



37th Annual Conference of the
**International Association
for Impact Assessment**

4-7 APRIL 2017

LE CENTRE SHERATON MONTRÉAL HÔTEL
MONTRÉAL, CANADA



Montréal skyline from the Parc Jean-Drapeau. With permission from © Tourisme Montréal.

IMPACT ASSESSMENT'S CONTRIBUTION TO THE GLOBAL EFFORTS IN ADDRESSING CLIMATE CHANGE

FINAL PROGRAM

LOCAL HOST AND ORGANIZER



IN ASSOCIATION WITH:



Canadian Environmental
Assessment Agency

Agence canadienne
d'évaluation environnementale



*Final program proudly sponsored by
Environmental Resources Management*



**International Association
for Impact Assessment**

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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.

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 CHAIRS

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Louise Fecteau (co-chair), *AQÉI/Gaïa environnement inc*

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Government of Northwest Territories: Lorraine Seale, Melissa Pink
Kativik Regional Government: Michael Barrett, Veronique Gilbert
Mackenzie Valley Environmental Impact Review Board:
Mark Cliffe-Phillips
Nunavut Impact Review Board: Ryan Barry
Société du Plan Nord: Julie Simone Hébert
Yukon Environmental and Socio-Economic Assessment Board: Tim Smith, Martin Haefeel
Golder Associates: Sean Capstick
Ouranos: Stéphanie Bleau, Robert Siron
Independent consultant: Peter Croal

Impact assessment and climate change

Climate change represents a key challenge to the sustainability of global ecosystems and human prosperity in the 21st century. Climate change goes beyond project impacts, as it affects many diverse global issues: from water, food, and energy security to impacts on human rights and vulnerable peoples. Global climate change raises important questions of international and intergenerational justice.

IA science and practice are strongly challenged by climate change. IA will contribute to ensuring that future development outcomes are not jeopardized by present-day decisions, and to identifying resilient adaptation measures to reduce and manage the adverse effects of climate change.

Using our skills to adapt or mitigate the adverse effects of climate change is one of the greatest challenges we face as professionals and citizens. Welcome to Montréal, as we share information, best practices, success stories, innovations, and lessons learned with delegates from all over the world.



Louise Fecteau

Co-Chair, IAIA17 and AQÉI President



François Boulanger

Co-Chair, IAIA17



Ana Maria Esteves

President, IAIA | Director, Community Insights Groups, Netherlands

AQÉI, an IAIA affiliate organization, is honored to welcome you to IAIA17 in Montréal. In Québec and Canada, we are experiencing a major reform of impact assessment best practices and seeing much action in the climate change fight.

The 2015 COP 21 Paris Agreement requires all parties to put forward their best efforts through “nationally determined contributions” and to strengthen these efforts in the years ahead. Many new questions on how to integrate climate change into our IA practice still need to be discussed, such as how IA in general can be improved to obtain more sustainable outcomes.

We strongly believe that IA professionals can add their voice, know-how, and actions to propose cross-sectorial solutions that will help to attain a carbon neutral world in the future.

Our bet is that IAIA17 will be inspiring and solution-oriented, so the IA community would be in position to establish and consolidate its determinant role in improving decision-making at the project, program, or policy level.

Surely IAIA17 in Montréal is the place to meet for results, and ultimately, the place for action!

There is no more apt a place to hold a conference on climate change than Montréal. The mélange of cultural influences, contemporary thought, tradition, creativity and boldness that our host city is known for will stimulate us.

Just as the face of our planet is being altered, so should the practice of impact assessment. Are we, and our tools, really up to the challenge of mitigating climate change? It is my wish that IAIA17 motivates us all to move towards a shared, and enlightened, sense of purpose.

Welcome to Montréal!

Mobile app

IAIA17 MOBILE APP AND DESKTOP PORTAL

Experience IAIA conferences in a whole new way!



AVAILABILITY The mobile app is available from 23 March 2017.

DESKTOP PORTAL <http://bit.ly/iaia17app>

MOBILE APP

Apple or Android: Search for “IAIA17”

Windows: <http://showcase.genie-connect.com/iaia2017/>

LOGIN DETAILS FOR REGISTERED DELEGATES

Username: [your email address]

Password: iaia

The IAIA17 mobile app is proudly sponsored by Export Development Canada and Ouranos

Keep important parts of IAIA17 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 and speakers.
- » Select your favorite sessions and create your personal agenda.
- » Submit nominations for outstanding presentations and 2018 awards.
- » Take notes and send them to yourself.
- » Use the map function to find rooms.

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

Get access to your information anywhere. Log in, make changes, and they will sync to both the desktop AND the mobile version.

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 IAIA17
- Contact us
- Montréal 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.

If you are posting IAIA17 photos on your Instagram, Facebook, or Twitter account, please tag #iaia17 so the photos can be collected and shared throughout IAIA as well.

LIVE TWITTER FEED

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 #iaia17.

INTERNET ACCESS

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

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.



Global Environment Award

The **World Bank** was chosen to receive the IAIA Global Award for its new Environmental and Social Framework, which expands protections for people and the environment in Bank-financed investment projects.

The Global Environment 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

Bill Kennedy receives the Lifetime Achievement Award for his sustained and significant contribution to environmental impact assessment practice worldwide and his long-term dedication to IAIA.

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.



Institutional Award

The **Netherlands Commission for Environmental Assessment** was chosen to receive the Institutional Award because of its role in driving the development of proper impact assessment practice in The Netherlands and worldwide, which has greatly improved both IA practice in general as well as specific EIAs.

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.



Regional Award

Michel Gariépy was selected as recipient of the Regional Award for his substantial contributions to environmental impact assessment in Québec and the francophone world.

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.



Corporate Initiative Award

Tullow Uganda receives the Corporate Initiative Award for two specific initiatives promoting responsible development through impact assessment (its support and funding of the new national Red List for Uganda, and its commission of landscape studies to develop comprehensive baselines).

The IAIA Corporate Initiative Award is presented to a private or public sector company for a specific activity or project that has made a notable contribution to responsible development practice through the application of impact assessment.



Individual Award

Francesca Viliani was selected for the Individual Award for her ongoing and sustained contributions to the field of health impact assessment, which has advanced the understanding of public health across sectors by addressing the root causes of adverse health impacts, inequality, and inequity throughout the project development cycle.

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 **Miguel Coutinho** for his exemplary contributions and on-going commitment to IAIA, displayed through his years of service on the Board of Directors and committees, hosting and participating in annual conferences, and representing IAIA at events around the world.

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

Cole Atlin was selected as the recipient of this year's Rita R. Hamm IA Excellence Scholarship. Cole is a PhD student in the School of Environment, Resources, and Sustainability at the University of Waterloo, Canada.

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 2016

The IAIA Best Paper Award is presented to **Anton Sizo, Bram Noble, and Scott Bell** for the paper "Connecting the strategic to the tactical in SEA design: An approach to wetland conservation policy development and implementation in an urban context," published in IAIA 34(1).

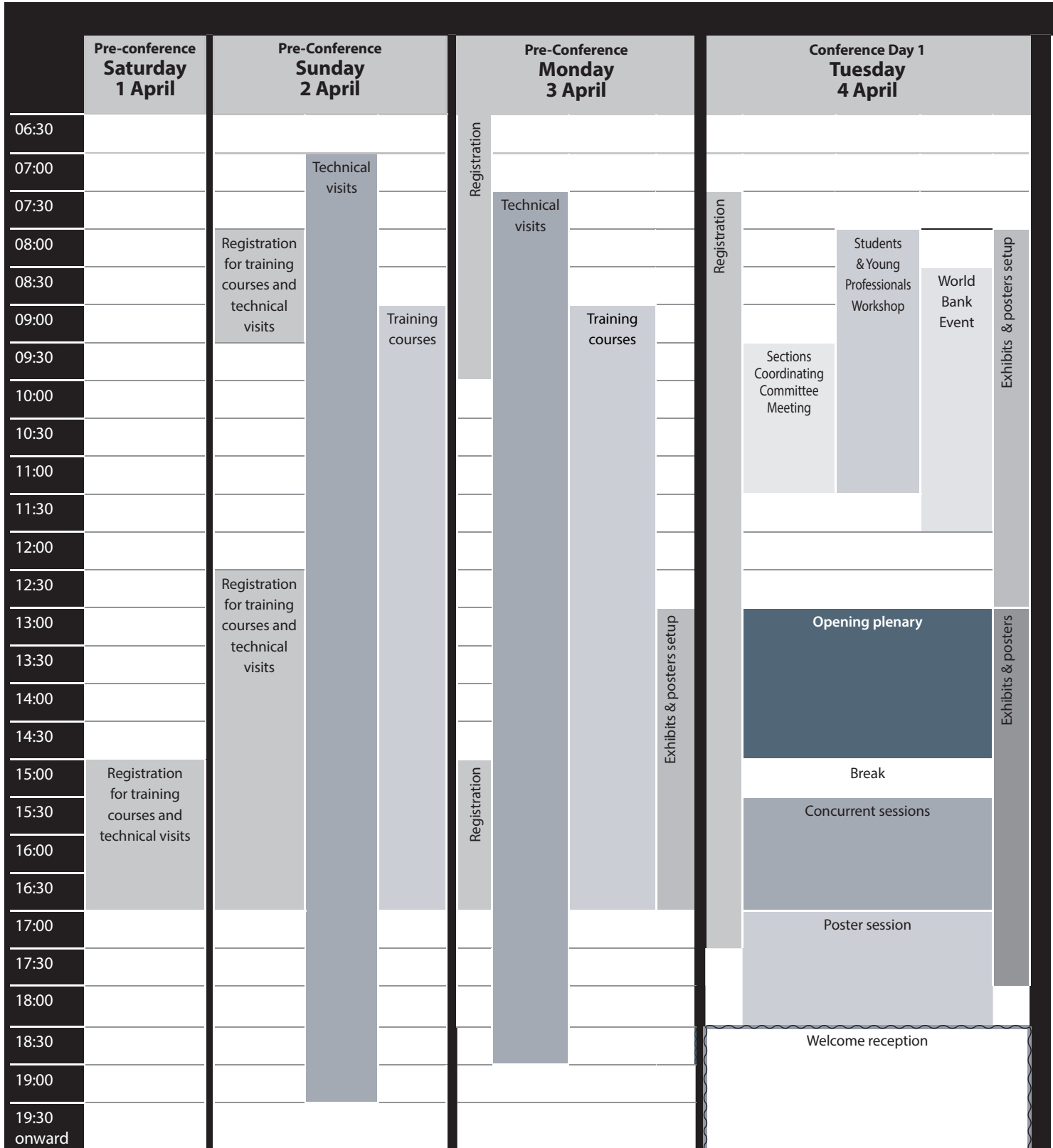
If you would like to nominate an individual or organization for a 2018 award, please submit name and justification in the IAIA17 mobile app or e-mail shell@iaia.org.

Online nominations will open soon.

Conference overview

REGISTRATION DESK HOURS

Saturday 1 April	15:00-17:00
Sunday 2 April	08:00-09:30, 12:45-17:00
Monday 3 April	06:45-10:00, 15:00-17:00
Tuesday 4 April	07:30-17:30
Wednesday 5 April	08:00-16:30
Thursday 6 April	08:30-14:30
Friday 7 April	08:30-13:30



Conference overview

ALL DELEGATES ARE INVITED TO THE AGM

TWEET ABOUT YOUR SESSION AT #IAIA17!

NOMINATE AN OUTSTANDING PRESENTATION TODAY!

Conference Day 2 Wednesday 5 April			Conference Day 3 Thursday 6 April			Conference Day 4 Friday 7 April			
									06:30
	Fun Run						Yoga Session		07:00
		Committee meetings		Committee and Section meetings				Committee meeting	07:30
									08:00
Registration			Registration			Registration			08:30
	Theme forums	Arctic & Nordic Forum		Theme forums	Exhibits & posters		Theme forums	Exhibits & posters	09:00
	Break			Break			Break		09:30
	Concurrent sessions			Concurrent sessions			Concurrent sessions		10:00
	Annual General Meeting			Council meeting			Lunch		10:30
	Lunch			Lunch					11:00
	Concurrent sessions			Concurrent sessions			Concurrent sessions		11:30
	Break			Break			Break		12:00
	Concurrent sessions			Concurrent sessions			Concurrent sessions		12:30
									13:00
									13:30
									14:00
									14:30
									15:00
							Closing plenary	Exhibits & posters dismantle	15:30
									16:00
									16:30
									17:00
									17:30
	Section meetings			Section meetings					18:00
									18:30
									19:00
	Dine outs			Banquet					19:30 onward

Daily schedule

SATURDAY 1 APRIL

15:00-17:00 **Registration** (Salon Fréchette)

SUNDAY 2 APRIL

08:00-09:30 **Registration** (Level 4)

08:30-12:00 **Technical visit B: Beauharnois Powerhouse**

07:45-17:00 **Registration** (Level 4)

13:30-17:00 **Technical visit C: Mont-Royal Park**

15:00-20:00 **Technical visit D: Maple syrup production**

09:00-17:00 **Training courses**

Integrating climate change into environmental impact assessment: Tools and concepts (Ballroom West)
Strategic thinking in IA for sustainability: Combining SEA and SA (Ballroom Centre)
Cumulative effects and follow-up in impact assessment (Salon 1)
Human rights and impact assessment (Ballroom East)
Quality assurance in EIA: Guide and review (Salon 4)
Toward more sustainable oil and gas sector projects (Salon 5)
How to maximize the value and effect of SIA (Salon 7)

14:00-17:00 **Registration** (Level 4)

MONDAY 3 APRIL

06:45-10:00 **Registration** (Level 4)

07:30-19:00 **Technical visit E: Huron settlement and Québec City**

08:00-12:00 **Technical visit F: Substations/Lines in Old Montréal**

08:30-12:00 **Technical visit G: IREQ Research Institute**

08:30-12:00 **Technical visit H: Saint-Michel Environ. Complex**

08:30-11:30 **Technical visit J: New Saint Lawrence Bridge**

09:00-17:00 **Training courses**

Strategic thinking in IA for sustainability: Combining SEA and SA (Ballroom Centre)
Cumulative effects and follow-up in impact assessment (Salon 1)
Human rights and impact assessment (Ballroom East)
Quality assurance in EIA: Guide and review (Salon 4)
Toward more sustainable oil and gas sector projects (Salon 5)
How to maximize the value and effect of SIA (Salon 7)
Multilevel approach for biodiversity-friendly infrastructure (Salon 3)
Labor rights in impact assessment (Salon 2)

15:00-17:00 **Registration** (Level 4)

13:00-17:00 **Exhibit and poster setup** (Levels 2, 3, 4)

TUESDAY 4 APRIL

07:30-17:30 **Registration** (Level 4)

08:00-11:45 **Students and Young Professionals workshop** (Salon A&B)

09:30-11:30 **Committee meeting**
Sections Coordinating Committee (Salon 7)

13:00-15:00 **Opening plenary** (see page 12) (Ballrooms West, Centre, and East)

15:00-15:30 **Break** (Levels B, 2, 3, 4)

15:30-17:00 **Concurrent sessions**

17:10-18:30 **Poster session** (Level 2)

18:30-20:00 **Welcome reception** (Ballroom)

WEDNESDAY 5 APRIL

07:00-08:00 **Fun Run**

07:30-08:30 **Committee meetings**
IAPA Editorial Board (Salon 1)
Training & Professional Development Committee (Salon 2)

08:30-16:30 **Registration** (Level 4)

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

10:30-11:00 **Break** (Levels B, 2, 3, 4) *Sponsored in part by Intrinsic Corp.*

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

12:40-13:30 **Annual General Meeting and Lifetime Achievement Award Presentation** (Drummond Centre & East)
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.

