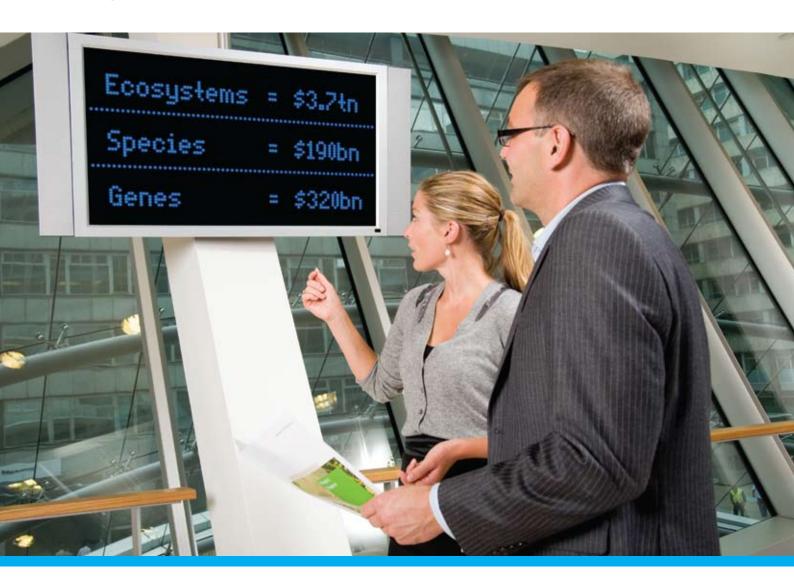


The Economics of Nature: Taking stock, sharing action

Meeting the global challenges of the TEEB report

Tuesday, 16 November 2010























The Economics of Ecosystems and Biodiversity (TEEB) report

The TEEB report was launched on 20 October 2010 at the Convention on Biological Diversity's 10th Conference of Parties meeting (CBD COP 10) in Nagoya, Japan. The independent study, which is led by Pavan Sukhdev and hosted by the United Nations Environment Programme (UNEP), highlights the economic importance of the world's natural assets.

The TEEB study calls for wider recognition of nature's contribution to human livelihoods, health, security and culture by decision makers at all levels. It promotes the demonstration and, where appropriate, the capture of the economic values of nature's services through an array of policy instruments and mechanisms.

The TEEB study concludes with the following recommendations:

Open communication about impacts on nature

Public disclosure of - and accountability for - impacts on nature should be essential outcomes of biodiversity assessment

National accounts should value natural capital

The present system of national accounts should be rapidly upgraded to include the value of changes in natural capital stocks and ecosystem service flows.

3 Account for forest stocks and ecosystem services

An urgent priority is to draw up consistent physical accounts for forest stocks and ecosystem services, both of which are required for example, for the development of new forest carbon mechanisms and incentives.

4 Annual reports of businesses should include impacts on nature

The annual reports and accounts of business and other organisations should disclose all major externalities, including environmental damage affecting society and changes in natural assets not currently disclosed in the statutory accounts

5 Businesses should adopt the principle of "net positive impact".

The principles of "no net loss" or "net positive impact" should be considered as normal business practice, using robust biodiversity performance benchmarks and assurance processes to avoid and mitigate damage, together with pro-biodiversity investment to compensate for adverse impacts that cannot be avoided.

6 Use the principle of the "beneficiary pays" to support ecosystem services.

The principles of "polluter pays" and "full-cost-recovery" are powerful guidelines for the realignment of incentive structures and fiscal reform. In some contexts, the principle of "beneficiary pays" can be invoked to support new positive incentives such as payments for ecosystem services, tax breaks and other fiscal transfers that aim to encourage private and public sector actors to provide ecosystem services.

7 Governments to phase out perverse subsidies

Governments should aim for full disclosure of subsidies, measuring and reporting them annually in order that their perverse components may be recognised, tracked and eventually phased out.

8 Ecosystem valuation can help to establish protected areas

The establishment of comprehensive, representative, effective and equitably managed systems of national and regional protected areas should be pursued (especially in the high seas) in order to conserve biodiversity and maintain a wide range of ecosystem services. Ecosystem valuation can help to justify protected areas policy, identify funding and investment opportunities, and inform conservation priorities.

Seconda description supports climate change mitigation and adaptation

Ecosystem conservation and restoration should be regarded as a viable investment option in support of climate change mitigation and adaptation. Within the UNFCCC process, REDD-Plus should be prioritised for accelerated implementation, beginning with pilot projects and efforts to strengthen capacity in developing countries to help them establish credible systems of monitoring and verification that will allow the full deployment of the instrument.

10 Include human dependence on ecosystem services in policy

Human dependence on ecosystem services, and particularly their role as a lifeline for many poor households, needs to be more fully integrated into policy. This applies both to targeting development interventions and to evaluating the social impacts of policies that affect the environment.

- How do we implement TEEB and its recommendations?
- What are the barriers?How can we overcome them?

