



Thesis offer

MSCA Cofund - MISCEA

Job Information

Organisation/Company : **Ecole nationale des ponts et chaussées (ENPC)**

Department : *Centre international de recherche sur l'environnement et le développement (CIRED)*

Research Field : *Energy and development economics*

Researcher Profile : **First Stage Researcher (R1)**

Country : **France**

Type of Contract : **Temporary**

Job Status : Full-time

Is the job funded through the EU Research Framework Programme? : **Horizon Europe (HE) / Marie Skłodowska-Curie Actions COFUND**

Is the Job related to staff position within a Research Infrastructure? : **No**



Offer Description

Thesis offer: Low-carbon cooling systems in African countries

1 – Air conditioning ownership is currently low across Africa. It could however increase tremendously under the joint effect of global warming, growth and urbanization. This prospect raises two questions. First, will AC adoption take a carbon-intensive path dominated by conventional, low-energy efficiency models, or a sustainable one relying on passive cooling or solar-powered technologies? Second, what is the impact of these changes on consumer wellbeing – household expenditure and health outcomes in particular? Answering these questions is key to assess the risk of ‘maladaptation’ associated with AC and design effective policies to mitigate it.

Two approaches are currently taken at ENPC/CIREC under the [AFRICOOLING](#) project to address this question: (i) an econometric analysis of pan-African AC product lines; (ii) a field study of household behavior in relation to cooling technologies. Depending on their skills, the successful applicant will contribute to either of these approaches, and possibly to both.

The first line of research will extend recent work by [Aja et al. \(2024\)](#) and exploit a panel dataset of AC products to examine cross-country differences and temporal variations, in an effort to capture weather and climate effects.

The second line of research will build on ongoing field work in Côte d’Ivoire to elicit the determinants of AC adoption and assess its effect on economic and health outcomes. Particular interest will be paid to solar-powered AC technologies, which can be deployed at a decentralized level.

2 – Thesis supervisor: Louis-Gaëtan Giraudet (louis-gaetan.giraudet@enpc.fr).

3 – The candidate will be hosted at [CIREC](#) in Nogent-sur-Marne.

4- The project is co-developed with [Meridiam](#), an asset management corporation that funds infrastructure projects in several African countries. It is also connected to the ANR-funded project [AFRICOOLING](#) awarded to L.-G. Giraudet.

5 – The project is linked to EELISA communities SDG3 (Good health and wellbeing), SDG7 (Affordable and clean energy) and SDG 13 (Climate action).

Description of the project and the candidates’ eligibility criteria :

This position will be part of the EU-funded project [MISCEA](#), which is an ambitious inter- and multidisciplinary Doctoral Training Network under the Horizon-Europe Marie Skłodowska-Curie Actions.



PhD candidates' can be of any nationality but you have to meet these eligibility criteria :

- **Not being a current employee** working at ENPC.
- Not having resided or carried out their main activity (work, studies, etc) in France **for more than 12 months** during the past 36 months immediately before the deadline of the MISCEA Programme's call. Compulsory national service, short stays such as holidays and time spent as part of a procedure for obtaining refugee status under the Geneva Convention are not taken into account.
- **Holding a Master's degree** or having a University degree equivalent to a European Master's degree (5-year duration) at the deadline of the MISCEA Programme's call.
- Researchers must be doctoral candidates, i.e. not already in possession of a doctoral degree at the deadline of the co-funded programme's call. Researchers who have successfully defended their doctoral thesis but who have not yet formally been awarded the doctoral degree will NOT be considered eligible.
- **Signing a declaration** of the veracity of the information provided (Declaration of honour, free of form).

If you comply with the eligibility criteria and you wish to submit your application, you must :

- Contact the thesis supervisor and explain your thesis project to her/him so that she/he validates your application.
- Submit a **5-pages thesis proposal** under the proposed research areas, with the agreement of the future supervisor. Additionally, to the submission of the 5-pages thesis proposal, the applicant will have to complete an ethics checklist based on ethics guidance from the HorizonEurope programme guide.
- **English-translated transcripts** from the master's degree or equivalent.
- **Any specific requirements of the Doctoral School** corresponding to the targeted MISCEA fellowship offer.
- English curriculum vitae, including information about the level on English language knowledge.
- A motivation letter.
- One letter of reference, at least.

Templates are available on the MISCEA website ([link](#)).

Then your candidature is complete, please send inquiries and applications to miscea-program@enpc.fr



Requirements

Research Field : *Economics, Energy efficiency*

Education Level : Master Degree or equivalent

Skills/Qualifications : *Applicants are expected to have extensive training in applied economics, econometrics and data management, in relation to development, health and environmental issues. They are expected to master state-of-the-art empirical approaches to technology adoption and impact estimation (instrumental variables, difference-in-differences estimation, etc.), tools for statistical analysis (R, Stata, etc.) and electronic data collection (ODK, SurveyCTO, etc.).*

Applicants are also expected to have demonstrated experience in field studies and project management. Fluency in English is required. Proficiency in French would be a strong plus. Some interest or experience with information technologies (using e-commerce, cellphone or electricity metering data) is a strong plus.

Lastly, the position requires a taste for both leadership and team work. It also involves a strong interest in public policy and an ability to engage with both professionals (from the public and private sector) and survey participants.

Languages : ENGLISH

Level : Excellent

Where to apply

E-mail : miscea-program@enpc.fr

