

Detailed Oral Programme with Timeframe

Tuesday, 10 March 2009

10:00 - 14:40

Plenary Hall - Auditorium A

Opening Session

Chairs: Professor Ian Chubb, ANU & IARU President & Dr Richard Levin, President, Yale University

Confirmed Speakers

Professor Katherine Richardson, University of Copenhagen

Mrs Connie Hedegaard, Danish Minister of Climate & Energy

Professor Maciej Nowicki, Minister of Environment, Republic of Poland

Professor Qingchen Chao, Deputy Director General, Department of Science & Technology, China Meteorological Administration

Mr Helge Sander, Danish Minister of Science, Technology & Innovation

Dr Rajendra K Pachauri, Chairman of IPCC

Professor Stefan Rahmstorf, Potsdam Institute for Climate Impact Research

12:00 - 12:30

Lunch

14:40 - 15:00

Coffee Break

15:00 - 16:30 S01A

Hall B - Room D

Session 01 - Cryosphere, Instabilities, Sea Level Rise Part I

Chairs: Professor Dorthe Dahl-Jensen, University of Copenhagen & Professor Konrad Steffen, University of Colorado at Boulder

- 15:00 - 15:15 S01.01 **Invited Paper:** Understanding sea level change over the last half century and its implications for the future
John Church (Australia), N White, C Domingues, J Gregory, K Steffen
- 15:15 - 15:30 S01.02 Reconstructing sea level from paleo and projected temperatures 200 to 2100AD
Aslak Grinsted (Denmark), J Moore, S Jevrejeva
- 15:30 - 15:45 S01.03 Greenland ice cores tell tales on the Eemian Period and beyond
Dorthe Dahl-Jensen (Denmark)
- 15:45 - 16:00 S01.04 Sea level change as an indicator of cryosphere instabilities
Kurt Lambeck (Australia)
- 16:00 - 16:15 S01.05 Reassessment of the potential contribution to sea level from a collapse of the West Antarctic Ice Sheet
Jonathan Bamber (UK), R Riva, B Vermeersen
- 16:15 - 16:30 S01.06 Monitoring the mass loss of the Greenland ice sheet
Andreas Peter Ahlstrøm (Denmark), D van As, M Citterio, P Gravesen, R Forsberg, EL Christensen, SS Kristensen, D Petersen, SB Andersen, L Stenseng, RS Fausto, S Hanson

16:30 - 17:00

Coffee Break

17:00 - 18:30 S01B

Hall B - Room D

Session 01 - Cryosphere, Instabilities, Sea Level Rise Part II

- 17:00 - 17:15 S01.07 Ice mechanical properties of the Larsen C ice shelf from in-situ geophysical measurements and implications for shelf stability
Bernd Kulessa (UK), E King, D Jansen, A Luckman, P Sammonds
- 17:15 - 17:30 S01.08 The Patagonian ice fields: an updated assessment of sea level contribution
Gino Casassa (Chile), W Krabill, A Rivera, J Wendt, A Wendt, P López, F Bown, E Rignot, R Thomas, J Yungel, J Sonntag, E Frederick, R Russell, M Linkswiler, A Arendt, K Steffen
- 17:30 - 17:45 S01.09 Acceleration of Arctic sea ice drift and deformation over the last 30 years
Jerome Weiss (France), P Rampal, D Marsan
- 17:45 - 18:00 S01.10 Understanding abrupt climate change: the importance of orbital insolation
Jose Rial (USA), R Saha
- 18:00 - 18:15 S01.11 Aerosol deposition on glaciers and resulting melting from darkening
Carl Egede Bøggild (Norway), R Solberg, AJ Hodson

18:15 - 18:30 S01.12 Forty years of weather data to understand recent climate change in the arctic (Svalbard, 79°N)
***Madeleine Griselin** (France), C Marlin, D Laffly, E Bernard, E Delangle*

Tuesday, 10 March 2009

15:00 - 16:30 S02A

Hall B - Room K

Session 02 - Global/Regional Climate State in 2030 Part I

Chairs: Professor John Mitchell, Met Office, Exeter & Professor Masahide Kimoto, University of Tokyo

- 15:00 - 15:15 S02.01 Decadal climate prediction: challenges and opportunities
James Hurrell (USA)
- 15:15 - 15:30 S02.02 Quantifying uncertainty, interpreting ensembles and combining models with process understanding
David Stainforth (UK), L Smith
- 15:30 - 15:45 S02.03 Influence of future air-pollution mitigation strategies on climate by 2030
Silvia Kloster (USA), F Dentener, F Raes, J Feichter, U Lohmann, E Roeckner
- 15:45 - 16:00 S02.04 Climate change over China in the past, present and year 2030
Zong-Ci Zhao (PR China), Y Luo, Y Jiang, S Tao
- 16:00 - 16:15 S02.05 Physical mechanism and quantitative assessment of the planetary boundary layer feedback in the climate system
Igor Esau (Norway)
- 16:15 - 16:30 S02.06 High resolution regional climate change modelling in CECILIA Project - climate change signal in central and Eastern Europe
Tomas Halenka (Czech Republic), J Miksovsky, M Belda, P Huszar

16:30 - 17:00

Coffee Break

17:00 - 18:30 S02B

Hall B - Room K

Session 02 - Global/Regional Climate State in 2030 Part II

- 17:00 - 17:15 S02.07 The North American Regional Climate Change Assessment Program (NARCCAP): overview of Phase II results
Linda Mearns on behalf of NARCCAP Team (USA)
- 17:15 - 17:30 S02.08 A multi-member, high-resolution, transient simulation of 20th and 21st century climate in the United States
Noah Diffenbaugh (USA), M Ashfaq
- 17:30 - 17:45 S02.09 The EU-FP7 'ACQWA' Project: exploring issues of water in vulnerable mountain regions
Martin Beniston (Switzerland)
- 17:45 - 18:00 S02.10 Climate indices for the prediction of European agricultural production in 2020 and 2040
Neil MacKellar (Denmark), S Yang, J Olesen
- 18:00 - 18:15 S02.11 Modelling yield distribution as affected by extreme events
Marco Moriondo (Italy), M Bindi, N Luger
- 18:15 - 18:30 Discussion

15:00 - 16:30 S03A

Hall B - Room P

Session 03 - Changes in Ocean Circulation Related to Regional Climate Part I

Chairs: Professor Martin Visbeck, IFM-GEOMAR, University of Kiel & Professor Nathan Bindoff, University of Tasmania

- 15:00 - 15:15 S03.01 Evolution of Atlantic Ocean properties and circulation from the tropics to the Arctic
Ruth Curry (USA)
- 15:15 - 15:30 S03.02 Evolution of Southern Ocean under climate change: dynamics and feedbacks
Sabrina Speich (France), SR Rintoul, K Speer
- 15:30 - 15:45 S03.03 Global and regional warming: the Mediterranean sea case from observation and modeling
Vincenzo Artale (Italy), S Marullo, R Santoleri
- 15:45 - 16:00 S03.04 Global and regional 50 year ocean salinity trends
Susan Wijffels (Australia), P Durack
- 16:00 - 16:15 S03.05 Changes in global upper-ocean heat content over the last half century and comparison with climate models
John Church (Australia), C Domingues, N White(1,2), S Wijffels, P Barker, P Gleckler
- 16:15 - 16:30 Discussion

16:30 - 17:00

Coffee Break

Tuesday, 10 March 2009

17:00 - 18:30 S03B

Hall B - Room P

Session 03 - Changes in Ocean Circulation Related to Regional Climate Part II

- 17:00 - 17:15 S03.06 Recent decadal warming and freshening of Antarctic-derived abyssal waters
Gregory Johnson (USA)
- 17:15 - 17:30 S03.07 Changes in the Arctic atmosphere-ice-ocean system
Igor Polyakov (USA)
- 17:30 - 17:45 S03.08 Why is the response of European climate to a collapse of the Atlantic meridional overturning circulation relatively small?
Wilco Hazeleger (The Netherlands), A Laurian, S Drijfhout, B van den Hurk
- 17:45 - 18:00 S03.09 Review of ocean temperature, salinity and oxygen changes in the Pacific and subtropical southern hemisphere
Lynne D Talley (USA)
- 18:00 - 18:15 S03.10 Stability of the interaction between the North Atlantic THC and its key source: the Nordic Seas
Bogi Hansen (Faeroe Islands) H Hátún, S Østerhus, D Quadfasel, S Jónsson, H Valdimarsson, B Turrell, S Hughes, B Berx, T Sherwin
- 18:15 - 18:30 Discussion

15:00 - 16:30 S04A

Hall B - Room O

Session 04 - Vulnerability in Carbon Sinks Part I

Chairs: Dr Michael Raupach, (CSIRO) Marine and Atmospheric Research & Professor Nicolas Gruber, ETH Zurich

- 15:00 - 15:30 S04.01 Vulnerability of the terrestrial C sink
Christopher B Field (USA)
- 15:30 - 15:45 S04.02 Vulnerability of terrestrial carbon sinks to high temperature extremes
Robert Scholes (South Africa), R Makhado
- 15:45 - 16:00 S04.03 Vulnerability of carbon stocks in tropical forests
Ruth DeFries (USA)
- 16:00 - 16:15 S04.04 Drought sensitivity of the amazon carbon sink
Oliver Phillips (UK), L Aragao, S Lewis, J Fisher, J Lloyd, G Lopez-Gonzalez, Y Malhi, A Monteagudo, J Peacock, C Quesada, G van der Heijden, S Almeida
- 16:15 - 16:30 S04.05 New observations suggest vulnerability of the carbon sink in tropical rainforests
David W Hilbert (Australia), JG Canadell, D Metcalfe, M Bradford

16:30 - 17:00

Coffee Break

17:00 - 18:30 S04B

Hall B - Room O

Session 04 - Vulnerability in Carbon Sinks Part II

- 17:00 - 17:30 S04.06 Recent trend in the global oceanic sink for CO₂
Corinne Le Quere (UK)
- 17:30 - 17:45 S04.07 The vulnerability of the coastal carbon cycle
Nicolas Gruber (Switzerland), Z Lachkar, G-K Plattner, C Hauri
- 17:45 - 18:00 S04.08 Long-term commitment of CO₂ emissions on the global carbon cycle and climate
Gian-Kasper Plattner (Switzerland)
- 18:00 - 18:15 S04.09 The role of climate variability and extremes for global terrestrial carbon dynamics: lessons learnt from multiple observations and experiments
Markus Reichstein (Germany), P Ciais, C Beer, C Beier, A Ibrom, I Janssens, M Jung, L Misson, S Seneviratne, P Smith, C Williams, C Wirth
- 18:15 - 18:30 S04.10 Quantifying and ranking vulnerabilities in the carbon-climate-human system
Michael R Raupach (Australia), N Gruber, P Ciais, PJ Rayner
- Discussion

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15:00 - 16:35 S05A

Hall B - Room Q

Session 05 - Developing a Spectrum of Models to Describe the Earth System Part I

Chair: Professor Martin Claussen, KlimaCampus University Hamburg, Max Planck Institute for Meteorology

- 15:00 - 15:20 S05.01 **Invited Paper:** A multiscale modelling framework for atmospheric flows
Rupert Klein (Germany)
- 15:20 - 15:35 S05.02 A GCM study on CO₂ emission pathways to climate stabilization
Erich Roeckner (Germany), M Giorgetta, T Crueger, M Esch, J Pongratz
- 15:35 - 15:50 S05.03 The Met Office Hadley Centre next generation Earth System Model
William Collins (UK), M Doutriaux-Boucher, C Jones, F O'Connor, I Totterdell
- 15:50 - 16:05 S05.04 EC-Earth: a seamless prediction approach to earth system modelling
Wilco Hazeleger (The Netherlands), C Jones, R McGrath, J Hesselbjerg-Christensen
- 16:05 - 16:20 S05.05 Analysis of climate-biosphere interactions using a spectrum of models of various complexity
Victor Brovkin (Germany), M Claussen
- 16:20 - 16:30 Discussion

16:30 - 17:00

Coffee Break

17:00 - 18:30 S05B

Hall B - Room Q

Session 05 - Developing a Spectrum of Models to Describe the Earth System Part II

- 17:00 - 17:15 S05.06 Adding human dimensions to earth system models
Joseph Alcamo, Germany
- 17:15 - 17:30 S05.07 PRIMAP – Potsdam Real-Time Integrated Model for the probabilistic assessment of emission paths
Malte Meinshausen (Germany), B Hare, K Frieler, J Nabel, K Markmann, M Schaeffer, J Rogelj
- 17:30 - 17:45 S05.08 Setting cumulative emissions targets to reduce the risk of dangerous climate change
Kirsten Zickfeld (Canada) M Eby, HD Matthews, AJ Weaver
- 17:45 – 18:05 S05.09 **Invited Paper:** From cost-optimal emissions to impacts of greenhouse gases: closing the loop in earth system modelling
Hermann Held (Germany)
- 18:05 - 18:30 Discussion

15:00 - 16:30 S06A

Hall B - Room E

Session 06 - Tipping Elements in the Earth System Part I – Paleo and Ice Sheet Tipping

Chairs: Professor Matthew England, University of New South Wales & Professor Tim Lenton, University of East Anglia

- 15:00 - 15:30 S06.01 **Invited Paper:** Abrupt climate change: findings from the us climate change science program synthesis and assessment product 3.4
Andrew Weaver (Canada), P Clark, E Brook, E Cook, T Delworth, J McGeehin, K Steffen
- 15:30 - 15:45 S06.02 Multiple West Antarctic ice sheet retreats could explain southern warmth in recent interglacials
Phil Holden, N(UK), Edwards, E Wolff
- 15:45 - 16:00 S06.03 What is the tipping point for the Greenland Ice Sheet?
Jonathan Bamber (UK), E Steig, D Dahl-Jensen
- 16:00 - 16:15 S06.04 The anatomy of abrupt warming and cooling climate transitions from two Greenland ice cores
Trevor James Popp (Denmark), JWC White
- 16:15 - 16:30 S06.05 Slowing down as an early warning signal for abrupt climate change
Marten Scheffter (The Netherlands), V Dakos, EH van Nes

16:30 - 17:00

Coffee Break

Tuesday, 10 March 2009

17:00 - 18:30 S06B

Hall B - Room E

**Session 06 - Tipping Elements in the Earth System Part II –
Atmosphere and Ocean Tipping Points**

- 17:00 - 17:30 S06.06 **Invited paper:** Abrupt climate change: atmospheric tipping points
Kerry H Cook (USA)
- 17:30 - 17:45 S06.07 Processes associated with the fast warming rate of the Southern Hemisphere midlatitude ocean
Wenju Cai (Australia), T Cowan
- 17:45 - 18:00 S06.08 The decreasing summer Arctic sea ice cover and the ice albedo feedback
Don Perovich (USA)
- 18:00 - 18:15 S06.09 Is the stability of the Atlantic MOC changed by global warming?
Sybrein Drijfhout (The Netherlands), E de Swaluw, S Weber
- 18:15 - 18:30 S06.10 Towards the probability of crossing tipping points
Peter Challenor (UK), D McNeall

15:00 - 16:30 S07A

Hall B - Room I

Session 07 - Informing the Future by Understanding the Past Part I

Chairs: Dr Bette Otto-Bliesner, National Center for Atmospheric Research (NCAR) & Dr Chris Turney, University of Exeter

- 15:00 - 15:15 S07.01 Palaeoclimatic insights and challenges inferred from ice core studies
Sune Olander Rasmussen (Denmark)
- 15:15 - 15:30 S07.02 The impact of global warming on precipitation patterns
Wallace S Broecker (USA)
- 15:30 - 15:45 S07.03 Recent movements of the ITCZ in the tropical Pacific and ramifications for the Marshall Islands
Julian Sachs & Mark Stege (Marshall Islands), T Keju
- 15:45 - 16:00 S07.04 High summer rainfall during the warm Early Pleistocene in the southern hemisphere: analogue for future greenhouse climates?
JM Kale Sniderman (Australia), N Porch
- 16:00 - 16:15 S07.05 Ecosystem response to abrupt climate change during the last glacial period in Western Europe - the Lacustrine Sequence of Les Echets
Barbara Wohlfarth (Sweden), L Ampel, D Veres, M Blaauw, F Preusser
- 16:15 - 16:30 S07.06 The age of small prey: diet and climate variability at the Pleistocene-Holocene boundary and beyond
Emily Lena Jones (USA)

16:30 - 17:00

Coffee Break

17:00 - 18:30 S07B

Hall B - Room I

Session 07 - Informing the Future by Understanding the Past Part II

- 17:00 - 17:15 S07.07 Archaeology and Climate change in the caribbean: lessons from the past for problems of the future
Jago Cooper (UK), M Peros
- 17:15 - 17:30 S07.08 Lessons of the mid-Pliocene: Planet Earth's last interval of greater global warmth
Alan Haywood (UK), S Bonham, D Hill, D Lunt, U Salzmann
- 17:30 - 17:45 S07.09 The last interglacial warm period record of the Arctic Ocean: proxy-data support a major reduction of sea ice
Niels Nørgaard-Pedersen (Denmark), N Mikkelsen, Y Kristoffersen
- 17:45 - 18:00 S07.10 Hazard and rates of sea level rise: what can we learn from the last interglacial?
Robert E Kopp (USA), FJ Simons, AC Maloof, D Kroon, S Jung, M Oppenheimer
- 18:00 - 18:15 S07.11 Dangerous ocean acidification
Andrew Ridgwell (UK), D Schmidt
- 18:15 - 18:30 S07.12 What can earth's deep past tell us about the future?
Jeffrey Kiehl (USA)

Tuesday, 10 March 2009

15:00 - 16:30 S08A

Hall B - Room N

Session 08 - Earth System Feedbacks and Carbon Sequestration Part I

Chairs: Professor Keith Paustian, Colorado State University & Professor Scott Denning, Colorado State University

