

Designing the Green Economy: Economic Principles and Guidance for Policy Makers

Workshop organised by

The Centre for International Environmental Studies at the Graduate Institute
of International and Development Studies, Geneva
and the United Nations Environment Programme UNEP

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Short biographies of speakers



Philippe AGHION

Philippe Aghion is Professor of Economics at Harvard University, having previously been Professor at University College London, an Official Fellow at Oxford's Nuffield College, and an Assistant Professor at MIT. His main research work is on growth and contract theory. With Peter Howitt, he developed the so-called Schumpeterian Paradigm, and extended the paradigm in several directions; much of the resulting work is summarised in his joint book with Howitt entitled "Endogenous Growth Theory". He is a graduate of the Ecole Normale Supérieure (Mathematics Section), has a DEA in Mathematical Economics from Université de Paris I, and a PhD from Harvard University (1987).



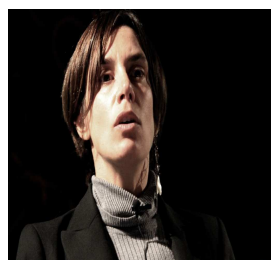
Richard BALDWIN

Richard Edward Baldwin is Professor of International Economics at the Graduate Institute, Geneva since 1991, Policy Director of CEPR since 2006, Editor-in-Chief of Vox since he founded it in June 2007, and an elected Member of the Council of the European Economic Association. He was a Senior Staff Economist for the President's Council of Economic Advisors in the Bush Administration (1990-1991) following Uruguay Round, NAFTA and EAI negotiations as well as numerous US-Japan trade issues including the SII talks and the Semiconductor Agreement renewal. He was Co-managing Editor of the journal Economic Policy from 2000 to 2005, and Programme Director of CEPR's International Trade programme from 1991 to 2001. The author of numerous books and articles, his research interests include international trade, globalisation, regionalism, and European integration; he has worked as consultant for the numerous governments, the European Commission, OECD, World Bank, EFTA, and USAID. He wrote his PhD at MIT under the guidance of Paul Krugman, with whom he has co-authored a half dozen articles the most recent of which was published in 2004. His M.Sc. is from LSE, his B.A. from the University of Wisconsin-Madison; he was awarded an honorary doctorate by Turku School of Economics and Business in 2005.



Edward B. BARBIER

Edward is the John S Bugas Professor of Economics, Department of Economics and Finance, University of Wyoming. He has over 25 years experience as an environmental and resource economist, working on natural resource and development issues as well as the interface between economics and ecology. He has served as a consultant and policy analyst for a variety of national, international and non-governmental agencies, including many UN organizations and the World Bank. Professor Barbier is on the editorial boards of several leading economics and natural science journals, and he appears in the 4th edition of Who's Who in Economics. He has authored over 150 peer-reviewed journal articles and book chapters, written or edited twenty-one books, and published in popular journals. Some of his well-known works include *Blueprint for a Green Economy* (with David Pearce and Anil Markandya, 1989), *Natural Resources and Economic Development* (2005), *A Global Green New Deal* (2010), *Scarcity and Frontiers: How Economies Have Developed Through Natural Resource Exploitation* (2011) and *Capitalizing on Nature: Ecosystems as Natural Assets* (2011).





Valentina BOSETTI

Valentina holds a PhD in Operation Research (Università Statale, Milan) and a MSc in Environmental and Resources Economics (UCL). She led the modelling team that developed the hybrid integrated assessment model [WITCH](#). Her expertise includes mathematics and Operations Research, stochastic programming and environmental modelling, economics of climate change. At FEEM since 2003, she works as a modeler for the Sustainable Development Programme and as Climate Change topic leader, coordinating a research group on numerical analysis of carbon mitigation options and policies. She has published several papers in the field of economics of climate change policy, including some linking forest management to the climate change policies. Valentina is currently the holder of a ERC grant on innovation in energy technologies.



