

# 10th Annual IAMC Conference

## Day I: Tuesday, December 5, 2017

Opening Plenary				Parallel Session: Analysis of climate change, climate impacts and adaptation in IAM applications				Parallel Session: Global Deep Transformation Pathways			
08:30	08:45	Welcome and introductory remarks	Roberto Schaeffer	14:00	14:05	Introduction		14:00	14:05	Introduction	
08:45	09:00	Introduction to the meeting	Detlef van Vuuren	14:05	14:30	A high-resolution, empirical approach to climate impact assessment for regulatory analysis	Michael Delgado	14:05	14:30	Between Scylla and Charybdis: Reluctant mitigation narrows the passage between large-scale CDR and high costs	Jessica Streffer
<b>IAM analysis and climate policy</b>			Chair: Detlef van Vuuren	14:30	14:55	Interactions in the economic consequences of climate change and air pollution	Lanzi	14:30	14:55	Direct Air Capture and the role of CDR in WB2C scenarios in ETSAP-TIAM	Xiufeng Yue
09:00	09:15	IPCC AR6 cycle; SR LUC and SR1.5	Thelma Krug	14:55	15:20	Global Climate Damage Risk and Decision-Making	Steven Rose	14:55	15:20	How essential are bioenergy with carbon capture and storage, and other negative-emission technologies for the 1.5 degree target?	Detlef van Vuuren
09:15	09:30	AR6- WG-III	Joana Portugal	15:20	15:45	Economic and biophysical impacts on agriculture under 1.5°C and 2°C warming	Bastiaan van Ruijven	15:20	15:45	Biophysical effects significantly affect the effectiveness and scale of afforestation	Alexander Popp
09:30	09:50	Deep mitigation scenarios and feasibility indicators	Elmar Kriegler	<b>15:45 16:15 Break</b>				<b>15:45 16:15 Break</b>			
09:50	10:10	Panel discussion contribution IAMs to IPCC		16:15	16:35	Economic assessment of effectiveness of shifting working time to offset the impact of labor capacity reduction due to climate change	Shinichiro Fujimori	16:15	16:35	Carbon budget uncertainty	Massimo Tavoni
10:10	10:40	Break		16:35	16:55	The Indian Summer Monsoon in a Changing Climate: Economic Impacts and Adaptive Strategies	Mariia Belaia	16:35	16:55	Modelling the impacts of investors' decision making on decarbonisation pathways in industry	Sara Giarola
			Chair: Stephanie Waldhoff	16:55	17:15	Impacts of climate change and climate policy on households in Mexico	Bastiaan van Ruijven	16:55	17:15	Comparing technology mixes in IPCC AR5 and SSP scenarios with investment preferences for implementing UN climate policy objectives	Mariliis Lehtveer
10:40	11:00	Contribution of IAM to global stock take	Tom van Ierland	17:15	17:35	An approach to modeling the complex system impacts of a stylized drought on infant mortality rates in India	Stephanie Waldhoff	17:15	17:35	A regional focus of EMF33 scenario results: Using the case of Brazil to assess region-specific performance of IAMs.	Pedro Rochedo
11:00	11:15	IAM contribution to the global stock take	Jae Edmonds	17:35	18:00	Moderated discussion		17:35	18:00	Moderated discussion	
11:15	11:30	Latin American decarbonisation pathways	Daniel Buira	<b>18:00 18:15 Break</b>				<b>18:00 18:15 Break</b>			
11:30	11:50	Panel discussion contribution IAMs to global stocktaking		<b>SD analysis and nexus</b>				<b>SD analysis and nexus</b>			
11:50	11:50	Break		11:50	12:05	TWI2050& CD-Links	Volker Krey	11:50	12:05	Investments for sustainable development	David McCollom
			Chair : Elmar Kriegler	12:05	12:20	Governance for SDGs	Julia Leininger	12:05	12:20	Panel discussion	
12:05	12:20	Investments for sustainable development	David McCollom	12:20	12:40	Panel discussion		12:20	12:40	Lunch	
12:20	12:40	Governance for SDGs	Julia Leininger	12:40	13:00	Lunch		12:40	13:00	Lunch	
12:40	13:00	Panel discussion									
13:00	14:00	Lunch									

