

Opening/Closing plenaries

Opening plenary

Opening address



Ntsako Baloyi
IAIA18 Co-chair



Sean O'Beirne
IAIA18 Co-chair

Welcome comments



Marla Orenstein
IAIA President

Greetings from the host



Cllr Zandile Gumed
Mayor, City of Durban

Greetings from the host



Dr. Bomo Edith Edna Molewa
Minister of Environmental Affairs

Presentation of the IAIA Global Award

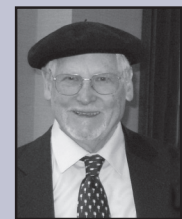
THE DANISH
INSTITUTE FOR
HUMAN RIGHTS

Miguel Coutinho
IAIA Awards Committee Chair

Charlie Wolf Memorial Lecture



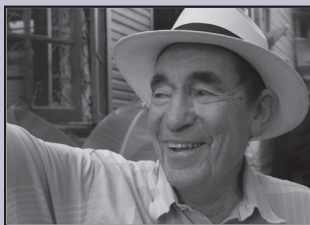
Charlotte McClain-Nhlapo
Global Disability Advisor for
the World Bank Group



**Charlie
Wolf**

The Charlie Wolf Memorial Lecture introduces the unique environmental, social, and cultural features of the conference location.

Keynote address: "Do you have to be white to be green?"



The Honorable Albie Sachs

Albie Sachs is an activist and a former judge on the Constitutional Court of South Africa (1994 – 2009). He began practicing as an advocate at the Cape Bar at the age of 21, defending people charged under the racial statutes and security laws of apartheid. After being arrested and placed in solitary confinement for over five months, Sachs went into exile in England, where he completed a PhD from Sussex University. In 1988, he lost his right arm and his sight in one eye when a bomb was placed in his car in Maputo, Mozambique. After the bombing, he devoted himself to the preparations for a new democratic constitution for South Africa. When he returned home from exile, he served as a member of the Constitutional Committee and the National Executive of the African National Congress. He is the author of several books, including *The Jail Diary of Albie Sachs*, *Soft Vengeance of a Freedom Fighter*, *The Strange Alchemy of Life and Law*, and *We, the People: Insights of an activist judge*. His latest book is *Oliver Tambo's Dream*.

Sachs has travelled to many countries sharing his experiences in order to help heal divided societies.

Opening plenary sponsored by Department of Environmental Affairs

Closing plenary

IAIA18 summary report

Sean O'Beirne and Ntsako Baloyi, IAIA18 Co-chairs; Francois Retief, Technical Program Chair

Keynote address

"Environmental Justice and Its Discontents: A Time for Radical Change"

Melissa Fourie, Executive Director, Centre for Environmental Rights (CER) South Africa

Awards

Miguel Coutinho, Chair, Awards Committee • Marla Orenstein, IAIA President
Individual Award • Regional Award • Institutional Award • IAPA Best Paper of 2017

Presidential address

Sara Bice, IAIA President (incoming)

Invitation to IAIA19-Brisbane

Lachlan Wilkinson and IAIA19 Committee

Close of conference

Ntsako Baloyi and Sean O'Beirne, IAIA18 Co-chairs

Closing plenary sponsored by African Development Bank

Understanding stakeholder expectations in impact assessment

Thursday 17 May | 09:00-10:30 | Hall 2BH

World Café

Chair(s): Megan Jones, Angus Morrison-Saunders, Jenny Pope

Come join our World Café discussions on evolving stakeholder expectations of the IA process.

Take the opportunity to meet new people while having your say and hearing others' perspectives on the extent to which IA is expected to (and can) contribute to environmental justice for societies in transition.

Toward improved implementation of biodiversity offsets

Thursday 17 May | 09:00-10:30 | Hall 2A

Theme Forum

Chair(s): Dave Cox, Susie Brownlie

IAIA Section: Biodiversity and Ecology

Biodiversity offsetting (BO) addresses ongoing loss of biodiversity, but successful implementation is limited. This session will define the factors for this and then analyze the strengths of different offsetting systems in addressing implementation issues. The outcome will be essential success elements for BO systems to improve practice.

Challenges of offset implementation in Guinea

Campbell, Genevieve; Livingstone, Suzanne; Fontaine, Malcolm; Suter, Jamison; Fontaine, Rene; Rabenantoandro, Johny

Mineral licenses and high biodiversity areas overlap extensively in Guinea; however, no national mechanisms exist to facilitate offsetting. We present our lessons learned for offsetting in West Africa.

Achieving No Net Loss for migratory birds

Cauldwell, Andrew; Brownlie, Susie; Fernandez Bilbao, Amalia

An innovative offsetting framework was applied in Ghana to achieve No Net Loss for migratory shorebirds that incorporated a local community conservation programme to alleviate ongoing threats.

Guidelines for implementing biodiversity offsets

Namara, Justine; Buhanga, Edgar

Biodiversity offsets is important for compensating for residual impacts. However, developers don't know how to implement it. The guidelines will give guidance to developers on how it can best be done.

South African National Biodiversity Offsets Policy

Kershaw, Pamela

The first national biodiversity offsets policy being developed in South Africa and in the African continent.

Resilience in infrastructure planning and assessment

Thursday 17 May | 09:00-10:30 | 11

Roundtable

Chair(s): Michelle Audouin

Resilience thinking recognizes the inherently unpredictable nature of social-ecological systems. The South African Council for Scientific and Industrial Research is developing a guide on applying resilience principles in infrastructure planning and assessment as part of the international GRAID Programme. This draft guide will be presented, followed by a roundtable discussion.

Decision-making in an uncertain world: Welcome to the Anthropocene

Friday 18 May | 09:00-10:30 | Hall 2BH

Workshop

Chair(s): Nicholas King, Francois Retief, Peter Lukey

The Anthropocene is described as a new geological epoch, a transition into one in which the influence and impact of humanity is overwhelming all other geological signals. The fossil record of the Anthropocene is predicted to show a layer of manufactured, artificial materials and waste from urbanized and built environments; a layer of ubiquitous physical and chemical pollution; a rapid and massive loss of biological life from the planet, the so-called 6th extinction; and a very rapid change in global climate. These changes are and will increasingly transform our planet, our societies, our ways of life and—without unprecedented global political cooperation—are predicted to be catastrophic for much of humanity.

The Anthropocene is an era of which we have no experience and for which we are ill-equipped in terms of understanding trends and trajectories and long-term outcomes. This session will explore potential future scenarios and the new leadership and decision-making approaches required to deal with the challenges of the Anthropocene.

ELA theme forum: Legal perspectives on environmental (in)justice

Friday 18 May | 09:00-10:30 | 11

Panel Discussion

Chair(s): Anél du Plessis, Peter Kantor

Organized by the Environmental Law Association of South Africa (ELA), the session deliberates the meaning of environmental justice from a South African point of view in the light of the country's Constitution and framework environmental law. It illustrates the courts' application of the legal principles underpinning environmental justice in a number of forthcoming, decided, and/or ongoing cases.

Panelists

Anél du Plessis: Perspectives on the changing meaning of environmental injustice

Stewart Green: Local government, pollution, waste, and environmental injustices in court

Peter Kantor: Procedural environmental injustices in court

Wlilimien du Plessis (NWU): Environmental law, EIA, and environmental injustices in court

John Rantlo: *Ex post facto* authorizations and environmental injustices in court

International Finance: The role of independent accountability mechanisms

Friday 18 May | 09:00-10:30 | Hall 2A

Panel Discussion

Chair(s): Gina Barbieri

This session focuses on international development finance and access to independent accountability mechanisms as a means of achieving environmental and social justice.

Panelists

Erica Bach, Project Complaint Mechanism Officer, European Bank for Reconstruction and Development

Dilek Barlas, Executive Secretary, Inspection Panel, World Bank

Sonja Derkum, Head, Complaints Mechanism, European Investment Bank

Bill Kennedy, Director, Office of Accountability, US Overseas Private Investment Corporation (OPIC)

Victoria Marquez Mees, Director, MICI, Inter American Development Bank

Sekou Toure, Director, BCRM, African Development Bank

Smaller than plenaries and larger than concurrent sessions, theme forums include “cut-above” presentations and discussions which address the conference theme, bring together on a particular topic the various aspects of impact assessment, and examine how those aspects apply to different sectors and issues.

Involuntary resettlement: Social license to operate

Saturday 19 May | 09:00-10:30 | Hall 2BH

Paper presentations

Chair(s): Charlotte Bingham

A social license to operate is key to achieving socially just involuntary resettlement. Learn from in-depth presentations of experienced experts how you can plan and implement involuntary resettlement more effectively in the public and private sectors. Discuss and comment on the papers and their relevance to you.

A mine's experience maintaining a social license

Appleby, Gordon

Transitioning from construction to operations, a mine adjusted its resettlement program but kept its social license because management steadfastly believed that local support was crucial for success.

Malawi and Moldova—SLO: Pair of scales

Stratulat, Grigore

Social teams (RAP consultant, contractor, engineer) and their interaction with local communities to obtain the social license to operate (SLO), how these parties interconnect, communicate, and cohabit.

Best practices for minimizing resettlement impacts

Tumbama, Lewis; Kapika, Brenda

This presentation describes innovative practices used in resettlement implementation to avoid construction delays, control cost overruns, and minimize impacts.

Exploring the relationship between quality and justice

Saturday 19 May | 09:00-10:30 | Hall 2A

Sponsored by eThekweni Municipality

Paper presentations

Chair(s): Ben Cave, Alan Bond

Impact assessment is part of the checks and balances that pay heed to social and environmental justice. What role does the quality of an impact assessment play in ensuring justice? How is the quality of an impact assessment judged and by whom? Join us to explore these and other questions.

Fifteen years of EIA quality in sub-Saharan Africa

Hauptfleisch, Morgan; Fillipus, Albertina

The paper reviewed the quality of 55 EIAs in sub-Saharan Africa over a 15-year period and identifies trends per sector, per country, and over time.

Environmental justice through effective EIA system

Lee, Ka Man; U, Clara

This paper review the extent of public involvement in the EIA system in Hong Kong, highlights the key challenges of the legal EIA framework, and suggests ways to remove conflicts.

Bias, quantitative analysis, and indigenous values

Muir, Bruce

Whether certain quantitative techniques fairly account for indigenous values is examined. Results show that cultural values are often mischaracterized and impacts are inaccurately predicted.

Effect characterization: A 12-country review

Orenstein, Marla; Westwood, Erica; Dowse, Susan

How consistently and how well is effect characterization undertaken for socio-economic outcomes in IA? We present results of a systematic review of 58 EIAs from 12 countries across six global regions.

How to improve the quality of EIA reports

Kamijo, Tetsuya

A wide range of alternatives analysis and two-time public involvement could improve the quality of EIA reports for development cooperation projects.

Hydropower: Meeting the sustainability challenge

Saturday 19 May | 09:00-10:30 | 11

Sponsored by ERM

Paper presentations

Chair(s): David Blaha

Hydropower is the leading renewable electricity generation source worldwide, but is often seen as controversial by many stakeholders and high risk by many financial institutions. Hydro has made significant progress toward managing these risks and becoming more sustainable. This session presents a paradigm for achieving and becoming more sustainable hydropower (Pick the Right Location and Design it Right).

Hydropower: Meeting the sustainability challenge

Blaha, David

International best practice for improving the environmental sustainability of hydropower projects.

Pick the right location

Martin, Erik

Applying Hydropower-by-Design: A basin-scale hydropower planning case study in Congo (Brazzaville).

Good practice handbook: EFlows for hydropower projects

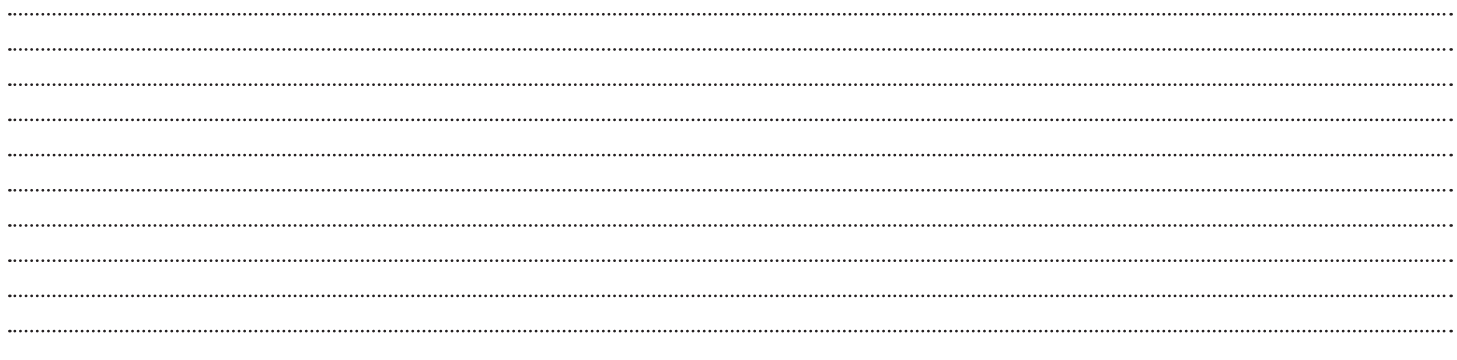
Brown, Cate

The World Bank Group (WBG) Good Practice Handbook proposes a systematic approach to EFlows for hydropower in order to inform project design and ensure compliance with Safeguard Policy / Performance Standard requirements.

Are large big hydros a big mistake?

Scott-Brown, Miles

Many of the world's future proposed hydroelectric schemes are in developing countries. Is this a big mistake or an essential part of our renewable energy future?



Concurrent sessions

ASSESSING AND MANAGING ENVIRONMENTAL RISKS IN SOCIETIES IN TRANSITION

Assessing the capacity to manage environmental and climate change risks

Wednesday 16 May | 15:00-16:30 | 21ABC

Workshop

Chair(s): John Carstensen, Nick Pyatt

This session describes CADD and how it can be used by impact assessors to identify and monitor changes in the risk and opportunity posed by organizational capacity to manage climate risk.

Adaptation capacity diagnosis and development

Pyatt, Nicholas; Black, Doogie

CaDD is a metric for developing organizational capacity to adapt to climate change. CaDD can be used by impact assessors to identify and monitor changes in the risk and opportunity posed by organizations or systems.

EIA effectiveness for infrastructure development projects in Africa (I)

Saturday 19 May | 11:00-12:30 | Hall 2A

Paper Session

Chair(s): Catherine Warburton

Case studies from across the African continent are presented to evaluate impact assessment practices in renewable energy, transboundary pipeline, railway, dam, tourism, and other infrastructure development projects in inter alia Zambia, South Africa, Uganda, Tanzania, Mozambique, and Nigeria. Shortcomings are identified and recommendations proposed for more effective IA practice.

The EIA uprising in Africa

Liversage, Nicola

Case studies from Africa where a mindshift towards EIAs in infrastructure projects can revolutionize their value.

Impacts of transborder projects: A case of EACOP

Ogwang, Tom; Vanclay, Frank; van den Assem, Arjan van den Assem

We propose that the potential socio-economic and environmental impacts of the EACOP project be avoided, minimized, or mitigated. There should be an inclusive, open decision making and conflict resolution process.

Reconciling theory with practice in EIA reviews

Ojile, Meshach

The study takes a critical look at the Nigerian EIA system respective to reviews of EIA Reports with a view to comparing with international best practice for EA effectiveness.

IA by the community in transition

Raissyian, Behzad

A local community has been trained and coached to use IA for their tourism initiative, to test how effectively IA can be used by the community itself where there are no resources to hire a consultant.

EIA effectiveness for infrastructure development projects in Africa (II)

Saturday 19 May | 14:30-16:00 | Hall 2A

Paper Session

Chair(s): Catherine Warburton

Case studies from across the African continent are presented to evaluate impact assessment practices in renewable energy, transboundary pipeline, railway, dam, tourism, and other infrastructure development projects in inter alia Zambia, South Africa, Uganda, Tanzania, Mozambique, and Nigeria. Shortcomings are identified and recommendations proposed for more effective IA practice.

Nacala Dam: Retrospective look at the ESIA

van Rooyen, Magnus

An evaluation of the practical accuracy of the impact assessment for the Nacala Dam rehabilitation project in northern Mozambique.

Making irrigation biodiversity-friendly in Malawi

Ledec, George

Malawi's Shire Valley Transformation Program features biodiversity-friendly irrigation development, including a fish barrier on the Main Canal to help protect Lake Malawi from invasive species.

Environmental and Social

Safeguards Lesson: Zambia

Kaniki, Christopher; Sakala Kayope, Stella

Safeguards are a real sustainable tool!

Evaluating EIA for infrastructure projects

Warburton, Catherine

Key elements of SA EIA requirements will be analyzed through the Gautrain EIA as a case study. Process-related flaws and deficiencies and alternative approaches will be discussed.

Environmental justice and the pursuit of sustainable cities

Friday 18 May | 14:30-16:00 | 12A

Paper Session

Chair(s): Anél Du Plessis

This session is devoted to new knowledge on good urban governance from the perspective of environmental, planning, and local government law, policy, and practice. The session focuses on the nexus between good urban governance and enhanced environmental justice in cities and other localities in the global North and South.

Transition to sufficiency and urban resilience

Shippey, Karen; van Staden, Francini

Drawing from harsh socio-ecological realities and crises, this paper frames the need for fundamental decision making shifts, from authorities to communities toward sufficiency and urban resilience.

Cornubia—Transitioning society—Planning

Bassa, Humayrah; Reddy, Prashika; Hoffman, Bjorn

The role and evolution of environmental planning in the creation of integrated human settlements.

Cornubia—Transitioning society—Implementation

Hoffmann, Bjorn; Reddy, Prashika; Bassa, Humayrah

The success and challenges of investing in both contractors and surrounding communities during project implementation—Cornubia: A transitioning society.

Environmental management for suburban areas

Yi, Young-Jae

This study developed a methodology for identifying potential areas of disorderly development in suburban areas, focusing on residential and industrial area mix.

Social impacts of transport in sustainable cities

Mottee, Lara; Vanclay, Frank; Arts, Jos

Managing the social impacts of transport requires their consideration in urban governance and planning. This paper argues for good practice EIA, SIA, and follow-up in transport for sustainable cities.