Conference programme

10.00 Welcome

David Hopkins, Spartacus Communications and Carbon Leapfrog charity

Chris Mahon, Chair, IUCN UK Committee

Garry Charnock, Chief Executive, Carbon Leapfrog charity

Keynotes

10.10 The importance of TEEB for nature

Julia Marton-Lefèvre, IUCN Director-General (via video)

10.30 Overview of TEEB

Josh Bishop, IUCN Chief Economist, and TEEB for Business report coordinator

Panel discussions

The main format of the day will consist of a series of panel discussions designed to encourage participation from the audience. Each panel will comprise CEO-level representatives from the corporate, investment, banking and finance, insurance, legal and environmental sectors.

11.00 The business of biodiversity

Chaired by John Elkington, Executive Chairman, Volans

Panellists

James Arbib, Founder, Tellus Mater Foundation

Mike Barry, Head of Sustainable Business, Marks & Spencer Tom Burke, Founding Director of E3G and Environmental Policy Adviser. Rio Tinto

Andrew Mitchell, Director, Global Canopy Programme Gavin Neath, Senior Vice President Communications and Sustainability, Unilever

Simon Thomas, Chief Executive, Trucost

11.40-12.00 Coffee

12:00 Investment challenges

Chaired by Hylton Murray Philipson, Founder and Managing Director, Canopy Capital

Panellists:

Adam Black, Head of Sustainability, Doughty Hanson

Tony Juniper, Former Director of Friends of the Earth, Writer (latest book *Harmony*), Sustainability Adviser

Chris Knight, Forestry and Ecosystems Leader, PwC UK Kirsty Schneeberger, Director of the ICE Coalition

12.40 Banking and financial challenges

Chaired by Paul Turner, Head of Sustainable Development, Lloyds Banking Group

Panellists:

Mark Avery, Director, Conservation, RSPB

Emma Howard Boyd, Head of Sustainable Investment and Governance, Jupiter Asset Management

Jon Williams, Partner, Sustainability and Climate Change, PwC

13.20-14.00 Lunch

14.00 The role of government

Rt. Hon. Caroline Spelman MP, Secretary of State for Environment, Food and Rural Affairs

14.20 Insurance challenges

Chaired by Sunny Sehgal, Senior Manager, HSBC Sustainable Insurance

Panellists:

Truska Angel, Head of Climate Change and Sustainability, AXA Insurance

Deanna Donovan, Environmental Economist, Joint Nature Conservation Committee

Cliff Warman, Environmental Practice Leader, Marsh Insurance Astrid Zwick, Head of Department, Corporate Responsibility, Munich Re

15.00 Legal challenges

Chaired by Steve McNab, Partner, Environment and Climate Change, Simmons & Simmons

Panellists:

Vanessa Havard-Williams, Global Head of Environment, Linklaters Daniel Owen, Barrister, Fenners Chambers and IUCN Commission on Environmental Law

Stephen Tromans, QC, 39 Essex Street

15.40-16.00 Coffee

16.00 Environment challenges

Chaired by Chris Stephens, Director of GLOBE's Commission on Land Use Change and Ecosystems

Panellists:

Victoria Chester, Chief Executive, Plantlife International Ian Jardine, Chief Executive, Scottish Natural Heritage Martin Spray, Chief Executive, Wildfowl & Wetlands Trust James Vause, Environmental Economist, DEFRA Evan Williams, Principal Consultant and Economist (Climate Change), AEA Consulting

16.40 The way forward – actions required

Josh Bishop, IUCN Chief Economist, and TEEB for Business report coordinator

End

17.10 Networking

Please note that the content of the conference may be subject to change.

Conference sponsors



IUCN

The International Union for Conservation of Nature (IUCN) is the largest global network of environmental experts on the planet and has been finding practical solutions to our most pressing environment and development challenges for over 60 years. IUCN works with governments to ensure that economic, trade and investment policies better integrate biodiversity considerations. It works with companies, industry associations and consumer groups to turn nature and environmental concerns into action. The IUCN UK National Committee comprises IUCN member organisations based in the UK and includes UK government and over 30 non-governmental organisations. It exists to assist in the delivery of the IUCN Global Programme and facilitate partnerships, networking and delivery on behalf of its members.

www.iucn.org · www.iucn-uk.org



Carbon Leapfrog

Carbon Leapfrog is a unique business-led not-for-profit organisation that channels pro bono (free) services from top businesses into activities that deliver carbon reductions. Our members are drawn from a cross-section of professions, including law firms, accountancies, banks, environmental consultancies and marketing. They believe that urgent action is required to help combat climate change and are willing to give their skills and time to support climate change initiatives that are already delivering change. The objectives are to help those initiatives overcome hurdles that may be slowing down their progress and effectiveness, and to help roll them out more quickly to a wider audience. We target initiatives that could have a scaleable and widespread impact and provide professional support to clean technology initiatives and entrepreneurs.

www.carbonleapfrog.org



Simmons & Simmons

Simmons & Simmons is a leading international law firm with fully integrated teams working through offices in Europe, the Middle East and Asia. The firm has a focus on four industry sectors: energy and Infrastructure; financial institutions; life sciences; and telecoms, media and technology. We are committed to managing our environmental impacts and were the first law firm to become carbon neutral across our international network.

