

European Association of Environmental and Resource Economists
Tenth Annual Conference
University of Crete, Department of Economics

OVERVIEW OF PROGRAMME

Thursday June 29

19:30 – 22:30 Registration and Welcome Reception

Friday June 30

09:00 - 09:30 Registration and Coffee

09:30 - 10:00 Opening Session

10:00 - 11:00 Plenary Session I

11:00 - 11:15 Eric Kempe Prize

11:15 - 11:45 Break

11:45 - 13:45 Session 1 A-H

13:45 - 15:00 Lunch

15:00 - 17:00 Session 2 A-H

17:00 - 17:30 Break

17:30 - 19:30 Session 3 A-H

20:00-23:00 Fortezza Evening

Saturday July 1

09:00 - 10:00 Plenary Session II

10:00 - 10:30 Break

10:30 - 12:30 Session 4 A-H

12:30 - 14:00 Lunch

14:00 - 16:00 Session 5 A-H

16:00 - 16:30 Break

16:30 - 18:15 Panel Session

20:30 Conference Dinner

Sunday July 2

09:30 - 11:30 Session 6 A-H

11:30 - 12:00 Break

12:00 - 13:15 Plenary Session III and Conference Closing

13:15 - 14:45 Lunch and EAERE General Assembly

PLENARY AND PANEL SESSIONS

Friday June 30

10:00 - 11:00 Plenary Session I

Room: Δ3

Social Well-Being, Wealth and Accounting Prices

Speaker: Karl-Goran Maler, The Beijer Institute

Moderator: Domenico Siniscalco, University of Turin and FEEM

Saturday July 1

09:00 - 10:00 Plenary Session II

Room: Δ3

Reflections on Irreversibility: Environmental Science and Environmental Economics

Speaker: Anthony Fisher, University of California at Berkeley

Moderator: Rudiger Pethig, University of Siegen

16:30 - 18:15 Panel Session

Room: Δ3

Climate Change in Mediterranean Environments

Moderator: Charles Perrings, University of York

Panelists: Carlo Carraro, University of Venice and FEEM
Lucien Chabason, United Nations Mediterranean Action Plan
Anthony Fisher, University of California at Berkeley
Geoffrey Heal, Columbia University
Mordechai Schechter, University of Haifa

Sunday July 2

12:00 - 13:15 Plenary Session III and Conference Closing

Room: Δ3

Discounting: What, Why and How?

Speaker: Partha Dasgupta, Cambridge University

Moderator: Aart de Zeeuw, University of Tilburg and CentER

Contributed Session 1: Friday 30 June, 11:45-13:45

Session A 1: CONTINGENT VALUATION AND UNCERTAINTY

Room: Δ3-7A

Chair: Richard T. Carson (University of California, San Diego)

Modeling the Uncertainty in Distinguishing between Respondent Types in Contingent Valuation Surveys

John Curtis (Economic and Social Research Institute, Ireland)

Discussant: **Richard T. Carson** (University of California, San Diego)

Analysis of Contingent Valuation Data with Multiple Bids and Response Options Allowing Respondents to Express Uncertainty

Anna Alberini (University of Maryland), **Kevin Boyle** (University of Maine) and Michael Welsh (Christiansen Consulting, Wisconsin)

Discussant: **Erkki Mäntymaa** (University of Oulu)

Estimating the Demand for Biodiversity - Vagueness Band and Open Questions

Erkki Mäntymaa (University of Oulu), Juha Siikamäki (Finnish Agricultural Economics Research Institute) and Rauli Svento (University of Oulu)

Discussant: **John Curtis** (Economic and Social Research Institute, Ireland)

On Overcoming Informational Deficiencies in Estimating Willingness to Pay Distributions
Richard T. Carson (University of California, San Diego) and Yongil Jeon (Harvard University)

Discussant: **Kevin Boyle** (University of Maine)

Session B1: NONPOINT SOURCE POLLUTION

Room: Δ1-A

Chair: Ignazio Musu (University of Venice)

Regulation of Non-Point Emissions. A Variance Based Mechanism

Lars Gårn Hansen (**Institute of Local Government Studies, Denmark**)

Discussant: **Marca Weinberg** (University of California, Davis)

Efficiency Benefits versus Transaction Costs in Non-Point Source Pollution Control

Marca Weinberg and James E. Wilen (University of California, Davis)

Discussant: **Werner Hediger** (Swiss Federal Institute of Technology)

Instrument Choice for Controlling Stochastic Nitrate Pollution

Athanasios Karpas (Environmental & Socio Economics Group, Macaulay Land Use Research Institute, Aberdeen) and Ben White (Newcastle University)

Discussant: **Lars Gårn Hansen** (Institute of Local Government Studies, Denmark)

Optimal Control of Soil Erosion and Phosphorous Runoff from Agricultural Land

Werner Hediger (Swiss Federal Institute of Technology)

Discussant: **Athanasios Karpas** (Environmental & Socio Economics Group, Macaulay Land Use Research Institute, Aberdeen)

Session C1: EMISSIONS TRADING

Room: Δ7

Chair: Eftichios Sartzetakis (University College of the Cariboo and University of Macedonia)

Bilateral CO₂ Trading

Matti Liski (Helsinki School of Economics and Academy of Finland) and **Juha Virrankoski** (Helsinki School of Economics)

Discussant: **Lars Lindholt** (Statistics Norway)

Stabilisation of CO₂ Concentrations: Mitigation Scenarios Using the Petro Model

Snorre Kverndokk (Ragnar Frisch Centre for Economic Research, Norway), **Lars Lindholt** (Statistics Norway) and **Knut Einar Rosendahl** (Statistics Norway)

Discussant: **Carolyn Fischer** (Resources for the Future, Washington)

Multinational Taxation and International Emissions Trading

Carolyn Fischer (Resources for the Future, Washington)

Discussant: **Eftichios Sartzetakis** (University College of the Cariboo and University of Macedonia)

On the Efficiency of Competitive Markets for Input Quotas: The Case of Emission Permit Trading

Eftichios Sartzetakis (University College of the Cariboo and University of Macedonia)

Discussant: **Matti Liski** (Helsinki School of Economics and Academy of Finland)

Session D1: WATER MANAGEMENT I

Room: Δ6

Chair: Ariel Dinar (The World Bank, Washington)

Residential Water Demand in the Northwest of Spain

Roberto Martinez-Espineira (University of York)

Discussant: **Charles W. Howe** (University of Colorado, Boulder)

Water Pricing in Mexico: Principles and Reality

Hilda Guerrero-G.R (Instituto Mexicano de Tecnologia del Agua and Université de Toulouse) and **Charles W. Howe** (University of Colorado, Boulder)

Discussant: **Ariel Dinar** (The World Bank, Washington)

Joint Quantity/Quality Management of Groundwater

Catarina Roseta Palma (Universidade Nova de Lisboa)

Discussant: **Roberto Martinez-Espineira** (University of York)

Institution-Performance Interaction within Water Sector: Empirical Results with Cross-Country Data

R. Maria Saleth (Institute of Economic Growth, India) and **Ariel Dinar** (The World Bank, Washington)

Discussant: **Catarina Roseta Palma** (Universidade Nova de Lisboa)