Reconfiguration of the role of cities in the global pursuit of socially-just and climate-resilient communities

du Plessis, Anél

This paper is set against the background of the recent adoption of Sustainable Development Goal 11 with its focus on safe, sustainable, resilient and inclusive cities and the United Nations' New Urban Agenda released in 2016.

Improving environmental and social performance on construction projects (I)

Thursday 17 May | 11:00-12:30 | 22ABC

Paper Session

Chair(s): Patrick Francis

Ultimately, the value of environmental and social measures lies in their implementation. This session explores strategies to improve their performance in construction projects. These include easier-to-implement plans, cloud-based tools to update and use information in the field in real time, and contractual incentives for good performance.

From assessment to practice: Tools for transition

Skotareva, Olga

Let's talk about management and contractual mechanisms that are instrumental to successful implementation of environmental and social measures during construction.

Geospatially-enabled project management

Park, Douglas

Geospatially enabled project management is a new approach that allows for enhanced and better informed decision making on large construction projects.

Environmental risk management in a dynamic environment

Gordhan, Bharat; Hayes, Johan

How does one manage environmental risks within a dynamic environment, post-environmental authorization, and without the EIA tool? Perhaps the environmental jargon could be useful to the engineer.

Defining roles in construction EMPs

Wessels, Jan-Albert; Rossouw, Nigel; Swanepoel, Robin

This paper defines the roles and relationships between different environmental actors and their contribution to the implementation of construction environmental management plans (EMPs) in South Africa.

Better environmental/social results for infrastructure

Francis, Patrick; Mason, Douglas

This presentation highlights practical and effective design, implementation, and oversight measures to translate environmental and social assessments into improved results on construction projects.

Improving environmental and social performance on construction projects (II)

Thursday 17 May | 14:30-16:00 | 22ABC

Paper Session

Chair(s): Patrick Francis

Ultimately, the value of environmental and social measures lies in their implementation. This session explores strategies to improve their performance in construction projects. These include easier-to-implement plans, cloud-based tools to update and use information in the field in real time, and contractual incentives for good performance.

Rehabilitation risk and project closure efficiency

Gosney, Gwen

Improved integration of environmental, engineering, and project management deliverables is identified as a critical means of reducing rehabilitation risk and improving project closure efficiency.

Social management in water infrastructure projects

Shale, Thato

Trans Caledon Tunnel Authority (TCTA) manages projects' social aspects through effective stakeholder management and local communities' participation, in order to maximize project benefits and minimize negative impacts.

Who protects the protectors?

Gouws, Pierre; Streater, Tom

Exploratory discussion of safeguarding security guards' human and labour rights on internationally-financed projects, often of insufficient focus during assessment, due diligence, and monitoring.

Biodiversity-rich connection of two continents

Arisoy, Defne

TANAP, a mega pipeline project, connects two continents without sacrificing biodiversity and enhances an in-country ecological database with its baseline studies, action plan, and offset strategy.

Infrastructure financing and EIA: Managing risk and the public interest

Wednesday 16 May | 15:00-16:30 | 21G

Panel Discussion

Chair(s): Patience Whitten

This panel will discuss MDB and other publicly-sponsored infrastructure development and how the finance process involved potentially influences the quality of EIAs. Panelists will discuss the mechanisms in place to develop better-quality EIAs so that shareholders and others can more confidently support the environmental integrity of these projects.

Two case studies from USAID's MDB project review

Bullen, Victor; Erwin, Alexis; Johnston, Leslie

USAID's independent field review mechanism of multilateral development banks (MDB) projects will present two case studies, one on Zambia roads and another on Solomon Islands hydro, as they relate to environmental and social concerns.

Infrastructure public procurement in Sweden

Longueville, Anna

Decision-making in infrastructure public procurement projects in Sweden.

SEA as a tool for radical reform

Thursday 17 May | 11:00-12:30 | Hall 2A

Paper Session

Chair(s): David Annandale

Proponents of SEA hope that the approach will lead to better design of public policies, plans, and programs. In addition, it has the potential to be a tool for radical reform in countries in transition, where freedom of expression is not always guaranteed.

Environmental assessment of the Guyana-Brazil LTP

Coutinho, Miguel; Bynoe, Mark; Monter, Sara; Borrego, Carlos; Monter, Ernesto

The tiering approach developed to identify environmental and social issues and impacts of undertaking the land transport project (LTP) linking northern Brazil with a port in Guyana.

The challenges of promoting SEA in Bhutan

Dalal-Clayton, Barry

How Bhutan is addressing the challenges of promoting SEA and present lessons from testing Bhutan's new SEA Guidelines during an SEA of the road sector master plan.

Changing role of SEA in a transitioning country

Kalle, Heikki; Faith-Ell, Charlotta; Arts, Jos

SEA can function as a tool promoting transition to an open society, e.g. in Estonia, where SEA has served as a change agent from top-down planning system into communicative planning.

How does SEA lead to radical reform?

Annandale, David

How does SEA result in radical shifts in policy reform?

SEA practice for regional and land use planning: Examples from Africa and Asia

Friday 18 May | 14:30-16:00 | Hall 2BH

Paper Session

Chair(s): Gwen van Boven

This session will provide the opportunity for people and organizations to share their experiences with SEA for regional and land use planning at sub-national level in low and middle income countries, focusing on plans in rural regions.

SEA and IWRM for river catchment planning in Rwanda

Hardon, Anne; Slootweg, Roel; van Boven, Gwen

River catchment planning in Rwanda is developed through learning-by-doing with external coaching. The approach integrates principles and procedures of SEA and integrated water resources management.

SEA for the Ayeyarwaddy River delta in Myanmar

Kolhoff, Arend

An SEA for the Ayeyarwaddy River delta in Myanmar was recently carried out and completely integrated in the planning process. Question answered: What is the added value of an integrated SEA?

CSO engagement in SEA: Lessons from Indonesia

Puspitasari, Astrid; Harizajudin, Riza

Civil society engagement in the SEA process is needed to encourage more participatory and better quality SEA outcomes. We share experiences with SEA for district planning in Indonesia.

National SEA for aquaculture development in SA

Kellerman, Lizande; Snyman-Van der Walt, Luanita;

Lochner, Karabo; Morant, Patrick; Lochner, Paul

National strategic environmental assessment for freshwater and marine aquaculture in South Africa to create an enabling environment where responsible and sustainable aquaculture can be developed.

SEA and land use planning for wetlands in Kenya

Nelson, Peter

This paper compares, contrasts, and draws lessons from the findings from the SEAs and land use plans for two of Kenya's five internationally important delta wetlands.

UN Environmental and Social Sustainability (ESS) Framework: Enabling SDGs

Thursday 17 May | 11:00-12:30 | 12D

Chair(s): Yunae Yi

Is the achievement of the SDGs through environmental and social sustainability approach straightforward and commonsensical? This session will share the UN efforts on it.

Sustainability in operations and beyond in UNOPS

Costa, Nives

UNOPS social and environmental management system has delivered clear improvements at the level of facilities and operations (and beyond), demonstrating a concrete support for the Sustainable Development Goals (SDGs).

Environmental and Social

Safeguards in UN programs

Mwanundu, Sheila; Mergler, Holly

Moving toward a common approach to safeguards in the UN: A comparative analysis of UN agencies' respective environmental and social standards to reach a collective framework of minimum requirements.

Adjusting the UN ESS framework to the policy level

Partidário, Maria; Yi, Yunae

Presenting and discussing a model to extend the UN environmental and social framework (ESS) to the policy/strategy level following a rationale appropriate to complex, non-linear systems and situations.

Concurrent sessions

Whose canary in whose coal mine? A Hypothetical

Friday 18 May | 11:00-12:30 | Hall 2BH

Debate/Practitioner exchange

Chair(s): Tanya Burdett, Jack Krohn

If development comes at a cost, who pays? Join Canaria's citizens' jury to assess environmental indicators that might tell different stories to different stakeholders. How much stress can the canary in the coal mine sustain? Come and participate in a Hypothetical with a twist—and a role for everyone.

Panelists

Martine Lehman, RHDHV. Role: Proponent, New Canaria Mining Co-operative

Philippe Hanna, RHDHV. Role: Traditional owner

Gerard Van Weele, RHDHV. Role: Government

Candan Ergeneman, Ramboll Environment & Health. Role: Hydropower Company Representative

Lerato Ratsoenyane, IAP2 South Africa

Thato Shale, IAP2 South Africa

CONTRIBUTION OF IA TO HUMAN WELLBEING

Great Scott! New thinking in IA

Thursday 17 May | 16:30-18:00 | 12A

Paper Session

Chair(s): Reece Alberts, Francois Retief

This session delves into new thinking around IA communication, adaptation and information. The papers ask important questions about improving IA practice into the future.

Making sense of it all: Big data, better decisions

Scott-Brown, Miles; Taylor, Tim

Even bigger than our footprint in the Anthropocene is the amount of data associated with it. How can we use this knowledge to make better decisions towards a more sustainable future?

Custom bikes, houses, and Nikes: What can EA learn?

Alberts, Reece; Retief, Francois; Roos, Claudine

Can the application of design theory, thinking, and design elements help simplify EA? digital

Adaptive management and sanctioning in Chile

Araya, Gino; Perez, Cristian

Adaptive environmental assessment is a tool that should be incorporated as a measure to improve the environmental performance of investment companies.

Using visual language in communicating EA processes

Sanderson, Danielle

Communicating sustainable development and environmental resilience to those outside this specialist realm requires branching out of purely scientific explanation and into that of graphics and media.

Impact assessment, decision making, and change

Thursday 17 May | 14:30-16:00 | Hall 2BH

Workshop

Chair(s): Wil Thissen, Lone Kornøv

This session explores insights from neighboring fields that have much to offer for the theory and practice of impact assessment (such as decision making, learning, policy sciences, organizational change, transitions, etc.) and why, despite calls to spend more attention on such fields, not much has changed in the literature on IA for over 20 years. Invited leading scholars will give brief pitches on their fields of interest and expertise, and more generally share their thinking on the topic.

Improved integration of land acquisition and resettlement expertise in ESIA

Thursday 17 May | 11:00-12:30 | 22G

Panel Discussion

Chair(s): Eddie Smyth, Frank Vanclay, Ellen De Keyser

This session will explore the central role played by impact assessment consultants in assessing the impact of land acquisition and resettlement (LAR) on vulnerable communities in societies in transition. The session format will be mixed with a selection of papers and a panel of LAR experts discussing how LAR policy and practice can be improved.

Managing RAP expectations and timelines

Hart, Andrew

How the disconnect between a mine's unrelenting schedule and budget and a carefully managed and implemented resettlement process can undermine a resettlement process and social license.

Political economy of African extractive investment

Pedersen, Rasmus; Jacob, Thabit

This paper demonstrates how relations between the state, investors, and communities in African extractives are currently changing, using Tanzania as a case. These changes also affect impact assessments.

Land acquisition, land tenure, and gender

Wellmann, Gwendolyn

This paper examines the intersection between gender and land tenure, providing insights on the disadvantages women face when the land on which they live is acquired for development projects.

Land administration systems and vulnerability

da Cunha, Maria; Dava, Eden

The paper will draw from examples in Africa and Latin America to illustrate how land acquisition and resettlement (LAR) experts can use policy to assess LAR risks and potential impacts, and recommend policy and regulatory solutions.

International progress in regional-scale impact assessment

Thursday 17 May | 11:00-12:30 | 21G

Paper Session

Chair(s): Terry Calmeyer

Regional impact assessment is increasingly popular among project proponents, governments, NGOs, and societies that wish to better address cumulative environmental effects and issues of environmental and social justice. This session profiles a range of

international experiences in regional impact assessment, and the methodologies, tools, partnerships, and public engagement strategies used to support it.

Brazilian hydropower plants: Good practices of CEA

Gallardo, Amarilis; Silva, João Carlos; Gaudereto, Guilherme; Sozinho, Davi

This work aims to analyze how the evaluation of cumulative impacts has been carried out in a Brazilian hydroelectric planning in comparison to the best practices of cumulative effects assessment (CEA) for a watershed.

Regional water strategy for Canterbury

Jenkins, Bryan

A regional water management strategy was developed in Canterbury to address the cumulative effects of water resource abstraction and land use intensification through irrigation.

Landscape level assessment, central Namib Desert

Lyons, Anna; Howard, Pippa

Sharing an approach to landscape level assessment of biodiversity vulnerability and land use in the Central Namib.

Psycho-social impact in support of environmental justice

Friday 18 May | 16:30-18:00 | 12A

Paper Session

Chair(s): Michael Edelstein

Psycho-social impact assessment (P-SIA) has particular utility for identifying in detail adverse impacts that constitute the harm or injustice suffered by people due to environmental change and is important for avoiding harm as well as mitigating it and/or charting recovery. Papers discuss theory, method, applications, and cases of P-SIA.

Reducing psycho-social stress in resource towns

Rifkin, Will; Witt, Katherine; Grant, Sharon

Community, government, industry, and researchers agree that psycho-social stress is the greatest immediate health effect of resource development in Queensland's rural gasfield communities.

Lessons learned from a forced relocation project

Hussain, Thilmeeza

The 2004 Indian Ocean tsunami made residents of Kandholudhoo refugees in their own country. This paper details the impacts of 4 years of temporary housing and subsequent relocation to a nearby uninhabited island.

Tension, conflict, love, and respect

Sanda, Ahmed

The paper will simply discuss the value we place on the environment from the perspective an individual's understanding, perception, experiences, and education may trigger conflict.

Uncertainty or manipulation? Post-factual IA

Fischer, Thomas; Sykes, Olivier; Clement, Sarah

Is it uncertainty which is emerging as the biggest problem of IA in the era of the Anthropocene that we are now entering, or is it rather the manipulation of IA processes through powerful interests?

Quality and effectiveness of impact assessments

Thursday 17 May | 16:30-18:00 | Hall 2BH

Paper Session

Chair(s): Wil Thissen

Quality and effectiveness of impact assessments can be defined and assessed in different ways, as illustrated by the literature. This session explores ways to advance quality and quality assessments, and will add empirical studies on and lessons about effectiveness from different countries.

How can we improve professional judgment?

Brown, Glenn

Professional judgment in IA often requires more than technical knowledge. Tools that assist problem analysis, reasoning, and decision making can improve professional judgment.

Toward the systematic use of quality review packs

Montaño, Marcelo; Veronez, Fernanda

The paper describes a strategy to the systematic use of Lee and Colley Quality Review Package driven by the relative importance between its sub-categories, categories, and areas of evaluation.

Perception and discourse analysis of EIA practice

Montaño, Marcelo; Veronez, Fernanda

The paper is based on discourse analysis and reveals the perception of EIA analysts regarding the practice of EIA.

Exploring the concept of effectiveness in SEA decision-making

Faith-Ell, Charlotta

The aim of the paper is to contribute to the understanding of the concept of effectiveness in SEA in decision making.

Reforming IA law in Canada: Moving to the next generation? (I)

Friday 18 May | 11:00-12:30 | 22DEF

Panel Discussion

Chair(s): John Sinclair, Meinhard Doelle

This series of sessions is comprised of an overview of the proposed Canadian IA process and short panel presentations about key IA issues to encourage open sharing of ideas and analyses regarding the reforms contained in the proposed lay and an initial evaluation of progress made on next generation IA.

Canada's renewed approach to impact assessment

Loth-Bown, Christine

The presentation discusses the review of Canada's environmental assessment process and the proposed path forward, including engagement of Indigenous Peoples.

Panelists

Alan Diduck
Bill Ross
Meinhard Doelle
John Sinclair

Reforming IA law in Canada: Moving to the next generation? (II)

Friday 18 May | 14:30-16:00 | 22DEF

Panel Discussion

Chair(s): John Sinclair, Meinhard Doelle

This series of sessions is comprised of an overview of the proposed Canadian IA process and short panel presentations about key IA issues to encourage open sharing of ideas and analyses regarding the reforms contained in the proposed lay and an initial evaluation of progress made on next generation IA.

Integrating climate change into EA

Doelle, Meinhard

Federal jurisdiction over climate in IA in Canada

Johnston, Anna

What is the federal government's power to assess climate implications and seek to achieve climate mitigation in accordance with the Paris Agreement in project, regional, and strategic IA in Canada?

Australian perspectives on sustainability in IA

Pope, Jenny

The IA reform process in Canada is an opportunity to embed a sustainability approach to impact assessment. We contribute a perspective from Australian experiences with sustainability assessment.

Improving project-based CEA in Canada for biodiversity

Sanchez, Luis; Dibo, Ana Paula; Noble, Bram

A survey with Canadian EA practitioners was conducted to gauge their perspectives about specific options or drivers of changes for improving the practice of project-based cumulative effects assessment (CEA) for biodiversity.

Legislating deliberative public involvement in IA

Diduck, Alan P.; Sinclair, A. John

This paper considers suggestions for legislating deliberative public involvement in impact assessment, and in particular in relation to proposed reforms to the Canadian Environment Assessment Act.

Reforming IA law in Canada: Moving to the next generation? (III)

Friday 18 May | 16:30-18:00 | 22DEF

Panel Discussion

Chair(s): John Sinclair, Meinhard Doelle

This series of sessions is comprised of an overview of the proposed Canadian IA process and short panel presentations about key IA issues to encourage open sharing of ideas and analyses regarding the reforms contained in the proposed lay and an initial evaluation of progress made on next generation IA.

Follow up and monitoring in Canada: The next generation

Ross, Bill

This paper will consider evolving federal IA reforms in Canada by comparing plans with two sets of principles: those espoused by Canada and those traditional principles of follow up.

Reforming SEA in Canada: Lessons from Kenya

Spaling, Harry; Sinclair, A. John

This paper explores how regulatory frameworks, guidelines, and practice in Kenyan SEA may apprise SEA reform in Canada.

Canadian EA reform: Integrating GBA+

Walker, Heidi

This paper examines what a requirement for gender-based analysis plus (GBA+) might mean for EA practice and reviews potential opportunities and challenges for its application.

