



Program





Climate Change and Impact Assessment

Special Symposium

Washington, D.C.

November 15-16, 2010



Symposium Host





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Welcome

It is a pleasure to welcome all of you to Washington DC and to the Special Symposium on Climate Change and Impact Assessment. The Symposium brings together experts in climate change and impact assessment professionals for a two-day exchange designed to foster mutual collaboration. It will engage all of us in thought-provoking discussions of the latest studies and projects linking impact assessment and climate change, and of ways to advance collaborative work in this increasingly important area.

Some of the questions to which we are all seeking answers and which the Symposium is addressing include:

- What effects will climate change have on the feasibility, viability and longterm sustainability of policies, plans, programs or projects?
- Will climate change exacerbate the impacts of a project?
- To what degree does a project, program, policy or intervention promote reduction of greenhouse gas (GHG) emissions?
- How can flexibility in responding to the impacts of climate change be assured through impact assessment?
- How can impact assessment apply climate change projections to site-specific projects?
- What tools does impact assessment offer for understanding, assessing risk and responding to climate change?

During the Symposium, experts will address these critical questions, and we hope that together we can identify areas where there is consensus and areas where additional work is still required. We encourage all of you to participate and engage in the discussions as we seek to identify the way forward to address them more fully.

The Symposium Chair, Will Knowland (Co-chair of the IAIA Washington Area Branch); the Co-Chair, Weston Fisher (Board Member of IAIA); and members of the Program Committee have worked hard to organize a relevant and interesting program that further strengthens the role of climate change in impact assessment as well as the climate change component of planning and policy-making.

The enclosed program outlines the range of topics that the Special Symposium offers. We are honored to have Professor Robert Watson, former Chair of the Intergovernmental Panel on Climate Change (1997-2002), as the keynote speaker, addressing "The State of Climate Science, The Role of Impact Assessment." The Symposium offers three tracks in concurrent sessions:

- Track A focuses on Emerging Standards and Guidance for Assessment of Climate Change Impacts;
- Track B focuses on Applying Impact Assessment to Private and Public Decision-Making; and
- Track C focuses on Environmental Impact Assessment Practice: Assessing Risk and Vulnerability to Climate Change.

The long coffee breaks and the Monday evening reception offer opportunities to network with colleagues. We encourage you to take advantage of them to further share ideas.

With our warmest regards, welcome to all of you!

Jonathan Allotey EPA, Ghana IAIA President Stephen F. Lintner World Bank

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Conference Venue

The World Bank Main Complex (MC Building)
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Keynote Address



Professor Watson's career has evolved from research scientist at the Jet Propulsion Laboratory: California Institute of Technology, to a US Federal Government program manager/director at the National Aeronautics and Space Administration (NASA), to a scientific/policy advisor in the US Office of Science and Technology Policy (OSTP), White House, to a scientific advisor, manager and chief scientist at the World Bank, to a Chair of Environmental Sciences at the University of East Anglia, the Director for Strategic Direction for the Tyndall centre, and Chief Scientific Advisor to the UK Department of Environment, Food and Rural Affairs. In parallel to his formal positions he has chaired, co-chaired or directed international scientific, technical and economic assessments of stratospheric ozone depletion, biodiversity/ecosystems (the GBA and MA), climate change (IPCC) and agricultural S&T (IAASTD). Professor Watson's areas of expertise include managing and coordinating national and international environmental programs, research programs and assessments; establishing science and environmental policies - specifically advising governments and civil society on the policy implications of scientific information and policy options for action; and communicating scientific, technical and economic information to policymakers. During the last twenty years he has received numerous national and international awards recognizing his contributions to science and the science-policy interface, including in 2003 - Honorary "Companion of the Order of Saint Michael and Saint George" from the United Kingdom.

Monday, November 15 | 9:00^{AM} | Preston Auditorium

The State of Climate Science, The Role of Impact Assessment

Robert Watson Professor

Department for Environment, Food and Rural Affairs, University of East Anglia (UK)

Climate change cannot be considered in isolation of other global and regional environmental issues such as loss of biodiversity, degradation of ecosystem services and local and regional air, water and land pollution. The impacts of climate change are predominantly negative, primarily affecting developing countries and poor people.

Human-induced climate change should be viewed as a risk management issue. The most effective strategy to address climate change is through a long-term, equitable global mitigation strategy involving all major emitters of greenhouse gases, but even with the most aggressive efforts to limit the magnitude of climate change, adaptation strategies will have to be developed for socio-economic sectors, ecological systems and human health.

While governments of the world have committed themselves to limit humaninduced climate change to no more than 2 degrees Celsius above pre-industrial levels, the lack of action as evidenced by the continuing increase in greenhouse gas emissions means it is more likely that the world will experience an increase of 3-4 degrees Celsius or more. Mitigating climate change will require technological innovation, putting a price on carbon and behavioural change.

The impacts of climate change need to be assessed using the methods and tools of Impact Assessment (IA), Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) and the science of climate change, specifically using probability-based regional climate projections that recognize the inherent uncertainties of prediction. Adaptation strategies will require integrating climate change considerations into sectoral and national economic development strategies, in the context of technological, behavioral, physical and financial limitations.

Human-induced climate change can be addressed but business-as-usual will not work and political and moral leadership is required.

Daily Agenda

Monday 15th November

8:00 Registration and Continental Breakfast (MC Building Front Lobby)

9:00 Opening and Keynote Address

- Organizers' Welcome with Remarks and Housekeeping
- Host's Welcome and Introduction of Keynote Speaker
- Keynote Address: The State of Climate Science, The Role of Impact Assessment

10:15 Coffee Break

11:00 Plenary I - Impact Assessment and Climate Change: What Can We Learn from Each Other?

