SERAPIS (Simulating the Emergence of Relevant Alternative Propulsion technologies in the car and motorcycle fleet Including energy Supply)

- **Start of development**: 2009
- **Topic**: Modelling consumer choice of propulsion technology (ICE, PHEV, BEV)
- **Coverage**: Austria (9 counties), Norway (428 districts)
- **Background**: Pre-feasibility study e-mobility on behalf of the Austrian Ministry for Transport, Innovation and Technology
- **Link**:
  e.g. http://compett.org

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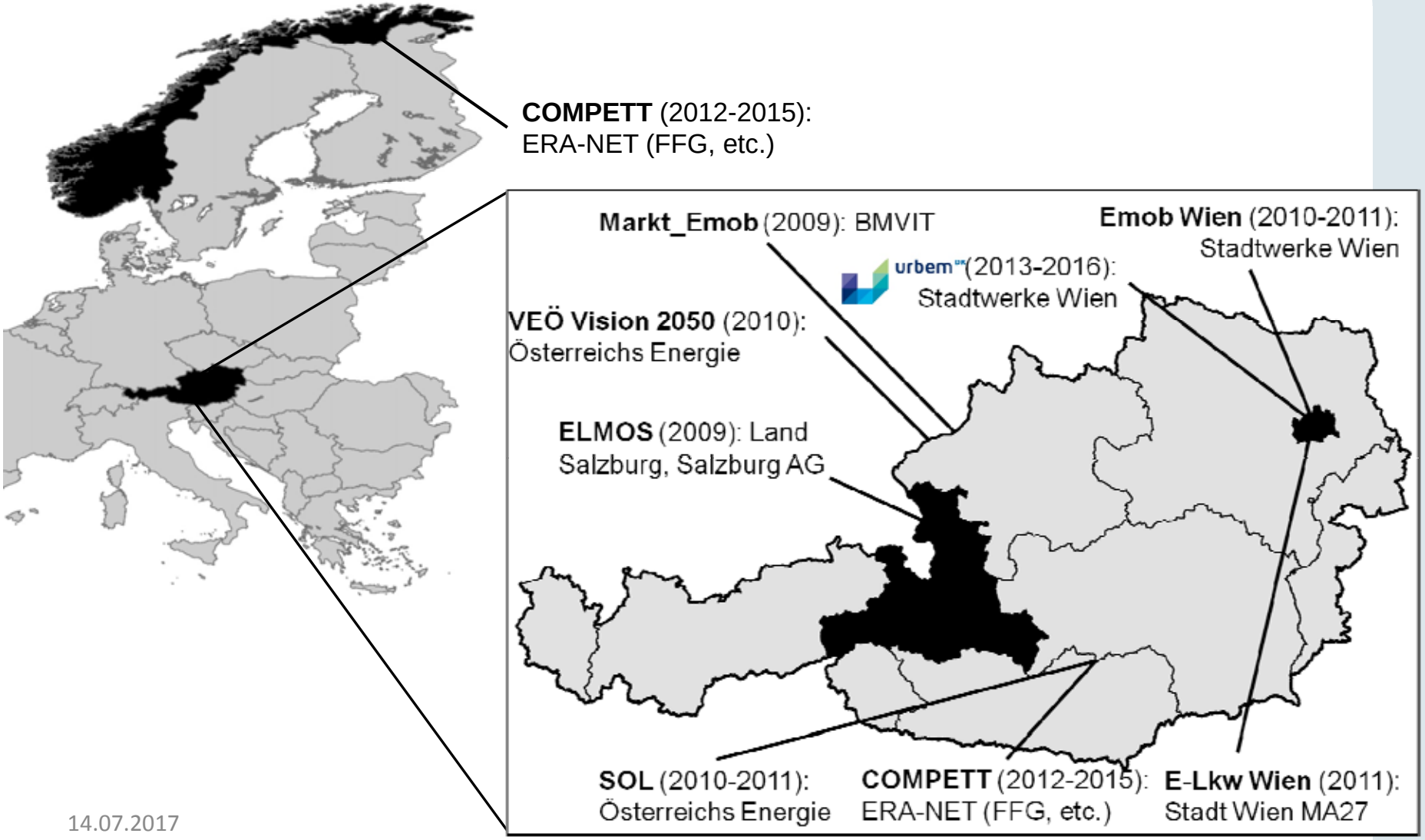
- Overview case studies



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- **Vehicle characteristics**:
  - Propulsion technology:
    - ICE: internal combustion engine incl. non-plug in hybrids (e.g. Prius)
    - PHEV: plug in hybrid & range extender veh. (e.g. Prius Plug In, Volt)
    - BEV: battery electric vehicles
  - Utilisation:
    - 1st (or only) car
    - 2nd+ car
  - Size:
    - Compact (from micro-cars up to cars like Renault Clio, Volkswagen Polo etc.)
    - Family (from Volkswagen Golf, Ford Focus, etc. up to BMW 3, Mercedes C, etc.)
    - Luxury (BMW 5 and 7, Audi A6, A7 and A8, Mercedes E and S, Ferrari, Lamborghini, BMW X series, Jeep Wrangler, etc.)