Session E1: ENVIRONMENT AND GROWTH

Room: Δ2-Γ

Chair: Sjak Smulders (Tilburg University and Center)

Economic Growth, Environmental Quality and Hyperbolic Discounting
Chuan-Zhong Li (University of Dalarna) and Karl-Gustaf Lofgren (University of Umea)
Discussant: **Sjak Smulders** (Tilburg University and CentER)

Natural Capital and Sustainability
Jan van Geldrop (Eindhoven University of Technology) and **Cees Withagen** (Vrije
Universiteit Amsterdam, Tinbergen Institute, Tilburg University and CentER)
Discussant: **Thomas I. Renström** (CentER, Tilburg University)

Inequality, Environmental Protection and Growth
Laura Marsiliani and **Thomas I. Renström** (CentER, Tilburg University)
Discussant: **Chuan-Zhong Li** (University of Dalarna)

Should We Invest More in the Economy or in the Environment? Discounting, Economic
Growth, and Environmental Quality
Sjak Smulders (Tilburg University and CentER)
Discussant: **Cees Withagen** (Vrije Universiteit Amsterdam, Tinbergen Institute, Tilburg
University and CentER)

Session F1: URBAN ENVIRONMENTAL PROBLEMS

Room: A2-2

Chair: Frank Convery (University College Dublin)

The Value of Conservation Easements
Andrew J. Plantinga (University of Maine) and Douglas J. Miller (Purdue University)
Discussant: **Anne Rozan** (Université Louis Pasteur)

Optimal Urban Road Tolls in the Presence of Distortionary Taxes
Edward Calthrop, Stef Proost and Kurt Van Dender (Catholic University of Leuven)
Discussant: **Frank Convery** (University College Dublin)

Benefit Transfer: A Comparison of WTP for Air Quality between France and Germany
Anne Rozan (Université Louis Pasteur)
Discussant: **Edward Calthrop** (Catholic University of Leuven)

Large Scale Out-of-town Shopping in the European Union – Theory, Externalities and Policy
Issues
Frank Convery (University College Dublin)
Discussant: **Andrew J. Plantinga** (University of Maine)

Session G1: PRODUCTIVITY AND EFFICIENCY

Room: A1-2

Chair: Lars Bergman (Stockholm School of Economics)

Market Structure in a Rights-Based Fishery
Chris Batstone (Auckland University of Technology) and B.M.H. Sharp (University of
Auckland)
Discussant: **Henk Folmer** (Wageningen University)

Endogenous Technology Switches in Dutch Dairy Farming when Environmental and Agricultural Policies Are Restrictive

Marinus H.C. Komen and Jack H.M. Peerlings (Wageningen University)

Discussant: **Lars Bergman** (Stockholm School of Economics)

The Porter Hypothesis: Some Evidence from Dutch Dairy Farms

Stijn Reinhard (LEI, The Netherlands) and **Henk Folmer** (Wageningen University)

Discussant: **Chris Batstone** (Auckland University of Technology)

Productivity and Growth Effects of Acidification: A Dynamic CGE Modelling Study of Sweden

Lars Bergman and Martin Hill (Stockholm School of Economics)

Discussant: **Jack H.M. Peerlings** (Wageningen University)

Session H1: RECREATION

Room: Δ2-B

Chair: Michael Hanemann (University of California, Berkeley)

Go Climb a Mountain: An Application of Recreation Demand Models to Rock Climbing in Scotland

Nick Hanley (University of Edinburgh), Gary Koop (University of Edinburgh), Robert Wight (Stirling University) and **Begona Alvarez-Farizo** (University of Zaragoza)

Discussant: **Philippe Polomé** (Universidade de Vigo)

Applying Simulated Maximum Likelihood to Estimate Contingent Valuation and Travel Demand

Philippe Polomé (Universidade de Vigo)

Discussant: **Craig Mohn** (Virginia Tech)

Valuing the Distribution and Efficiency Effects of Adjustments in the Entry Charges and Site Quality of Forest Parks Using a Regional Travel Cost Model for the Republic of Ireland

W. George Hutchinson (Queen's University Belfast), Riccardo Scarpa (Università degli Studi della Tuscia and CREAM, University of Newcastle), Susan M. Chilton (University of Newcastle) and Trevor McCallion (Department of Agriculture for Northern Ireland, Belfast)

Discussant: **Begona Alvarez-Farizo** (University of Zaragoza)

Caught in a Corner: Using the Kuhn-Tucker Conditions to Value Montana Sportfishing

Craig Mohn (Virginia Tech), Michael Hanemann (University of California, Berkeley), Michael Ward (University of California, Berkeley)

Discussant: **W. George Hutchinson** (Queen's University Belfast)

Contributed Session 2: Friday 30 June, 15:00 – 17:00

Session A 2: VALUATION ISSUES I

Room: Δ3-7A

Chair: Stef Proost (Catholic University of Leuven)

A Stochastic Threshold Model for Estimating the Value of Travel Time

Chuan-Zhong Li and Lars Hultkrantz (University of Dalarna)

Discussant: **Stef Proost** (Catholic University of Leuven)

Context and Framing Effects in Value of Time Estimation

Lena Nerhagen (University of Dalarna)

Discussant: **John A. List** (University of Central Florida)

The Incredible Disappearing Act: The Effect of Market Experience on the WTA/WTP Disparity

John A. List (University of Central Florida)

Discussant: **Chuan-Zhong Li** (University of Dalarna)

Cost - Efficiency Methodology for the Selection of New Car Emission Standards in Europe
Zeger Degraeve (London Business School), **Stef Proost** (Catholic University of Leuven) and
Gunther Wuyts (Catholic University of Leuven)

Discussant: **Lena Nerhagen** (University of Dalarna)

Session B 2: INVESTMENT, LOCATION DECISIONS AND STRUCTURAL CHANGE

Room: A1-2

Chair: Emmanuel Petrakis (University of Crete)

Strategic Environmental Policies in the Presence of Foreign Direct Investment

M. Ozgur Kayalica (University of Essex and Sakarya University, Turkey), S. Lahiri (University of Essex)

Discussant: **Emmanuel Petrakis** (University of Crete)

Investment Incentives of Environmental Policy Instruments

Bouwe R. Dijkstra (University of Heidelberg)

Discussant: **Henri L.F. de Groot** (Vrije Universiteit)

Structural Change, Economic Growth and the Environmental Kuznets Curve: A Theoretical Perspective

Henri L.F. de Groot (Vrije Universiteit)

Discussant: **M. Ozgur Kayalica** (University of Essex and Sakarya University, Turkey)

Location Decisions of a Polluting Firm and the Time Consistency of Environmental Policy

Emmanuel Petrakis and Anastasios Xepapadeas (University of Crete)

Discussant: **Bouwe R. Dijkstra** (University of Heidelberg)

Session C 2: INTERNATIONAL TRADE AND ENVIRONMENT

Room: A6

Chair: Maria A. Cunha-e-Sa (Universidade Nova de Lisboa)

Environmental Protection and Free Trade: Direct and Indirect Competition for Political Influence

Zhihao Yu (University of Nottingham)

Discussant: **Linda Fernandez** (University of California, Riverside)

Revealed Preferences of an International Trade and Environment Institution

Linda Fernandez (University of California, Riverside)