Carlo CARRARO

Professor Carlo Carraro is President of the Università Ca' Foscari Venezia and of the School for Advanced Studies in Venice. He holds a Ph.D. from Princeton University and is currently member of the Bureau of the Nobel Laureate Intergovernmental Panel for Climate Change (IPCC) and Vice-Chair of IPCC Working Group III. He is Chairman of the Scientific Advisory Board of the Fondazione ENI Enrico Mattei (FEEM), and Research Fellow of the Center for European Policy Studies (CEPS), Brussels, and of the Center for Economic Policy Research (CEPR), London. He is also member of the Scientific Advisory Board of the UN International Human Dimensions Programme (IHDP), of the Ifo Institute for Economic Research, Munich, of the Harvard Environmental Economics Program (HEEP) of the Kennedy School at Harvard University, of the Centre for Applied Macroeconomic Analysis (CAMA), Australian National University, and of the Research Network on Sustainable Development (R2D2), Paris.

	<p>He belongs to the Mitigation Board of the Climate Solutions Network at Columbia University's Earth Institute.</p> <p>Professor Carraro is Director of the Climate Impacts and Policy Division of the EuroMediterranean Center on Climate Change (CMCC) and of the International Center for Climate Governance (ICCG). He has been recently elected resident member of the Academy of Science, Letters and Arts (IVSLA) in Venice. He collaborates with the OECD, the Economic and Social Research Institute in Tokyo, the World Bank, and the European Investment Bank. He is also member of the Board of Directors of the Ca' Foscari - Harvard Summer School.</p> <p>He is co-editor of the Review of Environmental Economics and Policy and belongs to the editorial board of numerous academic journals. He has been publishing 30 books and about 200 articles on several economic, energy and environmental issues.</p>
	<p>Antoine DECHEZLEPRÊTRE</p> <p>Antoine Dechezleprêtre is a research fellow at the Grantham Research Institute on Climate Change and the Environment, London School of Economics.</p> <p>Antoine's work deals with the impact of climate and environmental policies on innovation in green technologies. In his current projects, he asks whether the European carbon market has induced more low-carbon innovation and analyses the effect of fuel taxes on innovation in electric and hybrid vehicles. He also analyses how public policies – including environmental policies and intellectual property regimes – can encourage international diffusion of new low-carbon technologies.</p> <p>Antoine has presented his works at many international conferences, including the United Nations COP conferences in Bonn and Poznan. He holds a PhD from MINES ParisTech (Paris, France).</p>
	<p>Jaime de MELO</p> <p>Jaime de Melo is a Professor of International Economics at the University of Geneva. A founding member of the WTI, he has taught economics at the University of Geneva since 1993. Previously, he held various positions in the Research Department at the World Bank where he worked between 1980 and 1993. He taught at Georgetown University from 1976 to 1980 and worked at USAID, the bilateral aid agency of the US from 1973 to 1976. He has been editor in chief of the World Bank Economic Review since 2005. He is the author, editor, or co-editor of a dozen books and has published extensively in the area of international trade policy.</p> <p>Professor De Melo holds a PhD from Johns Hopkins University</p>



Derek Eaton

Derek Eaton works as a programme officer with the Economics & Trade Branch (ETB - based in Geneva) of UNEP's Division of Technology, Industry and Economics. An economist, Derek concentrates on research and analytics within the Green Economy Initiative, including metrics, and tracking green economy developments. He has been a member of the core team producing the Green Economy Report, released in November 2011, managing the cross-cutting global modelling chapter and co-authoring the renewable energy chapter. In 2012, Derek will be joining the Centre for International Environmental Studies (CIES) at the Graduate Institute for International and Development Studies in Geneva, as Director of Research.

Prior to joining UNEP in 2009, Derek worked for 10 years as a researcher with LEI, part of the Wageningen University & Research Centre in the Netherlands, focusing on international policy issues relating to agriculture, environment and trade, within the context of EC DG Research-funded projects and also at the request of international organizations. Previously, Derek has worked as an economist for the Canadian International Development Agency (CIDA), and also at the International Institute for Environment and Development (IIED). Derek has worked extensively in a number of Sub-Saharan African countries, including living in both Kenya and Tanzania, and collaborating with and leading teams in East and Southeast Asia.