Canadian reforms for IA jurisdictional cooperation

Sinclair, A. John

This paper considers the reforms proposed in the new Canadian Federal IA Bill for "co-operative assessment" and whether the reforms adopted ensure processes harmonize upward to the highest standard.

SEA's role in transitions to sustainability, endorsing SDGs

Friday 18 May | 11:00-12:30 | 22G

Workshop

Chair(s): Maria Partidário

How can SEA be instrumental in leading sustainable development processes? Debates in IAIA17 recognized that SEA could play a role in helping to achieve SDGs. This opens up opportunities to look at SEA as an instrument of strategic change. This session invites examples on how SEA can strategically promote SDGs.

A polyphonic concept of environmental justice

Lopez, Luis

This paper seeks to incorporate the intercultural dimension from the Shipibo-Konibo perspective into the environmental justice discussion within the framework of IA and Sustainable Development Goals.

SEA participation and solid waste management: Kenya

Spaling, Harry; Dennis, Patricia N.; Sinclair, A. John

This paper explores how public participation in SEA is applied to two urban planning cases with solid waste management components in Kenya.

Who's asking? Climate vulnerability in Gauteng

van Weele, Gerard; Euler-Van Hulst, Karolina; Loubser, Janet

An outcomes-based approach to determining climate change vulnerabilities in the Gauteng City Region (South Africa).

Concurrent sessions

ECOSYSTEM SERVICES, HEALTH, LIVELIHOODS, AND ENVIRONMENTAL JUSTICE

Applying resilience thinking in impact assessment

Saturday 19 May | 11:00-12:30 PM | 21G

Paper Session

Chair(s): Cary Ehrman, Pieter Booth

This session will provide the opportunity for people and organizations to share experience in integrating resilience assessment in the impact assessment process. Papers cover frameworks and tools describing case studies representing a wide variety of contexts, key attributes, and lessons learned.

Limiting ecological impacts of sand extraction

Kominek, Byron; Bernhard, Teresa; Habib, Josh; Hall, Patrick

Limiting ecological impact of sand extraction in school construction projects in Malawi.

Criteria for defining natural wetlands

Venter, Marius; Esterhuysen, Surina

The key question that this study aims to address how to define natural and man-made wetlands by looking at legal, ecological, and philosophical criteria.

ESA in climate adaptation

Boltemo Edholm, Jenny

Ecosystem service assessments in climate adaptation, implemented adaptation, methods used and benefits from the methods used.

Ecosystem services and oil/gas activities

Ojile, Meshach

This study reports on how oil and gas pipelines and industrial activities have caused blockage in an area and an attempt by the local population to claim some compensation for ecosystem resource losses.

Use of habitat equivalency analysis

Booth, Pieter; Singer, Eugenio; Wenning, Romulo; Gomes, Fabiana; Wenning, Richard

The use of habitat equivalency analysis (HEA) to support ecosystem restoration as part of a resilience model for Rio Dôce Basin after the Fundão Dam failure.

Resilience model for the Rio Doce Basin, Brazil

Ehrman, Cary; Singer, Eugenio; Wenning, Hugo; de Oliveira Camargo, Ricardo; Wenning, Richard

The development and application of the resilience model prepared to support the restoration of the Rio Dôce Basin after the Fundão Dam failure.

Community participation in governance processes for reduced vulnerability

Friday 18 May | 14:30-16:00 | 21DEF

Workshop

Chair(s): Sean O'Donoghue, Catherine Sutherland, Kathleen Diga

Community participation in catchment management governance processes has resulted in a number of approaches employed to improve water security and reduce vulnerability in Durban. This session aims to highlight how these projects address social and environmental injustice.

Poverty reduction and environmental policy governance

Diga, Kathleen; Bracking, Sarah

Environmental governance starts with cities taking stock of their climate change contribution. This paper provides insight into Durban's monitoring of its evolving climate-related project portfolio in relation to poverty reduction.

Environmental justice driven by social change

Dithale, Ntswaki; Mahood, Kirsten

Wise Ways Water Care is an initiative with a unique approach in mitigating socio-ecological challenges to improve ecosystem functions while supporting sustainable livelihoods of poor communities.

ENERGY AND SOCIETIES IN TRANSITION

Country experiences with environmental justice in practice: Oil and gas

Wednesday 16 May | 15:00-16:30 | Hall 2A

Paper Session

Chair(s): Frank Eklo

This is an Oil for Development program session

The oil and gas industry does have a positive economic impact for most countries, but regretfully also negative impacts. Negative environmental impacts affecting local communities livelihood are more often than not being overlooked. This session will hear experiences and cases where environmental justice has been sought.

Environmental justice in the Niger Delta Region

Alonge, John; Chinweze, Chizoba

Oil exploration in the Niger Delta has left trails of impact which the government of the day is determined to clean-up, especially in Ogoniland, and right the wrongs of the past.

ESIA process and the application of local content

Leche, Juliet

It is essential for local content to be an integral part of the ESIA process by identifying risks and opportunities early enough in the process. Many African nations are yet to have policies.

Distilling the Nigerian government's attitude to compensation

Olorundami, Fayokemi; Olorundami, Tokunbo

Compensating for environmental injustice is very important in securing environmental justice. Is Nigeria committed to compensating for past wrongs?

IA best practice in mining: Lessons learned

Wednesday 16 May | 15:00-16:30 | 12D

Paper Session

Chair(s): Carli Steenkamp

Best practice mining cases from around the world are presented that show how different impact assessment tools, approaches, and methods can be used to address impacts related to environmental justice.

Forest smart mining: Sharing best practice

Lyons, Anna; Howard, Pippa

Sharing the results of a recent World Bank study identifying good and bad practices of large-scale mining in forest landscapes in relation to environmental justice.

MNOCs CD wellbeing efforts in oil-rich Niger Delta

Bristol-Alagbariya, Edward

Multinational oil companies (MNOCs) in Niger Delta are embarking on community development programs in their host communities, which require commitment of the MNOCs, government, and the communities.

SEA of the artisanal mining sector in Sierra Leone

Koroma, Ranita

This SEA, conducted in 2016, represents an in-depth study of legislative, environmental, economic, and social issues relating to artisanal mining and environmental justice in Sierra Leone.

Santos Basin pre-salt cumulative impact assessment

Bettencourt, Pedro; Nader, Tatiana; Fulgencio, Cláudia;

Canas, Ângela; Scarton, Marcel; Poletto, Carolina

Referring to a large cumulative impact assessment in São Paulo and Rio de Janeiro Brazilian States, the paper presents methodologies and arising social justice and sustainable development issues.

Integrated environmental assessment offshore

Almeida, Eliane Silva Ferreira; Penido, Fabricio

The integrated environmental assessment methodology proposed in this work was elaborated based on the analysis of the environmental impacts arising from the environmental impact assessment of pre-salt integrated projects.

Integrated IA for addressing Africa-specific challenges in extractives

Saturday 19 May | 14:30-16:00 | 22ABC

Panel Discussion

Chair(s): Rebecca DeWinter-Schmitt

IAIA Section: CSR

This interactive panel will focus on impact assessment to address challenges associated with resource extraction in Africa. Presenters will share examples demonstrating the value of integrated impact assessment to identify and manage the human rights, social, and environmental effects of extractive projects and to empower affected rights holders.

How to integrate human rights into the ESHIA process

Snashall, David

Integrating human rights impact assessment (HRIA) and environmental, social, and health impact assessment (ESHIA) is a challenge due to differing purposes, legal basis and viewpoints. This paper draws on a range of case studies to propose a process.

Value and pitfalls of integrated impact assessment

Winkler, Mirko

Against the evidence presented in two cross-sectional surveys that studied the effectiveness of the Addax Bioenergy project ESHIA (environmental, social, and health impact assessment), this paper discusses values and pitfalls of integrated IA.

Integrating human rights into IA: MENA and SSA

Salcito, Kendyl

Human rights intersect with environmental, social, and health conditions in complex, iterative ways. Case studies demonstrate the importance of non-linear analysis of corporate human impacts.

Using the concept of risk for transdisciplinarity

Schreiner, Greg

Complex social questions require integrated assessments which sometimes cross multiple, scientific, and knowledge disciplines. Here's a case study of how we attempted this, using the concept of risk.

Capacity building as a precursor to HRIA

Loots, Josua

Takeaways from human rights capacity building in preparation for human rights impact assessment in the mining sector.

Effective implementation: Where can we improve?

Walmsley, Bryony

How can we more effectively present the "business case" to developers for improved environmental and social management on their projects?

Is the oil and gas industry ready to prioritize environmental justice?

Thursday 17 May | 14:30-16:00 | 21G

Paper Session

Chair(s): Peter Tarr, Bryony Walmsley

This is an Oil for Development program session

Societies in transition are often suffering environmental injustice because of their weakened situation, socially and economically. The oil and gas industry in developing countries is often located in poor and environmentally-fragile regions dominated by societies in transition. This session will hear cases illuminating conflicts and opportunity.

Emerging social and environmental risks of oil

Mkutu, Kennedy

This work uses the case of Turkana, Kenya, to examine some of the emerging social and environmental risks of oil and how they might be averted.

TANAP "Silk Road of Pipelines" serving justice

Erdem, Fatih

TANAP (Trans-Anatolian Natural Gas Pipeline Project), "Silk Road of Pipelines," serving environmental and social justice.

Barriers to mitigating the indirect impacts of oil and gas

Holland, Twyla; Howard, Pippa

An integrated assessment of ecosystem services in northern Mozambique, and barriers to the effective mitigation of indirect project impacts in a rapidly changing landscape with multiple players.

The oil and gas industry and environmental justice in practice

Friday 18 May | 16:30-18:00 | Hall 28H

Workshop

Chair(s): Morgan Hauptfleisch, Bryony Walmsley

This is an Oil for Development program session

Environmental and social justice is often overlooked by the oil and gas industry, but may have dire consequences, something an increasing number of major oil companies have come to realize. Oil for Development participants will demonstrate interactions between oil and gas developments and environmental and social justice.

Managing ESG risks in hydropower in Africa

van den Berg, Stephan; Bungartz, Lindsey; Heather-

Clark, Alan; Ferreira, Rodrigo; Heather-Clark, Stuart

"De-risking" hydropower projects, located in pristine African environments and within declared protected areas, are explored from an environmental and social perspective to achieve bankability.

Tiering of SEA/EIA in relation to energy infrastructure plans

Friday 18 May | 16:30-16:00 | 12D

Paper Session

Chair(s): Luis Martins Dias, Maarten Scheffers, Jos Arts

The energy transition calls for new infrastructure and space for renewable energy projects. Different approaches (top-down, bottom-up) are possible for the realization of this transition. Experiences and tiering of impact assessment are discussed in this session, focusing on national/regional differences, decision-making, and public participation.

Governance by IA in the Brazilian hydropower sector

Gallardo, Amarilis; Gaudereto, Guilherme

This work aims to analyze the contribution of 3 types of IA instruments—EIA, SEA, and integrated environmental assessment—to promote the environmental governance of the Brazilian hydropower sector.

SEA to mitigate wildlife impacts from wind power

Skolnik, Benjamin; Magor, James

Strategic assessment of wildlife impacts from wind power development in Kenya will increase energy sector actors' understanding and ability to avoid impacts or plan mitigation of potential impacts.

German grid development: Effects on SEA/EIA

Geißler, Gesa; Rehhausen, Anke

We present the characteristics of the German transmission grid planning and permitting scheme and derive hypotheses on its effects on EIA and SEA with a special focus on tiering.

ENVIRONMENTAL JUSTICE CHALLENGES OF CLIMATE CHANGE

Energy justice: Beyond climate and environmental justice

Thursday 17 May | 16:30-16:00 | 21ABC

Paper Session

Chair(s): Darren McCauley, Jiska De Groot

This session explores the inter-linkages between energy, climate, and environmental justice. The major premise of the session is to explore how 'energy justice' contributes to the justice debate and action in terms of meeting societies energy, environmental, and climate targets.

The rise of the wind farms in Mexico

Escalante, Ariana

The fast approval of renewable energy has brought some issues due to its rapid implementation without consulting the communities that will be affected.

A socially just energy transition in Berlin?

Amoruso, Gloria

PhD research project on whether a socially-just energy transition in a city of inequalities is feasible. Local cases from the building sector in Berlin.

Concurrent sessions

Citizenship dimensions of energy justice

Damgaard, Caroline

How can we link principles of energy justice with understandings of individual consumers, or citizens, and their place in the energy system and transition?

Energy justice through a solar lens

Todd, Iain

The understanding of energy justice can be furthered by studying the potential and impact of solar energy across the globe. The implications argue for optimism.

HUMAN RIGHTS, EQUALITY, AND ENVIRONMENTAL JUSTICE

A rights-based approach to FPIC and HRIAs: Lessons from the field

Wednesday 16 May | 15:00-16:30 | 21DEF

Workshop

Chair(s): *Sara Bice*

This session will take a deeper look at community's role, voice, and agency in the face of mining, oil, and gas exploration projects. We discuss experiences from South Africa to Chile implementing tools to inform advocacy on free, prior, and informed consent (FPIC) and community-based approaches to human rights impact assessments (HRIAs). Expert practitioners will present case studies followed by an interactive session with audience participants.

Community-based HRIAs

Tamir, Irit (Oxfam)

A gold mine case study in Chile where indigenous communities were not granted proper consultation by the government of relevant companies. They chose a community-based approach to provide evidence of impacts from their perspective and recommendations for remedy.

FPIC tool for community advocacy

Wicomb, Wilimein (Legal Resources Centre)

Recent research that informs communities on their rights and relevant policies that can support their decision making and help mitigate negative impacts of extractive projects on the natural resources and livelihoods of communities in South Africa.

Regional approach to FPIC

Gwemende, Titus (Oxfam)

Oxfam's FPIC work with local communities impacted by the extractives sector at the Southern Africa regional level, drawing on experiences from Mozambique specifically.

Building local capacity for meaningful stakeholder engagement

Friday 18 May | 11:00-12:30 | 21DEF

Panel Discussion

Chair(s): *Kendyl Salcito*

IAIA Section: *CSRM*

This interactive panel discussion draws from the global expertise of practitioners using novel tools to meaningfully engage marginalized, vulnerable and unsophisticated stakeholders in impact assessment practice. Presenters will use firsthand experience to explore challenges and opportunities, with an eye to how fully informed stakeholders improve the effectiveness of assessment.

Rights-based approaches in company-led HRIAs

Gilles, Isabelle; Lipsett, Lloyd

This presentation seeks to provide practical reflections on the opportunities and obstacles for implementing rights-based approaches to engagement in company-led assessments.

Can we get to meaningful participation in ESIA?

Joyce, Susan

This will be part of an interactive panel and is intended to lay out case examples and to provoke questions about the challenges to meaningful participation within existing ESIA frameworks.

Full project cycle SIA: Optimizing social outcomes

Hart, Timothy

This paper describes work in progress to develop and implement an integrated full-project-cycle SIA approach to optimizing the outcomes of social projects and investments in mining communities.

Women and illegal mining in Africa

du Plessis, Willemien; Chamberlain, Lisa

This paper explores alternative instruments that could be used to formalize illegal mining for women in Africa.

Multi-disciplinary HRIA teams

DeWinter-Schmitt, Rebecca

Insights on the importance of multi-disciplinary teams for human rights impact assessment (HRIA) practice and learning from other disciplines to broaden assessment teams' skillsets and perspectives.

ECOWAS gender assessments in energy projects

Factor, Gabriela; Maduekwe, Monica

ECOWAS adopted a Directive on Gender Assessments in Energy Projects to ensure that vulnerable and marginalized persons are included and benefits result from energy infrastructure development.

Equality in IA and involuntary resettlement

Saturday 19 May | 11:00-12:30 | Hall 2BH

Paper Session/Pecha Kucha

Chair(s): *Michele Gilbert, Gordon Appleby*

IAIA Sections: *CSRM, Indigenous Peoples*

Exploring how IA engages with groups at risk of discrimination and inequality, from including women in engagement to EIA allowances for small companies to two key issues in involuntary resettlement (government and private sector approaches to valuation and livelihood restoration measures - case studies from Ghana and Malawi).

The value of EIA for disadvantaged SMMEs in SA

Stroebe, Kelly; Levendal, Minnelise; Mqokeli, Rirhandzu; Mogotshi, Reinet; Mqokeli, Babalwa; Retief, Francois

This paper aims to explore the value of the environmental assessment process to disadvantaged small, medium, and micro enterprises and to convey their experience of being part of this process.

Putting urban livelihood restoration into practice

Francis, Patrick; Drew, Sarah; Chipango, Pelekelo

Success stories, challenges, and lessons learned from Lusaka water supply, sanitation and drainage project urban livelihood restoration program.

Gender, engagement and the culture argument

Factor, Gabriela; Gotzmann, Nora

The "respect for local culture" argument frequently functions to exclude women. We challenge this argument from both international human rights law and impact assessment practice perspectives.

Indigenous and vulnerable people, cultural heritage, and health

Saturday 19 May | 11:00-12:30 | 22G

Paper Session

Chair(s): *Geetha Ramesh, Inge Lindblom*

IAIA Sections: *Indigenous Peoples, Health, Cultural Heritage*

This joint session aims to promote a discussion with practitioners from different IA practice areas on how IA is helping or not to promote social justice and participation of indigenous and vulnerable people on decisions that may affect them.

The limitations of law and EIA, Praeksa community

Assavarak, Passanan

The limitations of law and EIA for the Praeksa landfill caused villagers to face health problems, to waste time on lawsuits, to take risk in using both surface and groundwater, and issues with food insecurity.

Justice for the Piikani people; science, tradition

McLaughlin, Paul; Knowlton, Troy

The study presents how Piikani Nation has changed, how they will continue to change, and how, if possible, some of those impacts can be mitigated for the future of Piikani members.

Communities affected by the mining industry

Assavarak, Passanan; Lerdsateanchai, Pakorn

Three communities affected from mining: Klity Creek is facing lead poisoning, Mae Tow (famous for rice farming) is contaminated, and villagers' human rights are violated in Wang Sapung.

