

Agenda for the 8th Annual IAMC Conference

The 8th Annual IAMC Meeting is hosted by the Potsdam Institute for Climate Impact Research and held at Seminaris Seehotel, Potsdam, Germany

Sunday, November 15, 2015

Time 18:00 Informal Opening Reception

Day 1: Monday, November 16, 2015

Time	Opening Plenary	Chair: TBD
0:15:00	08:30 08:45 Welcome and introductory remarks	Ottmar Edenhofer, PIK
0:15:00	08:45 09:00 Introduction to the meeting	John Weyant, U Stanford & EMF
The road to Paris and beyond – Where do we stand on INDCs, what is the future role for the community in assessing INDCs?		
0:20:00	09:00 09:20 Implementing the Paris outcome (agreement, decisions, INDCs, Lima-Paris Action agenda) for realising the global transition to a low-emission climate-resilient economy (incl. Q&A)	Miles Perry, DG Climate Action, European Commission
0:20:00	09:20 09:40 The INDC assessment of the UNEP Emissions Gap Report 2015 (incl. Q&A)	Michel den Elzen, PBL
0:20:00	09:40 10:00 Implications of the INDCs for reaching long term climate policy objectives (incl. Q&A)	Christoph Bertram & Gunnar Luderer, PIK
0:30:00	10:00 10:30 Panel of modellers / policy makers from major emitting countries (~5x6 min inputs): <i>How useful and relevant was the work of the IAM community for the Paris negotiations, and what insights are sought from the IAM community for the post-Paris process?</i>	Allen Fawcett (EPA, US), Jiang Kejun (ERI, China), Miles Perry (DG Climate Action, EC), Toshihiko Masui (NIES, Japan), Ritu Mathur (TERI, India), Roberto Schaeffer (COPPE, Brazil)
0:30:00	10:30 11:00 Discussion between audience and panel	
0:30:00	11:00 11:30 Break	
How to use the new climate change (SSP-RCP) scenarios in future IAM, IAV and climate modelling studies?		
0:15:00	11:30 11:45 Overview and status of the SSP scenario process	Detlef van Vuuren, PBL
0:10:00	11:45 11:55 scenarioMIP and other CMIP6 activities	Brian O'Neill, NCAR
0:10:00	11:55 12:05 Q&A	
0:20:00	12:05 12:25 AgMIP and ISI-MIP perspective (incl. Q&A)	Hermann Lotze-Campen, PIK
0:15:00	12:25 12:40 Results of the IPCC scenario meeting and future scenario process	Keywan Riahi, IIASA
0:20:00	12:40 13:00 Discussion on ways for IA community to contribute to scenario process	

01:00 13:00 14:00 Lunch

Time	Parallel Session: Analysis of climate change and climate impacts in IAM applications	
0:05:00	14:00 14:05 Introduction	Tom Kram (PBL), Kate Calvin (PNNL), Juan-Carlos Ciscar (JRC-IPTS)
0:25:00	14:05 14:30 Searching for the weak spot– A comprehensive investigation of climate change impacts and macroeconomic growth	Franziska Piontek, PIK
0:25:00	14:30 14:55 Economic impacts of climate change on human health through undernourishment	Tomoko Hasegawa, KRISH/NIES
0:25:00	14:55 15:20 Avoiding the impacts of climate change: Results from the BRACE study	Brian O'Neill, NCAR
0:25:00	15:20 15:45 On the consequences of constraining water to energy and land use	Mohamed Hejazi, PNNL
0:30:00	15:45 16:15 Break	
0:20:00	16:15 16:35 Confronting and reducing future risks in Water-Energy-Land Systems	Adam Schlosser, MIT
0:20:00	16:35 16:55 Interactions between Climate Change Mitigation and Adaptation in Energy Scenarios for Brazil	André Lucena, PPE/COPPE/UFRR
0:20:00	16:55 17:15 The economic consequences of climate change to 2060	Rob Dellink, OECD
0:20:00	17:15 17:35 Estimating Global Damages from Sea Level Rise with the Coastal Impact and Adaptation Model (CIAM)	Delavane Diaz, EPRI
0:25:00	17:35 18:00 Moderated discussion	Tom Kram, PBL

