



Workshop: Integrating impacts, mitigation and inequality – State of the Art and Road Ahead

7-8 October 2019

Potsdam Institute for Climate Impact Research, Potsdam, Germany

Background & Aims:

It has been a long-standing challenge to improve the integrated assessment of costs and benefits of climate change and climate policies beyond standard cost-benefit analysis relying on aggregate damage functions. This is critically needed to support the implementation of the Paris Agreement with scientific assessment such as the upcoming 6th Assessment Report (AR6) of the IPCC. Such integration will require linking the latest state-of-the art in the field of climate change impacts with that of mitigation and scenario assessments. To understand the full magnitude of these costs and benefits and their implications for achieving a broader agenda set by the Sustainable Development Goals, it is also important to better understand and account for the distributional and poverty effects of both impacts and mitigation. Policy makers are requiring such information to design effective strategies regarding climate change, equity and development.

Building on the workshop “Understanding the impacts of climate change on growth and development”, organized in the framework of the ENGAGE project in June 2016 at PIK, which brought together empirical economists, CGE and Integrated Assessment modelers, we want to assess where we stand three years later and what the next steps are. Furthermore we want to facilitate collaboration across communities to prepare input for the upcoming 6th Assessment Report.

With this workshop we would again like to bring together leading experts from different disciplines to address the following topics:

- (i) Linking empirical climate impact research with projections of future damages from climate change;
- (ii) Including inequality/poverty dimensions into integrated climate change scenarios;
- (iii) Integrating costs and benefits of climate strategies with a view to informing AR6.

The workshop will put a strong emphasis on discussion among the participants and will involve a longer discussion phase with a discussant for each session, as well as a panel discussion at the end.

Preliminary Agenda:

October 7 2019		
10:00 - 10:40	Welcome and introduction	Elmar Kriegler (PIK), Franziska Piontek (PIK)
10:40 - 11:25	Keynote: Stephane Hallegatte (World Bank)	Climate change and development
11:25 - 11:55	Coffee break	
<i>Session I: Linking empirical climate impact research with projections of future damages from climate change</i>		Session chair: Katja Frieler (PIK)
11:55 - 12:20	Giovanni Melina (IMF)	Macroeconomic Outcomes in Disaster-Prone Countries
12:20 - 12:45	Francesco Lamperti (University of Pisa & CMCC)	From micro to macro damages: climate impacts in agent based economic models
12:45 - 13:10	James Rising (LSE)	Lives and livelihoods: empirical estimations of climate damages, adaptation, and inequality
13:10 - 14:10	Lunch	
14:10 - 14:35	David Bresch (ETH)	Economics of Climate Adaptation - strengthening societal resilience by application of a distributionally aware cost/benefit approach. – Illustrated by a case study in Barisal, Bangladesh
14:35 - 15:25	Discussion Discussant: Matthias Kalkuhl (MCC)	
15:25 - 15:55	Coffee break	
<i>Session II: Including inequality/poverty dimensions into integrated climate change scenarios</i>		Session chair: Bas van Ruijven (IIASA)
15:55 - 16:20	Lucas Chancel (World Inequality Lab, PSE)	Integrating research on climate change and global inequality: issues and ways forward
16:20 - 16:45	Narasimha Rao (Yale) – remote	Incorporating poverty thresholds in climate change scenarios- implications for inequality
16:45 - 17:10	Francis Dennig (Yale-NUS)	The carbon prices and non-climate

		goals in models with heterogeneous agents
17:10 - 17:35	Björn Sörgel (PIK)	Towards a better representation of inequality and sustainable development in IAMs
17:35 - 18:25	Discussion Discussant: Mark Fleurbaey (Princeton) - remote	
19:30	Workshop Dinner	
October 8 2019		
Session III: Integrating costs and benefits of climate strategies with a view to informing AR6		Session chair: Aurélie Méjean (CIRED)
9:00 - 9:25	Christian Otto & Franziska Piontek (PIK)	Integrating damages in IAMs: Persistencies and channels
9:25 - 9:50	Johannes Emmerling (EIEE)	Climate Change and Inequality - the role of mitigation and adaptation
9:50 - 10:15	Tom Kompas (University of Melbourne)	Economic Damages, Country Inequality and the Cost of Emissions Reduction in a Large-Dimensional Global Trade and Climate Model
10:15 - 10:45	Coffee break	
10:45 - 11:10	Zoi Vrontisi (E3Modeling) - remote	Model Macroeconomic trade-offs and co-benefits of mitigation pathways
11:10 - 12:00	Discussion Discussant: Elmar Kriegler (PIK)	
12:00 - 13:15	Lunch	
13:15 - 14:15	Stakeholder discussion panel: Eric Fee (UBA), Olivia Gippner (EU Commission), Theresa Lober (Bank of England), David Bresch (ETH Zürich & Meteo Swiss)	Chair: Anne Zimmer (Climate Analytics)
14:15 - 15:15	Concluding discussion: Insights gained, potential workshop outcomes, next steps	Elmar Kriegler (PIK)