



# IAIA18

## DURBAN SOUTH AFRICA

38th Annual Conference of the International Association for Impact Assessment  
16-19 May 2018 | Durban International Convention Center | Durban, South Africa

# ENVIRONMENTAL JUSTICE IN SOCIETIES IN TRANSITION

## FINAL PROGRAM



International Association  
for Impact Assessment



environmental affairs

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA



Your ideas for improving environmental justice  
so that development meets the needs of societies in transition  
are encouraged and welcomed at IAIA18.

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*We appreciate the work of these volunteers, who made this conference possible.  
If you meet one of them, please take a moment to say thank you!*

## CONFERENCE CO-CHAIRS

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Sean O'Beirne, *SE Solutions, South Africa*

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Nick King, *North West University, South Africa*  
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Ana Maria Quintero, *The Nature Conservancy, USA*  
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Sabelo Malaza, *Dept. of Environmental Affairs, South Africa*  
Musa Mbhele, *eThekweni Municipality, South Africa*  
Sabelo Nkosi, *eThekweni Municipality, South Africa*  
Chumisa Thengwa, *eThekweni Municipality, South Africa*

## ABOUT THE HOST

It is with great pride that **IAIAsa** is the host for the 2018 IAIA conference in Durban. IAIAsa was established in 1992 and has grown over time to a membership of approximately 650 members. We hold a national conference every year as well as a number of regional branch events.

IAIAsa's main objective is to be a professional association that leads integrated environmental management (IEM) in southern Africa. IAIAsa undertakes various activities in order to: provide a platform for advancing innovation and communication of best practice in IEM; enhance professionalism in the practice; and, advocate for sustainable policies and practices.

## ABOUT IAIA

The **International Association for Impact Assessment** was organized in 1980 to bring together researchers, practitioners, and users of various types of impact assessment from all over the world. IAIA members number over 5,000 from over 125 countries, including those from its 17 national affiliates. IAIA activities are carried out locally and regionally through its extensive network of affiliates and branches.

**IAIA's Vision:** IAIA is the leading global network on best practice in the use of impact assessment for informed decision making regarding policies, programs, plans and projects.

**IAIA's Mission:** To provide the international forum for advancing innovation and communication of best practice in all forms of impact assessment so as to further the development of local, regional, and global capacity in impact assessment.

**IAIA's Values:** IAIA promotes the application of integrated and participatory approaches to impact assessment, conducted to the highest professional standards. IAIA believes the assessment of the environmental, social, economic, cultural, and health implications for proposals to be a critical contribution to sound decision-making processes, and to equitable and sustainable development. IAIA is committed to the promotion of sustainability, the freedom of access to information, and the right of citizens to have a voice in decisions that affect them. When we assess the impact of policies, plans, programs, or projects, we promote the free flow of complete, unbiased and accurate information to decision makers and affected parties. We believe that impact assessments should be inclusive and comprehensive, addressing the broader social and health impacts as well as any impacts on the biophysical environment. Respect for human rights and human dignity should underpin all assessments. We acknowledge that we have a duty of care to both present and future generations.

**Insurance and Liability:** IAIA, the organizing committee, and the venue will not be responsible for medical expenses, accidents, losses or other unexpected damage to property belonging to conference participants, either during or as a result of the conference and during all tours and events. Participants are strongly advised to arrange their own insurance for health and accident, lost luggage and trip cancellation.

**Accessibility:** Attendees with a disability and/or special accessibility needs were asked to contact IAIA HQ by 15 March to make arrangements. If you have a disability and/or have special accessibility needs and require assistance, please advise IAIA staff at the registration desk. However, we cannot guarantee accommodation of requests made on-site.

## Environmental justice in societies in transition

**Globally, societies are in transition due to environmental challenges** such as climate change, shifts in political power as seen in Europe and the USA, and social changes such as mass migration. All these changes and challenges pose a threat to the sustainability of the physical and human environment, and growing inequality threatens both the social and natural environment.

Although the aim of development is to create a more sustainable environment, the reality is often that only few people benefit while others are left to bear the brunt of the impacts and greater inequality. Environmental management should serve to translate environmental costs into wellbeing benefits for all of humankind and not just the privileged few.

South Africa is a good example of a society in transition where reducing inequality is one of the greatest challenges the country faces. Durban represents a good example of this challenge: the city boasts both plush upmarket residential suburbs and impoverished informal settlements at the other end of the spectrum. Durban also bears the legacy of apartheid planning with historical residential areas in the immediate proximity of large-scale industrial operations. In amongst this all is a rich natural environment in the form of the sea, estuaries, rivers, forests, and wetlands that lie within the city limits.

This is an ideal setting to engage with the conference theme; your participation is invited.

## SIYANAMUKELA!\*



**Ntsako Baloyi**  
Conference co-chair, IAIA18  
Coca Cola Beverages, South Africa

Wow, where did the time go? The international conference has for so long been a dream for us South Africans, and here it is now—a reality. We have been blessed with a veritable army of volunteer helpers, all of whom have contributed to this great event, and we are deeply indebted to them all for that contribution. From the HQ staff through our various committees and our student helpers—a heartfelt thank you to you all for your contribution.

No matter the effort, a conference without delegates is nothing, so it is with great excitement that we welcome you here in Durban and thank you most sincerely for being here. It is our earnest hope that you leave our shores intellectually richer and thinking about when you will visit us again. South Africa remains a truly remarkable country where as soon as we seem to find the answers, we find that the questions have changed.

What we have come to learn is that the world is never saved in grand messianic gestures, but in the simple accumulation of gentle, soft, almost invisible acts of compassion, everyday acts of compassion. In South Africa we have a phrase called *Ubuntu*. *Ubuntu* comes out of a philosophy that says the only way for me to be human is for you to reflect my humanity back at me.

The common bond of humanity and decency that we share is stronger than any conflict, any adversity. Fighting for our convictions is important. But finding peace is paramount. Knowing when to fight and when to seek peace is wisdom. *Ubuntu* was right.

Your presence at the conference will make a contribution to South Africa's unstoppable journey to greatness, from the belief in us by the IAIA Board in awarding us the conference, through to the impact of your spending while here. We have worked hard to give a sparkling technical programme, with authentic South African experiences in the technical tours, welcome reception and cocktail dinner. The rest is up to you, so embrace it and enjoy!

***Ubuntu—I am because you are, you are because I am.***

\*"We welcome you" in Zulu, the home language of Durban.



**Sean O'Beirne**  
Conference co-chair, IAIA18  
SE Solutions, South Africa



# Mobile app

## MOBILE APP AND DESKTOP PORTAL

### Experience IAIA conferences in a whole new way!



The mobile app is available from 2 May 2018.

All delegates registered by 20 April received an invitation email to download the app.

If you didn't receive the email:

1. Visit <https://crowd.cc/iaia18> (Desktop or Mobile Web) or <https://crowd.cc/s/1mH90> (Apple or Android)
2. Download the CrowdCompass Attendee Hub.
3. Search for IAIA18 as an event.
4. Log in using "iaia18durban" as the password.

You must be a registered attendee to be able to view the restricted portions of the app such as attendee and speaker contact details.

### Keep important parts of the conference at your fingertips.

Use the **Desktop Portal**, the **Mobile App**, or both to:

- » Help others find you—complete your profile and upload a photo.
- » Search for sessions, speakers, and attendees.
- » Select your favorite sessions and create your personal agenda.
- » Download speaker handouts.
- » Take notes and send them to yourself.
- » Use the interactive map function to find rooms.
- » Receive instant notifications of program changes on-site.

Take your changes with you—data syncs between your desktop and mobile versions.

**DON'T HAVE A SMARTPHONE?** No problem. Use the app on your laptop or iPad.

### Access information not included in the final program:

- About conference sessions
- General information about IAIA18
- Contact us
- Durban info
- Speaker tips
- Technical visits

## SHARE WITH PHOTOS

Individuals who are attending technical visits are encouraged to take photos and send them to Headquarters staff for posting on IAIA's Facebook page and other uses. Please identify the name of the technical visit, the individuals pictured, and the photographer, and send your photo(s) to [info@iaia.org](mailto:info@iaia.org).

If you are posting IAIA18 photos on your Instagram, Facebook, or Twitter account, please tag #iaia18 so the photos can be collected and shared throughout IAIA as well. You can share your photos on the Activity Feed of the IAIA18 app, too!