00:30 18:00 18:30 Break

Poster Session with buffet dinner See Annex 1 for poster IDs, titles and presenters		
1:00:00	18:30 19:30 Slot 1	Thematic areas: Analysis of climate change and climate impacts in IAM applications (5 posters); New IAM analyses on the climate policy – sustainable development nexus (6 posters); Analyses of distributional impacts of mitigation pathways and/or climate change (3 posters); Uncertainty and the use of IAM projections (6 posters); Modeling Tools (2 posters)
1:00:00	19:30 20:30 Slot 2	Thematic areas: Integrated assessment of INDC proposals and their implications for global emissions (7 posters); Integration of variable renewable energy (3 posters); Transport modeling (5 posters); Fossil fuel resources and technologies (3 posters); Analyses of the low carbon transformation (3 posters); Integrated assessment of climate engineering and carbon dioxide removal technologies (3 posters)

Time	Parallel Session: Uncertainty and the use of IAM projections	
0:05:00	14:00 14:05 Introduction	John Weyant (U Stanford), Leon Clarke (PNNL), Steve Rose (EPRI)
0:20:00	14:05 14:25 Modelling to generate alternatives: A technique to explore uncertainty in integrated assessment models	James Price, UCL
0:20:00	14:25 14:45 A methodology to investigate the uncertainty of scenario drivers and the diversity of socio-economic pathways with similar outcomes	Celine Guivarch, CIREAD
0:20:00	14:45 15:05 Climate policy under socio-economic scenario uncertainty	Johannes Emmerling, FEEM
0:20:00	15:05 15:25 UK electricity system modeling 1990-2014 and the (im)possible mission of embracing parametric and structural uncertainties	Evelina Trutnevyte, ETH Zürich
0:20:00	15:25 15:45 Climate policy as risk management	Geoffrey Blanford, EPRI
0:30:00	15:45 16:15 Break	
0:20:00	16:15 16:35 Next steps in uncertainty analysis for the IAM community: Lessons from the IPCC scenarios database	Bas van Ruijven, NCAR
0:20:00	16:35 16:55 Exploring the feasibility of low-carbon scenarios using historical energy transitions analysis	Ajay Gambhir, Imperial College London
0:20:00	16:55 17:15 Global energy model hindcasting and validation	Shinichiro Fujimori, NIES
0:20:00	17:15 17:35 Comparing future patterns of energy system change in 2°C scenarios with historically observed rates of change	Marijke van Suisveld, PBL
0:25:00	17:35 18:00 Moderated discussion	John Weyant (U Stanford), Leon Clarke (PNNL)

Day 2: Tuesday, November 17, 2015

Time	Parallel Session: From climate policy to broader sustainable development analysis: New IAM analyses on the climate policy – sustainable development nexus			Chair:
0:05:00	08:30	08:35	Introduction	Keywan Riahi (IIASA), Bas van Ruijven (NCAR), Detlef van Vuuren (PBL)
0:20:00	08:35	08:55	Pathways to achieve a set of ambitious global sustainability objectives by 2050: Explorations using the IMAGE integrated assessment model	Detlef van Vuuren, PBL
0:20:00	08:55	09:15	Using the International Futures Model to enhance the socioeconomic representation of the Shared Socioeconomic Pathways (SSPs) for understanding challenges to adaptation	Dale Rothman, U Denver
0:20:00	09:15	09:35	Can Paris deal boost SDGs achievement? An assesment of climate-sustainability co-benefits	Lorenza Campagnolo, FEEM
0:20:00	09:35	09:55	Environmental impacts of alternative power sector decarbonization strategies	Gunnar Luderer, PIK
0:20:00	09:55	10:15	Will climate mitigation policies affect the energy poor? Synergies and tradeoffs between climate mitigation and universal clean cooking access goals	Kevin Ummel, IIASA
0:30:00	10:15	10:45	Break	
0:20:00	10:45	11:05	Modeling the energy-water-food nexus: A review of the opportunities and challenges for integrated assessment modeling	Nils Johnson, IIASA
0:20:00	11:05	11:25	Water demand for energy and food: a nexus analysis based on the Shared Socioeconomic Pathways	Ioanna Mouratiadou, PIK
0:20:00	11:25	11:45	Economic impacts of the land-water-energy nexus	Fritz Hellmann, PBL
0:20:00	11:45	12:05	Evaluating the impact of climate policies on regional food accessibility using an Integrated Assessment Model	Elisabeth Gilmore (U Maryland), Stephanie Waldhoff (PNNL)
0:25:00	12:05	12:30	Moderated discussion	Keywan Riahi (IIASA), Bas van Ruijven (NCAR), Detlef van Vuuren (PBL)

