SIEMENS energy

Master's thesis – Energy system modelling

We are looking for a master's thesis student for developing a simplified model of the German energy system in a multi-sector setting (transport, heat, power, etc.) with a specific temporal and geographic resolution. The objective is to utilize energy system modelling for evaluating various approaches to hydrogen integration into pathways leading towards carbon neutrality in Germany.

Profile

- Strong background of energy economics concepts.
- Previous experience with a modelling tool is preferred (e.g. PyPSA, GAMS, PLEXOS).
- Excellent written and verbal communication skills in English.
- Enrolled in a master's program in the field of power engineering, energy engineering, energy economics or similar fields.
- Interest in the role of hydrogen technologies in the German energy transition

Tasks

- Literature research
- Familiarization with hydrogen technologies and value chains
- Familiarization with a modeling tool
- Creation of a multi-sector energy model

Interested? Send us your CV and transcript of records at miguel.morales@siemens-energy.com and Smaranda.Sgarciu@b-tu.de