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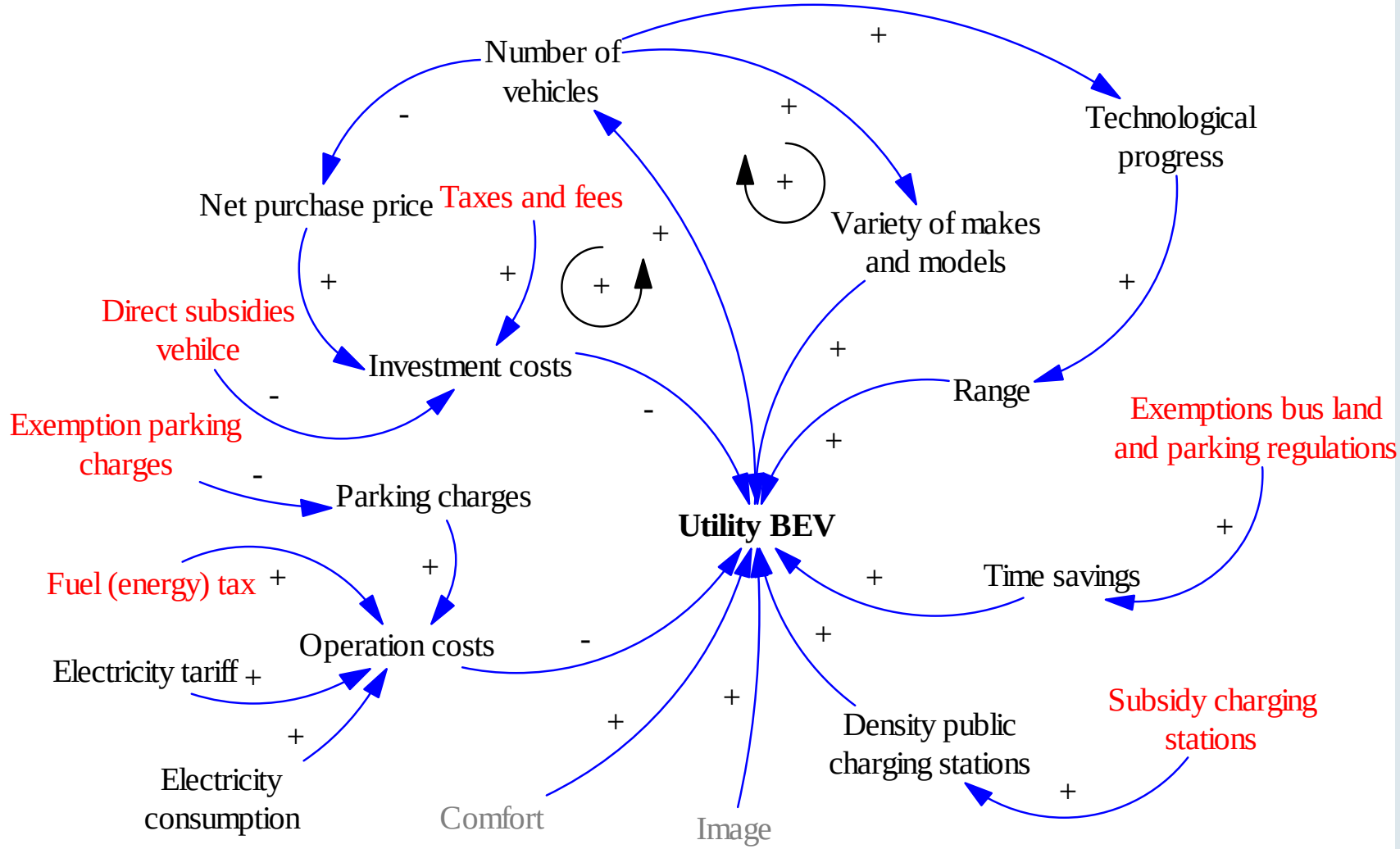
- Causal loop diagram utility BEV