13:30-14:20 **Lunch** (Ballrooms West, Centre, and East)

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

16:00-16:30 **Break** (Levels B, 2, 3, 4) *Sponsored by Amec Foster Wheeler*

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

18:10-19:10 **Section Meetings**
Agriculture, Forestry, & Fisheries (Salon 5)
Disasters, & Conflicts (Salon 4)
Corporate Stewardship & Risk Management (Salon 6)
Health (Salon 2)
Cultural Heritage (Salon 1)
Power Generation & Transmission (Salon C)
Public Participation (Salon B)

19:30 onward **Dine Outs**

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.

THURSDAY 6 APRIL

07:30-08:30	Committee meetings IAPA Journal Management Committee (Salon 1) Awards Committee (Salon 2)
07:30-08:30	Section meeting Students and Young Professionals (Salon 6)
08:30-16:30	Registration (Level 4)
09:00-10:30	Theme forums
10:30-11:00	Break (Levels B, 2, 3, 4)
11:00-12:30	Concurrent sessions
12:40-13:30	Council meeting (Salon 4) 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.
13:30-14:20	Lunch (Ballrooms West, Centre, and East)
14:30-16:00	Concurrent sessions
16:00-16:30	Break (Levels B, 2, 3, 4) <i>Sponsored by Amec Foster Wheeler</i>
16:30-18:00	Concurrent sessions
18:10-19:10	Section Meetings Biodiversity & Ecology (Salon 4) Indigenous Peoples (Salon 7) Climate Change (Salon 5) Oil, Gas, & Renewable Fuels (Salon 6) Social Impact Assessment (Salon 2) Strategic Environmental Assessment (Salon 1)
19:30 onward	Banquet (Montréal Science Centre)

FRIDAY 7 APRIL

07:00-08:00	Yoga session (Yasmin Yoga Loft)
07:30-08:30	Committee meeting Publications Committee (Salon 2)
08:30-13:30	Registration (Level 4)
09:00-10:30	Theme forums
10:30-11:00	Break (Levels B, 2, 3, 4)
11:00-12:30	Concurrent sessions
12:30-13:20	Lunch (Ballrooms West, Centre, and East)
13:30-15:00	Concurrent sessions
15:00-15:30	Break (Levels B, 2, 3, 4)
15:30-17:00	Closing plenary (see page 13) (Ballrooms West, Centre, and East)
15:30-17:30	Exhibit and poster dismantle

TECHNICAL PROGRAM: TOPICAL STREAMS

Are you interested in a particular topic?
Find sessions of interest to you on the following pages!

CONFERENCE STREAMS

Arctic-Nordic issues.....	14
IA's role in "climate smart(er)" IA and the future.....	19
Adaptation & resilience from developed and developing countries.....	19
Climate change, extreme events, and IA.....	20
Climate finance and risk management.....	20
Integration of climate change in EIA, SEA, environmental and social management plans, and regional and project planning.....	21
Major infrastructures adaptation measures and risk assessment.....	23
Revised IA baselines integrating climate change data, uncertainties, and impacts.....	25

GENERAL IA TOPICS

Biodiversity & ecology.....	26
Capacity building in EIA.....	27
Climate change.....	28
Corporate stewardship and risk management.....	30
Cultural heritage.....	30
Cumulative effects assessment.....	30
Disasters & conflict.....	32
Environmental and social management plan.....	32
Gender relations and environmental impact assessment.....	33
Governance and regulations.....	33
Health impact assessment.....	34
Impact assessment law and policies.....	35
Indigenous Peoples.....	36
Large-scale territorial developments and assessment.....	40
Mining and other large industries.....	40
Oil, gas, and renewable fuels.....	40
Power generation & transmission.....	41
Public participation.....	42
Social impact assessment.....	44
Socioeconomic impact assessment.....	46
Strategic environmental assessment.....	46
Tools and methods.....	46

SPECIAL TO IAIA

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IA and the Sustainable Development Goals.....	48
Meet the editors.....	49

Technical program overview

- Plenary
- Theme forum
- Concurrent session

	Ballroom West	Ballroom Centre	Ballroom East	Drummond Centre & East	Drummond West	Salon A	Salon B
Tuesday, 4 April							
13:00-15:00	Opening Plenary						
15:30-17:00	The introduction of EA into national policies against climate change (p20) <i>(French with English translation)</i>	The challenges of renewable energy for biodiversity (p27)	Sustainable infrastructure: Lessons from IAIA's Panama special symposium conference (p23)	Lessons learned in IA & capacity building (p27)	Aashukan: Highlights and lessons learned (p39)	Practical aspects of PP organization (p42)	Green vs. green: Does IA offer the objective framework for decision making (p40)
17:10 - 18:30	Poster session						
Wednesday, 5 April							
9:00-10:30	Arctic-Nordic forum Impact assessment approaches in Arctic and Nordic regions (p14)	Mainstreaming biodiversity into IA through the mitigation hierarchy (p16)	Compliance and enforcement in environmental assessment (I)(p16)	The interplay between climate change and impacts assessments			
11:00-12:30	Northern ecosystems and biodiversity under pressure: Climate change and other anthropic stressors (p14)	Tools and approaches for achieving biodiversity net gain from development (p26)	Compliance and enforcement in environmental assessment (II) (p33)	Climate change & IA: Good practice and assessment challenges (I) (p28)	Practical implications of UNDRIP for Canadian EA (p38)	Rethinking engagement to include the vulnerable (p42)	Ethical dilemmas in impact assessment (p35)
12:40-13:30	Annual General Meeting						
14:30-16:00	Vulnerability and risks for major infrastructure in a context of climate change (p15)	Design and management of biodiversity offsets (I) (p26)	Using EIA to address climate change vulnerabilities and adaptation (p28)	Climate change & IA: Good practice and assessment challenges (II) (29)	Traditional knowledge and traditional land use in environmental assessment (I) (p36)	Contention, social movements and the politics of impact assessment (I) (p44)	
16:30-18:00	How to better integrate social, cultural, and health impact assessment in the Northern context (p15)	Design and management of biodiversity offsets (II) (p27)	IAIA CommunityConnect workshop (p48)	Shifting to climate smart agriculture: ESIA & other tools (p19)	Traditional knowledge and traditional land use in environmental assessment (II) (p37)	Contention, social movements, and the politics of IA (II) (p44)	Building the business case for climate change adaptation (p24)
Thursday, 6 April							
09:00-10:30	Standardizing uncertainty: Systematic approaches to climate resilience for water security (p17)	EIA and climate change in Canada: Where we are and where we should go (p17)	If you can't stand the heat... sex and gender in impact assessment (p17)	Climate change vulnerability and assessment in the mining sector (p17)			
11:00-12:30	Follow-up studies on impacts of reservoirs over time: Beyond perceptions (p24)	EIA and the mitigation hierarchy: Tools for biodiversity conservation (p26)	Methodologies & tools for consideration of CC in EA and decision making (I) (p46)	So you think these impacts are due to climate change... prove it! (p28)	Expanding IA by including Indigenous concepts of inter-relationships (p39)	Public Participation International Best Practice Principles (p42)	Experience on the use of impact assessment as a design tool (p47)
12:40-13:30	Council meeting						
14:30-16:00	Assessing the world's river basins in a changing climate (p29)	Road ecology in IA: New methods and platforms to move towards larger scales (p23)	Sexual orientation & gender identity in impact assessment (p33)	Planning SGI for greening and climate proofing of linear projects (p22)	NA Indigenous Peoples & IA: The good, the bad, & the ugly (p38)	Governance and public participation in EIA: An international overview (II) (p42)	Methodologies & tools for consideration of CC in EA and decision making (II) (p47)
16:30-18:00	River restoration IA: A new twist to an old thing (p23)	Biodiversity-inclusive IA in the context of the CBD & the 2030 Agenda (p27)	Bridging IA and mediation in natural resource conflicts (p34)	Adapting projects in a changing northern climate (p20)	The complexity of climate change and Indigenous Peoples (p39)	Governance and public participation in EIA: Canadian experience (II) (p43)	Integrating human rights into impact assessment (p45)
Friday, 7 April							
09:00-10:30	CEA and climate change: Defining baseline and forecast scenarios (p18)	Energy needs and the climate dilemma (p18)	Climate smart(er) IA's role in implementing the Paris Agreement and beyond (p18)	Social license & Indigenous communities: Obligation or opportunity? (I) (p18)			
11:00-12:30	International development agencies' approach to climate change assessment (p20)	Managing ecosystem services to enhance climate change resilience (p26)	Climate change as a source of conflict in the oil and gas industry (p41)	Social license & Indigenous communities: Obligation or opportunity? (II) (p37)	Integrating climate change in resettlement planning: A new challenge (p22)	Participatory approaches in EA (p42)	Interjurisdictional collaboration: Opportunities and challenges (p33)
13:30-15:00	Integrating climate change in the EA process: Francophone countries (p25) <i>(French with English translation)</i>	Going beyond national standards: IFI requirements to manage biodiversity (p26)	CSRM Section World Café, eh? (p30)	Resource entanglements: Indigenous peoples and resource extraction (p37)		A new IAIA guidance for air quality impact assessment (p28)	Forging partnerships to address CC issues in the oil and gas sector (p41)
15:30-17:00	Closing Plenary						

Technical program overview

Salon C	Salon 1	Salon 2	Salon 3	Salon 4	Salon 5	Salon 6	Salon 7	
								13:00-15:00
Involuntary resettlement: Responses to extreme weather and adaptation to CC (p19)	The importance of clear aims in SEA (p46)		Potential role of life cycle assessment in EIA, SEA and management (p21)	Impact assessment for promoting the SDGs (p35)	Health impact assessment (p34)		Financial engineering element of ESIA (p47)	15:30-17:00
Poster session								17:10 - 18:30
								9:00-10:30
Hydropower 2.0: From planning to operation, a new generation (p41)	Renewable energy and climate change: Scenarios for IA (p21)	Impact assessment, climate change, and lasting community wellbeing (I) (p22)	Uncertainties in climate change futures in EA (p21)	The role of ODA for the implementation of SDGs (p33)	Climate change impacts on human health (p35)	IA effectiveness in development cooperation (p46)	Don't confuse me with the facts! (p43)	11:00-12:30
Annual General Meeting								12:40-13:30
Governance of social and environmental performance of the extractive sector (I) (p40)	Good examples of SEA as a facilitator for sustainable planning (I) (p47)	Impact assessment of policies (p45)	Uncertainty analysis and communication in IA practice and decision making (p25)	Impact assessment and disasters, conflict and other crises (I) (p32)	Climate change health impact assessment and risk-based decision making (p35)	Digital impact assessment (I) (p43)	IUCN & IAIA working together for improved results from IAs (p48)	14:30-16:00
Governance of social and environmental performance of the extractive sector (II) (p40)	Good examples of SEA as a facilitator for sustainable planning (II) (p48)	Social license to operate in the hot seat (p30)	Impact assessment, climate change and community lasting wellbeing (II) (p23)	Impact assessment and disasters, conflict and other crises (II) (p32)	IA in support of green infrastructure for healthy towns and cities (p34)	Digital impact assessment (II) (p44)		16:30-18:00
								09:00-10:30
Country dilemmas between their need for energy and avoiding climate change (p41)		Taking the blinders off SIA for energy projects (p46)	The role of IA within the project finance cycle (p35)	Hot topics in resettlement and livelihoods (45)	The role of impact assessment for smart cities (p19)	Picture this: Images of climate change and IA in action (p20)	Meet the editors (p49)	11:00-12:30
Council meeting								12:40-13:30
Traditional knowledge & EA (p37)	Early planning: A business rationale (p42)	Impact assessment and renewable energy (p40)	Economic impact assessment (46)	Assessing livelihoods in social impact assessment (I) (p45)	Fit for purpose? IA process and regulatory frameworks for the renewable industry (p33)	Adding organized reasoning to the IA process: Lessons learned so far (p28)	Indigenous Peoples and traditional knowledge: EA best practice (I) (p38)	14:30-16:00
Status of the IAIA climate change and impact assessment action (p19)	Challenges & solutions to assessing & managing CE to coastal marine ecosystems (p32)	Mind the gap! The giant step between ESIA and implementation (p25)	Socio-economic management plans and planning (p32)	Assessing livelihoods in social impact assessment (II) (p45)	Impact assessment and the SDGs dedicated session (48)	Losing focus in the murky waters of the kitchen sink (p27)	Indigenous Peoples and traditional knowledge: EA best practice (II) (p38)	16:30-18:00
								09:00-10:30
Assessing climate change and natural disaster impact on urban areas (I) (p29)	The cumulative effects of everything (I): The Pecha Kucha experience (p30)	Living heritage: Challenges for development projects (p30)	Building next generation EA for Canada: Moving federal process reform forward (I) (p36)	Mind the gap: Ecosystem services approach to integrated impact assessment (p44)	IFIs' accountability mechanisms: Results of investigations (I) (p21)	Assessing climate change issues in EA: The use of models (p20)		11:00-12:30
Assessing climate change and natural disaster impact on urban areas (II) (p29)	The cumulative effects of everything (II): The great debate (p32)	Cultural heritage and the challenge of climate change and community wellbeing (p30)	Building next generation EA for Canada: Moving federal process reform forward (II) (p36)	Healthy planet, healthy people: The role of impact assessment (p34)	IFIs' accountability mechanisms: Results of investigations (II) (p21)	Adapting EIA approaches to address climate change in urban highway projects (p24)	Guidelines for energy policies, plans and programs SEA (p41)	13:30-15:00
								15:30-17:00

Opening plenary*

Sponsored by Export Development Canada

Opening address



François Boulanger
IAIA17 Co-chair



Louise Fecteau
IAIA17 Co-chair

Welcome from First Nations



Chief Zachary Deom
Mohawk Council of Kahnawake

Welcome comments



Ana Maria Esteves
IAIA President

Greetings from the host



David Heurtel
Minister of the Québec Sustainable Development, Environment, and the Fight Against Climate Change Ministry

Presentation of the IAIA Global Award



Miguel Coutinho
IAIA Awards Committee Chair

Charlie Wolf Memorial Lecture



Marjolaine Castonguay
CEO, PESCA Environnement



Charlie Wolf

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

Keynote address: "Climate Change and Impact Assessment"



Barry Smit | University Professor Emeritus | University of Guelph, Canada

Dr. Barry Smit is an internationally recognized expert on climate change impacts and adaptation. He is University Professor Emeritus in Geography at the University of Guelph. His research and practice span more than 30 years. He has authored over 150 scientific papers and four books. His work has been influential in international negotiations on climate change and has been applied in resource management and development initiatives in over 40 countries, spanning Asia, Africa, the Americas, the Pacific, and the Arctic. He was a leader in assessments of the human impacts of climate change in the Arctic. He was also among the first to develop the concepts and methods of cumulative effects assessment.