The firm's international environment and climate change practice is recognised as a leader in this expanding and increasingly complex field. The team's expertise includes providing advice on regulatory compliance, environmental and safety issues, contentious matters and land use planning. We support our clients with the transition into a carbon-constrained future, managing risks and seizing opportunities. This includes advising on emissions trading, renewable energy and international and domestic carbon reduction projects and the corporate responsibility and governance issues.

www.simmons-simmons.com



Scottish Natural Heritage

Scottish Natural Heritage is a public body responsible to the Scottish Parliament through our Ministers. We are funded by the Scottish Government. Our purposes are to promote the care and improvement of the natural heritage; help people enjoy it responsibly; enable greater understanding and awareness of it; and promote its sustainable use, now and for future generations. Scotland's natural heritage includes its wildlife, habitats and landscapes. All our work supports our mission: All of nature for all of Scotland.

www.snh.gov.uk



RSK Group plc

RSK Group is the UK's largest privately owned multidisciplinary environmental consultancy, and one of the fastest growing companies of its kind in Europe with over 750 technical staff across strategic locations in the UK, Europe and the Gulf and Caspian regions. We offer clients a one-stop shop for over 200 environmental, health and safety and engineering services, including environmental impact assessment, contaminated land asssessment and remediation, carbon management, environmental and sustainability communication, and a complete range of ecological services via RSK Carter Ecological, which is one of the UK's largest and most experienced specialist ecology consultancies. RSK Group maintains a world-class dedication to best practice through certification to the ISO 9001, ISO 14001, and OHSAS 18001 standards for quality, environmental, and health and safety management. We safeguard your business environment.

www.rsk.co.uk · www.rskcarterecological.com · www.t-e-s.co.uk



Tellus Mater

The Tellus Mater Foundation is a grant-making trust that supports leaders to put in place a low carbon future. We do this by providing grant funding to forward-thinking individuals and organisations with cutting-edge ideas that will change the rules of the game. We seek innovative solutions to shift political, economic, and financial institutions to a sustainable path. Our vision is of a future that values the environment. Transition to a low carbon economy is a key step to achieve a sustainable society and to reduce emissions, waste and environmental destruction. A key part of this is to find ways to reduce energy demand, increase alternative energy supply and fully value the cost of natural assets.

We believe that people are part of the solution to environmental challenges. Individuals can act to create change. Leaders with the enterprise and ingenuity to make a difference have power to reshape the economy on the basis of sustainable principles. We seek to accelerate the scale of pioneering environmental enterprises and to put in place new business models that are the basis of a sustainable society. Positive solutions founded in enterprise and innovation are the future.

www.tellusmater.org.uk



Volans

Volans is part think tank, part consultancy, part broker and part incubator. Based in London and Singapore, Volans works globally with entrepreneurs, businesses, investors and governments to develop and scale innovative solutions to financial, social and environmental challenges. Our Pathways to Scale programme aims to identify, map and remove barriers that slow the scaling of innovative solutions to governance, economic, social and environmental challenges.

www.volans.com



Lloyds Banking Group

Lloyds Banking Group is a leading UK based financial services group providing a wide range of banking and financial services, primarily in the UK, to personal and corporate customers.

Lloyds Banking Group was formed in January 2009 following the acquisition of HBOS and our main business activities are retail, commercial and corporate banking, general insurance and life, pensions and investment provision. The new group also operates an international business with a global footprint in over 30 countries.

Lloyds Banking Group is the largest retail bank and has a large and diversified customer base. Services are offered through a number of well recognised brands including Lloyds TSB, Halifax, Bank of Scotland, Scotlish Widows, Clerical Medical and Cheltenham & Gloucester, and via a unique distribution capability comprising the largest branch network in the UK and intermediary channels.

Lloyds Banking Group aims to be the best financial services provider in the UK, building a leadership position on the foundations of reputation and recommendation.

www.lloydstsb.com



AFA

AEA is a leading energy, environment and information management consultancy. The company operates in the UK, Europe, the USA and China advising governments, the EU and major private sector organisations on energy and climate change, air and water quality, risk management, resources and waste, sustainable transport and knowledge transfer.

www.aeat.com



Footprint TV

Footprint is a sustainable television and film production company. We make high-end short films, documentaries and factual formats for television, the web and digital media for broadcasters, organisations and brands. At Footprint, we put sustainability at the heart of how we operate: in the office, on location and in the stories we tell onscreen. We work with new, ethical companies that are shaping the future and established companies with the potential to make a real difference by moving their staff, suppliers and customers towards sustainability. Our clients include Good Energy, Tesco and British Gas. Our work has three aims: to communicate the good you are doing for people and the planet, to inspire your audience and to help you bring about more change. All our work shares one insight: "To see is to believe."

www.footprinttv.co.uk

Speakers biographies

David Hopkins Managing Director, Spartacus Communications

David Hopkins is the founder and managing director of Spartacus Communications, a new firm specialising in research-led communications and stakeholder engagement strategies for the environmental and sustainability industries sector.

He is the former Director of Carbon International, a specialist investor relations and PR firm focused exclusively on the clean tech sector. During his time with Carbon International David designed, implemented and led research and communications strategies for a variety of leading cleantech market specialists including Impax Asset Management, Low Carbon Accelerator, London Stock Exchange and many others.

Prior to a career in communications, David spent 10 years as a journalist for national and specialist media, mainly covering the environmental, social & education sectors. He has a BA Hons in Humanities from Birkbeck College, University of London and post-graduate diploma in Development Economics.