## LIVE TWITTER FEED #IAIA18

Are you keen to share your thoughts on a presentation or reflect on the day's events? Conference participants are encouraged to tweet throughout the event on the hashtag **#iaia18**.

## INTERNET ACCESS

Free wifi is available in the meeting rooms and public spaces of the ICC.

## VIDEO/AUDIO POLICY

To foster sharing of information and open discussions, IAIA encourages presenters and panelists to speak freely and respectfully share their knowledge and experiences. During technical sessions, individuals are not permitted to record with personal audio or visual equipment or other recording devices such as cell phones, cameras, or recorders, without permission from the speaker.

Any media attending the event will be designated with a "MEDIA" name tag. Media will be allowed to take photographs, notes, and interviews, but video/audio recording by media will be allowed only during the opening and closing plenaries. Any recording by media during technical sessions requires prior permission from the speaker.

By attending the conference, you agree to allow your image to be used by IAIA.

*As a courtesy to all speakers and to help reduce disruptions, we kindly ask that you remain in the session you're attending for all presentations. Thank you for your consideration.*



# 2018 Award winners

THE DANISH  
INSTITUTE FOR  
HUMAN RIGHTS

## Global Award

The **Danish Institute for Human Rights** was chosen to receive the Global Award for developing and improving methodologies, tools, and guidance documents that promote and support human rights impact assessment and the integration of human rights principles and considerations in other branches of impact assessment.

*The Global Award is presented annually to a leading individual or institution that has made a substantial contribution to the practice of environmental assessment, management or policy at a global scale.*



## Lifetime Achievement Award

**Iara Verocai** receives the Lifetime Achievement Award for her sustained and significant contributions to Environmental Impact Assessment, from her pioneering introduction of EIA in Brazil to her consulting and capacity building work throughout Latin America and the world.

*The IAIA Lifetime Achievement Award, previously known as the Rose Hulman Award, is awarded to long-term supporters and members of IAIA for major contributions to the field of impact assessment.*



SABIN CENTER FOR  
CLIMATE CHANGE LAW

## Institutional Award

The **Sabin Center for Climate Change Law** was chosen to receive the Institutional Award because of its significant work on climate change and the law governing environmental impact assessment, such as its legal efforts aimed at advancing the use of EIA as a tool for climate change analysis, mitigation, and adaptation planning.

*The IAIA Institutional Award is presented to a national or international government or nongovernmental organization for outstanding contribution to impact assessment practice or other environment-related activity deserving of recognition.*



## Individual Award

**Nicholas King** was selected for the Individual Award for his ongoing and sustained contributions to the field of Environmental Impact Assessment, including his dedication to global environmental change and futures visioning.

*The IAIA Individual Award acknowledges personal contribution to the discipline of impact assessment. It recognizes major achievement and advancement in theory and/or practice over a period of time at an international level.*



## Outstanding Service to IAIA

The Outstanding Service to IAIA Award is presented to **John Boyle** for his contributions and commitment to IAIA, displayed through his years of service leading the Training and Professional Development Committee and developing/implementing the new Professional Development Program.

*The IAIA Board of Directors selects the recipient of the Outstanding Service to IAIA Award, which recognizes one or a small number of key individuals within IAIA who have provided exceptional service to IAIA as an organization over a number of years.*



## Rita R. Hamm IA Excellence Scholarship

**Greg Schreiner** was selected as the recipient of this year's Rita R. Hamm IA Excellence Scholarship. Greg is a PhD student in the Department of Science at University of the Witwatersrand (South Africa) and a Senior Sustainability Scientist at Council for Scientific and Industrial Research (South Africa).

*The Rita R. Hamm IA Excellence Scholarship, in honor of the legacy that IAIA's former CEO left on the organization and the field of impact assessment, is offered in conjunction with each annual IAIA conference, allowing a young practitioner in the region of the host country to attend.*



## IAIA Best Paper of 2017

Two papers were selected this year:

**Susie Brownlie, Amrei von Hase, Mark Botha, Jeffrey Manuel, Zoe Balmforth, and Nicky Jenner**, for their paper "Biodiversity Offsets in South Africa – Challenges and Potential Solutions." IAIA 35(3) 248-256.

**A. John Sinclair, Timothy J. Peirson-Smith, and Morrisa Boerchers** for "Environmental Assessments in the Internet Age: The Role of E-governance and Social Media in Creating Platforms for Meaningful Participation." IAIA 35(2) 148-157.



CSIR  
our future through science



## Regional Award

The team comprising the **South African National Department of Environmental Affairs (DEA)**, the **Council for Scientific and Industrial Research (CSIR)**, and the **South African National Biodiversity Institute (SANBI)** was selected as the joint recipient of the Regional Award for its work advancing and innovating Strategic Environmental Assessment in South Africa over the past five years via national-scale SEAs in the energy sector.

*The IAIA Regional Award is awarded to an individual or organization that has made a substantial contribution to the field of impact assessment and/or has taken a leadership role in promoting best practice in impact assessment within the general world region of the location of the conference for that year.*

*If you would like to nominate an individual or organization for a 2019 award, please submit name and justification to shell@iaia.org.*

*Online nominations will open soon.*

# Conference overview

## REGISTRATION DESK HOURS

Sunday 13 May	15:00-17:00
Monday 14 May	06:30-10:00, 15:00-17:00
Tuesday 15 May	06:30-10:00, 15:00-17:00
Wednesday 16 May	07:30-17:00
Thursday 17 May	08:30-16:30
Friday 18 May	08:30-16:30
Saturday 19 May	08:30-14:30

## Program Overview

	Pre-conference Sunday 13 May	Pre-Conference Monday 14 May	Pre-Conference Tuesday 15 May	Conference Day 1 Wednesday 16 May
06:30		Registration for training courses and technical visits	Registration	
07:00		Technical visits	Technical visits	
07:30				
08:00				Registration
08:30				Students & young professionals workshop
09:00		Training courses	Training courses	Special meetings
09:30				Exhibits & posters setup
10:00				
10:30				
11:00				
11:30				
12:00				
12:30				
13:00				Opening plenary
13:30				Exhibits & posters
14:00				
14:30				Break
15:00	Registration for training courses and technical visits	Registration for training courses and technical visits	Registration	Concurrent sessions
15:30				
16:00				
16:30				Welcome reception
17:00				
17:30				
18:00				
18:30				
19:00 onward				

# Conference overview

## SHUTTLE BUS HOURS

Monday 14 May	07:15-08:45	17:15-18:45
Tuesday 15 May	07:15-08:45	17:15-18:45
Wednesday 16 May	11:15-12:45	17:45-19:15
Thursday 17 May	07:15-08:45	18:00-19:30
Friday 18 May	07:15-08:45	18:00-19:30
Warehouse	18:30-20:00	21:30-23:00
Saturday 19 May	08:15-09:45	18:00-19:30

## SHUTTLE BUS

During the times at left, a shuttle bus will run a continuous loop consisting of the ICC and the Southern Sun Elangeni & Maharani Hotel, the Garden Court Marine Parade Hotel, the Garden Court South Beach, and the SunCoast Hotel & Towers.

A "people mover" shuttle will also run from these hotels to the Warehouse and back the evening of Friday 18 May for the cocktail dinner.