Including Indigenous Knowledge in EIA in Australia

True, Denise

Improving Australia's protection of indigenous heritage, by the inclusion of traditional ecological knowledge in environmental impact assessment from lessons of the Canadian experience.

Indigenous Knowledge: A poetic narrative

Faty, Babalwa

I will be poetically talking about information and knowledge management, through the opportunity of honoring our indigenous knowledge and incorporating it into the sustainability agenda.

Social justice and community participation in impact assessment

Saturday 19 May | 11:00-12:30 | 12D

Paper Session

Chair(s): Ilse Aucamp

A range of topics related to community participation and social justice are covered. Remote sensing as a tool for social risk management, the potential impact of economic activities between countries on environmental justice, and causes of land-use conflict in mining communities are investigated. A community-based HRIA tool that enhances informed decision making on the community level is discussed.

State institutions, communities, and mining in Peru

Quispe-Zúñiga, Melissa Roxana; Callo-Concha, Daniel; Borgemeister, Christian; Greve, Klaus

Land-use conflicts related to mining activities in Peru are due to the absence of the state, remoteness, weak state institutions, and vulnerability of economy/environment.

Environmental justice between countries:

Infractions to environmental licenses

Bergamini, Kay; Araya, Gino

Exportation generates environmental impacts away from consuming countries, thus causing problems in terms of international environmental justice. Infractions to environmental licenses are analyzed.

Integrated spatial and environmental development

van Straaten, Dick

The integration of spatial and environmental decision-making processes concerning spatial development is very efficient to cope with future transition challenges.

INDIGENOUS PEOPLES AND ENVIRONMENTAL JUSTICE

Informing enviro-cultural justice in impact assessment

Saturday 19 May | 14:30-16:00 | 12A

Paper Session

Chair(s): Kapa Morgan, Tumanako Ngawhika Fa'au

IAIA Section: Indigenous Peoples

Building on Aashukan, informing cultural justice is the focus. Disaster, scarcity, and competition all result in prioritization of the majority while enviro-cultural costs are ignored. Often Indigenous Peoples are the minority. What examples can be shared that achieve the empowerment of environmental and cultural justice in impact assessment?

From "stones and bones" to songlines and dreamings

Munday, Jane

Can "cultural blindness" be overcome by studies that describes the intangible, value the spiritual, and explain context when considering impacts on the social and cultural fabric of communities?

Measuring the intangible

De Beer, Jessica

This presentation will explore two approaches to incorporating intangible aspects of the environment into the impact assessment and decision-making process in order to ensure environmental justice.

Empowering ecosystem and cultural justice

Morgan, Te Kipa Kapa Brian

How barriers are challenged and what is being achieved—linking monitored ecosystem trends to decisions is empowering because it brings transparency and accountability to decision making processes.

PUBLIC PARTICIPATION AND ENVIRONMENTAL JUSTICE

Effective public participation in extractive industries and energy sector (I)

Friday 18 May | 11:00-12:30 | 21ABC

Paper Session

Chair(s): Sven Schicketanz, Patrick Wieland

The session aims at identifying innovative features of effective public participation based on good practice examples from countries in transition as well as industrialized countries. The participants will discuss ways to reduce both social conflicts and environmental damage.

Next generation engagement: 5 key issues

Bice, Sara

What five issues will drive the next generation of community engagement for major projects? Join our discussion of findings from the Next Generation Engagement project.

Balancing tensions to achieve better outcomes

Hemphill, Cassandra J.

Incorporating cultural rationality as well as technical rationality results in robust, sustainable decisions. Dialogic deliberation and other strategies help environmental management (EM) practitioners balance tensions.

Gender and ESIA public consultations in Cameroon

Nkerbu, Presley; Nguene, Francois Roger; Molonge, Yaah Louise; Belanke, Christine Doumbe; Molonge, Thompson Namanga

This paper further investigates and evaluates gender involvement in the ESIA public consultation process and brings out the disparities, constraints and presents the benefits of fully engaging more women in the public participation process.

Social response for CCS facilities in Japan

Murayama, Takehiko; Nagaoka, Atsushi; Nishikizawa, Shigeo

Carbon capture and storage (CCS) facilities is one effective devices to mitigate the impacts of carbon dioxides. This presentation covers trend analysis of social response and attitudes of stakeholders.

Effective public participation in extractive industries and energy sector (II)

Friday 18 May | 14:30-16:00 | 21ABC

Paper Session

Chair(s): Sven Schicketanz, Patrick Wieland

The session aims at identifying innovative features of effective public participation based on good practice examples from countries in transition as well as industrialized countries. The participants will discuss ways to reduce both social conflicts and environmental damage.

How to improve public involvement

Kamijo, Tetsuya

A simple alternatives analysis method with a wide range of alternatives may produce an active discussion of alternatives, and may result in improvement of public involvement.

Strategy and tools for effective public participation

Wieland, Patrick; Treidel, Holger

Senace promotes an effective public participation through tools and guidelines that promote the inclusion and accessibility of oft-excluded citizens in the process of environmental decision making.

IA community participation smokescreen

Ngwenyama, David

IA provides the only space for community participation in project decision making. However, control of the process by the developer makes this space a mere smoke screen.

Comparison of public behavior in the public sector

Albayrak, Ali; Eraslan, İsmail Raci; Turan, Volkan; Eraslan, Selman

Behavior of people during public participation for energy projects are different than that during environmental investment projects.

Concurrent sessions

Effective public participation in extractive industries and energy sector (III)

Friday 18 May | 16:30-18:00 | 21ABC

Paper Session

Chair(s): *Sven Schicketanz, Patrick Wieland*

The session aims at identifying innovative features of effective public participation based on good practice examples from countries in transition as well as industrialized countries. The participants will discuss ways to reduce both social conflicts and environmental damage.

Key factors to gain support from Indigenous Peoples

De la Cruz-Novey, Alicia; Ronquillo, Rodrigo

A successful story about an 866km linear project in Guatemala that used several techniques to enhance fairness and competence procedures that are associated with successful engagement processes.

Public consultation at the environmental licensing

Mello, Gisela; Nabuco, Felipe; Ramos, Alysso

This paper discuss the main issues of public consultation during the environmental licensing process in Brazil based on information brought by the affected population of 5 transmission line projects.

Participation reform in Australia extractives

Marsh, Daniel

Evaluation showed that petroleum industry consultation practices are broadly ineffective and inefficient, and led to development of detailed practice statements and a series of EIA "reference case" tools.

Improving environmental justice in IA through public participation (I)

Thursday 17 May | 11:00-12:30 | 22DEF

Paper Session

Chair(s): *Sanna-Riikka Saarela*

The session focuses on procedural and distributive justice in impact assessment procedures. Research-focused and practical contributions present concrete examples of methods and practices that can better address environmental justice in IA. In addition, challenges and opportunities for procedural justice in IA processes are discussed.

Public participation in strategic environmental assessment

Meyer, Theunis; Cilliers, Dirk

The development of EMFs requires public participation. This presentation reports on whether such processes complied with process criteria, achieved "social goals," and improved decision-making tools.

Public engagement in EIA for new town in Hong Kong

Lung, William

This paper will provide an account of how public engagement in the EIA process in Hong Kong contributed in shaping the Hung Shui Kiu New Development Area to achieve the planning vision.

Continuous public involvement in EIA: CKR

Ng Yeun Ching, Queenie; Cheung, Wai Hung Tony; Ping Ping, Alice

The continuous public involvement of CKR is conducive to public support, preemptive to potential judicial review of the EIA approval, and contributive to positive environmental outcomes of the project.

EIA large-scale engagement: 2 million people

Kelly, Paige Diana; Maurtua Konstantinidi, Alexandra

Case study on large scale engagement: challenges and lessons learned of the public participation process regarding a telecommunication project impacting 2 million people in Namibia.

Determinants of participation in public hearings

Fonseca, Alberto; Castro, Laís; de Brito, Ludmila A.

Are project type, ownership, and affected area associated with biophysical and socioeconomic concerns raised in public hearings? This study explores this question in the context of 49 Brazilian EIAs.

Improving environmental justice in IA through public participation (II)

Thursday 17 May | 14:30-16:00 | 22DEF

Paper Session

Chair(s): *Sanna-Riikka Saarela*

The session focuses on procedural and distributive justice in impact assessment procedures. Research-focused and practical contributions present concrete examples of methods and practices that can better address environmental justice in IA. In addition, challenges and opportunities for procedural justice in IA processes are discussed.

Participatory justice: The social "sweet spot"

Munday, Jane

Participatory justice is the "sweet spot" where relationships are symmetrical, community and proponent perspectives have equal weight, and the community has real influence.

Public participation in Integrated Environmental Management

Skosana, Vusi

This presentation will demystify challenges and misconceptions about public participation related to decision making or developments requiring authorization.

Does IA meet stakeholder expectations? POSCO case

Mishra, Pradeep

The paper tries to analyze critically how the EIA and cost-benefit analysis (CBA) exercises failed to bring out the complexities of the POSCO project in Odisha.

Role of communities in development and assessment

Ip, Tsz Ying; Lee, Ka Man; U, Clara

This paper discusses how communities should be engaged in development plans and impact assessment projects in order to tailor design, gain public support, and achieve environmental justice.

Are the youth silent in environmental procedures?

Saarela, Sanna-Riikka

This paper discusses youth participation in environmental planning and decision-making processes such as EIA, land use planning, and environmental permit procedures.

AGRICULTURE, FORESTRY, AND FISHERIES

Environmental justice: Options for coastal communities

Wednesday 16 May | 15:00-16:30 | 12A

Paper Session

Chair(s): *Ijeoma Vincent-Akpu*

IAIA Section: *Agriculture, Forestry and Fisheries*

This session looks at negative impacts of development projects on coastal communities dependent on water and how available regulatory frameworks and best practices could be utilized by the coastal communities to avoid violence and build resilience.

Participatory justice and networks of trust

Lawrence, Andrew

Trust networks are often overlooked by socio-technical approaches to energy policy, and more specifically by South Africa's REIPPPP program. Two contrasting examples show their importance.

Public opinions on offshore windmill project

Lee, Sangyun

This study conducts a survey of 300 residents who live near the offshore wind mill project in Korea. Results suggest perceptual differences between residents supporting and opposing the project.

Tensions in Durban's City-Port governance

Molelu, Obakeng; Enserink, Bert

Market forces have made the port-city-environment an arena that is becoming the scene of conflicts and coalitions as actors fight for their values, perspectives and interests to be considered.

Promoting community resilience in Niger delta

Vincent-Akpu, Ijeoma; Obute, Gordian; Ndukwu, Benjamin

What coastal communities can do to prevent or minimize socio-economic dysfunction associated with environmental effects and enhance community resilience.

HRIA in the agricultural sector: A case learning session

Thursday 17 May | 14:30-16:00 | 12A

Workshop

Chair(s): Nora Gotzmann

This case learning session will take a deep-dive into two human rights impact assessments in the agricultural sector: a community-based assessment in the sugar industry, and a sector-wide assessment in the palm oil industry. Presentation of the case studies will be followed by interactive group discussions facilitated by the presenters.

Assessing impacts in the Myanmar palm oil industry

Bansal, Tulika

This presentation describes the process and findings of a sector-wide impact assessment of the palm oil sector in Myanmar and whether such an approach can be applied in other geographies.

Case study using community-based approach

Tamir, Irit

This presentation will highlight a land case in Brazil in a sugar supply chain using the community-based approach to Human rights impact assessment (HRIA).

Impact assessment and agriculture

Saturday 19 May | 11:00-12:30 | 12A

Paper Session

Chair(s): Theunis Meyer

IA in agriculture can be viewed from two angles. On one hand, it needs to assess the impact of agricultural practices on nature and humans. On the other hand, it needs to protect valuable agricultural land against the impacts of other developments. This session deals with many of these aspects.

Intensive agriculture projects:

Hurdle or contribution?

Bella, Aimee; Bakia, Mbianypr

Could intensive agricultural projects present major ecological hurdles rather than contribute towards reducing food poverty in Africa?

Agriculture on mine tailings dumps: Possible?

Legoale, Tshiamo; Sosibo, Ndabenhle

The possibility of having multi-purpose mining land is explored, and experiments on phytomining prove it possible.

Protection of SWSAs using NEMA (107 of 1998)

Bahindwa, Abigail

SANBI's BLU Project, together with partners, is piloting the listing of a subset of strategic waster source areas (SWSAs) under Section 24 (2A) of the National Environmental Management Act (No. 107 of 1998).

Protection and management of groundwater quality

Chande, Milika Mimi; Mayo, Alyoce; Nobert, Joel

A study to assess the protection and management of groundwater quality for urban aquifers of Lusaka in Ngwerere sub-catchment of Zambia.

Socio-ecological approaches for sustainable landscapes

Howard, Pippa

Options available to achieve objectives-based outcomes through the application of the mitigation hierarchy (MH) at an ecosystem level.

BIODIVERSITY AND ECOLOGY

Applying the mitigation hierarchy to address marine biodiversity impacts

Saturday 19 May | 14:30-16:00 | 22G

Paper Session

Chair(s): Jan-Willem van Bochove, Suzanne Livingstone

How can the mitigation hierarchy be applied to address marine biodiversity and ecosystem service impacts? What are some of the challenges and opportunities for implementing good mitigation practice? We bring together experiences from around the world to share new ideas, tools, and approaches for improving marine biodiversity outcomes.

Tools to support the mitigation hierarchy

Brooks, Sharon; Fletcher, Ruth; Grigg, Annelisa; Martin, Sharon; Regan, Eugenie; Thomas and Corinne Martin, Hannah

Tools exist to support the mitigation hierarchy. These include a data portal, the Integrated Biodiversity Assessment Tool, a data analysis product, and exploratory work on marine No Net Loss (NNL).

Good practice guidance for marine oil and gas

Holland, Twyla; Howard, Pippa

An introduction to FFIs "Good Practice Guidance for Oil and Gas operations in marine environments," designed to assist oil and gas operations to mitigate impacts to marine biodiversity and ecosystem services.

Addressing data paucity to improve avoidance

Cousins, Neil

Data paucity hampers effective avoidance and leads to impacts on marine biodiversity. These issues will be explored and some solutions provided, including predictive approaches and community science.

Governance innovations around marine offset

Jacob, Céline; Bas, Adeline; Scemama, Pierre

Governance issues around marine offset can draw upon insights from marine spatial planning initiatives and precedents from organizational innovations used in wetland mitigation systems.

Marine biodiversity offsetting in Australia

Niner, Holly; Milligan, Ben; Jones, Peter J. S.; Styan, Craig

Biodiversity offsetting developed with a terrestrial focus. I discuss the challenges posed by the use of the approach in marine contexts and how this has influenced current practice in Australia.

Marine biodiversity offsets:

Prospects and challenges

van Bochove, Jan-Willem; Livingstone, Suzanne

This talk explores some of the opportunities and unique challenges for implementation of averted loss, restoration and policy-based offsets to address unavoidable impacts to marine biodiversity.

Biodiversity offsets and people (I)

Saturday 19 May | 11:00-12:30 | 12C

Panel Discussion

Chair(s): Suzanne Livingstone, Katherine Gotto-Walton

We draw on real world offset projects to identify trade-offs between multi-stakeholder visions for offset management. Presenters will highlight lessons learned from their experiences and tools and techniques to develop a collaborative approach to offset design, establishment, and implementation using an interdisciplinary approach.

A participatory approach to offset actions

Cannon, Paul; Livingstone, Suzanne; Riddell, Michael; Sylla, Cheikh

Case study using a participatory approach to develop biodiversity offset actions with positive landscape-level outcomes for both biodiversity and people.

Biodiversity mitigation hierarchy and communities

Gaylord, Lisa

QMM's biodiversity mitigation program in Madagascar is based on an integrated spatial approach by targeting land, ecosystems, natural resources management, and community stewardship.

No Net Loss for people and biodiversity

Griffiths, Victoria; Bull, Joseph; Baker, Julia; Milner-Gulland, E.J.

Biodiversity offsets should not make people worse off, but understanding is lacking concerning how to achieve No Net Loss with regard to people's provisioning and cultural values for biodiversity.

The local impacts of biodiversity offsets

Jones, Julia P. G.; Bidaud, Cecile; Schreckenberger, Kate

Using the case of the Abatovy mine, Madagascar, we explore the ways in which offsets can impact local populations and the reasons for a gap between international standards and implementation.

Biodiversity offsets and people (II)

Saturday 19 May | 14:30-16:00 | 12C

Panel Discussion

Chair(s): Suzanne Livingstone, Katherine Gotto-Walton

We draw on real world offset projects to identify trade-offs between multi-stakeholder visions for offset management. Presenters will highlight lessons learned from their experiences and tools and techniques to develop a collaborative approach to offset design, establishment, and implementation using an interdisciplinary approach.

Innovative responses to biodiversity offsets in Durban

Mullins, Greg; Douwes, Joanne; Nkosi, Sabelo; Ralfe, Kate; Dlamini, Zama; Macfarlane, Doug

A pilot project in Durban to advance the science around biodiversity offsets and translate this into practical implementation and policy development.

Concurrent sessions

Net ecosystem services analysis for mitigation

Reub, Greg; De la Cruz Novey, Alicia; Roca, Roberto

This presentation will provide an overview of a methodology that is an equitable and quantified approach for providing biodiversity and ecosystem services mitigation and offsets.

Biodiversity offsets: A competent authority view

Moses, Malcolm

The trend for developments, subject to an EIA and requiring a biodiversity offset is on the rise. This is a government perspective on the effectiveness of offsets and solutions to improve the status quo.

Coral offset in Vanuatu

Takeda, Shingo; Murayama, Takehiko; Nishikizawa, Shigeo

A new marine protected area (MPA) was registered in Vanuatu to compensate the coral loss due to development projects after series of environmental and social survey and stakeholder meetings.

Do biodiversity offsets deliver equitable outcomes?

Friday 18 May | 16:30-18:00 | 11

Paper Session

Chair(s): Susie Brownlie, Amrei von Hase

IAIA Section: Biodiversity and Ecology

Biodiversity offsets aim for “no net loss” of biodiversity for current and future generations, striving for equity. Many see this goal as “symbolic,” not explicit. This session explores the basis for biodiversity offsets in different contexts, to examine how effective they are likely to be in helping curb biodiversity loss.