Poster Session with buffet dinner		Chairs: Brian O'Neill, John Weyant,
18:30	19:30	Poster Session Slot 1
Poster ID and Title	Presenter	
<b>Global Deep Transformation Pathways</b>		
1.1	Is the zero emission requirement aligned with 2.0°C and 1.5°C stabilization targets?	Katsumasa Tanaka (NIES)
1.2.	The contribution of the Paris Agreement to limit global warming to 2°C	Gokul Iyer (PNNL)
1.3	On the Dynamics of Sustainable Energy Transition and Policy Implications: A Partial Equilibrium Approach	Jie Liu (CASS)
1.4	How much can nuclear energy do about global warming?	Lixia Ren (CIAE) / Herve Nifenecker (Save the Climate)
1.5	Temporal and spatial distribution of global mitigation cost: INDCs and generational equity	Jing-Yu Liu (National Institute for Environmental Studies)
1.6	Exploring the requirements for reaching the 2°C target without nuclear and power sector CCS	Gunnar Luderer (PIK)
1.7	What winner for transport decarbonisation : Hydrogen Fuel-Cell versus Electric Vehicles	Silvana Mima (GAEL-CNRS)
1.8	Trade-offs of Solar Geoengineering and Mitigation under Climate Targets	Mohammad Mohammadi Khabbazan (Hamburg Univ.)
<b>The role of non-CO2 emissions</b>		
2.1	Modelling the Co-control of CO2, SO2 and NOx emissions with environmental taxes: a CEEPA based analysis	Qiao-Mei Liang (BIT)
2.2	Role of non-CO2 GHGs in climate stabilization within emission scenarios aiming at global temperature targets	Diego Silva Herran (JAMSTEC)
2.3	Taking some heat off of the INDCs? The potential of short-lived climate forcers' mitigation	Mathijs Harmsen (PBL)
2.4	Optimizing climate change policy beyond industrial CO2 emissions control	Xuanming Su (NIES)
<b>IAM methods and approaches</b>		
3.1	Operational and environmental performance evaluation modelling in thermal power industry: A distinguishing analysis between efficiency and effectiveness	Ke Wang (CEEPR)
3.2	Recursive-dynamic vs forward-looking: The importance of allowing for intertemporal investment and net trade adjustments	Matthias Weitzel (NCAR)
3.3	An Innovative Approach to the Integrated Assessment Model Creation Process	Stefan Pickl (univ. Of armed forces, Munich)
3.4	Integrating General Equilibrium and Energy System Models: a methodological approach	Bruno Cunha (COPPE – UFRJ)
<b>From climate policy to broader sustainability analysis</b>		
4.1	Emissions Scenario Portal	Mengpin Ge (WRI)
4.2	Downscaling Economic Indicators of Income and Inequality for the Shared Socioeconomic Pathways	Matthew Gidden (IIASA)
4.3	Contribution to Sustainable development Goals from Achieving 2 degree Mitigation Target in China*	Chenmin He (Peking University)
4.4	Energy and Development in Global Integrated Assessment Models	Bas van Ruijven (NCAR)