Conference Day 2 Thursday 17 May	Conference Day 3 Friday 18 May	Conference Day 4 Saturday 19 May	Post-Conference Sunday- Monday 20-21 May	
				06:30
			Technical visits	07:00
Committee meetings	Committee meetings			07:30
				08:00
Registration	Registration	Registration		08:30
Theme forums	Theme forums	Theme forums		09:00
Exhibits & posters	Exhibits & posters	Exhibits & posters		09:30
Break	Break	Break		10:00
Concurrent sessions	Concurrent sessions	Concurrent sessions		10:30
Poster session	Annual General Meeting	Council meeting		11:00
Lunch	Lunch	Lunch		11:30
Concurrent sessions	Concurrent sessions	Concurrent sessions		12:00
Break	Break	Break		12:30
Concurrent sessions	Concurrent sessions	Closing plenary		13:00
Section meetings	Section meetings	Exhibits & posters dismantle		13:30
	Cocktail dinner			14:00
				14:30
				15:00
				15:30
				16:00
				16:30
				17:00
				17:30
				18:00
				18:30
				19:00 onward



# Daily schedule

## SUNDAY 13 MAY

15:00-17:00 **Registration** (ICC Main Entrance)

## MONDAY 14 MAY

06:30-10:00 **Registration** (ICC Main Entrance)

07:00-18:00 **Technical visit A: Spring Grove Dam\***

07:00 depart **Technical visit D: iSimangaliso Wetland Park\***

07:00 depart **Technical visit E: Maloti-Drakensberg World Heritage Tour\***

08:00-16:30 **Investing in Natural Capital in Urban Areas** (22ABC)

09:00-17:00 **Training courses**  
Public Participation in IA (21ABC)  
Using Organized Reasoning (12A)  
Multilevel Approach for Biodiversity (12B)  
Strategic Thinking in SEA/IA (12C)  
Human Rights and IA (21G)  
Resettlement as Part of IA (21DEF)  
Cumulative Effects Assessment (12D)

15:00-17:00 **Registration** (ICC Main Entrance)

## TUESDAY 15 MAY

06:30-10:00 **Registration** (ICC Main Entrance)

07:00-16:00 **Technical visit F: Ingula Pumped Storage Scheme \***

09:00-17:00 **Integrating Climate Change Considerations in Impact Assessment: Interlinks with Environmental and Social Impacts** (22ABC)

09:00-17:00 **Training courses**  
Undertaking Inclusive ESIs (21ABC)  
Using Organized Reasoning (12A)  
Multilevel Approach for Biodiversity (12B)  
Strategic Thinking in SEA/IA (12C)  
Human Rights and IA (21G)  
Resettlement as Part of IA (21DEF)  
Cumulative Effects Assessment (12D)

15:00-17:00 **Registration** (ICC Main Entrance)

## WEDNESDAY 16 MAY

07:30-17:00 **Registration** (ICC Main Entrance)

08:00-11:45 **Students and Young Professionals workshop** (21ABC)

08:30-10:00 **Impact assessment primers**  
Agriculture, Forestry, and Fisheries (12C)  
Biodiversity and Ecology (12D)  
Corporate Stewardship and Risk Management (22ABC)  
Disasters and Conflict (22G)  
Public Participation (12A)

09:00-12:00 **World Bank Group Day** (Hall 2A)

09:00-12:00 **EHSS Risk Management in Project Finance: An IFI Perspective** (21DEF)

10:30-12:00 **Meet the Instructors** (21G)

\* Technical visit participants: Please meet at the main entrance to the ICC, by the rhino statue, a minimum of 15 minutes prior to departure.

(Wednesday continued)

10:30-12:00 **Impact assessment primers**  
Climate Change (12C)  
Cultural Heritage (12D)  
Health (22ABC)  
Indigenous Peoples (22G)  
Social Impact Assessment (12A)

Note: No lunch is provided.

13:00-14:30 **Opening plenary** (see page 15) (Hall 1)  
Sponsored by Department of Environmental Affairs (DEA)

14:30-15:00 **Break** (Hall 2CDE) Sponsored by DEA

15:00-16:30 **Concurrent sessions**

16:45-18:15 **Welcome reception** (Foyer and Courtyard)  
Sponsored by eThekweni Municipality

## THURSDAY 17 MAY

07:00-08:30 **Affiliates, Branches, & Associated Organizations Forum** (22G)

07:30-08:30 **Committee meetings**  
IAPA Editorial Board (12A)  
Awards Committee (12C)  
Board Nominations Committee (12D)

07:30-08:30 **Section meeting**  
Students and Young Professionals (21G)

08:30-16:30 **Registration** (ICC Main Entrance)

09:00-10:30 **Theme forums**

10:30-11:00 **Break** (Hall 2CDE) Sponsored by eThekweni Municipality

11:00-12:30 **Concurrent sessions**

12:40-13:30 **Poster session** (Hall 2CDE)

12:40 **Book launch: Environmental Management in South Africa** (Hall 2A)

13:30-14:20 **Lunch** (Hall 2CDE)

14:30-16:00 **Concurrent sessions**

16:00-16:30 **Break** (Hall 2CDE)

16:30-18:00 **Concurrent sessions**

18:10-19:10 **Section Meetings**  
Agriculture, Forestry, and Fisheries (12A)  
Disasters & Conflicts (12C)  
Corporate Stewardship and Risk Management (12D)  
Health (22G)  
Cultural Heritage (21G)  
Governance & Implementation Systems (22DEF)  
Public Participation (22ABC)

*Coffee breaks and lunches*

Based on the data collected via registration forms, IAIA arranged for a percentage of vegetarian meals. This does not guarantee accommodation of individual preference. All food is being prepared halal.

Note: Lunch is NOT provided on 16 May.

## FRIDAY 18 MAY

<b>07:30-08:30</b>	<b>Committee meetings</b> IAIA Journal Management Committee (12A) Training & Professional Development Committee (12C) Sections Coordinating Committee (12D)
<b>08:30-16:30</b>	<b>Registration</b> (ICC Main Entrance)
<b>09:00-10:30</b>	<b>Theme forums</b>
<b>10:30-11:00</b>	<b>Break</b> (Hall 2CDE)
<b>11:00-12:30</b>	<b>Concurrent sessions</b>
<b>12:40-13:30</b>	<b>Annual General Meeting and Lifetime Achievement Award Presentation</b> (11) All conference participants are encouraged to attend the annual business meeting of the Association. Meet the IAIA Board of Directors, hear the Treasurer's report, and be present for the prestigious Lifetime Achievement Award recipient's acceptance speech.
<b>12:40-14:20</b>	<b>Lunch</b> (Hall 2CDE)
<b>14:30-16:00</b>	<b>Concurrent sessions</b>
<b>16:00-16:30</b>	<b>Break</b> (Hall 2CDE)
<b>16:30-18:00</b>	<b>Concurrent sessions</b>
<b>18:10-19:10</b>	<b>Section Meetings</b> Biodiversity & Ecology (21G) Indigenous Peoples (12C) Climate Change (22DEF) Social Impact Assessment (22G)
<b>19:00-23:00</b>	<b>Cocktail dinner</b> (The Warehouse; see pages 13, 51) <i>Sponsored by eThekweni Municipality</i>

## SATURDAY 19 MAY

<b>08:30-14:30</b>	<b>Registration</b> (ICC Main Entrance)
<b>09:00-10:30</b>	<b>Theme forums</b>
<b>10:30-11:00</b>	<b>Break</b> (Hall 2CDE)
<b>11:00-12:30</b>	<b>Concurrent sessions</b>
<b>12:40-13:30</b>	<b>Council meeting</b> (21G) The Council is an advisory resource for the Board. Committee chairs, Section coordinators, Affiliate and Branch representatives and conference program chairs for current and future conferences comprise the Council. All members are encouraged to attend and meet the leadership of IAIA. Presentation of the Outstanding Service Award.
<b>12:40-14:20</b>	<b>Lunch</b> (Hall 2CDE)
<b>14:30-16:00</b>	<b>Concurrent sessions</b>
<b>16:00-16:30</b>	<b>Break</b> (Hall 2CDE)
<b>16:30-17:30</b>	<b>Closing plenary</b> (see page 15) (Hall 2BH)
<b>16:00-19:00</b>	<b>Exhibit and poster dismantle</b>

## SUNDAY 20 MAY

<b>07:00 depart</b>	<b>Technical visit K: Hluhluwe-Imfolozi Park*</b>
<b>08:00 depart</b>	<b>Technical visit J: Wild Coast and Community Walking Tour*</b>

## TECHNICAL PROGRAM: TOPICAL STREAMS

The technical program is structured into two streams: (1) thematic sessions focusing on environmental justice in societies in transition, and (2) general impact assessment sessions, including topics that address issues of interest to IAIA's special-interest Sections. Each morning, all delegates are invited to participate in a select number of theme forums, sessions which focus on cross-cutting issues relevant to the many specialties of impact assessment with topics that engage the conference theme.

