Special Issue of *Climate Policy* – ISEFI 2020

Special Issue: "Assessing Economic Effects and Uncertainty induced by Climate Change: Policy Measures and Perspectives."

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Aims and scope of the special issue:

This special issue of *Climate Policy* will highlight novel approaches and methodologies in the field of research on responding to climate change. The focus of this special issue will be on "*Assessing Economic Effects and Uncertainty induced by Climate Change: Policy Measures and Perspectives*".

The analysis of climate change scenarios and their potential consequences has been widely conducted based on hypotheses of future temperature projections. However, Allen et al. (2009) stressed that "the eventual equilibrium global mean temperature associated with a given stabilization level of atmospheric greenhouse gas concentrations" remains uncertain." This contradictory reality emphasizes that climate policies should be designed to cope with the uncertainty that determines the climate impact, the "carbon emissions to the environment" transmission mechanism and the resulting economic and social damages (Barnett, Brock and Hansen, 2019).

Against this background, estimating the costs and benefits of emissions reduction both at global and local levels is the first step and of paramount importance for addressing increases in global temperatures (Michaelowa, Allen & Sha, 2018). It notably includes an analysis of the most efficient, equitable and politically feasible instruments to implement needed policy changes, and three areas of concern arise from the recent debate:

First, although future damages from climate change are uncertain, it is clear that economists have primarily underestimated the effects of rising sea levels, harm to human health from heat stress and pollution, increased frequency of storms, floods and fires, the pressures of migration with climate change, and losses infrastructure, biodiversity and agricultural productivity (Chandra, McNamara & Dargusch, 2018). It is also clear that highly aggregated economic models that focus on global averages miss the heterogeneity of damages across countries and regions.

Second, although a good deal of work has been done on the cost of emissions reduction, much remains missing, including the effects of rapidly falling prices in renewables and negative emissions technologies, the impact of increases in resource efficiency and the problem with stranded assets on existing high-emissions technologies (Johnsson, Kjärstad & Rootzén, 2019). The cost of emissions reduction, along with appropriate tax and subsidy schemes, will also vary widely by country and region, and have different impacts on the potentially avoided damages from climate change.

Accordingly, we welcome papers that augment existing damage functions as a result of temperature increases and capture the full distribution of damages across regions and countries so that the avoided damages from emissions reduction can be estimated appropriately, designed and implemented both with a given country and across countries and regions (McNamara, Bronen, Fernando & Klepp, 2018). We also encourage submissions that explore

the design of equitable and enforceable policy instruments, taking into account the different impacts of emissions reductions schemes and political realities across countries with varying levels of economic development.

The special issue would reflect the diversity of issues, perspectives, and disciplinary approaches that feature in *Climate Policy*.

Submission instructions:

Interested participants at ISEFI 2020 should indicate during the submission of their **full paper** that they want to be considered in the special issue *by selecting "SI Climate Policy" topic*. Following approval by the Editors-in-Chief of the SI, all submissions will undergo regular peer-review after the conference; authors invited to submit a full paper are expected to act as reviewers for the special issue.

Important dates:

Submission deadline: February 29, 2020, for **full paper** (7,000 words for research articles, 8,000 words for synthesis papers, and 3-5,000 words for commentaries or policy analyses) submission to ISEFI 2020. Authors selected to submit to the SI *Climate Policy* will be informed. The deadline for the submission of papers to Climate Policy after the conference is July 5, 2020.

For questions regarding this special issue, please contact **Guest Editors,** Duc Khuong Nguyen (duc.nguyen@ipag.fr), Julien Chevallier (julien.chevallier04@univ-paris8.fr) and Tom Kompas (tom.kompas@unimelb.edu.au).

For general questions or inquiries about *Climate Policy*, please contact the **Editor**, Dr. Joanna Depledge(joanna@climatepolicyjournal.org).

References:

Allen, M. R., Frame, D. J., Huntingford, C., Jones, C. D., Lowe, J. A., Meinshausen, M., & Meinshausen, N. (2009). Warming caused by cumulative carbon emissions towards the trillionth tonne. *Nature*, 458(7242), 1163.

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