Discussant: **Urs Steiner Brandt** (University of Odense)

Voting for Pollution Policy: The Importance of Income Inequality and Trade

Carol McAusland (University of California, Santa Barbara)
Discussant: **Zhihao Yu** (University of Nottingham)

Implementation of Uniform Approaches

Urs Steiner Brandt (University of Odense)

Discussant: **Carol McAusland** (University of California, Santa Barbara)

Session D 2: FISHERIES

Room: A1-A

Chair: Veijo Kaitala (Helsinki University of Technology and University of Jyväskylä)

Cooperative and Non-cooperative Harvesting in a Stochastic Sequential Fishery

Marita Laukkanen (University of California, Berkeley)

Discussant: **Håkan Eggert** (Göteborg University)

Technical Inefficiency and its Determinant Factors in a Demersal Trawl Fishery: The Swedish Norway Lobster Fishery

Håkan Eggert (Göteborg University)

Discussant: **Ana Brasão** (Universidade Nova de Lisboa)

Bio-economic Model of Northern Atlantic Bluefin Tuna: A Comparison between the Deterministic and the Stochastic Results

Ana Brasão (Universidade Nova de Lisboa)

Discussant: **Marko Lindroos** (Helsinki University of Technology and Helsinki School of Economics and Business Administration)

When to Sign an Environmental Agreement: The Case of High Seas Fisheries

Veijo Kaitala (Helsinki University of Technology and University of Jyväskylä) and **Marko Lindroos** (Helsinki University of Technology and Helsinki School of Economics and Business Administration)

Discussant: **Marita Laukkanen** (University of California, Berkeley)

Session E 2: ECONOMIC THEORY AND ENVIRONMENTAL POLICY

Room: A7

Chair: Gerard Gaudet (Université de Montreal)

Optimal Taxation of Resource Rent with Imperfectly Observable Cost

John Livernois (University of Guelph)

Discussant: **Maria-Jose Gutierrez** (Universidad del Pais Vasco)

Taxing Pollution in an Overlapping Generation Model with Health Costs

Javier Gardeazabal, **Maria-Jose Gutierrez** and Luis A. Vicente (Universidad del Pais Vasco)

Discussant: **Thomas Wagner** (University of Applied Sciences, Nuernberg)

Environmental Policy and the Equilibrium Rate of Unemployment

Thomas Wagner (University of Applied Sciences, Nuernberg)

Discussant: **Gerard Gaudet** (Université de Montreal)

Noncompetitive Recycling and Market Power

Gerard Gaudet (Université de Montreal) and Ngo Van Long (McGill University)

Discussant: **John Livernois** (University of Guelph)

Session F 2: ENVIRONMENTAL POLITICS AND LAW

Room: A2-2

Chair: Alistair Ulph (University of Southampton)

A Political Economy Approach to the Environment: Environmental Analysis from the Institutional Perspective

Mauricio G. Villena and Marcelo J. Villena (University of Cambridge)

Discussant: **Laura Valentini** (University of Southampton)

The Relative Efficiency of Environmental Policy Instruments in a Second-Best Setting with Costly Monitoring and Enforcement

Sandra Rousseau and Stef Proost (Centre for Economic Studies, Catholic University of Leuven)

Discussant: **Laurent Franckx** (Royal Military Academy and Centre for Economic Studies, Catholic University of Leuven)

Ambient Inspections and Commitment Contracts: Substitutes or Complements?

Laurent Franckx (Royal Military Academy and Centre for Economic Studies, Catholic University of Leuven)

Discussant: **Mauricio G. Villena** (University of Cambridge)

Environmental Liability and the Capital Structure of Firms

Alistair Ulph and Laura Valentini (University of Southampton)

Discussant: **Sandra Rousseau** (Centre for Economic Studies, Catholic University of Leuven)

Session G 2: ENVIRONMENTAL AGREEMENTS

Room: A2-B

Chair: Karl-Gustaf Lofgren (University of Umea)

Voluntary Agreements, Investment Subsidies or Taxes? An Econometric Evaluation of Their Effect on Energy Use in Danish Industry

Thomas Bue Bjoerner and Henrik Holm Jensen (Institute of Local Government Studies, Denmark)

Discussant: **François Salanie** (University of Toulouse)

Collective Environmental Agreements: An Analysis of the Problems of Free-Riding and Collusion

Katrin Millock (Centre de Recherche International sur l'Environnement et le Développement (CIRED)) and **François Salanie** (University of Toulouse)

Discussant: **Thomas Bue Bjoerner** (Institute of Local Government Studies, Denmark)

Implicit Cartelization and the Emergence of Voluntary Agreements in Environmental Policy

Markus A. Lehmann (Max-Planck Project Group 'Common Goods', Germany)

Discussant: **Katrin Millock** (Centre de Recherche International sur l'Environnement et le Développement (CIRED))

International Cooperation over Green Taxes: On the Impossibility of Achieving a Probability-One Gain

Thomas Aronsson, Kenneth Backlund and **Karl-Gustaf Lofgren** (University of Umea)

Discussant: **Markus A. Lehmann** (Max-Planck Project Group 'Common Goods', Germany)

Session H 2: NATURAL RESOURCE STUDIES I

Room: Δ2-Γ

Chair: Harmen Verbruggen (**Institute of Environmental Studies, Vrije Universiteit**)

Reconciling Tests of the Theory of Exhaustible Resources

Janie M. Chermak (University of New Mexico) and Robert H. Patrick (Rutgers University)

Discussant: **Pascal Favard** (Université des Sciences Sociales et LEERNA, Toulouse)

Does Productive Capital Affect the Order of Resource Exploitation?

Pascal Favard (Université des Sciences Sociales et LEERNA, Toulouse)

Discussant: **Joanne Burgess** (University of York)

An Environmental Accountant's Dilemma: Can Market Prices Indicate Anything about Scarcity of Resources?

Anni Huhtala (Swedish National Institute of Economic Research), Anne Toppinen (Finnish Forest Research Institute) and Mattias Boman (Swedish University of Agricultural Sciences)

Discussant: **Janie M. Chermak** (University of New Mexico)

Implications for the Faustmann Formula of Forest Land Conversion over Time

Joanne Burgess (University of York)

Discussant: **Anni Huhtala** (Swedish National Institute of Economic Research)

Contributed Session 3: Friday 30 June, 17:30-19:30

Session A 3: VALUATION ISSUES II

Room: Δ3-7A

Chair: **Anil Markandya** (University of Bath)

The Information Content of Market Good Purchases for the Indirect Valuation of Environmental Goods

Alain Carpentier (INRA-ESR, Rennes, France)

Discussant: **Olof Johansson-Stenman** (Göteborg University)

Economic Valuation of the Environment: How Citizens Make Sense of Contingent Valuation Questions

Henrik Svedsäter (Göteborg University)

Discussant: **Alain Carpentier** (INRA-ESR, Rennes, France)

The Valuation of Capital Gains and Losses on Natural Resources in the Construction of Green National Accounts

Anil Markandya and **Pamela Mason** (University of Bath)

Discussant: **Henrik Svedsäter** (Göteborg University)

Environmental Regulation in the Presence of Interdependent and Context-Dependent Preferences and Social Norms