Chris Mahon Chair, IUCN UK Committee

Chris Mahon has worked for 20 years on environmental aspects of the public, voluntary and private sectors at local, regional, national and international levels. He is now Managing Director of his own consultancy business, Chris Mahon Environment (CME). An environmental science graduate and postgraduate in environmental assessment, Chris began his career in the planning department of a local authority in Cheshire. He moved to the voluntary sector as Conservation Manager of the Cheshire Wildlife Trust, becoming Chief Executive and Managing Director of its ecological consultancy. He is a Member of the Institute of Directors and has had several Board positions, including the North of England Zoological Society (Chester Zoo). Chris was elected Chair of the IUCN UK National Committee in 2008 and works with the IUCN UK Secretariat at the Royal Zoological Society of Scotland (Edinburgh Zoo).

Garry Charnock CEO, Carbon Leapfrog

Garry Charnock is CEO of Carbon Leapfrog – a city based charity that galvanises pro bono professional support from various sectors to help carbon reducing initiatives overcome hurdles to growth. He is also the instigator of the Ashton Hayes Going Carbon Neutral Project, a community-led initiative that is trying to help this small Cheshire community to become England's first carbon neutral village. Since its launch in 2006 the village has cut it carbon footprint by 23% and inspired communities around the world to follow its lead. Garry is a chartered engineer and an experienced technical journalist.

Joshua Bishop IUCN Chief Economist

Joshua Bishop is a natural resource and environmental economist. In his current position at IUCN, Bishop seeks to promote economically-efficient approaches to nature conservation, while presenting the case for conservation in economic terms. Before joining IUCN, Bishop worked for the International Institute for Environment and Development (IIED) conducting research on the economics of land use change. He has also worked in West Africa as a consultant economist to the European Commission and the World Bank, and as a development volunteer with the US Peace Corps in Mali. Dr Bishop holds a BA from Yale University, a Masters in Public Policy from Harvard University, and a PhD from University College London.

Julia Marton-Lefèvre Director General of IUCN

Julia Marton-Lefèvre has a longstanding interest in humanity, science, the environment and education, and has served on numerous boards, councils and committees. Previously, she was rector of the University for Peace, a graduate-level international university mandated by the United Nations and providing education, training and research on issues related to peace and conflict. Earlier offices include executive director of Leadership for Environment and Development International, a programme to bring together and train mid-career leaders worldwide in improving their leadership skills around sustainable development, and executive director of the International Council for Science, which brings together scientific academies and unions to promote scientific activities for the benefit of humanity. Julia has also co-authored numerous books and papers.

Rt. Hon. Caroline Spelman MP

Caroline joined Parliament in 1997 as one of only 34 new Conservative MPs elected when she won the West Midlands seat of Meriden. Born in 1958, she was educated at Herts and Essex Grammar School before reading European Studies at Queen Mary College, University of London. Fluent in French and German, she lived in Paris for six years where she worked in the sugar beet industry. She also wrote a book on biofuels whilst on maternity leave with her first child. Among the positions she has held are: Shadow Secretary of State for the Environment and Shadow Minister for Women, 2003-2004; Shadow Secretary of State for Communities and Local Government, 2004-2007; Chairman of the Conservative Party, 2007-2009; Shadow Secretary of State for Communities and Local Government, 2009 - May 2010; Secretary of State for Environment, Food and Rural Affairs, May 2010 - present.

Panel 1 The Business of Biodiversity

John Elkington Executive Chairman, Volans

John Elkington is a founding partner and executive chairman of Volans, and co-founder of SustainAbility (1987), where he is a non-executive member of the board, and of Environmental Data Services (ENDS, 1978).

John is a world authority on corporate responsibility and sustainable development. In 2004, BusinessWeek described him as "a dean of the corporate responsibility movement for three decades." His first involvement in the field was in raising money for the newly formed World Wildlife Fund in 1961, aged 11.

John is also a visiting professor at the Doughty Centre for Corporate Responsibility at the Cranfield School of Management, UK. He chairs the Foundation for Democracy and Sustainable Development and the Aflatoun impact and policy analysis steering group, and is an honorary fellow of the Hub. He is also a member of strategic advisory boards, a senior adviser to the Business & Human Rights Resource Centre, and a member of various councils and trusts. John also recently joined Newsweek's Green Rankings advisory board and the newly formed *Guardian* Sustainable Business advisory board.

He has written or co-authored 17 books, including the 1988 million-selling *Green Consumer Guide* (Victor Gollancz; co-authored with SustainAbility co-founder Julia Hailes).

James Arbib Founder, Tellus Mater Foundation

After graduating from Trinity College, Cambridge, UK, where he read history, James Arbib qualified as an accountant and worked in London as an investment analyst. He is currently an investor in several businesses pioneering resource-efficient technologies. James is also the founder of Tellus Mater, a grant-making foundation that aims to support leadership for a low-impact future through ideas for solutions to shift political, economic, and financial institutions to a low-carbon path.

Mike Barry Head of Sustainable Business, Marks & Spencer

Mike Barry is head of sustainable business at the UK retailer Marks & Spencer and was part of the team that put together its groundbreaking sustainability plan: "Plan A (because there is no Plan B for the one planet we have)".