Derek is expecting to complete his PhD with Wageningen University in 2012, based on a series of papers on the economics of innovation and intellectual property rights over genetic resources. He holds an MSc degree in Environmental Economics (University College London), a diploma in International Development Co-operation (University of Ottawa), and a BSc in Economics, Quantitative Methods (University of Toronto).



Carsten FINK

Carsten Fink is the Chief Economist of the Economics and Statistics Division of the World Intellectual Property Organisation (WIPO) based in Geneva. Before joining WIPO, he was Professor of International Economics at the University of St. Gallen. He also held the positions of Visiting Professor at the Fondation Nationale des Sciences Politiques (Sciences Po) in Paris and Visiting Senior Fellow at the Group d'Economie Mondiale, a research institute at Sciences Po. Prior to his academic appointments, Mr. Fink worked for more than 10 years at the World Bank. Among other positions, he was a Senior Economist in the International Trade Team of the World Bank Institute, working out of the World Bank's office in Geneva and an Economist in the Trade Division of the World Bank's research department, based in Washington, DC. Mr. Fink's research work has been published in academic journals and books. He holds a doctorate degree in economics from the University of Heidelberg in Germany and a Master of Science degree in economics from the University of Oregon in the United States.



Dominique FORAY

Prof. Dominique Foray is the Director of the "Chaire en Economie et Management de l'Innovation". He is currently vice-chairman of the expert group "Knowledge for Growth", a group of prominent economists created to advise Commissioner J. Potocnik (European Commission, DG research). He is also a member of the National Research Council (Switzerland), the Advisory Board of the Swiss Economic Institute (KOF) and the World Economic Forum's Global Agenda Council. He serves as the 2009-President of the EPIP (European Policy for Intellectual Property - www.epip.eu) association. Between 2004 and 2008 Prof. Foray was the Dean of the "Collège du Management de la Technologie". Before joining EPFL, he was a Research Director at the Centre National de la Recherche Scientifique (CNRS) and a Professor at the Institut pour le Management de la Recherche et de l'Innovation (IMRI) of the University of Paris-Dauphine (from 1993 to 2000); he was then a Principal Analyst at the Organization of Economic Cooperation and Development (OECD) from 2000 to 2004. Prof. Foray received his PhD in 1984 and his "habilitation" in 1992 from the University Lumière of Lyon. He received the distinction of outstanding research in 1995 (médaille du CNRS). Prof. Foray research interests include all topics and issues related to the economics and management of technology, knowledge and innovation at both the micro and macro levels. This broad field covers the economics of science and technology with a particular focus on high tech sectors, the management of large-scale technological projects, international comparisons of institutions, and systems of innovation within the context of the new economy. Intellectual property and competition policies, information technology and the new economy, capital market and entrepreneurship, national systems of innovation are fields of high relevance for his research.



Zhouying JIN

Professor, Institute of Quantitative-Economics and Technical-Economics of the Chinese Academy of Social Sciences; Director, Centre for Technology Innovation and Strategy Studies (CTISS), of the Chinese Academy of Social Sciences. She was graduated from Chinese University of Science and Technology in 1965; a researcher, Institute of Mechanics, Chinese Academy of Sciences (1960s); Deputy Chief Engineer of Changchun Electric Industrial Administration (1970s); studied Management and Consultant in Japan Productivity Center and awarded the title of Management Consultant by JPC (1980 and 1984) ; Vice secretary-general, China enterprise Directors (Managers) Association of State Economic Committee of China (1980s). From 1988 (to present), she serves for the Chinese Academy of Social Sciences. In 1996-2000, she has been appointed by Ministry of Science & Technology of China as a key member of Nation's S863 Plan and appointed as the Experts Team Leader of Strategy for the S863 Plan (China High-Tech Research & Development Plan for 2001-2010) of China. Since the past sixteen years, she has been bending herself to research on "soft technology" and founded the Beijing Academy of Soft Technology. She is Chairman and founder of The Future 500 (China), which is aiming to improve sustainability and harmonizing profits with social and environmental benefits in enterprises dimensions.



