Modelling and measuring the socio-economic impact of climate change: the Blue Economy sectors in the European islands

The Call

The Centre for Advanced Studies in Tourism at the University of Bologna (Italy), Rimini Campus, is looking for candidates for a two-year Post-Doc position.

Applicants should hold a recent PhD in Economics or Statistics (or related fields) or be close to finishing their thesis. The ideal candidate should be interested and/or have some research experience in areas of applied economics, with particular reference to environmental and/or tourism economics. Publications in these fields would be an advantage. Strong attitude towards applied research, good knowledge of micro and macro econometrics and expertise in the use of statistical software (R, STATA) are required. Good knowledge of Academic English (written and spoken) is necessary. Knowledge of data scraping techniques and computer programming (e.g. Python) would be an advantage.

The candidate will be working on Work Package 5 and Work Package 6 of the H2020 project “SOCLIMPACT - Downscaling climate impacts and decarbonisation pathways in EU islands, and enhancing socioeconomic and non-market evaluation of Climate Change for Europe, for 2050 and beyond”, an international partnership of 24 Institutions led by the University of Las Palmas de Gran Canaria (further information on the project is available at soclimpact.org). Within SOCLIMPACT, the main objective of these work packages is to estimate the socio-economic impact of climate change, with particular reference to marine and coastal ecosystems (inputs for Blue Economy sectors), in the European islands.

The successful candidate will be working with the team of researchers involved in SOCLIMPACT project and will participate to the normal activities of the Centre for Advanced Studies in Tourism and of the other departments involved in the project (Department of Statistics, Department of Economics). The position will start on September the 1st, 2018. The salary will be of € 25,000 per year, tax-free.

Interested candidates should apply through the University of Bologna website (https://www.aricweb.unibo.it/BandiPubblicati/zz_bandi_din.aspx) before the deadline of June the 29th, 2018. Interested candidates are invited to contact the project supervisor (Prof. Paolo Figini – paolo.figini@unibo.it)

Further information on the overall research project

The present research will be carried out within the H2020 project “SOCLIMPACT - Downscaling climate impacts and decarbonisation pathways in EU islands, and enhancing socioeconomic and non-market evaluation of Climate Change for Europe, for 2050 and beyond”, an international partnership of 24 research institutions led by the University of Las Palmas de Gran Canaria.

The warming of the climate system is unequivocal and continued emission of greenhouse gases will cause further warming and changes. Islands are particularly vulnerable to Climate Change (CC) consequences, but the coarse spatial resolution of available projections makes it difficult to derive valid statements for islands. Moreover, science-based information about the economic impacts of CC in marine and maritime sectors is scarce, and current economic models lack of solid non-market assessment. Policy makers must have accurate information about likely impact chains and about the costs and benefits of possible strategies to implement efficient measures.

SOCLIMPACT aims at modelling downscaled CC effects and their socioeconomic impacts in European islands for 2030–2100, in the context of the EU Blue Economy sectors, and assess corresponding decarbonisation and adaptation pathways, complementing current available projections for Europe, and nourishing actual economic models with non-market assessment, by:
• Developing a thorough understanding on how CC will impact the EU islands located in different regions of the world.

• Contributing to the improvement of the economic valuation of climate impacts by adopting revealed and stated preference methods.

• Increasing the effectiveness of the economic modelling of climate impact chains, through the implementation of an integrated methodological framework (GINFORS, GEM-E3 and non-market indicators).

• Facilitating climate-related policy decision making for Blue Growth, by ranking and mapping the more appropriate mitigation and adaptation strategies.

• Delivering accurate information to policy makers, practitioners and other relevant stakeholders.

SOCLIMPACT addresses this Work Programme providing advances in the economic valuation of climate induced impacts, and in climate and economic models, allowing downscaled projections of complex impact chains, and facilitating the resilience capacity of these vulnerable lands.

Within this International Project, the Centre for Advanced Studies in Tourism (CAST) at the University of Bologna, Rimini Campus, is specifically addressing the economic valuation of climate impacts (SOCLIMPACT Working Package n. 5) and their integration into macroeconomic and macroeconometric models (SOCLIMPACT Working Package n. 6). Different methodologies will be applied and developed in order to address the research goals: on one side revealed and stated preference methods for the economic valuation of climate impacts (for both resident population and tourists) will be applied. Big data will also be analysed with relevant techniques in order to assess individual perceptions of, and behavioral adaptation to, climate changes.

Research Plan

The current research projects lasts 24 months. The selected candidate will be the main researcher working at SOCLIMPACT project within CAST, hence ability to be proactive and to carry out independent and innovative research will be among the main competencies to be developed. Moreover, given the nature of the data to be retrieved and analysed, cross-disciplinary skills (in particular data scraping and light computer coding) will also be developed.

It can be expected that in months 1-4 the focus would be to reassess and critically review the current literature about two different strands of literature: (i) the evaluation of non-market goods and environmental services and (ii) the use of big data in socio-economic research. In months 5-8 the main focus would be to identify the research design and to prepare the framework for collecting data. Months 9-12 will mainly be dedicated to data retrieving, cleaning and organizing, while months 13-18 will be dedicated to the statistical and econometric analysis. Finally, months 19-24 will be dedicated to wrapping up the main findings and to prepare scientific papers and reports.

Throughout the 24-month research period, the post-doc researcher will also be involved in networking with the other partners of the project and will have to opportunity to participate to international meeting, workshops and conferences.