He has collaborated with major UN organizations and international development agencies, and has advised governments in countries as diverse as Norway, USA, Bangladesh, UK and Samoa. In Canada he has counseled federal and provincial governments, the Senate, businesses and organizations. He served on Ontario's Expert Panel on Climate Change Adaptation. As a member of the Intergovernmental Panel on Climate Change (IPCC), he was a co-recipient of the Nobel Peace Prize (2007). Among his recognitions, he is a recipient of the Order of Ontario and the Queen Elizabeth II Diamond Jubilee Medal.

Armchair discussion

Introductions by Catherine Decarie, Senior Vice President, Corporate Affairs, EDC



Moderator
Julie Reid Forget
Vice President, Transfert Environnement et Société



Julie Gelfand
Commissioner of the Environment and Sustainable Development, Canada



Monica Scatasta
Head of Environment, Climate and Social Policy, Projects Directorate, European Investment Bank



Aaron Goldschmidt
Vice President, EIA Practice Amec Foster Wheeler Liaison, California Association of Environmental Professionals

This interactive and meaningful discussion will address how IA and sustainability leaders can better influence and act on climate change and will set the tone of the conference with key questions, issues, and innovative solutions.

Several questions will be addressed to bridge policy directions and intentions to concrete actions.

The spirit of having three perspectives (the auditor, the investor, and the private sector) with a facilitator as a challenger will inspire all of us to a fruitful three days of conference.

* Translation funded in part by the Government of Canada

Notes

IAIA17 summary report and potential initiatives/general discussion

Jean-Philippe Waaub
Program Chair

Arend Kolhoff
Co-coordinator, IAIA Climate Change Section

Awards

Miguel Coutinho
Chair, Awards Committee

Ana Maria Esteves
IAIA President

- Corporate Initiative Award
- Individual Award
- Regional Award
- Institutional Award
- IAPA Best Paper of 2016

Presidential address

Marla Orenstein

Invitation to IAIA18-Durban

IAIA18 Committee

Close of conference

Louise Fecteau and François Boulanger
IAIA17 Co-chairs

* Translation funded in part by the Government of Canada



Catherine McKenna

Special session with Honourable Catherine McKenna, Minister of Environment and Climate Change

Wednesday 5 April | 08:15-08:45 | Ballroom West

In 2016, the Government of Canada embarked on an extensive review of federal environmental assessment processes. This review, led by an Expert Panel, consisted of months of engagement with Canadians from coast to coast.

Please join Minister McKenna as she sits down to have an armchair discussion with Expert Panel Chair Johanne Gélinas about the panel's experience leading to the delivery of its report.

Arctic-Nordic forum

Wednesday 5 April | 09:00-18:00 | Ballroom West

The Arctic-Nordic forum aims to open discussions on some of the priorities and specific challenges that Arctic and northern regions will face in the coming decade. These regions are already facing numerous changes at the environmental, economic, social, and cultural levels, and those will continue and likely accelerate with a changing climate. This forum will allow impact assessment specialists to consider practices and adaptation strategies that could enhance their interventions, as well as raise awareness among the impact assessment community about major issues in this part of the world.

Opening Remarks

Honourable

Catherine McKenna

Minister of Environment and Climate Change

The Arctic-Nordic forum is proudly sponsored by

Golder Associates

Government of the Northwest Territories

Nunavut Impact Review Board

Québec Government

Impact assessment approaches in Arctic and Nordic regions

Proudly sponsored by Golder Associates

09:00-10:30

Theme forum with panel discussion

Chairs: Lorraine Seale. Director, Securities and Project Assessment, Department of Lands, Government of the Northwest Territories, Yellowknife, NWT, Canada

Martin Haefele. Manager, Whitehorse Designated Office, Yukon Environmental and Socio-economic Assessment Board, Whitehorse, Yukon, Canada

This panel session introduces impact assessment approaches and priorities in the circumpolar north, including environmental, social, cultural, and economic impact assessment. One focus will be experiences with impact assessment regimes in northern Canada, which resulted from land claim settlements with Indigenous Peoples and have participation of indigenous groups enshrined in law. The session also considers impact assessment in other northern regions and sets the stage for discussions throughout the Arctic-Nordic forum day about approaches to climate change and other challenges.

Panelists

Unique aspects and challenges of assessing projects in the Yukon Territory

Steve Caram. Project Assessment Manager, Yukon Environmental and Socio-economic Assessment Board (YESAB), Whitehorse, Yukon

YESAB's progress in continuing to advance its assessment practice in order to be efficient and effective on behalf of the First Nations and Yukoners will be discussed.

Environmental management in the North Western Territories

Rebecca Chouinard. Executive Director, Mackenzie Valley Land and Water Board, Yellowknife, NWT

As part of this panel discussion, the integrated resource co-management system of the Mackenzie Valley region of the NWT will be explored with an emphasis on impact assessment.

Impact assessment approaches in Nunavut

Ryan Barry. Executive Director, Nunavut Impact Review Board, Cambridge Bay, Nunavut

This part of the panel discussion will highlight how Nunavut's impact assessment process utilizes traditional ecological knowledge and active public engagement when considering the potential effects of development in a unique Arctic environment.

Impact assessment approaches in Greenland

Parnuna Egede. Ph.D. Fellow, Danish Centre for Environmental Assessment at Aalborg University, University of Greenland and Inuit Circumpolar Council, Greenland

The advantages and challenges of the two parallel impact assessment systems in Greenland will be discussed with emphasis on participation of Indigenous Peoples.

Northern ecosystems and biodiversity under pressures: Climate change and other anthropic stressors

11:00-12:30

Paper session

Chair: Stéphanie Bleau. Program Coordinator, Vulnerability Impact and Adaptation Group, Ouranos

The Arctic is under tremendous pressure to adapt to climate-induced changes, to economic appeal, and to social-cultural transition. Strongly connected to the environment and its natural heritage, northern populations rely on the ecosystem integrity and northern biodiversity for their livelihoods, health, and wellbeing. This session will explore how these pressures and issues are interconnected. Discussions will bring insight on decision making, resource management, and planning practices relative to impact assessments specific to northern/Arctic environments in the context of climate change.

Effects of climate shifts on Arctic biodiversity

Dominique Berteaux. Chair Holder, Canada's Research Chair on Northern Biodiversity, University of Rimouski, Canada

This presentation explains the strong value of Arctic biodiversity to humans, the impacts of climate shifts on Arctic ecosystems, and the knowledge needed to address ecological issues in the Arctic.

Traditional food security and sustainable land use in northern Canada

Murray Humphries. Academic Director, McGill's Centre for Indigenous Peoples' Nutrition and Environment, McGill University, Montréal, Canada

Ensuring access to land, conserving wildlife populations, and maintaining the traditional food security of Indigenous Peoples requires strategic planning, effective and sustained community-based monitoring, and adaptive management.

Planning to conserve biodiversity: Addressing land use and climate change in Ontario's Far North

Cheryl Chetkiewick. Associate Conservation Scientist and Landscape Lead, Wildlife Conservation Society, Canada

Biodiversity conservation in northern intact regions requires proactive planning to address land use and climate change. We describe tools and ecological research that addresses cumulative effects in order to improve planning processes.

Working together to balance conservation and development in Nunavik

Lorraine Brooke. Independent consultant, Canada

Involving Nunavik Inuit in the planning and creation of protected areas has proven to be a very positive approach to balancing interests and providing protection to spaces of both ecological and social importance.

Vulnerability and risks for major infrastructures in a context of climate change

14:30-16:00

Panel discussion

Chair: Sean Capstick, Principal, Golder Associates

Adaptive management is a necessary tool to address climate change uncertainty when completing environmental and social impact assessments (ESIA). This panel will discuss how to incorporate uncertainty in the climate change projections into engineering design standards for project infrastructure in Arctic and Nordic regions, and in the decision making framework of the project, through the development and implementation of adaptive management plans. The outcome of the session will be a framework for creating a well-designed adaptive management plan, which satisfies regulatory needs and incorporates input from the project design team at the assessment stage.

Panelists

Incorporating climate change into engineering practice standards and use of the Public Infrastructure Engineering Vulnerability Committee Protocol

David Lapp, Practice Lead, Engineering and Public Policy, Engineers Canada

Experience in planning, permitting, and operating two mines in Nunavut

Michel Julien, Vice President, Environment, Agnico Eagle

Including climate change considerations in the planning and operation of Québec's Arctic transportation infrastructure

Anick Guimond, Coordinatrice, Module aménagement du territoire et adaptation aux changements climatiques, Ministère des Transports du Québec, Canada

How to better integrate social, cultural and health impact assessment in the Northern context

16:30-18:00

Paper session

Chair: Martin Tremblay, Science Advisor, Indigenous and Northern Affairs Canada, Canada

Arctic and northern regions are impacted by environmental, economic and societal changes. In these regions, where several communities rely on traditional activities, the quality of the natural environment and community health and wellbeing are closely interrelated. Modernization and industrialization, which can represent economic opportunities, can at the same time contribute to increased cumulative impacts on northern communities. This session will explore the challenges of how to do impact assessment in a manner that strives to ensure economic development is socially and culturally acceptable, and not negatively affect the natural environment and traditional ways of life.

The politics of consent: IA and IBA in the context of Canada northern land claims settlement

Thierry Rodon, Associate Professor, University Laval and Research Chair in Northern Sustainable Development, Québec, Canada

Focusing on the Canadian northern land claims context, this presentation discusses the roots and implications of a proponent-driven model for seeking indigenous consent for natural resource extraction on their traditional lands.

Securing post-petroleum futures in the Arctic

Anne Merrild Hansen, University of Aalborg, Denmark

This paper presents a study of social impacts in Arctic communities subject to petroleum development and addresses the challenge of securing local benefits and planning for post petroleum futures.

Health and social impact assessment process for the development projects in the Eeyou Istchee-James Bay region

Elizabeth Robinson, MD, Public Health Department, Cree Board of Health and Social Services of James Bay, Québec, Canada

Human health and wellbeing depend not only on heredity, biology, and health services, but also on a wide range of social and physical environmental determinants. This presentation describes the involvement of the Cree Board of Health and Social Services in the environmental and social impact assessment process and highlights some of the challenges in integrating health impacts.

Lessons learned in application of the impact assessment

Brian Craik, Director, Federal Relations, Cree Nation Government, Québec, Canada

This presentation provides a review of hydroelectric and mining project development in James Bay Eeyou Istchee region from a social, cultural, and health perspective.

NOTES



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.

Impact assessment approaches in Arctic and Nordic regions

Wednesday 5 April | 09:00-10:30

Ballroom West

See page 14.

Mainstreaming biodiversity into IA through the mitigation hierarchy

Wednesday 5 April | 09:00-10:30

Ballroom Centre

Theme forum, paper presentations
Chair(s): Robin Mitchell and Jo Treweek
Section: Biodiversity and Ecology Section

The mitigation hierarchy underpins positive outcomes for biodiversity through impact assessment. Good practice requires appropriate emphasis on impact avoidance and uses offsets to address residual impacts as a last resort. We will discuss technical challenges of implementing the mitigation hierarchy and identify key enabling factors to inform IAIA principles.

Strengthening regulatory frameworks for IA

Edwards, Steve; Asante-Owusu, Rachel
Establishing regulatory frameworks to strengthen the IA process for driving reductions in BES impacts.

The Red List and IA

Hardner, Jared
Lists of threatened species (e.g., IUCN's Red List) may be misleading in IA. We discuss how to address potential issues.

Offset plan for threatened flora species in Turkey

Mezzalama, Roberto; Amosso, Cecilia; Pititto, Francesco; Tronconi, Davide
Multiple tools, including habitat models, field studies and pilot cultivation were used iteratively to support the preparation of a conservation strategy for four endemic flora species in Turkey.

Principles underpinning the mitigation hierarchy

Treweek, Jo
IAIA's best practice principles identify the mitigation hierarchy as a key principle underpinning sustainable outcomes for biodiversity and ecosystems. This presentation introduces wrap-up discussion.

Compliance and enforcement in environmental assessment (I)

Wednesday 5 April | 09:00-10:30

Ballroom East

Theme forum, paper presentations
Chair(s): Steve Chapman, Davis Jones

This session will bring together international experience in the field of compliance and enforcement as it relates to environmental assessment. Topics of investigation include the drafting of enforceable conditions, enforcement experience in the field, tools that enable compliance and facilitate monitoring, and efforts to promote compliance.

Weak non-compliance limits EIA effectiveness

Kolhoff, Arend
Research in Georgia and Ghana showed that EIA effectiveness is limited due to weak capacity for monitoring, inspection, and enforcement.

Ensuring compliance: Tools for EA practitioners

Shantz, Phil
Ensuring compliance is a proponent's and EA consultant's interest. This session will draw on the experience of a Canadian practitioner in ensuring environmental assessments are compliant.

ECE: Sound foundation for sustainable development

Baldwin, Jr., Gunnar
Strengthened environmental compliance and enforcement (ECE) at the national and local level can be leveraged to achieve competitive advantages as well as enhanced political and private sector commitment.

EAO's compliance and enforcement initiatives

Haines, Kate; Cousins, Autumn; Horvath, Celesa; Lacroix, Deborah
This paper describes the evolution of the BC Environmental Assessment Office's (EAO) compliance and enforcement programs, highlighting successes and challenges and describing approaches that may be of value.