### Conference theme

Assessing & managing environmental risks in societies in transition.....	18
Contribution of IA to human wellbeing.....	20
Ecosystem services, health, livelihoods, & environmental justice.....	22
Energy and societies in transition .....	22
Environmental justice challenges of climate change.....	23
Human rights, equality, & environmental justice.....	24
Indigenous Peoples & environmental justice.....	25
Public participation & environmental justice .....	25

### IAIA Section and general topics

Agriculture, forestry, & fisheries .....	26
Biodiversity & ecology.....	27
Climate change .....	30
Corporate stewardship & risk management .....	30
Cultural heritage.....	31
Digital IA.....	31
Disasters & conflicts.....	32
Extractive resources .....	32
Governance & implementation .....	32
Health IA .....	33
Indigenous Peoples.....	33
Power generation & transmission .....	33
Professional development & capacity building in IA.....	33
Public participation .....	35
Renewable energy .....	36
SIA .....	36
Tools and methods.....	37

Special to IAIA .....	38
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# Technical program overview

■ Plenary  
■ Theme forum  
■ Concurrent session

	Hall 1	Hall 2BH	Hall 2A	Room 11	Room 21ABC	Room 21DEF
<b>Wednesday 16 May</b>						
13:00-14:30	Plenary					
15:00-16:30		Using organized reasoning to improve impact assessment: Building capacity (p34)	Country experiences with environmental justice in practice: Oil & gas (p22)	DEA: The harmonization of EIA in the SADC region (I) (p32)	Assessing the capacity to manage environmental and climate change risks (p18)	A rights-based approach to FPIC and HRIAs: Lessons from the field (p24)
<b>Thursday 17 May</b>						
09:00-10:30		Understanding stakeholder expectations in IA (p16)	Toward improved implementation of biodiversity offsets (p16)	Resilience in infrastructure planning and assessment (p16)	DEA: The harmonization of EIA in the SADC region (II) (p32)	
11:00-12:30		Negotiating environmental justice with stakeholders (p35)	SEA as a tool for radical reform (p19)		Climate change and IA: Good practice cases (I) (p30)	Diagnostic tools for country ESIA systems: An update (p37)
12:40-13:30		Poster Session				
14:30-16:00		Impact assessment, decision making, and change (p20)	China's EIA process: Adapting for sustainable future (I) (p37)		Climate change and IA: Good practice cases (II) (p30)	Disasters, conflict, other crises, and IA (p32)
16:30-18:00		Quality and Effectiveness of IAs (p21)	China's EIA process: Adapting for sustainable future (II) (p37)		Energy justice: Beyond climate & environmental justice (p23)	Online IA training: Experiences, lessons learned, and the future (p33)
<b>Friday 18 May</b>						
09:00-10:30		Decision-making in an uncertain world: Welcome to the Anthropocene (p16)	International finance: The role of independent accountability mechanisms (p16)	ELA theme forum: Legal perspectives on environmental (in)justice (p16)		
11:00-12:30		Whose canary in whose coal mine? A hypothetical (p20)	Planning for and implementing NNL/NG of biodiversity goals (I) (p29)	Mechanisms for biodiversity conservation (I) (p28)	Effective PP in extractive industries and energy sector (I) (p25)	Building local capacity for meaningful stakeholder engagement (p24)
12:40-13:30		Annual General Meeting				
14:30-16:00		SEA practice for regional and land use planning: Examples from Africa and Asia (p19)	Planning for and implementing NNL/NG of biodiversity goals (II) (p29)	Mechanisms for biodiversity conservation (II) (p29)	Effective PP in extractive industries and energy sector (II) (p25)	Community participation in governance processes for reduced vulnerability (p22)
16:30-18:00		The oil & gas industry and environmental justice in practice (p23)	Toward effective implementation of the mitigation hierarchy in EIA process: Case examples (p29)	Do biodiversity offsets deliver equitable outcomes? (p28)	Effective PP in extractive industries and energy sector (III) (p26)	A systems approach to SEA capacity development (p34)
<b>Saturday 19 May</b>						
09:00-10:30		Involuntary resettlement: Social license to operate (p17)	Exploring the relationship between quality and justice (p17)	Hydropower: Meeting the sustainability challenge (p17)		
11:00-12:30		Equality in IA and involuntary resettlement (p24)	EIA effectiveness for infrastructure developments in Africa (I) (p18)	Sustainable hydropower: Best practice examples (p36)	Digital IA: The latest developments (p31)	Social license to operate: Expectations of communities vs. corporates (p30)
12:40-13:30		Council Meeting				
14:30-16:00		Eish! African World Café: What are your Big Five? (p34)	EIA effectiveness for infrastructure developments in Africa (II) (p18)	Example reforms of environmental permitting and review (p32)	Digital innovation: Experiences with developing IA online platforms (p31)	Institutional capacity = Enhanced SDG outcomes (p35)
16:30-17:30		Plenary				



# Technical program overview

Room 22ABC	Room 22DEF	Room 21G	Room 22G	Room 12A	Room 12C	Room 12D
Impact assessment: Its role in triggering conflict and using mediation (p38)	Hits of the 1980s: Insights from the formative years of IA (34)	Infrastructure financing & EIA: Managing risk & the public interest (19)	CLEAA Africa Professional Development Fellows Program (p34)	Environmental justice: Options for coastal communities (p26)	Professional development and capacity building in IA (p35)	IA best practice in mining: Lessons learned (p22)
Improving environmental & social performance on construction projects (I) (p18)	Improving environmental justice in IA through PP (I) (p26)	International progress in regional-scale impact assessment (p20)	Improved integration of land acquisition & resettlement expertise in ESIA (p20)	Regional conservation assessments: Value, process, and case studies (p29)	Power-sector ESIA: Good practice examples & guidelines (p33)	UN Environmental and Social Sustainability (ESS) Framework: Enabling SDGs (p19)
Poster Session						
Improving environmental & social performance on construction projects (II) (p19)	Improving environmental justice in IA through PP (II) (p26)	Is the oil & gas industry ready to prioritize environmental justice? (p23)	Economic displacement and livelihood restoration (p36)	HRIA in the agricultural sector: A case learning session (p27)	Registration and certification of IA practitioners (p35)	IA and biodiversity (p28)
And now the good news (p34)	Practical aspects of public participation (p36)	Experiences with SEA in the oil and gas sector (p32)	Policy and program impacts assessment (p36)	Great Scott! New thinking in IA (p20)	Are the SDGs an opportunity to guide a regulatory framework for HIA? (p33)	Meet the editor (p38)
Independent panels for helping address environmental challenges (p38)	Reforming IA law in Canada: Moving to the next generation? (I) (p21)	Enhancing DRR and community resilience: What role ESIA can play (p32)	SEA's role in transitions to sustainability, endorsing SDGs (p21)	Shaping of a perfect HIA: Barriers in achieving the same (p33)	Enriching ES(H)IAs with the natural & social capital concept (p33)	IAIA's climate change and impact assessment next steps (p30)
Annual General Meeting						
Environmental justice in IA: Case studies in guidance and practice (I) (p37)	Reforming IA law in Canada: Moving to the next generation? (II) (p21)	Where did it all go wrong? An honest look at lessons learned in ESIA (p35)	Coordinating national and international ESIA to ensure streamlining (p34)	Environmental justice & the pursuit of sustainable cities (p18)	HIA and health in EIA: Legislation and implementation (p33)	Greening the transport sector through smart plans and eco-friendly designs (p28)
Environmental justice in IA: Case studies in guidance and practice (II) (p38)	Reforming IA law in Canada: Moving to the next generation? (III) (p21)	IA and Sustainable Development Goals (p35)	Integrated strategic environmental assessments for post-crisis recovery (p32)	Psycho-social impact in support of environmental justice (p20)	Aashukan, one year later (p33)	Tiering of SEA/EIA in relation to energy infrastructure plans (p23)
Implementing renewable energy projects within complexity (p36)	Assessing cultural heritage significance and risk (p31)	Applying resilience thinking in IA (p22)	Indigenous & vulnerable people, CH, and health (p24)	IA and agriculture (p27)	Biodiversity offsets and people (I) (p27)	Social justice and community participation in IA (p25)
Council Meeting						
Integrated IA for addressing Africa-specific challenges in extractives (p23)	Managing cultural heritage in urban & rural landscapes (p31)		Applying the mitigation hierarchy to address marine biodiversity impacts (p27)	Informing enviro-cultural justice in IA (p25)	Biodiversity offsets and people (II) (p27)	EIA Follow-up best practice principles (p38)

# Special meetings and networking activities

## INVESTING IN NATURAL CAPITAL IN URBAN AREAS

Discuss the key challenges to scaling up community ecosystem- and green economy-based solutions in urban areas. Highlight any risk areas which may catalyze ecosystem-based adaptations with transformative socio-economic outcomes.