Poster Session with buffet dinner		Chairs: Brian O'Neill, John Weyant,
19:30	20:30	Poster Session Slot 2
Poster ID and Title	Presenter	
<b>National and regional transformation pathways</b>		
5.1	Evaluation of Integrated Air Pollution and Climate Change Policies: Case Study in the Thermal Power Sector in Chongqing City, China	Qian ZHOU (NIES)
5.2	Understanding the interplay between trade elasticities and the wage curve for climate policy analysis at the French scale	Gaëlle Le Treut (CIRED)
5.3	Climate policy design and the competitiveness of the French industry	Gaëlle Le Treut (CIRED)
5.4	Modelling heat supply and infrastructure trade-offs for studying heat decarbonisation pathways in a UK case study	Francisca Jalil-Vega (Imperial College London)
5.5	The importance of demand side management to adapt to climate actions	Paula Ferreira (Universidade do Minho)
5.6	Methodological proposal for the evaluation of the residential demand for electrical energy through the yearly and hourly load curve	Paula Bezerra (COPPE - UFRJ)
5.7	A methodology for assessing the vulnerability of Rankine-cycle thermal power plants to water availability and climate change: a case study in Brazil	Eveline Vasquez (COPPE – UFRJ)
<b>Analysis of climate change, climate impacts and adaptation in IAM applications</b>		
6.1	Revising Climate Change Impacts on Agriculture: The Role of Adaptation and Implications for Integrated Assessment Modelling	Jie Liu (CASS)
6.2	Climate impacts, climate policies, and the role of adaptation through the lens of water systems	Jae Edmonds (PNNL)
6.3	Assessing the Economic Impact of Climate Change on Cash Crop Farms in Canada: An Integrated Modelling Approach*	Paul Thomassin (McGill University)
6.4	Economic cost of workplace heatstroke prevention by following recommended work/rest cycles	Jun'ya TAKAKURA (NIES)
6.5	The assessment and analysis of climate change vulnerabilities in the energy sector of Beijing*	Sha Chen (Beijing University of Technology)
6.6	Climate Strategies and Green Climate Fund for China's INDC 2030 - Compared Two Types of Damage Function	Pan Peng (CEEP-IPM-CASS)
6.7	Global economic impacts of climate change: first results from the HELIX project	Peter Russ and Bert Saveyn (JRC)
6.8	Avoiding the impacts of climate change: Results from the BRACE study	Brian O'Neill (NCAR)
6.9	Water Demand under China's 2°C Scenario	Kejun Jiang (ERI)

## 10th Annual IAMC Conference

### Day 2: Wednesday, December 6, 2017

Parallel Session: Analysis of climate change, climate impacts and adaptation in IAM applications		Parallel Session: National and regional transformation pathways, including INDCs and mid-century mitigation strategies	
08:30	08:35	08:30	08:35
	Introduction		Introduction
08:35	09:00	08:35	08:55
	Assessing uncertainty of climate change impacts on hydropower generation Using the CMIP5 ensemble - The case of Ecuador		Towards optimal 1.5°C emission pathways for individual countries: a Finland case study
	Pablo Carvajal		Fabio Sferra (Climate Analytics)
09:00	09:25	08:55	09:15
	Interactions between climate change mitigation and adaptation: the case of hydropower in Brazil		A multi-model assessment of Japan's long-term climate policy
	Andre Lucena		Masahiro Sugiyama (The University of Tokyo)
09:25	09:50	09:15	09:35
	How does climate change effect the global potential of Hydropower? A Spatially-Explicit, Global Assessment of Hydroclimatic Impacts on Energy Supply Infrastructure and Vulnerable Populations		Reconciling global sustainability targets and regional action
	David Gernaat		Vassilis Daioglou (PBL)
09:50	10:15	09:35	09:55
	Break		The Paris Agreement without US - Lessons from an integrated assessment exercise in a second best modeling framework
			Meriem Hamdi-Cherif (CIRED)
10:15	10:45	09:55	10:15
	Lessons from the implementation of integrated resource assessments: the cases of Nicaragua, Syr Darya and Sava River basins		Implication of coal power development for delivering the Paris Agreement
	Eunice Pereira Ramos		Yiyun Cui (PNNL)
11:05	11:25	10:45	11:05
	A climate resilient Africa - Calculating the cost of adaptation to climate change for the African Countries		Assessing mitigation feasibility and options for Ireland in 2050 with ESOM based MACCs
	Vignesh Sridharan		Xiufeng Yue (University College Cork)
11:25	11:45	11:05	11:25
	Temperature impacts from climate change on electricity demand for cooling: Estimating changes in the LDC and implications for generation, supply cost, and emissions with the US-REGEN model		Long-term transformation pathways for Brazil: the role of Concentrated Solar Power (CSP) perceived by two modelling approaches.
	Delavane Diaz		Rafael Soria (Escuela Politécnica Nacional)
11:45	12:05	11:25	11:45
	Assessment of Climate Change on Solar and Wind Energy Complementarities in Latin America		Waiting for the unicorn technology? - The effect of disruptive technologies and myopia in national power systems planning
	Cindy Viviescas		Niall Mac Dowell (Imperial College London)
12:05	12:30	11:45	12:30
	Moderated discussion		Moderated discussion
12:30	13:30	12:30	13:30
	Lunch		Lunch