Time	Parallel Session: Integrated assessment of climate engineering and carbon dioxide removal technologies			Chair:
0:05:00	08:30	08:35	Introduction	Elmar Kriegler (PIK), Massimo Tavoni (FEEM)
0:30:00	08:35	09:05	The potential and limits of solar geoengineering and the trade-offs involved in substituting it for mitigation	Pete Irvine, IASS
0:25:00	09:05	09:30	Geoengineering and climate agreements: a numerical assessment of the regional strategic incentives	Massimo Tavoni, FEEM
0:25:00	09:30	09:55	The role of carbon dioxide removal technologies for achieving long-term climate policy objectives: an analysis of the larger portfolio of CDR options	Jessica Streffer, PIK
0:25:00	09:55	10:20	Is Direct Atmospheric Capture the needed backstop technology for decarbonizing the global energy system or does it just complement BECCS?	Evangelos Panos, PSI
0:30:00	10:20	10:50	Break	
0:25:00	10:50	11:15	Sustainable land-use scenario toward negative emissions pathways	Etsushi Kato, IAE
0:25:00	11:15	11:40	Large-scale bioenergy production: Can adjustment policies neutralize negative side effects?	Florian Humpenöder, PIK
0:25:00	11:40	12:05	Prospects and challenges concerning carbon dioxide removal from the atmosphere by biomass-based capture and storage in Brazil	Alexander Köberle, COPPE
0:25:00	12:05	12:30	Moderated discussion	Elmar Kriegler (PIK), Massimo Tavoni (FEEM)

01:00	12:30	13:30	Lunch	
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Time	Closing Plenary			Chair: TBD
0:15:00	13:30	13:45	Report from the scenarios scientific working group (incl. Q&A)	Tom Kram (PBL), Keywan Riahi (IIASA), Detlef van Vuuren (PBL)
0:25:00	13:45	14:10	Report from the data protocols scientific working group (incl. Q&A)	Volker Krey, IIASA
0:15:00	14:10	14:25	Report from the evaluation and diagnostics scientific working group (incl. Q&A)	Jae Edmonds, PNNL
0:20:00	14:25	14:45	Overview on community activities	
0:30:00	14:45	15:15	Break	
The Future of IA Modeling				
0:25:00	15:15	15:40	The evolving role of IA and emerging critiques (incl. Q&A)	John Weyant, U Stanford
0:25:00	15:40	16:05	Evaluating model analysis of climate change mitigation (incl. Q&A)	Charlie Wilson, UEA
0:40:00	16:05	16:45	Panel of researchers providing perspectives on challenges and directions for IA (~4 x 10 min inputs)	Ottmar Edenhofer (PIK), Evelynna Trutnevyte (ETH Zürich), Gregory Nemet (U Wisconsin), TBD
0:30:00	16:45	17:15	Open discussion of IA priority areas, strategy and criticism	
0:15:00	17:15	17:30	Other IAMC business and closing remarks	

Day 3: Wednesday, November 18, 2015

Time	Scientific Working Group Meetings			Chair:
1:00:00	09:00	10:00	Scenarios SWG	Tom Kram (PBL), Keywan Riahi (IIASA), Detlef van Vuuren (PBL)
0:30:00	10:00	10:30	Break	
1:00:00	10:30	11:30	Data protocols and management SWG	Volker Krey & David McCollum (IIASA)
1:00:00	11:30	12:30	Evaluations and diagnostics SWG	Jae Edmonds (PNNL), Elmar Kriegler (PIK), John Weyant (U Stanford)