- 15:00 - 15:15 S08.01 Global carbon sources and sinks: 2007 update
Pep Canadell (Australia), *C Leure, M Raupach, P Ciais, T Conway, C Field, S Houghton, G Marland*
- 15:15 - 15:30 S08.02 Biogeochemical feedbacks in the earth system
Iain Colin Prentice (UK)
- 15:30 - 15:45 S08.03 Future climate carbon cycle feedbacks, reducing uncertainties through process evaluation
Corinne Le Quere (UK)
- 15:45 - 16:00 S08.04 Land-surface-cloud coupling and climate change
Alan K Betts (USA)
- 16:00 - 16:15 S08.05 Climate change in an Arctic mountainous area in the period 1900-2100 and the effect on permafrost and the ecosystem carbon stocks
Birger Ulf Hansen (Denmark), *C Sigsgaard, M Tamstorf, B Elberling, T Friborg, KM Iversen, M Rasch*
- 16:15 - 16:30 S08.06 Greenhouse gas fluxes at a continental tundra site in NE Siberia and radiative forcing of advancing of the growing season
Michiel van der Molen (The Netherlands), *K van Huissteden, F-J Parmentier, R de Jeu, T Holmes, H Dolman*

16:30 - 17:00

Coffee Break

17:00 - 18:30 S08B

Hall B - Room N

Session 08 - Earth System Feedbacks and Carbon Sequestration Part II

- 17:00 - 17:15 S08.07 Climatic feedbacks in ecosystems of the arctic region
Thomas Friborg (Denmark), *J Falk, L Groendahl, BU Hansen, M Herbst, T Johansson, I Kiepe, H Soegaard*
- 17:15 - 17:30 S08.08 Ocean iron fertilization: an examination of sequestration potential, environmental impacts and feedbacks
Margaret Leinen (USA), *D Whaley, K Whilden*
- 17:30 - 17:45 S08.09 Increasing carbon storage in intact African tropical forests: implications for the global carbon cycle
Simon Lewis (UK), *G Lopez-Gonzalez, B Sonké, K Affum-Baffoe, L Ojo, L White, T Hart, A Hladik, D Sheil, M Swaine, D Taylor, O Phillips*
- 17:45 - 18:15 S08.10 The role of land use and land cover in stabilizing atmospheric CO₂
James Edmonds (USA)
- 18:15 - 18:30 Discussion

Tuesday, 10 March 2009

15:00 - 16:30 S09A

Hall B - Room J

Session 09 - Detection and Attribution: State of Play in 2009 Part I

Chair: Professor Ann Henderson-Sellers, Macquarie University

- 15:00 - 15:15 S09.01 How does attributable human influence on climate constrain forecasts of the future?
Myles Allen (UK), D Frame, C Huntingford, C Jones, J Lowe, M Meinshausen, N Meinshausen
- 15:15 - 15:30 S09.02 Recent progress on detection and attribution of the water cycle
Peter Stott (UK)
- 15:30 - 15:45 S09.03 Human-Modified Temperatures Induce Species Changes: Joint Attribution
Terry Root (USA), DP MacMynowski, MD Mastrandrea, SH Schneider
- 15:45 - 16:00 S09.04 Can we regionalise adaptation when we are challenged by regionalising detection?
Jean Palutikof (UK)
- 16:00 - 16:15 S09.05 Post IPCC AR4 biological and physical impact data analysis
Cynthia Rosenzweig (USA)
- 16:15 - 16:30 S09.06 Discernable effects of climate change on crop production
Peter Gregory (UK)

16:30 - 17:00

Coffee Break

17:00 - 18:30 S09B

Hall B - Room J

Session 09 - Detection and Attribution: State of Play in 2009 Part II

- 17:00 - 17:15 S09.07 Climate change and extreme weather
Greg Holland (USA)
- 17:15 - 17:30 S09.08 Detection and attribution: the case of escalating damage from extreme events
Laurens Bouwer (The Netherlands), R Pielke
- 17:30 - 17:45 S09.09 Frozen carbon: a time bomb in the future?
Philippe Ciais (France), D Khvorostianov, S Zimov, G Krinner, P Friedlingstein, S Piao, C Koven
- 17:45 - 18:00 S09.10 Coupling climate models with human decision making
Kevin Noone (Sweden), J Norberg, A Henderson-Sellers
- 18:00 - 18:15 S09.11 Detection and attribution since the production of the IPCC Fourth Assessment Report
Lucka Kajfez Bogataj (Slovenia)
- 18:15 - 18:30 S09.12 What are the large ice sheets in Greenland and Antarctica doing now?
Eric Rignot (USA)

15:00 - 16:30 S10A

Hall B - Room I

Session 10 - Equity between Sectors and Individuals within Countries Part I

Chairs: Dr Paul Baer, Research Director, The College of William and Mary and Oxford University & Dr Sivan Kartha, Stockholm Environment Institute

- 15:00 - 15:15 S10.01 Equity in the climate regime: the forgotten 2.5 Billion
Ambuj Sagar (India)
- 15:15 - 15:30 S10.02 Vulnerability, adaptability and mitigation in the context of challenges of climate change: the balance of benefits in traditional and urban paradigms in Ghana
Jones Lewis Arthur (Ghana)
- 15:30 - 15:45 S10.03 Variation in household CO2 emissions and the consequences for burden sharing
Annemarie C Kerkhof (The Netherlands), RMJ Benders, HC Moll
- 15:45 - 16:00 S10.04 A 'ground-up' interpretation of fair burden-sharing within countries - an entitlement to equitable household energy services
Narasimha Rao (USA)
- 16:00 - 16:15 S10.05 Policy implications of post-2012 allocation based on individual emissions
Heleen de Coninck (The Netherlands), S Chakravarty, A Chikkatur, S Pacala, R Socolow, M Tavoni
- 16:15 - 16:30 S10.06 Does the philosophical literature support an equal per capita allocation of emissions rights within nations?
Richard Starkey (UK)

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16:30 - 17:00

Coffee Break

17:00 - 18:30 S10B

Hall B - Room I

Session 10 - Equity between Sectors and Individuals within Countries Part II

- 17:00 - 17:15 S10.07 Opportunities for mitigation: considering the gender gap
Susan Buckingham (UK), JE da Veiga
- 17:15 - 17:30 S10.08 Methane and the natural debt: a combined index of responsibility
Kirk R Smith (USA), JV Rogers
- 17:30 - 17:45 S10.09 Climate policy and the problem of competitiveness: border tax adjustments or integrated emission trading?
Victoria Alexeeva-Talebi (Germany), A Löschel, T Mennel
- 17:45 - 18:15 S10.10 Biofuels, poverty, and growth: a computable general equilibrium analysis of Mozambique
Finn Tarp (Denmark), C Arndt, R Benfica, J Thurlow, R Uaiene
- 18:00 - 18:15 S10.11 Tropical forest product markets and addressing adaptation priorities of forest communities in West and Central Africa
Johnson Nkem (Indonesia), M Idinoba, K Fobissie, A Awono, O Somorin
- 18:15 - 18:30 S10.12 Inequality and the missing common good: Challenges to climate adaptation in the new (neoliberal) world order
Glenn Fieldman (USA)

15:00 - 16:30 S11A

Hall B - Room Y

Session 11 - Equity between Nations and Regions Part I

*Chairs: Dr Timmons Roberts, The College of William and Mary and
Oxford University & Professor Coleen Vogel, University of Witwatersrand*

- 15:00 - 15:15 S11.01 Common but differentiated responsibilities' defined on the basis on equity for future climate change regime
Sanjay Vashist (India), M Alam, S Krishnaswamy, P Bahouth, V Bartra, T Athanasiou, S Singer, A Hill
- 15:15 - 15:30 S11.02 Do equity preferences matter for climate negotiators? An experimental investigation
Bodo Sturm (Germany), A Dannenberg, C Vogt
- 15:30 - 15:45 S11.03 Effort-sharing between regions in ambitious climate scenarios
Tommi Ekholm (Finland), S Soimakallio, S Syri, N Höhne, S Moltmann
- 15:45 - 16:00 S11.04 Participation for developing countries: some criteria
Jyoti Parikh (India)
- 16:00 - 16:15 S11.05 The health impacts of climate change will exacerbate inequities
Kristie Ebi (USA)
- 16:15 - 16:30 S11.06 Distributing emission allowances versus sharing mitigation burden: two contrary perspectives on climate justice among world regions
Brigitte Knopf (Germany), M Lüken, N Bauer, O Edenhofer

16:30 - 17:00

Coffee Break

Tuesday, 10 March 2009

15:00 - 16:30 S11B

Hall B - Room Y

Session 11 - Equity between Nations and Regions Part II

- 17:00 - 17:15 S11.07 Analysing reductions in Annex I and non-Annex I for meeting concentration stabilisation targets
Michel den Elzen (The Netherlands), N Höhne
- 17:15 - 17:30 S11.08 International adaptation finance: the need for an innovative and strategic approach
Benito Müller (UK)
- 17:30 - 17:45 S11.09 An ethical approach to the international-level funding of adaptation to climate change
Marco Grasso (Italy)
- 17:45 - 18:00 S11.10 Effects of the CDM on poverty eradication and global climate protection
Dirk Rübbelke (Norway), N Rive
- 18:00 - 18:15 S11.11 Technology transfer and financing: issues for long term climate policy in developing countries
Tirthankar Mandal (India)
- 18:15 - 18:30 S11.12 Building a 'Global Adaptation Atlas': setting geographic priorities for funding adaptation to climate change
Shalini Vajjhala (USA)

15:00 - 16:30 S12A

Hall B - Room R

**Session 12 - Equity in Time: Past, Present and Future
Emitters and Victims Part I**

Chairs: Dr Carlos Nobre, Brazil National Institute for Space Research and Chair of IGBP & Dr Cameron Hepburn, Oxford University

- 15:00 - 15:30 **Keynote Lecture:** Climate change and the future: discounting for time, wealth, and risk
Simon Caney (UK)
- 15:30 - 15:45 S12.01 Climate change, social justice and development
Terry Barker (UK), SS Scrieciu, D Taylor
- 15:45 - 16:00 S12.02 Economic models and the rights of future generations
Dominic Roser (Switzerland)
- 16:00 - 16:15 S12.03 Economics, ethics and climate change
Simon Dietz (UK), C Hepburn, N Stern
- 16:15 - 16:30 Discussion

16:30 - 17:00 Coffee Break

17:00 - 18:30 S12B

Hall B - Room R

**Session 12 - Equity in Time: Past, Present and Future
Emitters and Victims Part II**

- 17:00 - 17:15 S12.04 COP-15 and the ethics of climate change
José Eli da Veiga (Brazil), MV Pettersen
- 17:15 - 17:30 S12.05 Methodology of simplified Brazilian proposal and the long-term contribution to temperature rise
Hiromi Nishimoto (Japan), Y Matsuoka
- 17:30 - 17:45 S12.06 Individual preferences for aversion to public and private risk, inequality, and time - an empirical study
Jennifer Helgeson (USA), H Sælen, G Atkinson, S Dietz, C Hepburn
- 17:45 - 18:10 S12.07 Sustainability as generosity
Herman Vollebergh (The Netherlands), R Gerlagh
- 18:10 - 18:30 Discussion

16:30 - 17:00 Coffee Break

Tuesday, 10 March 2009

15:00 - 16:30 S13A

Hall B - Room S

Session 13 - Equity between Humans and the Rest of Nature Part I

Chairs: Professor Dale Jamieson, New York University & Dr William Schlesinger, Cary Institute of Ecosystem Studies

- 15:00 - 15:20 S13.01 Effects of European bioenergy policies and targets on land use allocations and nature conservation options
Christine Schleupner (Germany), UA Schneider
- 15:20 - 15:40 S13.02 Survival of humankind rather than equity between humans and the rest of nature
Furio Cerutti (Italy)
- 15:40 - 16:00 S13.03 Framing natural resource management for climate resilience
Marilyn Averill (USA)
- 16:00 - 16:20 S13.04 Human happiness - friend or foe?
Mikko Yrjönsuuri (Finland)
- 16:20 - 16:30 Discussion

16:30 - 17:00

Coffee Break

17:00 - 18:30 S13B

Hall B - Room S

Session 13 - Equity between Humans and the Rest of Nature Part II

- 17:00 - 17:20 S13.05 Extinction, suffering, and the cruciformity of the cosmos
Kyle Van Houtan (USA)
- 17:20 - 17:40 S13.06 Climate change and biodiversity preservation: a non-anthropocentric perspective
Anders Melin (Sweden)
- 17:40 - 18:00 S13.07 Environmental justice, human responsibility and equity between humans and nature
Catherine Larrère (France)
- 18:00 - 18:10 Wrap-up
Dale Jamieson, USA
- 18:10 - 18:30 Discussion

15:00 - 16:30 S14A

Hall B - Room U

Session 14 - Differential Effects of Climate Change on Human Health and Well-Being Part I

Chairs: Professor Anthony J McMichael, Australian National University & Dr Roberto Bertollini, WHO Headquarters

- 15:00 - 15:05 Introduction
Anthony J McMichael (Australia)
- 15:05 - 15:20 S14.01 A proactive public health approach to climate change: tackling the infectious disease challenge
Jan Semenza (Sweden), J Suk
- 15:20 - 15:35 S14.02 Potential impact of, and adaptation to, climate change influence on schistosomiasis transmission in China
Xiao-Nong Zhou (PR Chian), K Yang, G-J Yang, X-H Wu, TK Kristensen, R Bergquist, J Utzinger
- 15:35 - 15:40 S14.03 Potential impacts of climate change on snail-borne disease in sub-Saharan Africa
Anna-Sofie Stensgaard (Denmark), TK Kristensen, C Rahbek, F Møhlenberg
- 15:40 - 15:55 S14.04 Climate change implications for contaminant exposures in the Arctic
Philippe Grandjean (USA), P Bjerregaard, P Weihe
- 15:55 - 16:10 S14.05 Climate change, food yields, food security, and health
Colin D Butler (Australia)
- 16:10 - 16:20 S14.06 Physiological heat stress due to climate change: risk differentials exacerbates health inequities
Tord Kjellstrom (Australia), B Lemke
- 16:20 - 16:30 S14.07 Quantifying regional heat stress increases in warmer and more humid climates
Steven Sherwood (USA), K Willet,

16:30 - 17:00

Coffee Break

Tuesday, 10 March 2009

17:00 - 18:30 S14B

Hall B - Room U

Session 14 - Differential Effects of Climate Change on Human Health and Well-Being Part II

- 17:00 - 17:05 Introduction
Roberto Bertollini, WHO Headquarters
- 17:05 - 17:20 S14.08 Estimating the health burden of current and future extreme events
Sari Kovats (UK)
- 17:20 - 17:35 S14.09 Health risks of current and future heat stress in East Asia a. In title, replace 'stress' with 'extremes'
Yasushi Honda (Japan)
- 17:35 - 17:45 S14.10 Projected impacts on heat-related mortality from changes in the mean and variability of temperature with climate change
Simon Gosling (UK), **J Lowe**, **G McGregor**
- 17:45 - 18:05 S14.11 Health adaptation choices at local and regional scales
Kristie Ebi (USA)
- 18:05 - 18:20 S14.12 Health and climate co-benefits: a survey of the mitigation landscape
Kirk R Smith (USA)
- 18:20 - 18:30 Wrap-up overview
Simon Hales, WHO Headquarters

15:00 - 16:30 S15

Hall B - Room G

Session 15 - Avoiding Land-Cover Change to Reduce Carbon Emissions

Chair: Professor Mark S Ashton, Yale School of Forestry and Environmental Studies & Professor Liping Zhou, Peking University

- 15:00 - 15:20 S15.01 Ensuring 'permanence' in forest carbon sinks: insights from contract theory
Charles Palmer (Switzerland), **M Ohndorf**, **I MacKenzie**
- 15:20 - 15:40 S15.02 Providing financial support where action takes place: "Compensated Successful Efforts" for REDD
Romain Pirard (France), **P Combes-Motel**, **J-L Combes**
- 15:40 - 16:00 S15.03 Reducing deforestation is essential for constraining global temperatures to 2°C above pre-industrial levels
Rachel Warren (UK), **J Price**, **B Strassburg**, **J Lowe**, **S de la Nava Santos**, **S Raper**, **N Vaughan**
- 16:00 - 16:20 S15.04 Climate policy design and forest carbon sequestration
Steven Rose (USA), **B Sohngen**
- 16:20 - 16:30 Discussion

16:30 - 17:00

Coffee Break

15:00 - 16:30 S17A

Hall B - Room M

Session 17 - Carbon Capture and Storage: Technology, Economy, Social Attitudes Part I

Chair: Professor Wim C Turkenburg, Director Copernicus Institute, Utrecht University

- 15:00 - 15:05 S17.01 Introduction to the session on Carbon Capture Storage
Wim C Turkenburg (The Netherlands)
- 15:05 - 15:25 S17.02 What have we learnt from CCS demonstration projects?
John Gale (UK), **B Beck**, **T Dixon**
- 15:25 - 15:45 S17.03 Experience with CO2 capture from coal flue gas in pilot-scale
Jacob Nygaard Knudsen (Denmark), **JN Jensen**, **PJ Vilhelmsen**, **O Biede**
- 15:45 - 16:05 S17.04 Outlook for CO2 capture technologies
Olav Bolland (Norway)
- 16:05 - 16:25 S17.05 United States carbon sequestration regional partnerships
Bruce Lani (USA), **S Plasynski**, **S Klara**
- 16:25 - 16:30 Discussion