Joy KIM

Dr. Joy A. Kim has been working in the area of economic and environmental policies specially on the issue of climate change, trade and environment, environmental goods and services as well as environmental governance almost 15 years. Before joining UNEP, she worked as an economist/senior policy analyst at the Environment as well as the Trade/Agriculture Directorates of the Organisation for Economic Cooperation and Development (OECD) in Paris; a research associate at the United Nations University Institute of Advanced Studies (UNU-IAS) in Tokyo; Visiting Professor at the Aoyamagakuin University in Tokyo; PhD researcher at the Tyndall Centre for Climate Change Research in the UK; and Assistant researcher at the Korea Institute for International Economic Policy in Seoul. She was also a leadership fellow at Harvard Kennedy School of Government and contributing author of the 4th Global Environmental Outlook of UNEP. She holds a doctoral degree from the University of East Anglia in the UK. Her major publications include 'Matching support with nationally appropriate mitigation actions' (lead-author, OECD/IEA), 'Trade and climate policies in the post-2012 world' (co-author, UNEP), 'Facilitating trade in selected climate change mitigation technologies in the energy supply, building and industry sectors' (co-author, OECD), 'Institutional interplay: biosafety and trade' (co-editor, UNU Press) and 'Envisioning a sustainable development agenda for trade and environment' (co-author)'.



Patrick LOW

Dr Patrick Low is Chief Economist at the World Trade Organization and an Adjunct Professor of International Economics at the Graduate Institute, Geneva. He worked for GATT from 1980–1988 and joined the WTO in 1995, taking up his present position in 1997. For a short interlude from 1999–2001, he served as WTO Director-General Mike Moore's Chief of Staff. He taught from 1988–1990 at El Colegio de México, and served in the research complex of the World Bank from 1990–2004. He holds a PhD in economics from Sussex University and has written widely on trade policy issues.



Keith E. MASKUS

Keith E. Maskus is Professor of Economics and Associate Dean for Social Sciences at the University of Colorado, Boulder, USA. He has been a Lead Economist in the Development Research Group at the World Bank. He is also a Research Fellow at the Peterson Institute for International Economics, a Fellow at the Kiel Institute for World Economics, and an Adjunct Professor at the University of Adelaide. He has been a visiting professor at the University of Adelaide and the University of Bocconi, and a visiting scholar at the CES-Ifo Institute at the University of Munich and the China Center for Economic Research at Peking University. He serves also as a consultant for the World Bank, the World Health Organization, and the World Intellectual Property Organization. Maskus received his Ph.D. in economics from the University of Michigan in 1981. His current research focuses on the international economic aspects of protecting intellectual property rights. He is the author of *Intellectual Property Rights in the Global Economy*, published by the Institute for International Economics, and co-editor of *International Public Goods and the Transfer of Technology under a Globalized Intellectual Property Regime*, published by Cambridge University Press. He recently wrote a piece analyzing the need for reforms in U.S. patent policy, published by the Council on Foreign Relations. A new volume, *Private Rights and Public Problems: The Global Economics of Intellectual Property in the 21st Century*, is scheduled for publication by the Peterson Institute for International Economics.



Joost PAUWELYN

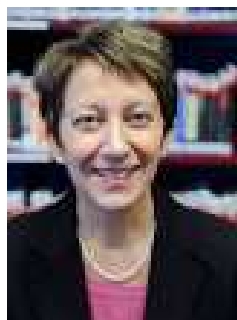
Joost Pauwelyn is Professor of International Law at the Graduate Institute of International and Development Studies in Geneva, Switzerland since 2007. Previously he was Professor of Law at Duke University (USA). He has taught at Neuchâtel, Columbia, NYU and Georgetown law schools and worked as legal adviser for the WTO Secretariat (1996-2002). He specializes in international economic law, in particular trade law and investment law, and its relationship to public international law. He also frequently advises governments and industry in WTO dispute settlement and investment arbitration, and is Senior Advisor to the law firm of King & Spalding LLP. In July 2011, he was added to the indicative list of WTO panelists at the request of Belgium.