He is responsible for providing the direction and strategy for putting the company's business practices on a more sustainable footing. His job involves listening to stakeholders' expectations of the company, translating these into policy and then working with buying groups and suppliers to make them a reality. He deals with issues as diverse as chemicals in products, fish farming, wood sourcing, labour standards, animal welfare, fair trade, carbon emissions and fish sourcing.

Before joining Marks & Spencer in 2000, Mike worked as an environmental consultant and an environmental manager in the engineering sector. He is a chemistry graduate from Sheffield University.

Tom Burke, CBE

Tom Burke is an environmental policy adviser to Rio Tinto and a visiting professor at Imperial and University colleges, London. He is also a senior adviser to the Foreign Secretary's Special Representative on Climate Change; a founding director of E3G, Third Generation Environmentalism; and chairman of the editorial board of ENDS magazine.

Tom's previous roles as a governmental adviser include chairing an independent review of environmental governance in Northern Ireland (2006–2007) for the Secretary of State for Northern Ireland; belonging to the Council of English Nature (1999–2005), the statutory adviser to the British government on biodiversity; serving as an adviser to the Central Policy Group in the Deputy Prime Minister's office (2002); and being a special adviser to three secretaries of state for the environment (1991–1997) after serving as director of the Green Alliance from 1982 to 1991.

Tom has also been executive director of Friends of the Earth and a member of the executive committee of the European Environmental Bureau (1988–1991). In 1993, he was appointed to the United Nations Environment Programme's Global 500 Roll of Honour, and in 1997 he became a CBE for services to the environment.

Andrew Mitchell Director, Global Canopy Programme

Andrew Mitchell is a leading authority on forests and climate change. In 2001, he founded the Global Canopy Programme, an international network linking 38 scientific institutions in 19 countries studying interactions between tropical forest canopies and the atmosphere. Andrew has been an impassioned advocate of forest conservation for over 35 years, and has had a career spanning scientific research, broadcasting journalism and environmental policy. He is a senior adviser to the Prince of Wales' Rainforests Project. His current focus is on innovative financial mechanisms that value forests as natural capital in a 21st century economy

Gavin Neath Senior Vice President Communications and Sustainability, Unilever

Gavin Neath is currently senior vice president communications and sustainability, Unilever. He has worked for the Unilever group in a wide variety of business roles worldwide since 1977, when he joined its management development scheme.

Gavin's roles outside Unilever include being a member of the governing body of ICC in the UK, the leadership team of Business in the Community and the development board of the Royal Court Theatre. He is a former president of the UK Food and Drink Federation. Gavin was awarded the CBE in 2007 for services to the food industry.

Gavin has a BA from Manchester University, UK, and an MSc from Warwick Business School, UK. He has also undertaken the senior executive programme at Stanford University, USA.

Simon Thomas Chief Executive, Trucost

Simon Thomas, a founding director of Trucost, has 28 years' senior business experience in the financial, publishing and self-storage industries. He is a regular commentator on the quantification of environmental impacts, and he frequently addresses the investment and corporate communities on sustainable and responsible investment, and corporate social responsibility related issues. Simon co-founded the Emerging Markets Investment Trust business at LCF Edmond de Rothschild, and has held senior positions at Swiss Bank Corporation, Nomura International and Reed International.

Panel 2 Investment Challenges

Hylton Murray-Philipson Investor and Environmentalist

Hylton Murray-Philipson is a former investment banker and set up Canopy Capital in December 2007 to develop value for the ecosystem services of the standing forests of Guyana. He is director of several recycling and renewable energy companies in the UK, an adviser to the Prince's Rainforests Project and a trustee of the Global Canopy Programme.

Adam Black Head of Sustainability, Doughty Hanson

Adam Black is head of sustainability at Doughty Hanson and has over 18 years' experience as a specialist practitioner in sustainability and corporate responsibility.

He is a Chartered Environmental and a Chartered Health and Safety specialist with a BSc in environmental science and higher degrees in environmental law and occupational health and safety.

Before joining Doughty Hanson in 2008, Adam spent time working in industry (Halliburton), environmental consultancy (Environmental Resources Management) and the sustainability practice of accountancy firm KPMG in London.

Adam's current role is primarily one of portfolio engagement, value creation and risk management. He works alongside portfolio management on initiatives that address the full spectrum of sustainability and corporate responsibility issues, including those relating to the environment, climate change, good governance, fair labour, health and safety.

Tony Juniper Sustainability and Environment Adviser

Tony Juniper is an independent sustainability and environment adviser who works as a senior associate with the Cambridge University Programme for Sustainability Leadership and the Prince of Wales' International Sustainability Unit. He advises international companies and speaks and writes on many aspects of sustainability.

The author of several books, including the award-winning *Parrots of the World, Spix's Macaw: The Race to Save the World's Rarest Bird* and *How Many Light Bulbs Does It Take To Change A Planet?*, Tony has co-authored, with HRH The Prince of Wales and Ian Skelly, the new book *Harmony.*

Tony began his career as an ornithologist working with Birdlife International. From 1990 he worked at Friends of the Earth and was the organisation's executive director from 2003 to 2008.