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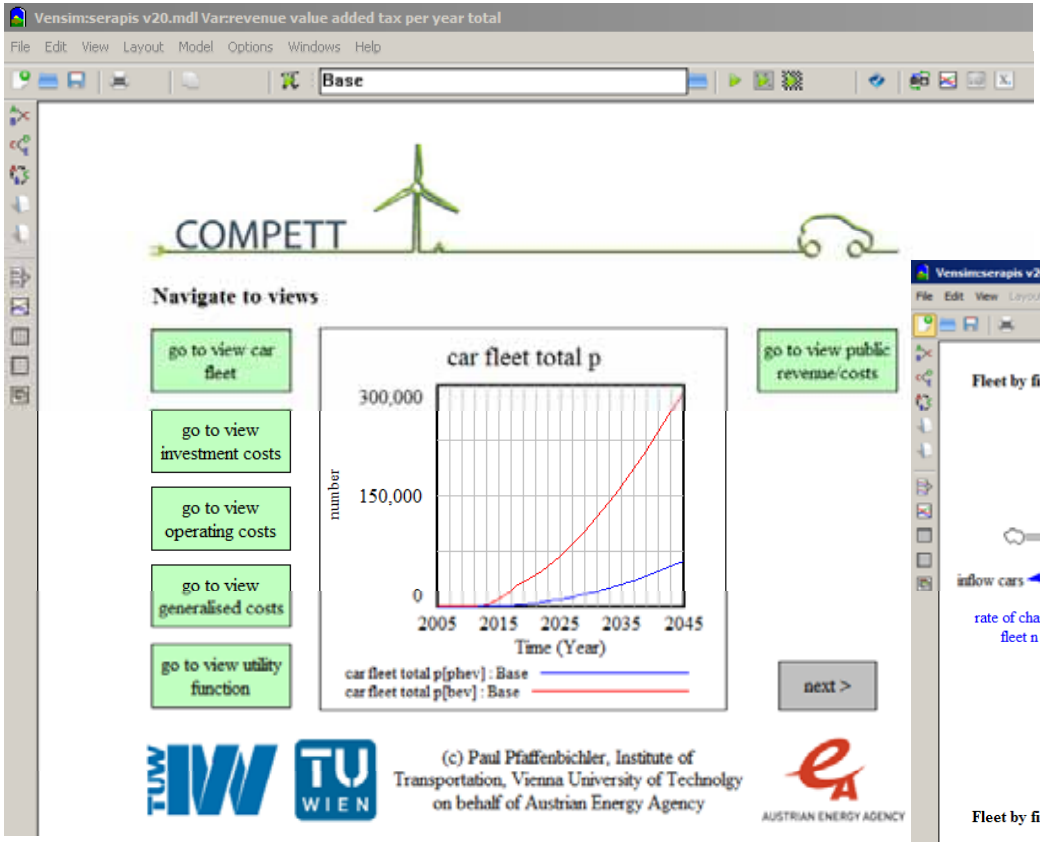
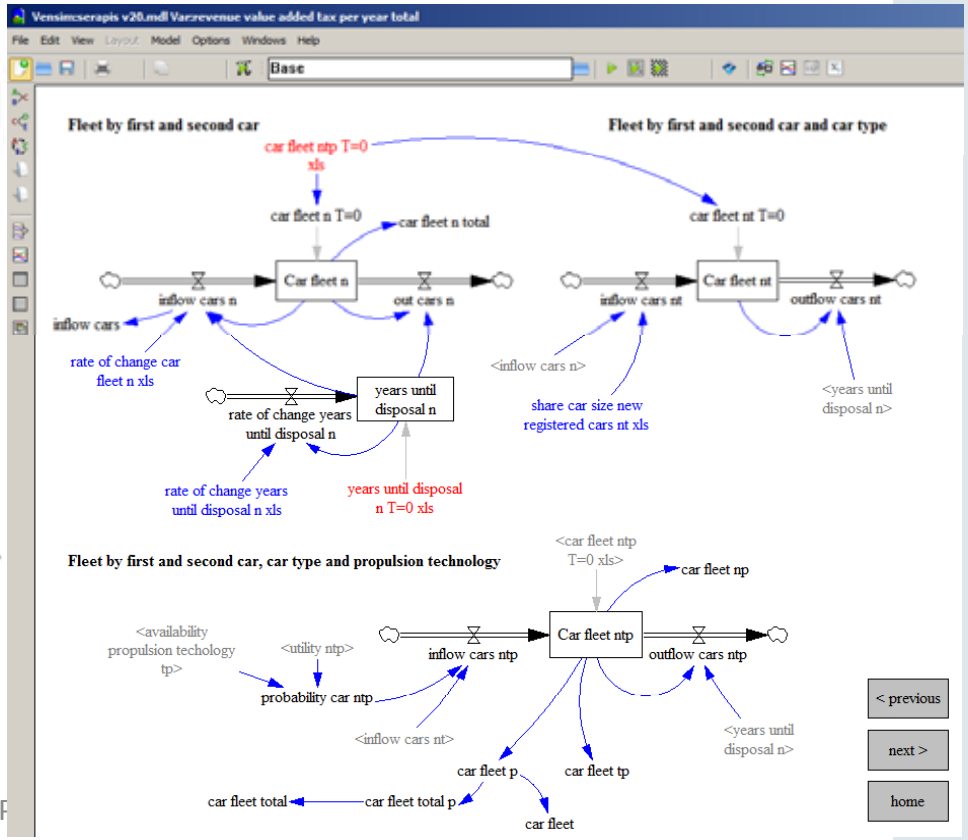
- Quantitative stock flow modelling





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- Comparison Modelling Results - Statistics