**Monday, 14 May | 08:00-16:30 | 22ABC**  
Pre-registration by 20 April required.

## INTEGRATING CLIMATE CHANGE CONSIDERATIONS IN IMPACT ASSESSMENT: INTERLINKS WITH ENVIRONMENTAL AND SOCIAL IMPACTS

The aim of this training is to familiarize practitioners with the interlinkages between climate change, environment, and social impacts. It will guide participants through decisions around when and how to integrate climate change considerations into impact assessment and to identify and realize opportunities to achieve positive outcomes.

**Tuesday, 15 May | 09:00-17:00 22ABC**  
Pre-registration by 20 April required.

## STUDENTS AND YOUNG PROFESSIONALS (SYP) WORKSHOP

The SYP Section invites early career IA researchers, practitioners, and post-graduate students to a half-day workshop to present their work, listen to seasoned IA practitioners and academics speak about their career path, and participate in a speed-mentoring activity. Stay connected by attending other SYP social activities during the week.

**Wednesday, 16 May | 08:00-11:45 | 21ABC**  
Pre-registration by 20 April required.

## WORLD BANK DAY: IMPLEMENTATION OF THE ENVIRONMENTAL AND SOCIAL FRAMEWORK

The World Bank's new Environmental and Social Framework (ESF) will go into effect in late 2018. It includes a standard dedicated to labor and working conditions, detailing the requirements that borrowers will satisfy in World Bank-financed projects. This event provides a brief update on the status of the roll-out of the ESF, including guidance material that is currently being developed. We will then discuss the specific labor provisions included in the ESF and will focus, in particular, on occupational health and safety as well as child and forced labor. The presentation of the World Bank's ESF will be accompanied by reports from practical case studies.

**Wednesday, 16 May | 09:00-12:00 | Hall 2A**  
Pre-registration by 20 April required.

## MEET THE INSTRUCTORS

Meet and communicate with some of the IAIA training course instructors and Training and Professional Development Committee (TPDC) members, directly ask your questions, and raise any concerns and expectations about IAIA training. The IAIA TPDC will also explain how the Committee works, the process of evaluating and offering courses, and ways in which members can take part.

**Wednesday, 16 May | 10:30-12:00 | 21G**  
Pre-registration by 20 April required.

## IMPACT ASSESSMENT PRIMERS

Do you want to know a little bit about a specific topic of impact assessment before the conference begins? Is there an area of impact assessment that you've heard about but are not quite sure what it involves? Are you coming to the conference hoping to learn more about a specialty area, but aren't certain if it's where you should spend your time this week? Do you want to know more about IAIA's Sections and start your networking early by meeting delegates before the conference begins? If you answered "yes" to any of these questions, consider participating in the *Impact Assessment Primers*.

Join members of IAIA's Sections for 90-minute introduction sessions where seasoned IAIA members, experts in their field, will provide you with a brief introduction to the topic, an introduction to the Section and its activities, advice and information on which IAIA18 sessions are related to the topic, and how you can start to build your capacity in that area.

**Wednesday, 16 May | 08:30-12:00**  
See page 8 for locations.

## EHSS RISK MANAGEMENT IN PROJECT FINANCE: AN IFI PERSPECTIVE

This workshop intends to build participant capacity by familiarizing attendees with International Financing Institution (IFI) environment, health, safety, and security (EHSS) standards, good practices and emerging issues, the role of environmental and social impact assessment (ESIA) in IFI banking and investment processes, and the requirements behind developing bankable ESAs. Specifically, the workshop will include the following:

- An overview of applicable IFI and international EHSS legislation and requirements (e.g., European Bank for Reconstruction and Development (EBRD), International Finance Corporation (IFC), World Bank (WB), African Development Bank (AfDB), Equator Principles Financial Institutions (EPFIs) and Export Credit Agencies (ECAs)) to develop "bankable projects."
- EHSS due diligence requirements of the EBRD and other IFIs with which the Bank co-finances or syndicates deals. This will cover the full internal appraisal and due diligence process carried out by IFIs, including project categorization, EHSS due diligence planning, the auditing and analysis process, use of independent third party consultants, etc.
- An overview of banking and investment processes and the differences in the environmental and social implications related to differing investment types (debt vs. equity, bonds, lending facilities, and the leverage available in differing scenarios).
- The legal mechanisms through which the Bank and IFIs agree on, covenant, and ensure actions designed to manage risk and drive compliance with policy. This will include loan documentation tools such as representations and warranties, covenants, conditions precedent and subsequent, and the use of Environmental and Social Action Plans (ESAPs).
- Emerging EHSS issues currently being explored through ongoing and collaborative IFI environmental and social (E&S) working groups.
- Project monitoring and evaluation: annual E&S reporting and evaluation, key performance indicators, and outcomes.
- IFI independent recourse/complaints mechanisms.

**Wednesday, 16 May | 09:00-12:00 | 21DEF**  
Pre-registration by 20 April required.

# Special meetings and networking activities

## "POP UP" MEETINGS

Do you need to meet with colleagues? Continue a discussion? Get together with a potential business partner or client? Meeting room 12B is available on a first-come, first-served basis for small meetings that "pop up" during the conference. Check the schedule on the room for available times and sign up.

**16-19 May | 09:00-18:00 | 12B**

## WELCOME RECEPTION

For the welcome reception, we are planning to show a little of the famous South African hospitality. The event will aim to showcase the extraordinary cultural diversity in South Africa and Durban specifically. It will offer the opportunity to catch up with old friends and hopefully make some new ones all from the comfort of the conference venue, so no need to arrange transport. You will leave the meet-and-greet inspired for the conference and hopefully with some insight into what makes Durban and South Africa as a whole so remarkable.

**Wednesday, 16 May | 16:45-18:15**  
**ICC foyer and courtyard**

## AFFILIATES FORUM

IAIA Affiliates, Branches, and Associated Organizations broadening our reach for professional benefit to each. Meet with all of the representatives. It's about sharing ideas from across the globe toward building a community of professional practice. Bring your poster. Share your needs. Tell us your aspirations. Summarize your challenges. Together let's build relationships.

**Thursday, 17 May | 07:00-08:30 | 22G**

## BOOK LAUNCH

Join Juta Law for a launch of *Environmental Management in South Africa, 3rd Edition*, edited by ND King, HA Strydom, and FP Retief. Editors Nicholas King & Francois Retief will present this exciting new edition.



Drop your business card at the Juta booth for a chance to win a copy of the book. Drawings will take place during the book launch and at the closing plenary.

**Thursday, 17 May | 12:40 | Hall 2A**

## COCKTAIL DINNER

IAIA delegates asked for a more informal, networking-friendly banquet evening ... here it is! Join your colleagues and friends for a "cocktail dinatoire" (walking dinner).

This African-inspired cocktail event will provide networking opportunities in a contemporary urban South African setting. Conference goers will experience the diversity of food, dance, and music of the many Durban cultures, all brought together through the spirit of *Ubuntu*. *Ubuntu* is a powerful African philosophy translated as "I am because we are" or the spirit of community. We invite you to immerse yourself!

**Friday, 18 May | 19:00-23:00**  
**The Werehouse, 82 Hunter Street**  
**Pre-registration by 20 April required.**  
**See page 7 for shuttle bus times.**

## LEGACY PROJECT

The Entuthukweni Primary School in Lamontville, South of Durban is located next to the Mobeni Industrial area. Over the years, the children have been exposed to industrial pollution that is affecting the entire South Durban Basin. The school has no air conditioning, forcing the classrooms to be kept open to the Durban heat, even when emissions from the industrial area are extreme. The fencing at the school is also lacking, exposing children to dangers of crime and being run over by traffic. IAIA donates \$5 of each conference registration to a worthy cause. With the conference theme of "Environmental Justice in Societies in Transition," the IAIA18 Committee felt that this school is a worthy recipient of a donation. The school can use the money to purchase fans for the classrooms as well as do something about the fencing.

## SUSTAINABLE CONFERENCES

IAIA takes the following steps to mitigate the impacts of our conferences:

- Limit printed materials; communicate via e-mail and Web to the extent practical and possible.
- Contract with venues that participate in green programs (e.g., hotels that provide a linen and towel reuse program).
- Use bulk servings and pitchers rather than individual bottles; use china and silverware rather than disposables.
- Provide recycling bins for discarded paper products
- Ask delegates to confirm their attendance at events and functions to reduce waste and leftovers.
- Encourage delegates to purchase carbon-offset credits for their flights.
- Encourage delegates to return name badge holders.