- Part 1: Aalborg in Brief Videolink Report on the October Meeting
- Part 2: Panel on Climate Change and Impact Assessment

1:00 Lunch (MC Building Front Lobby)

2:00 Concurrent Sessions I

(A) Multilateral Development Banks: Emerging Standards and New Guidance for EIA

- Strategic Implications of Climate Change for Institutional Investors
- European Investment Bank (EIB)
- World Bank
- European Bank for Reconstruction and Development (EBRD)
- Asian Development Bank (ADB)
- Inter-American Development Bank (IDB)

(B) OECD DAC Panel on Strategic Environmental Assessment and Climate Change

- Climate Change and Adaptation Mainstreaming
- The Aalborg Lessons: Available Guidance and Practice in Using SEA for Climate Issues in Developing Countries
- Climate Change Policy Making and SEA in Indonesia
- Adaptation Tools in an SEA in Mali
- SEA, Disaster Risk Management and Climate Change in Malawi

(C) Tools, Methods and Information Resources (Part 1)

- Addressing Climate Change Uncertainties in Project EIA
- Climate Change and Ecosystem Services
- Geographic Information Systems (GIS)
- World Bank Group Climate Change Portal
- Lessons from and for Evaluation

3:15 Coffee Break

3:45 Concurrent Sessions II

(A) National Governments: Climate Change and EIA - North America

- US Climate Change and National Environmental Policy Act
- Canada Climate Change and Environmental Assessment
- Proposed Climate Change Law in Mexico

(B) Insuring Against Climate Change

(C) Tools, Methods and Information Resources (Part 2)

- EIA of Coal-Fired Power Plants
- EIA of Low-Income Housing Sector in Mexico
- Environmental Flows in Water Resources Policies, Plans and Projects
- Climate Risks and Adaptation in Asian Coastal Mega-Cities

5:15 First Day's Summary and Review

6:00 Reception (MC Building Front Lobby)

Tuesday 16th November

8:00 Continental Breakfast (MC Building Front Lobby)

8:30 Announcements

8:45 Plenary II: EIA, Climate Change and the Private

- The Human Response to Climate Change: Reflections on the Big Picture
- Hydro-Québec's Experience in Adapting to Climate Change
- MacKenzie Valley Gas Pipeline -Sustainability Assessment
- Climate Change Adaptation Decisions in the Private Sector - The Role of EIA

10:15 Coffee Break

10:45 Concurrent Sessions III

(A) National Governments: Climate Change and EIA - Beyond North America

 Incorporating Climate Change Impacts and Adaptation in EIA: Opportunities and Challenges

(B) EIA as an Input to Climate Change Adaptation Planning

- National Policy Frameworks on Adaptation: A Survey
- Participatory Climate Vulnerability Asssessment
- Practical Measures for Adapting Infrastructure to Climate Impacts
- A Review of the Use of Climate Change Mitigation and Adaptation Measures in EIA in Western Australia

(C) Disaster Management, Rapid Environmental Assessment Response and Climate Change

- Impact of Climate Variability and Change on Vulnerable Populations
- WWF Experience on Disaster Management and Climate Change

12:15 Lunch (MC Building Front Lobby)

1:15 Concurrent Sessions IV

(A) Bilateral Donors: New Guidance for

- Overseas Private Investment Corporation: Greenhouse Gas Policy
- Export-Import Bank: New Requirements for High Carbon Intensity Projects
- Millennium Challenge Corporation: Challenges and Opportunities

(B) Special Topics in EIA and Climate Change Decision-Making

- Health Impact Assessment in Climate Change Decision-Making
- Assessing Displacement/Resettlement Due to Climate Change Adaptation Projects
- Biodiversity Assessment and Climate Change

(C) SEA and Cumulative Impacts: Case Studies

- Cumulative Impact Assessment
- SEA Approaches in the Environmental Sustainability and Climate Change Program: Case of the State of Michoucan, Mexico
- Climate Change and Country Environmental Analysis: Case of Indonesia
- An Innovative Approach to Preparing a Sub-National Climate Change Action Plan: Case of Orissa State, India

2:45 Coffee Break

3:15 Second Day's Summary and Review

4:30 Discussion and Next Steps

Stephen Lintner will lead a summary discussion with the aim of building on the work of the Symposium to identify next steps. The essence of this Special Symposium is the convening of two complementary communities - climate change professionals and impact assessment practitioners – to share experience and insights from their respective specialties. Collectively, there may be interest and opportunities for further collaborations. Individually, participants will come away with a clearer understanding of how to approach their ongoing work.

6:00 Symposium Ends

11:00^{AM} | Preston Auditorium

Plenary I

IA and Climate Change: What Can We Learn from Each Other?

Part 1: Aalborg in Brief – Videolink Report on the October Meeting

Lone Kørnøv and Martin Lehmann Aalborg University, Denmark

Part 2: Panel on Climate Change and Impact Assessment

Chair: Courtney Lowrance, Citibank

This panel will address the state of laws and regulations regarding climate change, the approach of the Equator Banks to funding private sector projects and the potential contributions of IA and SEA to climate change adaptation and mitigation.

Current State of the Law on Impact Assessment and Climate Change

Michael Gerrard Columbia Law School

This talk will summarize the current state of the law on impact assessment and climate change in the United States (US), in other countries and under global agreements. The relevant federal and state regulations and ensuing litigation will be covered. Based on this, legal guidance for impact assessment professionals will be discussed.

IA in Climate Change Mitigation and Adaptation

Courtney Lowrance Citibank

This talk will focus on the approach of Equator Banks to climate change IA including: how banks are addressing climate change from mitigation to adaptation, climate change and risk management from an Equator Principles perspective, and climate change risk in project finance.

Role, Value and Application of IA and SEA to Climate Change Adaptation and Mitigation

Peter Croal

Canadian International Development Agency (CIDA)

This talk will provide some insights on the role, value and application of IA and SEA to climate change adaptation and mitigation drawing on the lessons and experience of the Panel on SEA and Climate Change of the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC).