ESIA compliance and follow-up in Cameroon

Taza-Asaba, Juliet; Halleon, Durrel
Findings on the level of ESIA follow-up in Cameroon extractives industries based on field visits, work sessions with stakeholders, and review of different ESIA follow-up reports are examined.

The interplay between climate change and impact assessments

Wednesday 5 April | 09:00-10:30

Drummond Centre & East

Proudly sponsored by the Gouvernement du Québec

Theme forum, paper presentations
Chair(s): David Huard

Climate change has the potential to influence the design, operation and maintenance of hydropower infrastructures as well as their surrounding environment, challenging how we usually think about impacts assessments. Engineers will discuss cases where interactions between climate, infrastructures, and environmental impacts were assessed, along with possible mitigation measures.

Impacts of energy production in changing climate

Valdimarsson, Sveinn; Blöndal Sveinsson, Óli Grétar
Climate change is making Iceland warmer and wetter. Hydropower projects need to take into account increased future flows and changes in aquatic species and vegetation.

Hydropower investment decisions and climate change

Porter, George
Decisions on hydropower facility investments are multi-faceted and further complicated by the fact that peak flows, power production values, and river temperatures are subject to climate change.

Integrating climate risk and vulnerability in EIA

Lapp, David
This presentation discusses and proposes how climate risk and vulnerability assessment tools like the PIEVC Protocol can be integrated into the EIA process at policy and implementation levels.

Standardizing uncertainty: Systematic approaches to climate resilience for water security

Thursday 6 April | 09:00-10:30

Ballroom West

Theme forum, paper presentations
Chair(s): Ana Maria Quintero, John Matthews

Section: Climate Change

How do we address future uncertainty as we plan for water security? Existing approaches to infrastructure investments and natural resource management are inadequate to coping with the uncertainties of climate change. In this session, we will catalyze a dialogue to enable new systematic, standardized methodologies that result in resilient water security solutions.

Ecosystems, infrastructure, climate

Matthews, John; Poff, LeRoy; Grantham, Ted

Climate change provides a new opening for negotiating tradeoffs between water infrastructure and freshwater ecosystems. How do we take advantage of this opportunity?

Climate risk informed decision analysis

Jeuken, Ad; Mendoza, Guillermo; Matthews, John

Planning for future uncertainty requires a shift in integrated assessment from best performing to most robust or flexible plan alternatives. The CRIDA approach guides planners how to do this.

Confronting climate uncertainty in water investments

Mendoza, Guillermo; Brown, Casey; Rodriguez, Diego; Garcia, Luis

This talk demonstrates the World Bank decision tree for confronting uncertainty in water resources investments aiming at cost-effectiveness, sustainability, distributional equity, and resilience.

Aral Sea: Lessons for bioregional health

Edelstein, Michael; Lall, Ramona

The loss of the Aral Sea resulted in significant ecosystem, social, economic, health, and climate impacts. The disaster's lessons include need for bioregional assessment and early action.

EIA and climate change in Canada: Where are we and where should we go

Thursday 6 April | 09:00-10:30

Ballroom Centre

Proudly sponsored by WSP Canada
Theme forum, panel discussion
Chair(s): Caroline Larrivière

Environmental impact assessments (EIAs) and strategic environmental assessments (SEAs) are tools that are well suited to consider climate change as they allow mainstreaming mitigation and adaptation into decision-making at various levels of governance. The objective of this session is to present where Canadian jurisdictions are at and open the discussion to possible future directions.

How Canada integrates climate change in environment

Gaudet, Anne-Marie

Integrating climate change into environmental assessments conducted under the Canadian Environmental Assessment Act and discussion of mitigation and adaptation approaches applied in Canada.

EIA in Québec: Toward better climate change considerations

Gagnon, Melissa

The modernization of the Environmental Quality Act and its regulations, as well as the adaptation process of the environmental authorization regime, will be presented.

Addressing climate change through Nunavut EIAs

Barry, Ryan

Highlighting how Nunavut's impact assessment process addresses climate change and related issues when considering the potential effects of development in a unique Arctic environment.

Challenges of integrating climate change in the EA process

Côté, Gilles

Environmental assessment (EA) processes as a tool to integrate climate change in decision making; methodological challenges integrating climate change into the EA processes.

If you can't stand the heat... Sex and gender in impact assessment

Thursday 6 April | 09:00-10:30

Ballroom East

Theme forum

Chair(s): Lea den Broeder, Benjamin Oforu-Koranteng

Sections: Health, SIA, Indigenous Peoples, CSRM

Plans, programmes and projects have differential impacts on men, women, boys and girls. How to address issues like commercial sex, social cohesion, safety in public space and underlying power relations? We will explore options and prioritize by voting in this "wisdom of the crowd" session. Result: input for an IAIA FaSTips.

How to operationalize SDG 5 in impact assessment

Levin, Lena; Faith-Ell, Charlotta

The aim of this paper is to present a method on gender mainstreaming in transport planning based on the SDG gender objectives in Agenda 2030.

Gender in Mexico's impact assessment

Mendoza Sammet, Angeles

An analysis of how gender and vulnerable groups issues are considered in legislation and EIA practice in Mexico.

Health and gender impacts of a night time economy

Green, Liz

This paper provides an overview of the first ever HIA of a night time economy framework and the impacts on health, wellbeing and gender. It details the process, the findings, and benefits.

New approach to an old problem

Walmsley, Bryony; Oforu-Koranteng, Benjamin

This paper examines the inclusion of gender in selected DFI safeguard systems and provides some practical thoughts on how to improve the integration of gender, health, and climate change issues.

Climate change vulnerability and assessment in the mining sector

Thursday 6 April | 09:00-10:30

Drummond Centre & East

Proudly sponsored by The Intergovernmental Forum on Mining, Minerals, Metals, and Sustainable Development (IGF)

Theme forum, paper presentations

Chair(s): Greg Radford

There is increasing evidence that a changing climate represents material risks to the mining sector. This session will look at how governments develop a climate smart mineral sector policy, the mining industry's approach to energy management and climate change, and vulnerability and adaptation assessment in the mining sector.

How to develop a climate smart mineral sector policy

Drexhage, John; La Porta, Daniele

The World Bank will present its work evaluating what climate change means for the mining sector and how to advise Governments in developing "climate smart" mineral sector policies.

Mining industry's approach: Energy management and climate change

Blades, Russell

The mining industry's approach to energy management and climate change, including how renewables fit with mining's broader corporate strategies, the benefits of emissions reductions and fuel switching, and opportunities for greater transparency through real-time data collection.

Vulnerability and adaptation assessment in the mining sector

Hammill, Anne

Vulnerability and adaptation assessment methods will be presented that can assist local communities in identifying current and future vulnerabilities to their livelihoods, and assess and select adaptive options.

CEA and climate change: Defining baseline and forecast scenarios

Friday 7 April | 09:00-10:30

Ballroom West

Theme forum | Panel discussion

Chair(s): Margaret Scott

A clear strategy to manage and communicate potential cumulative effects of large scale development on climate change is needed. This requires national or multi-national management policies, monitoring networks, and modelling tools. So who is responsible for developing this strategy and defining the baseline conditions and forecast scenarios?

Baseline GHG and climate change conditions in EIAs

Scott, Margaret; Alexan, Tamer

An overview of the approaches in different EIAs to set assessment boundaries, determine and assess greenhouse gas (GHG) baseline conditions, and define significance-of-effect-thresholds.

Scenario-based approach for risk mapping

Cape, Lydia; Schreiner, Gregory Olivier; Snyman-Van der Walt, Luanita; Scholes, Robert John; Lochner, Paul Andrew

The South African shale gas scientific assessment, compiled by over 200 authors and peer reviewers from around the world, assesses seventeen topics by applying a rigorous risk assessment approach.

Canada's energy outlook: Energy Futures 2016

van Sluys, Bryce; Doleman, Chris; Nadew, Michael

Understanding future energy use patterns requires a rigorous examination of the complex interactions between all actors in the energy system.

Energy needs and the climate dilemma

Friday 7 April | 09:00-10:30

Ballroom Centre

Norwegian Oil for Development (OfD) program session

Proudly sponsored by Hydro-Québec

Theme forum

Chair(s): Peter Tarr, Arne Dalfelt, Joseph Essandoh-Yeddu

Maintaining economic development and growth while safeguarding ecosystems and addressing climate change is often a challenge. What can an impact assessor do at project or program level to contribute to a solution or reduce the dilemma? Speakers from the energy industry as well as climate research will discuss options.

Implications of the great global energy transition

King, Nicholas

The Paris Agreement is based on mitigation pledges requiring an immediate global energy transformation. The implications for energy infrastructure planning and investments across all sectors are vast.

Disruptive technologies

Kronen, Terje

Development of disruptive technologies will be crucial for the demand risk of the oil and gas industry.

Cost and GHG impacts of new oil sands technologies

Nduagu, Experience; Sow, Alpha; Umeozor, Evar; Millington, Dinara

This study shows how cost and greenhouse gas (GHG) emissions challenges of the oil sands can be addressed through innovation by emerging technologies that can be deployed between 5-7 years.

An impact assessor's role in reducing the dilemma

Eine, Kristin; Dalfelt, Arne

Climate change issues relevant to impact assessments for oil and gas developments on the project and program level.

Climate smart(er) IA's role in implementing the Paris Agreement and beyond: The role of IAIA and IA practitioners in addressing the recommendations emerging from the Paris Agreement

Friday 7 April | 09:00-10:30

Ballroom East

Theme forum

Chair(s): Weston Fisher, Arend Kolhoff

Section: Climate Change

The climate summit in Paris (December 2015) represents an unprecedented global achievement in setting out steps to address the effects of GHG emissions on adverse carbon accumulation in the atmosphere and oceans. The recommendations from Paris now provide IAIA and IA practitioners with new opportunities to help decision-makers make wise choices in policy, program, plans and projects in climate change adaptation and mitigation. IAIA Climate Change (CC) Section co-chairs Wes Fisher and Arend Kolhoff are the moderators for this Theme forum. Each panelist will speak for 10 minutes, after which they will answer questions and solicit comments and suggestions for new initiatives from the audience.

Investment aspects of climate change and IA

Croal, Peter

To remain relevant, IA must evolve to respect the needs of the broader risk management and investment communities.

Low carbon urban strategy for China and IA

Lam, Kin Che

As the largest greenhouse gas emitter in the world, it is high time to examine China's low carbon urban strategy and how impact assessment can help.

Evaluating how climate change affects proposals

Wentz, Jessica

This presentation will explain why consideration of climate change impacts falls within the purview of EIA mandates and describe protocols for conducting a climate change impact analysis.

Climate smarter projects due to IA

Verheem, Rob

Does the use of climate change considerations in impact assessment result in climate smarter projects or plans? The findings of a worldwide inventory will be presented to answer this question.

The social license to operate and indigenous communities: Obligation or opportunity (I)

Friday 7 April | 09:00-10:30

Drummond Centre & East

Proudly sponsored by Rio Tinto

Theme forum

Chair(s): John-Paul Murdoch

Sections: Indigenous Peoples, CSR

This session will explore the social license to operate for recent projects undertaken on indigenous lands. More specifically, we would like to examine whether procuring a social license to operate is an obligation under Corporate Social Responsibility or are there additional opportunities to obtaining acceptance from communities?

Indigenous employment integration

Thibault, Diane; Lauzon, Daniel

The unique experience and partnership between the Cree Nation of Eeyou Istchee, the Hydroelectric corporation, Hydro-Québec, and the education community in achieving indigenous employment integration.

Social license and indigenous sovereignty

Yates, Brian; Horvath, Celesa

This paper will explore the concept of social license as it applies to indigenous communities as they advance governance and decision making in their territories.

IA methodologies and indigenous peoples engagement

Ingles de Sousa, Cássio; Hanna, Philippe

This presentation will discuss current challenges and opportunities related to methodological strategies to ensure the engagement of indigenous communities in impact assessment.

Integrating community input into project design

Andrus, Karina; Kullman, Harald

Designing and permitting a small-craft harbour in Nunavut required a holistic approach to integrate community input into project design to gain a social licence and support regulatory requirements.

IA'S ROLE IN "CLIMATE SMART(ER)" IMPACT ASSESSMENT AND THE FUTURE

The role of impact assessment for smart cities

Thursday 6 April | 11:00-12:30 | Salon 5

Paper session

Chair(s): Andy Chung, Urmila Thakur, Damola Aderiyi

Urbanization is a global trend, giving pressure to the local community, from land use, town planning, transportation and infrastructure. Smart cities have been emerging as a sustainable response to this trend. This session will explore how environmental assessment practices are evolving in conjunction with the smart cities around the world.

Korean City Biodiversity Index (CBI) Development

Kim, Myungjin; Yun, Hyerngdu; Lee, Jangho; Park, Seokcheol; Han, Bongho

The Korean City Biodiversity Index (CBI) used the City Ecological Soundness Index (CESI), developed to assess the ecological status of city.

Developing smart transportation policies

Waheed, Faiza; Ferguson, Glenn; Cole, Donald; Macfarlane, Ronald

This project is a health impact assessment (HIA) of the potential positive and negative impacts of a transportation policy: the implementation of High Occupancy Toll (HOT) lanes on highways in Toronto.

Smartening smart cities in India

Jha-Thakur, Urmila; Aderiyi, Damola; Fischer, Thomas
This work develops a typology for smart cities within the Indian context and explores its trend along with the role of EA practice in India to create a mutually beneficial system.

Smart cities widen EIA scopes

Schellekens, Eric; Kroustrup, Jonas
Based on recent sessions with the city of Vejle, this presentation will focus on the evolving key approaches of frontrunner cities to accelerate their transition into smart and resilient cities.

Case studies of EIA for smart rail development

Chung, AC; Leung, Henry

This paper gives an overview on prevailing EIA practices for railway projects in Hong Kong and UK, with highlights on how key issues are addressed to make their cities smarter.

Status of the IAIA climate change and impact assessment action

Thursday 6 April | 16:30-18:00 | Salon C

Roundtable

Chair(s): Shirley Lee, Phil Byer, Arend Kolhoff, Peter Croal
Section: Climate Change

IAIA's Climate Change Section has produced a "2017 Status Report on IAIA Climate Change Actions and Suggested New Initiatives." The roundtable participants will use the status report and recommendations from IAIA17 to focus on the impact assessment and climate change challenges before us.