## SKATE UBUNTU

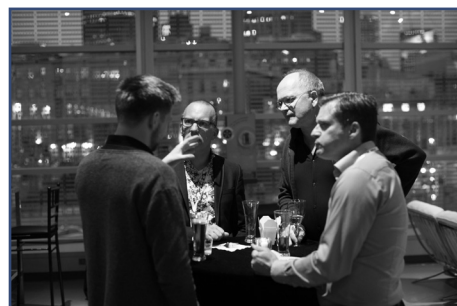
Skate Ubuntu is a student initiative at Rhodes University in Grahamstown. Through the appeal of skateboarding, the student group hopes to create opportunities for kids from Joza township to mix and socialize with kids from Grahamstown. In order to do so, the group is raising money to build a skatepark on land situated between the two urban centers. They are also raising money to buy skateboards and safety gear, so that the skateboarding is both fun and safe.

To raise money for the initiative, Sean O'Beirne (Conference Co-chair) has made a carving knife and fork that will be raffled at the conference. The knife and fork set is etched with the IAIA18 logo and the handles are made of "sneezewood." The wood, after sawing or sanding, produces highly irritant, aromatic peppery oils that cause violent sneezing. Sneezewood (*Ptaeroxylon obliquum*) is extremely hard and durable and highly valued as a timber for fence posts, buildings, and railway sleepers. The wood for these handles was sourced from an old fence post.

Raffle tickets are on sale at R100. The draw will take place at the closing plenary and you do NOT need to be there to claim your prize.

**Tickets may be purchased at the entrance to Hall 2CDE.**

**Drawing to be held during closing plenary.**





# Impact assessment primers

IAIA's special-interest Sections are comprised of exciting and hardworking members who work together in their related field to promote and improve their work on topics and areas including social impact assessment, climate change, biodiversity, and much more!

The purpose of these introductory sessions is to give you an inside look into how these experts contribute to the IAIA community on their related topic and are applying rigorous solution sets and best practices. This is also a chance to learn how you can become a member of a Section and become proactive in the IAIA community. Join us!

## WEDNESDAY 16 MAY

### 08:30-10:00

#### Agriculture, Forestry and Fisheries (12C)

##### The “invisible” impact drivers

Few governments regulate AFF activities—we promote impact assessment in our sectors internationally and nationally and seek to ally with local and regional groups interested in promoting this work.

*Chair: Ijeoma Vincent-Akpu*

#### Biodiversity and Ecology (12D)

##### Biological and ecological knowledge: The foundation of sustainable development

An overview of the Biodiversity and Ecosystem Section's activities, plus the use of biodiversity and ecological information to guide environmental review, IA, and mitigation options will be discussed. Areas where practices are advancing will be reviewed, along with opportunities and challenges to mainstream this work in the future. Information from the “Mainstreaming the Mitigation Hierarchy in Impact Assessment” IAIA Special Symposium will be summarized.

*Chair: Denny Grossman*

#### Corporate Stewardship & Risk Management (22ABC)

##### Being human in impact assessment

The CSRSM section chairs welcome you to IAIA18, starting with an introduction to the Section, with a focus on human rights in impact assessment and vulnerable groups. Through an interactive session, the chairs will share key challenges and lessons learnt from recent experiences working with companies, followed by a Q&A with the members.

*Chairs: Nora Gotzmann, Michele Gilbert, & Tulika Bansal*

#### Disaster and Conflict (22G)

##### Disasters, conflict, and the environment: Why it is important

Focused on immediate threats to life and welfare, the Disaster & Conflict Section seeks to understand disaster-and-crisis environmental impacts to reduce lives lost and promote sustainable recovery.

*Chair: Charles Kelly*

#### Public Participation (12A)

##### Engaging impact assessment

Public participation as if it mattered. Exploring the role, function and opportunities through games and play.

*Chairs: John Sinclair, Timothy Peirson-Smith, & Tanya Burdett*

### 10:30-12:00

#### Climate Change (12C)

##### Climate change and impact assessment

The aim of this session is to inform you about the methods to integrate climate change in impact assessment and application of a method by you in a practical case in a working group.

*Chairs: Arend Kolhoff & Nick King*

#### Cultural Heritage (12D)

##### Introduction to Cultural Heritage Section

This session will provide an introduction to the role of cultural heritage in IAIA specifically, and more generally to integrating cultural heritage into impact assessment and the development process.

*Chairs: Arlene Fleming & Chris Polglase*

#### Health (22ABC)

##### Health in impact assessment: Concepts and practice

The session will introduce basic and important concepts and methodologies to facilitate why health may be important to consider in impact assessment, when, why, and what outputs may look like.

*Chairs: Geetha Ramesh & Mark Dival*

#### Indigenous Peoples (22G)

##### Impact assessment and Indigenous Peoples: Assessing impacts while respecting rights

What was achieved and how is Aashukan influencing best practice IA when it impacts Indigenous Peoples? Mooting a bi-annual pre-conference gathering for Indigenous Peoples that advances the Aashukan Declaration.

*Chairs: Philippe Hanna & Kepa Morgan*

#### Social Impact Assessment (12A)

##### Social impact assessment

The SIA Section is a professional network of SIA practitioners and researchers. The Section provides a platform for international collaboration and information sharing. The goal is to keep those involved and interested in SIA up to date with the latest developments in theory and practice.

*Chairs: Irge Satiroglu & Katherine Witt*

# 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 Gumede**  
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



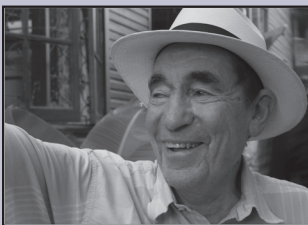
**Charlotte McClain-Nhlapo**  
Global Disability Advisor for  
the World Bank Group



**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

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**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

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**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

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**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

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**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

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**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

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**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; Streather, 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-El, 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

*Kollhoff, 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 Kørnøv

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 Kandholhudhoo 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 Pack 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 Doce 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 Doce 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

*Ditlhale, 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 regrettably 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 2BH**

*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: CSR*

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 2B**

*Paper Session/Pecha Kucha*

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

*IAIA Sections: CSR, 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, Reinett; 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; Lertsateanchai, 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, Mbiyanpr*

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 FF's "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; Quétiér, Amrei; ten Kate, Kerry; Quétiér, Fabien; Victurine, 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 adaption 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.

## CULTURAL HERITAGE

### 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.

## Concurrent sessions

#### 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, Mbiyanor; 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

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; Uggowitzter, Petter; Sæbø, Johan; Uggowitzter, 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; Uberty, 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; Pyper, 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.

#### equalitatives 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 FIIs

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; Sodré, Federica Natasha; Espécie, 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

*Hagemeijer, 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; Cegonha, 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

*Garbharan, 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, Alysso; 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; Montañó, 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, Nankyoung; 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.

# Exhibits | Annual General Meeting

## EXHIBITORS



Bioinsight • Biota • DEA  
EAPASA • EIMS • Environmental Accord Ltd  
eThekwini Municipality • IAIA19  
Juta • LiMETOOLS • NCEA  
SRK Consulting • Tetra Tech  
The Cadmus Group

TRIPLO4 Sustainable Solutions (Pty) Ltd • Skate Ubuntu

## AFFILIATE, BRANCH, AND ASSOCIATED ORGANIZATION POSTERS

Check out the posters to learn about these groups and their latest activities!

- **Korea:** Korean Society of Environmental Impact Assessment (KSEIA)
- **Mozambique:** Mozambican Association (AMAIA)
- **Environmental Institute of Australia & New Zealand** (EIANZ)
- **Nigeria:** Association for Environmental Impact Assessment of Nigeria (AEIAN)
- **Portugal:** Associação Portuguesa de Avaliação de Impactes (APAI)
- **Washington (DC) Area Branch**
- **Zambia:** Impact Assessment Association Zambia (IAAZ)

Tables are provided at the entrance to Hall 2CDE for IAIA members to display information, distribute conference papers, or announce/distribute non-commercial items. Delegates must attend the conference to display materials. IAIA reserves the right to remove documents or materials without notice.

Only official exhibitor posters and/or technical posters approved by the Program Committee during the review process may be displayed.