2:00^{PM}

Concurrent Sessions I

(A) Multilateral Development Banks: Emerging Standards and New Guidance for Environmental Impact Assessment

Preston Auditorium

Chair: Elizabeth Brito, Inter-American Development Bank (IDB)

Multilateral Development Banks are incorporating climate change risks and impacts in their corporate strategies and their due diligence procedures. This session will focus on emerging standards and guidance for IA needed to incorporate the potential effects of climate change. The session will open with a presentation on the strategic implications of climate change for institutional investors by Alan Miller. This will be followed up by brief presentations from the European Investment Bank (EIB), the World Bank, the European Bank for Reconstruction and Development (EBRD), the Asian Development Bank (ADB) and the IDB to showcase emerging standards and guidance for EIA adopted or under consideration by these organizations.

Strategic Implications of Climate Change for **Institutional Investors**

Alan Miller International Finance Corporation (IFC)

Long-term asset managers of pension funds and other institutional investors collectively administer many trillions of dollars. Until recently, they have largely not been active participants in discussions of climate finance and climate risk. This is gradually beginning to change as reflected in initiatives by international financial institutions and a sub-set of institutional investors looking at both climatefriendly investment opportunities and climate risk management. This talk will discuss the strategic implications of climate change for institutional investors.

Brief Presentations by Representatives of the Multilateral Development Banks

Eva Maria Mayerhofer, EIB Michele de Nevers, World Bank Alistair Clark, EBRD Nessim Ahmad, ADB Janine Ferreti, IDB

(B) OECD DAC Panel on **SEA** and Climate Change

I Theater

Chair: Peter Croal, CIDA Co-chair: Barry Dalal-Clayton, International Institute for Environment and Development (IIED)

This session will showcase recent international work on SEA and climate change in development cooperation undertaken by the OECD DAC Environet SEA Task Team. The panel will focus on how SEA can be used in climate change adaptation planning in developing countries, with a particular emphasis on how tools developed by the SEA Task Team can be used and improved. The panel will seek recommendations from the participants on how ongoing work can be shaped for more effective use of SEA in development cooperation programming.

Climate Change and Adaptation Mainstreaming

Jess Ayers HED

This presentation focuses on the use of SEAs in addressing some of the challenges presented by adaptation planning and mainstreaming. In particular, this presentation considers what can be learned from SEAs for achieving an integrated approach to evidenced-based and participatory planning, and balancing domestic needs with external accountability.

The Aalborg Lessons: Available Guidance and Practice in Using SEA for Climate Issues in Developing Countries

Rob Verheem

Environment Impact Assessment Commission, The Netherlands

The Netherlands has had several years of using EIA/SEA for climate change mitigation and adaptation. This presentation will discuss the key lessons learned and present a 3-step approach to obtain information for informed decision-making. EIA/SEA mechanisms for dialogue and enforcement are equally important to make this information influential.

Climate Change Policy Making and SEA in Indonesia

Tomonori Sudo

Japan International Cooperation Agency (JICA)

SEA is being currently applied to identify appropriate policies on climate change within the framework of national development strategies. This presentation will focus on how SEA can be used as a tool to identify and develop climate change policies, based on the national development policies/strategies of Indonesia.

Adaptation Tools in an SEA in Mali

Bernhard Frey German Development Cooperation (GTZ)

The GTZ supported the implementation of an SEA within the National Program for Small-scale Irrigation (PNIP) in Mali. In considering the challenges of climate change and supporting the development of appropriate measures within the PNIP, an instrument called "Climate Proofing for Development" was developed. This is a flexible and comprehensive tool that can be easily integrated into the SEA.

SEA, Disaster Risk Management and Climate Change in Malawi

Peter Nelson Land Use Consultants

This presentation will summarize key conclusions of the SEA conducted for the Shire River Basin in Malawi and will describe what is needed to integrate a wide range of policies, plans and programs - instituted by the central government, the international community and others - related to economic development, climate change adaptation, disaster risk management and watershed management.

(C) Tools, Methods and Information Resources (Part 1)

Preston Lounge

Chair: Josephina Doumbia, IFC

During recent years, both development agencies and the private sector have been creating practical tools, methods and information resources for incorporating considerations of climate change impacts, mitigation and adaptation into the formulation of programs, plans and projects. In this session, a series of practical examples on the use of recently developed tools, methods and information resources from around the world will be presented.

Addressing Climate Change Uncertainties in Project EIA

Phil Byer University of Toronto

This presentation will discuss the methodology needed to understand the implications of uncertainties concerning the degree of future climate change on project design. It then analyzes the various criteria and approaches used to decide how the project should be planned, when adapting to uncertain climate change.

Climate Change and Ecosystem Services: Bridging the Gap Between Science and On-the-Ground Decision-Making

Evan Girvetz

The Nature Conservancy Global Climate Change Program

Climate change threatens to impact people and the ecosystem services they depend upon. The speaker will present a framework and provide specific examples of tools for assessing the impact of climate change on ecosystem services, including river flows, grassland forage and coastal protection.

Geographic Information Systems (GIS)

Jon Harrison

Esri

Climate change, adaptation and sustainability are complex processes. Our responses are occurring at global, national and sub-national levels. This presentation showcases a sampling of ways in which GIS is being used in each level of response to integrate and apply diverse data sets while achieving actionable results.

World Bank Climate Change Portal

Fernanda Zermoglio, World Bank Ana Bucher, World Bank Vladimir Stenek, IFC

The presentation will feature the Climate Change Knowledge Portal, developed jointly by the World Bank and the IFC. The tool integrates the best available climate and climate-related information relevant for decision-making of different user groups; and facilitates learning, sharing and evaluation of different risks and impacts from a changing climate.

Lessons From and For Evaluation

Kenneth Chomitz World Bank

The presentation will discuss the findings of a major new study from the Independent Evaluation Group (IEG) that assesses the World Bank Group's activities related to climate change mitigation. Reviewing what has worked and what hasn't, the study identifies specific measures that offer attractive local benefits while mitigating climate change, within five areas of action: energy efficiency; forest protection; project finance; technology transfer; and accelerated learning.