ADAPTATION AND RESILIENCE FROM DEVELOPED AND DEVELOPING COUNTRIES

Shifting to climate smart agriculture: ESIA and other tools

Wednesday 5 April | 16:30-18:00 | Drummond Centre & East

Paper session

Chair(s): Jeannette M.E. Tramhel, Ann Pacey, Ijeoma Vincent-Akpu

Section: Agriculture, Fisheries and Forestry

Agriculture is a huge source of GHG emissions. To meet COP21 targets, we need a shift towards climate smart agriculture. This panel will deconstruct CSA and sustainable intensification, review examples of resilient production systems and consider tools such as ESIA and VAA for "scaling up" toward achieving global food security.

Sustainable food systems: A choice?

Dansey, Anne

Sustainable food systems: is sustainable intensification the only answer or should government influence consumption patterns to reduce emission-intensive diets?

IICA on resilience and risk management in agricultural systems

Marzall, Katia

The InterAmerican Institute for Cooperation in Agriculture (IICA) works with its member countries in order to increase resilience of the diverse national agricultural systems, within the framework of sustainable development.

VAA: A tool to inform CSA policy

Serra, Andrea

Cardno will discuss the use of vulnerability assessment and analysis (VAA) as a tool to inform policy and programming to address challenges in food security, poverty and climate vulnerability and to support climate smart agriculture (CSA) integration and scalability.

ESAI: An effective tool in the shift toward CSA?

Tramhel, Jeannette

Can ESIA be used to encourage a shift toward climate smart agriculture (CSA), especially in large-scale land-based investments? Which international and domestic legal instruments are most effective?

Involuntary resettlement: Responses to extreme weather and adaptation to climate change

Tuesday 4 April | 15:30-17:00 | Salon C

Paper session

Chair(s): Manon Circé, Charlotte Bingham

Because of climate change, communities need to adapt to new environmental conditions threatening their livelihood, and even forcing them to flee their neighborhoods. This session will present resettlement initiatives aiming at assisting climate vulnerable people. In addition, presenters will discuss specific challenges in dealing with climate related resettlement.

Planning preventive resettlement in Cap-Haitien

Roquet, Vincent

This paper discusses planning of preventive resettlement of slum dwellers and informal businesses required for widening of a river outlet to the sea in Cap-Haitien, Haiti.



Engaged towards sustainability and participatory impact assessments.

Rio Tinto is proud to support the 2017 IAIA Conference in Montreal.

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Concurrent sessions

Resettlement: Adaptation option to climate change

Koskinen-Lewis, Paivi

This paper will focus on sharing the experiences from Sao Tome & Principe, where preventive resettlement has been used as a strategy for climate change adaptation.

Resettlement: A response to natural disasters

Desbiens, Luc

This presentation shares successes and downfalls in resettling people after a disaster, referring to some practical experiences such as in Saguenay, Canada, and Léogâne, Haïti.

Resettlement as a measure for adapting to climate change

Correa, Elena

The presentation analyzes preventive resettlement as a measure for adapting to climate change based on lessons learned during the implementation of resettlement plans over more than three decades.

CLIMATE CHANGE, EXTREME EVENTS, AND IMPACT ASSESSMENT

Picture this: Images of climate change and IA in action

Thursday 6 April | 11:00-12:30 | Salon 6

Debate

Chair(s): *Angus Morrison-Saunders, Reece Alberts*

A picture says a thousand words! Winning pictures selected by the jury members of the IAIA17 photo contest which communicates about climate change especially in relation to the role of impact assessment will be displayed. Both presenters and session participants will be invited to reflect and comment on those images.

The introduction of environmental assessment into national policies against climate change

Session held in French, with translation to English.

Tuesday 4 April | 15:30-17:00 | Ballroom West

Translation funded in part by the Government of Canada

Paper session

Chair(s): *Evens Emmanuel*

"The introduction of environmental assessment into national policies against climate change and extreme events: an alternative to achieving the SDGs in Haiti" is an open session which aims to facilitate an exchange between scientists, managers, and practitioners on the benefits of the environmental assessment in achieving the SDGs in Haiti.

Implementation of the strategic environmental evaluation in the EE process in Haiti

Balthazard-Accou, Ketty; Clervil, Elmyre

The purpose is to show the benefits of the strategic environmental evaluation as a strategic tool in the actions to be undertaken in Haiti in achieving the SDGs in Haiti.

ESIA of the Ile-à-Vache Airport project, in Haiti

Samoura, Karim; Bras, Anie; Ligonde, Jean Lucien

This paper discusses how to address the risks of climate change in the impact study of an airport on an island in Haiti.

Strategic environmental assessment:

A theoretical approach

Emmanuel, Evens; Bras, Anie; Jerome, Yolette; Osnick,

Joseph

The implementation of the integrated water resources management in Haiti today requires alternative participation of different users, public, managers, scientists, and international cooperation.

Adapting projects in a changing northern climate

Thursday 6 April | 16:30-18:00 | Drummond Centre & East

Paper session

Chair(s): *Cameron McLean, Isaac Voyageur*

Many development projects, northern communities, and First Nations territories are located in the sub-arctic and Boreal forest; vast areas expected to experience the effects of climate change. Therefore, accounting for resiliency and adaptability to climate change early in the environmental impact assessment process will reduce risks and potential environmental impacts.

Need for a wetland guide for Northern Québec

Quinty, Francois; Simard, Julie; Deshayé, Jean

The current Québec wetland identification and delineation guide was developed for the mixed forest. There is an urgent need for a guide adapted to northern parts of the province.

Rural Alaska strategies: Flooding and erosion

Shonsey, Cara; Wilson, Susan

Settlement and thawing of the permafrost has increased the risk of flooding and loss of infrastructure due to erosion in rural Alaska. Case studies mitigation strategies will be discussed.

Adapting project descriptions for climate change

Voyageur, Isaac; McLean, Cameron

The drafting of a project statement that deals with climate change considerations is important for projects during the approval process.

Assessing climate change issues in EA: The use of models

Friday 7 April | 11:00-12:30 | Salon 6

Paper session

Chair(s): *Jean-Philippe Waaub, Davide Geneletti*

Modeling and decision support system tools are designed to assess climate change issues in environmental assessment. They take into account complex systemic relationships on the long term. Strategic and project levels are facing methodological challenges related to predictive, prospective, spatial, and comparative approaches that will be discussed.

Mapping climate risks in an interconnected system

Davidson, Christopher; Mackenzie, Kevin; Kaufman, Steve

In order to assess risk and direct future climate infrastructure funding, Golder developed a coupled water balance model and synthetic climate generator for use with climate change projections.

Thermal comfort in typical CBD: Case study of Korea

Ahn, Saekyul; Lee, Dongkun

Thermal environments of typical central business district (CBD) areas were assessed with different mitigation scenarios considering future climate change. A case study of Seoul, Korea.

Energy and land use planning: The Greater Montréal Area

Mandjee, Shazmane; De Robert, Arthur; Waaub, Jean-Philippe

This research project aims at creating an environmental and energy planning tool for the Greater Montréal Area through a multi-model approach.

Integrating climate changes issues in ESIA reports

Waaub, Jean-Philippe; Côté, Gilles

Issue-based and multi-criteria and multi-stakeholders' models and tools are innovating assessment approaches to integrate climate changes issues in ESIA reports.

CLIMATE FINANCE AND RISK MANAGEMENT

International development agencies' approach to climate change assessment

Friday 7 April | 11:00-12:30 | Ballroom West

Panel discussion

Chair(s): *Hope Herron, Yunae Yi*

Section: *Climate Change*

This session seeks to build a community of practice for climate change through exchange of lessons learned and shared experiences on climate change assessment and adaptation. The session will consider approaches of the UN, DFID, and MCC to spur dialogue on sustainable development in the face of climate change.

Connecting the dots between IA, climate change, and SDGs

Yi, Yunae

A2R (Anticipate, Absorb and Reshape) is a UN climate resilience initiative, which intends to build climate resilience in SDGs. Can impact assessment be a main vehicle in promoting A2R?

Principle-based safeguards for climate/environment

Carstensen, John

What happens when a development organization moves from mandatory, project-based climate and environment assessments to a principles-based approach to climate and environmental risks and opportunities?

Managing uncertainty in infrastructure development

Mason, Doug

Infrastructure development must manage uncertainty. Focusing on robustness (rather than a particular climate projection) and adaptable approaches can help.

IFI's accountability mechanisms: Results of investigations (I)

Friday 7 April | 11:00-12:30 | Salon 5

Panel Discussion

Chair(s): Victoria Marquez-Mees, Bill Kennedy

This session will focus on lessons learned in the course of investigations (related both to compliance and problem-solving) carried out by the independent accountability mechanisms (IAM) of development finance institutions' (DFIs) investment projects related to climate finance or climate related risk assessment.

How does the work of the IAMs help to improve the climate change initiatives and projects which are being put forward by the MDBs and other development finance institutions?

Panelists

Gina Barbieri
David Simpson

IFI's accountability mechanisms: Results of investigations (II)

Friday 7 April | 13:30-15:00 | Salon 5

Panel Discussion

Chair(s): Victoria Marquez-Mees, Bill Kennedy

This session will focus on lessons learned in the course of investigations (related both to compliance and problem-solving) carried out by the independent accountability mechanisms (IAM) of development finance institutions' (DFIs) investment projects related to climate finance or climate related risk assessment.

Trends in new financing structures and accountability for E&S impacts.

Panelists

Dingding Tang
Dilek Barlas
Alfredo Abad
Osvaldo Gratacos

INTEGRATION OF CLIMATE CHANGE IN EIA, SEA, ENVIRONMENTAL AND SOCIAL MANAGEMENT PLANS, AND REGIONAL AND PROJECT PLANNING

Uncertainties of climate change futures in EA

Wednesday 5 April | 11:00-12:30 | Salon 3

Paper session

Chair(s): Caroline Aguti

The uncertainties resulting from climate change measurements throughout the life-cycle of a project in environment assessments makes planning, appraisals, communication and decision making difficult. Quantification of uncertainties and identification of climate change risks requires promotion and use of best practices to assess the impacts and facilitate communication of climate change data.

Working with uncertain climate futures

Byer, Philip

Best practices for identifying and using climate projections to assess life-cycle project impacts.

Special attention on addressing and communicating uncertainties.

Saltware intrusion in Baie de Rupert, James Bay

Tremblay, Alain

The commissioning of the Rupert diversion-Eastmain-1-A-Sarcelle powerhouses resulted in freshwater flow decrease, a decrease of the water level, and a saltwater intrusion of about 5 km into the Bay.

Manage climate change risk by uncertainty analysis

Davidson, Christopher; Capstick, Sean; Mackenzie, Kevin; Liu, Hong; Kelly, Janya

Managing climate change risks through quantifying uncertainties resulting from greenhouse gas emission scenarios, general circulation models (GCM) and downscaling approaches for infrastructure planning.

Renewable energy and climate change: Scenarios for impact assessment

Wednesday 5 April | 11:00-12:30 | Salon 1

Paper session

Chair(s): Grace Barrasso

We examine how a changing climate may have significant financial implications on operations of wind power plants, alternative scenarios for the future of development and livelihood sources in southwest Yukon, the importance of spatial analysis for national strategic projects to inform informed decision making, IA on climate change in a SEA for the Icelandic transmission plan, and an overview on the sustainability appraisal of Scotland's National Marine Plan.

Risks of wind power under changing climate

Capstick, Sean; Liu, Jinliang; Liu, Hong

Changing climate may have significant financial implications on operations of wind power plants due to increased stormy weather events and changed wind regimes.

Spatial analysis to promote renewables

Fischer, Dee; Annergarn, Harold

Highlighting the importance of spatial analysis for national strategic projects to inform informed decision making.

Impact of energy exchange in Iceland

Magnusdottir, Audur; Gudmundsson, Gnyr; Sveinsdottir, Greta Hlin; Jonsdottir, Sigridur Droplaug

An IA on climate change in an SEA for the Icelandic transmission plan sheds light on the impacts of increased electricity demand and of the activities of end users.

Climate scenarios and CEA

Slocombe, Scott; Qazi, Saba

We construct four alternative scenarios for the future of development and livelihood sources in southwest Yukon in light of climate change, with recommendations for improving regional and strategic CEA.

Appraisal of Scotland's National Marine Plan

Chisholm, Amanda

This paper focuses on the sustainability appraisal of Scotland's National Marine Plan, challenges encountered, and lessons learned, including data collection and dealing with data gaps and uncertainty.

Potential role of life cycle assessment in EIA, SEA and management

Tuesday 4 April | 15:30-17:00 | Salon 3

Paper session

Chair(s): Annie Levasseur, Wouter Achten

In this session, we will explore how life cycle assessment could play a role in EIA, SEA, and environmental management to support decision making while avoiding impact shifting and considering planetary boundaries in a circular economy context.

A methodology for an integrated LCA-EIA procedure

Larrey-Lassalle, Pyrene; Catel, Laureline; Roux, Philippe; Rosenbaum, Ralph K.; Lopez-Ferber, Miguel; Loiseau, Eléonore

A methodology for a practical implementation of life cycle analysis (LCA) in four EIA steps was proposed and applied on two case studies. LCA provided valuable additional information on global and off-site impacts.

LCA to support national embedded emission targets

Levasseur, Annie; Kalbar, Pradip; Elsborg Nygaard, Simon; Louise Jensen, Charlotte; Birkved, Morten; Zwicky Hauschild, Michael

National targets for embedded greenhouse gas (GHG) emissions can be derived and life cycle analysis (LCA) can be used to model embedded emissions. Targets may be realized by combining efficiency improvements and changes in consumption.

Concurrent sessions

What role will IA play in the circular economy?

Fothergill, Josh

The circular economy is poorly understood in IA, but could be central to a sustainable future. An author of forthcoming Standard BS8001 will discuss its potential relation to IA organizations.

Improving eco-efficiency effectiveness

Houssard, Catherine; Margni, Manuele; Pouliot, Yves

Discussion of an eco-efficiency model linking environmental and economical indicators within the broader concept of societal value creation whilst aiming to reduce the total environmental impact of the dairy industry.

Planning SGI for greening and climate proofing of linear projects

Thursday 6 April | 14:30-16:00 | Drummond Centre & East

Paper session

Chair(s): V.B. Mathur, Asha Rajvanshi

Section: Biodiversity and Ecology

In the present day context, where infrastructure development underpins economic progress, design of smart green infrastructure commands core importance for achieving conservation gains and climate-resilience. We will explore the benefits of adopting nature-based approaches over traditional "grey" in road, rail, energy projects and share worldwide examples of smart developments.

Planning smart green roads: Good practice options

Mathur, Vinod B.; Rajvanshi, Asha

The paper focuses on how smart planning options can reduce ecological impacts of road projects and deliver the benefits of good conservation outcomes, efficient infrastructure, and economic growth.