Olof Johansson-Stenman (Göteborg University)

Discussant: **Pamela Mason** (University of Bath)

Session B 3: WASTE MANAGEMENT AND RECYCLING

Room: Δ1-A

Chair: Anna Alberini (University of Maryland)

Recycling, Producer Responsibility and Centralized Waste Management

Thomas Eichner and Rüdiger Pethig (University of Siegen)

Discussant: **François Bonnieux** (INRA-ECONOMIE, Rennes, France)

First-Best and Second-Best Regulation of Solid Waste under Imperfect Competition in a Durable Good Industry

Marco Runkel (University of Siegen)

Discussant: **Anna Alberini** (University of Maryland)

Municipal Waste Strategy and Households' Behavior and Attitudes

François Bonnieux and Brigitte Desaignes (INRA-ECONOMIE, Rennes, France)

Discussant: **Thomas Eichner** (University of Siegen)

The Effects of Regulation and Substitution between Sources of Pollution: An Empirical Analysis of Florida's Storage Tanks

Anna Alberini (University of Maryland)

Discussant: **Marco Runkel** (University of Siegen)

Session C 3: INVESTMENT AND LOCATION DECISIONS II

Room: A2-2

Chair: Henk Folmer (Wageningen University)

Strategic Environmental Policy When the Governments Are Threatened by Relocation

Mads Greaker (University of Oslo)

Discussant: **Laura Marsiliani** (CentER, Tilburg University)

Environmental Policy and Capital Flight: Rules versus Discretion

Laura Marsiliani and Thomas I. Renström (CentER, Tilburg University)

Discussant: **Michael Finus** (University of Hagen)

Strategic Links between Environmental and Trade Policies if Plant Location Is Endogenous

Michael Finus and Bianca Rundshagen (University of Hagen)

Discussant: **Markus Haavio** (University of Helsinki)

Environmental Policy and Foreign Investment under Uncertainty

Markus Haavio (University of Helsinki)

Discussant: **Mads Greaker** (University of Oslo)

Session D 3: FORESTRY I

Room: Δ7

Chair: Markku Ollikainen (University of Helsinki)

An Integrated System for Management and Policy Analysis - An Application to Forestry and Reindeer Husbandry in Sweden

Peter J. Parks (Rutgers University), **Göran Bostedt** (Swedish University of Agricultural Sciences) and Bengt Kriström (Swedish University of Agricultural Sciences)

Discussant: **Mette Termansen** (University of York)

Forest Conservation in Humid Costa Rica: Uncertainty and the Tradeoff between Forestry and Agriculture

Erwin Bulte (Tilburg University and University of Wageningen), Daan P. van Soest (Tilburg University), G. Cornelis van Kooten (University of Wageningen and University of British Columbia) and Robert A. Schipper (University of Wageningen)

Discussant: **Göran Bostedt** (Swedish University of Agricultural Sciences)

The Optimality of Rotational Dynamics in Forestry

Mette Termansen (University of York)

Discussant: **Erkki Koskela** (University of Helsinki)

Forest Rotation under Spatial and Temporal Interdependence: A Re-Examination

Erkki Koskela and **Markku Ollikainen** (University of Helsinki)

Discussant: **Erwin Bulte** (Tilburg University and University of Wageningen)

Session E 3: ECONOMIC THEORY AND THE ENVIRONMENT I

Room: Δ2-Γ

Chair: Andreas Papandreou (University of Macedonia)

Further Evidence on Corner Constraints, Income Distribution and Voluntary Contributions to a Public Good

A.C. Burton (University of Leeds), **Susan M. Chilton** (University of York) and W. George Hutchinson (Queen's University, Belfast)

Discussant: **Andreas Papandreou** (University of Macedonia)

On Coalitional Games with Multilateral Environmental Externalities

Carsten Helm (University Magdeburg)

Discussant: **David Abler** (Pennsylvania State University)

Valuation of Climate Change Impacts in Computable General Equilibrium Models

Gbadebo Ayodeji Oladosu (Pennsylvania State University), James Shortle (Pennsylvania State University), **David Abler** (Pennsylvania State University) and Jeffrey K. Lazo (Stratus Consulting Inc.)

Discussant: **Susan M. Chilton** (University of York)

Externality, Convexity and Institutions

Andreas Papandreou (University of Macedonia)

Discussant: **Carsten Helm** (University Magdeburg)

Session F 3: ENVIRONMENT AND DEVELOPMENT I

Room: Δ6

Chair: Charles D. Kolstad (University of California, Santa Barbara)

Growth, Environment and Uncertain Future Preferences

Ayong Le Kama and **Katheline Schubert** (Université Paris I)

Discussant: **Charles Perrings** (University of York)

Does Status Driven Growth Increase Pollution?

Kjell Arne Brekke (Statistics Norway)

Discussant: **Katheline Schubert** (Université Paris I)

Modelling Sustainable Ecological Economic Development

Charles Perrings (University of York)

Discussant: **Charles D. Kolstad** (University of California, Santa Barbara)

Malthus and Climate Change: Betting on a Stable Population

David L. Kelly and **Charles D. Kolstad** (University of California, Santa Barbara)

Discussant: **Kjell Arne Brekke** (Statistics Norway)

Session G 3: EMPIRICAL MODELING OF THE ECONOMY AND THE ENVIRONMENT I

Room: A1-2

Chair: Alessandro Lanza (International Energy Agency)

Emissions Trading and Equity in International Agreements

Roberto Roson (Universita Ca Foscari di Venezia) and Francesco Bosello (Fondazione ENI Enrico Mattei) Discussant: **Christoph Böhringer** (Centre for European Economic Research, Germany)

Decomposing the Cost of Kyoto. A Global CGE Analysis of Multilateral Policy Impacts

Christoph Böhringer (Centre for European Economic Research, Germany) and Thomas F. Rutherford (University of Colorado, Boulder)

Discussant: **Alessandro Lanza** (International Energy Agency)

Economic Growth and Greenhouse Gas Emissions

Alberto Ansuategi (University of York and University of the Basque Country) and Marta Escapa (University of the Basque Country)

Discussant: **Roberto Roson** (Universita Ca Foscari di Venezia)

Richer and Cleaner? A Study on Carbon Dioxide Emissions in Developing Countries

Marzio Galeotti (University of Bergamo and Fondazione ENI Enrico Mattei) and **Alessandro Lanza** (International Energy Agency)

Discussant: **Alberto Ansuategi** (University of York and University of the Basque Country)

Session H 3: ENVIRONMENT AND AGRICULTURE

Room: A2-B

Chair: Klaus Conrad (University of Mannheim)

The Environmental Effectiveness of Alternative Agri-Environmental Policy Reforms:
Theoretical and Empirical Analysis

Jussi Lankoski (Agricultural Economics Research Institute, Finland) and Markku Ollikainen (University of Helsinki)

Discussant: **Pierre-Alain Jayet** (Centre INRA de Versailles-Grignon, France)

Efficiency in Agri-Environmental Policies: A Comparison between Policy Instruments

Guido Bazzani (CNR Bologna), Vittorio Gallerani (University of Bologna), **Davide Viaggi** (University of Bologna) and Giacomo Zanni (University of Foggia)

