Bachelor Thesis

A comprehensive study of certification schemes for energy consumption

The emission of greenhouse gases by humans is associated with significant economic and social damage. Many governments around the world are therefore attempting to reduce their economy's greenhouse gas emissions. One of the typical aims of these governments is to facilitate the change from a non-renewable to a renewable-based energy system.

For example, the EU aimsto produce 27% of total energy consumption in 2030 from renewable sources, coming from 17% in 2016 (European Commission, 2017). In addition to traditional policy tools such as taxes and subsidies, governments have implemented certification schemes to promote the use of renewable energy.

Certificates have been introduced to address the problem of information asymmetry in the energy market. Information asymmetry is typically present in energy markets because consumers cannot credibly distinguish between renewable and non-renewable energy.

What are your tasks?

- Review the state-of-the-art, empirical assessment of the European markets for energy certificates
- Design features of certificate systems relate to the performance of certificate markets.

What should you bring?

- Bachelor student in electrical engineering, computer science
- Background on power system monitoring, concepts on statistics, and machine learning are desirable
- Good programming skill in Python is mandatory
- Interest in inter-disciplinary research topics
- Critical thinking and enjoys working independently

What we offer?

- Highly motivated, young and output focused team
- Chance to bring your vision and ideas of a sustainable energy future to life
- Supervision in English language

Curious?

For further information please contact maliheh.haghgoo@eon.com