Chris Knight Forestry and Ecosystems Leader, PwC UK

Chris Knight has been a member of the PwC UK sustainability and climate change team since 2004, and leads PwC's work on forestry (including REDD), ecosystems and biodiversity. He also leads the organisation's global ecosystems and biodiversity network, and has in-country project experience in 20 countries. He is a trained environmental scientist and represents PwC on several international REDD and conservation finance working groups, including the World Economic Forum's global agenda council on biodiversity loss.

With 12 years' experience across a range of industry sectors and a particular specialism in biodiversity, finance and sustainable forestry, Chris coordinates PwC's work on valuing and accounting for biodiversity and ecosystems, including the organisation's contribution to the TEEB Report for Business.

Kirsty Schneeberger, MBE

Kirsty Schneeberger was honoured as an MBE in the Queen's Birthday Honours list this year for services to environmental conservation and her work as coordinator of the UK Youth Climate Coalition.

She has been involved in the UNFCCC negotiations as a policy analyst and youth advocate for the Youth Constituency since the Poznań COP in 2008, and she led the UK youth delegation to the 2009 COP in Copenhagen. During the opening plenary of the interim negotiations at Bonn in 2009, she offered an intervention on behalf of civil society, in which she called for a coherent integration of intergenerational equity in the negotiation process, and launched the How old will you be in 2050? campaign.

More recently, Kirsty has joined the board of directors for the International Court for the Environment Coalition and is coordinating the Department of Energy and Climate Change's Youth Advisory Panel.

Panel 3 Banking and Financial Challenges

Paul Turner Head of Sustainable Development, Lloyds Banking Group

Paul Turner is the head of sustainable development for Lloyds Banking Group's wholesale division. For most of his career, he has worked in structured finance in the project finance, property, transportation and utility sectors, where his last role was as managing director of Lloyds TSB's global transportation finance businesses. Paul now focuses on the business impacts of sustainable development, including climate change, and his responsibilities involve working directly with the bank's corporate customers and supporting the relationship management and business development teams on this complex topic, training and risk management.

Paul is an active member of the UK Corporate Leaders Group in Climate Change and the Business in the Community Environment leadership team. In addition, he sits on the bank's corporate responsibility and the environment steering groups. He is also a trustee of the environmental charity Global Action Plan, which runs corporate and community engagement programmes.

Paul has a master's degree in sustainable business from Cambridge University, UK, and is a graduate of the Harvard Business School advanced management programme and the One Planet leaders' programme. He is a tutor with the Cambridge University programme for sustainability leadership and a regular speaker on the Henley Business School advanced management programme.

Mark Avery Director of Conservation, RSPB

Mark Avery is a scientist by training and a naturalist by inclination. He has worked for the RSPB since 1986. Since 1998, he has been director of conservation with responsibility for the RSPB's conservation policy and advocacy, research and acquisition of nature reserves. He is a member of the Rural Climate Change Forum, the UK Standing Committee on Biodiversity and the Water Framework Directive National Liaison Panel for England, and was a member of a government group looking at the environmental consequences of genetically modified crops.

Emma Howard Boyd Head of Socially Responsible Investment and Governance, Director, Jupiter Asset Management

Emma Howard joined Jupiter in 1994 and has overall responsibility for the management and development of the company's sustainable and responsible investment business. She is also responsible for building Jupiter's corporate governance and engagement services for institutional clients and for the company's UK retail funds.

Emma is an independent non-executive member of the Environment Agency Board, a senior associate of the University of Cambridge's programme for sustainability leadership and a director of Triodos Renewables.

During 2007, Emma was a member of the Commission on Environmental Markets and Economic Performance, which was set up by the UK government to make detailed proposals specifically for enhancing the UK's environmental industries, technologies and markets. Emma was chair of UKSIF, the sustainable investment and finance association, until March 2006, when she retired from the board after eight years' service.

Jon Williams Lead Partner, Financial Services Advisory, Sustainability and Climate Change, PwC

Jon Williams joined PwC in September 2008 as a partner focusing on financial services and climate change and carbon markets. He is responsible for leading the financial services sector team.

Previously, Jon worked for HSBC for 21 years in a variety of banking roles in Europe and Asia, most recently as head of group sustainable development. Under Jon's leadership, HSBC became a leader in sustainability risk management, business and product development, and communication and reporting. He developed and implemented HSBC's sustainability risk strategy to mainstream environmental and social risk management techniques across the group. He was also responsible for developing HSBC's sustainable business strategy, which focuses on lending and investments related to climate change, low-carbon energy, water infrastructure, forestry and microfinance.

Jon chairs the Carbon Markets & Investors Association low-carbon technology working group, and currently sits on the United Nations Environment Programme finance initiative climate change working group, the Forum for the Future Climate finance advisory board, the BVCA sustainability advisory board, the Ecosystem Marketplace advisory board and the UK Government Trade & Investment environmental sector advisory group. He is also a member of the World Economic Forum low-carbon prosperity taskforce, which has recommended low-carbon technology funding structures to the G20. He previously chaired the Equator Principles, the global benchmark for banks to manage social and environmental issues in project finance, and the Climate Principles.

