

## Model scenarios

(Current policies, low-carbon policies, no-CCS, no-nuclear, new sustainability criteria, etc.)

### Model input

#### Resources

- Fossil resources
- RE potentials
- Land use

#### Technology

- Existing systems
- Trade infrastruct.
- ~1500 new techs in each region

#### Demands

- ~60 demands (useful services) in each region

## Helsinki Metropolitan region

### Energy conversion

- Electricity
- CHP
- Heat
- Biomass refining
- Hydrogen production

### Transmiss. / distribution

- Electricity grid
- District heating grid
- Gas grid
- Other fuels distribution

### Demand technologies

#### Industry sectors

- CHP / boilers
- Manuf. processes

#### Tertiary sectors

- Heating systems
- Hot water systems
- Cooling systems
- Lighting
- Other appliances

#### Transport sectors

- Pass. transport
- Freight transport

### Model results

#### Energy production

- By period
- By technology
- By energy source

#### Energy end-use

- By period
- By sector / end-use
- By energy source
- By technology

#### Emissions

- By period
- By sector
- By emission type

#### Costs

- Costs by period and cost type
- Investments

#### Energy prices

- Fuels
- Electricity
- District heat

### Other model regions:

Rest of Finland,  
DNK, NOR, SWE,  
13 other regions

### Energy conversion

- Electricity
- CHP / Heat
- Fuel refining

### Transmiss. / distribution

- Electricity grid
- Heat grid
- Gas / hydrogen

### Demand technologies

#### Industry sectors

#### Tertiary sectors

#### Transport sectors