16:30 - 17:00

Coffee Break

Tuesday, 10 March 2009

15:00 - 16:30 S35A

Hall B - Room X

**Session 35 - Adapting Coastal Zone and Marine Resources
to Climate Change Part I**

Chair: Professor Pier Vellinga, Wageningen University

- 15:00 - 15:15 S35.01 Adapting coastal zone and marine resources to climate change and integrating human dimensions during natural disasters
Narendra Kumar Choudhary (India), LP Chaudhari, AG Bhole
- 15:15 - 15:30 S35.02 Informing adaptation: a new set of marine climate change scenarios
Jonathan Tinker (UK), J Lowe, T Howard, D de Gusmão, J Wolf, K Horsburgh, J Holt, T Reeder
- 15:30 - 15:45 S35.03 Policy options for adapting marine ecosystems to climate change
Ian Perry (Canada), M Barange
- 15:45 - 16:00 S35.04 Exploring high-end climate change scenarios for flood protection of the Netherlands
Wilco Hazeleger (The Netherlands), C Katsman, A Sterl, J Beersma
- 16:00 - 16:15 S35.05 Vulnerability assessment for development of strategic planning policies for Eastern Mediterranean Coast of Morocco
Allali Abdelkader (Morocco)
- 16:15 - 16:30 S35.06 Ecosystem-based adaptation to climate change in coastal and marine areas
Lynne Hale (USA), P Van Ejik, M Hatziols, N Davidson, R Chacko, C Toropova

16:30 - 17:00

Coffee Break

17:00 - 18:30 S35B

Hall B - Room X

**Session 35 - Adapting Coastal Zone and Marine Resources
to Climate Change Part II**

- 17:00 - 17:15 S35.07 Testing empirical relationships between global sea-level and global temperature in long climate model simulations
Eduardo Zorita (Germany), H von Storch
- 17:15 - 17:30 S35.08 Impact of climate change in coastal area: a vulnerability assessment of coastal inundation due to sea level rise in Central Java Indonesia
Muh Aris Marfai (Indonesia)
- 17:30 - 17:45 S35.09 Decision support model to risk management and adaptation strategies to climate change in Buenos Aires coast, Argentina
Leandro Fernandez (Argentina), J Karol, N Castillo
- 17:45 - 18:00 S35.10 A survey of stakeholders' response to heat waves in Adelaide, South Australia: a qualitative study
Peng Bi (Australia), R van Iersel
- 18:00 - 18:15 S35.11 Adaptation to climate change in coastal zones: an analysis of the interventions to safeguard Venice and its lagoon
Stefania Munaretto (Italy)
- 18:00 - 18:30 Discussion

Tuesday, 10 March 2009

15:00 - 16:30 S58A

Hall B - Room F

Session 58 -National and Regional Development of Mitigation Policies Part I

Chair: Dr Katrine Krogh Andersen, Special Advisor, Ministry of Climate & Energy

- 15:00 - 15:15 **Invited Paper:** Title to be announced
Ogunlade Davidson (Sierra Leone)
- 15:15 - 15:30 S58.01 The economics of the new EU climate and energy package
Tom van Ierland (Belgium), K Ger
- 15:30 - 15:45 S58.02 CDM and solar energy in India: issues and concerns
Vagish Sharma (India), KC Das
- 15:45 - 16:00 S58.03 Reconciling energy insecurity and climate risks in China
Guodong Sun (USA)
- 16:00 - 16:15 S58.04 Reduced Emissions from Deforestation and Degradation (REDD) and decentralized forest management
Silvia Irawan (Australia), L Tacconi
- 16:15 - 16:30 S58.05 Mitigation potential and perspectives for Russian participation in a post-Kyoto agreement
Alexander Golub (USA), O Lugovoy

17:00 - 18:30 S58B

Hall B - Room H

Session 58 -National and Regional Development of Mitigation Policies Part II

- 17:00 - 17:15 **Invited Paper:** The road to Copenhagen. The UNFCCC negotiations
Thomas Becker (DK)
- 17:15 - 17:30 S58.06 A proposal that adds up to a global solution: Australia's Garnaut Climate Change Review
Frank Jotzo (Australia), R Garnaut, S Howes
- 17:30 - 17:45 S58.07 Keeping Government on Track: The UK Climate Change Act and the Committee on Climate Change
Jim Skea (UK), S Smith
- 17:45 - 18:00 S58.08 Comparing mitigation potentials and costs in Annex 1 countries in 2020
Markus Amann (Austria)
- 18:00 - 18:15 S58.09 International support for domestic climate policies: policy summary
Karsten Neuhoff (UK), W Gboney, K Grant, H Machado-Filho, A Singh, U Sreenivasamurthy, X Zhang, J Cust, I Iliev, S Lester, A Magen, Z Pato, M Sipple
- 18:15 - 18:30 S58.10 EU policies on climate change and energy: a critical view
Eirik S Amundsen (Denmark), Peter PB Sørensen
Discussion

Tuesday, 10 March 2009

15:00 - 16:30 S57A

Hall B - Room F

Session 57 - Cultures, Values & World Perspectives as Factors in Responding to Climate Change Part I

Chairs: Professor Karen O'Brien, University of Oslo & Professor Thomas Heyd, University of Victoria

- 15:00 - 15:05 Introduction
- 15:05 - 15:15 S57.01 Attitudes and responses to climate change: the intersection of worldviews and immediate concerns
Elizabeth L Malone (USA)
- 15:15 - 15:25 S57.02 Encouraging climate change engagement through affective connections
Saffron O'Neill (UK), L Whitmarsh
- 15:25 - 15:35 S57.03 Emotional reaction of children aged 9-14 years to climate change and how emotions are linked to action
Christian A Klöckner (Norway), A Beisenkamp, S Hallmann
- 15:35 - 15:45 S57.04 Harnessing universal motivators to enable a humanitarian response to climate change
Judith Ford (The Netherlands)
- 15:45 - 15:55 S57.05 Can the religions contribute to fight climate change?
Jakob Wolf (Denmark)
- 15:55 - 16:05 S57.06 Shedding a new kind of light: dealing with climate change by shifting our most fundamental perspective
Carien AC de Jonge (The Netherlands), HJC Brezet
- 16:05 - 16:30 Discussion

17:00 - 18:30 S20A

Hall B - Room V

Session 20 - Enhancing Energy Conservation and Efficiency Part I

Chair: Professor Diana Ürge-Vorsatz, Central European University

- 17:00 - 17:25 S20.01 Global policy for dramatic reduction of energy consumption in buildings – Factor 3 is both possible and economic rational
Jens Laustsen (France)
- 17:25 - 17:50 S20.02 Energy efficiency in buildings: the road to a real market transformation
Christian Kornevall (Switzerland), C van Aerschot, B Sisson
- 17:50 - 18:10 S20.03 The factors of urban morphology in greenhouse gas emissions: a research overview
Michael Mehaffy (Norway)
- 18:10 - 18:30 S20.04 Energy efficiency the Gordian Knot of EU and global climate policy: a scenario-based policy analysis for the EU
Stefan Thomas (Germany), S Lechtenböhmer, R Schüle

Tuesday, 10 March 2009

17:00 - 18:30 S29A

Hall B - Room F

Session 29 - Climate Change and Water Systems Part I

Chairs: Professor Maria Carmen Lemos, University of Michigan & Professor Torkil Jønh Clausen, DHI

- 17:00 - 17:05 Introduction by the Co-chairs
- 17:05 - 17:15 S29.01 Adaptation actions to reduce water system vulnerability to climate change in Tensift River basin (Morocco)
Mohammed Yacoubi Khebiza (Morocco), M Messouli, F Hammadi, B Ghallabi
- 17:15 - 17:25 S29.02 Climate change and water resources in Lebanon
Jalal Halwani (Lebanon)
- 17:25 - 17:35 S29.03 Assessing the impacts of climate change on the water resources in the Nile Basin using a regional climate model ensemble
Carlo Buontempo (UK), JK Lørup, MA Antar, M Sanderson, MB Butts, E Palin, R McCarthy, R Jones, R Betts
- 17:35 - 17:45 S29.04 Adaptive measures for coping with increased floods and droughts in Bangladesh
Karsten Havnø (Denmark), A Malmgren Hansen
- 17:45 - 17:55 S29.05 Impacts of climate variability and change on development and water security in Sub-Saharan Africa
Fulco Ludwig (The Netherlands), P Kabat, S Hagemann, M Dorlandt
- 17:55 - 18:05 S29.06 Cooperation and adaptation to climate change in transboundary river basins in Africa: evidence from the Nile Basin
Marisa Goulden (UK), D Conway
- 18:05 - 18:15 S29.07 Planning water resources development in the Western Cape of South Africa: how do coping with development pressure, climate variability, and climate change influence each other?
Daniël B Louw (South Africa), M Tadros, R Schulze, M Hellmuth, A Greene, J Callaway
- 18:15 - 18:30 Discussion

17:00 - 18:30 S38A

Hall B – Room M

Session 38 - Adapting Forests to Climate Change Part I

Chair: Professor Niels Elers Koch, University of Copenhagen

- 17:00 - 17:05 S38.01 Introduction: adapting forests to climate change
Niels Elers Koch (Denmark)
- 17:05 - 17:20 S38.02 A new climate for forests: a global assessment by the Expert Panel on adaptation of forests to climate change
Risto Seppälä (Finland)
- 17:20 - 17:35 S38.03 Adapting European forests to climate change: resource modelling under climate change at high resolution based on inventory data
Gert-Jan Nabuurs (The Netherlands), I Van den Wyngaert, G Hengeveld, MJ Schelhaas
- 17:35 - 17:50 S38.04 The Global Biodiversity Information Facility (GBIF): Infrastructure, standards, and access to data and tools to forecast climate change impacts on forest ecosystems
Andy Jarvis (Denmark), N King, S Gaiji
- 17:50 - 18:05 S38.05 Projecting forest fires in mountain forests under climate change
Patrick Weibel (Switzerland), B Reineking, H Bugmann
- 18:05 - 18:20 S38.06 Will the Danish forests stay adapted?
Erik Dahl Kjær (Denmark), JK Hansen, UB Nielsen, LN Hansen, DC Olrik
- 18:20 - 18:30 Discussion

15:00 - 16:30

Workshop: Creating Green Universities

Hall B - Room T

16:45 - 18:30

Workshop: Mitigation of climate change: filling the knowledge gaps revealed by the Fourth Assessment Report

Hall B - Room V

19:00 - 20:30

Reception

Wednesday, 11 March 2009

09:00 - 10:15

Plenary Hall - Auditorium A

Plenary Session

Chair: Professor Michael Grubb, University of Cambridge

Confirmed Speakers

Professor Nebjosa Nakicenovic, IIASA (The International Institute for Applied Systems Analysis) & Vienna University of Technology

Professor William D Nordhaus, Yale University

Professor Dan Kammen, University of California at Berkeley

10:15 - 10:45

Coffee Break

10:45 - 12:15 S01C

Hall B - Room D

Session 01 - Cryosphere, Instabilities, Sea Level Rise Part III

Chairs: Professor Dorte Dahl-Jensen, University of Copenhagen & Professor Konrad Steffen, University of Colorado at Boulder

- | | | |
|---------------|--------|---|
| 10:45 - 11:00 | S01.13 | Future East Greenland runoff acceleration
Sebastian H Mernild (UK) |
| 11:00 - 11:15 | S01.14 | Arctic Sea ice change
Son Nghiem (USA), G Neumann |
| 11:15 - 11:30 | S01.15 | Greenland ice sheet seasonal speedup coupled with surface hydrology
Andrew Shepherd (UK), S Palmer, P Nienow |
| 11:30 - 11:45 | S01.16 | Arctic warming, Greenland Melt and Moulins
Konrad Steffen (USA), A Behar |
| 11:45 - 12:00 | S01.17 | The fate of permafrost in Greenland and Alaska: results from high-resolution transient climate simulations
Martin Stendel (USA), J Hesselbjerg Christensen, R Daanen, S Marchenko, V Romanovsky |
| 12:00 - 12:30 | | Discussion |

15:15 - 15:45

Coffee Break

13:45 - 15:15 S06C

Hall B - Room D

Session 06 - Tipping Elements in the Earth System Part III - Land and Ecosystem Tipping Points

Chairs: Professor Matthew England, University of New South Wales & Professor Tim Lenton, University of East Anglia

- | | | |
|---------------|--------|---|
| 13:45 - 14:15 | S06.11 | Invited Paper: Tipping points in the terrestrial biosphere
Peter Cox (UK) |
| 14:15 - 14:30 | S06.12 | Is the Sahara a tipping element?
Martin Claussen (Germany), V Brovkin |
| 14:30 - 14:45 | S06.13 | Risks for ecosystems - key findings from the Fourth Assessment Report of IPCC
Andreas Fischlin (Switzerland), GF Midgley |
| 14:45 - 15:00 | S06.14 | Committed ecosystem change due to climate change
Chris Jones (UK), J Lowe, S Liddicoat, R Betts |
| 15:00 - 15:15 | S06.15 | Avoiding and recovering from dangerous climate impacts
Jason Lowe (UK), L Gohar, C Huntingford, P Good, J Ridley, D McNeall, C Jones, S Liddicoat, M Parry, S Raper |

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:15 S11C

Plenary Hall - Auditorium A

Session 11 - Equity between Nations and Regions Part III

Chairs: Dr Timmons Roberts, The College of William and Mary and Oxford University & Professor Coleen Vogel, University of Witwatersrand

- 10:45 - 11:00 S11.13 The ethical dilemma of climate change: how unequal is the global distribution of responsibility for and vulnerability to climate change?
Hans-Martin Füssel (Germany)
- 11:00 - 11:15 S11.14 The clean development mechanism: striking a balance between environmental integrity, promoting sustainable development and economic efficiency
Christina Voigt (Norway)
- 11:15 - 11:30 S11.15 International trade and forest sequestration as components of fair climate policy
Glen Peters (Norway), G Marland, P Kauppi
- 11:30 - 11:45 S11.16 Distributional choices in EU climate change policy: in search of a legal framework
Javier de Cendra de Larragan (The Netherlands)
- 12:00 - 12:15 Discussion

12:15 - 13:45

Lunch Break

10:45 - 12:15 S16A

Hall B - Room Q

Session 16 - Integrating Economic Models and the Dynamics of the Carbon Sinks Part I

Chair: Dr Pep Canadell, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Marine and Atmospheric Research & Executive Director Global Carbon Project

- 10:45 - 11:05 S16.01 Integrated assessment modeling of land-use change and climate change impacts on terrestrial carbon stocks
Allison Thomson (USA), M Wise, K Calvin, L Clarke, R Sands, B Bond-Lamberty, S Smith, A Janetos, J Edmonds
- 11:05 - 11:25 S16.02 GHG mitigation through bioenergy production versus carbon sinks enhancement: a quantitative analysis
Petr Havlík (Austria), UA Schneider, E Schmid, H Böttcher, G Kindermann, S Leduc, M Obersteiner
- 11:25 - 11:45 S16.03 Hotspots for carbon offsets in agricultural landscapes: identifying threats, opportunities and policy responses to widespread reforestation
Neville Crossman (Australia), P Butler, D Summers, B Bryan, J Ward
- 11:45 - 12:05 S16.04 Implications of carbon price dynamics and eligibility of mitigation options for U.S. Forestry and Agriculture Carbon Sinks
Adam Daigneault (USA), R Beach, B McCarl, D Adams, R Alig, G Latta
- 12:05 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S16B

Hall B - Room Q

Session 16 - Integrating Economic Models and the Dynamics of the Carbon Sinks Part II

- 13:45 - 14:05 S16.05 Optimal forest management for carbon sequestration: a case study in Yen Bai province, Vietnam
Thi Hong Nhung Nghiem (New Zealand)
- 14:05 - 14:25 S16.06 Carbon cycle uncertainty and CO₂ mitigation cost
Atsushi Kurosawa (Japan)
- 14:25 - 14:45 S16.07 Precautionary feedback policy rules in MUICE - an integrated climate-economy differential game with climate model uncertainty
Magnus Hennlock (Sweden)
- 15:45 - 15:15 Discussion

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:15 S17B

Hall B - Room M

Session 17 - Carbon Capture and Storage: Technology, Economy, Social Attitudes Part II

Chair: Professor Wim C Turkenburg, Director Copernicus Institute, Utrecht University

- 10:45 - 11:05 S17.06 Geological storage of carbon dioxide: current status
Peter J Cook (Australia), *SM Benson*
- 11:05 - 11:25 S17.07 Estimates of CO₂ storage capacity in Europe
Karen Lyng Anthonsen (Denmark), *T Vangkilde-Pedersen, LH Nielsen*
- 11:25 - 11:45 S17.08 Understanding the impact of the level of characterization on long-term performance predictions at geologic CO₂ sequestration sites
Grant Bromhal (USA), *B Harbert, B McPherson, M Deo, P Stauffer, W Carey, B Strazisar, B Kutchko, H Viswanathan, D Wildman, R Pawar, G Guthrie*
- 11:45 - 12:05 S17.09 CO₂ fixation by mineral matter; the potential of different mineralization routes
Ron Zevenhov (Finland), *J Fagerlund*
- 12:05 - 12:15 Discussion

12:15 - 13:45 Lunch Break

13:45 - 15:15 S17C

Hall B - Room M

Session 17 - Carbon Capture and Storage: Technology, Economy, Social Attitudes Part III

- 13:45 - 14:05 S17.10 Development of a large scale CO₂ infrastructure. The case of the Netherlands
Andrea Ramirez Ramirez (The Netherlands), *M van den Broel, H Groenenberg, F Neele, P Lako*
- 14:05 - 14:25 S17.11 Scaling-up Carbon Dioxide Capture and Storage (CCS) - from megatonnes to gigatonnes
Howard Herzog (USA)
- 14:25 - 14:45 S17.12 Recent developments in public attitudes and acceptance of CCS: an overview of research activities and results in recent years
Peta Ashworth (Australia), *S Wade, D Reiner, D Daamen, K Itaoka*
- 14:45 - 15:05 S17.13 Short-term and long-term policies to promote CCS technologies
David Reiner (UK)
- 15:05 - 15:15 Discussion

