



# AGENDA

### Sustainable Development Conference

Feldberg Room in William and June Warren Hall Columbia University January 21, 2009 12:00 P.M. – 6:00 P.M.

| <u>Guest</u>    | Business School of Erasmus University, Rotterdam School of Management: |
|-----------------|--|
| <b>Visitors</b> | "Sustainability Trip - NYC 2009"                                       |
|                 | hosted by Study Association Rotterdam School of Management             |

| <u>Time</u>  | Item   | Presenter   |
|--------------|--|---|
| 12:00 – 1:00 | Welcome Luncheon   |   |
| 1:00 – 1:05  | Opening Remarks  | Rob van Tulder, Professor of International Business-<br>Society Management, Erasmus University<br>Rotterdam/Rotterdam School of Management  |
| 1:05 – 1:35  | Public Policy & Business<br>Responsibility                             | Geoffrey M. Heal, Paul Garrett Professor on Public<br>Policy & Business Responsibility & Professor<br>International & Public Affairs  |
| 1:35 – 2:05  | The Vale Columbia Center<br>on Sustainable<br>International Investment | Karl P. Sauvant, Executive Director of the Vale<br>Columbia Center on Sustainable International<br>Investment; Research Scholar and Lecturer in Law<br>at Columbia Law School.  |
| 2:05 – 3:00  | The Water Center at the Earth Institute                                | Members of the Water Center at the Earth Institute<br>at Columbia University: featuring Upmanu Lall, Alan<br>and Carol Silberstein Professor of Earth and<br>Environmental Engineering and of Civil Engineering<br>and Engineering Mechanics, Stergios<br>Athanassoglou, Postdoctoral Rsch Scientist, and<br>Tayna Heikkila, Assistant Professor at School of<br>International & Public Affairs |
| 3:00 - 4:00  | The Lenfest Center for<br>Sustainable Energy                           | Members of the Lenfest Center for Sustainable Energy:<br>featuring Director Klaus S. Lackner and Associate<br>Director Ah-Hyung Park  |
| 4:00 - 6:00  | <b>Closing Reception</b>   |   |

## **SPEAKER BIOGRAPHIES**

#### **Rob van Tulder**

Dr. van Tulder is the Professor of International Business-Society Management, Erasmus University Rotterdam/Rotterdam School of Management. He holds a PhD degree (cum laude) in social sciences from the University of Amsterdam. Winner of the 1994 Erasm Research Award, winner of the 1998 "best teachers" award, Erasmus University Rotterdam, winner of the 1996 Gunnar Myrdal Award of the European Association for Evolutionary Political Economy (EAEPE). His co-authored 2003 book on reputation and corporate responsibility was nominated for the 'best management book of the year' award. He received the best book award of ERIM in 2007 for his book on 'international business society management'. Van Tulder published in particular on the following topics: European Business, Multinationals, high-tech industries, Corporate Social Responsibility, poverty, child labour, the global car industry, issues of standardisation, network strategies, smaller industrial countries (welfare states) and European Community/Union policies. In these studies the focus has in particular been on strategic bargaining relations between actors, the role of governments and of big influential multinational actors. Acted as consultant for international organisations, companies and ministries. Academic Referee for various publishers and journals. Coordinator of the ERIM research project "International Business-Society Management" and the SCOPE databank project, bringing together a large number of interdisciplinary researchers. Co-founder and rotating chair of the Department of Business-Society Management (www.bsm.org) and the expert centre on Sustainable business and development cooperation (www.ecsad.nl). Van Tulder taught executive courses on International Strategic Management with (executive) managers and academics and has been visiting professor at several universities abroad.

#### **Geoffrey M. Heal**

Geoffrey Heal is Paul Garrett Professor of Public Policy and Corporate responsibility and Professor of Finance and Economics at the Graduate School of Business at Columbia University, and Director of Columbia Earth Institute's Center for Globalization and Sustainable Development. He studied and physics and economics at Cambridge University, from which he obtained a first class honors BA and a doctorate. He taught at Cambridge as a Fellow of Christ's College, and subsequently at Sussex and Essex Universities in the UK, at the Universities of Paris and Stockholm, and in the US at Yale, Stanford and Princeton. Heal is a Director of the Union of Concerned Scientists, of the Coalition for Rainforest Nations, and of the Beijer Institute of the Royal Swedish Academy of Sciences and was a Commissioner of the Pew Oceans Commission and a member of the U.S. Environmental Protection Agency's Science Advisory Board Committee on the Valuing the Preservation of Ecosystem Services.