3:45^{PM}

Concurrent Sessions II

(A) National Governments: Climate Change and EIA - North America

Preston Auditorium

Chair: Michael Gerrard, Columbia Law School

Although EIA has been part of project development in North America for several decades, the integration of climate change considerations is more recent. The session will examine how the governments of the US, Canada and Mexico are addressing the inclusion of the climate change component into national impact assessment procedures.

US Climate Change and National Environmental Policy Act (NEPA)

Michael Smith **ICF** International

Proposals for more formally integrating climate change considerations into NEPA analyses conducted by US federal agencies date back over a decade, but to date no finalized regulations or guidance have been enacted. This presentation will discuss the rising activity surrounding the issue, including the release earlier this year of a draft guidance document by the White House Council on Environmental Quality (CEQ). The main elements contained in the draft guidance will be discussed and some examples of recent climate change analyses from federal agency NEPA projects will be highlighted.

Canada Climate Change and Environmental Assessment

Dean Stinson O'Gorman Canadian Environmental Assessment Agency (CEAA)

The presentation will provide a brief exploration of the role of climate change considerations in the federal environmental assessment process in Canada. Areas to be discussed include: what guidance exists, how has it been used and potential directions for improvement

Proposed Climate Change Law in Mexico

Luis Vera Vera & Carvajal

At the end of November, Mexico will be hosting in Cancun the United Nations Climate Change Conference, which encompasses the sixteenth Conference of the Parties (COP) and the sixth Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP). However, Mexico's legislative debate over the adoption of renewed climate change policies is at a crossroad. While the Senate wants a general framework, the House and the Executive Branch have been pushing for amendments of the existing laws. To date neither position has succeeded. The speaker will discuss the potential impacts on the design of environmental policy instruments and on investments based on a close look at the ongoing process.

(B) Insurance and Climate Change

Chair: Rowan Douglas, Willis Re

The international insurance and reinsurance sector enables populations, at local and global scales, to share the costs of extreme events. It has evaluated the likely impacts of climate change on the built environment, communities and legal liabilities for many years and this is increasing. More recently, the industry has developed climaterelated products to augment its traditional policies and extend its role to protect populations in developing and emerging economies. This session will introduce these themes and provide a basis for exploring collaboration between insurance and impact assessment institutions.

- An evolving regulatory environment provides a key driver for re/insurers' interest in climate change. In many parts of the world insurance contracts and the companies that underwrite them are expected to withstand the maximum probable loss expected once in every 200 years (the 1 in 200 year return period). Extreme weather and natural catastrophes represent a major driver of risk at this level.
- Re/insurers are concerned to understand the current level of climate variability and the potential frequency and severity of extreme events today, as well as in the future. A dynamic climate and limited historical records require re/insurers to embrace advanced climate modeling to understand the potential distribution of extreme climate events.
- Understanding the hazard is only the first part of the story. The industry assesses the exposure and the vulnerability of different buildings and human systems to weather events. This engineering research helps buildings to become more resilient and enables estimates of potential losses to be developed.
- Upon this foundation of modeling, the sector develops solutions to reduce and transfer the financial and legal risks that climate-related perils bring to individuals, projects, corporations and governments.

Panelists

Debra Ballen, General Counsel & SVP Public Policy, Institute of Building & Home Safety

Lindene E. Patton, Chief Climate Product Officer, Zurich Financial

Francis Ghesquiere, Lead Disaster Risk Management Specialist, The World Bank

Chris Johnson, SVP Marketing & Enterprise Learning, FM Global

Rick Hawkinberry, Senior Vice President, Willis Environmental Practice

(C) Tools, Methods and Information Resources (Part 2)

Preston Lounge

Chair: Richenda Connell, Acclimatise

During recent years, both development agencies and the private sectors have been developing practical tools, methods and information resources for incorporating considerations of climate change impacts, mitigation and adaptation into the formulation of programs, plans and projects. In this session, additional practical examples on the use of recently developed tools, methods and information resources from around the world will be presented.

EIA of Coal-Fired Power Plants

Emmanuel Boulet IDB

GHGs are generally not addressed in coal-fired power plants, because EIAs, as national legal and regulatory frameworks, are yet to be developed, particularly in developing countries. This presentation will showcase the IDB's recently-published guidelines to incorporate such climate change impacts on the basis of minimum performance criteria.

EIA of Low-Income Housing Sector in Mexico

Tobias Contreras Vinte Viviendas Integrales, Mexico

Vinte is sharing how it is possible to build sustainable low-income housing even during tough financial times. In a climate where more than half of the Mexican home builders went out of business, Vinte succeeded and surpassed the competition. How so? Vinte believes and applies these two key concepts among others: (a) integral and sustainable urban design, and (b) energy efficient homes to make its product to be an eco-friendly and economically high efficient home. The presentation will offer a holistic approach to solving social and climate change related problems; imagine: low-income houses which reduce the carbon footprint by optimizing design, energy consumption and overall environmental footprint.

Environmental Flows in Water Resources Policies, Plans and Projects

Rafik Hirji World Bank

Environmental flows are central to sustainable water resources development, poverty alleviation and climate smart water resources planning, design and operations (adaptation) decisions. This presentation will cover the findings of a 2009 World Bank Report to advance the understanding of environmental water allocation into integrated water resources management.

Climate Risks and Adaptation in Asian Coastal Mega-Cities

Poonam Pillai World Bank

This presentation will summarize the approach, findings and lessons from a recently completed study on "Climate Risks and Adaptation in Asian Coastal Mega-Cities" undertaken jointly by the Asian Development Bank, the Japan International Cooperation Agency and the Work Bank. The study is based on case studies from Manila, Ho Chi Minh, Bangkok and Kolkata. Initiatives being undertaken by these cities to address current and future climate related risks will also be highlighted and the policy implications for addressing climate adaptation in other coastal cities will be discussed.