Green Inter-Andean Linear Gas-Infrastructure, Peru

Dallmeier, Farancisco; Vildoso, Bruno; Linares-Palomino, Reynaldo; Tabora, Pablo; Ledesma, Karim; Alonso, Alfonso

Lessons learned for the design, construction, and operation of an inter-Andean gas pipeline to minimize impacts and to contribute to management and biodiversity and ecosystem services conservation.

Irrigation canals: Smart planning for bigger gains

Rajvanshi, Asha; Mathur, Vinod B.

The paper focuses on how smart planning options can reduce impacts of canals and deliver the benefits of good conservation outcomes and sustained water availability for economic growth.

Green roads: Case studies from South Asia

Farrell, Leanne; Vyas, Neha

Showcase of challenges and good practices from South Asia for integrating biodiversity considerations and other smart green infrastructure (SGI) innovations into road development projects in sensitive ecosystems.

Integrating climate change into resettlement planning: A new challenge

Friday 7 April | 11:00-12:30 | Drummond West

Workshop

Chair(s): Jon Richart, Manon Circé, Charlotte Bingham

Involuntary resettlement outcomes can be highly affected by climate change. Participants will discuss considerations, challenges and guidance for taking climate change into account in resettlement planning and implementation. Specific recommendations and guidance identified in this workshop will serve as an input to the drafting of an IAIA FasTip.

Impact assessment, climate change, and lasting community wellbeing (I)

Wednesday 5 April | 11:00-12:30 | Salon 2

Paper session

Chair(s): Yoichi Kumagai, Maria Partidário

This session will encourage dialogues in examining how impact assessment can help to integrate climate change mitigation and adaptation considerations with attention to other factors affecting lasting community wellbeing (LCW), and encourage development of climate change mitigation and adaptation plans and projects that contribute to LCW.

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 Agence canadienne d'évaluation environnementale

Canadian Environmental Assessment Agency



Climate and community in sustainability-based EA

Gibson, Robert

How to translate national commitments for climate change mitigation into implications for community-scale project EA in the broader context of seeking positive contributions to lasting wellbeing.

Anticipatory adaptation and the Mauri Model

Morgan, Te Kipa Kepa

Can an indigenous epistemology, Mauri Model Decision Making Framework, foster precautionary behavioural change by communities, and facilitate incorporation of community level anticipatory adaptation?

Long-term community wellbeing and climate change

Kumagai, Yoichi; Partidário, Maria

This study introduces a multi-scale analytical framework for long-term community wellbeing and climate change effects, and presents a comparative analysis of major plans from Toronto, Lisbon, and Tokyo.

Impact assessment, climate change, and lasting community wellbeing (II)

Wednesday 5 April | 16:30-18:00 | Salon 3

Pecha Kucha and roundtable

Chair(s): Yoichi Kumagai, Maria Partidário

This session will encourage dialogues in examining how impact assessment can help to integrate climate change mitigation and adaptation considerations with attention to other factors affecting lasting community wellbeing (LCW), and encourage development of climate change mitigation and adaptation plans and projects that contribute to LCW.

Impact assessment on rehabilitated mining zones

Palencia-Aguilar, Carla

Integration of social, economic, environmental, technical, and ecological aspects is needed to overcome possible adverse effects in the mining industry to attain sustainable rehabilitated projects.

Improving our understanding of climate resilience

Yaron, Gil; Wilson, Dave

By defining a minimum acceptable resilience threshold, we use household survey data to better understand who the "resilience poor" are and how far below the threshold they lie.

Urban design and city thermally responds for King Abdullah Financial District (KAFD)

Bennetsen, Jens Christian; Stromann-Andersen, Jakob; Libicki, Shari

Combining architecture with advanced scientific engineering, the sensed temperature in the heart of a new urban district in Saudi Arabia has dropped by up to 8 degrees Celsius.

MAJOR INFRASTRUCTURES ADAPTATION MEASURES AND RISK ASSESSMENT

Sustainable infrastructure: Lessons from IAIA's Panama special symposium

Tuesday 4 April | 15:30-17:00 | Ballroom East

Panel discussion

Chair(s): David Blaha

This session will focus on the lessons learned from IAIA's Sustainable Mega-Infrastructure symposium held in Panama, including identifying sustainability principles, integrating sustainability into infrastructure design, and managing environmental and social risks; and will wrap up with a panel discussion on the necessary next steps in achieving sustainable infrastructure.

Do we know how to move from principles into practice?

Barros, Ana Christina

Principles for sustainable infrastructure are converging. Like IAIA, a group of 37 NGOs active in the Amazon has a vision, with early action as a critical component. My talk focuses on turning principles into practice.

Adaptive thinking on PS 6 compliance and linear projects

Roca, Roberto; Lanier, Frazer

Adaptive thinking on Performance Standard 6 compliance of linear projects in high biodiversity areas.

Inland-offshore sustainable infrastructure in Peru

Dallmeier, Francisco; Sanchez, Ana Maria; Vanthomme, Hadrien; Deichmann, Jessica; Tremaine, Gregory; Alonso, Alfonso

Case study: business and biodiversity investigating biodiversity impacts, evaluating social values for ecosystem services, and projecting scenarios of landuse change for the region.

Sustainable infrastructure: Lessons learned

Blaha, David

Discussing key measures to improve infrastructure sustainability.

Road ecology in IA: New methods and platforms to move towards larger scales

Thursday 6 April | 14:30-16:00 | Ballroom Centre

Paper session

Chair(s): Aurora Torres, Jochen A. G. Jaeger

In moving toward larger scales and to cope with rapid infrastructure development, road ecology research and practice needs to develop new IA tools and improve collaboration. The session will present assessments of infrastructure-mediated effects on wildlife and novel approaches to foster innovation and knowledge exchange between practitioners and scientists.

Road ecology for resilient urban ecosystem

Shrestha, Namrata

Urban natural systems are highly stressed yet function as the only remaining habitat. This presentation will show two examples of road ecology applications in GTA to benefit urban ecosystem resiliency.

ITTECOP: A framework for research on infrastructure

Autret, Yannick

Since 2008 ITTECOP, an integrated research programme dedicated to infrastructure effects on landscapes and biodiversity, seeks to produce scientific responses and methods directly from lab to land.

EA of road Impacts on wildlife in Mesoamerica

Langen, Tom; Pacheco Figueroa, Coral Jazvel; Luna Ruiz, Ruth del Carmen; Valdez Leal, Juan de Dios; Saenz, Joel

This talk will present rising issues and new data on evaluating the impacts of roads on wildlife in environmentally-sensitive areas of Mexico and Costa Rica.

Large-scale wildlife responses to road development

Torres, Aurora; Jaeger, Jochen A. G.; Alonso, Juan Carlos

We show the high pervasiveness of transport infrastructure in European countries and present a method for assessing the spatial extent of the impacts from infrastructure on wildlife at large scales.

River restoration IA: A new twist to an old thing

Thursday 6 April | 16:30-18:00 | Ballroom West

Paper session

Chair(s): Jeffrey Barnes, Gregory Gillis

Experience with IA for river restoration projects, e.g., the removal or modification of dams and other control structures to remediate significant environmental and social impacts is explored. Practitioners describe the approaches and tools used to evaluate both the impacts and benefits of these remediation projects.

A multi-option impact assessment of a dam removal

Yamazaki, Gordon; Gillis, Gregory; Kinnie, Matthew

A multi-option impact assessment approach was successfully applied to the Petitcodiac dam removal project in New Brunswick, Canada. Mitigation addressed flooding and climate change concerns.

Eel River dam removal project

Blair, Chris; Moreau, Darek; Yamazaki, Jennifer

An EIA addressing project-related impacts of an estuarine dam that caused biological effects on resources important to an adjacent indigenous community.

River restoration for express railway in Hong Kong

Shea, Mark

The paper presented three main steps in river habitat restoration and summarized ecological data of the stream habitats along with a photographic record of habitat/vegetation establishment.

Concurrent sessions



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Follow-up studies on impacts of reservoirs over time: Beyond perceptions

Thursday 6 April | 11:00-12:30 | Ballroom West

Paper session

Chair(s): Alain Tremblay, Sandie Poliquin

Reservoirs have been criticized for many environmental impacts related to the flooding of land, and follow-up studies and research programs have been conducted over the last 40 years. What do post-project studies tell us about their documented impacts on both natural and human environments?

Ecosystem studies at an early hydroelectric site

Krichbaum, Randall

The results of vegetation studies conducted at a 100-year-old hydroelectric facility are presented, giving insight into the long-term relationship between reservoirs and their surrounding habitats.

Hydroelectric swell and protected areas in the Amazon

Santos, Marco Aurelio; Marques, Orleno

This paper analyzes how the dams in the Brazilian Amazon influence and are influenced when they are located in protected areas. Future hydro expansion and impacts associated with these special projects are analyzed.

Results from dam follow-up studies in Brazil

Andrade, Andre; dos Santos, Marco

This paper aims to present examples of results from follow-up studies in hydropower projects in Brazil.

Mercury and hydroelectric boreal reservoirs

Bilodeau, Francois; Plante, Michel

In hydroelectric reservoirs, the mercury level in fish increases rapidly but temporarily (<30 years). The health risk issue will be presented.

Analyzing 20 years of fish dynamics in reservoirs

Turgeon, Katrine; Turpin, Christian; Solomon, Christopher T.; Gregory-Eaves, Irene

The non-equilibrium phase following impoundment can be long, and a multi-scale approach is critical in evaluating the effects of hydroelectricity production on fish in light of climate change.

Building the business case for climate change adaptation

Wednesday 5 April | 16:30-18:00 | Salon B

Paper session

Chair(s): Laurent Da Silva, David Viner, Pravin Karki

Section: Climate Change

This session will demonstrate the need to develop a robust business case for incorporating adaptation and resilience into major infrastructure projects, and will present tools developed to quantify economic and financial benefits of climate change resilience in project design and EIA.

Costs and benefits of community resilience programs

Yaron, Gil; Wilson, Dave

We use case studies from the Department for International Development (DFID) BRACED program Myanmar project to better understand the types and scale of economic returns from resilience-building interventions.

An economic valuation of climate change adaptation

Lechthaler, Filippo; Vinogradova, Alexandra; Flubacher, Moritz; Rohrer, Mario; Villar, Gesabel; Valverde, Manuel
Economic valuation is applied to quantify the benefits of improved climate information for small-holder farmers in Peru.

Climate change and development assistance

Nooteboom, Sibout

Mainstreaming climate objectives into Dutch development assistance and private sector investments, contributing to the 100 billion/year commitment in the United Nations Framework Convention on Climate Change (UNFCCC).

Monetizing the impacts of sustainable infrastructure

Georgoulas, Andreas; Mueller, James; Bradley, Norman; Beinstein, Robert

We developed a holistic cost-benefit methodology for infrastructure sustainability and resilience, applied at a NYC wastewater project to identify the option with the best long-term value proposition.

Adapting EIA approaches to address climate change in urban highway projects

Friday 7 April | 13:30-15:00 | Salon 6

Paper session

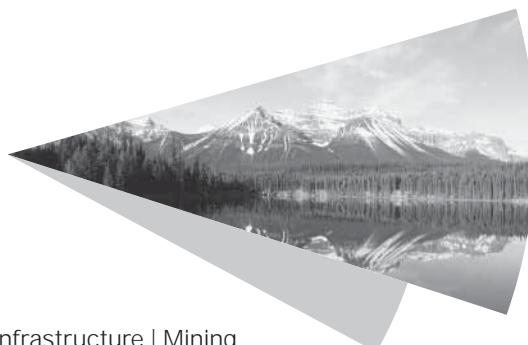
Chair(s): Malcolm Smith

EIA in support of planning urban road and highway projects represents an important mechanism for integrating climate change considerations into the development of infrastructure that will shape urban areas for generations to come and be required to

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withstand a broader range of climate conditions in the future. This session examines case studies where climate change considerations are being integrated into both the design of more climate-resilient infrastructure as well as better understanding the potential effects of road infrastructure on urban areas in a changing climate.

Urban highways and heat island effect

Gauthier, Daniel; Bourguignon, Pierre

Highway projects can amplify existing urban heat islands (UHI) or create new ones. Innovative tools and design approaches can reduce the impact of highway projects on UHI and climate change.

Climate adaptation in IA for Dutch infrastructure

Barten, Bart; Fortuin, Paul; Arts, Jos

A recent pilot study on IAs of four Dutch infrastructure projects highlights lessons learned and factors for successful integration of climate adaptation.

Climate mitigation and adaptation in transport EIAs

Hands, Stephanie; Hudson, Malcolm

A review of current practice in incorporating climate change mitigation and adaptation into environmental impact assessment within transport projects in England through a criteria-based review.

REVISED IA BASELINES INTEGRATING CLIMATE CHANGE DATA, UNCERTAINTIES, AND IMPACTS

Uncertainty analysis and communication in IA practice and decision making

Wednesday 5 April | 14:30-16:00 | Salon 3

Paper session

Chair(s): Jill Blakley

"Evidence-based" and "public confidence" are welcome concepts in impact assessment, but uncertainty is rarely discussed. We present papers investigating uncertainty disclosure and consideration in impact assessment,

and the implications for practitioners, decision-makers, and public perceptions of the process. Legislative requirements, case studies, lessons from practice, and novel solutions are examined.

Uncertainty in EA: Provisions and practices

Noble, Bram; Pavlyuk, Olena; Lees, Juliette; Jaeger, Jochen; Blakley, Jill

We present an analysis of provisions in Canadian EA legislation, regulations, and guidance for addressing and communicating uncertainty, and how uncertainties are considered in EA practice.

Contested knowledge and uncertainty in IA

Vammen Larsen, Sanne

The role of uncertainty is explored in the case of a conflictual SEA of radioactive waste. This is based on a survey of citizens and theory about uncertainty and knowledge.

Improving uncertainty with open communication

Grondin, Jacques; Reid Forget, Julie

This presentation deals with the difficulty of informed consent when uncertainties are miscommunicated, and shows how adequate public discussions of uncertainties lead to better social acceptance.

Grappling with uncertainty in collaboration

Duncan, Ronlyn

This paper examines how collaboration is changing conceptions of uncertainty and how uncertainty is influencing how collaboration is conducted.

Integrating climate change in the environmental assessment process: What is the situation in the Francophone countries?

Session held in French with translation to English.

Friday 7 April | 13:30-15:00 | Ballroom West

Translation funded in part by the Government of Canada

Paper session

Chair(s): Gilles Côté

Integrating climate change in the environmental assessment process: What is the situation in the Francophone countries?

Institutional reinforcement in

Haiti: Climate change and EA

Blanc Civil, Edna; Samoura, Karim; Waaub, Jean-Philippe

The role of the National Bureau for Environmental Assessment of Haiti regarding how climate change should be taken into account in environmental assessment is presented and analyzed (SWOT analysis).