Panel 4 Insurance Challenges

Sunny Sehgal Senior Manager, Sustainable Insurance, HSBC

Since 2004, Sunny Sehgal has led the development of sustainable insurance in HSBC. His work aims to embed sustainability into core business processes with clear commercial goals. This has led to successful product launches across Latin America, Asia Pacific and the UK. Sunny is part of the climate business team in HSBC and the development team behind the United Nations Environment Programme finance initiative principles for sustainable insurance. Before joining HSBC, Sunny worked as a consultant specialising in due diligence and environmental liability for global corporates and financial institutions

Truska Angel Head of Climate Change and Sustainability, AXA Insurance

Truska Angel is a leading voice in corporate responsibility. As AXA Insurance's head of corporate responsibility and climate change, she has developed strategic programmes for the business. Truska has been instrumental in influencing change across the financial services industry, including authoring the Association of British Insurers' A Guide to Communicating Climate Change for Insurers.

She is a popular speaker on climate change issues, including panel appearances at party political conferences, the Climate Change Summit and the London Market Forum.

Truska is a board member of ClimateWise and the EU/UK Cambridge Programme for Sustainability Leadership corporate leaders group, sits on the advisory board of the Every Child a Reader trust and is a member of the Institute of Directors.

Deanna Donovan Environmental Economics Adviser, Joint Nature Conservation Committee

With extensive experience in Europe, Asia, and the Americas, Deanna is currently the environmental economist at the Joint Nature Conservation Committee, the statutory adviser to the UK government on national and international issues of biodiversity and nature conservation on behalf of the four UK country agencies. She advises on key issues related to biodiversity and nature conservation, including valuation, ecosystem services, sustainable development and REDD. Deanna's previous experience includes work on water, forest resources and international trade for UNESCO, the US Forest Service, the Asian Development Bank and USAID. She has more than 60 publications and papers to her name.

Cliff Warman Environmental Practice Leader, Marsh Insurance

Cliff Warman is the Marsh Insurance environmental practice leader for Europe, the Middle East and Africa, and is a senior risk adviser to multinational clients and has responsibility for technical leadership on projects involving the assessment and management of key environmental risks. He is involved in developing environmental risk advisory services and insurance products for climate-change related risks.

Cliff has over 15 years' experience in assessing and managing environmental risks in operational business. Having previously worked as an environmental engineer, an environmental consultant and a management consultant, he can provide pragmatic, business-focused advice on the risks and costs associated with all aspects of environmental risk management.

Cliff has specialised in the quantification and management of key environmental risks in the context of large corporate mergers and acquisitions, and has previously worked on environmental due diligence projects for target businesses in the oil and gas, waste, manufacturing and power generation sectors. He has a PhD in ecotoxicology and is a trained environmental auditor.

Astrid Zwick Head of Department, Corporate Responsibility, Munich Re

Astrid Zwick has been head of department corporate responsibility of the Munich Re Group since September 2010. Previously (2000–2010), she was head of the Allianz Group sustainability office with responsibility for developing and implementing the company's strategy for sustainable development.

From 2005 to 2008, she was chair of the strategy and steering team sustainability research programme of the German Ministry of Education and Research.

From 1994 to 2000, Astrid worked at the Institute for Technological Prospective Studies of the Joint Research Center of the European Commission in Seville, Spain. Here, her responsibilities included being in charge of policy advice on the analysis of political, technological and economic options for the reduction of greenhouse gases on the mandate of the European Parliament and the European Commission.

Astrid has a PhD on the impact of climate change on ecosystems from the Institute for Ecological Chemistry, German Joint Research Center for Environment and Health, Munich, and a degree in geology and palaeontology from Ludwig Maximilian University, Munich.

Panel 5 Legal Challenges

Steven McNab Partner, Environment and Climate Change, Simmons & Simmons

Steven McNab is head of the environment and climate change practice at Simmons & Simmons. He is passionate about the areas where his practice meets the firm's corporate responsibility agenda: primarily those around harnessing collaborative networks to deliver carbon reductions and environmental benefits. He has extensively lectured and written on his specialist areas.

Steven is a founder and trustee of Carbon Leapfrog, an award-winning climate change charity that pushes the boundaries for collaborative pro bono/corporate responsibility work. He is in the Lawyer magazine's "Hot 100" 2010 for contribution to sustainability, was one of the UK Attorney General's Pro Bono Champions for 2009, and is an active member of the UK Environmental Law Association. He is consistently ranked in the key UK legal guides. He was listed as being in the top dozen lawyers nationwide for environmental law in the *Chambers Guide to the UK Legal Profession*, 2011, where he is one of the few lawyers also ranked for planning expertise.

Vanessa Havard-Williams Partner, Environment and Climate Change Practice, Linklaters

Vanessa Harvard-Williams is a Linklaters partner and head of its environment and climate change practice. She acts for a wide range of energy and financial sector clients across various sectors. Her practice encompasses climate change, ethical investment and sustainability issues, and includes providing transactional and contentious environmental advice. Vanessa is an expert on the management of environmental and social risk in large-scale projects. She has advised the association of Equator banks but also acts on the sponsor side of large project financings. She has also advised on a wide range of matters relating to environmental litigation, director and officer liability, piercing the corporate veil, and structures to ring-fence group members from health, safety and environmental liabilities.

Daniel Owen Barrister, Fenners Chambers

Daniel Owen is a barrister at Fenners Chambers in Cambridge, UK. For the past 10 years, he has specialised in UK, European Union and international law regulating the use of the marine environment. His practice covers environmental protection and the conduct of marine activities more generally. Over the years, Daniel has advised clients on the legal aspects of many sea uses, whether static, like offshore wind farms, or mobile, like many fishing activities. Daniel's new book on the EU's common fisheries policy, co-authored with Robin Churchill, was published by Oxford University Press in March 2010.