5:15^{PM} | Preston Auditorium

First Day's Summary and Review

Chair: Andrew Steer, World Bank

Panel of Session Chairs

Courtney Lowrance - Panel: Climate Change and Impact Assessment

Elizabeth Brito - Multilateral Development Banks: Emerging Standards and New Guidance for Environmental Impact Assessment

Peter Croal - OECD DAC Panel on Strategic Environmental Assessment and Climate Change

Josephina Doumbia - Tools, Methods and Information Resources (Part 1)

Michael Gerrard - National Governments: Climate Change and Impact Assessment - North America

Rowan Douglas - Insurance and Climate Change

Richenda Connell - Tools, Methods and Information Resources (Part 2)

With All Participants

6:00^{PM}

Reception

Reception will take place at the Main Complex Building Front Lobby and will be hosted by the Environmental Department of the World Bank and the Environment, Social and Governance Department of the International Finance Corporation.

8:45^{AM} | Preston Auditorium

Plenary I

EIA, Climate Change and the Private Sector

Chair: Craig Davies, EBRD

This session begins with a 'big picture' examination of human responses to climate change, including failings, lessons and options for how private sector approaches and public policy might evolve. It then provides practical examples of how EIA/SEA are being applied in the private sector and the use of the broader principles of sustainability assessment in climate change adaptation and mitigation. The session also examines how EIA fits into corporate decisions for large infrastructure projects seeking to ensure climate resilience, and looks at the critical issue of correct and early application of EIA processes during the project life cycle.

The Human Responses to Climate Change: Reflections on the Big Picture

Ralph Torrie **Torrie Smith Associates**

It has now been over twenty years since the international community acknowledged the threat climate change presents to energy and land use patterns of modern civilization. This presentation will review responses, explore the reasons they are failing and suggest scenarios for how public policy and business strategies may evolve, characterizing the decades ahead.

Hydro-Québec's Experience in Adapting to Climate Change

Ralph Silver Technik Eaucan, Inc.

This presentation will introduce the results of a recently completed evaluation carried out by Hydro-Québec to investigate the impacts of climate change on the hydrological regime of Québec's developed watersheds. The evaluation found that the annual water availability may increase, while the intra-annual inflow pattern could vary, to the extent that operating rules would have to be reassessed to optimize the electricity generated from power houses.

MacKenzie Valley Gas Pipeline – Sustainability Assessment

Steven Hazell Consultant and ex-President of Sierra Club of Canada

Sustainability assessment is emerging as an important approach to reducing greenhouse gas emissions to be generated in association with development projects subject to Canadian environmental assessment processes. The speaker will talk about a recent paper that discusses the leading application of sustainability assessment in Canada to date -- the Joint Panel Review for the US \$16 billion Mackenzie Gas Project concluded in December 2009-- and argues for broad implementation of sustainability assessment for development projects in Canada.

Climate Change Adaptation Decisions in the Private Sector - The Role of EIA

Richenda Connell Acclimatise

This presentation will discuss how decisions about large infrastructure projects are made by corporations, and where EIA fits into the process. While EIA is a useful instrument for examining the resilience of projects to climate change, it may not pick up all relevant risks and opportunities. Timing is also crucial - once critical design and engineering decisions have been made early in the project lifecycle, they often can not be revisited without causing costly delays.

 $10:45^{AM}$

Concurrent Sessions III

(A) National Governments: Climate Change and EIA - Beyond North America

Preston Auditorium

Chair: Ronald Hoffer, World Bank

Some national governments have started to incorporate climate change risks and impacts in their due diligence procedures. This session will provide an overview of emerging methodologies, tools and standards for EIA adopted or under consideration by national governments. The first speaker will provide a comprehensive overview of current and ongoing efforts by national governments (and development agencies) to incorporate considerations of climate change impacts and adaptation into project design. The first discussant will reflect on incorporating climate change into EIA of water projects in the UK, with an emphasis on water supply and floods. The second discussant will reflect on key lessons learned on climate change and EIA in the Netherlands, including highlights on the Netherlands' approach to EIA and climate change in international development. The third discussant will reflect on incorporating climate change considerations into the agriculture and water sectors in Australia. The last discussant will reflect on practical strategies for improving national implementation of climate requirements.

Incorporating Climate Change Impacts and Adaptation in EIA: Opportunities and Challenges

Shardul Agrawala OECD

National governments and development agencies have invested considerable efforts to develop methodologies and tools to screen their projects for the risks posed by climate change. This presentation will examine the feasibility of an alternate and complementary approach for incorporating consideration of climate change impacts and adaptation within existing modalities for project design, approval and implementation.

Discussants:

Glenn Watts, UK Environment Agency
Rob Verheem, The Netherlands EIA Commission
Simon Smalley, Australian Department of Foreign Affairs and Trade
Kenneth Markowitz, International Network for Environmental
Compliance and Enforcement

(B) EIA as an Input to Climate Change Adaptation Planning

J Theater

Chair: Joe Foti, World Resources Institute (WRI)

Adapting to climate change will require changes in approach to impact assessment and mitigation. A key starting point to integrate these types of changes will be in national and sub-national planning. Such plans will assess needs and vulnerabilities, set priorities and begin processes for coordination. This session will explore current gaps and efforts at mainstreaming EIA processes in the development of plans to address the impacts of climate change. Participants will examine public participation in the development of such plans. Participants will be able to draw from international experiences in vulnerability assessments, IA and other environmental management tools informing broad plans for adaptation. In light of these shortcomings and innovations, participants will make recommendations about integrating EIA into the suite of tools for adaptation planning.

