

Economical and societal scenarios to challenge more renewable energy in a changing climate world

Mission

The development of a significant and tested list of economical and societal scenarios to challenge more renewable energy in a changing climate world with all conditions, constraints and specificities will be the main output of this project. The deployment of renewable energy involves a complex interplay of actors from various sectors and levels of governance: government, industry, finance, civil society, and communities. These actors can considerably influence the resilience of a power systems in the context of a massive insertion of renewable energies (PSMRE) or, in the other way around, can be considerably impacted by the resilience ability of the PSMREs. The main objective of this project is to establish in which extent and how economical and societal actors must be modeled in the resilience assessment and in its optimization process.

We will consider that the interplay of actors can shape the development and the deployment of renewable energy technologies and then condition the ability of the PSMRE to anticipate and mitigate blackouts. The expected results are firstly the development of a significant and tested list of economical and societal scenarios to challenge more renewable energy in a changing climate world with all conditions, constraints, and specificities. Second, when designing a PSMRE, it is necessary to evaluate the socio-economic impact of a blackout. Indeed, an electricity blackout can have significant socio-economic impacts, both in the short-term and the long-term. These can have an impact on individuals, communities, and entire countries. We will so measure and evaluate the impact of a blackout for each scenario and the time to recover a standard situation.

Climate and Debates deliverable must be written during the internship.

Profile

This position is aimed at master's students/engineering students in economics fields. The candidate must have organizational comfort, autonomy, and the ability to work in conjunction with the various interlocutors of the Chair. The candidate must know the electricity or at least energy markets. An energy economics course would be ideal. Good knowledge of database management would be a plus.

This internship can lead to a CEC thesis project with Paris-Saclay University and the Climate Economics Chair.

Duration: Starting March-April 2024 for a 6 month-period

Location : 1 day at Université Paris-Saclay, UVSQ, 47 Bld Vauban, 78280 Guyancourt and 4 days at Climate Economics Chair, Palais Brongniart, 28 Place de la Bourse, 75002

Salary: Legal indemnity

Contact and documents: send CV, Cover letter **plus** Master 1 grades (and Master 2 grades available) in **only ONE PDF file** to claire.berenger@chaireeconomieduclimat.org indicating the internship offer's **(only 2 applications maximum on all CEC internships offers)**

Application closure: January 9th, 2024

Interviews from January 10th, 2024

Final response to candidates: January 31st, 2024