Discussant: **Jussi Lankoski** (Agricultural Economics Research Institute, Finland)

Optimal Management of Water Pollution Using a Land-Classification System, Land-Use Taxes and Land-Zoning

Renan-Ulrich Goetz (Universitat de Girona), **Maria Àngels Xabadia** (Universitat de Girona) and David Zilberman (University of California, Berkeley)
Discussant: **Davide Viaggi** (University of Bologna)

Emissions of Greenhouse Gases from French Agriculture: An Economic Approach
Stéphane De Cara (Université Paris X Nanterre and Centre INRA de Versailles-Grignon, France) and **Pierre-Alain Jayet** (Centre INRA de Versailles-Grignon, France)
Discussant: **Maria Àngels Xabadia** (Universitat de Girona)

Contributed Session 4: Saturday 1 July, 10:30-12:30

Session A 4: CONTINGENT VALUATION

Room: Δ3-7A

Chair: Ian J. Bateman (University of East Anglia and CSERGE)

Interaction Effects in Valuation of Non Market Goods
Kjartan Sælensminde (Institute of Transport Economics, Norway)
Discussant: **Stavros Georgiou** (University of East Anglia and CSERGE)

Non-Market Valuation and Discount Rates: Implications for Contingent Valuation in Developing Countries
Ana María Ibáñez and **Kenneth McConnell** (University of Maryland at College Park)
Discussant: **Kjartan Sælensminde** (Institute of Transport Economics, Norway)

A Sample Selection Model for Protest Votes in Contingent Valuation Analyses
Pinuccia Calia (University of Bologna) and **Elisabetta Strazzera** (DRES and CRENoS and University of Cagliari)
Discussant: **Kenneth McConnell** (University of Maryland at College Park)

Bound and Path Effects in Double and Triple Bounded Dichotomous Choice Contingent Valuation
Ian J. Bateman (University of East Anglia and CSERGE), Ian H. Langford (CSERGE, University of East Anglia and University College London), Geoffrey N. Kerr (Lincoln University, New Zealand), Stavros Georgiou (CSERGE and University of East Anglia) and Roy Brouwer (CSERGE and University of East Anglia)
Discussant: **Elisabetta Strazzera** (DRES and CRENoS and University of Cagliari)

Session B 4: POLICIES FOR CARBON EMISSIONS

Room: Δ1-A

Chair: Herman R.J. Vollebergh (Erasmus University)

Why Do We Still Have Diesel Cars in Europe?
Inge Mayeres and Stef Proost (Centre for Economic Studies, Catholic University of Leuven)
Discussant: **Dirk Rübhelke** (Chemnitz University of Technology, Germany)

C&C - Contraction and Convergence of Carbon Emissions: The Economic Implications of International Emissions Trading
Christoph Böhringer (Centre for European Economic Research, Germany) and H. Welsch (University of Oldenburg)
Discussant: **Herman R.J. Vollebergh** (Erasmus University)

Private Secondary Benefits of Greenhouse Gas Abatement and Renegotiations of International Environmental Treaties

Dirk Rübhelke (Chemnitz University of Technology, Germany)

Discussant: **Christoph Böhringer** (Centre for European Economic Research, Germany)

Green Taxes and Administrative Costs: The Case of Carbon Taxation

Sjak Smulders (Tilburg University and CentER) and **Herman R.J. Vollebergh** (Erasmus University)

Discussant: **Inge Mayeres** (Centre for Economic Studies, Catholic University of Leuven)

Session C 4: EMPIRICAL COUNTRY AND REGIONAL STUDIES

Room: Δ6

Chair: David Abler (Pennsylvania State University)

Dynamic Cost-effective Reduction Strategies for Acidification in Europe: An Empirical Application to Ireland and the United Kingdom

Erik Schmieman (Wageningen University), Wim de Vries (DLO Winand Staring Centre, The Netherlands), Leen Hordijk (Wageningen University), Carolien Kroeze, (Wageningen University), Maximilian Posch (National Institute of Public Health and the Environment, The Netherlands), Gert Jan Reinds (DLO Winand Staring Centre, The Netherlands) and Ekko van Ierland (Wageningen University)

Discussant: **Randall Bluffstone** (University of Redlands)

How Much Will it Cost to Join the Club? The Costs of Approximating Lithuanian Environmental Laws with Those of the European Union

Randall Bluffstone (University of Redlands) and Daiva Semeniene (Center for Environmental Policy, Lithuania) and Jochem Jantzen (TME, b.v., The Netherlands)

Discussant: **Matthieu Glachant** (CERNA, Ecole des Mines de Paris)

The Political Economy of Water Effluent Charges in France: Why Are Rates Kept Low?

Matthieu Glachant (CERNA, Ecole des Mines de Paris)

Discussant: **Ekko van Ierland** (Wageningen University)

Climate Change, Agriculture, and Water Quality in the U.S. Chesapeake Bay Region

David Abler, James Shortle and Jeffrey Carmichael (Pennsylvania State University)

Discussant: **Erik Schmieman** (Wageningen University)

Session D 4: FORESTRY II

Room: Δ2-B

Chair: Edward B. Barbier (University of York)

Optimal Management of Two Interlinked Renewable Resources: Moose and Pine in Norway

Richard Ready (Pennsylvania State University), Olvar Bergland (Agricultural University of Norway) and Eirik Romstad (Agricultural University of Norway)

Discussant: **Michael J. Goldbach** (Resources for the Future, Washington)

Optimal Management of a Forest Exploited for the Stochastic Value of Its Wood and Its Ability to Reduce Greenhouse Gases

Ruolz Ariste (Centre for Interuniversity Research and Analysis on Organisations (CIRANO)) and **Pierre Lasserre** (University of Quebec at Montreal and CIRANO)

Discussant: **Edward B. Barbier** (University of York)

Policy Implications of Forest Recovery Dynamics in Shifting Cultivation
Heidi J. Albers and **Michael J. Goldbach** (Resources for the Future, Washington)
Discussant: **Pierre Lasserre** (University of Quebec at Montreal and CIRANO)

Institutional Constraints and Deforestation: An Empirical Application
Edward B. Barbier (University of York)
Discussant: **Richard Ready** (Pennsylvania State University)

Session E 4: ECONOMIC THEORY AND THE ENVIRONMENT II
Room: A1-2

Chair: Richard Damania (University of Adelaide)

Irreversibility Effect with a Continuum of Development Levels
Anthony Fisher (University of California, Berkeley), Michael Hanemann (University of California, Berkeley) and **Urvashi Narain** (Resources for the Future, Washington)
Discussant: **Richard Damania** (University of Adelaide)

The Concept of Joint Production. How to Model Thermodynamic Irreversibility in Economics
Stefan Baumgärtner (University of Heidelberg)
Discussant: **Urvashi Narain** (Resources for the Future, Washington)

Secondary Materials, Exhaustible Resource and Growth Rates
Giuseppe di Vita (University of Catania)
Discussant: **Stefan Baumgärtner** (University of Heidelberg)

When the Weak Win: The Role of Investment in Environmental Lobbying
Richard Damania (University of Adelaide)
Discussant: **Giuseppe di Vita** (University of Catania)

