



## 3-year PhD Position (65%)

*Reference number PhD\_2021\_01*

Solving the climate crisis requires the brightest and most motivated minds. The Mercator Research Institute on Global Commons and Climate Change (MCC) has established itself prominently in the climate policy research landscape. We conduct collaborative world-class research on climate solutions and offer an inspiring interdisciplinary environment for scientific excellence.

If you enjoy working in an highly supportive and international team, you feel that policy should be informed by the best available scientific evidence, and would like to contribute to a long-term project funded by the European Research Council that aims to better understand feasibility and potential role of carbon dioxide removal (CDR) and solar radiation management (SRM) technologies in climate policy - then you may want to apply for this position at the MCC:

### **PhD student position on assessing Carbon Dioxide Removal (CDR) and Solar Radiation Management (SRM)**

The successful candidate will contribute to developing a portfolio approach for CDR. So far, CDR technologies have been explored mostly from technology-specific studies or IAMs. In the understanding of the future need and relevance of CDR, investors have started to explore deployment at commercial scale for some technologies, such as BECCS and DACCS. Our aim is to develop a portfolio approach, as common in the financial industry, to assess the optimality and feasibility of CDR pathways, which can also include SRM. This approach should not only account for uncertainty in cost developments, but also account for other risks, e.g. associated with environmental impacts or technological development. Investment can reflect these overall risks and uncertainties, and allow for reallocation of investments as time and learning provides better insights into costs, risks and benefits. Further conceptual work into deep uncertainty (ambiguity) and how to formally include ambiguity in models is envisaged. The successful candidate would be interested in both the technological detail of different CDR options and in the modeling work associated with the described portfolio approach. Depending on the candidate's profile and research interests, this can include a diversity of methods for decision-making under uncertainty.

#### **Job duties**

The successful candidate will be located at MCC in Berlin and work in the [GENIE project](#) funded by the European Research Council under the prestigious Synergy Grant scheme. GENIE will investigate the environmental, technical, social, legal, and policy dimensions of GGR and SRM to provide an urgently needed interdisciplinary perspective on their development. Our meta-analytical framework integrates insights from these disciplines to provide a comprehensive view of GGR and SRM in the transition to climate neutrality in Europe. The project will conduct world-class research and generate robust, scientific resources for evidence-based policy advice and global environmental assessments. The project is a collaboration between Prof. Jan C. Minx (MCC), Prof. Benjamin Sovacool (Aarhus University), Prof. Keywan Riahi (International Institute of Applied Systems Analysis, IIASA) and Prof. Gregory Nemet (University of Wisconsin Madison). The specific work conducted in the frame of a PhD described here would be co-supervised by Prof. Felix Creutzig and Prof. Sabine Fuss.

Major tasks of the candidate are:

- Contribute to an assessment of risks, benefits and uncertainties associated with CDR (and potentially SRM) technologies and practices that will be the basis for further analysis.

- Contribute to the development of a portfolio approach for CDR, e.g., by pragmatic design or by theory development
- Apply the approach at EU and global level.
- Participate in project meetings and coordinate with other project partners;
- Presentation of results at international conferences;
- Publish scientific results in esteemed, peer-reviewed international journals;

### **Job requirements**

We are looking for enthusiastic individuals that can work independently and within an interdisciplinary team who bring a good understanding of economic methods or an interest to develop these skills, and who have a strong interest in the project.

- MSc or MA in any field related to interdisciplinary climate change research;
- Active interest in CDR and SRM technologies and their role in climate change mitigation - relevant scientific publications are a strong asset;
- Some experience in data analysis, or interest in theories that deal with ambiguities and uncertainty
- Willingness to travel for work 3 times per year (project meetings, workshops, conferences);
- Strong motivation and good organizational skills;
- Team orientation as well as written and oral fluency in English.

### **We offer:**

- An inspiring, international, interdisciplinary, diverse and multi-cultural work environment in a world leading research institutes on climate policy;
- The opportunity to contribute tackling challenges of climate change and our common future;
- Flexible and family-friendly working times and possibilities for home office;
- Working in a dedicated and motivated multi-cultural team;
- Work in one of the most ambitious projects that tries to understand CDR and SRM technology and their role in climate policy;
- Working together with world-leading scholars in the GENIE consortium;
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- High-impact research: MCC researchers publish in renowned international journals, including Nature, Science, or PNAS and have impacted international climate change assessments such as IPCC reports;
- Opportunities for cooperation with MCC's national and international network of leading climate & energy research institutes and think tanks
- Participation in employee retirement provision;
- An attractive workplace in an old industrial building at the EUREF - Campus in Schöneberg, Berlin.

The MCC values a collaborative working place environment that values diversity, tolerance, and equity. We aim to improve the share of women especially in leadership positions as witnessed by our equal opportunity strategy ([here](#)). MCC provides an exciting, collaborative, interdisciplinary and international research and working atmosphere.

### **Appointment terms**

We seek for candidates to start the position from **01.06.2021**. The position is funded until 2024. Remuneration is in accordance with German public tariff scheme at **65% TVL 13(1)**.

### **Applications**

For application please send an e-mail with the reference number as subject **Phd\_2021\_01** to Mrs. Franziska Faber, [jobs@mcc-berlin.net](mailto:jobs@mcc-berlin.net), with an electronic application by **17.05.2021**, which should contain the following in one single pdf file:

- Motivation letter
- Curriculum Vitae, mentioning two academic references
- One representative academic paper
- Copies of relevant certificates

Please note that only short-listed candidates will be contacted for a job interview. For content-related questions you can contact Prof. Felix Creutzig, [creutzig@mcc-berlin.net](mailto:creutzig@mcc-berlin.net) or Prof. Sabine Fuss, [fuss@mcc-berlin.net](mailto:fuss@mcc-berlin.net).

### **Portrait of the MCC**

MCC was founded in 2012 by Stiftung Mercator and the Potsdam Institute for Climate Impact Research (PIK) and since 2014 it is affiliated with the Technical University (TU) Berlin. Our research is carried out in seven working groups and it addresses the grand challenges of climate change and of governing the global commons. Our research is rooted primarily in economics and other social sciences. We provide scientific policy advice and aim to identify policy-relevant solutions. Cooperation with high-profile international partner organizations provides a network of excellence and foster the high quality of the research at MCC. Within a few years, MCC has established itself prominently in the climate policy research landscape, ranked as No. 1 of climate think tanks in Europe.

For more information about the institute, please visit <http://www.mcc-berlin.net>.