15:15 - 15:45 Coffee Break

10:45 - 12:25 S18A

Hall B - Room Y

Session 18 - Potentials and Limitations of Biofuels Part I

Chairs: Professor Claus Felby, University of Copenhagen & Science Manager Anders Viksø-Nielsen, Novozymes Biofuels R & D

- 10:45 - 11:25 S18.01 Biomass for biofuels - the challenge and a possible way forward
Claus Felby (Denmark), *JR Porter, SK Rasmussen, JK Schjørring, T Hamborg Nielsen, Y Sakuragi, WGT Willats*
- 11:25 - 11:45 S18.02 Nutrient and energy potential for sustainable biorefineries based on wastes of agrifood systems: two regional cases
Helena Kahiluoto (Finland), *M Kuisma, P Karttunen, M Horttanainen, J Grönroos, RP Rötter, M Virtanen*
- 11:45 - 12:05 S18.03 Sustainability standards for bioenergy - a means to reduce climate change risks
Renate Schubert (Switzerland), *J Blasch*
- 12:05 - 12:25 S18.04 World biofuels production study: understanding the challenges in meeting the new u.s. renewable fuel standard
Audrey Lee (USA), *B Sastri, C Difiglio, T Kaarsberg, T Alfstad*
- 12:25 - 12:30 Discussion

12:15 - 13:45 Lunch Break

Wednesday, 11 March 2009

13:45 - 15:15 S18B

Hall B - Room Y

Session 18 - Potentials and Limitations of Biofuels Part II

- 13:45 - 14:05 S18.05 Can biofuels justify current transport policies?
Jérémie Mercier (UK), A Gathorne-Hardy, Z Makuch
- 14:05 - 14:25 S18.06 Biotechnology enabling commercial biofuel production
Nina Eriksen (Denmark), S Teter, P Harris, KC McFarland, E Vlasenko
- 14:25 - 14:45 S18.07 The development of plants as environmentally benign green factories merging into synthetic biology
Birger Lindberg Møller (Denmark), PE Jensen, P Ulvskov
- 14:45 - 15:05 S18.08 Development of local fuel system for sustainable regional biomass utilization
Yasuo Igarashi (Japan), K Mochidzuki, M Takayama, A Sakoda
- 15:05 - 15:15 Discussion

15:15 - 15:45

Coffee Break

10:45 - 12:15 S19A

Hall B - Room X

Session 19 - Renewable Energies: How Far Can They Take Us? Part I

Chairs: Director Henrik Bindslev, Risø National Laboratory for Sustainable Energy, Technical University of Denmark & Professor Jim Skea, Research Director, UK Energy Research Centre

- 10:45 - 10:48 Opening remarks
- 10:48 - 11:03 S19.01 Wind – the challenge (from a European perspective)
Erik Lundtang Petersen (Denmark)
- 11:06 - 11:21 S19.02 Future wind energy technology and CO2 perspectives
Poul Erik Morthorst (Denmark), JK Lemming, N-E Clausen
- 11:24 - 11:39 S19.03 Beyond feasibility: linking the Mediterranean region's renewable energy resources to Europe - a roadmap for addressing the policy challenges
Anthony Patt (Austria), A Battaglini, N Komendantova, M Milkoreit, J Lilliestam
- 11:42 - 11:57 S19.04 Global market penetration of new renewable energy technologies -assessing future growth rates and energy impacts
Peter Lund (Finland)
- 12:00 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S19B

Hall B - Room X

Session 19 - Renewable Energies: How Far Can They Take Us? Part II

- 13:45 - 13:48 Opening remarks
- 13:48 - 14:03 S19.05 Properties and suitability of liquid fuels derived from microalgae
Anthony Marchese (USA)
- 14:06 - 14:21 S19.06 Good or bad bioenergy? The validity of comparing biomass and biofuels using life cycle assessment
Jeanette Whitaker (UK), K Ludley, S Ryder, R Rowe, J Chapman, G Taylor, D Howard
- 14:24 - 14:39 S19.07 Polymer solar cells for solar energy conversion
Frederik Christian Krebs (Denmark)
- 14:42 - 14:57 S19.08 Producing renewable energy in urban spaces
Dongbin Huang, (Switzerland), DD Genske, L Porsche, A Ruff
- 15:00 - 15:15 Discussion

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:15 S20B

Hall B - Room E

Session 20 - Enhancing Energy Conservation and Efficiency Part II

Chair: Professor Diana Ürge-Vorsatz, Central European University

- 10:45 - 11:05 S20.05 Reducing greenhouse gas emissions from the building sector under the Kyoto Protocol. Challenges and opportunities
Stephane Pouffary (France), CC Cheng, N Svenningsen
- 11:05 - 11:25 S20.06 Promoting energy efficiency through carbon finance: Green Investment Schemes
Diana Ürge-Vorsatz (Hungary)
- 11:25 - 11:45 S20.07 Energy efficiency and development finance: lessons learned for future approaches
Jochen Harnisch (Germany)
- 11:45 - 12:00 S20.08 Methodological challenges for energy efficiency improvement under the Clean Development Mechanism
Daisuke Hayashi, (Switzerland), A Michaelowa
- 12:00 - 12:15 S20.09 Success and failures of energy efficiency funds and obligations. What five European systems have achieved, and what can be learnt from them – a criteria-based policy analysis
Stefan Thomas (Germany)

12:15 - 13:45

Lunch Break

13:45 - 15:15 S20C

Hall B - Room E

Session 20 - Enhancing Energy Conservation and Efficiency Part III

- 13:45 - 14:00 S20.10 Energy efficiency in transport sector for mitigating climate change
Suzana Ribeiro (Brazil), A Abreu
- 14:00 - 14:15 S20.11 Energy efficiency to meet global goal - need for re packaging to induce national and transnational actions
Joyashree Roy (India)
- 14:15 - 14:30 S20.12 The macroeconomic rebound effect from the implementation of energy efficiency policies at different end-use sectors at global level
Athanasios Dagoumas (UK), T Barker
- 14:30 - 14:45 S20.13 The potential contribution from urban planning to reduce carbon-emissions from transportation
Thomas Sick Nielsen (Denmark), P Næss, HH Johannsen
- 14:45 - 14:55 S20.14 Progress on energy efficiency in Europe and related environmental benefits
Anca-Diana Barbu (Denmark)
- 14:55 - 15:15 S20.15 Energy efficiency policies : a world-wide panorama by the World Energy Council
Didier Bosseboeuf (France)

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:15 S21A

Hall B - Room G

Session 21 - Integrated Energy Mixes from a Socio-Economic and Environmental Perspective Part I

Chair: Professor Jiahua Pan, Chinese Academy of Social Sciences

- 10:45 - 14:55 S21.01 Enhance the economic performance of renewable energies from the perspective of incentive development
Weifeng Li (Australia), D Prasad
- 14:55 - 11:05 S21.02 Low-cost carbon-neutral due to CO₂ extraction application
Steve Clemens (Belgium)
- 11:05 - 11:15 S21.03 The impact of China and India's economic growth on energy use and CO₂ emissions - integrated modelling of economic-energy-environment scenarios
Fabien Roques (France), O Sassi, J-C Hourcade, C Guivarch, H Waisman, R Crassous
- 11:15 - 11:25 S21.04 The trajectories of new energy technologies in carbon constraint cases with the POLES world energy model
Patrick Criqui (France), P Menanteau, S Mima
- 11:25 - 11:35 S21.05 A policy appraisal of the EU policy mix: Abatement and innovation
Gunnar Eskeland (Norway), K Linnerud
- 11:35 - 11:45 S21.06 Integration and compatibility of economic instruments in energy and climate policies
Eirik S Amundsen (Denmark), P Fristrup, JB Mortensen
- 11:45 - 11:55 S21.07 GHG emissions and development: what if developing countries baselines were not so optimal?
Sandrine Mathy (France), C Guivarch
- 11:55 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S21B

Hall B - Room G

Session 21 - Integrated Energy Mixes from a Socio-Economic and Environmental Perspective Part II

- 13:45 - 13:55 S21.08 Economic optimization of the Danish energy systems through minimization of direct costs as well as indirect costs related to air born pollution
Eigil Kaas (Denmark), A Baklanov, J Brandt, H Brønnum-Hansen, JH Christensen, A Groos, K Karlsson, M-L Siggaard-Andersen, T Sigsgaard, J Sørensen
- 13:55 - 14:05 S21.09 Low carbon city development of China
Dongmei Chen (PR China)
- 14:05 - 14:15 S21.10 A numerical simulation study on national/regional per capita historical contribution to climate change
Guoquan Hu (PR China)
- 14:15 - 14:25 S21.11 Policy options for reducing GHG emissions
Maolin Liao (PR China)
- 14:25 - 14:35 S21.12 Two logics of climate change games: environmental governance and know-how competition
Hongyuan Yu (PR China)
- 14:35 - 14:45 S21.13 Socio-economic development and carbon emissions
Yan Zheng (PR China)
- 14:45 - 15:15 Discussion

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:15 S22A

Hall B - Room H

Session 22 - Transforming Institutions to Managing a Carbon Constrained World Part I

Chair: Professor Joyeeta Gupta, Vrije Universiteit, Amsterdam

- 10:45 - 11:00 S22.01 Transforming institutions that do not exist - the (im-)possible task for global energy governance?
Sylvia I Karlsson (Finland)
- 11:00 - 11:15 S22.02 The efficiency of simplicity - a comprehensive evolutionary perception of the earth can help to improve the management of subsystems
Andreas Klaey (Switzerland), C Ott
- 11:15 - 11:30 S22.03 Incentives for the adoption of carbon free technologies
Carlo Cararo (Italy)
- 11:30 - 11:45 S22.04 Technology and market factors impacting value creation and capture in the commercialisation of sustainable energy technologies by new ventures
Nicola Dee (UK)
- 11:45 - 12:00 S22.05 The role of institutional capacity development in making the CDM operational in developing countries
Karen Holm Olsen (Denmark), M Hinojosa
- 12:00 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S22B

Hall B - Room H

Session 22 - Transforming Institutions to Managing a Carbon Constrained World Part II

- 13:45 - 14:00 S22.06 The Kyoto Protocol and the carbon agenda in Uganda: implementing mechanisms and stakeholder perceptions in Kampala City
Paul Isolo Mukwaya (Uganda), H Sengendo, C Basalirwa, T Otiti
- 14:00 - 14:15 S22.07 Internal trading as a strategy for carbon mitigation
Harsh Dhand (UK), S Doll, N Sethi, K Chaugul
- 14:15 - 14:30 S22.08 From burden- to effort-sharing: negotiating emission reduction targets in the European Union
Constanze Haug (The Netherlands)
- 14:30 - 14:45 S22.09 Participatory policy formation to address climate change
Eleftheria Vasileiadou (the Netherlands), A Gandhi
- 14:45 - 15:00 S22.10 Copenhagen Plus: Complementing output oriented climate policy by input oriented approaches
Stefan Lechtenböhmer (Germany), H-J Luhmann
- 15:00 - 15:15 Discussion

15:15 - 15:45

Coffee Break

10:45 - 12:15 S23A

Hall B - Room I

Session 23 - Integrating National and International Approaches to Carbon Pricing Policies: Developing a Global Framework Part I

Chair: Professor Warwick McKibbin, Australian National University

- 10:45 - 11:05 S23.01 The cost-effectiveness of climate policy: beyond emissions trading
Barbara Buchner (France), R Baron
- 11:05 - 11:25 S23.02 Expecting the unexpected: macroeconomic volatility and climate policy
Peter Wilcoxen (USA), W McKibbin, A Morris
- 11:25 - 11:40 S23.03 A more comprehensive approach to an international treaty on greenhouse gas emissions: biofuels, land-use and developing country participation
James Randall Kahn (USA), AAF Rivas
- 11:40 - 11:55 S23.04 Considering price caps for climate policy
Cédric Philibert (France)
- 11:55 - 12:15 Discussion

12:15 - 13:45

Lunch Break

Wednesday, 11 March 2009

13:45 - 15:15 S23B

Hall B - Room I

Session 23 - Integrating National and International Approaches to Carbon Pricing Policies: Developing a Global Framework Part II

- 13:45 - 14:00 S23.05 Global trading versus linking: architectures for international emissions trading
Christian Flachslund (Germany), *R Marschinski, O Edenhofer*
- 14:00 - 14:15 S23.06 Is there a role for energy production cut backs in global warming climate policy?
Lars Gårn Hansen (Denmark), *N Nannerup*
- 14:15 - 14:30 S23.07 Measuring emissions against an alternative future: a fundamental flaw in the structure of the CDM
Barbara Haya (USA)
- 14:30 - 14:45 S23.08 Uses and misuses of the notion of a unique world carbon price
Renaud Crassous-Doerfler (France), *J-C Hourcade, PR Shukla, O Sassi*
- 14:45 - 15:00 S23.09 Enlarging the scope of the European emissions trading scheme: implications for the international carbon market
Cate Hight (France), *M Hervé-Mignucci, B Leguet*
- 15:00 - 15:15 Discussion

15:15 - 15:45

Coffee Break

10:45 - 12:15 S24A

Hall B - Room N

Session 24 - The Role of Agriculture in Mitigating Climate Change Part I

Chairs: Professor Pete Smith, University of Aberdeen & Professor Jørgen E Olesen, University of Aarhus

- 10:45 - 11:15 S24.01 Global greenhouse gas mitigation potential in agriculture
Pete Smith (UK)
- 11:15 - 11:35 S24.02 Marginal abatement cost curves for UK agriculture, forestry, land-use and land-use change sector out to 2022
Dominic Moran (UK), *M Macleod, E Wall, V Eory, A Mcvittie, A Barnes, B Rees, G Pajot, R Matthews, P Smith, A Moxey*
- 11:35 - 11:55 S24.03 Modeling marginal biophysical responses to assess cropland greenhouse gas abatement potential
Steven Rose (USA), *R Beach, C Li, W Salas, A Daigneault*
- 11:55 - 12:15 S24.04 Modeling alternative policies for forestry and agricultural GHG mitigation: allowances vs. offsets
Robert Beach (USA), *A Daigneault, B McCarl, B Murray*

12:15 - 13:45

Lunch Break

13:45 - 15:15 S24B

Hall B - Room N

Session 24 - The Role of Agriculture in Mitigating Climate Change Part II

- 13:45 - 14:15 S24.05 Measures to promote both mitigation and adaptation to climate change in agriculture
Jørgen E Olesen (Denmark)
- 14:15 - 14:35 S24.06 A practical carbon estimation application tool for the (USA) agricultural end user
Carolyn Olson (USA), *K Paustian, S Ogle, RConant, M Easter, K Killian, A Swan, J Alvero-Fuentes, J Schuler, G Johnson, R Vining, M Merwin*
- 14:35 - 14:55 S24.07 The net-benefit of bioenergy for climate change mitigation
Aleaxander Popp (Germany), *H Lotze-Campen*
- 14:55 - 15:15 S24.08 Increasing efficiency of land use and phytomass conversion to mitigate climate change until 2050
Arthur Riedacker (France)

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:15 S25A

Hall B - Room O

Session 25 - The Role of Forests in Mitigation Climate Change Part I

Chair: Director General Frances Seymour, Center for International Forestry Research (CIFOR)

- 10:45 - 10:50 Introduction
- 10:50 - 11:02 S25.01 Collaborative modeling initiative on REDD economics
Jonah Busch (USA), B Strassburg, A Cattaneo, R Lubowski, F Boltz, R Ashton, A Bruner, A Creed, M Obersteiner, R Rice
- 11:02 - 11:14 S25.02 How to reduce the headache of REDD reference lines
Arild Angelsen (Norway)
- 11:14 - 11:26 S25.03 Overcoming the livelihood risks associated with REDD: options for policymakers
Kathleen Lawlor (USA), E Weinthal
- 11:26 - 11:38 S25.04 REDD architecture: facing critical choices
Alain Karsenty (France)
- 11:38 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S25B

Hall B - Room O

Session 25 - The Role of Forests in Mitigation Climate Change Part II

- 13:45 - 13:50 Introduction
- 13:50 - 14:05 S25.05 Lessons learned from past influences on deforestation: effectiveness, efficiency, equity and REDD relevance
Alexander Pfaff (USA), G Amacher, L Curran, K Lawlor, E Sills, C Streck
- 14:05 - 14:15 S25.06 Carrots versus sticks: scoping alternative avoided deforestation strategies in the Brazilian Amazon
Sven Wunder (Brazil), J Boerner
- 14:15 - 14:25 S25.07 Challenges and opportunities in implementing REDD at the national level: the case of Ghana
Thorsten Treue (Denmark), CP Hansen, JF Lund
- 14:25 - 14:35 S25.08 Carbon stock in smallholder chocolate forest in southern Cameroon and potential role in climate change mitigation
Denis J Sonwa (Cameroon), SF Weise, BA Nkongmeneck, M Tchatat, MJJ Janssens
- 14:35 - 14:45 S25.09 REDD mountain perspective and opportunities for community-based forest management in the Hindu Kush Himalaya Region
Robert Zomer (Nepal), K Banskota, BS Karky
- 14:45 - 15:15 Discussion

15:15 - 15:45

Coffee Break

10:45 - 12:25 S26A

Hall B - Room R

Session 26 - Beyond Technology: Changing the Way We Live? Part I

Chair: Professor Mike Hulme, School of Environmental Sciences, University of East Anglia