Annex 1 Poster Session (November 16, 2015)

Poster Session with buffet dinner		Chairs: Volker Krey (IIASA), Gunnar Luderer (PIK), Roberto Schaeffer (COPPE), Narasimha Rao (IIASA), Bas van Ruijven (NCAR)
18:30	19:30	Poster Session Slot 1
Poster ID and Title	Presenter	
Analysis of climate change and climate impacts in IAM applications		
1.1.	Global economic impacts caused by space heating and cooling demand changes	Shinichiro Fujimori, NIES
1.2.	A consistent and comprehensive analysis of climate change impacts on the energy system – A status report on IS-MIP ENERGY	Franziska Piontek, PIK
1.3.	Linking human and earth system models to assess regional impacts and adaptation	Brian O'Neill, NCAR
1.4.	Energy sector adaptation in response to water scarcity	Oliver Fricko, IIASA
New IAM analyses on the climate policy – sustainable development nexus		
2.1.	Spanning the inequity simplex across time, states and regions	Loic Berger, FEEM
2.2.	Potential land-use futures: applying different indicators to assess the endogenous trade-offs between cropland land expansion and intensification	Xiaoxi Wang, PIK
2.3.	Land use emissions abatement and consequences for food prices	Miodrag Stevanovic, PIK
2.4.	Modelling efficient and equitable scenarios for a stringent carbon constrained world with the IEA-ETSAP's Integrated Assessment Model; TIAM-MACRO	James Glynn, U College Cork
2.5.	Assessing the global co-benefits and risks of alternative 2°C pathways	Christoph von Stechow, MCC
2.6.	Exploring synergies between climate and air quality policies	Maarten van den Berg, PBL
Analyses of distributional impacts of mitigation pathways and/or climate change		
3.1.	Development perspectives of Sub-Saharan-Africa under climate policies	Marian Leimbach, PIK
3.2.	Inequalities in a +4°C world: a global scenario analysis	Aurélie Méjean, CIRED
3.3.	Impacts from climate change and climate policy on urban and rural households	Bas van Ruijven, NCAR
Uncertainty and the use of IAM projections		
4.1.	Uncertainty in IA Model estimates: the impact of real-world barriers to technology adoption	Matteo Muratori, PNNL
4.2.	The effect of regulatory uncertainty on optimal investment decisions in the European Union energy sector	Anastasis Giannousakis, PIK
4.3.	Mitigation costs and uncertainty	Laurent Drouet, FEEM
4.4.	Uncertainty in land resource projection associated with static geographic land units in an integrated assessment model	Alan Di Vittorio, LBL
4.5.	Global warming and a potential tipping point in the Atlantic thermohaline circulation: The role of risk aversion	Mariia Belaia, U Hamburg
4.6.	An hybridization of system dynamics and agent based models to predict scenarios and interpret IAM projections - intelligent adaptive coupling OR analytic simulations and Integrated Assessment Models	Stefan Pickl, Bundeswehr Universität München
Modeling tools		
5.1.	Baseline energy demand projections for Integrated Assessment Modeling	Antoine Levesque, PIK
5.2.	Harmonized preparation of model inputs for flexibility in regional model composition	Lavinia Baumstark, PIK