Stephen Tromans QC Barrister, 39 Essex Street

Barrister Stephen Tromans is an adviser and advocate to industry, government and non-governmental organisations on all aspects of environmental, energy and planning law. He is the author of various books, including *Nuclear Law* (2010), *Contaminated Land* (2009) and *Environmental Impact Assessment* (2003).

Stephen is the chair of the Environmental Law Foundation, the co-founder and former chair of the UK Environmental Law Association, and a former council member of English Nature (1996–2002).

Panel 6 Environment Challenges

Chris Stephens Director, GLOBE International Commission on Land Use Change and Ecosystems

Chris Stephens has coordinated the work of the GLOBE International Commission on Land Use Change and Ecosystems since early 2009. The commission brings together legislators from developed and developing countries with scientific and economic experts in order to develop progressive environmental policies.

Before joining the GLOBE International Secretariat, Chris worked for IDEAcarbon, where he was a senior analyst specialising in risk analysis of emission reduction projects. He has also worked as a civil and structural engineer with Atkins Global after receiving a first-class master's degree in engineering science from the University of Oxford, UK.

Chris is a member of the Appeals Committee for Tusk Trust, a UK-based African conservation charity. In 2008, Chris helped raise over £150,000 for community-based conservation projects during an 8000 km cycling expedition across sub-Saharan Africa.

Victoria Chester Chief Executive, Plantlife International

Since May 2006, Victoria Chester has been chief executive of Plantlife International, the wild plant conservation charity. She is also a trustee of Wildlife and Countryside Link (England).

After graduating from Williams College, Massachusetts, USA, and undertaking a stint as a paralegal, Victoria completed BA and master's degrees in law at Lucy Cavendish College, Cambridge, UK. From 1989 to 1995, she worked as a commercial lawyer in the USA with Davis Polk and Wardwell, and in the UK with Blake Lapthorn. Victoria moved into voluntary sector management in 1996 with the Grubb Institute of Behavioural Studies, which was followed by roles as the chief executive with the Hampshire and Yorkshire Wildlife Trusts.

Ian Jardine Chief Executive, Scottish Natural Heritage

lan is the chief executive of Scottish Natural Heritage. He has a degree in ecology and a doctorate in zoology. Ian worked for the Scottish Government between 1984 and 1991. He joined the Nature Conservancy Council for Scotland in 1991 as regional director for the northeast, continuing in that role with the formation of Scottish Natural Heritage in 1992. In 1997, Ian became director for east areas and was appointed chief executive in 2002.

From 2007 to 2010, Ian was the president of Eurosite. He is a member of European nature conservation agencies and a former member of IUCN's World Protected Areas Leadership Forum.

Martin Spray Chief Executive, Wildfowl & Wetlands Trust

Martin Spray has been chief executive of the Wildfowl & Wetlands Trust (WWT) since 2004. He is also chairman of the Marine Conservation Society.

After studying for a degree in zoology, Martin spent the early part of his career in government, predominantly in the Science and Engineering Research Council, with a brief secondment to HM Treasury. An interest in working in conservation led to his joining WWF UK as area manager for London and the South East. From there, he became the first chief executive of the Berkshire, Buckinghamshire & Oxfordshire Wildlife Trust. Martin then spent a year on secondment as acting chief executive of the Royal Society of Wildlife Trusts before moving to WWT.

He is currently a trustee of the Veolia Environmental Trust and a member of the BBC Wildlife Fund Advisory Committee. Martin's previous activities have included being chair of the North Wessex Downs AONB, a founder trustee of Pond Conservation, a member of IUCN UK Executive Committee and an Environment Agency REPAC member.

James Vause Environmental Economist, Department for the Environment, Food and Rural Affairs

James Vause has been an environmental economist in government for nine years and has worked on issues ranging from waste to avoided deforestation. Since December 2008, he has been working on the economics of biodiversity and nature conservation in the Department for the Environment, Food and Rural Affairs. As part of this role, he is a member of the TEEB funders coordination group.

Evan Williams Principal Consultant and Economist, AEA Consulting

Evan Williams joined AEA Consulting in January 2010. He is an experienced economist with a strong background in environmental regulation, climate change and sustainable development. Evan brings analytical and delivery skills to projects in the public and private sectors. He has a particular interest in translating technical analysis into practical actions to achieve outcomes for clients. Evan has first-class presentation and communication skills, and is frequently called on to present to conferences and events.

In recent years, Evan has worked with high-profile clients such as Al Gore's Climate Project, Lloyds Banking Group and BAA, and local authorities and government departments and agencies. His work focuses on delivering effective responses to environmental and organisational challenges around climate change and sustainable development.

Evan is chair of the Scottish Sustainable Development Forum and a visiting fellow and honorary lecturer at the University of Strathclyde's David Livingstone Centre for Sustainability. He is also a member of the editorial boards of *Business Strategy and the Environment, and Corporate Social Responsibility and Environmental Management*. His book *Economic Appraisal of Environmental Regulation* was published in 2008.