He is the author of one of the leading case books on International Trade Law (Aspen, 2009, with A. Guzman) and, most recently, editor of *Global Challenges at the Intersection of Trade, Energy and The Environment* (CEPR, 2010) and *The Law, Economics and Politics of Retaliation in WTO Dispute Settlement* (CUP, 2010). He also authored, amongst other works, *The Transformation of World Trade* (Michigan Law Review, 2005) and *Conflict of Norms in Public International Law* (Guggenheim Prize, 2005). In 2009, he received the Francis Deak prize, awarded to a younger author for meritorious scholarship published in *The American Journal of International Law* for his article on non-discrimination.



Marcelo POPPE

Marcelo Poppe, both Brazilian and French, graduated in Electrical Engineering by the Federal University of Rio de Janeiro, Brazil, 1972, and Graduated (Master degree) in Economy of Production – Innovation and Energy Systems Economics by the University of Paris IX - Dauphine and the National Institute of Nuclear Science and Technology , France , 1985. Since 2004, Senior Adviser at Centre for Strategic Studies and Management – CGEE, a not for profit Social Organization located in Brasília, DF, Brazil. Former Senior Consultant of the Brazilian National Industry Confederation – CNI (2005-2008). Until December 2003, Secretary of State for Energy Development, Ministry of Mines and Energy, Brazil, and former Director in the same matter and Ministry (2001-2002), in charge of establishment and implementation of the Brazilian National Policy for energy efficiency, energy technology, renewable energy and rural electrification. From 1998 to 2001, Special Adviser of the Board of Directors of the Brazilian Electricity Regulatory Agency – Aneel, and from 1984 to 1998, Senior Fellow at the International Research Centre on Environment and Development - Cired, Paris, France. From 1972 to 1983, Electrical Engineer at Natron and Enisa, two Brazilian engineering enterprises. Has expertise on energy, environment and development; climate change, low carbon technologies, social, environmental and economic sustainability; science, technology and innovation; member of some national and international professional councils, commissions and committees and author of various studies, articles, publications and speeches.



Elisabeth PRÜGL

Faculty member since 2009 and Deputy Director of the Graduate Institute since 2010, Professor Prüg l previously taught at Florida International University, where she co-directed the Miami-Florida European Union Centre of Excellence. Her research focuses on gender politics in global governance and feminism in International Relations. In addition to having published numerous journal articles, book chapters and anthologies, she is the author of *The Global Construction of Gender: Home-based Work in the Political Economy of the 20th Century* (Columbia University Press, 1999) and *Transforming Masculine Rule: Agriculture and Rural Development in the European Union* (Ann Arbor: University of Michigan Press 2011). Currently, she serves as associate editor of *Politics and Gender*, a journal of the Women and Politics Section of the American Political Science Association, and as president of the Feminist Theory and Gender Studies Section of the International Studies Association. Prüg l also heads the Graduate Institute's new research programme on Gender and Global Change. Dr. Prüg l holds a PhD from The American University.



Ben SIMMONS

Benjamin Simmons is Head of the Trade, Policy and Planning Unit with UNEP's Economics and Trade Branch, located in Geneva, Switzerland. He is responsible for managing UNEP's trade programme and for guiding the policy work for UNEP's Green Economy Initiative. Benjamin also coordinates UNEP's implementation of "The Economics of Ecosystems and Biodiversity" (TEEB) initiative and serves as UNEP's representative in the World Trade Organization's trade and environment negotiations. Prior to joining UNEP in 2003, Benjamin worked as an environmental lawyer for a private law firm in New York City. He holds a Juris Doctorate from Columbia University School of Law, a Master in International Affairs from Columbia University School of International and Public Affairs, and a Bachelor of Arts degree from Buena Vista University.



Steven STONE

Steven W. Stone is the Chief of UNEP's Geneva-based Economics and Trade Branch. Dr. Stone holds a M.Sc. and Ph.D. in Resource Economics from Cornell University and has more than 20 years of professional experience in environmental and natural resource management. Prior to his position with UNEP, Dr. Stone worked for the Inter-American Development Bank in Jamaica and Ecuador as a Senior Environmental Specialist, and also in Honduras as IADB's Country Representative. Dr. Stone has also contributed to large scale investments in natural resource management in Panama and Brazil, as well as capacity building and technical assistance in areas related to environmental economics. Prior to his positions at the IADB and UNEP, Dr. Stone also served with the World Bank and the Instituto do Homem e Meio Ambiente da Amazonia, IMAZON, a Brazilian think tank on issues related to the sustainable use of land and forestry resources.