Biodiversity offsets: No clear destination?

Brownlie, Susie; von Hase, Amrei

Biodiversity offsets aim for “no net loss” of biodiversity at least. But are imprecise objectives and poorly defined frames of reference perpetuating biodiversity loss now and for the future?

Exploring loss-gain scenarios for a robust policy

von Hase, Amrei; Parham, Erin

The introduction of robust No Net Loss or Net Gain-type goals can benefit from good preparatory work, including gap analyses, risk assessment, and exploratory loss-gain analysis to inform robust policy formulation.

Reframing compensation for nature and people

Quétier, Fabien; Chamagne, Juliette; Garcia, Anna;

Dessard, Hélène; Garcia, Claude; Souquet, Mathieu

Drawing lessons from a diversity of compensatory approaches worldwide, we discuss how to frame and achieve positive outcomes for both nature and people.

Counterbalancing loss with protection—not gain

Manuel, Jeffrey; Ginsburg, Aimee

In the South African context, counterbalancing loss for protection, rather than No Net Loss/Net Gain, provides for a more consistent, measurable, and transparent basis for measuring equitable outcomes from offsets.

Enabling approaches for promoting offsets in India

Rajvanshi, Asha

The paper attempts to share the experience of emerging “offset-like” approaches in regulating developments in all major sectors of economy and particularly transportation, mining, and energy.

Use of natural capital to preserve biodiversity

King, Virginia

Integrating natural capital and associated ecosystem services into project planning can support preserving biodiversity, in the midst of project execution. This presentation presents a methodology to support this goal.

Greening the transport sector through smart plans and eco-friendly designs

Friday 18 May | 14:30-16:00 | 12D

Panel/Workshop

Chair(s): Bruce Dunn, Vinod B. Mathur

IAIA Section: Biodiversity and Ecology

This session builds on the outcome of the Hanoi Forum on Sustainable Infrastructure, emphasizing opportunities for countries to strengthen policies and practices for avoiding biodiversity loss and greening transport infrastructure. This session discusses best practice for eco-friendly project designs, critical challenges and needs, and efforts to strengthen implementation capacity globally.

Mainstreaming mitigation: The Indian experience

Mathur, Vinod; Rajvanshi, Asha

The paper shares a range of mitigation options and highlights experience gained in implementation in road, rail, and power sectors to achieve a win-win situation for both development and conservation.

Guiding principles for sustainable infrastructure

Newman, Kate; Dunn, Bruce; Yangzom, Karma

Infrastructure investment is accelerating. The presentation will discuss new “guiding principles” to improve infrastructure sustainability and resilience through better planning and design.

IA and biodiversity

Thursday 17 May | 14:30-16:00 | 12D

Paper Session

Chair(s): Nicholas King

This session explores several different approaches to assessing impacts on biodiversity across various development sectors and varying habitats. Case studies range from Iraq, to mining in Zambia, to the mountains of Lesotho.

Critical, natural, and modified habitat in ESIA

Coroi, Mihai

We will attempt to clarify issues with definitions and differences between modified and natural habitat, and will present a 2-stage critical habitat assessment that fits better in the ESIA process.

Planning biodiversity monitoring in Iraq

Kor, Laura; Coroi, Mihai; Fant, Mia

A long-term biodiversity monitoring plan was developed for a project in a sensitive biodiversity area, within a country affected by conflict. Innovative methods were designed to overcome challenges.

What if we could mine in protected areas/wetlands?

Ngwenyama, David

Three mines are to be developed in Lochinvar National Park, reversing an earlier decision. These projects have had no full IA despite being in a high biodiversity and ecologically sensitive area.

Biodiversity conservation and mining in sensitive areas

Buhanga, Edgar

Eco-toxicological study undertaken in the Dura Limestone Mining near a Ramsar Site to establish bio-accumulation of heavy metals by indicator species. Results showed lead beyond national standards.

Trekking for Thoboshana: Conserving the Maloti minnow

McCarfetty, James; Monongoaha, Palesa

Trekking for Thoboshana—Efforts to conserve the endemic Maloti minnow (*Pseudobarbus quathlambae*) in the Lesotho highlands.

Mechanisms for biodiversity conservation (I)

Friday 18 May | 11:00-12:30 | 11

Paper Session

Chair(s): Dirk Cilliers

This session explores different mechanisms to promote biodiversity conservation and the sustainable management of sensitive environments. Mechanisms include environmental licensing, fiscal provisions, and legal provisions as well as innovative methodologies and project level plans.

Biodiversity sanctions under the new environmental framework

Perez, Cristian; Bergamini, Kay

The study, made using data gathered by the researchers, highlights the main infractions associated with biodiversity under the new environmental framework.

Environmental licensing as an important instrument

Borges, Antônio; Souza, Katia

This paper aims to highlight the importance of environmental management in the improvement of transmission lines and in the preservation of biodiversity.

Adaptive dredging and sea turtle conservation

Patiri, Victor; Lopez, Gustavo; Teixeira, Vicente;

Santarossa, Leonardo; Teixeira, João; Brandl, Carolina

Case study of the development of an adaptive dredging plan to Port of Açú, Brazil, in the area of environmental sensitivity due to the presence of nesting sea turtles.

Property rights on agricultural productivity

Vincent-Akpu, Ijeoma; Hart, Aduabobo; Obute, Gordian

This paper is on effects of property rights and land tenure on socio-economics of Niger Delta, available tools for them, and the role of different stakeholders in ensuring agricultural sustainability.

Mechanisms for biodiversity conservation (II)

Friday 18 May | 14:30-16:00 | 11

Paper Session

Chair(s): Dirk Cilliers

This session explores different mechanisms to promote biodiversity conservation and the sustainable management of sensitive environments. Mechanisms include environmental licensing, fiscal provisions, and legal provisions as well as innovative methodologies and project-level plans.

Species distribution and resilience range

Chung, Hye In

Extracting species distribution and establishing the concept of resilience range using species distribution models (SDMs) based on new ensemble methodology.

Financial mechanism for the maintenance of protected areas

Borges, Antônio; Souza, Katia

This article demonstrates how the allocation of environmental compensation resources of licensed projects contributed to the management of protected areas in the different Brazilian biomes.

Risk management based on FAO normative functions

Davis, Mark; Morra, Daniela

Environmental and social risks in food and agriculture projects are managed by guiding formulators through a semi-automated system that links risk management strategies to FAO's normative functions.

Adaptation potential of SADC's dryland forests

King, Nicholas

Proactive adaptation policies are urgently needed for SADC's large dryland areas. New approaches for the key dryland forests sector, incorporating community-based management, are described.

Integrated spatial and environmental development

van Straaten, Dick

The integration of spatial and environmental decision-making processes concerning spatial development is very efficient to cope with future transition challenges.

Planning for and implementing No Net Loss/Net Gain of biodiversity goals: Approaches, challenges, and solutions (I)

Friday 18 May | 11:00-12:30 | Hall 2A

Paper Session

Chair(s): Amrei von Hase, Juan Pablo Carrera

The session will provide examples on how the mitigation hierarchy can be successfully integrated into the EIA process, and will discuss how the application of the principle can contribute effectively to biodiversity conservation, also considering challenges and risks.

Recent legislative developments in Latin America

Brooks, Sharon; Rogalla von Bieberstein, Katharina; Ognibene, Lara

Recent legislative developments to foster the application of the mitigation hierarchy in the EIA process will be presented, with a focus on Latin America.

Mitigation hierarchy in Peru: Legal framework

Carrera, Juan Pablo; Ramirez, Aldo

This presentation will analyze the legal situation and the advances that they have on the implementation of instruments for the mitigation of impacts.

Biodiversity offsets in South Africa's EIA system

Manuel, Jeffrey; Ginsburg, Aimee

Offset implementation in a policy vacuum created challenges, but also opportunities, to tailor the concept to support implementation of the mitigation hierarchy.

When are aggregated and anticipated offsets effective?

Quétier, Fabien; Sarmiento, Mariana; Victurine, Catherine; Rainey, Hugo; Victurine, Ray; Souquet, Mathieu

Drawing lessons from the development of habitat banking models in contrasting contexts, we discuss challenges and opportunities for more effective implementation of the mitigation hierarchy.

Planning for and implementing No Net Loss/Net Gain of biodiversity goals: Approaches, challenges, and solutions (II)

Friday 18 May | 14:30-16:00 | Hall 2A

Paper Session

Chair(s): Amrei von Hase, Juan Pablo Carrera

The session will provide examples on how the mitigation hierarchy can be successfully integrated into the EIA process, and will discuss how the application of the principle can contribute effectively to biodiversity conservation, also considering challenges and risks.

Biodiversity data and mitigation hierarchy in Mozambique

Costa, Hugo M. R.; Videira, Eduardo; Rainey, Paulino; Sidat, Naseeba; Rainey, Hugo; Victurine, Ray

This case study undertaken in Mozambique by the company Impacto and Project COMBO gives valuable insights and lessons learned on how biodiversity data can inform an adequate mitigation hierarchy plan.

Objectives-based ES conservation in Colombia

Howard, Pippa

Oil and gas development offshore La Guajira, Colombia, requires attention to local community social and cultural preferences.

Linear infrastructure in Lesotho: Getting it right

Hughes, Jessica

Achieving effective implementation of the mitigation hierarchy through optimization of road and powerline alignments for an EIA in Lesotho.

Implementing biodiversity offsets in Gamsberg

Asante-Owusu, Rachel; Edwards, Steve

The session will highlight lessons learned in implementing biodiversity offsets towards a No Net Loss outcome in the Northern Cape region of South Africa.

Regional conservation assessments: Value, process, and case studies

Thursday 17 May | 11:00-12:30 | 12A

Paper Session

Chair(s): Dennis Grossman

The motivation behind this session is to encourage the development and implementation of a standard Regional Conservation Assessment (RCA) approach. This session will explore different RCA practices that have been implemented around the world. The RCA benefits to regional conservation and development planning and implementation will be explored.

Analysis of an ecologically healthy area

Ryu, Jieun; Jeon, Seong Woo; Lee, Kyung-Il; Hwang, Jinhoo

This study not only considered the health and diversity of the ecosystem but also optimized the evaluation results through the mechanical learning method.

Ecosystem service mapping by integrated ES modelling

Hayashi, Kiichiro; Kobayashi, Wataru; Ooba, Makoto

Based on the assessment of the ES potential supply mapping, an integrated ES modelling approach was employed to view the results of ES potential mapping.

Mainstreaming regional conservation assessments across California

Grossman, Dennis

Application of regional conservation assessment methods for California's Mojave Desert ecoregion. The assessment products inform the development and implementation of integrated regional conservation and development plans.

Toward effective implementation of the mitigation hierarchy in EIA process: Case examples

Friday 18 May | 16:30-18:00 | Hall 2A

Paper Session

Chair(s): Johan Nel

The session provides examples on how the mitigation hierarchy model has been or can be integrated into the EIA and decision making process. The case studies explored in this session offer real case examples of and experiences with the adoption and implementation of the hierarchical impact mitigation and management model in biologically diverse areas.

Concurrent sessions

South American offset policies in practice

Campbell, Genevieve; Putri, Tami; Regan, Isabel; Tatum-Hume, Emma; Regan, Eugenie; Edwards, Steve
South American governments are leaders in developing biodiversity offsets policies that align with international best practice standards. However, their implementation remains a challenge.

The mitigation hierarchy before and beyond EIA

Raine, Hugo; Costa, Hugo; Quétier, Amrei; ten Kate, Kerry; Quétier, Fabien; Victorine, Ray
EIA has a role in mitigating biodiversity impacts, but outcomes are better if mitigation starts before design, if government leads landscape planning, and if lenders assure long-term outcomes.

IA standardization and the mitigation hierarchy

Fonseca, Alberto; Rivera, German; de Brito, Ludmila A.; Cunha, Karine
How may the lack of standardization affect the use of the mitigation hierarchy in EIAs? This study explores this question in the context of 49 Brazilian EIAs.

Improving EIAs on linear projects

Roca, Roberto; Ronquillo, Rodrigo
PS6-IFC Critical habitat identification and application of the mitigation hierarchy to transmission lines.

Amending approved biodiversity mitigation measures

Valencia, Claudia
A case study shows how new measures following the mitigation hierarchy had to be devised to protect a reclassified locally endemic species during project operations.

Adapting coastal communities to climate change

Koroma, Ranita
Presentation of the findings from a climate change vulnerability assessment and the preparation of a guide to adaptation planning for coastal communities in Sierra Leone.

Finding agency for climate justice

Seekamp, Erin; Jurjonas, Matthew
An adaptive capacity assessment informed by coastal resilience and rural sociological literatures engaged marginalized rural coastal communities of eastern North Carolina (US).

Heat wave-related damage

Je, Minhee; Jung, Seunghyun; Kim, Hyomin
This study aims to analyze vulnerable regions of thermal environments in the present and future, thereby analyzing and discussing the main occurrence factors by region of classified thermal environment.

Climate change and impact assessment: Good practice cases (II)

Thursday 17 May | 14:30-16:00 | 21 ABC

Paper Session
Chair(s): Arend Kolhoff
IAIA Section: Climate change

This session will provide the opportunity for people and organizations to share their good practice experiences with the integration of climate change issues in EIA as well as SEA. We welcome good practice cases on climate change adaptation and mitigation for all types of impact assessment and all sectors.

Integration of climate change adaptation to EIA in Korea

Lee, Youngsoo
Integration of climate change to the EIA is more effective than preparation of a new act in mainstreaming climate change adaptation in policy, plans, program, and projects in Korea.

Developing SA framework for the Thai context

Chanchitpricha, Chaunjit; Bond, Alan
A sustainability assessment framework is developed for the Thai context and is applied as a pilot study to Thailand's climate change master plan 2015-2050.

GHGs management along agricultural value chain in Nigeria

Salau, Ibrahim; Agbaje, Abbas; Olaogun, Atanda
This study is the first to consider the applicability of farm-level and agricultural value chain greenhouse gas (GHG) emissions from agriculture through the farm-to-fork value chain.

Impact assessment of land degradation and desert

Muhammad, Usman
The research adopted two theories: Deep Ecology and Weak Anthropocentric. Findings demonstrate that soil in northern Nigeria has low nutrients now compared to 30 years back.

IAIA's climate change and impact assessment next steps

Friday 18 May | 11:00-12:30 | 12D

Roundtable
Chair(s): K.C. Lam, Ana Maria Quintero
IAIA Section: Climate Change

How are IAIA and IA practitioners responding to the recommendations outlined in the Paris Agreement on Climate Change? We review actions that have been taken by IAIA and identify other initiatives we might take through impact assessment to reduce carbon emissions and mitigate climate impacts globally and locally.

CSRM

Social license to operate: Expectations of communities vs. corporates

Saturday 19 May | 11:00-12:30 | 21DEF

Pecha Kucha
Chair(s): Sara Bice, Philippe Hanna
IAIA Sections: Indigenous Peoples, CSRM

Join us for a fast and furious Pecha Kucha session where we interrogate the complex and controversial social license to operate (SLO). Our panelists will delve into the diverse and often divergent expectations of communities vs. corporates when it comes to SLO. How are these expectations formed? Can these differences be reconciled? And what role could IA play in helping to bridge the gap?

Managing social risks: The engagement process

Bolton, Robin
The expectations and views of indigenous communities versus corporates regarding engagements pre-, during, and post-projects will be explored.

Due diligence: Social license if positive impact

Rodríguez, Edna; Moreno, Andrea
Due diligence as a tool for mitigating and compensating social and environmental impacts through risk management and the design and execution of social impact investment portfolios (participatory).

Oil industry and SLO in the Ecuadorian Amazon

Diantini, Alberto; Pappalardo, Eugenio Salvatore; Codato, Daniele; De Marchi, Massimo
Critical analysis of social license to operate (SLO) tool efficacy in the oil context of the Ecuadorian Amazon: examination of expectations from locals and oil enterprise in relation to community engagement and consultation.

The NSW coal seam gas industry: Textbook case of SLO loss

Snashall, David
The New South Wales (NSW) coal seam gas (CSG) industry was destroyed when its social licence to operate was withdrawn. However, just across the border, the industry thrives in Queensland. How did this situation occur?

CLIMATE CHANGE

Climate change and impact assessment: Good practice cases (I)

Thursday 17 May | 11:00-12:30 | 21 ABC

Paper Session
Chair(s): Arend Kolhoff
IAIA Section: Climate change

This session will provide the opportunity for people and organizations to share their good practice experiences with the integration of climate change issues in EIA as well as SEA. We welcome good practice cases on climate change adaptation and mitigation for all types of impact assessment and all sectors.

ES use in climate adaptation in northern Sweden

Boltemo Edholm, Jenny
Presence of knowledge and assessments of ecosystem services in local planning, decision making, and climate adaptation in northern Sweden.

Climate change impacts on New Katembe, Mozambique

Bettencourt, Pedro; Canas, Ângela; Fulgencio, Cláudia; Jesus, César
The paper presents recent studies of the impact of climate change in the Katembe territory of the south Mozambique shoreline and the way conclusions were integrated in planning for a new city.

Assessing cultural heritage significance and risk

Saturday 19 May | 11:00-12:30 | 22DEF

Paper Session

Chair(s): Christopher Polglase, Ishanlosen Odiaua
IAIA Section: Cultural Heritage

We address evolving perspectives on the assessment of cultural heritage significance and risks. We draw on varying examples to document how cultural heritage significance of characterized and how risks are calculated and then follow with an open discussion.

The need to recognize World Heritage in SEAs

Jo, Eugene; van Merm, Remco

Considering cultural resources in SEAs proves to be beneficial in attaining better sustainable development, by including social and cultural factors, as highlighted in the management of World Heritage.

Heritage dissonance and impact assessment

Patiwael, Patrick

This paper discusses how heritage dissonance on different geographical levels can influence the impacts assessed within a heritage impact assessment (HIA).

IA as a management tool for World Heritage

Jo, Eugene; van Merm, Remco

Heritage impact assessments should recognize both universal and local values to grasp both positive and negative impacts of change on World Heritage properties.