Heal was Managing Editor of the Review of Economic Studies, acted as an associate editor of many other journals, and published fifteen books and over one hundred articles. His books include *Economic Theory and Exhaustible Resources, Public Policy and the Tax System, The Evolving International Economy, Oil and the International Economy, Topological Social Choice, The Economics of Increasing Returns, Environmental Markets, Valuing the Future and Nature and the Marketplace.* He acted as Senior Vice Dean of Columbia Business School from 1991 to 1994 and is a Fellow of the Econometric Society and of the Association of Environmental and Resource Economists, of which he is a Past President and from which he received the 2003 Prize for a Publication of Enduring Quality. He chaired the National Academy of Science's Committee on the Valuation of Ecosystem Services. Heal was a founder of a London-based economic consulting company and also of FITEL, a company providing computer-based

services to the international securities industry. He has acted as a consultant to the British and American governments, to the World Bank and other international agencies, and to trade unions and major corporations.

Heal's current research interests reach from financial markets, where he studies the role of derivatives and the securitization of catastrophic risks, to environmental conservation, where he studies the use of marketbased incentives for conservation of forests and biodiversity. He is particularly interested in the interface between economics and ecology, and the extent to which profit-oriented companies can contribute to the solution of social and environmental problems.

Heal's latest books, *Valuing the Future* and *Nature and the Marketplace*, attempt to develop an economic framework for thinking rigorously about sustainability and the issues for which it has become a metaphor.

#### Karl P. Sauvant

Dr. Karl P. Sauvant is the Executive Director of the Vale Columbia Center on Sustainable International Investment; Research Scholar and Lecturer in Law at Columbia Law School; Co-Director, Millennium Cities Initiative; Honorary Fellow, European International Business Academy; Chatham House Foundation Fellow; Senior Advisor to the China Council for Investment Promotion; and Member, International Advisory Council, International Center for Corporate Accountability, Baruch College, CUNY. He is also Guest Professor at Nankai University, China.

Until July 2005, Dr. Sauvant was Director of the United Nations Conference on Trade and Development's (UNCTAD) Division on Investment, Technology and Enterprise Development (DITE), the focal point in the UN system for matters related to foreign direct investment (FDI) and technology, as well as a major interface with the private sector. While at the UN, he created, in 1991, the prestigious annual World Investment Report, of which he was the lead author until 2004. In 1992, Dr. Sauvant founded the journal Transnational Corporations, serving as its editor until 2005. He provided intellectual leadership and guidance to a series of 25 monographs on key issues related to international investment agreements, which were published in 2004/05 in three volumes, and he edited, together with Dr. John H. Dunning, a 20-volume Library on Transnational Corporations (published by Routledge).

Dr. Sauvant joined the United Nations in 1973 and, as of 1975, has focused his work on matters related to FDI. Since 1988, he was responsible for the Organization's policy analysis work on FDI. In 2001, he became Director of DITE. His responsibilities included managing the Division; promoting international consensus-building in the areas of FDI, technology and enterprise development; providing intellectual leadership for policy-oriented research; and conceptualizing and supervising technical assistance activities in this field.

Apart from his work for the United Nations, Dr. Sauvant has published extensively on issues related to economic development, FDI and services. His name is associated with some 150 United Nations publications on FDI over the past three decades.

Dr. Sauvant received a Ph.D. degree from the University of Pennsylvania, Philadelphia. He is a national of Germany, married to Silvana F. da Silva, a national of Brazil.

#### **Upmanu Lall**

Dr. Upmanu Lall's original training emphasized hydrology, water resource systems analysis, operations research and stochastic processes with applications to flood/drought risk and uncertainty assessment and the design and operation of water systems. His initial research led him to the conclusion that significant improvements in methods were needed to better represent the hydrologic processes considered in water management models. This assessment stimulated self education in applied mathematics and statistics focused on (a) nonlinear dynamical systems, (b) nonparametric methods of function estimation and their application to spatio-temporal dynamical systems, and (c) the study of multi-scale climate variability and change as an integral component of hydrologic systems. As new knowledge was created in these areas, he has focused on its application to water resources management through innovation in adaptive or dynamic risk management methods that can use information on the structure of climate for simulation or forecasting. Recently, he has become concerned with the issue of global and regional water sustainability, and the more general issue of modeling and managing planetary change due to coupled human and natural dynamics.

#### **Stergios Athanassoglou**

Stergios Athanassoglou is a new Earth Institute Fellow who received his PhD in Operations Research from Columbia University's School of Engineering and Applied Sciences in 2008. He is native of Greece and focused his doctoral dissertation on game theoretic models of allocation. As a doctoral student, he developed and analyzed resource and cost allocation mechanisms, which, within certain frameworks for an economy, produce outcomes that meet precise criteria of efficiency and fairness. His current research interests are in the area of environmental and resource economics applied to groundwater management. He is particularly interested in studying the design of contract farming mechanisms in India and in developing a general game-theoretic framework for groundwater extraction in the presence of land heterogeneity and income inequality. Regarding the latter, he plans to study the effects different subsidy mechanisms induce on equilibrium extraction patters. Methodological tools include optimization, optimal control, and game theory. Athanassoglou also received a BA in Mathematics from Yale College. At the Earth Institute, he will be working with Manu Lall, Director of the Columbia Water Center, and Vijay Modi, Professor of Mechanical Engineering