## ANNUAL GENERAL MEETING

Friday 18 May | 12:40-13:30 | Meeting Room 11

This is the annual business meeting of the Association and a time to recognize one of IAIA's outstanding members.

All conference participants are encouraged to attend, learn more about IAIA's operations, what we accomplished over the past year, and what lies ahead for the next. In addition, come celebrate one of IAIA's finest as we give out the Lifetime Achievement Award to Iara Verocai.

### Agenda

1. Welcome, introductions, confirmation of the 2017 AGM Minutes
2. Report from the President, Marla Orenstein
3. Report from the Executive Director, Jill Baker
4. IAIA's Financial Report from the Treasurer, Morgan Hauptfleisch
5. Presentation of the IAIA Lifetime Achievement Award and address by the recipient, Iara Verocai
6. Q & A from members

### Notes

## STUDENTS AND YOUNG PROFESSIONALS (SYP) WORKSHOP

**Wednesday 16 May | 08:00-11:45 | 21ABC**

To foster the integration of students and young professionals in IAIA conferences, the Students and Young Professionals (SYP) Section, together with the Headquarters and the IAIA18 Program Committee, have organized a half-day "Student and Young Professionals Workshop" as a pre-event of IAIA18.

### PROGRAM

**07:45 - 08:00**

**Registration**

**08:00 – 08:10**

**Workshop opening.** Marla Orenstein (IAIA President) will do the honors of welcoming the SYP Section members to the workshop.

**08:10 – 09:30**

**Keynote speakers presentations.** Four invited speakers from different sectors present their experience and share their points of view about career issues related to IA career development.

- **Luis E. Montañez Cartaxo** (Consultancy sector)
- **Ntsako Baloyi** (Industry sector)
- **Kwadwo Adusei-Asante** (Academic sector)
- To be confirmed (Public sector)

**09:30 – 09:45**

**Presentation of an EIA training course by John Boyle**

**09:45 – 10:00**

Coffee break

**10:00 – 10:30**

**Elevator-pitch presentations by SYP.** Five SYP members (pre-chosen volunteers) will present what they are working on (4 minutes each) and all the participants of the workshop will be able to benefit from the experience of others.

**10:30 – 11:30**

**Speed mentoring.** Just like speed dating, the SYP will introduce himself/herself to an experienced member of the IAIA (the mentor) and have 3 minutes for an exchange. At the expiration of this 3 minutes, the SYP will move to meet the next mentor. The objective of this speed mentoring is to meet new people and develop your network.

**11:30 – 11:45**

**Close of workshop.** Dr. Ilse Aucamp, IAIA18 Program Committee

*Help identify outstanding presentations!*

*Based on delegates' feedback, select presenters will be invited to record their presentations for online viewing.*

*Please drop off your ballot at the registration desk by 13:30 on Saturday, 19 May, or complete the session's "Presentation Survey" in the mobile app.*

## OUTSTANDING PRESENTATIONS

**Submitted by** .....

**Presenter's name** .....

**Presentation title** .....

Session Date	Session Time			
Wednesday 16 May				15:30
Thursday 17 May	09:00	11:00	14:30	16:30
Friday 18 May	09:00	11:00	14:30	16:30
Saturday 19 May	09:00	11:00	14:30	

**What makes this presentation outstanding?**

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**Presenter's name** .....

**Presentation title** .....

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Saturday 19 May	09:00	11:00	14:30	

**What makes this presentation outstanding?**

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## SOUTH AFRICA'S DEPARTMENT OF ENVIRONMENTAL AFFAIRS

The Constitution of the Republic of South Africa empowers us as a sector and the Department of Environmental Affairs continue to endeavour for the full realisation of the right to an environment that is not harmful to the health and well-being of South Africans and all those who live in our country. As the sector and the Department, we aim to radically transform our approach to environmental protection, while also balancing it with socio- economic development – crucial pillars on which sustainable development rests. As a nation we adopted the National Development Plan, which maps out the vision of the country for the 20 years ahead. In the environment sector, we will implement related aspects of the priority areas that deal with environmental protection and sustainable development.

Also in our quest to achieve the Sustainable Development Goals, we continue to promote various initiatives that galvanise unprecedented efforts to make South Africa a better country for all who live in it. The department therefore aims to provide leadership in environmental management, utilisation, conservation and protection of ecological infrastructure.

### Mandate and core business

The Department of Environmental Affairs is mandated to give effect to the right of citizens to an environment that is not harmful to their health or wellbeing, and to have the environment protected for the benefit of present and future generations. To this end, the department provides leadership in environmental management, conservation and protection towards sustainability for the benefit of South Africans and the global community.

### Vision

A prosperous and equitable society living in harmony with our natural resources.

### Mission

Providing leadership in environmental management, conservation and protection towards sustainability for the benefit of South Africans and the global community.

### Values

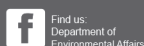
Driven by our Passion as custodians and ambassadors of the environment we have to be Proactive and foster innovative thinking and solutions to environmental management premised on a People-centric approach that recognises the centrality of Batho Pele, for it is when we put our people first that we will serve with Integrity, an important ingredient in a high Performance driven organisation such as ours.



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**environmental affairs**

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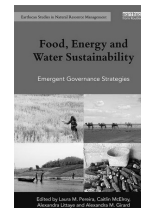
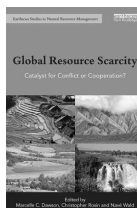
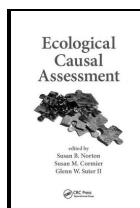
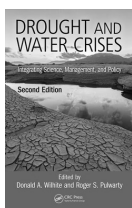
## DURBAN SOUTH AFRICA

Durban is a natural paradise known for its gorgeous coastline of sun-kissed beaches and subtropical climate, situated on the eastern seaboard of Africa. The City is built around one of the busiest ports in Africa and our people are our pride. The city focuses on providing visitors with a unique set of experiences that go beyond the beach and into the realm of Durban's diverse culture, urban lifestyle and scenic diversity. Durban is a gateway to the Kingdom of the Zulus, which boasts world heritage sites, uKhahlamba Drakensburg Mountain ranges and iSimangiliso Wetland Park and numerous unique game parks within 3 hours' drive. The City of Durban is an elegant, mature and ambitious city. It is a trendsetter in offering great lifestyle, speckled with adventure activities, blessed with natural beauty and is an astonishingly liveable city. Whether you are here as a business delegate or a leisure traveller, there is a warm African flavour that will capture your heart forever.

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**Where next for impact assessment?**

29 April-2 May 2019



**April 2020**  
*Seville, Spain*



**IAIA20**

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Smartening Impact Assessment

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(IAIA) has created **IAIA Career Central** to be your  
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- Confidential resume posting.
- Save jobs and apply when ready.
- Email notification whenever posted jobs match your search criteria.

#### Employer Benefits

- Targeted talent pool – reach a focused audience of qualified professionals.
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- Email notification whenever job seekers match your requirements.

Post your job or resume at <http://jobboard.iaia.org>.

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**We look forward to meeting you at IAIA18.**

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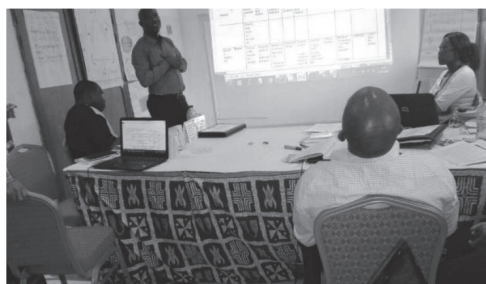
**Want to ask a question of all IAIA members?  
Get Section members' opinions on a topic?  
Continue a discussion started at a conference to  
involve those who couldn't attend the conference?**

Just log in at <http://iaiaconnect.iaia.org>, choose a group, and post your question.

Messages and replies on IAIAConnect are archived and accessible, much like an electronic bulletin board. Members can upload resources, post event notices, add a profile picture, and search for and view each others' profiles.

Activity on the site can be sent to members via e-mail notifications with either a daily or weekly "digest."

If you have any questions, please contact Bridget John ([bridget@iaia.org](mailto:bridget@iaia.org)) or download two resource documents posted at [www.iaia.org/iaia-connect.php](http://www.iaia.org/iaia-connect.php): 1) Frequently Asked Questions and 2) a quick reference guide to the navigation system used in Connect.