Climate change on EIA: French experience

Defromont, Virginie

By case studies, the French experience will be presented in order to integrate the issue of climate change on EIA according to two aspects: on the project itself and on the environment.

EA processes as a tool to integrate climate change in decision making

Tchindjand, Mesmin

There has been much progress in Francophone African countries over the last year regarding the fight against climate change and climate change adaptation.

Mind the gap! The giant step between ESIA and implementation

Thursday 6 April | 16:30-18:00 | Salon 2

Paper session

Chair(s): Bryony Walmsley

How do we deal with the gap between ESIA approval and project implementation? Are our environmental assessment systems resilient enough to cater for long delays, project changes, and an ever-changing regulatory system? Do we apply adaptive management principles adequately? Examples of good practice will attempt to answer these questions.

New policies of World Bank and Asian Infrastructure Investment Bank: Models for others?

Tsuji, Masami

In 2016, WB and AIIB established a new safeguard policy. The presentation will discuss whether these are effective for issues raised in compliance review cases of regional development banks.

Climate change incorporation into EP's EIA process

Aboutorabifard, Haniehalsadat; Craik, Neil

The Equator Principles incorporate climate change issues into the EIA process, but this process is vague, affecting its likely effectiveness and causing implementation challenges for risk management.

Lost in time

Walmsley, Bryony; Rutebuka, Annah

There are many points in the ESIA process from project conception to completion where failings can occur. What are these and how can we resolve them?

Systematic adaptive management can change EIA

Wheler, Brett

How adaptive management can be actively incorporated into EIA decision making and how a systematic approach to adaptive management can affect EIA decision making itself.

FASTIPS

Need practical advice, *fast*?

iaia.org/publications-resources/fastips

Concurrent sessions

BIODIVERSITY AND ECOLOGY

Tools and approaches for achieving biodiversity net gain from development

Wednesday 5 April | 11:00-12:30 | Ballroom Centre

Panel discussion

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

Biodiversity net gain and no net loss approaches offer a unique opportunity to achieve sustainable development and contribute to conservation goals. What are the tools, methodologies and partnerships required to ensure this potential is reached in a way that is measurable and credible?

CSBI experience in net gain: No net loss

Miller, Scott

Cross Sector Biodiversity Initiative (CSBI) extractive industry experiences in net gain and no net loss impacts highlighting tools and approaches.

Contribution to CBD's Aichi target through JICA

Takeda, Shingo; Ohi, Yoshiko; Nagatomi, Naoko; Murase, Noriaki

In this investigation, the mode of ecosystem conservation and JICA's contribution to the Environmental and Social Considerations (ESC) to the AICHI Targets was qualitatively studied.

Building net gain feasibility credible rationales

Mitchell, Robin

The NNL-NG mitigation design phase should be a semi-quantitative decision making process focusing on optimal stakeholder buy-in and ensuring quantitative rigor for the most vulnerable features.

Conservation and net gain for copper flora in DRC

Enk, Terry; Langstroth, Robert

This case study illustrates conservation of critical habitat at a copper mine in the Democratic Republic of the Congo (DRC) and suggests a new paradigm for demonstrating PS6 alignment and no net loss.

NGO perspective on applying mitigation hierarchy

Viana, Leonardo; Weikel, Marielle; Blaha, Jennifer

Drawing from Conservation International's experiences, this presentation will explore challenges, complexities, and benefits of applying mitigation hierarchy to address biodiversity and ecosystem services.

Managing ecosystem services to enhance climate change resilience

Friday 7 April | 11:00-12:30 | Ballroom Centre

Panel discussion

Chair(s): Mike Jones, Roel Slootweg

Section: Biodiversity and Ecology

Resilience is the capacity of systems to recover from disturbance. This session comprises three papers that explore practical use of ecosystem services as better alternatives to engineering for enhancing resilience to climate change.

Improve urban resilience to climate change

Defromont, Virginie; Labarraque, Dorothée

Preparation of a structured and robust approach to improve urban resilience to global climate change.

Climate change and the Philippine mangroves

Madid, Cassiophia

Enhancing the ecosystem services of mangroves to provide resilience to the impacts of climate change to small coastal communities in the Philippines through EIA.

Nile basin scenario construction

Enserink, Bert; Onencan, Abby

Rapid changes in the water regime affect the quality of the ecosystems services in the Nile basin. A participatory scenario-building exercise resulted in four scenarios for the basin's future.

Going beyond national standards: IFI requirements for managing biodiversity

Friday 7 April | 13:30-15:00 | Ballroom Centre

Panel discussion

Chair(s): Peter Moore

International Financing Institutions (IFI) often require its clients to carry out supplemental biodiversity assessments to ensure that the projects they finance meet their policy requirements. This session will include a series of case studies that examine the challenges (and opportunities) when faced with the requirement to go beyond national standards.

IFI and national requirements: Bridging the gap

Quétier, Fabien

Lessons and perspectives from Biotope's experience and the COMBO project on bridging the gap between biodiversity requirements of financial institutions and national policies and practice.

Aligning mitigation strategies for positive outcomes

Treweek, Jo

Practical experiences of developing mitigation strategies will be used to illustrate the challenges of aligning IFI and national requirements to provide assurance of NNL/Net Gain outcomes.

Habitat mapping, methodology, and mitigation

Faulks, Nicola

Habitat mapping can be a useful tool for informing ecological impact assessments. Setting survey aims to suit the intended end use of the data is therefore very important.

Applying PS6's risk-based approach in Guinea

Tatum-Hume, Emma

We describe the process and tools used to build on regulatory EIAs to identify and prioritise actions for meeting Performance Standard 6 (PS6) requirements for biodiversity for mining projects in the bauxite region of Guinea.

Biodiversity offsets within protected areas

Hardner, Jared

Arguments for and against biodiversity offsets within protected areas in developing countries to meet lender standards and propose criteria to help determine their appropriateness.

Environmental impact assessments and the mitigation hierarchy: Tools for biodiversity conservation

Thursday 6 April | 11:00-12:30 | Ballroom Centre

Panel discussion

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

This session will explore the challenges and opportunities of impact assessments and application of the mitigation hierarchy. Presentations will highlight lessons learned from on the ground experiences and discuss how environmental concerns can be integrated into development projects to ensure that biodiversity gains are robust and sustainable in the long-term.

Improving EIA for roads at the landscape-scale

Jaeger, Jochen A.G.

Since ecological effects of roads at the landscape-scale are usually neglected in EIAs, I will draw 12 lessons from road ecology about how we can improve EIA.

Ecological gains through EIA in Parks Canada

Tremblay, Eric

This case study shows how the EIA process can offer environmental gains beyond the duration of the project itself and contribute to long term conservation of wildlife and species at risk.

Biodiversity Offsets: A User Guide

Ledec, George

The new Biodiversity Offsets User Guide, a World Bank Group technical report, provides step-by-step guidance on whether, when, and especially how to prepare and implement offsets for large-scale development projects.

Lessons learned in the implementation of net positive impact (NPI)

Asante-Owusu, Rachel

Identifying on-ground challenges and solutions for the implementation of the mitigation hierarchy.

Design and management of biodiversity offsets (I)

Wednesday 5 April | 14:30-16:00 | Ballroom Centre

Paper session

Chair(s): Randy Krichbaum, Pamela Gunther, Michel Bérubé
Section: Biodiversity and Ecology

The use of biodiversity offsets—also known as compensatory mitigations—has become an established tool in EIA as the final option in the mitigation hierarchy. This session presents case studies of various biodiversity offsetting projects and mitigation banking examples.

Hydro-Québec real estate for ecological offsetting

Prince, Annie; St-Onge, Isabelle; Gagnon, Benoit

Hydro-Québec faces increasing offsetting demands regarding natural habitats. A method was developed to assess the conservation value of properties owned by HQ for ecological offsetting.

A substation's wetland and forest offsets

Gagnon, Benoit; Charest, Carole

The unreleased steps of a Hydro-Québec 315-kV substation's wetlands and forest compensation project are discussed with focus on lessons learned and best practices with stakeholders.

Mitigation measures for Highland wetlands in Peru

Valencia, Claudia; Ayza, Cecilia; Pace, Alina

Studies and mitigation measures were devised for Highland wetlands, a critical habitat threatened by climate change, to minimize impacts from construction of the Southern Peru Gas Pipeline project.

On-site offsets: A unique use in Canada's north

Hubert, Chuck; Carthew, Ruari

The Mackenzie Valley Review Board implemented on-site offsets to reduce impacts to caribou and indigenous use of caribou below a significance threshold at a diamond mine expansion in northern Canada.

Design and management of biodiversity offsets (II)

Wednesday 5 April | 16:30-18:00 | Ballroom Centre

Paper session

Chair(s): Randy Krichbaum, Pamela Gunther, Michel Bérubé
Section: Biodiversity and Ecology

The use of biodiversity offsets—also known as compensatory mitigations—has become an established tool in EIA as the final option in the mitigation hierarchy. This session presents case studies of various biodiversity offsetting projects and mitigation banking examples.

Offsetting to protect Great Barrier Reef values

Cameron, Carolyn

Getting the balance right with biodiversity offsetting is always challenging, especially for the Great Barrier Reef. In this dynamic marine ecosystem, the focus for offsetting is on affected values.

Quantifying appropriate biodiversity offsets

King, Virginia

This presentation will focus on the consistent use of a quantification methodology to support identification of appropriate conservation offsets, ultimately demonstrating no net loss (NNL) of biodiversity.

Offsets: Guiding practice in Russia's energy sector

Brownlie, Susie; Botha, Mark; Vladimirov, Alexey; Sheynfeld, Svetlana

Compensation for damage in Russia comprises payments to government. New UNDP guidelines encourage companies in the energy sector to provide offsets, having applied the mitigation hierarchy in EIA.

Ecological mitigation for drainage in Hong Kong

Cheng, Wellem; U, Clara; Cheung, Tony

Climate change poses higher flooding risks to Hong Kong. Various successful ecological mitigation measures for drainage improvement projects in Hong Kong are reviewed and evaluated.

The challenges of renewable energy for biodiversity

Tuesday 4 April | 15:30-17:00 | Ballroom Centre

Paper session

Chair(s): Emmanuel Boulet

While renewable energy is key in reducing greenhouse gas emissions, it presents unique challenges to biodiversity. Through case studies focused in Latin America, we present specific challenges in the geothermal, hydroelectric, and wind sectors and associated facilities and discuss mitigation measures developed to address the impacts on biodiversity.

Wind-wildlife risks and wind power in Argentina

Aramburu, Romina; Gordon, Caleb

Argentina is expanding wind power, yet limited data and guidance exists on risks to bird/bat biodiversity. An initiative to standardize data gathering and assess risks for decision making is presented.

Leveraging geothermal energy for conservation

Hurwitz, Zachary

This session will present case studies from Central America and the Caribbean to illustrate how geothermal energy may be leveraged to achieve positive outcomes in biodiversity conservation.

Reventazón hydropower project: Biodiversity loss mitigation

Navarro, Rosario

Good environmental management practices to address impacts produced on high-biodiversity habitats by the Reventazón hydropower project in Costa Rica: Challenges, solutions, and lessons learned.

The white glove approach

Collins, Steven

When impacts to critical natural habitat are unavoidable, best practice measures must be implemented to minimize impacts to these habitats and their inhabitants.

Biodiversity-inclusive IA in the context of the CBD and the 2030 agenda

Thursday 6 April | 16:30-18:00 | Ballroom Centre

Workshop

Chair(s): Roel Slootweg

This workshop will present preliminary conclusions of a study, commissioned by the Secretariat of the Convention on Biological Diversity, on the global state of affairs regarding guidance on, and application of, biodiversity-inclusive impact assessment, in the context of the intensified work of the CBD on the mainstreaming of biodiversity into development policies and economic sectors. The workshop will provide a platform to identify and discuss opportunities for further contributions to the biodiversity agenda by the impact assessment work, in particular in the context of the 2030 Agenda for Sustainable Development.

Losing focus in the murky waters of the kitchen sink

Thursday 6 April | 16:30-18:00 | Salon 6

Paper session

Chair(s): Earle Hickey

In the early days of IA in Canada, practitioners were encouraged to prepare focused assessments. Today we appear to be slipping back to including everything in the scope of the assessment (including the kitchen sink). This session presents examples of ways to keep IA focused.

Project EA scoping after SEA: Benefits and challenges

Bonnell, Steve

The potential implications of SEA and Class EA for focussing the scope of subsequent project EAs, some factors that impede this in practice, and suggested approaches for improved EA scoping.

Focusing on receptors

Horvath, Celesa; Braun, Nathan

This paper examines the benefits of and challenges related to differentiating between pathway intermediate components and receptor valued components as a means of focusing EA.

Scoping of IA in Canada: Are we losing our focus?

Giddens, Heather; Hickey, Earle

Recent regulatory guidance for project IA has reverted to being all-inclusive rather than assessments that are focused on factors that are most important.

Lessons Learned in IA capacity building

Tuesday 4 April | 15:30-17:00 | Drummond Centre & East

Paper session

Chair(s): John Boyle

The session considers practical experience and lessons learned with improving IA performance through training and capacity building in government, the private sector, international organizations and academia.

Capacity building in IA: Abu Dhabi case study

Dulaimi, Saif; Abdalla, Hani; Bousserouel, Zied; Abdalla, Lina

Capacity building in impact assessment supported by RTI International has helped the Environment Agency – Abu Dhabi (EAD) raise standards in the Emirate of Abu Dhabi and face new and changing challenges.

The role of academics and other experts in SIA

Verduzco Chavez, Basilio; Valenzuela, Maria Basilia

This paper analyzes the role of experts, academics, and universities in the adoption of SIA in Mexico.

Concurrent sessions

Searching for evidence of learning in EIA

Sánchez, Luis; Mitchell, Ross

Three kinds of “learning outcomes”: skills and knowledge, new behaviors, and new norms and values, are cross-checked against four key groups of “learners”: proponents, consultants, regulators, and stakeholders.

Lessons learned on implementing development project

Bella-Corbin, Aimee; Konare, Amadou; Mbiyanor, Bakia

The main premise of this environmental, social, and climate change compliance audit was to seek ways in which the Bank’s overall performance in meeting its mandate on sustainable development can be implemented.

Putting health into mining

Levasseur, Marie-Eve; Gosselin, Pierre; Bustinza, Ray;

Grondin, Jacques

An online course and procedures on health impact assessment of mining projects were developed for Colombia to strengthen capacity in integrating the inputs of EIA and SIA on population health.