Session F 4: ENVIRONMENT AND TECHNOLOGY
Room: A2-2

Chair: Yannis Katsoulacos (Athens University of Economics and Business)

Energy Saving by Firms: Decision-Making, Barriers and Policies
Henri L.F. de Groot, Erik T. Verhoef and Peter Nijkamp (Vrije Universiteit)
Discussant: **Yannis Katsoulacos** (Athens University of Economics and Business)

Environmental Externalities and the Development of Renewable Energy Sources
Danae Diakoulaki, S. Mirasgedis and M. Tziantzi (National Technical University of Athens)
Discussant: **Henri L.F. de Groot** (Vrije Universiteit)

An Econometric Model of Production with Endogenous Improvement in Energy Efficiency, 1970-1995
Klaus Conrad (University of Mannheim)
Discussant: **Danae Diakoulaki** (National Technical University of Athens)

The Effects of Environmental Policy on the Performance of Environmental RJVs
Yannis Katsoulacos (Athens University of Economics and Business), Alistair Ulph (University of Southampton) and David Ulph (University College London)
Discussant: **Klaus Conrad** (University of Mannheim)

Session G 4: EMPIRICAL MODELING OF THE ECONOMY AND THE ENVIRONMENT II

Room: Δ7

Chair: R. Kerry Turner (University of East Anglia, CSERGE)

Influence of Economic Constraints on the Shape of Emission Corridors

Marian Leimbach and Thomas Bruckner (Potsdam Institute for Climate Impact Research)

Discussant: **Reyer Gerlagh** (Vrije Universiteit)

Dynamic Simulation and Environmental Policy Analysis: Beyond Comparative Statics and the Environmental Kuznets Curve

Dennis Anderson and **William Cavendish** (T. H. Huxley School, Imperial College)

Discussant: **Marian Leimbach** (Potsdam Institute for Climate Impact Research)

A Climate Change Model with Overlapping Generations: The Discounting of Sustainability and the Unsustainability of Discounting

Reyer Gerlagh and B.C.C. van der Zwaan (Vrije Universiteit)

Discussant: **Andrea Bigano** (Catholic University of Leuven)

Environmental Regulation for the Liberalised European Electricity Sector towards a Numerical Approach

Andrea Bigano (Catholic University of Leuven)

Discussant: **William Cavendish** (T. H. Huxley School, Imperial College)

Session H 4: ENVIRONMENT REGULATION ISSUES

Room: Δ2-Γ

Chair: Robert H. Patrick (Rutgers University)

On the Accuracy of Regulatory Cost Estimates

Winston Harrington, Richard D. Morgenstern and Peter Nelson (Resources For the Future, Washington)

Discussant: **Mari Rege** (Statistics Norway)

Revolving Doors and Regulatory Complexity

Anthony Heyes (Royal Holloway College, London University)

Discussant: **Robert H. Patrick** (Rutgers University)

Evolution of Peer Groups that Enforce Environmental Norms: Green Taxation Can Crowd in Environmentally Friendly Behavior

Mari Rege (Statistics Norway)

Discussant: **Anthony Heyes** (Royal Holloway College, London University)

Incentives for Public Utility Conservation and Pollution Control with Unknown Costs

Robert H. Patrick (Rutgers University)

Discussant: **Winston Harrington** (Resources For the Future, Washington)

Contributed Session 5: Saturday 1 July, 14:00-16:00

Session A 5: URBAN AND REGIONAL ENVIRONMENTAL ISSUES

Room: Δ1-A

Chair: Tomasz Zylicz (Warsaw Ecological Economics Center, Warsaw University)

How Much Are People Willing to Pay for Silence? A One and One-Half-Bound DC CV Estimate

Jesús Barreiro, Mercedes Sánchez and Montserrat Viladrich-Grau (Universidad Pública de Navarra)

Discussant: **Tomasz Zylicz** (Warsaw Ecological Economics Center, Warsaw University)

Uncertainty, Benefit Transfers, and Physical Models: A Middle Rio Grande Valley Focus
David S. Brookshire, **Janie M. Chermak** and Richard De Simone (University of New Mexico)

Discussant: **Jesús Barreiro** (Universidad Pública de Navarra)

Cleaning-Up the Coffee Processing Industry in Costa Rica: Strategic Behaviour and Pay-Offs for "Beneficios"

Albert Schram (Universidad de Costa Rica)

Discussant: **Janie M. Chermak** (University of New Mexico)

Housing Market in Warsaw. Is It Green?

Marta Borkowska (Atmoterm Ltd, Warsaw), Magdalena Rozwadowska (Warsaw University Interdepartmental Environment Protection Study), Jerzy Sleszynski (Warsaw Ecological Economics Center, Warsaw University) and **Tomasz Zylicz** (Warsaw Ecological Economics Center, Warsaw University)

Discussant: **Albert Schram** (Universidad de Costa Rica)

Session B 5: REGULATION AND INSTRUMENT CHOICE

Room: Δ2-F

Chair: Eirik Romstad (Agricultural University of Norway)

Audit Confidentiality and Immunity Laws: The Problem of Diligent Effort

Eva Hentschel (Munich Institute of Technology) and **Alan Randall** (Ohio State University)

Discussant: **Juan-Pablo Montero** (Catholic University of Chile and MIT)

Honesty in Environmental Compliance Games

Philippe Bontems (INRA, Toulouse) and Gilles Rotillon (Université Paris X Nanterre)

Discussant: **Alan Randall** (Ohio State University)

Prices vs. Quantities with Incomplete Enforcement

Juan-Pablo Montero (Catholic University of Chile and MIT)

Discussant: **Gilles Rotillon** (Université Paris X Nanterre)

Environmental Performance: An Extension of Weitzman's Prices vs. Quantities

Eirik Romstad (Agricultural University of Norway)

Discussant: **Philippe Bontems** (INRA, Toulouse)

Session C 5: INTERNATIONAL ENVIRONMENTAL POLICY I

Room: Δ7

Chair: Peter Bohm (Stockholm University)

Banking and Trade of Carbon Emission Rights: A CGE Analysis
Gunter Stephan and **Georg Müller-Fürstenberger** (Institute of Applied Micro-Economics,
University of Bern)
Discussant: **Björn Carlén** (Stockholm University)

A Dynamic Analysis of the Marketable Permits Approach to Global Warming Policy: A
Decomposition of Sources of Advantage
Brandt Stevens (California Energy Commission, Sacramento) and **Adam Rose** (Pennsylvania
State University)
Discussant: **Georg Müller-Fürstenberger** (Institute of Applied Micro-Economics,
University of Bern)

Do Climate Securities Reduce Free Riding with Regard to International Climate Policy?
Susanne Klimpel (University of Heidelberg)
Discussant: **Adam Rose** (Pennsylvania State University)

Cost-Effective Approaches to Attracting Low-Income Countries to International Emissions
Trading: Theory and Experiments
Peter Bohm and Björn Carlén (Stockholm University)
Discussant: Susanne Klimpel (University of Heidelberg)

Session D 5: WATER MANAGEMENT II Room: A2-B

Chair: Yacov Tsur (The Hebrew University of Jerusalem)