## INTERESTED IN AN IMPACT ASSESSMENT FELLOWSHIP IN AFRICA?

## INTERESTED IN SUPPORTING A RISING STAR IN IMPACT ASSESSMENT?



Africa's award-winning Professional Development Fellowship Program in Impact Assessment (**PD Fellows Program**) provides practical training and mentorship to the continent's most promising young and mid-career environmental and social impact assessment and management professionals. Implemented by the pan-African network Capacity Development and Linkages for Environmental Assessment in Africa (CLEAA), the program has been supported by multiple international donors, including USAID, the World Bank, and Sida.

Program fellows learn by doing, participating in a professional impact assessment team, applied training and/or appropriately-tailored engagement for a period of 2 to 6 months to gain practical impact assessment experience in specialized fields of their own choosing. The experience is also intended to connect fellows firmly to the impact assessment professional community, including travel to and participation in a relevant impact assessment conference such as IAIA 2018.

For the 2017–2018 program cycle, USAID has generously provided support to reboot the program by funding the first fellows class since 2009, as well as outreach and planning to place the program on a sustainable, multi-donor funding basis under African leadership. Fellows from this year's program will present on their experiences and lessons learned at a panel discussion session during this year's IAIA.



CLEAA gratefully acknowledges core support from USAID for the 2017–2018 Fellows class.

The PD Fellows Program requires engagement from the IA community to sustain its mission—supporting sustainable development in Africa by supporting the professional development of the most promising young African IA professionals:

- African and international businesses, developers, banks, foundations, philanthropists, and governments are urged to support this highly successful program to strengthen the ranks of highly qualified African IA specialists.
- Fellowship candidates, host entities able to offer practicum placements, and potentially interested private-sector sponsors/hosts and international donors for the next year's program cycle are urgently sought!

**To learn more at IAIA 2018, please:**

**Attend the PD Fellows conference session.**

**Attend the CLEAA-Africa interests side meeting (to be announced).**

**Talk with CLEAA Trustees:**

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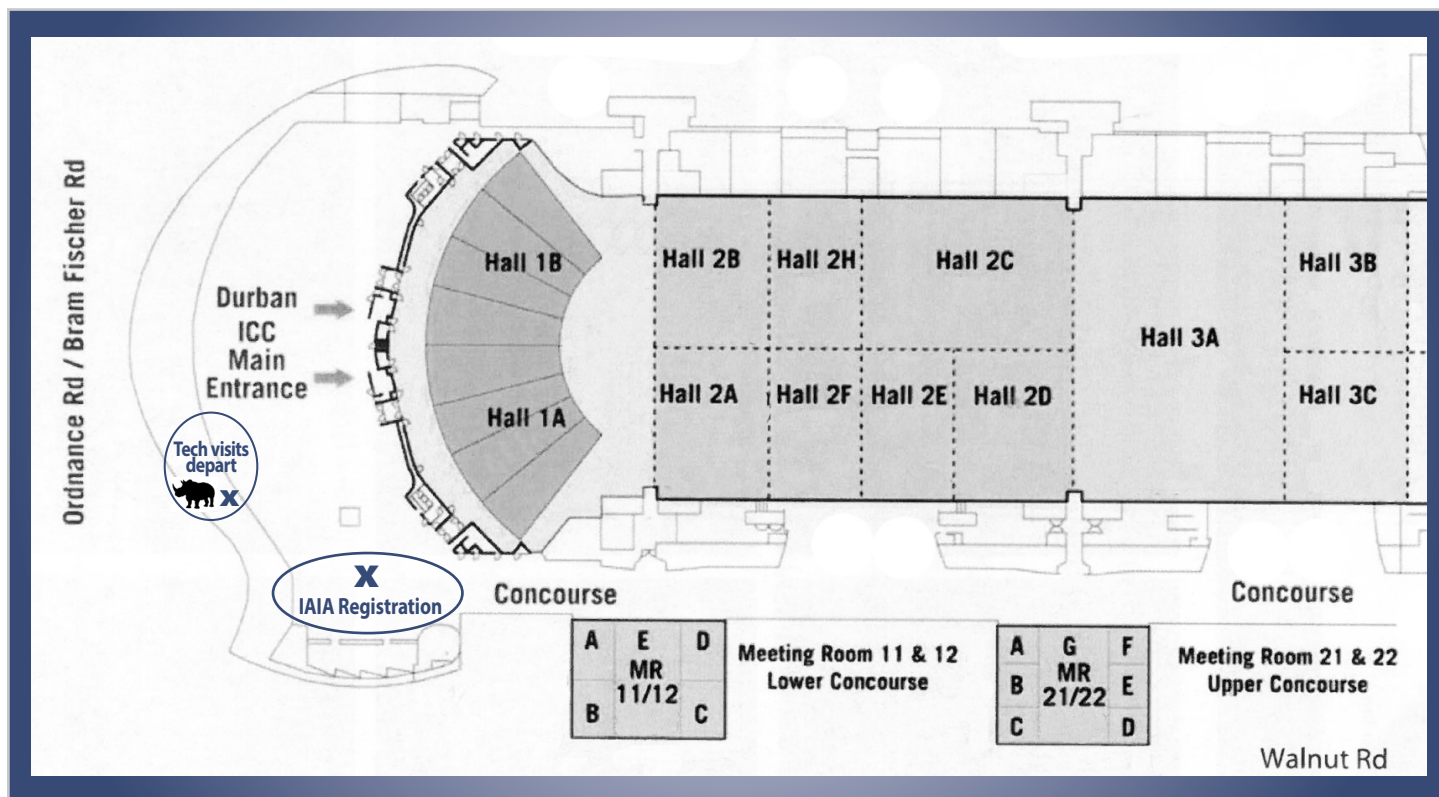
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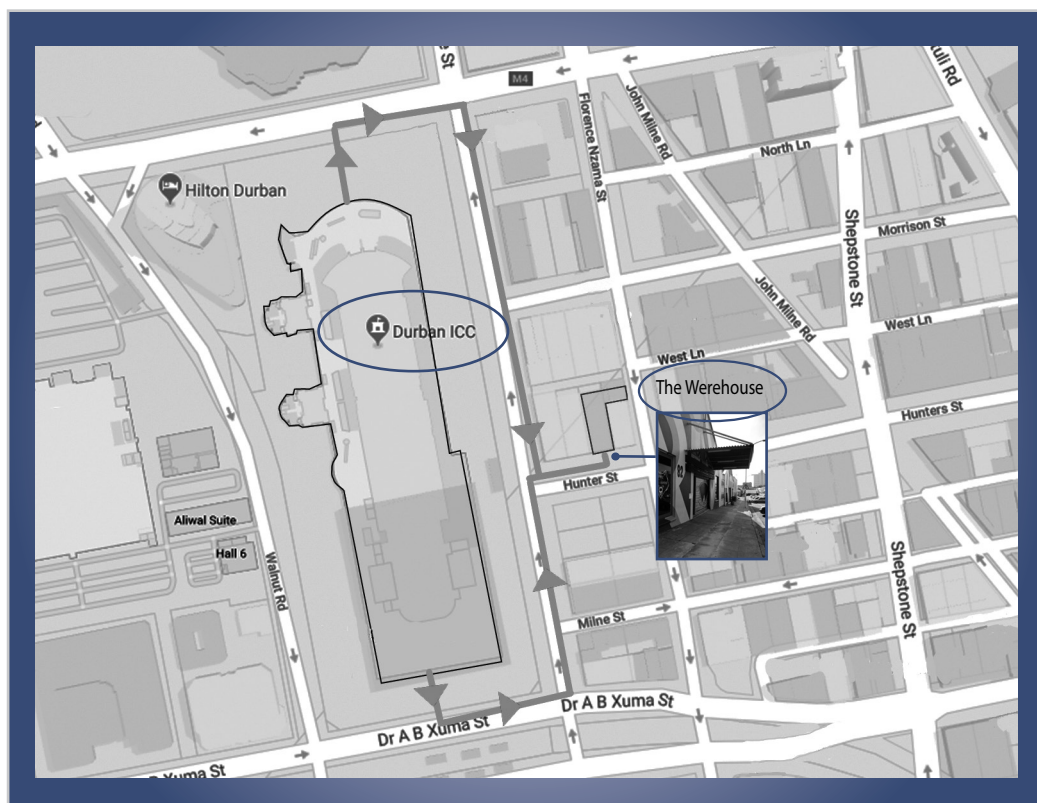
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