Optimizing planning in vulnerable coastal zones

Seekamp, Erin; Eaton, Mitchell; Xiao, Max; Fatorić, Sandra; Xiao, Xiao; McCreary, Allie

A climate adaptation planning tool for historic preservation in coastal zones at risk to flooding that includes measures of vulnerability, adaption costs, and the relative historic value of buildings.

Flood risk management and cultural heritage

Bedeaux, Dietske; Augustyn, Anna; Van t Wout, Tamara; Amsing, Eline

With cases studies we will show the challenge of flood risks and the need for assessing the impact on tangible and intangible heritage.

Using modeling to manage cultural heritage risk

Polglase, Christopher

I will discuss cultural heritage risks, outline the challenges associated with defining heritage baseline conditions, and suggest approaches for modelling heritage and associated risks.

Managing cultural heritage in urban and rural landscapes

Saturday 19 May | 14:30-16:00 | 22DEF

Paper Session

Chair(s): Inge Lindblom

This session focuses on cultural heritage in urban and rural landscapes, including its interdisciplinary nature. Cultural heritage is an important component because it involves different topics relevant to landscape. Papers are related to cultural heritage and sustainable development in culturally-significant urban and rural areas.

How to bridge the gap between EIA and HIA

Appendino, Federica

This paper discusses the consideration of cultural heritage in environmental impact assessment (EIA) by presenting a specific case study: Saint-Vincent-de-Paul eco-neighborhood in Paris.

The Dutch approach to heritage impact assessment

Patiwael, Patrick

This paper describes how the heritage impact assessment framework has contributed to the sustainable development of the Defense Line of Amsterdam in the Netherlands.

Impact assessment for natural World Heritage Sites

van Merm, Remco; Jo, Eugene

This presentation sets out IUCN's 8 principles for environmental assessments of development proposals that may impact on natural World Heritage Sites, to enable adequately informed decision-making.

What do we see? Discovering landscapes

Skulberg, Per Kristian

Is a development plan "far away" from cultural heritage sites, or is an enterprise "in the midst of" a unique cultural heritage landscape? Focus on the trouble of "unrecognized" heritage.

DIGITAL IA

Digital impact assessment: The latest developments

Saturday 19 May | 11:00-12:30 | 21ABC

Paper Session

Chair(s): Malcolm Roods, Paul Eijssen

This session highlights latest achievements and innovations in digital impact assessment reporting, reviewing, and communication. We focus on sharing and discussing state-of-the-art IA project showcases, approaches, and interactive tools like virtual reality to support informed decision making in a society in digital transition.

Digital IA reporting: The next step

Eijssen, Paul

IA reporting is moving towards a digital way of working. This session highlights where we are in our developments, how we anticipate this to evolve, and how our customers think about digital IA.

Toward digital IA: Requirements from a government

Martins Dias, Luis; Barten, Bart; De Vries, Hans

This paper will discuss opportunities and challenges for governments with the ambition to apply digital and interactive IA. It is based on several presentations and discussions about digital IA.

Analysis in environmental geo-informatics with UAV

Zhu, Yongyan

The usability analysis of the fourth industrial revolution technologies in environmental geo-informatics with unmanned aerial vehicles (UAV).

A rapid tour of emerging technologies and IA

Orenstein, Marla

Enjoy an amusing and informative tour of emerging technologies: what they are and how they may influence how impact assessment is practiced in the future.

Digital innovation: Experiences with developing IA online platforms

Saturday 19 May | 14:30-16:00 | 21ABC

Paper Session

Chair(s): Thomas Fischer, Julia Nowacki, Sam Hayes

Experiences from developments (on and offline) which have sought to support impact assessment practice, professional development, and the development of professional communities.

Building an online platform to support IA practice

Hayes, Samuel; Fischer, Thomas; Nowacki, Julia

This presentation demonstrates a beta version of an online platform to support IA practitioners and related professionals with the consideration of health—both in HIA and environmental assessment.

A database with EA country legislation

Hardon, Anne; Buit, Gerlinde

What do a professional and a layman want to find in an online database with EA legislation? Following a survey, the NCEA translated the outcomes in the restyling of their country profile database.

Digital innovation, a tool for aligning IA efforts

Rodriguez Macias, Edna Lilianna; Moreno, Andrea

IA digital innovations act as a bridge between the amount of information produced and the ability to integrate it, helping institutions and researchers in the successful alignment of efforts.

Spatially varying impact significance assessment

Sileryte, Rusne

Spatially varying impact significance assessment is introduced as an innovation to support creating and assessing place-based eco-innovative spatial development strategies to reduce waste flows.

Concurrent sessions

DISASTERS AND CONFLICT

Disasters, conflict, other crises, and impact assessment

Thursday 17 May | 14:30-16:00 | 21DEF

Paper Session

Chair(s): Charles Kelly

IAIA Section: Disasters and Conflict

A session on crisis, disasters, and other crisis and impact assessment.

Analyzing the Dutch syndrome in mineral rich countries

Bakia, Mbianyor; Bella-Corbin, Aimee

Why do mineral-rich post-conflict fragile countries continue to find themselves in a spiral of endless poverty?

Slavery and the environment: A need for a new IA?

Abrusci, Elena

A discussion on the need to establish a newly-tailored modern slavery impact assessment to address the critical multifaceted nature of modern slavery in conjunction with environmental injustice.

Bridging IA and mediation in environmental conflict

Peltonen, Lasse; Brown, Michael; Sairinen, Rauno

In the face of conflict, IA needs to be performative, legitimate, and socially robust. Its outcomes do not depend on data alone: they depend on legitimacy and institutional settings of the process.

Disaster risk of property development on floodplains

Mmom, Prince Chinedu; Iluyemi, Patrick Olorunloba

Rapid urbanization of Port Harcourt City, Nigeria, has led to encroachment into natural flood basins, thus increasing their vulnerability to disasters.

The politics of post-disaster EIAs

Kelly, Charles

The politics of whether and to what end post-disaster EIAs take place and how politics will be influenced by an ongoing review of post-disaster EIA tools.

Enhancing disaster risk reduction and resilience: What role ESIA can play

Friday 18 May | 11:00-12:30 | 21G

Paper Session

Chair(s): Angelo Jonas Imperiale, Frank Vanclay, Charles Kelly, Chizoba Chinweze, Abbas Suleiman

Chair(s): Angelo Jonas Imperiale, Frank Vanclay, Charles Kelly, Chizoba Chinweze, Abbas Suleiman

This session reflects on the role social impact assessment can have in enhancing, locally, disaster risk reduction and resilience of people and places at risk. We explore the value in IA of assessing prevention and community resilience in post-disaster and development interventions.

Flood risk management and cultural heritage

Bedeaux, Dietske; Augustyn, Anna; Van t Wout, Tamara

With cases studies we will show the challenge of flood risks and the need for assessing the impact on tangible and intangible heritage.

EIA/Planning for floods and droughts in Freetown

Nelson, Peter

This paper presents plans for dealing with flooding, drought, mudslides, and other natural and man-made disasters in Freetown, Sierra Leone.

Social impact and extreme events:

An inclusive model

Walker, Heidi

This presentation examines how assessing socially-differentiated impacts of an extreme event can contribute to inclusive climate change adaptation, disaster risk reduction strategies, and IA.

Diagnosing environmental damages from carcass

Hwang, Sang-il; Cha, Eun-Jee; Hyun, Yunjung

We developed a tool (worksheet) to diagnose simple environmental damages in a community with carcass disposal site(s).

Integrated strategic environmental assessments for post-crisis recovery

Friday 18 May | 16:30-18:00 | 22G

Panel Discussion

Chair(s): Karen Sudmeier-Rieux, Samuel Yonkeu

What do Sri Lanka, Nepal and Côte d'Ivoire have in common? They are all post-crisis countries with needs for rapid planning while promoting sustainable reconstruction and recovery. This session describes lessons learned from applying integrated strategic environmental assessments to post-crisis countries and how these lessons can be applied elsewhere.

Opportunity Mapping in post-crisis Sri Lanka

Mallawatantri, Ananda; Pathirage, Sandamali

This presentation details the development of an integrated strategic environmental assessment process that was undertaken after the 33-year long conflict in the Northern Province of Sri Lanka.

Post-crisis (I)SEAs: What's different?

Sudmeier, Karen; Yonkeu, Samuel; Estrella, Marisol

Based on country experiences, this presentation explores the two-dimensional approach of ISEAs: post-crisis and long-term while addressing disaster risks.

EXTRACTIVE RESOURCES

Experiences with SEA in the oil and gas sector

Thursday 17 May | 16:30-18:00 | 21G

Paper Session

Chair(s): Ineke Steinhauer

How to make use of SEA in the oil and gas sector and how to improve its effectiveness. Best practice cases of SEA in the oil and gas sector will be shared, with focus on examples where SEA implementation has been more or less successful and the reason why.

SEA for the identification of energy corridors

Walsdorff, Annick; Abed, Rohaida; Ngema, Samukele

The identification of suitable strategic corridors for the development of an onshore gas pipeline network has the potential to unlock further growth possibilities for the gas industry in South Africa.

When a SEA normative fails: Lessons from Brazil

Vilardo, Cristiano; Évora, José Eduardo

The 2012 Brazilian SEA regulation to oil and gas remains non-implemented. We analyze the mix of factors explaining that failure, both conjunctural and substantive. How can a consensus normative fail?

How to make SEA more effective in the oil and gas sector

Steinhauer, Ineke

Best practise in SEA for the oil and gas sector, with focus on good examples where SEA implementation has been successful.

GOVERNANCE AND IMPLEMENTATION

Governance and implementation: Example reforms of environmental permitting and review

Saturday 19 May | 14:30-16:00 | 11

Workshop

Chair(s): Cheryl Wasserman

IAIA Section: Governance and Implementation

Participants will discuss current reform efforts for more efficient and effective ESIA implementation by countries and development banks facing similar implementation challenges and system weaknesses.

The harmonization of EIA in the SADC region (I)

Wednesday 16 May | 15:00-16:30 | 11

Sponsored by Department of Environmental Affairs

Facilitator: Ishaam Abader, Deputy Director, General:

Department of Environmental Affairs

Discussions

Harmonizing the definition of the term "Environment" in the region in order to allow the biophysical and social and economic dimensions of the environment to receive equal attention in impact assessments for large capital projects.

To develop a shared understanding of what is meant by key terms such as "social," "gender," "health," etc. in environmental assessments (EAs) and environmental justice in societies in transition generally.

The harmonization of EIA in the SADC region (II)

Thursday 17 May | 09:00-10:30 | 21ABC

Sponsored by Department of Environmental Affairs

Facilitator: Ishaam Abader, Deputy Director, General:

Department of Environmental Affairs

Discussions

To develop a common understanding of what it will take for Member States to revise their EA Acts, guidelines, and regulations in alignment with the harmonized definitions.

To create a platform for sharing information and learning on EAs by Member States and Secretariat.

Develop a road map for the harmonization process.

Key commitments and resolutions reached.

HEALTH IMPACT ASSESSMENT

Are the SDGs an opportunity to guide a regulatory framework for HIA?

Thursday 17 May | 16:30-18:00 | 12C

Workshop

Chair(s): Mark Divall

IAIA Section: Health

Health impacts are often not adequately considered in policy or project development. This session explores the potential to include the Sustainable Development Goals (SDGs) or other in the promotion of a more robust regulatory framework, including presentation of case studies ideally from low and middle income countries.

SDGs and HIA in Africa: The HIA4SD project

Winkler, Mirko

The HIA4SD Project analyzes the conditions under which impact assessments are an effective regulatory mechanism to mitigate negative externalities from resource extraction and contribute to the SDGs.

Enriching ES(H)IAs with the natural and social capital concept

Friday 18 May | 11:00-12:30 | 12C

Workshop

Chair(s): David Thelen, Frank Wildschut

The broad scope of the natural and social capital concepts can enrich ES(H)IAs. They can help unravel the complexities of impacts, disclose dependencies, and further improve mitigation options. This can increase the opportunities to make developments more sustainable, on site and in the value chain.

Natural capital strengthens ESIA: Early evidence

Rahill, Bilal; White, Elizabeth

Application of the Natural Capital Protocol in the agri-business sector demonstrates the potential for natural capital approaches to supplement impact assessment and risk management approaches.

HIA and health in EIA: Legislation and implementation

Friday 18 May | 14:30-16:00 | 12C

Paper Session

Chair(s): Filipe Silva, Lindsay McCallum

IAIA Section: Health

HIA considers the interface between the social / biophysical environment and human well-being by characterizing the consequences of development on health. The session presents recent examples of HIA methods and tools, evaluation of practice in the private sector, and assessment of health impacts within EIA sparked by the new European EIA directive.

DHIS 2 as an HIA tool for low-resource settings

Saunders-Hastings, Patrick; Perrin, Maureen; Uggowitzer, Petter; Sæbø, Johan; Uggowitzer, Steven

This paper examines the value of the District Health Information Software in gathering data to inform risk, vulnerability, and impact assessments in low-resource, humanitarian, or crisis settings.

Systematic improvement of health mitigation

Xiao, Yina; Uberti, Filippo; Mwatembo Msagha, Erasmo; Namer, Giada; Mwatembo Msagha, Raphael

Eni conducted an internal review to appraise HIA studies and mitigation plan strategy to identify possible gaps in the assessment phase and/or in the mitigation plan implementation.

New directive. New world? Health and EIA

Cave, Ben; Fothergill, Josh; Pypers, Ryngan; Gibson, Gillian

The directive that frames the Environmental Impact Assessment (EIA) Directive now includes population and human health. Action is needed now to shape the way this topic is assessed.

Shaping of a perfect HIA: Barriers in achieving the same

Friday 18 May | 11:00-12:30 | 12A

Pecha Kucha

Chair(s): Geetha Ramesh, Francesca Viliani

IAIA Section: Health

This session will briefly present various HIAs conducted by experienced HIA practitioners around the world and the discuss ways to better it while trying to comprehend the road blocks along the way.

INDIGENOUS PEOPLES

Aashukan, one year later

Friday 18 May | 16:30-18:00 | 12C

Paper Session

Chair(s): Kepa Morgan, Philippe Hanna

IAIA Section: Indigenous Peoples

In 2017, the Indigenous Peoples Section organized Aashukan, designed to build bridges between communities and proponents through IA. This session will revisit the lessons from Aashukan. Presenters are encouraged to bring case studies that exemplify (or not) the principles from Aashukan to continue the discussion initiated in 2017.

IBA timing is everything

Courcelles, Réal; Dunn, Marc

Signing an impact benefit agreement (IBA) prior to an EIA is a first step in a long-term relationship.

Can Traditional Knowledge inform IA?

Fa'au, Tūmanako; Morgan, Kepa; Kikuroa, Daniel

This paper identifies how indigenous approaches can contribute to IA, presenting a framework to facilitate the integration of IK and "Western" knowledge—realizing opportunities for complementarity.

Indigenous views: Poverty and impact assessment

Mendoza, Angeles

The description of how indigenous participants in Aashukan defined poverty from the perspective of their people is used to promote an exchange of ideas on how impact assessment can be improved.

Aashukan Declaration: A guiding principle for SIA

Hanna, Philippe; Inglez de Souza, Cássio

As anthropologists and consultants, we intend to discuss the strategic role played by IA with Indigenous Peoples and its potential to contribute for the enhancement of SIA practice.

POWER GENERATION AND TRANSMISSION

Power-sector ESIA: Good practice examples and guidelines

Thursday 17 May | 11:00-12:30 | 12C

Paper Session

Chair(s): Bernt Rydgren

The presenters will share good practices in ESIA of power generation and transmission, including the development of standards and guidelines for practitioners.

equalitric procedures for indigenous values

Muir, Bruce

Modified procedures of the weighted impact interaction matrices technique are presented as a best practice for EIAs to integrate indigenous cultural values and evaluate project alternatives.

Checklist-style ESIA guidelines for hydropower

Rydgren, Bernt; Hartmann, Jörg; Locher, Helen

The guidelines address good practice on key hydropower issues, support capacity-building through the use of checklists, and integrate socio-environmental guidance with similar techno-financial input.

Energy justice in transition

Zengin, Zinnure Osman

The focus around energy transition should not be about fighting against climate change or increasing energy security but rather presenting and developing green industrial policies.

PROFESSIONAL DEVELOPMENT AND CAPACITY BUILDING IN IA

Online IA training: Experiences, lessons learned, and the future

Thursday 17 May | 16:30-18:00 | 21DEF

Paper Session

Chair(s): John Boyle

The explosion of online training capabilities over the past decade offers considerable opportunity to enhance IA training worldwide. The session will share online IA training experiences, lessons learned, plans for the future, and thoughts about what is required for effective online training.

Dramatized learning = Impactful IA training in FIs

Ormerod, Paul; Dale, John; Evans, Rob

What have social cognitive learning theory and dramatization got to do with engaging and effective online IA learning? Find out how this approach to learning is emerging in the financial institutions (FI) sector.

IAIA's online Foundation Course

Boyle, John

IAIA's online Foundation Course in the "basics" of IA was piloted in 2017. The presentation will discuss lessons learned from the pilot before the course is made widely available.

Concurrent sessions

Reflections on IA training platforms for FIs

Ormerod, Paul; Evans, Rob; Dale, John; Fothergill, Josh
Recently, major players in the financial institutions (FI) community have aimed to enhance IA-related training. The paper reviews examples of immersive dramatization in video and audio training interventions to enhance IA training.

Using organized reasoning to improve impact assessment: Building capacity

Wednesday 16 May | 15:00-16:30 | 2BH

Workshop

Chair(s): Glenn Brown

A set of tools that supports creating and writing arguments called "Organized Reasoning" was assembled for IA practitioners. Hundreds of people received training. This workshop, including video clips from participants, shares our "theory of change," our experiences in building capacity with these skills, and suggestions for others.

A systems approach to SEA capacity development

Friday 18 May | 16:30-18:00 | 21DEF

Paper Session

Chair(s): Bobbi Schijf, Anna Francis Olsson

A systems approach helps to see the bigger picture, and to decide where to focus capacity efforts in a country. The NCEA has developed such an approach for ESIA and SEA. The Sida-funded SEA training program also uses a systems approach. We outline our approaches and share application experiences.

