

PhD position on the economics of coastal nature-based solutions

The <u>Global Climate Forum (GCF)</u> in Berlin is a non-profit transdisciplinary research institute founded by noble laureate Klaus Hasselmann in order to bring together different public, private and civil society parties concerned with climate change and carry out joint studies that support environmental policies. The Research Process <u>Adaptation and Social Learning (ASL)</u> at GCF conducts internationally leading work on the economics and governance of coastal adaptation to sea-level rise from local to global scales. The process is led by Dr. Jochen Hinkel, who co-leads work on coastal adaptation in the United Nations World Climate Research Programme and has been Lead Author on coastal/marine governance in the last two Assessment Reports of the Intergovernmental Panel on Climate Change.

In the context of two new large-scale collaborative European Research projects on coastal nature-based solutions (REST-COAST) and the economics of climate change and biodiversity (DECIPHER), ASL is seeking a PhD student to work on a global economic assessment of coastal nature-based solutions (NBS) such as maintaining and restoring coastal wetlands (e.g., salt marshes and mangrove forest). Coastal wetlands are hotspots of marine biodiversity, sequester large amounts of carbon, and protect hundreds of million people globally from coastal flooding. At the same time, they are being converted into agricultural or industrial land at alarming rates of 1-3% annually, releasing large amounts of carbon. Sea-level rise is expected to exacerbate this situation, if the inland migration of wetlands continues to be hindered by human infrastructure, settlements and dikes. The PhD student will advance an existing global model of sea-level rise, coastal flooding and wetland dynamics (Schuerch et al. 2018 and Hinkel et al. 2014) to investigate the economic trade-offs between coastal development, coastal protection through hard infrastructure (e.g. dikes) and wetland conservation and restoration. The work entails close collaboration with other PhD students modelling the biophysical response of coastal wetlands to sea-level rise and scholars working on the economics of biodiversity and climate change. The PhD would be obtained from the Division of Resource Economics at the Thaer Institute of Humboldt University in Berlin, where Hinkel is an external professor (*Privatdozent*). A salary will be paid following German university standards (65 % position) for three years in which the PhD thesis should be completed, with the possibility of extension.

The successful candidate is expected to have:

- An excellent Master degree in economics, environmental economics or related fields (e.g., ecological economics, resource economics)
- Excellent command (oral and written) of English (the language of the PhD thesis)
- A good command of a major programming language (e.g. Java, Python, R, Julia)
- Familiarity with cost-benefit analysis, econometric and optimisation methods

We offer the opportunity to work in a high-profile, internationally recognized research institute within a global network of leading researchers on social and economic aspects of climate change and environmental issues. The successful candidate will join a friendly and highly motivated team in central Berlin (within the Mercator Center) and will benefit from a flexible, dynamic working environment, close cooperation within our team, attentive PhD supervision and flat hierarchies. The Global Climate Forum is an equal opportunity employer. We thrive for diversity and inclusion and welcome applications from all qualified applicants.

The deadline for applications is 24 April. Please send your application including a motivation letter, a copy of transcripts and certificates, a complete CV, your Master thesis, as well as names, email addresses and telephone numbers of two possible referees as a single PDF file with the subject "PhD economics of wetlands" to Dr. Daniel Lincke (daniel.lincke@globalclimateforum.org). For further information please also contact Dr. Lincke.