National Policy Frameworks on Adaptation: A Survey Joe Fori

Joe Foti WRI

Over time, action on climate change will need to be institutionalized and integrated into mainstream development decisions to avert the worst of looming crises. Civil society will be critical in pushing for policy beyond the election cycle and in ensuring effective, locally-relevant responses. This presentation will showcase key features of a recently developed Rapid Institutional Analysis for Adaptation tool-kit to aid in assessing policy and developing an agenda for advocacy; it will also discuss the preliminary results of two case studies being conducted in Ghana and Bolivia to pilot the tool.

Participatory Climate Vulnerability Assessment

John Furlow

United States Agency for International Development (USAID)

This presentation will describe the stakeholder-defined problem analyses approach currently used by USAID as the basis for vulnerability assessment. Under this approach, stakeholders identify priority development goals, critical inputs for achieving these goals and, then, explore the climate and non-climate stresses to focus further analysis. The approach helps to tailor assessments to problems and ensures alignment with broader goals.

Practical Measures for Adapting Infrastructure to Climate Impacts

Cameron Ells **Cameron Consulting**

This presentation will focus on practical measures for adapting the life cycle of the infrastructure of interest to climate impacts. Some of the measures to be showcased include: develop regional climate options in familiar formats for applications by decision-makers; prioritize applicable infrastructure climate-related performance relationships; where most useful, conduct evaluations of vulnerability and adaptive capacity; maintain corporate memories; and manage risk in the context of available resources.

A Review of the Use of Climate Change Mitigation and Adaptation Measures in EIA in Western Australia

Garry Middle Curtin University, Perth, Australia

This presentation will describe and trace the history of assessment of climate change in EIA in Western Australia. It will be shown that mitigation has been the main focus, with an almost complete absence of consideration of adaption measures. It will discuss and outline some ideas about the use of EIA, and will make reference to the fact that any EIA's policy position must be seen within the broader context of very weak national and state climate change policy context.

(C) Disaster Management, Rapid Environmental Assessment Response and Climate Change

Preston Lounge

Chair: Charles Kelly, IAIA Disasters and Conflict Section

Climate change is an immediate threat to lives and livelihoods. This session will report on consultations between international humanitarian, development and environment communities on the links between climate change, disaster response, risk reduction and impact assessment. The session will provide insight into reducing the immediate impact of climate change on lives and livelihoods.

Impact of Climate Variability and Change on Vulnerable Populations

Erika Clesceri USAID

Impact of climate variability and change are the greatest for those who the least are able to cope. Climate change practitioners must facilitate new opportunities, while reducing unintended consequences, especially to the poor. The speaker will talk about integrated impact assessments as a means of bringing together expertise that maximizes the positive impacts of programming.

WWF Experience on Disaster Management and Climate Change

Jonathan Randall World Wildlife Fund (WWF)

Climate change represents a fundamental shift in how human development occurs in the future. Assessing direct, indirect and synergistic climate impacts (and finding effective solutions) represents a challenge, especially in a post-disaster situation. The presentation will seek to stimulate a forward-looking discussion on how the IA process can serve as a tool for creating and reinforcing integrated solutions and cross-disciplinary cooperation.

1:15^{PM}

Concurrent Sessions IV

(A) Bilateral Donors: New Guidance for EIAs

Preston Auditorium

Chair: Michael Smith, ICF International

The incorporation of climate change considerations into both the impact assessment process for donor-assisted projects, as well as the design and implementation of assistance projects, has drawn increased attention in recent years. Several US donor entities have recently developed guidance for incorporating climate change into their project impact assessments. In addition, some have developed formal GHG emissions analysis and reduction policies. Speakers in this session will describe the origin of those policies and guidance, and the current implementation process. They will also discuss recent experience with incorporating climate change mitigation and adaptation considerations into donor project design and implementation.

Overseas Private Investment Corporation (OPIC): Greenhouse Gas Policy

Diane Brown OPIC

OPIC has initiated an aggressive greenhouse gas policy that requires reduction of direct greenhouse gas emissions in its portfolio. The presentation will review OPIC's greenhouse gas reduction policy and discuss changes in the EIAs being received to reflect these policy changes as well as changes being observed that will address new policies.

Export-Import Bank: New Requirements for High Carbon Intensity Projects

Stephen Parsons Export-Import Bank

In November 2009, the Export-Import Bank of the US became the first Export Credit Agency to adopt a carbon policy that considers the impact of GHG production from projects it finances. The policy promotes renewable, efficient and low-carbon energy exports through financing incentives, introduces financing disincentives for high carbon intensity projects, and improves transparency by reporting project GHG production. The presentation will describe the new policy.

Millennium Challenge Corporation (MCC): Challenges and Opportunities

Ben Campbell MCC

This presentation will review the MCC's approach to country ownership for building climate mitigation and adaptation into its funding vehicle. The approach presents challenges and opportunities It involves assisting some countries through the Environmental and Social Impact Assessment process. In other cases, it involves assisting countries in identifying the opportunities to build climate mitigation and adaptation into their project design.

(B) Special Topics in EIA and Climate Change Decision-Making

Preston Lounge

Chair: Ben Cave, Ben Cave Associates Ltd

Severe weather events and the changing climate are altering the hazards that people and communities face. This has required new partnerships to be formed in government, in communities, in industry and in research. In this session we will hear how these new partnerships and new research are feeding into decision-making.

Health Impact Assessment in Climate Change Decision-Making

James Berner Alaska Native Tribal Health Consortium

This presentation will describe the work of the Alaska Native Tribal Health Consortium's Center for Climate and Health and their processes for merging traditional knowledge, climate change science, environmental impact data and health effects data to develop effective adaptation strategies for local government and tribal health leadership.

Assessing Displacement/Resettlement due to Climate Change Adaptation Projects

Alex de Sherbinin Columbia University's Center for International Earth Science Information Network

Resettlement should be a last resort in climate adaptation, but the reality is that it is already occurring in some countries and this trend is likely to intensify. This presentation will provide recommendations for impact assessments that address resettlement in connection with large-scale mitigation, adaptation projects and infrastructure.