The NCEA's systems approach: An update

van Boven, Gwen; Schijf, Bobbi

The Netherlands Commission for Environmental Assessment has been working with a systems approach for SEA ESIA capacity development. We outline this approach and share experiences with its application.

Sida's ITP on SEA: Approach and experiences

Francis Olsson, Anna; Slunge, Daniel

We introduce the capacity development approach and experiences from the Sida-financed International Training Programme on SEA, with examples from Kenya and Vietnam.

SEA framework in Kenya

Mutui, Frida

The constitutional provision for integrating environmental considerations into developmental decisions provides a legal standing within which an SEA exercise can be required and executed.

Enhancing the scoping practice for SEA in Vietnam

Vu, Chi Cong

The paper discusses and evaluates the impacts of various SEA system functions on the limited performance of scoping for SEA in Vietnam to propose plausible initiatives for enhancement.

And now the good news

Thursday 17 May | 16:30-18:00 | 22ABC

Panel Discussion/Workshop/Therapy Session

Chair(s): Jack Krohn, Angus Morrison-Saunders

Tired of hearing EIA talked down? Come and hear inspiring, therapeutic stories of why EIA is valuable—how it drives better decision-making, better environmental conditions, better policy, better results for communities—and delivers environmental justice for society. Your stories will be welcome too. Be energized by the good news!

Story-tellers will be relating episodes from their respective EIA experiences that illustrate the positive ways that EIA has added value, whether by making projects better, finding innovative solutions to entrenched problems, achieving steps forward in environmental justice or through tangential benefits such as finding and filling policy gaps.

This session will be entertaining and inspiring while providing a safe place for professional reminiscence to counteract the negative pressure that is often applied to EIA from outside the profession.

How does IA influence development proposals?

Gronow, Claire

IA produces variable and often minor improvements in the environmental protection outcomes of development proposals. Explanations are offered based on research into the process and practice of IA.

CLEAA Africa Professional Development Fellows Program

Wednesday 16 May | 15:00-16:30 | 22G

Panel Discussion

Chair(s): Peter Tarr, Dieudonne Bitondo

Africa's most promising young and mid-career environmental and social impact assessment professionals will present on their experiences from the 2017-2018 Professional Development Fellowship Program in Environmental Assessment. The award-winning program is implemented by the pan-African network Capacity Development and Linkages in Environmental Assessment.

Coordinating national and international ESIA to ensure streamlining

Friday 18 May | 14:30-16:00 | 22G

Paper Session

Chair(s): Denise Wright

Projects relying on financing from international financial institutions must meet national and international standards. This is often achieved through a national EIA and an international ESIA, which are typically not fully aligned. The objective of the session is to review good examples where these processes have been successfully coordinated.

Mainstreaming an international environmental management standard

Nel, Johan

This paper explores the evolution of the ISO 14001 environmental management system standard from being a stand-alone standard when it was first published in 1996 through the compatibility and alignment phases with other management standards.

EIA stakeholder engagement: Experience in Nigeria

Olaogun, Atanda; Salau, Ibrahim; Lawal, Adewole

Lack of structured approach for stakeholder engagement in the existing policy framework guiding EIA process has been identified as a major challenge to an effective stakeholder engagement in Nigeria.

Opportunities in subsidiarity: SIA in Australia

Marsh, Daniel

Ichthys LNG showed how subsidiarity, materiality and risk can streamline ESIA to address lenders' standards, national/state government statutes, and the rights or expectations of traditional peoples.

NBIA: Aligning local and international ESIA requirements

Wright, Denise; Holme, Brent

Streamlining the in-country regulatory EIA requirements and international ESIA lender standards to develop an acceptable comprehensive and efficient ESIA report.

Understand closure prior to open

Preeyarittipan, Punyawit; Tippayachan, Haruthai;

Wongunta, Thawatchai

Starting early with the rehabilitation master plan for Hongsa Mine Mouth Power Project (Lao) not only provided us the understanding but also faster ecosystem return as well as more alternative local livelihoods.

Eish! African World Café: What are your Big Five?

Saturday 19 May | 14:30-16:00 | Hall 2BH

Workshop

Chair(s): Michele Gilbert, Nora Gotzmann

It's the last day of the conference, you are brimming with ideas from contemplative beach walks after conference sessions and ready to head out to South Africa's big five. Before you head out on your safari, let's get together over koeksisters and coffee and identify your big five takeaways.

Hits of the 1980s: Insights from the formative years of IA

Wednesday 16 May | 15:00-16:30 | 22DEF

Debate

Chair(s): Jos Arts, Francois Retief

In this session we discuss critical lessons from the formative years of IA. Share with us what you consider to be key wisdom from IA publications in the 1980s. What were the main debates, trends, concepts, cases, professionals, and publications? What are the lessons for today's IA?

Introducing the hits of the 1980s

Arts, Jos; Retief, Francois

Critical lessons from the formative years of IA. What were the main debates, trends, concepts, cases, professionals, publications? What are lessons for today's IA?

Impact assessment and Sustainable Development Goals

Friday 18 May | 16:30-18:00 | 21G

Workshop

Chair(s): Maria Partidário, Rob Verheem

Open forum to converge discussions with IAIA members and collectively find forms to help IA professionals in effectively addressing SDGs in IA practice.

Institutional capacity = Enhanced SDG outcomes

Saturday 19 May | 14:30-16:00 | 21DEF

Paper Session

Chair(s): Josh Fothergill

The session explores the practical and operational use of competency frameworks to enhance and ascertain adequate technical impact assessment capability in organizational and national contexts. This open session aims to examine the approach to IA capacity building across international financial and development institutions, regions, and countries.

Enabling new global E&S safeguards via training

Evans, Rob; Murphy, Jo

A thought-provoking paper on the work needed to advance a global community from existing standards to a 21st century approach to E&S safeguards.

OH&S conflicts from upcoming construction projects

Roy, Saugat; McDonald, Graham

IA and planning is blinkered from actual ground realities of hardships and risks from hazardous workplace conditions during construction phase of projects in emerging economies.

Modelling off-grid electricity delivery in Nigeria

Bello, Hafiz; Diaz-Chavez, Rocio

Conceptualizing rural off-grid systems as a common pool resource and a socio-technical system existing on multiple scales can bring about sustainable institutions managing the infrastructure.

Environmental sustainability vs. economic growth

Adejumo, Oluwabunmi

This study examines the conflicting or complementary relationship that could exist between economic growth and the environment with a view to assessing the plausibility of the environmental policies in Nigeria in achieving sustainable development.

A donor view on safeguards and risk management

Carstensen, John

This presentation explores the key reasons for donors to embrace greater use of national systems for safeguarding and risk management of development assistance funded programmes.

Professional development and capacity building in IA

Wednesday 16 May | 15:00-16:30 | 12C

Workshop

Chair(s): Lone Kørnøv, Ulf Kjellerup

This session examines the role, responsibilities and competencies of an EIA project manager: What does "competent" mean, and can experts be incompetent? What is the perceived role of managers? What knowledge, abilities, and skills are perceived important to successfully fulfil the role? How are competencies developed/assured?

Capacity building for enhanced EIA competence

Evans, Rob; Fothergill, Josh; Fothergill, Jo

A multi-perspective view on how competence and expertise are developed in the IA community, drawing on UK and multi-lateral financial institutions (MFI) actions to consider how EIA competence and capacity is built.

Leadership skills in EIA project management

Marshall, Ross

Leadership skills are a necessary component of EIA project management, not only to organize other environmental disciplines but also to communicate with other project managers and the client.

Registration and certification of IA practitioners

Thursday 17 May | 14:30-16:00 | 12C

Paper Session

Chair(s): Ross Marshall, Richard Hill

Are you an IA professional? Are you competent to practice IA? Are you seeking certification?

Globally, national and institutional systems are emerging that seek to certify or accredit IA professionals recognized as "competent" to lead on IA. This session seeks to explore and review existing systems and discuss their merits.

Global trends in EIA professional recognition schemes

Fothergill, Josh; Marshall, Ross

What individual EIA recognition schemes exist globally? What trends exist in such schemes? How can we share experience and improve standards? Come along, hear about the research, and join the discussion!

Enhancing IA professionalism in South Africa

Makhudu, Snowy; Hill, Richard

The history, purpose and structure of the Environmental Assessment Practitioners Association of South Africa (EAPASA) are outlined. Once EAPASA is appointed, practitioners have 24 months to register.

Accreditation scheme to improve IA quality in Hong Kong

U, Clara; Lee, Ka Man

This paper describes the accreditation scheme of IA in Hong Kong, which aims to maintain the integrity and advance the knowledge of the environmental professionals in the region.

Developing an IA specialist certification

Wilkinson, Lachlan

This presentation discusses experience in Australia and New Zealand in developing an Impact Assessment Specialist certification.

Where did it all go wrong? An honest look at lessons learned in ESIA

Friday 18 May | 14:30-16:00 | 21G

Panel Discussion

Chair(s): Peter Moore

IAIA practitioners are often reluctant to publicly share their experiences when things have gone a bit "pear shaped" during project implementation. This session is intended to provide a "safe space" for practitioners to discuss lessons learned, and the corrective actions taken, to get things back on track.

Improved governance of biodiversity projects

Cauldwell, Andrew; Hughes, Jessica

An improved approach is presented for practical application to screen issues and more reliably achieve the desired outcomes in the implementation of biodiversity assessments.

The problem with modern goals in traditional ESIA

Coroi, Mihai

We will use examples to demonstrate incompatibilities between traditional ESIA and more recent goals such as No Net Loss or Net Gain of biodiversity.

Community perspectives on ESIA challenges

Hamze, Mohammad; Darcy, Vincent

This paper offers lessons learned for practitioners to operationalize communities' perspectives on the challenges of conducting meaningful stakeholder engagement in ESIA processes.

Was going wrong, right for this greenfield port?

O'Donnell, Nikki

A proposed greenfield coal port in the Great Barrier Reef World Heritage Area (WHA) was beset with challenges from the outset, from an unclear strategic planning mandate to sensitive biodiversity features galore.

PUBLIC PARTICIPATION

Negotiating environmental justice with stakeholders

Thursday 17 May | 11:00-12:30 | Hall 2BH

Role-playing workshop

Chair(s): Morgan Hauptfleisch

This is an Oil for Development program session

A fun and interactive role play about environmental and social justice of a controversial (fictitious) gas field development. The session simulates a public meeting and improves understanding of how impacts are perceived by different stakeholders. The session is concluded with an analysis of engagement and negotiating techniques employed.

Concurrent sessions

Practical aspects of public participation

Thursday 17 May | 16:30-18:00 | 22DEF

Workshop

Chair(s): *Tim Peirson-Smith*

A lively, facilitated fast-paced workshop discussing the merits and demerits of the latest techniques used by practitioners in public participation around the world.

Designing projects for sustainable outcomes

Steenkamp, Tasneem

Transdisciplinary design principles enable practitioners to effectively carry out projects and develop sustainable solutions, through reflexive learning and co-creation of knowledge and solutions.

RENEWABLE ENERGY

Sustainable hydropower: Best practice examples

Saturday 19 May | 11:00-12:30 | 11

Paper Session

Chair(s): *David Blaha*

Hydropower is the leading renewable electricity generation source worldwide, but is often seen as controversial by many stakeholders and high risk by many financial institutions. Hydro has made significant progress toward managing these risks and becoming more sustainable. This session focuses on international best practice in hydro development.

Managing biodiversity risks from hydropower

van Bochove, Jan-Willem; Campbell, Genevieve; Pilgrim, John; Regan, Eugenie

In this talk, we highlight frequent gaps in hydropower biodiversity risk management and recommend best practice approaches to address these issues.

Ecological flow rate in HEP projects in Turkey

Albayrak, Ali; Bayer, İsmail Raci; Turan, Volkan; Eraslan, Selman

Ecological flow rates for hydro electric power plant projects have been increased tremendously in recent years in Turkey.

Use of climate models for hydro power planning

Changula, Luwita Kanema; Jarvis, Andrew

Climate models can play an essential role in energy planning for renewables, as they tend to replicate present and past climate to some degree of accuracy.

Engagement plan for HPPs: A case study from Brazil

Pinheiro, Mariana; Almeida, Elisângela; Heliodora, Carolina Maria; Sodr , Federica Natasha; Esp cie, Mariana

This paper outlines the Brazilian Energy Research Office (EPE) experience in stakeholder's engagement during a hydropower plant (HPP) environmental licensing process.

Implementing renewable energy projects within complexity

Saturday 19 May | 11:00-12:30 | 22ABC

Panel Discussion

Chair(s): *Alison McCallum*

In this session we will be reflecting on the practical challenges of bringing green technologies into social complex settings. How do we bring benefit without doing harm? Successful implementation is best supported by an open sharing of challenges and lessons learned.

Solar and wind developments in sub-Saharan Africa

Bhamidipati, Padmasai Lakshmi; Wlokas, Holle Linnea; Haselip, James

This paper attempts to investigate the utility-scale solar developments in East Africa, focusing on social inclusion, through a framework of niche transition and political economy.

Managing E&S risks in hydropower in Africa

Heather-Clark, Stuart; van den Berg, Stephan; Bungartz, Lindsey; Cochran, Alan; Ferreira, Rodrigo

This paper explores hydropower project case studies in Africa where environmental and social (E&S) risks were identified early in the project life-cycle and understanding the practical implementation of IFC Performance Standard 5, 6, 7, and 8 was of particular importance.

Doing the right thing? Resettlement challenges

Inamdar Willetts, Arundhati; Kateregga, Keziah

This paper discusses resettlement experiences from the development of renewable energy projects in East Africa, highlighting the need for flexibility in addressing social issues to overcome challenges.

Gender and land tenure

Wellmann, Gwendolyn

This paper examines the intersection between gender and land tenure, providing insights on the disadvantages women face when the land on which they live is acquired for development projects.

Land and facility ownership in the US wind industry

Jacquet, Jeffrey; Fergen, Joshua

This mixed-methods research examines how the ownership structure of wind farms affects host communities and how landownership characteristics affect the spatial distribution of wind farm development.

SOCIAL IMPACT ASSESSMENT

Economic displacement and livelihood restoration

Thursday 17 May | 14:30-16:00 | 22G

Paper Session

Chair(s): *Irge Satiroglu, Katherine Witt*

It is not uncommon that projects interfere with the livelihood activities of the local people and economically displace them. This session aims at sharing experiences on livelihood restoration and enhancement as part of project social management.

Restoring livelihoods for long-term sustainability

DeVine, Anne

The Livelihood Restoration Program focuses on restoring and improving the means of earning income of project affected persons in Lusaka, Zambia, through business development training and mentorship.

CDAP: Identifying community priorities for skills

Inamdar Willetts, Arundhati; Kateregga, Keziah

Skills development is central to enhancing the livelihoods of project communities. Here we describe an informal consultative approach to identify essential skills needs within project communities.

Quantifying the loss: Livelihood framework applied

Maurtua Konstantinidi, Alexandra

Lessons learned of a livelihood framework approach to livelihood restoration planning (LRP) and the quantification of the loss through livelihood capitals to identify adequate restoration and improvement activities.

Voluntary resettlement within the mining environment

Becker, Elize; Human, Willie; Bloemhof, Johan

Resettlement models should be used to guide the formalization of sustainability and enterprise development programs and the application thereof. The process allows for an applied science approach.

Policy and program impacts assessment

Thursday 17 May | 16:30-18:00 | 22G

Paper Session

Chair(s): *Kwadwo Adusei-Asante*

This session focuses on ideas, examples, and studies that have measured the social impacts of specific public policies and programs and the lessons learned. Discussion of the similarity or dissimilarity of the process and the lessons learned relative to the current SIA framework are welcome.

Impact assessment of peer mentoring approaches to violence prevention

Adusei-Asante, Kwadwo

Peer mentoring approaches to violence prevention among African youth in Western Australia: a preliminary impact assessment of the "Stop the Violence" program.

Seychelles leading the way: Development of an SIA framework

Aucamp, Ilse; Aucamp, San-Marie; Renaud, Diana

The process of developing a SIA framework for the Seychelles is discussed. The framework was developed in a participatory manner. Lessons learned, opportunities, and challenges are shared with the audience.

Assessing the social impacts in EIA

Liu, Yen-Chun; Yang, Chih-Kai

EPA Taiwan is now proceeding to draw up the social impact assessment criterion, which mainly assesses the migration, rights, and interests of a majority of local residents or the traditional lifestyle.

SIA and public procurement in Sweden

Longueville, Anna

This paper explores current practice of social sustainable public procurement in Sweden and how practices can be further improved with lessons learned relative to the current SIA framework.

Gender and impact assessment theoretical challenges: A case study from Ghana

Adusei-Asante, Kwadwo

We caution against "one-size-fits-all" gender approach in SIA. We advocate for context specific and particularized gendered analysis of the impacts of projects, policies, and programs.

Environmental policy and factors of resilience

Kvistad, Michele

Government power shifts can threaten to weaken or eliminate environmental policy. This research analysis reveals characteristics of environmental policy which contribute to factors of resilience.

TOOLS AND METHODS

China's EIA Process: Adapting for a sustainable future (I)

Thursday 17 May | 14:30-16:00 | Hall 2A

Panel Discussion

Chair(s): Tianwei Li, Clara U Kam Wa

This discussion explores restructuring of environmental impact assessment framework to address environmental impacts of local and regional mega infrastructure in order to safeguard the environment, integrate the need of community, and develop sustainable development strategy. Case studies from the mainland and other countries will also be demonstrated.

SEA for China to rise to new sustainability challenges

Lam, Kin Che

This paper describes the new form of SEA required to equip China to rise to her own sustainability challenges and as a leader in One Belt One Road (OBOR) regional development.

A SEA reform in green development of cities

Li, Wei; Cheng, Runhe

An improved EIA system is composed of the red line for ecological conservation, the bottom line of environmental quality security, and the upper line of natural resource utilization.

Public engagement in the EIAO System of Hong Kong

Cheung, Wai Hung Tony

The special features of the environmental impact assessment ordinance (EIAO) in Hong Kong, which is the 2-stage public consultation process for the public and the Advisory Council on the Environment (ACE) to actively participate in the EIA process.