- 10:45 - 11:05 S26.01 The '5-D Staged-Approach' to climate-oriented cognitive and behavioral change
Bob Doppelt (USA)
- 11:05 - 11:25 S26.02 Critical issues in the psychology of behaviour change for climate change
David Uzzell (UK)
- 11:25 - 11:45 S26.03 Sufficiency – does energy consumption become a moral issue?
Adrian Muller (Switzerland)
- 11:45 - 12:05 S26.04 Energymark: changing Australians' behaviours through kitchen table discussions
Peta Ashworth (Australia), A-M Dowd
- 12:05 - 12:25 S26.05 Lifestyle approach to climate mitigation: cross country empirical evidence
Joyashree Roy (India), S Pal

12:15 - 13:45

Lunch Break

Wednesday, 11 March 2009

13:45 - 15:15 S26B

Hall B - Room R

Session 26 - Beyond Technology: Changing the Way We Live? Part II

- 13:45 - 14:05 S26.06 For better understanding people's understandings of climate change issues and motivation for taking actions: Japanese case
Midori Aoyagi-Usui (Japan), Y Sampei
- 14:05 - 14:25 S26.07 Climate risk perceptions and local experiences of the 2007 summer flooding: opportunities or obstacles to change?
Nicholas Pidgeon (UK), C Butler
- 14:25 - 14:45 S26.08 Climate benefits of changing diet
Elke Stehfest (The Netherlands), L Bouwman, D van Vuuren, M den Elzen, B Eickhout, P Kabat
- 14:45 - 15:15 Discussion

15:15 - 15:45

Coffee Break

10:45 - 12:15 S27A

Hall B - Room S

Session 27 - Low Carbon Science, Technology Policies Part I

Chair: Professor Dan Kammen, University of California at Berkeley

- 10:45 - 11:10 S27.01 Low stabilization pathways: economic and technical feasibility
Brigitte Knopf (Germany), O Edenhofer, T Barker, L Baumstark, A Kitous, S Kypreos, M Leimbach, B Magne, S Scrieciu, H Turton
- 11:10 - 11:35 S27.02 Considering technology within the UN climate change negotiations
Morgan Bazilian (Ireland), H de Coninck, M Radka, S Nakhooda, W Boyd, I MacGill, A-L Amin, F von Malmberg, J Uosukainen, R Bradley, R Bradley
- 11:35 - 12:00 S27.03 A finance architecture for technology development and transfer
Heleen de Coninck (The Netherlands), A Higham, E Haites
- 12:00 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S27B

Hall B - Room S

Session 27 - Low Carbon Science, Technology Policies Part II

- 13:45 - 14:10 S27.04 Top-down technological modelling of stabilisation pathways: UKERC scenarios for the UK to 2050 using E3MG-UK
Athanasios Dagoumas (UK), T Barker, S Scrieciu, S Stretton
- 14:10 - 14:35 S27.05 Corporate climate technology strategies in response to international market-based climate policies - the case of the power sector
Karoline Rogge (Germany), M Schneider, V Hoffmann, T Schmidt
- 14:35 - 15:00 S27.06 Energy and carbon emissions scenarios of China towards 2100
Tao Wang (UK), J Watson
- 15:00 - 15:15 Discussion

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:15 S28A

Hall B - Room J

Session 28 - Climate Change and Air Pollution: The Role of non-CO2 Atmospheric Pollutants (CH4, Halocarbons, N3), Ozone, Aerosols) in Climate Stabilization Part I

Chairs: Dr James E Hansen, NASA Goddard Institute for Space Studies & Professor Ole John Nielsen, University of Copenhagen

- 10:45 - 11:05 S28.01 Global climate policy scenarios: the benefits and trade-offs for air pollution
John Van Aardenne (Italy), F Dentener, R Van Dingenen, E Marmer, E Vignati, P Russ, L Szabo
- 11:05 - 11:25 S28.02 Ground level ozone in the 21st century: trends, climate interactions and impacts - a report from The Royal Society
David Fowler (UK), R Garthwaite, D Stevenson, P Cox, M Ashmore, P Grennfelt, M Amann, R Anderson, M Depledge, D Derwent, N Hewitt, O Hov, M Jenkin, F Kelly, P Liss, M Pilling, J Pyle, J Slingo
- 11:25 - 11:45 S28.03 Natural variations of methane and nitrous oxide from ice cores
Thomas Blunier (Denmark), A Schilt, L Louergue, J-M Barnola, M Bock, J Chappellaz, H Fischer, B Lemieux, V Masson-Delmotte, D Raynaud, R Spahni, TF Stocker
- 11:45 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S28B

Hall B - Room J

Session 28 - Climate Change and Air Pollution: The Role of non-CO2 Atmospheric Pollutants (CH4, Halocarbons, N3), Ozone, Aerosols) in Climate Stabilization Part II

- 13:45 - 14:05 S28.04 Long-term trends in atmospheric elemental carbon (~1800 to 2005): measurements and comparison with models
Liaquat Husain (USA)
- 14:05 - 14:25 S28.05 Achieving agreement and climate protection by mitigation of short- and long-lived greenhouse gases
Michael MacCracken (USA)
- 14:25 - 15:15 Discussion after Introduction by *James Hansen, (USA)*

15:15 - 15:45

Coffee Break

10:45 - 12:15 S40A

Hall B - Room K2

Session 40 - Learning From Ongoing Adaptation: A Comparative Study Part I

Chair: Mr James Pittock, WWF Research Associate, Australian National University

- 10:40 - 10:45 Introduction
James Pittock (Australia)
- 10:45 - 11:00 S40.01 Floodplain restoration along the Lower Danube: a climate change adaptation case study
Irene Lucius (Austria), O Hulea, S Ebert, D Strobel
- 11:00 - 11:15 S40.02 Freshwater conservation and climate change adaptation – a case study of the Great Ruaha River Catchment in Tanzania
Japhet Kashaigili (Tanzania), K Rajabu, P Masolwa
- 11:15 - 11:30 S40.03 Adaptation to climate change in the Central Yangtze River Basin, China
Li Lifeng (PR China), L Wang, X Yu, G Lei, L Jiang
- 11:30 - 11:45 S40.04 Recovery with social participation - the experience of Lagos São João consortium, RJ, Brazil
Luiz Firmino Pereira (Brazil), S Barreto
- 11:45 - 12:00 S40.05 Water for life: the Rio Conchos (Mexico) lessons for climate change adaptation from better management of rivers for people/nature
Eugenio Barrios (Mexico), A Rodriguez, M de la Maza, V Trueba
- 12:00 - 12:15 S40.06 Variability of daily discharges of Godavari River due to climate change in coming decades and its implications to infrastructure and people
Biksham Gujja (India), S Dalai

12:15 - 13:45

Lunch Break

Wednesday, 11 March 2009

13:45 - 15:15 S40B

Hall B – K2

Session 40 - Learning From Ongoing Adaptation: A Comparative Study Part II

- 13:45 - 14:00 S40.07 Lessons for climate change adaptation from river management reforms
Jamie Pittock (*Australia*)
- 14:00 - 14:15 S40.08 Looking forward: building a freshwater climate adaptation program
John Matthews (*USA*)
- 14:15 - 14:30 S40.09 From risk to resilience: exploring the links between adaptation concepts and practice in India, Nepal and Pakistan
Marcus Moench (*USA*), *A Dixit*
- 14:30 - 14:45 S40.10 Perspectives on vulnerability and adaptation from the developing world: lessons learned from the AIACC project
Jon Padgham (*USA*), *H Virji*
- 14:45 - 15:15 Discussion – “What are the common policy lessons for better adaptation from these organizations’ research?”
Comments: **Karen Hussey**, Australian National University
Audience discussion

15:15 - 15:45

Coffee Break

10:45 - 12:15 S44A

Hall B - Room P

Session 44 - Filling In The Gaps Between IA, GCM, Economic and ES Models Part I

Chair: Dr Rik Leemans, Wageningen University

- 10:45 - 10:55 Introduction
- 10:55 - 11:10 S44.01 The ESSP strategy to develop integrated earth system models to comprehensively assess global change problems with input from social and natural science disciplines
Rik Leemans (*The Netherlands*), *M Rice*
- 11:10 - 11:25 S44.02 Socio-climatic analysis, modeling, and prediction
Noah Diffenbaugh (*USA*)
- 11:25 - 11:40 S44.03 Linking climate, economy and ecosystem models
Markku Rummukainen (*Sweden*), *C Jones, T Persson, B Smith, R Klein*
- 11:40 - 11:55 S44.04 Incorporating the human dimensions of water resources in earth system models
Joseph Alcamo (*Germany*)
- 11:55 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S44B

Hall B - Room P

Session 44 - Filling In The Gaps Between IA, GCM, Economic and ES Models Part II

- 13:45 - 14:05 S44.05 Modeling impacts of global change on terrestrial biodiversity, The GLOBIO3 framework
Rob Alkemade (*The Netherlands*), *M Bakkenes, M van Oorschot*
- 14:05 - 14:20 S44.06 Regional scale habitat-based vulnerability assessment of the natural ecosystems
Bálint Czúcz (*Hungary*), *G Kröel-Dulay, G Torda, Z Molnár, L Tőkei*
- 14:20 - 14:35 S44.07 A conceptual model for assessing the geography of social vulnerability, environmental hazards and climate change
Haakon Lein (*Norway*), *I Berthling, C Brun, JK Rød, G Vatne*
- 14:35 - 14:50 S44.08 Running policy-relevant Integrated Assessment Models scenarios in Earth System Models
Detlef P van Vuuren (*The Netherlands*), *J Feddema, S Frolking, K Hibbard, G Hurtt, J-F Lamarque, L Parsons Chini, K Riahi, S Rose, S Smith, E Stehfest*
- 14:50 - 15:15 Discussion

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:15 S45A

Hall B - Room L

Session 45 - From Geo-Perturbation to Geo-Management Part I

Chair: Professor Ken Caldeira, Stanford University

- 10:45 - 11:00 S45.01 Climate engineering: solution, curse, or chimera?
Ken Caldeira (USA)
- 11:00 - 11:15 S45.02 Climate engineering as risk management
David Keith (Canada)
- 11:15 - 11:30 S45.03 Impact intervention: regional geo-engineering as a complementary step to aggressive mitigation
Michael MacCracken (USA)
- 11:30 - 11:45 S45.04 Earth system engineering: the art of dealing wisely with the planet Earth
Axel Kleidon (Germany), **P Wilderer**, **R Weiler**
- 11:45 - 12:00 S45.05 Is geo-management a defensible response to climate change? An NGO perspective
David Santillo (UK)
- 12:00 - 12:15 S45.06 Geoengineering: too good to be true?
Thomas C Schelling (USA)

12:15 - 13:45

Lunch Break

13:45 - 15:15 S45B

Hall B - Room L

Session 45 - From Geo-Perturbation to Geo-Management Part II

- 13:45 - 13:55 S45.07 Progress on engineering hardware design for spray vessels for implementing Latham's proposals for cloud albedo control to reverse global warming
Stephen Salter (UK)
- 13:55 - 14:05 S45.08 Evaluating effects of climate stratospheric geoengineering on the hydrological cycle, ocean heat content, sea level, and sea ice extent
Georgiy Stenchikov (USA), **V Ramaswamy**, **T Delworth**, **R Stouffer**
- 14:05 - 14:15 S45.09 Can geoengineering save the Greenland ice sheet?
Daniel Lunt (UK), **J Singarayer**, **A Ridgwell**
- 14:15 - 14:25 S45.10 Tackling future climate change by leaf albedo bio-geoengineering
Andrew Ridgwell (UK), **J Singrayer**, **AL Hetherington**, **P Valdes**
- 14:25 - 14:35 S45.11 Sensitivity of ocean acidification to geoengineered climate stabilization
Damon Matthews (Canada), **K Caldeira**, **L Cao**
- 14:35 - 14:45 S45.12 Exploration of planetary geoengineering by seeding of boundary layer cloud systems in fully coupled climate system models
Philip John Rasch (USA), **J Latham**, **J Chen**
- 14:45 - 14:55 S45.13 Carbon storage in the ocean; an ECOR review
Ian SF Jones (Australia)
- 14:55 - 15:05 S45.14 Burying wood as a climate management strategy
Ning Zeng (PR China)
- 15:05 - 15:15 S45.15 Climate engineering responses to climate emergencies
Jason J Blackstock (Austria), **D Battisti**, **K Caldeira**, **DE Eardley**, **JI Katz**, **DW Keith**, **SE Koonin**, **AAN Patrinos**, **DP Schrag**, **RH Socolow**

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:30 S46A

Hall B - Room T

Session 46 - Consequences of Acidification of Land and Ocean Part I - Aspects of Ocean Acidification

Chairs: Professor Mary Scholes, University of Witwatersrand & Dr Carol Turley, Plymouth Marine Laboratory

- 10:45 - 10:55 Introduction
Carol Turley (UK)
- 10:55 - 11:05 S46.01 Ocean acidification impacts on southern ocean calcifiers
William Howard (Australia), D Roberts, A Moy, J Roberts, T Trull, S Bray, R Hopcroft
- 11:05 - 11:15 S46.02 Southern ocean acidification: a tipping point at 450ppm atmospheric CO₂
Ben McNeil (Australia), R Matear
- 11:15 - 11:25 S46.03 Detecting early signs of global-scale effects of ocean acidification on marine calcification
Tatjana Ilyina (USA), R Zeebe, E Maier-Reimer, C Heinze
- 11:25 - 11:35 S46.04 Ocean acidification: humanity and the environment in geologic time
Ken Caldeira (USA)
- 11:35 - 11:45 S46.05 North Atlantic Ocean acidification from time series measurements
Jon Olafsson (Iceland), SR Olafsdottir, A Benoit-Cattin, M Danielsen, T Takahashi
- 11:45 - 11:55 S46.06 Impact of CO₂-driven ocean acidification on early life-history – what we know and what we need to know
Sam Dupont (Sweden), J Havenhand, M Thorndyke
- 11:55 - 12:05 S46.07 Changes in underwater sound propagation caused by ocean acidification
Tatjana Ilyina (USA), R Zeebe, P Brewer
- 12:05 - 12:15 S46.08 The low CO₂ glacial ocean as a reverse paleo-analog for the future high CO₂ ocean
Christoph Heinze (Norway)
- 12:15 - 12:25 S46.09 Amplified acidification of the Arctic Ocean
James C Orr (Monacco), S Jutterström, L Bopp, LG Anderson, P Cadule, VJ Fabry, T Frölicher, EP Jones, F Joos, A Lenton, E Maier-Reimer, J Segsneider, M Steinacher, D Swingedouw
- 12:25 - 12:30 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S46B

Hall B - Room T

Session 46 - Consequences of Acidification of Land and Ocean Part II - Aspects of Land Acidification

- 13:45 - 13:55 Introduction
Mary Scholes (South Africa)
- 13:55 - 14:05 S46.10 Acidification in South America as a result of biomass burning emissions
Paulo Artaxo (Brazil)
- 14:05 - 14:15 S46.11 A global perspective on soil acidification in terrestrial ecosystems
Kevin Hicks (UK), J Kuylensstierna
- 14:15 - 14:25 S46.12 Acidification and eutrophication of temperate North American and European ecosystems from atmospheric deposition
Jill S Baron (USA), WD Bowman, H Sverdrup, CT Driscoll, JT Stoddard, MD Hartman
- 14:25 - 14:35 S46.13 Acid deposition in Asia; current situation and prospects for the future
Henning Rhode (Sweden)
- 14:35 - 15:15 Discussion

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:15 S47A

Hall B - Room K1

Session 47 -Managing Food in a Climate Constrained World Part I

Chairs: Professor Pam Matson, Stanford University & Professor Louise Fresco, University of Amsterdam

- 10:45 - 11:05 S47.01 Hydrologic limitation of global food production and the potential of green water management
Dieter Gerten (Germany), S Rost
- 11:05 - 11:25 S47.02 The Global Biodiversity Information Facility (GBIF): infrastructure, standards, and access to forecast agricultural production in the face of climate change
Andrew Jarvis (Denmark), S Gaiji, N King,
- 11:25 - 11:45 S47.03 A primary assessment of climate change impact on rice production in China
Yao Huang (PR China), W Zhang, Y Yu, W Sun, W Sun, J Chen
- 11:45 - 12:05 S47.04 Cross-scale and cross-level interactions in food systems – considerations for adaptation to global environmental change
Polly Ericksen (UK), J Ingram
- 12:05 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S47B

Hall B - Room K1

Session 47 -Managing Food in a Climate Constrained World Part II

- 13:45 - 14:05 S47.05 Irrigation strategies for sustainable environmental and human health under climate change
Fulai Liu (Denmark)
- 14:05 - 14:25 S47.06 Forecasting rice yield under climate change scenarios and evaluation of agro-adaptation measures for Mekong basin region: a simulation study
Anshul Agarwal (Thailand), MS Babel
- 14:25 - 14:45 S47.07 Improving early warning systems for food security in Africa with geostationary earth observation data
Silvia Huber (The Netherlands), R Fensholt, K Rasmussen, SR Proud, A Anyamba
- 14:45 - 15:15 Discussion

15:15 - 15:45

Coffee Break

10:45 - 12:15 S48A

Hall B - Room U

Session 48 - Earth System Governance Part I

Chairs: Agus Sari, EcoSecurities & Professor Oran Young, Bren School of Environmental Science and Management, University of California

- 10:45 - 11:05 S48.01 Earth system governance. Outline of a research programme
Frank Biermann (The Netherlands)
- 11:05 - 11:25 S48.02 Kyoto2 - an effective, efficient and equitable framework for a new Climate Agreement
Oliver Tickell (UK)
- 11:25 - 11:45 S48.03 Post-2012 Options Beyond Climate Change: Using Inter-Linkages with Trade Issues to Break Deadlocks
Fariborz Zelli (UK), H van Asselt
- 11:45 - 12:05 S48.04 The urgency of the climate change challenge: Is governance “getting in the way” of progress?
Lisa Dilling (USA)
- 12:05 - 12:15 Discussion