#### Tanya Heikkila

Tanya Heikkila is an assistant professor in Columbia University's School of International and Public Affairs and the Associate Director of the Columbia Water Center. Her research expertise is in comparative institutional analysis, common pool resource governance, and water resource management. Heikkila's research has looked at the institutions for coordinating ground and surface water management, at the organization of collaborative ecosystem restoration programs in the United States (with Andrea K. Gerlak), as well as the performance of special purpose governments (with Kimberley Isett). She is also involved in a collaborative research project funded by the National Science Foundation (with E. Schlager) to study interstate river basin compacts in the Western United States. Heikkila has recently published articles in *Policy Studies Journal, PS: Political Science and Politics, Natural Resources Journal,* the *Journal of Policy Analysis and Management, Water Policy,* and the *American Review of Public Administration.* In 2004, she published a book titled *Common Waters Diverging Streams: Linking Institutions and Water Management in Arizona, California, and Colorado* (with W. Blomquist and E. Schlager) recently co-authored the 4<sup>th</sup> edition of *The Effective Public Manager* with Steven Cohen and William Eimicke. Heikkila holds a BA from the University of Oregon, Robert D. Clark Honors College (1992) and a Master of Public Administration and PhD from the University of Arizona, School of Public

Administration and Policy (1998, 2001). In 2001 she was the recipient of Resources for the Future's Joseph L. Fisher dissertation fellowship. Before joining Columbia she was a postdoctoral research fellow at Indiana University's Workshop in Political Theory and Policy Analysis.

### Kaul S. Lackner

Klaus S. Lackner, Ph.D. 8.12.2008 Biography Klaus S. Lackner joined the faculty of Columbia University in 2001, where he is the Ewing-Worzel Professor of Geophysics in the Department of Earth and Environmental Engineering, and a member of the Earth Institute. He is the Director of the Lenfest Center for Sustainable Energy and the Chair of the Department of Earth and Environmental Engineering in the School of Engineering and Applied Sciences.

Klaus Lackner's scientific career started in the phenomenology of weakly interacting particles. Later, searching for quarks, he and George Zweig developed the chemistry of atoms with fractional nuclear charge, and a more recent participation in matter searches for particles with a non-integer charge in experiments conducted at Stanford by Martin Perl and his group. After joining Los Alamos National Laboratory, Lackner became involved in hydrodynamic work and fusion-related research. He has published on the behavior of high explosives, novel approaches to inertial confinement fusion, and numerical algorithms. His interest in self-replicating machine systems has been recognized by *Discover* magazine as one of seven ideas that could change the world. Currently he is developing innovative approaches to energy issues of the future. He has been instrumental in forming the Zero Emission Coal Alliance, an industry led group that defined the zero emission concept. His recent work is on environmentally acceptable technologies for the use of fossil fuels. Research topics focus on carbon management, specifically the capture of carbon dioxide in power plants, and also directly from the atmosphere.

Research at Columbia University is focused on mineral sequestration, zero emission coal plants, carbon electrochemistry and the study of large scale energy infrastructures. In addition to his activities at Columbia, Lackner is a member of GRT, a company based in Tucson, Arizona, that hopes to develop a commercially viable device to capture CO2 from the air, with the intent of mitigating the effects of climate change.

Klaus Lackner received his Ph.D. in 1978 in theoretical physics from the University of Heidelberg, and held postdoctoral positions at the California Institute of Technology and the Stanford Linear Accelerator Center before joining Los Alamos National Laboratory in 1983.

### **Ah-Hyung Park**

In fall 2007, Ah-Hyung (Alissa) Park joined the Department of Earth and Environmental Engineering at Columbia University as the Lenfest Junior Professor in Applied Climate Science and the Associate Director of the Lenfest Center for Sustainable Energy after completing her Ph.D. at The Ohio State University. Her research interests include carbon capture and mineral sequestration, sustainable energy conversion systems, particle technology and multiphase flows. The specific on-going research efforts of Park's research group include the fundamental studies of novel organic-inorganic hybrid nanomaterials for the application in CO<sub>2</sub> capture and storage, synthesis of engineered carbon-neutral filler materials and production of liquid fuels from biomass and solid municipal wastes with integrated carbon sequestration.

# **CONFERENCE ORGANIZERS**

## The Earth Institute at Columbia University

The Earth Institute at Columbia University is the world's leading academic center confronting the practical challenges of sustainable development. Based on interdisciplinary research and education, The Earth Institute is dedicated to finding effective solutions to humanity's most urgent challenges, including climate change, sustainable energy, environmental degradation, extreme poverty and natural and human-made hazards, among many others. For more information, see: www.earth.columbia.edu

## Vale Columbia Center on Sustainable International Investment Columbia Law School/The Earth Institute

The Vale Columbia Center on Sustainable International Investment promotes learning, teaching, policy-oriented research, and practical work within the area of foreign direct investment (FDI), paying special attention to the sustainable development dimension of this investment. It is a joint center of Columbia Law School and The Earth Institute. For more information, see: <u>www.vcc.columbia.edu</u>.