Poster Session with buffet dinner		Chairs: Volker Krey (IIASA), Gunnar Luderer (PIK), Roberto Schaeffer (COPPE), Narasimha Rao (IIASA), Bas van Ruijven (NCAR)
19:30	20:30	Poster Session Slot 2
Poster ID and Title	Presenter	
Integrated assessment of INDC proposals and their implications for global emissions		
6.1.	Which emissions and temperature pathways could the Paris pledges lead to? What climate impacts would these pathways avoid?	Ajay Gambhir, Imperial College
6.2.	Integrated assessment of the effect of current policies, pre-2020 pledges and INDCs on global emissions	Detlef van Vuuren, PBL
6.3.	Understanding the global implications of INDCs for the 2°C target	Christoph Bertram, PIK
6.4.	Comparative assessment of the regional economic impact of selected INDCs for real-time policy advice using existing IAM scenarios	Ryan Alexander, PIK
6.5.	Evaluations on the Japan's INDC in comparison with other nations', and in the context of achieving 2	□ Fuminori Sano, RITE
6.6.	On incompatibility of energy policy and climate policy: South Korea Case	Sung Won Kang, KAIST
6.7.	Energy-economic models and policymaking: International comparison	Masahiro Sugiyama, U Tokyo
Integration of variable renewable energy		
7.1.	Improving the variable renewable energy technology representation in integrated assessment models	Yvonne Scholz, DLR
7.2.	How a very detailed representation of energy efficiency options in the objective-function of MESSAGE-Brazil (MSB8000) can affect the penetration of renewables (VRE) into the Brazilian power grid	Roberto Schaeffer, COPPE
7.3.	Improving the representation of wind and solar variability in Integrated Assessment Models	Robert Pretzker, PIK
Transport modeling		
8.1.	The transportation sector as a lever for reducing long-term mitigation costs in China	Meriem Hamdi-Cherif, CIRED
8.2.	Emission reduction potential of carbon taxes on international transportation	Yong Gun KIM, KE
8.3.	Incorporating social influence effects into global transportation models	Hazel Pettifor, U East Anglia
8.4.	Reduced form representation of the transport sector: a model comparison study	Oreane Edelenbosch, PBL
8.5.	Exploring the role of transport infrastructure in a low-carbon world	Eoin Ó Broin, CIRED
Fossil fuel resources and technologies		
9.1.	The role of fossil carbon capture and storage (CCS) in the transformation towards a low-carbon energy system	Volker Krey, IIASA
9.2.	An integrated assessment model for the gas upstream supply sector	Daniel Crowe, Imperial College
9.3.	Oil prices and their impact on global carbon dioxide emissions	David McCollum, IIASA
Analyses of the low carbon transformation		
10.1.	Low-carbon energy transition: the optimal balance between carbon pricing and technology subsidies	Anselm Schultes, PIK
10.2.	Life-cycle energy demand of the electricity sector	Michaja Pehl, PIK
10.3.	Changes in biomass production and land use in an intermediate mitigation scenario with emissions path from an earth system model of high climate sensitivity	Diego Silva Herran, JAMSTEC
Integrated assessment of climate engineering and carbon dioxide removal technologies		
11.1.	Food price impacts following from afforestation	Ulrich Kreidenweis, PIK
11.2.	The role of CCS and negative emissions to achieve stringent climate change mitigation	Matteo Muratori, PNNL
11.3.	Enhanced weathering and BECCS - are carbon dioxide removal technologies complements or substitutes?	Jessica Sreffer, PIK

Annex 2 Scientific Working Groups Meetings (November 18, 2015)

Scenarios Scientific Working Group (9:00 - 10:00)

The SWG Scenarios will present and discuss ideas and suggestions for a next phase, aiming to encourage and facilitate analysis of SSPs by as many IAMC members as possible. This can include regional and/or sectoral (e.g. energy) scenarios, adopting SSP storylines and either staying close to global ranges of key assumptions to produce so-called harmonized SSP scenarios, or exploring wider ranges of drivers and outcomes to produce other scenarios and cases. Issues to discuss include technical aspects and minimum requirements for inclusion of results in the data repository and possible guidance and data needs (20 minutes presentation, 40 minutes Q&A).

Data Protocols and Management Scientific Working Group (10:30-11:30)

Brief presentations on topics where progress has been made (5 min presentation, 5-10 min discussion per topic)

- IAMC data template
- Harmonized region definitions
- Model documentation
- Spatial data formats

Session will conclude with a general discussion of next steps for the SWG

Evaluation and Diagnostics Scientific Working Group (11:30-12:30)

Introduction and review of the SWG mandate and scope, followed by brief presentations and discussion on the following topics:

- Report on diagnostic scenarios work under the ADVANCE project.
- Description of activities and plans for diagnostics, evaluation and hindcasting under PIAMDDI
- Opportunity to raise proposals for future evaluation work by the community. 2-minute maximum interventions by participants which should include description of specific activity, approach, and means of support for the activity.
- Reflections by Charlie Wilson on potential ways forward for the SWG and the community

Session will conclude with a general discussion of next steps for the SWG