12:15 - 13:45

Lunch Break

Wednesday, 11 March 2009

13:45 - 15:15 S48B

Hall B - Room U

Session 48 - Earth System Governance Part II

- 13:45 - 14:05 S48.05 The London Convention/London Protocol: an ocean institution addresses sub-seafloor CO₂ injection and ocean iron fertilization
Margaret Leinen (USA), R LaMotte, D Whaley
- 14:05 - 14:25 S48.06 Firm decisions to invest in low-carbon projects in developing countries: the influence of climate policy and evolving carbon markets
Nathan Hultman (USA), S Pulver
- 14:25 - 14:45 S48.07 The importance of being partners: exploring horizontal and vertical interplay in urban climate governance
Heike Schroeder (UK), H Bulkeley
- 14:45 - 15:05 S48.08 Strengthening Arctic governance in a post-Kyoto world
Jacqueline McGlade (Denmark)
- 15:05 - 15:15 Discussion

15:15 - 15:45

Coffee Break

10:45 - 12:15 S49A

Hall B - Room V

Session 49 - The Role of Integrated Assessment Models in Handling Climate Change Part I

Chair: Dr Chris Hope, University of Cambridge

- 10:45 - 11:10 S49.01 Discounting and uncertainty in integrated assessment: the Stern Review and its critics
Simon Dietz (UK)
- 11:10 - 11:35 S49.02 Climate policy analysis in the context of globalization
Marian Leimbach (Germany), N Bauer, L Baumstark, O Edenhofer
- 11:35 - 12:00 S49.03 Variation in the climatic response to SRES emissions scenarios in integrated assessment models
Rachel Warren (UK), M Mastrandrea, C Hope, A Hof
- 12:00 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S49B

Hall B - Room V

Session 49 - The Role of Integrated Assessment Models in Handling Climate Change Part II

- 13:45 - 14:10 S49.04 How well do IAMs model climate change?
Detlef van Vuuren (The Netherlands), J Lowe, E Stehfest, L Gohar, A Hof, C Hope, R Warren, M Meinshausen, G-K Plattner
- 14:10 - 14:35 S49.05 Using insurance catastrophe models as a new form of integrated assessment modelling to investigate the economics of climate change impacts and adaptation
Nicola Patmore (UK), R Muir-Wood, C Herweijer
- 14:35 - 15:00 S49.06 Modeling the human dimensions of climate change: the CIM-EARTH project
Elisabeth Moyer (USA), I Foster, K Judd, T Munson
- 15:00 - 15:15 Discussion

15:15 - 15:45

Coffee Break

Wednesday, 11 March 2009

10:45 - 12:15 S50A

Hall B - Room F

Session 50 - Enabling Long Term Climate Policy Part I

Chair: Detlef Sprinz, Senior Scientist, Potsdam Institute for Climate Impact Research (PIK)

- 10:45 - 10:50 Opening remarks
- 10:50 - 11:05 S50.01 Implementing long-term climate policy: three commitment problems
Detlef F Sprinz (Germany), J Hovi, A Underdal
- 11:05 - 11:20 S50.02 Mitigation implications of mid-century targets that preserve long-term climate policy options
Brian O'Neill (USA), K Riahi, I Keppo
- 11:20 - 11:35 S50.03 Playing it forward: path dependency, progressive incrementalism, and the “Super Wicked” problem of global climate change
Steven Bernstein (USA), K Levin, B Cashore, G Auld
- 11:35 - 11:50 S50.04 Adaptive approaches for long-term climate policy
Jürgen Scheffran (USA)
- 11:50 - 12:15 Discussion

12:15 - 13:45

Lunch Break

13:45 - 15:15 S50B

Hall B - Room F

Session 50 - Enabling Long Term Climate Policy Part II

- 13:45 - 14:00 S50.05 Risk of ruin: a framework for reviewing greenhouse gas stabilization targets
Oliver Bettis (UK), N Silver
- 14:00 - 14:15 S50.06 Trade & climate change: limits for consumption based trade measures?
Laura Nielsen (Denmark), S Charnovitz
- 14:15 - 14:30 S50.07 The Climate Action Initiative: deploying policy exercises and the pangaea simulation to facilitate and support long-term climate policy development
Andrew Jones (USA), A Barkman, RW Corell, T Cummings, T Fiddaman, J McGlade, F van Peter, ER Sawin, LS Siegel, J Sterman
- 14:30 - 14:45 S50.08 The challenge is unprecedented
Thomas C Schelling (USA)
- 14:45 - 15:15 Discussion

15:15 - 15:45

Coffee Break

15:45 - 17:00

Plenary Hall - Auditorium A

Plenary Session

Chair: Professor Martin Parry, Grantham Institute and Centre for Environmental Policy, Imperial College London

Confirmed Speakers

Dr Balgis Osman-Elasha, Higher Council for Environment & Natural Resources (HCENR)

Professor Amanda Lynch, Monash University

17:00 - 18:00

Welcome Drink

18:00 - 20:30

Congress Dinner

Chair: Professor Will Steffen, Executive Director of ANU Climate Change Institute

Confirmed Dinner Speaker

Professor Johan Rockström, University of Stockholm ^ Executive Director at Stockholm Environment Institute

Plenary Session

Chair: Mrs Ulla Tørnæs, Minister for Development Cooperation, Denmark

Confirmed Speakers

Professor Diana Liverman, Oxford University

Professor John Schellnhuber, Potsdam Institute for Climate Impact Research & Visiting Professor at Oxford University

Professor Lord Nicholas Stern, London School of Economics & Political Science (LSE)

10:30 - 11:00

Coffee Break

11:00 - 12:30 S29B

Hall B - Room D

Session 29 - Climate Change and Water Systems Part II

Chairs: Professor Maria Carmen Lemos, University of Michigan & Professor Torkil Jøneh Clausen, DHI

- 11:00 - 11:05 Introduction by the Co-shairs
- 11:05 - 11:15 S29.08 Evaluating the benefits of adapting to changing flood hazard in Europe
Luc Feyen (Italy), R Dankers, K Bódis
- 11:15 - 11:25 S29.09 Quantifying the effects of future climate change on groundwater and stream discharge in Denmark
Lieke van Roosmalen (Denmark), TO Sonnenborg
- 11:25 - 11:35 S29.10 Future European drought regimes under mitigated and un-mitigated climate change
Rachel Warren (UK), R Yu, T Osborn, S de la Nava Santos
- 11:35 - 11:45 S29.11 Climate change and the changing frequency of floods and droughts: scenario analysis of risk and adaptation in Europe
Joseph Alcamo (Germany)
- 11:45 - 11:55 S29.12 Climate change scenarios of low-flow conditions and hydro power production in the upper Danube River basin
Markus Muerth (Germany), W Mauser, S Stoeber
- 11:55 - 12:30 Discussion

12:30 - 14:00

Lunch Break

14:00 - 15:30 S29C

Hall B - Room D

Session 29 - Climate Change and Water Systems Part III

- 14:00 - 14:05 Introduction by the Co-shairs
- 14:05 - 14:10 Dialogue on adaptation to Climate Change for land and water management – a contribution to the UNFCCC and COP 15 processes
Member of Danish Ministry of Foreign Affairs
- 14:10 - 14:20 S29.13 Technical knowledge and democratic decision-making: building adaptive capacity of fresh water systems in Brazil
Maria Carmen Lemos (USA), A Bell, N Engle, R Formiga-Johnsson, D Nelson
- 14:20 - 14:30 S29.14 Securing water for food, livelihoods and ecosystems to face climate change: research needs
Vladimir Smakhtin (Sri Lanka), C de Fraiture, D Bossio, D Molden, C Hoanh, A Noble, M Giordano
- 14:30 - 14:40 S29.15 The use and application of knowledge networks for water systems' management of climate change
David Feldman (USA), H Ingram
- 14:40 - 14:50 S29.16 Comparison of the processes for developing climate change adaptation strategies for dealing with floods and droughts in the Netherlands, South Africa, China and Australia
Patrick Huntjens (Germany), C Pahl-Wostl, X Jun, J Camkin, N Kranz
- 14:50 - 15:00 S29.17 Water bargaining & climate adaptation: asymmetric access to information affects equity
Alexander Pfaff (USA), MA Velez, K Broad, J Hercio, R Taddei
- 15:00 - 15:10 S29.18 Approaches to identifying climate change adaptation strategies: a comparison of case studies in the UK and California
Suraje Dessai (UK), D Groves, R Lempert
- 15:10 - 15:30 Discussion

Thursday, 12 March 2009

11:00 - 12:30 S30A

Hall B - Room E

Session 30 - Impact of Climate Change on Ecosystem Services Part I

Chairs: Professor Harold Mooney, Stanford University & Dr Anne Larigauderie, Executive Director of DIVERSITAS

- 11:00 - 11:15 S30.01 Biodiversity and ecosystem services: climate change impacts on species extinctions
Georgina Mace (UK), *W Foden*
- 11:15 - 11:30 S30.02 The climate regulating services provided by ecosystems
Robert Scholes (South Africa), *K Mennell*
- 11:30 - 11:45 S30.03 How biodiversity response to changing climate feeds on to ecosystem processes underlying ecosystem services
Sandra Lavorel (France), *J-P Sarthou, W Thuiller*
- 11:45 - 12:00 S30.04 Coral reefs and rapid climate change: impacts, risks and implications for tropical societies
Ove Hoegh-Guldberg (Australia), *T Hughes, K Anthony, K Caldeira, M Hatzios, J Kleypas*
- 12:00 - 12:15 S30.05 Risks and adaptation options for rivers and streams
Margaret Palmer (USA)
- 12:15 - 12:30 Discussion

12:30 - 14:00

Lunch Break

14:00 - 15:30 S30B

Hall B - Room E

Session 30 - Impact of Climate Change on Ecosystem Services Part II

- 14:00 - 14:15 S30.06 Direct and indirect impacts of climatic change on species diversity and genetic diversity
Tetsukazu Yahara (Japan), *M Donoghue, A Hendry*
- 14:15 - 14:30 S30.07 The impacts of climate change on ecosystem services: the case of disrupted disease regulation in South-Western Amazonia
Manuel Cesario (Brazil), *R Rangel Cesario, M Andrade-Morraye*
- 14:30 - 14:45 S30.08 Climate, ecosystem services and social systems
Thomas Elmqvist (Sweden), *C Perrings*
- 14:45 - 15:00 S30.09 Summary
Harold Mooney (USA)
- 15:00 - 15:30 Discussion

15:30 - 16:00

Coffee Break

11:00 - 12:45 S31A

Hall B - Room P

Session 31 - Biodiversity: Enhancement of Resilience or Facilitating Transformation? Part I

Chairs: Dr Mark Stafford-Smith, Commonwealth Scientific and Industrial Research Organisation (CSIRO) & Professor Paul Leadley, Université Paris-Sud 11

- 11:00 - 11:20 S31.01 From principles to practice: national approaches to managing biodiversity under climate change in Australia
Will Steffen (Australia), *A Burbidge, L Cherry, B Edgar, L Hughes, R Kitching, D Lindenmayer, J Mummery, W Musgrave, M Stafford Smith, P Werner*
- 11:20 - 11:40 S31.02 Climate change adaptation and mitigation: synergisms, antagonisms and trade-offs for biodiversity
Pam Berry (UK), *J Paterson, M Cabeza, A Dubuis, A Guisan, L Jäätelä, I Kühn, M Musche, J Piper, E Wilson*
- 11:40 - 12:00 S31.03 Redefining in situ and ex situ conservation of useful plant diversity in an era of climate change
Toby Hodgkin (Italy), *L Snook, M Bellon, E Frison*
- 12:00 - 12:20 S31.04 Enhancing the adaptive capacity of biodiversity through implementation of the convention on biological diversity
Jaime Alexandra Webbe (Canada), *A Djoghla*
- 12:20 - 12:45 Discussion including posters

12:30 - 14:00

Lunch Break

Thursday, 12 March 2009

14:00 - 15:30 S31B

Hall B - Room P

Session 31 - Biodiversity: Enhancement of Resilience or Facilitating Transformation? Part II

- 14:00 - 14:20 S31.05 Ensuring biodiversity security in the face of climate change
Sandy Andelman (USA), *G Midgley, S Polasky, M Bode, J Busch, L Hannah, P Marquet, D Panitz, B Reyers, R Shaw, R Wise*
- 14:20 - 14:40 S31.06 Towards an adaptive management framework for climate change across species, sites and land/seascapes
David Hole (USA), *W Turner, T Brooks, S Willis, B Huntley, L Hannah, S Butchart, P Donald*
- 14:40 - 15:00 S31.07 Developing a systematic regional approach for biodiversity conservation in South East Asia: a social-ecological perspective
Craig Miller (Australia), *R Lasco, D Hilbert, L Tandug, M Dunlop, T Jovanovic*
- 15:00 - 15:20 S31.08 Global warming is eroding the resilience of kelp beds
Peter Staeher (Denmark), *T Wernberg, M Thomsen, F Tuya, G Kendrick, B Toohey*
- 15:20 - 15:30 Discussion on session conclusions

15:30 - 16:00

Coffee Break

11:00 - 12:30 S32A

Hall B - Room N

Session 32 - Economic Costs of Adapting and not Adapting to Climate Change Part I - Costing adaptation in Developed Countries, and Conceptual Issues

Chair: Dr Frank Jotzo, Australian National University

- 11:00 - 11:15 S32.01 Effects of climate change in Europe: results from the PESETA study
Juan Carlos Ciscar (Spain), *L Szabo, A Soria, A Iglesias, L Garrote, S Pye, L Horrocks, P Watkis, R Nicholls, R Roson, F Bosello, L Feyen, R Dankers, A Moreno, B Amelung, JM Labeaga, X Labandeira, OB Christensen, C Goodess, D van Regemorter*
- 11:15 - 11:30 S32.02 Economic consequences of Europe's changing climate – 2008 indicator-based assessment
Stephane Isoard (Denmark)
- 11:30 - 11:45 S32.03 A roadmap to assess the economic cost of climate change with an application to hurricanes in the United States
Stephane Hallegatte (France)
- 11:45 - 12:00 S32.04 Estimation of the economic costs of non adapting Japanese port infrastructure to a potential increase in tropical cyclone intensity
Miguel Esteban (Japan), *C Webersick, T Shibayama*
- 12:00 - 12:15 S32.05 To adapt or not to adapt? Towards local costing of climate change impacts for decision making in adaptation
Alistair Hunt (UK), *T Taylor*
- 12:15 - 12:30 S32.06 Private adaptation of critical infrastructures is inefficient
Klaus Eisenack (Germany)

12:30 - 14:00

Lunch Break

Thursday, 12 March 2009

14:00 - 15:30 S32B

Hall B - Room N

Session 32 - Economic Costs of Adapting and not Adapting to Climate Change Part II - Developing countries: Costing and Funding Adaptation

- 14:00 - 14:15 S32.07 Regional total climate change costs for different burden sharing regimes and concentration targets
Michel den Elzen (The Netherlands), A Hof, D van Vuuren
- 14:15 - 14:30 S32.08 Climatic variability and its impacts on agricultural income and households' welfare in southern and Northern Nigeria
Abayomi Oyekale (Nigeria)
- 14:30 - 14:45 S32.09 Climate change and Ethiopia
Sherman Robinson (Denmark), C Arndt, H Ahmed, D Willenbockel
- 14:45 - 15:00 S32.10 How to go about costing and funding adaptation in developing countries?
Stephen Howes (Australia), F Jotzo
- 15:00 - 15:30 Discussion

15:30 - 16:00

Coffee Break

11:00 - 12:30 S33A

Hall B - Room O

Session 33 - Adapting Urban Areas to Climate Change Part I

Chair: Professor Roberto Sanchez-Rodriguez, University of California at Riverside

- 11:00 - 11:15 S33.01 Building urban resilience in the least developed countries
David Dodman (UK)
- 11:15 - 11:30 S33.02 Adaptation in the urban environment: a story of process and outcome
Darryn McEvoy (The Netherlands), K Lonsdale, J Rawlins, S Lindley, J Hinckel, M Falaleeva
- 11:30 - 11:45 S33.03 Regional adaption to climate change in the United States: are metropolitan planning organizations responding?
Eric Lindquist (USA)
- 11:45 - 12:00 S33.04 Joint-action for urban resilience: Linking national and local climate change strategies
Cecilia Njenga (Kenya), R Tuts
- 12:00 - 12:15 S33.05 City-scale integrated assessment of climate impacts, adaptation and mitigation
Richard Dawson (UK), J Hall, S Barr, M Batty, A Bristow, S Carney, A Dagoumas, S Evans, A Ford, M Tight, H Watters, A Zanni
- 12:15 - 12:30 Discussion

12:30 - 14:00

Lunch Break

14:00 - 15:30 S33B

Hall B - Room O

Session 33 - Adapting Urban Areas to Climate Change Part II

- 14:00 - 14:15 S33.06 The framing of an eco-city: towards cross-sectional urban policies of climate and urban development
Anne Jensen (Denmark), AB Pedersen, S Svalgaard
- 14:15 - 14:30 S33.07 Integrated planning strategies for climate change mitigation and adaptation in Europe's urbanising regions – towards a research agenda
Hilda Blanco (USA), S Pauleit, G Jørgensen, TA Carstensen, J Handley
- 14:30 - 14:45 S33.08 Rapidly growing cities and their resilience to climate change: a meta-analysis of global trends in urban land-use change and indicators of resilience and vulnerability
Karen C Seto (USA), Fragkias, B Guneralp, M Reilly
- 14:45 - 15:00 S33.09 Enhancing adaptation of poor urban dwellers to the effects of climate variability and change
Shuaib Lwasa (Uganda), M Tenywa, GJ Majaliwa Mwanjalolo, H Sengendo, G Prain
- 15:00 - 15:15 S33.10 The impacts of climate change on New York City's energy sector: vulnerabilities and potential adaptation strategies
Stephen Hammer (USA), L Parshall
- 15:15 - 15:30 S33.11 Adaptation in the transport sector: the constraining effect of actor-interdependencies
Esther Hoffmann (Germany), D Reckien, K Eisenack