Biodiversity Assessment and Climate Change

Nick King Global Biodiversity Information Facility, Denmark

With a planet increasingly in flux, with climate change conflating geological spatial- and time-scales of evolutionary responses of species, a radical rethink is required on how we perceive, measure and assess biodiversity and ecological interactions. This presentation will provide recommendations for biodiversity impact assessment to remain meaningful in a rapidly changing world.

(C) SEA and Cumulative Impacts: Case Studies

J Theater

Chair: Fernando Loayza, World Bank

This session will explore the emerging use and potential of SEA and SEA-like tools, such as Country Environmental Analysis (CEA) and cumulative impact assessment in mainstreaming climate change in plans and national development strategies. Lessons are drawn from Canada on constraints from moving beyond the project level; Indonesia on linking climate change to development priorities; and Mexico and India on applying SEA approaches for preparing climate change adaptation and mitigation plans at the state level.

Cumulative Impact Assessment

Norval Collins CEF Consultants

This session will explore the use of cumulative impact assessment tools for climate change mitigation and adaptation in Canada. Canada remains a major consumer, producer and exporter of energy and is experiencing greater impacts from climate change than most other industrialized nations. Yet, impact assessment in Canada remains focused on impacts of the environment on the project and greenhouse gas emissions. The costs of inadequate environmental protection in the North are high.

SEA Approaches in the Environmental Sustainability and Climate Change Program: Case of the State of Michoacan, Mexico

Ann J. Glauber The World Bank

SEA may be a useful tool for setting climate change adaptation and mitigation priorities. This presentation will showcase the results from incorporating SEA principles into the State of Michoacan's Climate Change Plan. The benefits of a participatory effort to identify climate change impacts and prioritize related adaptation and mitigation options will also be highlighted.

Climate Change and CEA: Case of Indonesia

Helena Al-Naber The World Bank

CEA is an analytical tool to mainstream environmental issues into poverty reduction strategies, lending programs and country assistance strategies. CEAs can also initiate dialogue on climate change issues. This presentation builds on the case of Indonesia, where through the CEA, climate change was identified as relevant to Indonesia's development in three areas: adaptation to climate change, land use and energy sectors.

An Innovative Approach to Preparing a Sub-National Climate Change Action Plan: Case of Orissa State, India

Upendra Behera Department of Forests and Environment, Orissa

Muthukumara Mani The World Bank

Orissa is a poor state vulnerable to climate change. Its 480 km long coastline is a periodic recipient of climate risks such as cyclones and coastal erosion. With a water-dependent crop, rice, as its main crop, the agriculture sector is vulnerable to climate-induced weather changes. This presentation will showcase how the Government of Orissa, one of the first Indian states to initiate work on mitigation and adaptation to climate change, is using an innovative, participatory approach to develop its climate change action plan.

3:15^{PM} | Preston Auditorium

Second Day's Summary and Review

Chair: Weston Fisher, The Cadmus Group, Inc.

Panel of Session Chairs

Craig Davies, IA, Climate Change and the Private Sector Ronald Hoffer, National Governments: Climate Change and EIA - Beyond North America

Joe Foti, EIA as an Input to Climate Change Adaptation Planning Charles Kelly, Disaster Management, Rapid Environmental Assessment Response and Climate Change

Michael Smith, Bilateral Donors: New Guidance for EIAs Ben Cave, Special Topics in EIA and Climate Change Decision-

Fernando Loayza, SEA and Cumulative Impacts: Case Studies

With All Participants

4:30^{PM} | Preston Auditorium

Discussion and Next Steps

Chair: Stephen Lintner, World Bank and President Elect IAIA

Based on the issues identified during the Review and Summary sessions and issues suggested by the participants, this session will provide a summation and integration of the two-day Symposium's discussions and identify options and priorities for follow-up. Participants will be seated at round tables, so that there can be small group discussions of key questions as well as interaction on the entire plenary.

What have we learned from each other? What next?

The essence of this Special Symposium is the convening of two complementary communities – climate change professionals and impact assessment practitioners – to share information, experience and insights from their respective specialties. Collectively, there may well be interest and opportunities to build further collaborations. Individually, it is hoped that all participants will come away with a clearer understanding of how to approach their own on–going work.

6:00^{PM}

Symposium Ends

17-18 November | World Bank

GTZ Training Course

The course is designed to help assessment practitioners as well as stakeholders and decision-makers involved in SEA to fully exploit the potential of this tool: to explore different policy options, to model scenarios for climate change and to test mitigation measures and adaptation solutions in an interactive way.

Fee for this course is US\$395. There are a few seats available. If interested, please contact the registration desk.

For a more complete description of the training program see http://www.iaia.org/IAIA-Climate-Symposium-DC/sea-climate-change-training-course.aspx

General Information

■ Special Symposium Web Site

http://www.iaia.org/iaia-climate-symposium-dc/

■ Registration and Conference Folder

Upon registration you will be provided with the symposium program, participants list and name tags. As part of our sustainable event initiatives implemented for this symposium there will be no conference folder for the symposium.

Language Used

The language of the symposium is English.

■ Venue

The IAIA Special Symposium will be held in the Main Complex building (1818 H Street NW) and the J Building (701 18th Street NW) of the World Bank Group.

All plenary sessions will be held in the Preston Auditorium in the Main Complex building (MC Building 1st floor).

The concurrent sessions will be held in the following three locations: Preston Auditorium, Preston Lounge (MC Building 1st floor) and J Theater (J Building 1st floor). Breakfast, lunch and reception will be held in the MC Building Front Lobby (MC Building 1st floor).

Dining

A light breakfast, lunch and coffee breaks will be provided at the symposium venue. Based on the information provided in the registration form, vegetarian meals will be provided.

Smoking

Smoking in public places is prohibited.