Mahesh SUGATHAN

Mahesh is presently working as Programme Coordinator for Economics and Trade Policy Analysis. At ICTSD, he has worked on a broad range of issues, including trade and environment, agriculture and special and differential treatment and is presently engaged in projects on environmental goods and services and trade and energy. Mr. Sugathan joined ICTSD in 2002 after interning at the ICTSD, UNCTAD and WTO. Mr. Sugathan has a Masters degree in International Law and Economics from the World Trade Institute in Bern. Mr. Sugathan completed undergraduate and graduate studies in Economics and International Relations at the University of Kerala and the Jawaharlal Nehru University in New Delhi, India. He also holds an M.Phil in European Studies from Jawaharlal Nehru University where he researched implications of EU environmental standards on Indian exports. Mr. Sugathan is a citizen of India.



Timothy SWANSON

André Hoffman Chair of Environmental Economics, Graduate Institute of International and Development Studies, Director, Centre for International Environmental Studies. Professor Swanson holds graduate degrees in law and economics, completing his PhD at the London School of Economics under the supervision of Nick Stern. Previously, he was the holder of the Chair of Law and Economics at University College London, a lecturer at Cambridge University and the Research Director for the UK's National Centre on Social and Economic Research on the Global Environment (CSERGE). Recently, he has led research teams on issues dealing with: environmental governance in China (for the China Council and the ADB), biodiversity management domestically and globally (for various developing countries as well as the European Union's BioEcon programme), EU water management, as well as intellectual property rights and biotechnology regulation (EU and European Science Foundation). He has advised many international agencies (OECD, UNEP, World Bank) on issues dealing with burden sharing and institution-building under international environmental agreements such as the Montreal Protocol and the Convention on Biological Diversity. His publications appear in journals which focus on economics, international affairs and development, environmental studies, as well as law and economics.



Jorge E. VIÑUALES

Pictet Chair in International Environmental Law and Assistant Professor of International Law, Graduate Institute of International and Development Studies. Ph.D. (Sciences Po Paris), LL.M. (Harvard), D.E.A. (HEI). Professor Viñuales is also Counsel with the law firm Lévy Kaufmann-Kohler in Geneva, as well as the Executive Director of the Latin American Society of International Law. He is currently active both as an academic and a practitioner in the fields of international environmental law and international investment law. Before joining the Graduate Institute, he was a full-time practitioner specialising in international investment law. He has worked on many cases under ICSID, UNCITRAL, PCA, ICC or LCIA rules, including several high profile inter-State or investor-State disputes. He has also served as consultant or provided advice on different matters of international law to private companies, governments, international organisations or major NGOs. He has published widely in his areas of expertise, in journals such as the British Yearbook of International Law, the *Annuaire français de droit international*, the *ICSID Review*, the *Yearbook of International Environmental Law* or the *Georgetown International Environmental Law Review*. He is currently completing a monograph on the relations between foreign investment law and international environmental law, forthcoming at Cambridge University Press.



Rainer WALZ

Priv.-Doz. Dr. Rainer Walz is Head of the Competence Center Sustainability and Infrastructure Systems at the Fraunhofer Institute for Systems and Innovation Re-search ISI in Karlsruhe. He studied Economics and Political Science at the University of Freiburg and at Brock University, Canada. PhD and "habilitation" in economics. In 1992, he received the Friedrich-August-von-Hayek Price from the University of Freiburg. In 1991, Dr. Walz joined the Fraunhofer ISI. Prior employment includes the University of Wisconsin and the Enquête Commission "Protecting the Earth's Atmosphere" of the German Bundestag.

He is teaching at the University of Karlsruhe and is Guest Professor at the Institute for Policy and Management of the Chinese Academy of Science