Thursday, 12 March 2009

11:00 - 12:30 S34A

Hall B - Room T

Session 34 - Adapting Human Land Use to Climate Change Part I

Chair: Professor Anette Reenberg, University of Copenhagen

- 11:00 - 11:15 S34.01 Urban land-use change and affects on regional climate: reduced precipitation from rapidly growing cities in China
Karen C Seto (USA), *RK Kaufmann, A Schneider, Z Liu, L Zhou, W Wang*
- 11:15 - 11:30 S34.02 Linking climate factors, agricultural development and adaptation strategies in the Sahel-Sudan zone of West Africa
Ole Mertz (Denmark), *C Mbow, JØ Nielsen, A Ka, D Diallo, P Cissé, B Barbier, DE Da, I Bouzou, WM Mato, D Dabi, V Ihemegbulem*
- 11:30 - 11:45 S34.03 Scenarios of agricultural land-use change in Africa under changing climate conditions
Rüdiger Schaldach (Germany), *J Alcamo, J Koch, D Lapola*
- 11:45 - 12:00 S34.04 Food production risks associated with land use change and climate change in East Africa
Nathan Moore (USA), *G Alagarswamy, B Pijanowski, P Thornton, J Olson, B Lofgren, J Andresen, D Campbell*
- 12:00 - 12:15 S34.05 Climate change, land use policies, and adaptation in Alxa region, inner Mongolia, China
Henry Neufeldt (UK)
- 12:15 - 12:30 S34.06 El Niño and land-use change – an attempt to simulate farmers' reactions on climate variability and climate change in Indonesia
Joerg A Priess (Germany)

12:30 - 14:00

Lunch Break

14:00 - 15:30 S34B

Hall B - Room T

Session 34 - Adapting Human Land Use to Climate Change Part II

- 14:00 - 14:15 S34.07 Sustainable land use for adaptation to long term impacts of climate change in Himalaya
Prakash Chandra Tiwari (India)
- 14:15 - 14:30 S34.08 Mapping and modelling ecosystem services in land systems
Richard Aspinall (UK), *E Milne*
- 14:30 - 14:45 S34.09 The influence of land use change, CO2 fertilization and climate change on the European carbon budget
Jemma Gornall, (UK), *J Hughes, A Wiltshire*
- 14:45 - 15:00 S34.10 Integration of spatially explicit climate-adaptation measures with a land use model
Eric Koomen (The Netherlands), *P-D Nga*
- 15:00 - 15:15 S34.11 Adaptation to land use and global change thresholds
Dennis Ojima (USA), *R Corell*
- 15:15 - 15:30 S34.12 Discussion

15:30 - 16:00

Coffee Break

Session 36 - Approaches to Measuring and Enhancing

Adaptive Capacities Part I

Chairs: Professor Tom E Downing, Stockholm Environment Institute & Dr Dagmar Schröter, Environmental Impact Assessment and Climate Change Group of the Umweltbundesamt, Austria

- | | | |
|---------------|--------|---|
| 11:00 - 11:10 | | Introduction
Dagmar Schröter (Austria) |
| 11:10 - 11:13 | S36.01 | Developing new adaptation strategies to climate change in Ghana: the potential of underutilized bamboo resources
Stephen Lartey Tekpetey (Ghana), <i>GA Quartey, R Tekpetey</i> |
| 11:13 - 11:16 | S36.02 | Institutional factors for adaptation to climate change in the Congo Basin forest of Cameroon
H Carolyn Peach Brown (Canada) |
| 11:16 - 11:19 | S36.03 | Social networks and rural adaptation to climate change: a Bangladesh case study
Fiona Rothberg (Sweden) |
| 11:19 - 11:22 | S36.04 | Drought and flood in Korhogo (Côte d'Ivoire : from their manifestation to population perception and coping strategies.
Brama Koné (Ivory Coast), <i>NK Boko, E Kouakou, GR Koffi, PV Houenou, G Cissé</i> |
| 11:22 - 11:25 | S36.05 | A participatory approach for defining response strategies to reduce risk and vulnerability from flooding in a changing climate
Valentina Giannin (Italy), <i>C Giupponi, A Allan, A Rieu-Clarke, M Clark, C Hutton, L Ceccato</i> |
| 11:25 - 11:28 | S36.06 | Linking knowledge systems for rural livelihoods adaptation under uncertainty: drying and warming in Andean ecosystems
Corianne Valdivia (USA), <i>JL Gilles, A Seth, J Thiebault, E Jiménez, M García, E Yucra</i> |
| 11:28 - 11:31 | S36.07 | A resilience check – enhancing adaptive capacities in Sub-Sahara African agriculture
Chinwe Ifejika Speranza (Germany) |
| 11:31 - 11:34 | S36.08 | Vulnerability and adaptation to water scarcity in the European Alps
Stephane Isoard (Denmark), <i>S McCallum, B Hain</i> |
| 11:34 - 11:37 | S36.09 | Embedding climate change into evaluation frameworks
Merylyn McKenzie Hedger (UK), <i>T Mitchell, J Leavy, L Horrocks, M Greeley</i> |
| 11:37 - 11:40 | S36.10 | Goal conflicts in adaptation to climate change: a Swedish report
Karin Edvardsson Björnberg (Sweden) |
| 11:40 - 11:43 | S36.11 | Measuring adaptation through building scientific capacity: a survey of investigators from the AIACC project
Hassan Virji (USA), <i>J Padgham</i> |
| 11:43 - 12:03 | | Rotating through room, look at visual props, network |
| 12:03 - 12:30 | | General Discussion |

12:30 - 14:00

Lunch Break

Thursday, 12 March 2009

14:00 - 15:30 S36B

Hall B - Room Q

Session 36 - Approaches to Measuring and Enhancing Adaptive Capacities Part II - Carousel, 3 parallel themes, groups rotating through them (3 rotations, 20 minutes each)

Theme 1. Targeting Adaptation in Processes of Social Learning

- 14:00 - 14:10 Introduction
Tom E Downing (Sweden)
- 14:10 - 14:12 S36.12 Measuring adaptation as a socio-institutional process in targeting climate adaptation
Ian Tellam (The Netherlands), *J Gonzales*, *AR Subbiah*, *A Nishat*, *T Devisscher*, *P O'Donoghue*, *K Lonsdale*, *S Bharwani*, *V Mathur*, *W Kojo Bonzu*, *L Gladin*
- 14:12 - 14:14 S36.13 Measuring adaptation: comparing possible outcomes or describing social learning?
Jochen Hinkel (Germany)
- 14:14 - 14:16 S36.14 Towards indicators for adaptation: policy needs, possible approaches and practical solutions
Lisa Horrocks (UK), *A Hunt*
- 14:16 - 14:20 Questions
- 14:20 - 14:30 Listing principles

Theme 2. Linking Poverty to Enhancing Adaptation

- 14:10 - 14:13 S36.15 An assessment of channels to support climate adaptation by the poorest
Simon Anderson (UK), *T Geoghegan*, *J Ayers*
- 14:13 - 14:16 S36.16 Adaptive capacity of the poor
Alexandre Magnan (France), *B Garraud*, *R Billé*
- 14:16 - 14:20 Questions
- 14:20 - 14:30 Listing principles

Theme 3. Governance and Science-Policy Interfaces

- 14:10 - 14:13 S36.17 Decision makers, scientists and modellers: collaborative approaches to enhancing adaptive capacity
David Stainforth (UK), *F Zermoglio*, *Mark Tadross*, *T Downing*
- 14:13 - 14:16 S36.18 A state of the art of governance literature on adaptation to climate change: towards a research agenda
Kim Van Nieuwaal (The Netherlands), *P Driessen*, *T Spit*, *K Termeer*
- 14:16 - 14:20 Questions
- 14:20 - 14:30 Listing principles
- 15:10 - 15:30 General Discussion

15:30 - 16:00

Coffee Break

11:00 - 12:30 S37A

Hall B - Room U

Session 37 - Adapting Future Agricultural Production to Climate Change Part I

Chairs: Professor John R Porter, University of Copenhagen & Professor Peter Gregory, Director of Scottish Crop Research Institute (SCRI)

- 11:00 - 11:30 S37.01 Adapting future agricultural production to climate change: a survey of the challenge to increase food security and reduce risk of hunger
Martin Parry (UK)
- 11:30 - 11:45 S37.02 Importance of local institutions and downwards accountability of local government for mitigating adverse effects of global climate change for poor farmers in South-Eastern Africa
Esbern Friis-Hansen (Denmark), *O Stage*, *C Aben*
- 11:45 - 12:00 S37.03 Modeling farmers' adaptation to climate change - integrating a biophysical and an economic model
Robert Finger (Switzerland)
- 12:00 - 12:15 S37.04 Future cereal production in China: the interaction of climate change, water availability and socio-economic scenarios
Declan Conway (UK), *W Xiong*, *J Jinhe*, *Y Li*, *L Erda*, *Y Xu*, *H Ju*, *Y Li*
- 12:15 - 12:30 Discussion

12:30 - 14:00

Lunch Break

Thursday, 12 March 2009

14:00 - 15:30 S37B

Hall B - Room U

Session 37 - Adapting Future Agricultural Production to Climate Change Part II

- 14:00 - 14:15 S37.05 What can we learn from historic adaptations to extreme events in agriculture?
Anita Wreford (UK), N Adger
- 14:15 - 14:30 S37.06 Managing future agricultural production in a variable and changing climate
Steven Crimp (Australia), M Howden, A Laing, D Gaydon, A Gartmann, P Brown
- 14:30 - 14:45 S37.07 Anticipating and responding to biological complexity in the effects of climate change on agriculture
Karen Garrett (USA), G Forbes, S Pande, S Savary, A Sparks, C Valdivia, C Vera Cruz, L Willocquet
- 14:45 - 15:30 Discussion

15:30 - 16:00

Coffee Break

11:00 - 12:30 S38B

Hall B - Room V

Session 38 - Adapting Forests to Climate Change Part II

Chair: Professor Niels Elers Koch, University of Copenhagen

- 11:00 - 11:15 S38.07 A review of measures to adapt to climate change in forests of EU countries
Marcus Lindner (Finland), M Kolström
- 11:15 - 11:30 S38.08 A review of measures to adapt to climate change in forests in Southeast Asia
Heru Santoso (Indonesia)
- 11:30 - 11:45 S38.09 Locating climatically stable forest in West and Central Africa, protecting the nodes in the web of life
Miguel Leal (USA)
- 11:45 - 12:00 S38.10 Adaptation of tropical pine plantation forestry to climate change
Christoph Leibing (Colombia), M van Zooneveld, A Jarvis
- 12:00 - 12:15 S38.11 Adaptation, non-timber forest products and rural livelihood: an empirical study in West Bengal, India
Jyotish Prakash Basu (India)
- 12:15 - 12:30 S38.12 Adaptive forest management in Germany - strategies, options and risks
Andreas Bolte (Germany), P Spathelf, C Ammer
- 12:30 - 12:45 Discussion

12:30 - 14:00

Lunch Break

14:00 - 15:30 S38C

Hall B - Room V

Session 38 - Adapting Forests to Climate Change Part III

- 14:00 - 14:15 S38.13 Adaptation of forests to climate change/ socio-economic considerations
Balgis Osman-Elasha (Sudan)
- 14:15 - 14:30 S38.14 Policy options for the adaptation of forests to impacts of climate change
Jeremy Rayner (Canada), P Glück
- 14:30 - 14:45 S38.15 Climate change and forest ecosystems in Belarus: integration of exposure and institutional adaptability
Viktar Kireyeu (Hungary), A Shkaruba
- 14:45 - 15:00 S38.16 Changing policies to adapt forests to climate change
Rashid Sheikh (Bangladesh)
- 15:00 - 15:15 S38.17 Adapting research direction on wood mobilization to meet the challenges of climate change
Piotr Paschalis-Jakubowicz (Poland)
- 15:15 - 15:30 Discussion

15:30 - 16:00

Coffee Break

Thursday, 12 March 2009

11:00 -12:30 S39A

Hall B - Room G

Session 39 - Climate Tools and Information to Support Adaptation Part I

Chair: Dr Jill Jäger, Sustainable Europe Research Institute (SERI)

- 11:00 - 11:15 S39.01 The role of shared mental models for adaptation policies to climate change
Ilona Banaszak (Slovak Republic), P Matczak, A Chorynski
- 11:15 - 11:30 S39.02 Frame-based guide to situated decision-making on climate change
Joop de Boer (The Netherlands)
- 11:30 - 11:45 S39.03 The climate learning ladder. A dialogic tool to support Integrated Climate Governance (ICG)
J David Tabara (Spain), A Serra
- 11:45 - 12:00 S39.04 Knowledge for adaptation: the ADAM digital adaptation compendium
Jochen Hinkel (Germany), ME Hofmann, K Lonsdale, P Matczak, D Mcevoy, M Wrobel
- 12:00 - 12:15 S39.05 Participatory scenario development for integrated sustainability assessment
Lisa Bohunovsky (Austria), I Omann
- 12:15 - 12:30 S39.06 Aiding multi-level decision-making processes for climate change mitigation and adaptation
Katherine Anne Daniell (France), MA Mánuez Costa, N Ferrand, M Vassileva, F Aix, P Coad, IS Ribarova

12:30 - 14:00

Lunch Break

14:00 - 15:30 S39B

Hall B - Room G

Session 39 - Climate Tools and Information to Support Adaptation Part II

- 14:00 - 14:15 S39.07 An integrated approach to support climate policy formulation and evaluation
Andrea Marcello Bassi (USA)
- 14:15 - 14:30 S39.08 Climate change adaptation with multiple-perspective based games
Pieter Valkering (The Netherlands)
- 14:30 - 14:45 S39.09 Providing scientific basis for climate change adaptation strategies in the Andes region
Nadine Salzmann (Switzerland), P Calanca, A Diaz, C Huggel, T Jonas, C Jurt, T Konzelmann, P Lagos, M Rohrer, D Sietz, W Silverio, M Zappa
- 14:45 - 15:00 S39.10 "One size fits all?" Can the IPCC serve as blueprint for scientific advice on adaptation to climate change?
Silke Beck (Germany), C Goerg
- 15:00 - 15:15 S39.11 From knowledge to action? Either via science as usual or 'just do it'
Peter Moll (Germany)
- 15:15 - 15:30 Discussion

15:30 - 16:00

Coffee Break

11:00 - 12:30 S41A

Hall B - Room I

Session 41 - Adaptation To Climate Change In Least Developed Countries - Challenges, Experiences and Ways Forward Part I

Chairs: Head of Centre John Christensen, UNEP Risø Centre on Energy, Climate and Sustainable Development & Dr Fatima Denton, Team Leader, Climate Change Adaptation in Africa (CCAA)

- 11:00 - 11:15 **Keynote Lecture**
Saleemul Huq (IIED)
- 11:15 - 11:30 S41.01 Mainstreaming climate change in the implementation of poverty reduction strategies
Gonzalo Griebenow (USA)
- 11:30 - 11:45 S41.02 Financing climate change adaptation in small island developing states
Kanako Morita (Japan)
- 11:45 - 12:00 S41.03 Understanding adaptation-development links from practice
Muyeye Chambwera (UK)
- 12:00 - 12:15 S41.04 Adaptation to climate change: a case study on Bangladesh
Saila Parveen (Bangladesh), I Faisal
- 12:15 - 12:30 S41.05 Empirically based analysis of household-level adaptive capacity in the Central Himalaya
Carsten Smith Olsen (Denmark), HO Larsen, JF Lund, H Meilby, ØJ Nielsen, S Rayamajhi, N Strange

12:30 - 14:00

Lunch Break

Thursday, 12 March 2009

14:00 - 15:30 S41B

Hall B - Room I

Session 41 - Adaptation To Climate Change In Least Developed Countries - Challenges, Experiences and Ways Forward Part II

- 14:00 - 14:15 S41.06 Views on rural vulnerability following hurricane Mitch in Nicaragua
Kristian Thor Jakobsen (Denmark)
- 14:15 - 14:30 S41.07 Linkages between climate change, health, water and food security: what are the issues for Southern Africa?
Moses Chimbari (Uganda), D Mazvimavi, G Manase, P Furu, M Feilberg, JR Jensen, N Ørnbjerg, AM Sørensen, PV Madsen
- 14:30 - 14:45 S41.08 Can groundwater enable communities in sub-Saharan Africa to adapt to predicted impacts of climate change on freshwater resources?
Richard Taylor (UK), C Tindimugaya
- 14:45 - 15:00 S41.09 Linking climate trends to coping strategies in northern Tanzania
Sara Trærup (Denmark), O Mertz
- 15:00 - 15:15 S41.10 Does climate change control land degradation in the Sahel?
Rasmus Fensholt (Denmark), K Rasmussen
- 15:15 - 15:30 Discussion

15:30 - 16:00

Coffee Break

11:00 - 12:30 S42A

Hall B - Room J

Session 42 - Adaptation and Climate Risk Insurance Part I

Chair: Dr Koko Warner, Munich Climate Insurance Initiative (MCII)

- 11:00 - 11:05 Introductory remarks, session objectives
Koko Warner (USA)
- 11:05 - 11:15 S42.01 The insurability of the impacts of climate change
Nick Silver (UK), Andrew Dlugolecki (UK)
- 11:20 - 11:30 S42.02 Adapting to climate change to maintain the insurability of people and property against extreme weather and sea level rise
Nicola Patmore (UK), C Herweijer, R Ward, R Muir-Wood
- 11:35 - 11:45 S42.03 Risk prevention and flood insurance in the UK: ensuring availability in the face of rising climate risks
Swenja Surminski (UK)
- 11:45 - 12:00 Discussion
- 12:00 - 12:15 S42.04 Climate change and climate insurance. The case of Malawi
Reinhard Mechler (Austria), S Hochrainer, G Pflug
- 12:15 - 12:25 S42.05 Climate risk insurance: opportunities for poverty reduction & adaptation
Molly Hellmuth (USA), H Bhojwani, D Osgood, J Hansen, A Moorhead
- 12:25 - 12:30 Discussion