China's EIA Process: Adapting for a sustainable future (II)

Thursday 17 May | 16:30-18:00 | Hall 2A

Panel Discussion

Chair(s): Tianwei Li, Clara U Kam Wa

This discussion explores restructuring of environmental impact assessment framework to address environmental impacts of local and regional mega infrastructure in order to safeguard the environment, integrate the need of community, and develop sustainable development strategy. Case studies from the mainland and other countries will also be demonstrated.

Public participation in EIA by ENGOs in China

Wu, Jing; Chang, I-Shin

The research is to study the political opportunity structure for environmental non-governmental organizations (ENGOs) to participate in EIA and to investigate the orientation and development of public participation (PP) under the centralized regime in China.

China's EIA policy reform on unconventional fuel

Liang, Rui; Liang, Peng

China's EIA of unconventional fuel should speed up the reform, give full play to the role of planning EIA, and speed up the formulation of pollution control standards.

Information management on the EIA approval process

Pan, Peng; Zhao, Xiaohong; Liang, Peng

This paper introduces the related improvement work and main progress on the EIA information management and puts forward the suggestions for further EIA work in China.

Diagnostic tools for country ESIA systems: An update

Thursday 17 May | 11:00-12:30 | 21DEF

Paper Session

Chair(s): Rob Verheem, Peter Tarr

Reliable diagnostic tools are needed to assess country ESIA systems. In this session we bring together different tools, share results of applications, and discuss which tool works best when.

The renewed ESIA mapping tool of the NCEA

Schijf, Bobbi

The Netherlands Commission for Environmental Assessment (NCEA) presents its new "mean and lean" version of ESIA mapping: a tool for SWOT (strengths, weaknesses, opportunities, and threats) analysis of ESIA country systems.

Africa's EA barometer

Tarr, Peter

Sharing of experience with Africa's EA barometer.

Environmental justice in IA: Case studies in guidance and practice (I)

Friday 18 May | 14:30-16:00 | 22ABC

Paper Session

Chair(s): Aaron Goldschmidt

IA guidance worldwide varies on how to address impacts related to environmental justice. Some agencies/governments are aggressive, ensuring robust analyses; other agency guidance is weak or nonexistent. Case studies are requested to explore best practices and identify mechanisms to identify opportunities to share those best practices globally.

Environmental justice in IA: Law and policy

da Cunha, Maria; Wasserman, Cheryl

This paper explores the evolution of the concept and application of environmental justice. Implications for impact assessment include consideration of alternatives, mitigation approaches, and due process.

Institutional learning vs. Resistance: 2 US EJ cases

Edelstein, Michael R.

Two cases illustrate shortcomings in U.S. environmental justice assessment and suggest improvements. One, a nuclear permitting case, revealed institutional learning. The second, a contaminated site cleanup, did not.

Constitutional provision and environmental justice

Alam, Aparajita

Discussion on implementation and enforcement of environmental law and policies and role of judiciary through the constitution which may ensure environmental justice.

Environmental restorative justice Canterbury cases

Jenkins, Bryan

Environmental restorative justice was an alternative to enforcement when operators took responsibility for infringements, and when infringements involved government agencies with common ratepayers.

Concurrent sessions

Environmental justice in IA: Case studies in guidance and practice (II)

Friday 18 May | 16:30-18:00 | 22ABC

Paper Session

Chair(s): Aaron Goldschmidt

IA guidance worldwide varies on how to address impacts related to environmental justice. Some agencies/governments are aggressive, ensuring robust analyses; other agency guidance is weak or nonexistent. Case studies are requested to explore best practices and identify mechanisms to identify opportunities to share those best practices globally.

Environmental justice lies in eyes of beholder

Mathur, Aradhna; Quintero, Juan D.

This presentation questions if environmental justice is possible and who decides that development is taking place in a just manner using examples globally from different sectors.

Environmental justice in India

Dilay, Ariane; Patel, Kirit; Diduck, Alan

This research explores the limitations in IA process and practice that trigger the involvement of environmental courts in India and how decisions of these bodies affect the wellbeing of communities.

IA, small hydro, and environmental justice in India

Diduck, Alan P.; Johnson, Richard M.; Gardner, Esther; Sinclair, A. John; Gardner, James S.; Patel, Kirit

We examine the environmental justice implications of small hydro development in the Indonesian Himalaya, including equity in distribution of risk and opportunities for participation in impact assessment.

Acid mine drainage: Is it an ownerless environment?

Tlale, Sophia

The consequences of mining activities is evident in the form of acid mine drainage in the Witwatersrand. This environmental crime challenges the weight of the polluter pays principles.

Chile: Minera Candelaria and its community

Llamazales, Soledad; Baranao, Pablo

There are many ways to resolve conflicts between projects and communities. An environmental impact assessment process can be an opportunity to negotiate, avoiding legal actions to achieve justice.

Independent panels for helping address environmental challenges

Friday 18 May | 11:00-12:30 | 22ABC

Panel Discussion

Chair(s): Stephen Edwards, Rachel Asante-Owusu

Independent panels and advisory committees are medium-to-long-term processes that involve experts who provide scientific and technical advice on a conservation or natural resource management issue, established to help understand, propose recommendations for, and monitor, projects with challenging issues and impacts on biodiversity and conservation.

Introducing the panel process to Gamsberg operation

Asante-Owusu, Rachel; Edwards, Steve

Demonstrating how lessons learned from previous IUCN panel processes are being used to form a panel of experts to help ensure No Net Loss of the unique environment of the Gamsberg (South Africa) operation.

An independent panel for a biodiversity offset

Cannon, Paul; Livingstone, Suzanne; Armstrong, Glen

A review of the role, function, and utility of an independent advisory panel to support the design and implementation of a biodiversity offset programme for the Mako Gold Project, Senegal.

Lessons from 10+ years of the Rio Tinto QMM

Gaylord, Lisa

Sharing lessons learned from the RTQMM Biodiversity Committee and describing the proposed way forward for a similar independent advisory effort.

Uganda Biodiversity and Livelihoods

Advisory Committee

Hagemeyer, Ward; Victurine, Ray; Brett, Rob; Le Bel, Sebastien; Namara, Agrippinah; Muhweezi, Alex; Esteves, Ana Maria

The Albertine Graben independent Biodiversity & Livelihoods Advisory Committee (2013) advises Total, Tullow, and CNOOC for both the upstream oil projects and the East African crude oil export pipeline.

Rio Doce Panel: Independent science-based perspective

Sanchez, Luis; Kakabase, Yolanda; Barbosa, Keith;

Alonso, Luiza; Barbosa, Francisco; Roeser, Hubert

An independent panel was established by IUCN to advise on the restoration of ecosystems and livelihoods affected by a mine dam failure in Brazil. Disaster impacts and the panel's role will be presented.

Impact assessment: Its role in triggering conflict and using mediation

Wednesday 16 May | 15:00-16:30 | 22ABC

Panel Discussion

Chair(s): Gina Barbieri, Alison McCallum

This session will focus on answering questions about conflicts associated with impact assessment and development projects. Using practical case examples, the panel will discuss mediation tools used to avoid and address conflict situations associated with environmental and social justice, project development, and the impact assessment process.

Panelists

Adrea Repetto, Dispute Resolution Specialist, CAO, will describe an actual conflict relating to IA and the tools used to overcome the conflict.

Fatoumata Binta Keita, International Finance Corporation (IFC), Infrastructure and Natural Resources Advisory, will share innovative approaches on youth engagement in a fragile environment.

Stuart Heather-Clark, Sustainability Consultant, will share experiences of conducting IAs and the conflicts that can arise.

SPECIAL TO IAIA

EIA Follow-up best practice principles

Saturday 19 May | 14:30-16:00 | 12D

Roundtable

Chair(s): Angus Morrison-Saunders, Jos Arts, Ross Marshall

It is time that the 2007 IAIA best practice principles for EIA follow-up are reviewed and updated. Come along to this workshop to contribute to the revision process led by Angus Morrison-Saunders, Jos Arts, and Ross Marshall. All ideas and contributions welcome!

Meet the editor

Thursday 17 May | 16:30-18:00 | 12D

Workshop

Chair(s): Thomas Fischer

Are you considering writing an article or professional practice paper on impact assessment but aren't sure where to start? The editor and managers of IAIA's journal, *Impact Assessment and Project Appraisal*, will present ways to write a good article and get it published. Bring your questions and ideas for articles or guest issues.

Posters

Agriculture, forestry, and fisheries

Knowledge brokerage in fisheries management

Partidário, Maria; Cegonho, Rute; Monteiro, Margarida; Barros, Margarida

The bottom-up participatory approach of ConFish Project is presented to share lessons on positive actions for knowledge brokerage and transform fishery community practices towards a sustainable change.

Biodiversity and ecology and ecosystem services

Biodiversity-rich connection of two continents

Arisoy, Defne

TANAP, a mega pipeline project, connects two continents without sacrificing biodiversity and enhancing in-country ecological database with its baseline studies, action plan, and offset strategy.

Landscape analysis in EIA: A biodiversity ally?

Rehbein, Christina; Brklacich, Mike; Mitchell, Scott

Study results suggest gaps where landscape analysis could enhance biodiversity dimensions of EIA. We introduce a simulation model to explore how this might inform decisions and impact biodiversity.

An innovative evaluation of ecosystem services

Rodrigues, Patricia; Monteiro, Barbara; Oliveira, Nuno

An innovative approach to the evaluation of ecosystem services was produced, based on the identification of ecosystem services per habitats and the classification of its importance.

Analysis of ecological hotspot area

Ryu, Jieun; Lee, Dong-Kun; Jeong, Seong Woo

This study not only considered the health and diversity of the ecosystem but also optimized the evaluation results through the mechanical learning method.

River flow and nutrient changes using periphyton

Singh, Samiksha

Periphyton, due to its susceptibility to changes in flow regimes and nutrient composition, is a good indicator of river health.

Climate change

Urban heat wave vulnerability for climate change

Je, Minhee; Jung, Seunghyun; Kim, Hyomin

This study aims to analyze vulnerable regions of thermal environments in the present and future, thereby analyzing and discussing the main occurrence factors of classified thermal environments by region.

Disasters and conflicts

Disaster preparedness and response

Garbarran, Hari

Humans In Crisis volunteers trained in emergency response practices make a positive impact to 2017 hurricanes in the USA.

Education and the IA profession

Compendium: National EIA

Professional Recognition

Fothergill, Josh

The poster presents the findings of an IAIA research grant-funded study exploring national recognition schemes for individual EIA practitioners.

The circular economy joins sustainability teaching

João, Elsa

It is fundamental that teaching of sustainability includes leading issues in circular economy. Survey results of 100+ participants on a new circular economy course (Strathclyde University) are presented.

Environmental education for primary school

Lima, Júlia

Environmental education, critical thinking, environmental attitude, extra-curricular activities, value priorities, large-scale survey, interests in science topics, influence.

EIA

EIA implementations on IA projects in Turkey

Albayrak, Ali; Bayer, İsmail Raci; Bozkır, Bahadır; Eraslan, Selman

EU supports Turkey for environmental infrastructure development. The EIA process for those investments should be re-organized and EU Commission decisions should be adopted to the Turkish EIA system.

EA: A sustainability steering wheel

Azong, Matilda; Chamane, Sindiso Charlotte; Dikeme, Dikgang, Otsile Niel

This poster presents some of the experiences of CLEAA's Professional Development Fellowship Program participants, advancing the use of environmental assessment best practices in sub-Saharan Africa.

Atmospheric pollution by particulate matter

Pereira Santos, Deborah; Daniel Ferreira, Flávio

Atmospheric pollution by particulate matter: temporal and spatial variation in the state of Minas Gerais, Brazil.

Issue for EIA on management of soil in Korea

Yang, Kyung; Shin, Kyung-Hee; Kim, Kyoung-Ho

The problems and its solutions of EIA on soil environment, especially for soil contamination management in Republic of Korea were suggested.

Energy

Reference matrix and qualification of EIA

Araujo, Felipe; Mello, Gisela; Ramos, Alysson; Martins, Lilian

Elaboration of a cause and effect reference matrix to improve EIA of power lines, through the standardization and the settlement of the main issues and impacts that need to be addressed.

Is bird conservation a barrier to wind energy?

Aversa, Izabella; Polizel, Juliana; Montaña, Marcelo

Identification of alternative sites to prevent trade-offs between wind energy expansion and birdlife conservation: case study in Brazil.

EIA in Korea's onshore wind power project

Lee, Young-Joon; Chun, Dong Jun; Lee, Moungh Jin; Park, Jong-Yoon

This study suggests solutions to minimize the conflict of an excellent wind resource distribution area with a nature conservation area for expansion of an onshore wind power project in Korea.

Estimating potential of floating solar power

Park, Jong-Yoon; Lee, Young-Joon; Chun, Dong-Jun; Lee, Moungh-Jin

A hierarchical approach for estimating the potential of floating solar power on agricultural reservoirs by considering technical, environmental, and social factors.

Offshore wind farm in Korean southwestern coastal area

Seo, Jinsung; Maeng, Junho; Park, Seonyoung

It is expected to provide environmental impact assessment and ocean safety guidelines for the establishment of offshore wind farms suitable for domestic waters by providing environmental information.

Environmental justice

TANAP, "Silk Road of Pipelines," serving justice

Erdem, Fatih

TANAP, the "Silk Road of Pipelines," serving environmental and social justice.

Currencies for transition and sustainability

van Staden, Francini

A theoretical call to the risk of social-ecological justice remaining unresolved based on transition movements that are founded on economic orthodoxy and therefore, the need for complementary ideologies.

Governance

IA of a one-stop-shop for environmental permits

Jantunen, Jorma

The poster presents IA process and the main results of a legislative proposal for coordination of environmental permitting procedures (one-stop-shop) in Finland.

Health

Evaluation of impacts of the transshipment plant

Almeida, Eliane; Matias, Camila; Gondim, Carolina; Domenico, Filipo; Moura, Thiago

The improper disposal of solid waste is a big problem in Brazil and is responsible for impacts on the environment that affect public health of the population.

Integrated environmental assessment of pre-salt projects

Almeida, Eliane; Penido, Fabricio

The integrated environmental assessment methodology proposed was elaborated based on the analysis of the environmental impacts arising from the environmental impact assessment of pre-salt projects.

Wetlands as an alternative to basic sanitation

Lima, Júlia

It is necessary to build treatment systems suitable to the Brazilian reality; that is, low operating cost, maintenance, and high efficiency to address poor sanitation and health conditions.

Alternative method to provide water for human need

Lima, Júlia

The problem of precarious sanitary conditions requires treatment systems appropriate to the Brazilian reality: low operating costs, easy maintenance, and high efficiency.

Air quality EA for industrial complex in Korea

Moon, Nankyung; Ha, Jongsik; Seo, Jihyun

We evaluated the impact of the major industrial complexes such as petrochemical, refining, and steel complex and estimated the number of premature deaths to investigate the impact on the public health.

Determinants of health: Challenges of project level

Viliani, Francesca

HIA of projects encounter limitations when the broader context and developmental issues are not considered. Health therefore needs to be better included at the policy and planning phases.

Public participation

Bus rapid transit Rea-Vaya: "We are Moving" the public transport system together with communities

Hlomuka, Sibongile

Promoting effective and efficient public transport and non-motorized transport system to the communities for the communities through community participation process in Johannesburg, South Africa.

SEA

SEA outcomes applied to Scottish waste strategies

João, Elsa; Celestino, Joyce; Montano, Marcelo

Tiering and outcomes incorporation from environmental assessment at strategic levels of decision: lessons from the Scottish SEA system applied to waste management strategies.

Tools and methods

A protocol for EIS: A tool for managers

Armanini Tagliani, Paulo Roberto

This work presents a free digital platform developed by the Coastal Management Laboratory of the Rio Grande Federal University (Brazil) to facilitate EIS analysis.

Urban heat map making using network-based observations

Jung, Seunghyun

This study enabled regional classification based on heat island characteristics to contribute to establishment of measures for each regional classification.

EIA large-scale engagement: 2 million people

Kelly, Paige Diana

Illustrating the methodology of a large-scale engagement and outcomes of the public participation process regarding a telecommunication project impacting 2 million people in Namibia.

Crime science improves biodiversity goals in EIAs

Kerr-Smith, Catherine

Focusing on the EIA decision-making process to protect biodiversity and ecosystems, crime science uses empirical evidence to determine why "crime events" such as legislative "rule-breaking" happen.

Estimation of diesel vehicle emissions in HIA

Kim, Yumi; Kim, Mina

Current status and problems of air pollutant emission estimation of diesel vehicles in EIA and HIA were investigated and then an improved method of emission factor application was suggested.

Quantifying the loss: Livelihood framework applied

Maurtua Konstantinidi, Alexandra

Livelihood framework approach to LRP planning: the quantification of loss through livelihood capitals to identify adequate restoration and improvement activities.

Empowered through play

Oosthuizen, Sian

Empowering society to actively engage in decision making can be achieved by playing games that simulate reality, enabling stakeholders to generate understanding, test scenarios, and build knowledge.

Using visual language to manage environmental risk

Sanderson, Danielle

Communicating sustainable development and environmental resilience to those outside this specialist realm requires branching out of purely scientific explanation and into that of graphics and media.

The Mauri Model: Indigenous tool for IA

Taute, Dylan

This poster presents a review of the Mauri Model and presents its application as a tool to assess the potential impacts of further geothermal development in New Zealand.

An online scoping tool using vulnerability maps

Van Ghelue, Pascal; Timmermans, Veerle; van Straaten, Dick

In Flanders, a more effective scoping online system will be created. Vulnerability maps and sub-activities of the proposed activity will be used to determine potential environmental impacts.

Engagement: Showing compliance with standards

Westbury, Mark

This poster provides a model for recording stakeholder engagement in a way that helps to demonstrate alignment with international standards and to provide robust evidence to support the ESDD process.

Analysis in environmental geo-informatics with UAV

Zhu, Yongyan

The usability analysis of the fourth industrial revolution technologies in environmental geo-informatics with UAV.