### Day 3: Thursday, December 7, 2016

Closing Plenary - Reflections on IAMs		Chair Keywan Riahi
08:30	08:50	Arnulf Grubler
	IAM critique and the way forward-1	
08:50	09:10	Detlef van Vuuren
	IAM critique and the way forward-2	
09:10	09:30	
	Open discussion	
09:30	09:50	Jan Volkholz
	IAMC and ISIMIP	
09:50	10:05	Impact chairs
	Impacts analysis in IAMs	
10:05	10:30	
	Open discussion	
10:30	11:00	
	Break	
11:00	11:15	Leon Clarke
	Implication for future IAM work of IAMC annual meeting	
11:15	12:00	Tom Kram
	Quick overview of current projects	
12:00	12:30	
	Reporting back of Working Groups	
12:30	12:50	Jae Edmonds/ Detlef van Vuuren Roberto Schaeffer
	IAMC business	
12:50	13:00	
	Final discussions	
13:00	14:00	
	Lunch	

## Day 2: Wednesday, December 6, 2017

Parallel Session: Methodological aspects of IAM analysis				Parallel Session: From climate policy to broader sustainable development analysis			
13:30	13:35	Introduction		13:30	13:35	Introduction	
13:35	14:05	Hedging decarbonization strategy to deal with the uncertain deployment of negative emission technologies	Laurent Drouet	13:35	14:00	Implications of the Paris agreement for achieving the Sustainable Development Goals	Volker Krey
14:05	14:35	Optimal mitigation strategy under uncertainty and learning on climate sensitivity and damages	Tommi Ekholm	14:00	14:25	On climate change and air quality: Two birds, one stone?	Kimon Keramidas
14:35	15:05	Global Air Quality Index under different socioeconomic and climate scenarios	Johannes Emmerling	14:25	14:50	Diverse policy approaches required to achieve sustainable 1.5 or 2°C decarbonization pathways	Gunnar Luderer
<b>15:05 15:35 Break</b>				<b>15:15 15:45 Break</b>			
15:35	16:05	A probabilistic expert elicitation about future carbon dioxide emissions	Detlef van Vuuren	15:45	16:10	Smart mitigation policies to ensure food security under 1.5°C goal	Shinishiro Fujimori
16:05	16:35	Accounting for the Social Cost of Carbon in Integrated Assessment	Gunnar Luderer	16:10	16:35	Incorporating elements of the water SDG into the MESSAGE integrated assessment model to quantify feedbacks with climate change mitigation	Simon Parkinson
16:35	17:00	The Impact of Trade Module Specification in Environmental CGE Modelling	Li	16:35	17:00	Impacts of national decarbonization targets for subnational societal priorities	Leon Clarke
17:00	17:25	The Role of Regional Weights on Cost-Risk Trade-off of Solar Geoengineering and Mitigation	Elnaz Roshan	17:00	17:25	Climate change induced migration and inequality	Soheil Shayegh
17:25	18:00	Moderated discussion		17:25	18:00	Moderated panel discussion	

## Day 3: Thursday, December 7, 2016

Scientific Working Group Meetings			
14:00	14:45	Scenarios SWG	Tom Kram, Keywan Riahi, Detlef van Vuuren
14:45	15:30	Finance	Elmar Kriegler, Jae Edmonds
<b>15:30 16:00 Break</b>			
16:00	16:45	Data protocols and management SWG	Volker Krey, David McCollum
16:45	17:30	Evaluations and diagnostics SWG	Jae Edmonds, Elmar Kriegler