Helpful Links

Weather http://www.weather.com **Transportation** http://www.wmata.com

■ Access/Security

All participants (World Bank staff and external participants) must pick-up their symposium badges at the registration desks. Participants will not be allowed to enter into the meeting rooms without their badges.

Participants will enter through the main entrance of Main Complex (MC) Building (located on the Pennsylvania-side). Please do not enter through the Visitor Entrance on 18th Street NW.

Participants are required to present a matching photo ID (Passport or US State ID / Driver License) to pick up their Symposium badges at the registration desks located at the MC Building Front Lobby.

Participants will pass through a metal detector. All bags will be scanned, so to facilitate entry for all participants, please bring necessary material only.

Participants must keep their Symposium badges during the whole duration of the event to enter and re-enter the Symposium meeting rooms.

GIS—Better Decisions through Modeling and Mapping Our World



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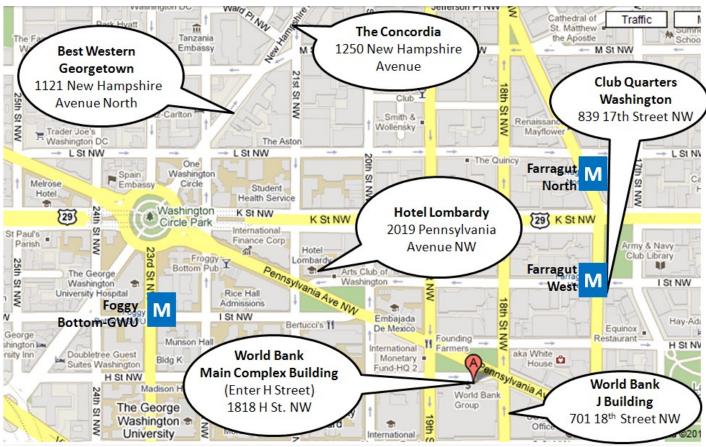
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Symposium, Metro and Hotel Locations



Source: Google Maps

Best Western Georgetown Hotel & Suites

1121 New Hampshire Avenue North Washington, DC 20037 USA 1 202 457-0565 (phone)

The Concordia

1250 New Hampshire Avenue Washington, DC 20036 USA 1 202 557-2000 (phone)

Club Quarters Washington

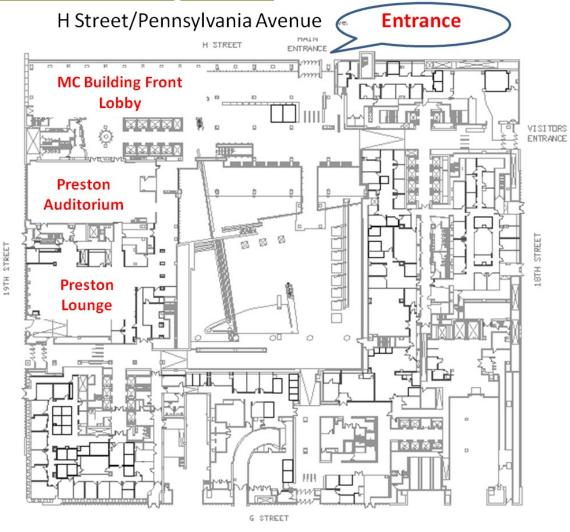
839 17th Street NW Washington, DC 20006 USA 1 202 463 6400 (phone)

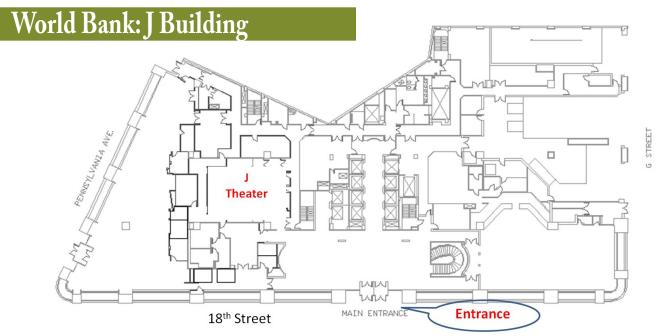
Hotel Lombardy

2019 Pennsylvania Avenue NW Washington, DC 20006 USA 1 202 828-2600 (phone)

Symposium Location and Map

World Bank: Main Complex





Host, IAIA and Symposium Committee



About the World Bank Group

The World Bank is a vital source of financial and technical assistance to developing countries. Its mission is to fight poverty and to help people help themselves and their environment by providing resources, sharing knowledge, building capacity and forging partnerships in the public and private sectors. It consists of two unique development institutions owned by 186 member countries: the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). Each institution plays a different but collaborative role in advancing the vision of inclusive and sustainable globalization. The IBRD aims to reduce poverty in middle-income and creditworthy poorer countries, while IDA focuses on the world's poorest countries. Their work is complemented by that of the International Finance Corporation, the Multilateral Investment Guarantee Agency and the International Centre for the Settlement of Investment Disputes. Together, they provide low-interest loans, interest-free credits and grants to developing countries for a wide array of purposes.

The World Bank Group

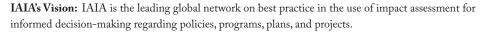
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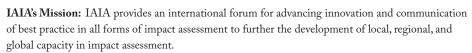
About IAIA



The International Association for Impact Assessment was organized in 1980 to bring together researchers, practitioners, and users of various types of impact assessment from all over the world.

IAIA members number over 2,500 and reside in over 120 countries. IAIA activities are carried out locally and regionally through its extensive network of Affiliates and Branches.





IAIA's Values: IAIA promotes the application of integrated and participatory approaches to impact assessment, conducted to the highest professional standards.

IAIA believes the assessment of the environmental, social, economic, cultural, and health implications for proposals to be a critical contribution to sound decision-making processes, and to equitable and sustainable development.

International Association for Impact Assessment

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Climate Change and Impact Assessment

Special Symposium Washington, DC 15-16 November 2010

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