An Evaluation of Inter-Temporal Management of Water Reservoirs
Alberto Garrido, Eva Iglesias and Almudena Gómez-Ramos (Universidad Politécnica de
Madrid)
Discussant: **Yacov Tsur** (The Hebrew University of Jerusalem)

Long Run Study of Residential Water Consumption
Celine Nauges and Alban Thomas (LEERNA-INRA, Toulouse)
Discussant: **Alberto Garrido** (Universidad Politécnica de Madrid)

Dynamic Sectoral Adaptation to Resource Depletion with Backstop Technology: Theory and
Application to Groundwater Allocation
Phoebe Koundouri (University of Cambridge and University of Cyprus)
Discussant: **Celine Nauges** (LEERNA-INRA, Toulouse)

Sustainable Water Management and R&D Policies for Desalination Technologies
Yacov Tsur (The Hebrew University of Jerusalem) and Amos Zemel (The Jacob Blaustein
Institute for Desert Research, Ben Gurion University of the Negev)
Discussant: **Phoebe Koundouri** (University of Cambridge and University of Cyprus)

Session E 5: UNCERTAINTY AND ASYMMETRIC INFORMATION Room: A2-2

Chair: Franz Wirl (Otto-von-Guericke University of Magdeburg)

Investing in Pollution Control in Transition Economies When Future Environmental Policies Are Uncertain

Bruce A. Larson (University of Connecticut)

Discussant: **Franz Wirl** (Otto-von-Guericke University of Magdeburg)

Do More Risk Averse Agents Decrease Factor Use?

Jutta Roosen (Université Catholique de Louvain) and David A. Hennessy (Iowa State University)

Discussant: **Bruce A. Larson** (University of Connecticut)

Decisions on Greenhouse Gas Emissions under Uncertainty - The Concept of Choquet-Expected Utility Maximization

Andreas Lange (University of Heidelberg)

Discussant: **Jutta Roosen** (Université Catholique de Louvain)

Strict Liability (Polluter Pays Principle) versus Injunctions under Asymmetric Information

Franz Wirl (Otto-von-Guericke University of Magdeburg) and Claus Huber (Institute of Energy Economics, Vienna University of Technology)

Discussant: **Andreas Lange** (University of Heidelberg)

Session F 5: ENVIRONMENT AND DEVELOPMENT II

Room: Δ6

Chair: Larry Karp (University of California, Berkeley)

Some Further Economics of Easter Island: Introducing Subsistence and Resource Conservation

John C.V. Pezzey (Australian National University) and John M. Anderies (Commonwealth Scientific and Industrial Research Organisation, Australia)

Discussant: **Sara Aniyar** (Universidad del Zulia, Maracaibo and The Beijer International Institute of Ecological Economics)

Cooperation or Conflict in Common Pools

Ingela Ternström (Stockholm School of Economics)

Discussant: **Larry Karp** (University of California, Berkeley)

The Venezuelan Economy Is Sustainable, Is It True?

Sara Aniyar (Universidad del Zulia, Maracaibo and The Beijer International Institute of Ecological Economics)

Discussant: **Ingela Ternström** (Stockholm School of Economics)

How Many Cake Eaters? Chouette, on a du Monde à Dîner!

Pascal Favard (LEERNA and Université de Toulouse) and **Larry Karp** (University of California, Berkeley)

Discussant: **John C.V. Pezzey** (Australian National University)

Session G 5: ECO-LABELING, QUALITY AND ENVIRONMENTAL TAXATION

Room: A1-2

Chair: Till Requate (University of Heidelberg)

Product Ecolabeling: Looking Further into Policy Considerations

Alain Nadaï and Benoit Morel (Carnegie Mellon University)

Discussant: **Till Requate** (University of Heidelberg)

Taxation, Environmental Quality Choice and Welfare in a Vertically Differentiated Duopoly

Chiara Lombardini-Riipinen (University of Helsinki)

Discussant: **Alain Nadaï** (Carnegie Mellon University)

Emission Taxes and the Design of Refunding Schemes

Hans Gersbach and **Till Requate** (University of Heidelberg)

Discussant: **Chiara Lombardini-Riipinen** (University of Helsinki)

Session H 5: VALUATION AND HEALTH

Room: Δ3-7A

Chair: Luis A. Cifuentes (Pontifical Catholic University of Chile)

Value of Preventing a Fatality or Value of Increasing Life Duration

Olivier Chanel, **Serge Masson**, Pascale Scapecchi and Jean-Christophe Vergnaud (Université Louis Pasteur)

Discussant: **Luis A. Cifuentes** (Pontifical Catholic University of Chile)

Testing the Transferability of the Social Benefits of UV Health Risks Reduction

Roy Brouwer (Institute for Integrated Inland Water Management and Waste Water Treatment (RIZA), Ministry of Transport, The Netherlands) and Ian Bateman (University of East Anglia and CSERGE)

Discussant: **Thijs Zuidema** (University of Groningen)

Health Damage of Air Pollution and Benefits and Costs of Ammonia Control in The Netherlands

Thijs Zuidema and Andries Nentjes (University of Groningen)

Discussant: **Roy Brouwer** (Institute for Integrated Inland Water Management and Waste Water Treatment (RIZA), Ministry of Transport, The Netherlands)

Valuing Mortality Risk Reductions at Present and at an Advanced Age: Preliminary Results from a Contingent Valuation Study in Chile

Luis A. Cifuentes, Jose Joaquin Prieto and Jorge Escobari (Pontifical Catholic University of Chile)

Discussant: **Serge Masson** (Université Louis Pasteur)

Contributed Session 6: Sunday 2 July, 09:30-11:30

Session A 6: VALUATION ISSUES III

Room: Δ3-7A

Chair: Kevin J. Boyle (University of Maine)

Incommensurable Preferences in Contingent Valuation: Commitments to Nature and Property Rights

Mika Rekola (University of Helsinki), Eija Pouta (University of Helsinki), J. Kuuluvainen (University of Helsinki), Olli Tahvonon (Finnish Forest Research Institute) and Chuan-Zhong Li (University of Dalarna)

Discussant: **Seung-Jun Kwak** (Korea University)

The Measurement of the Conservation Value for Korean Coastal Wetlands Using the Contingent Valuation Method and Cost-Benefit Analysis
Hee-Dong Pyo (Korea Maritime Institute), Seung-Hoon Yoo (Korea University) and Seung-Jun Kwak (Korea University)
Discussant: **Camille Bann** (CSERGE and University College London)

A Contingent Valuation of the Mangroves of Benut, Johor State, Malaysia
Camille Bann (CSERGE and University College London)
Discussant: **Mika Rekola** (University of Helsinki)

A Meta Analysis of Contingent Values for Groundwater Quality in the United States
Gregory L. Poe (Cornell University), **Kevin J. Boyle** (University of Maine) and John C. Bergstrom (University of Georgia)
Discussant: **Eija Pouta** (University of Helsinki)

Session B 6: IMPACT OF ENVIRONMENTAL POLICIES

Room: A1-2

Chair: Charles Howe (University of Colorado, Boulder)

The Impact of Policy Instruments on the Adoption of Energy-Saving Technologies under Uncertainty
Daan P. van Soest and Erwin H. Bulte (Tilburg University and CentER)
Discussant: **Richard G. Newell** (Resources for the Future, Washington)