12:30 - 14:00

Lunch Break

14:00 - 15:30 S42B

Hall B - Room J

Session 42 - Adaptation and Climate Risk Insurance Part II

- 14:00 - 14:05 Welcome back, second session objectives
Koko Warner (USA)
- 14:05 - 14:15 S42.06 Climate insurance as part of a post-2012 adaptation strategy
Koko Warner (USA)
- 14:20 - 14:30 S42.07 Insurance Mechanisms to help Developing Countries respond to climate change
Joanne Linnerooth-Bayer (Austria), C Bals, R Mechler
- 14:35 - 14:45 Towards a risk finance facility for development: The UNDP initiative
Pablo Suarez (The Netherlands)
- 14:50 - 15:30 Discussion

15:30 - 16:00

Coffee Break

Thursday, 12 March 2009

11:00 - 12:30 S43A

Hall B - Room L

Session 43 - Integrating Climate Change into Global Sustainability Part I

Chair: Professor Kazuhiko Takeuchi, University of Tokyo

- 11:00 - 11:05 Introduction
Kazuhiko Takeuchi (Japan)
- 11:05 - 11:30 **Keynote Lecture:** Towards global sustainability structuring of actions through networks of networks and knowledge innovation
Todai Komiyama, President, The University of Tokyo (Japan)
- 11:30 - 11:40 S43.01 Social-ecological resilience and transformation in the face of global change
Carl Folke (Sweden)
- 11:40 - 11:50 S43.02 Millennium ecosystem assessment: balancing trade offs in a holistic manner
Hamed Zakri (Japan)
- 11:50 - 12:00 S43.03 The climate of disciplinary tunnel vision
Petter Naess (Denmark)
- 12:00 - 12:10 S43.04 Agglomeration economies and spatial sustainability
Henri Waisman (France), *F Grazi, JCJM van den Bergh*
- 12:10 - 12:20 S43.05 Knowledge structuring and an exploration system for global sustainability and its application to the biofuel issue
Riichiro Mizoguchi (Japan), *O Saito, K Kozaki, T Hirota,*
- 12:20 - 12:30 Discussion

12:30 - 14:00

Lunch Break

14:00 - 15:30 S43B

Hall B - Room L

Session 43 - Integrating Climate Change into Global Sustainability Part II

- 14:00 - 14:10 S43.06 Development of long-term vision of global sustainable society from viewpoints of low-carbon, material cycle and ecosystem.
Toshihiko Masui (Japan), *T Inoue, K Takeuchi, K Hanaki, S Arai, G Hibino, S Matsui, M Yoshikawa, Y Motoki*
- 14:10 - 14:20 S43.07 Strategies for reducing carbon emissions from disturbed tropical peat
Mitsuru Osaki (Japan), *T Iwakuma, H Takahashi, T Hirano, T Kohyama, N Tanaka, T Honnma, H Sekine, A Braimoh, SH Limin, B Setiadi*
- 14:20 - 14:30 S43.08 Consumer behaviour and climate change: consumers' strategies to mitigating climate change impacts in Mauritius.
Lutchmeeduth Bullywon (Mauritius), *A Sookun*
- 14:30 - 14:40 S43.09 Protecting the Arctic marine environment in a changing climate – options for transatlantic and international governance
Katharina Umpfenbach (Germany), *S Cavalieri*
- 14:40 - 14:50 S43.10 Traditional knowledge for developing holistic adaptation and mitigation measures
Sam Johnston (Japan), *V Tauli-Corpuz*
- 14:50 - 15:00 S43.11 Economic impacts of rising demand of vegetable oil for bio-diesel and food on sustainability of developing countries
Hiroataka Matsuda (Japan), *N Suzuki*
- 15:00 - 15:10 S43.12 Corporate sustainable-developmental responsibility (CSdR): corporate addressing climate change within a sustainability framework
Harn Wei Kua (Singapore)
- 15:10 - 15:30 General Discussion

15:30 - 16:00

Coffee Break

Thursday, 12 March 2009

11:00 - 12:30 S51A

Hall B - Room K1

Session 51 -Managing Food in a Climate Constrained World Part I

Chairs: Professor Pam Matson, Stanford University & Professor Louise Fresco, University of Amsterdam

- 11:00 - 11:20 S51.01 Food security in the face of climate change, population growth and resource constraints
Islam Faisal (Bangladesh), S Parveen
- 11:20 - 11:40 S51.02 Simulating the interactions between climate change, food, and water in future Africa
Joseph Alcamo (Germany)
- 11:40 - 12:00 S51.03 Technological change in agriculture and the trade-offs between land expansion, intensification and international trade
Hermann Lotze-Campen (Germany), A Popp
- 12:00 - 12:20 S51.04 Global food flows and urban food security: case studies from three IARU cities
Lisa Deutsch (Sweden), D Dumaesq, R Dyball, H Matsuda, J Porter, A Reenberg, K Takeuchi
- 12:20 - 12:30 Discussion

12:30 - 14:00

Lunch Break

14:00 - 15:30 S51B

Hall B - Room K1

Session 51 -Managing Food in a Climate Constrained World Part II

- 14:00 - 14:20 S51.05 Predicting the climate impacts of liquid biofuels through project-level and policy level case studies: contrasting approaches in Ethiopia and the Philippines
Ian Monroe (USA)
- 14:20 - 14:40 S51.06 Climate change impacts on African agriculture: uncertainties and implications for adaptation
Marshall Burke (USA)
- 14:40 - 15:30 Discussion

15:30 - 16:00

Coffee Break

11:00 - 12:30 S52A

Hall B - Room R

Session 52 - Economic Costs of not Mitigating Climate Change Part I

Chair: Kevin Anderson; Research Director; Tyndall Centre for Climate Change Research; University of Manchester and University of East Anglia

- 11:00 - 11:20 S52.01 Climate change & carbon budgets: implications for international transport and emissions trading
Alice Bows (UK), K Anderson
- 11:20 - 11:40 S52.02 The economic impact of future increase in tropical cyclones in Japan
Christian Webersik (Japan), M Esteban, T Shibayama
- 11:40 - 12:00 S52.03 Loss of worker productivity due to projected climate change
Tord Kjellstrom (Australia), B Lemke
- 12:00 - 12:20 S52.04 Climate change adaptation scenario for the European electricity sector
Ulrich Reiter (Switzerland), H Turton
- 12:20 - 12:30 Discussion

12:30 - 14:00

Lunch Break

Thursday, 12 March 2009

14:00 - 15:30 S52B

Hall B - Room R

Session 52 - Economic Costs of not Mitigating Climate Change Part II

- 14:00 - 14:20 S52.05 Quantifying the costs of no-action: high-resolution impacts analysis for the United States
Noah Diffenbaugh (USA)
- 14:20 - 14:40 S52.06 An adaptability limit for large warmings--are we accounting for it?
Steven Sherwood (USA), M Huber
- 14:40 - 15:00 S52.07 Representing the impacts of climate change in a US economic model
Martin Ross (USA), B DeAngelo, R Beach, M Gallaher, S Pattanayak, C Poulos, S Waldhoff
- 15:00 - 15:20 S52.08 The economic cost of climate change – loss of value of European forestland as a consequence of not mitigating climate change
Marc Hanewinkel (Germany), NE Zimmermann, DA Cullmann
- 15:20 - 15:30 Discussion

15:30 - 16:00

Coffee Break

11:00 - 12:30 S53A

Hall B - Room X

Session 53 - Role of Media in Contributing in Combating Climate Change Part I

Chair: Dr Max Boykoff, University of Oxford

- 11:00 - 11:05 Introduction
Max Boykoff (UK)
- 11:05 - 11:15 S53.01 Competition and getting past the boss
Paul Ray Beck Brown (UK)
- 11:15 - 11:25 S53.02 The cultural politics of climate change: focusing on mass media
Maxwell Boykoff (UK)
- 11:25 - 11:35 S53.03 Communicating about global climate change...persuasively
Sharon Dunwoody (USA)
- 11:35 - 11:45 S53.04 Web 2.0: friend or foe?
Olive Heffernan (UK)
- 11:45 - 11:55 S53.05 The evolving role of Southeast Asian media in climate change
Imelda Abano (Philippines)
- 11:55 - 12:05 S53.06 Challenges in climate change reporting, experience from mainland Southeast Asian media
Piyaporn Wongruang (Thailand)
- 12:05 - 12:15 S53.07 Transforming the role of the media in combating climate change in Africa
Patrick Luganda (Uganda)
- 12:15 - 12:30 Discussion

12:30 - 14:00

Lunch Break

Thursday, 12 March 2009

14:00 - 15:30 S53B

Hall B - Room X

Session 53 - Role of Media in Contributing in Combating Climate Change Part II

- 14:00 - 14:10 S53.08 Media coverage of climate change in the US and Brazil: understanding convergences and divergences in light of socio-political contexts and identifying policy implications
Myanna Lahsen (Brazil)
- 14:10 - 14:20 S53.09 The problem with supply-side science
Naomi Oreskes (USA)
- 14:20 - 14:30 S53.10 Why climate-change skepticism is so prevalent in the USA: the success of conservative think tanks in promoting skepticism via the media
Riley Dunlap (USA)
- 14:30 - 14:40 S53.11 The effects of journalistic imbalance on scientific imbalance: special interests, scientific consensus and global climate disruption
William Freudenburg (USA)
- 14:40 - 14:50 S53.12 European media discourses and the governance of climate change
Anabela Carvalho (Portugal)
- 14:50 - 15:00 S53.13 Reducing greenhouse gases: the media challenge
James Kanter (Belgium)
- 15:00 - 15:10 S53.14 Exploring the media framing of carbon capture and storage and its influence on public perceptions
Sarah Mander (UK), R Wood, C Gough
- 15:10 - 15:30 Discussion

15:30 - 16:00

Coffee Break

11:00 - 12:30 S54A

Hall B - Room S

Session 54 - The Role of non Nation State Actors (Cities, NGOs, Business) in Combating Climate Change Part I

Chair: Dr Aled Jones, Deputy Director, University of Cambridge Programme for Industry

- 11:00 - 11:20 S54.01 Participation of community-based stakeholders in the CDM project cycle in China
Joakim Nordqvist (Sweden), E Mühlhäuser
- 11:20 - 11:40 S54.02 Volunteers as the entry point to climate change adaptation at community level
Andreas G Koestler (Norway), A Torbjørnsen, A-M Austenå
- 11:40 - 12:00 S54.03 The limits of participatory democracy for the fight against climate change
Stéphane La Branche (France)
- 12:00 - 12:30 Discussion

12:30 - 14:00

Lunch Break

14:00 - 15:30 S54B

Hall B - Room S

Session 54 - The Role of non Nation State Actors (Cities, NGOs, Business) in Combating Climate Change Part II

- 14:00 - 14:20 S54.04 Paving the way for a new development path: an analysis of transnational corporations and carbon lock-in
Vanessa Pena (UK)
- 14:20 - 14:40 S54.05 Collaborative emission reduction in regional Australia: Maine's power
Peta Ashworth (Australia), D Bridgfoot, J Gardner, S Rooney
- 14:40 - 15:00 S54.06 Transnational climate governance: assessing the performance of non-state driven mitigation schemes
Philipp Pattberg (The Netherlands)
- 15:00 - 15:30 Discussion

15:30 - 16:00

Coffee Break

Thursday, 12 March 2009

11:00 - 12:30 S55A

Hall B - Room H

Session 55 - Resources in a Changing Climate: Building Collaboration and Avoiding Conflict Part I

Chairs: Professor Johan Rockström, University of Stockholm and Executive Director at Stockholm Environment Institute & Dr Tariq Banuri, Senior Researcher at Stockholm Environment Institute

- 11:00 - 11:20 S55.01 A game theoretic approach to climate negotiation
Ekko van Ireland (*The Netherlands*)
- 11:20 - 11:40 S55.02 Stringency of climate targets
Paul Baer (*USA*)
- 11:40 - 12:00 S55.03 Integrated development and climate network: climate and development
Munir Akram (*USA*)
- 12:00 - 12:30 Discussion

12:30 - 14:00 Lunch Break

14:00 - 15:30 S55B

Hall B - Room H

Session 55 - Resources in a Changing Climate: Building Collaboration and Avoiding Conflict Part II

- 14:00 - 14:20 S55.04 Civic exchange: menu or recipe
Christine Loh (*PR China*)
- 14:20 - 14:40 S55.05 Government of Korea: menu or recipe
Rae Kwon Chung (*South Korea*)
- 14:40 - 15:00 S55.06 UN: policy timing
Tariq Banuri (*Sweden*)
- 15:00 - 15:30 Discussion

15:30 - 16:00 Coffee Break

11:00 - 12:30 S56A

Hall B - Room Y

Session 56 - Human Migration - Geopolitical Conflicts Part I

Chairs: Professor Ole Wæver, University of Copenhagen

- 11:00 - 11:15 S56.01 Climate change, migration and conflict in Bangladesh: a view from the ground
ABM Ziaur Rahman (*Bangladesh*)
- 11:15 - 11:30 S56.02 Climate change impacts on migration: conflict and cooperation in the Mediterranean
Hans Günter Brauch (*Germany*)
- 11:30 - 11:45 S56.03 Social vulnerability and geopolitical conflicts due to socio-environmental migration in Mexico
Ursula Oswald Spring (*Mexico*)
- 11:45 - 12:00 S56.04 Migration: climate adaptation or failure to adapt? Findings from a global comparative field study
Koko Warner (*USA*)
- 12:00 - 12:30 Discussion

12:30 - 14:00 Lunch Break

Thursday, 12 March 2009

11:00 - 12:30 S56A

Hall B - Room Y

Session 56 - Human Migration - Geopolitical Conflicts Part I

Chairs: Professor Ole Wæver

- 14:00 - 14:15 S56.05 IPCC and the climate-conflict nexus
Nils Petter Gleditsch (Norway), R Nordås
- 14:15 - 14:30 S56.06 Climate change, urban vulnerability and disasters: a preliminary analysis of selected Nigerian cities
Felix Olorunfemi (Nigeria), A Gbadegesin, U Raheem
- 14:30 - 14:45 S56.07 The meaning and function of European discourses on climate security
Julia Trombetta (The Netherlands)
- 14:45 - 15:00 S56.08 Climate-induced instabilities and conflicts
Jürgen Scheffran (USA)
- 15:00 - 15:30 Discussion

15:30 - 16:00

Coffee Break

11:00 - 12:30 S57B

Hall B - Room F

Session 57 - Cultures, Values & World Perspectives as Factors in Responding to Climate Change Part II

Chairs: Professor Karen O'Brien, University of Oslo & Professor Thomas Heyd, University of Victoria

- 11:00 - 11:05 Introduction
- 11:05 - 11:15 S57.07 Indigenous peoples of the Sierra Nevada de Santa Marta-Colombia: local ways of thinking climate change
Astrid Ulloa (Colombia)
- 11:15 - 11:25 S57.08 The sentinel key role of indigenous peoples in the assessment of climate change effects on tropical forests
Edmond Dounias (France)
- 11:25 - 11:35 S57.09 Gone the bull of winter: grappling with the cultural implications of and anthropology's role(s) in global climate change
Susan Crate (USA)
- 11:35 - 11:45 S57.10 Bad weather or stricter standards - sources of knowledge in climate adaptation?
Sunniva Tøsse (Norway)
- 11:45 - 12:10 Discussion
- 12:10 - 12:36 S57.11 Climate change: the ethical dimension (Video Presentation)
Robin Attfield (UK)

12:30 - 14:00

Lunch Break

Thursday, 12 March 2009

14:00 - 15:30 S57C

Hall B - Room F

**Session 57 - Cultures, Values & World Perspectives as Factors
in Responding to Climate Change Part II**

- 14:00 - 14:05 Introduction
- 14:05 - 14:15 S57.12 Procrastination in climate policy: metaphysics vs. decisions in the wild
Bertrand G Guillaume (France)
- 14:15 - 14:25 S57.13 Understanding the role of culture in determining risk from natural hazards
Lisa Schipper (Thailand), **J Dekens**
- 14:25 - 14:35 S57.14 Climate change and the re-invigoration of the public sphere: issues, methodologies and the way(s) forward
Kersty Hobson (Australia)
- 14:35 - 14:45 S57.15 Ignorance and vulnerability: beliefs about stability and the occurrence of 'radical surprise'
Christian Kuhlicke (Germany)
- 14:45 - 14:55 S57.16 Warming up the climate change debate: a challenge to policy based on adaptation
Andrea Nightingale (UK)
- 14:55 - 15:05 S57.17 Human agency and the anatomy of climate change adaptation strategies in the Arctic
Frank Sejersen (Denmark)
- 15:05 - 15:30 Discussion

15:30 - 15:50

Coffee Break

15:50 - 17:10

Plenary Hall - Auditorium A

Closing Session

Chair: Professor Katherine Richardson, University of Copenhagen

Confirmed Speakers

Professor Katherine Richardson, University of Copenhagen

Professor Dan Kammen, University of California at Berkeley

Professor Lord Nicholas Stern, London School of Economics & Political Science (LSE)

Professor Jane Lubchenco, Nominated to be Head of National Oceanic and Atmospheric Administration, USA

Mr Anders Fogh Rasmussen, Prime Minister, Denmark

17:10 - 17:30

Closing Ceremony with Entertainment by Rasmus Lyberth & Band