

PhD or PostDoc position in probabilistic energy systems modeling at the University of Geneva, Switzerland

Background

[Renewable Energy Systems group](#), led by Prof. Evelina Trutnevyte, at the University of Geneva is looking to fill a PhD or PostDoc position in the field of probabilistic modeling for the energy transition. Located at the Faculty of Science and at the interfaculty Institute for Environmental Sciences, Renewable Energy Systems group has three strategic research themes. First, it uses mathematical modeling and technology assessment tools in order to inform transition to renewable energy systems at all spatial scales, from neighborhoods and cities to countries and continents. Second, the group works with multi-disciplinary methods for improving quantitative long-range energy foresight for decision making under deep uncertainty. Third, the group searches for system-level socio-technical energy solutions that are techno-economically feasible, environmentally desirable, as well as acceptable and realistically implementable in society. The scientific work in the group regularly involves interactions with practitioners outside academia, including policy makers, stakeholders, and the wider public.

The successful PhD or PostDoc candidate will have an opportunity to work on research questions that are designed based on their backgrounds and interests within the on-going projects of the group. The umbrella topics include, but are not limited to: modeling for a transition to high shares of renewable energy; improving accuracy of long-range energy projections; and integration of insights from social sciences into techno-economic modeling. The application case studies will be in Switzerland or Europe. The successful candidate will share the vision of modeling-based multi-disciplinary work at science-society interface that the Renewable Energy Systems group is conducting. The group's website and publications are examples of such work.

In return, the Renewable Energy Systems group provides a stimulating and innovative research environment to work on some of today's most pressing societal challenges – energy and climate change. The city of Geneva takes pioneering action in promoting renewable energy as well as hosts multiple international organizations that foster global transition. The Renewable Energy Systems group offers excellent conditions for PhD and Postdoc candidates, including a competitive salary as well as funds for travel to conferences and further education. The city of Geneva consistently ranks among the most attractive cities worldwide to live.

Application process and requirements

In order to qualify for the position, the candidates are required to have:

- Completed or nearly completed Master's or PhD degree;
- Less than 3 years of PostDoc experience (for PostDoc applicants only);
- Proven knowledge of energy technology, energy systems, energy and climate policy, or socio-technical transitions;
- Experience with quantitative analysis and ideally familiarity with modeling energy systems at a national or continental scale, e.g. using Python or Matlab;
- Peer-reviewed journal publications as first author (for PostDoc applicants only);
- Excellent English skills in understanding, speaking, and writing;
- French, German or other European languages are an advantage;
- Readiness to move to Geneva.

Please send your application to job-res@unige.ch. The applications shall include:

- Motivation letter in English;
- CV;
- Recommendation letters or work certificates of two referees; the letters can be submitted by the candidate directly or can be sent by the referees to the email address above;
- Sample document of academic writing in English, e.g. peer-reviewed publication as first author, Master thesis, semester thesis;
- Scanned copy of the Master's degree diploma with grades (for PhD candidates only). In the case of nearly completed Master's degree, the latest transcript of grades should be submitted;
- Please combine all the documents in one PDF;
- If the size of the email exceeds 10 MB, only the motivation letter and CV shall be included in the email as well as a link for downloading the rest of the documents, e.g. Dropbox.

The first deadline of applications will close on Monday, 30 December 2024. The starting date will be mutually agreed on. The successful candidates from outside Switzerland and European Union should count with additional 4-6 months for receiving their residence permit. For questions, please send an email to job-res@unige.ch.