On the Environmental Impact of Energy Market Liberalisation
Daan P. van Soest (Tilburg University and CentER), **Henri L.F. de Groot** (Vrije Universiteit) and Maroeshka Boots (ECN, Petten, The Netherlands)
Discussant: **Cathrine Hagem** (Center for International Environmental and Climate Research, Norway)

National Climate Policy, Firm Survival and Investments
Cathrine Hagem (Center for International Environmental and Climate Research, Norway) and Hege Westskog (University of Oslo)
Discussant: **Daan P. van Soest** (Tilburg University and CentER)

Abatement-Cost Heterogeneity and Anticipated Savings from Market-Based Environmental Policies
Richard G. Newell (Resources for the Future, Washington) and Robert N. Stavins (Harvard University)
Discussant: **Henri L.F. de Groot** (Vrije Universiteit)

Session C 6: INTERNATIONAL ENVIRONMENTAL POLICY II

Room: A6

Chair: Michael Hoel (University of Oslo)

International Environmental Problems and Policy: Modelling Imperfect Reversibility with Modified Mirror Games
Jardena Kroeze-Gil (Tilburg University)
Discussant: **Perry Shapiro** (University of California, Santa Barbara)

Clean Development Mechanism from a Flexibility Mechanism to a Leverage on Development

Sandrine Mathy, Jean-Charles Hourcade and Christophe de Gouvello (Centre International de Recherche en Environnement et développement (CIRED))
Discussant: **Jardena Kroeze-Gil** (Tilburg University)

Estimating the Size of the Potential Market for the Kyoto Flexibility Mechanisms
ZhongXiang Zhang (University of Groningen)
Discussant: **Sandrine Mathy** (Centre International de Recherche en Environnement et développement (CIRED))

Transboundary Environmental Problems with a Mobile Population: Is There a Need for Central Policy?
Michael Hoel (University of Oslo) and Perry Shapiro (University of California, Santa Barbara)
Discussant: **ZhongXiang Zhang** (University of Groningen)

Session D 6: RESOURCE MANAGEMENT AND COMPLEX ECOSYSTEMS Room: Δ1-A

Chair: Virginia McConnell (University of Maryland and Resources for the Future)

The Economics of Shallow Lakes
Karl-Goran Mäler (The Beijer International Institute of Ecological Economics), Anastasios Xepapadeas (University of Crete) and **Aart de Zeeuw** (Tilburg University and CentER)
Discussant: **Silvana Dalmazzone** (University of York)

A New Model of Harvesting in a Complex Ecosystem
David Finnoff and John Tschirhart (University of Wyoming)
Discussant: **Eric Naevdal** (Agricultural University of Norway)

Optimal Regulation of Eutrophying Lakes, Fjords and Rivers in the Presence of Threshold Effects
Eric Naevdal (Agricultural University of Norway)
Discussant: **Aart de Zeeuw** (Tilburg University and CentER)

Economic Factors Affecting Vulnerability to Biological Invasions
Silvana Dalmazzone (University of York)
Discussant: **David Finnoff** (University of Wyoming)

Session E 6: SUSTAINABILITY Room: Δ7

Chair: Y. Hossein Farzin (University of California, Davis)

Sustainable Growth and Environmental Policies
Santiago J. Rubio and Juana Aznar (University of Valencia)
Discussant: **Y. Hossein Farzin** (University of California, Davis)

Experimentation in a Dynamic Setting with an Application to Pollution Accumulation
Maria A. Cunha-e-Sa and Vasco Santos (Universidade Nova de Lisboa)
Discussant: **Sofia Ahlroth** (National Institute of Economic Research, Sweden)

Correcting NDP for SO₂ and NO_x Emissions: Implementation of a Theoretical Model in Practice

Sofia Ahlroth (National Institute of Economic Research, Sweden)
Discussant: **Santiago J. Rubio** (University of Valencia)

Sustainability, Hamiltonian Value, and NNP in a Cake-Eating Economy
Y. Hossein Farzin (University of California, Davis)
Discussant: **Maria A. Cunha-e-Sa** (Universidade Nova de Lisboa)

Session F 6: ENVIRONMENT AND DEVELOPMENT III
Room: A2-F

Chair: John W. Maxwell (Indiana University)

International Trade and Environmental Regulation – Where Does Dirty Pollution Shift to?
Karl W. Steininger (University of Graz)
Discussant: **John W. Maxwell** (Indiana University)

Price-Based vs. Quantity-Based Policies and Economic Growth: An Application to Pollution
Taxes vs. Pollution Targets
George Economides and Apostolis Philippopoulos (Athens University of Economics and
Business)
Discussant: **Unai Pascual** (University of York)

A Model of Optimal Labour and Soil Use with Shifting Cultivation
Unai Pascual and Edward B. Barbier (University of York)
Discussant: **Karl W. Steininger** (University of Graz)

The Dynamics of Continuing Conflict
Rafael Reuveny and **John W. Maxwell** (Indiana University)
Discussant: **George Economides** (Athens University of Economics and Business)

**Session G 6: EMPIRICAL MODELING OF THE ECONOMY AND THE
ENVIRONMENT III**
Room: A2-2

Chair: Giannis Karagiannis (University of Crete)

“S.A.F.E”: Sustainability Assessment by Fuzzy Evaluation
Luc A. Andriantiatsaholiniaina and Yannis A. Phillis (Technical University of Crete)
Discussant: **Tommy Lundgren** (Swedish University of Agricultural Sciences)

The Divergence between the Hicksian Welfare Measures: The Case of Revealed Preference
for Public Amenities
Sudip Chattopadhyay (San Francisco State University)
Discussant: **Luc A. Andriantiatsaholiniaina** (Technical University of Crete)

Abatement Investments and Green Goodwill - An Empirical Application to the Swedish Pulp
Industry
Bengt Kriström and **Tommy Lundgren** (Swedish University of Agricultural Sciences)
Discussant: **Giannis Karagiannis** and Anastasios Xepapadeas (University of Crete)

Sources of Productivity Growth and Environmental Pollution: A Parametric Approach
Giannis Karagiannis and Anastasios Xepapadeas (University of Crete)
Discussant: **Sudip Chattopadhyay** (San Francisco State University)

Session H 6: NATURAL RESOURCE STUDIES II

Room: A2-B

Chair: **Olli Tahvonen** (Finnish Forest Research Institute)

Privatization and Regulation of Capacity in a Multi-Product Fishery: A Purse from a Sow's Ear?

R. Quentin Grafton (University of Ottawa)

Discussant: **Olli Tahvonen** (Finnish Forest Research Institute)

The Hartwick Rule: Myths and Facts

Geir B. Asheim (University of Oslo) and **Wolfgang Buchholz** (University of Regensburg)

Discussant: **John Tisdell** (Griffith University, Australia)

Game Theoretic Strategies for Acquiring Water for Environmental Use

John Tisdell (Griffith University, Australia)

Discussant: **R. Quentin Grafton** (University of Ottawa)

On Faustmann Rotation and Normal Forest Convergence

Olli Tahvonen (Finnish Forest Research Institute) and Seppo Salo (Helsinki School of Economics)

Discussant: **Wolfgang Buchholz** (University of Regensburg)