A new IAIA guidance for air quality impact assessment

Friday 7 April | 13:30-15:00 | Salon A

Workshop

Chair(s) Franco DiGiovanni, Miguel Coutinho

Have your say in developing new IAIA guidelines! This workshop will present new IAIA guidelines on air quality impact assessments. It will provide a vehicle to encourage use and adoption of the new guide and seek feedback from users of the guide.

Introduction to new IAIA guidance for air quality impact assessment

DiGiovanni, Franco; Coutinho, Miguel

Commentary I on implementation of new IAIA guidance for air quality impact assessment

Siriunas, Kristofer

Commentary II on implementation of new IAIA guidance for air quality impact assessment

Murphy, Michael

Adding organized reasoning to the IA process: Lessons learned so far

Thursday 6 April | 14:30-16:00 | Salon 6

Panel Discussion

Chair(s): Graham Seagel, Glenn Brown

Guidelines for clear argument and improved writing, called organized reasoning, are intended to make IA documents easier to prepare and clearer for audiences to understand. Panelists will share the experiences of several organizations that received training in the methods and applied them in their operations.

Organized Reasoning Project: Goals and process

Brown, Glenn

This presentation describes the Organized Reasoning project, which developed a process and tools to organize argument within the steps of IA and to better present argument within written IA documents.

The Mackenzie Valley Review Board’s experience

Wheeler, Brett

The experience of the Mackenzie Valley Review Board (Northwest Territories, Canada) in applying organized reasoning tools to a recent environmental assessment process and report writing.

Introducing organized reasoning in Government of the Northwest Territories

Seale, Lorraine

Staff from diverse organizations and backgrounds applied organized reasoning in impact assessment and other contexts.

Gains so far and expectations for the future

Bjarnadottir, Jona

Organized reasoning is a promising methodology that has already proven its capacity to facilitate better reasoning in communicating with stakeholders in the EIA process.

CLIMATE CHANGE

Using EIA to address climate change vulnerabilities and adaptation

Wednesday 5 April | 14:30-16:00 | Ballroom East

Panel discussion

Chair(s): Karl Kim, Scott Glenn, Philip Byer, Jimena Eyzaguirre, Patricia De la Cueva Bueno

Lively discussion, cases and examples about the use of tools, data, and processes in EIAs to assess the vulnerabilities of projects to climate change and consideration of measures to adapt the project to reduce these vulnerabilities.

Assessing project vulnerabilities

Byer, Philip

The process to assess vulnerabilities, including scoping of vulnerable components, vulnerability assessments of components, addressing uncertainties, communication of results, and monitoring.

Climate change impacts on rangelands in Lake Mburo

Namara, Justine

Climate change has had adverse impacts on wildlife in Lake Mburo National Park resulting into wildlife mortality. The impact assessment tool can guide decisions on adaptation measures to curb the impacts.

Climate change adaptation and disaster response in EIA

Kim, Karl; Glenn, Scott

An examination of Hawai’i’s efforts to incorporate climate adaptation into the EIA process from a disaster management framework, considering impacts of climate change on projects and projects on the environment.

So you think these impacts are due to climate change...Prove it!

Thursday 6 April | 11:00-12:30 | Drummond Centre & East

Panel discussion

Chair(s): C. Kelly, Weston A. Fisher

Sections: Disasters and Conflict, Climate Change

The panel explores how impact assessment practitioners confront evidence that climate is changing and assessing these impacts in ways which stand up to both skepticism and long-term planning challenges. The panel discussions will be used to identify field-practical ways to formulate and present information on the impact of a changing climate.

Scientifically sound climate information

Braun, Marco; Huard, David; Roy, René; Chaumont, Diane

Providing scientifically sound climate data, information, and advice to the adaptation community: climate services at the Ouranos Consortium.

Measuring deviation from climatic baseline

Fisher, Weston A.

Whether human induced or not, climate changes are occurring. Quantifying deviations from climatic historical baseline conditions is essential to developing economically and ecologically “smart strategies.”

Climate change, disaster impacts and the evidence

Kelly, Charles

The presentation looks at the evidence that climate change is causing or contributing to disaster impacts.

Climate change and IA: Good practice and assessment challenges (I)

Wednesday 5 April | 11:00-12:30 | Drummond Centre & East

Paper session

Chair(s): Arend Kolhoff, Sean Capstick, Aaron Goldschmidt

Section: Climate Change

Assessment of a changing climate is a powerful planning tool as part of an ESIA and has become a regular part of the process. This session will describe how guidance across the globe varies, identify how uncertainties are being addressed, and provide good practice case studies.

Challenges and strategies: Scenarios by EIA actors

Jiricka-Pürner, Alexandra; Fischer, Thomas; Leitner, Markus; Wachter, Thomas F.; Margelik, Eva; Formayer, Herbert
Specific entry points for considering climate change in EIA, based on the outcomes of large international research project SPECIFIC (SPECific Climate change Foresight in projeCt design and EIA), to facilitate implementation of the new Directive on EIA (2014/52/EU).

The role of EIA in greenhouse gas mitigation

Jenkins, Bryan
The paper compares the role of EIA in Western Australia (with comprehensive provisions) and New Zealand (with no provisions) in addressing greenhouse gas emissions.

UK action on assessing GHG significance in EIA

Vergoulas, George; Fothergill, Josh
Are all greenhouse gas (GHG) emissions significant in EIA from a UK perspective, and how might this differ between comparative and absolute emissions?

Climate change and IA: Good practice and assessment challenges (II)

Wednesday 5 April | 14:30-16:00 | Drummond Centre & East

Paper session

Chair(s): Arend Kolhoff, Sean Capstick, Aaron Goldschmidt
Section: Climate Change

Assessment of a changing climate is a powerful planning tool as part of an ESIA and has become a regular part of the process. This session will describe how guidance across the globe varies, identify how uncertainties are being addressed, and provide good practice case studies.

Significance and GHGs in impact assessment

Murphy, Michael; Talebi, Sana; Kun, Julia; Banholzer, Sandra
There is very little guidance available on how to assess the release of greenhouse gases from a project. New ideas are presented based on recent assessment experiences.

Climate change and urban renewal in Brazil

Scarton, Marcel; Bettencourt, Pedro; Grade, Maria
Urban renewal is one important trend in Brazil; the paper discuss the contribution of impact assessment and a case study—the city of Salvador—is presented.

Embedding climate change in impact assessment

Pikman, Braulio; Mwangi, Wairimu; Rawlings, Peter
Authors describe what ERM has been doing while preparing environmental impact statements in infrastructure projects with significant greenhouse gas (GHG) emissions based on the White House CEQ's final Guidance on GHG.

Unlocking biodiversity data from EIA

Masinde, Siro; Hirsch, Tim; Willoughby, Selywn; Roberts, Reuben; Wilson, Simon; Kloosterman, Henk
We present best practices for gathering and publishing biodiversity data to make it accessible and reusable and show how aggregated data is used to study the effects of climate change.

Climate change and project EA: What's useful?

Greig, Lorne
The dramatically different scales of project EA and global climate change, and challenges with CEA in a project EA context, raise fundamental questions about what is useful to do?

Assessing the world's river basins in a changing climate

Thursday 6 April | 14:30-16:00 | Ballroom West

Paper session

Chair(s): Pedro Bettencourt, Johann Köppel, Marianna Siegmund-Schultze, Marcel Scarton, Alberto Schwartzman
Section: Climate Change

Climate change and growing population impose multiple challenges on the world's aquifers and river basins. This session focuses on river basin best practices of planning and management, and discusses the contribution of EIAs and SEAs to preserve the world's freshwater resources, and its related ecosystems and habitats.

Managing big river basin in climate change context

Schwartzman, Alberto; Bettencourt, Pedro; Scarton, Marcel
The São Francisco case study discusses climate change and governance of a region where water is critical. The paper discusses development scenarios, impact assessment, and sustainable development.

Water resources and conflict in a semi-arid region

Scarton, Marcel; Bettencourt, Pedro; Fulgêncio, Cláudia; Schwartzman, Alberto
The paper discusses the São Francisco Management Plan case study and presents findings of the public participation process, highlighting the challenges of sustainability.

Riverine watershed response to climate change

Dan-Jumbo, Nimi
This study focuses on the effects of climate change and urbanization on the river hydraulics and hydrology of GPH watershed.

Assessing climate change and natural disaster impact on urban areas (I)

Friday 7 April | 11:00-12:30 | Salon C

Paper session

Chair(s): Juchul Jung

This session addresses all fields including urban planning, public policy, atmosphere science, civil engineering, and so on.

The need for change in urban flood management

Gaskell, Simon; Strickland, Luke; Guay, Anthony
Our understanding of climate change impacts on urban flooding is always changing. Problems result from bad communication and short-term plans. Flood management must therefore adapt to meet urban needs.

Islands under threat: Coastal resilient strategies

Herron, Hope
This presentation will provide recommendations for actions that promote implementation of locally-appropriate best practices and innovative approaches in coastal resiliency.

Mitigating climate change impact on flooding

Dan-Jumbo, Nimi
This research examines the extent to which afforestation can address climate change impacts on flooding in large storm conditions in the Greater Port Harcourt Watershed.

Analysis of regional disaster prevention plan.

Na, Hyemin; Lee, Dalbyul; Kang, Jungeun; Jung, Juchul
This study analyzed the difference of Korean local governments' disaster prevention plans, considering regional characteristics and climate change scenarios.

Assessing climate change and natural disaster impact on urban areas (II)

Friday 7 April | 13:30-15:00 | Salon C

Paper session

Chair(s): Juchul Jung

This session addresses all fields including urban planning, public policy, atmosphere science, civil engineering, and so on.

Method to assess climate change risks in buildings

Murray, Andrew
Climate change presents multiple risks to existing property portfolios and potential new purchases. An example of a bespoke assessment method to quantify the risk and provide potential mitigation.

Socioeconomic impacts of climate change scenarios for sugarcane crops

Mendizabal Cortes, Alejandra Daniela; Fabrício Malheiros, Tadeu
We studied the socio-economic implications considering the changes in suitable areas for sugarcane culture expansion in SP-BR, based on CC forecast and three scenarios presented by Marin et al. (2007)

Natural disaster vulnerability of building scale

Kim, Keumji; Yoon, Seonghwan; Kim, Dongsik; Choi, Junho
The characteristics of building damage caused by natural disasters which occurred between 2005 and 2014 at 232 regions in South Korea are analyzed by cities and countries.

Urban sprawl and social vulnerability on disaster

Bae, Kyungwan; Jung, Juchul; Lee, Dalbyul; Lee, Sungho
This study aims to determine the relationship between floodplain development by urbanization and social vulnerability and to identify how the disaster varies by the relationship.

Concurrent sessions

CORPORATE STEWARDSHIP AND RISK MANAGEMENT

Social license to operate in the hot seat

Wednesday 5 April | 16:30-18:00 | Salon 2

Pecha Kucha

Chair(s) *Sara Bice*

Section: *CSR*

Join our interactive session as we get stuck in to interrogating the term "social license to operate" (SLO). The session offers thought-provoking papers and case studies addressing the key challenges facing the SLO concept. It will be of interest to practitioners, project proponents and researchers grappling with complex impacts and SLO.

IA as social license tool: Front line stories

Mitchell, Ross

Images shown derive from personal experience as a EIA practitioner, supplemented by other cases from various locations, to highlight real examples where IA, social conflict, and social license to operate (SLO) have intersected.

EIA and SLO: A symbiotic relationship?

Gronow, Claire

Understanding the interplays between the processes for obtaining environmental and social licences to operate for major development proposals may increase the beneficial outcomes for both types of license.

Achieving social licence - New Zealand experience

Baines, James; Edwards, Peter; Tipa, Gail; Sinner, Jim

The presentation will highlight experience gleaned from some 25-30 interviews covering various perspectives: business, cultural, community, environment.

Corporate Stewardship and Risk Management Section: World Café, eh?!

Friday 7 April | 13:30-15:00 | Ballroom East

World Café

Chair(s): *Sara Bice*

It's the last day of the conference. You're brimming with ideas, enthusiastic about the IA year ahead and wondering how it was that you came to be salsa dancing in a beaver tail hat after last night's banquet. It's tempting to stay in bed, but you hear that little voice saying (in Canadian accent, of course), "But it's a World Café, eh?!" GET UP! COME ON! Consolidate your conference experience, take time to reflect on your learnings with colleagues and coffee, and give yourself time to commit to an action plan upon your return to the real world.

CULTURAL HERITAGE

Living heritage: Challenges for development projects

Friday 7 April | 11:00-12:30 | Salon 2

Panel discussion

Chair(s): *Christopher Polglase, Ishanlosen Odiava*

Section: *Cultural Heritage*

In this panel discussion, we will address evolving perspectives on the identification and management of living heritage. We will draw upon the experience of session participants with a focus on defining industry best practice based on the solicitation and incorporation of input from stakeholder communities to assure project success.

Community narratives and the EIA process

Sinamai, Ashton

Narratives of place contain information that can be used to identify sacred places within landscapes. Understanding these narratives can enrich heritage impact assessment processes and lessen conflict.

Widening ESIA's focus: From tangible to intangible

Chisholm, Amanda; Jesus, Julio

This paper explores the challenges and opportunities of assessing intangible alongside tangible expressions of cultural heritage, required by changing international policy and performance standards.

The consideration of living heritage in the U.S.

Polglase, Christopher

How living heritage protection is integrated into broader national and local heritage protection programs in the U.S.

Managing change at living heritage sites

Odiava, Ishanlosen

Managing living heritage in development projects potentially raises questions regarding the eventual influences that development change could induce in traditional practices and way of life.

Cultural heritage and the challenge of climate change and community wellbeing

Friday 7 April | 13:30-15:00 | Salon 2

Paper session

Chair(s): *Véronique Karine Simon, Inge Lindblom*

Section: *Cultural Heritage*

Cultural heritage and landscapes around the world are challenged by climate and societal changes. This session discusses heritage's conservation and management in the development of sustainable places. The goal is to introduce the threats encountered and the possibilities offered by the connections between past and future, and evaluate innovative approaches.

Looking to the future to protect the past

Seibel, Scott

A study of short and long-term erosion threats to archaeological cultural heritage at a U.S. military installation provides lessons that can be applied to development projects worldwide.

A place's past guides a healthier future

Herring, Peter

Historic landscape characterization serves as a framework for assessment of how the valued histories of places make them differently sensitive to different change scenarios.

Where is the value in landscape?

Bolger, Michelle

Developing definitions of valued landscapes in the English planning system. A review of how planning appeals and court judgements are defining the meaning of a valued landscape.

CUMULATIVE EFFECTS ASSESSMENT (CEA)

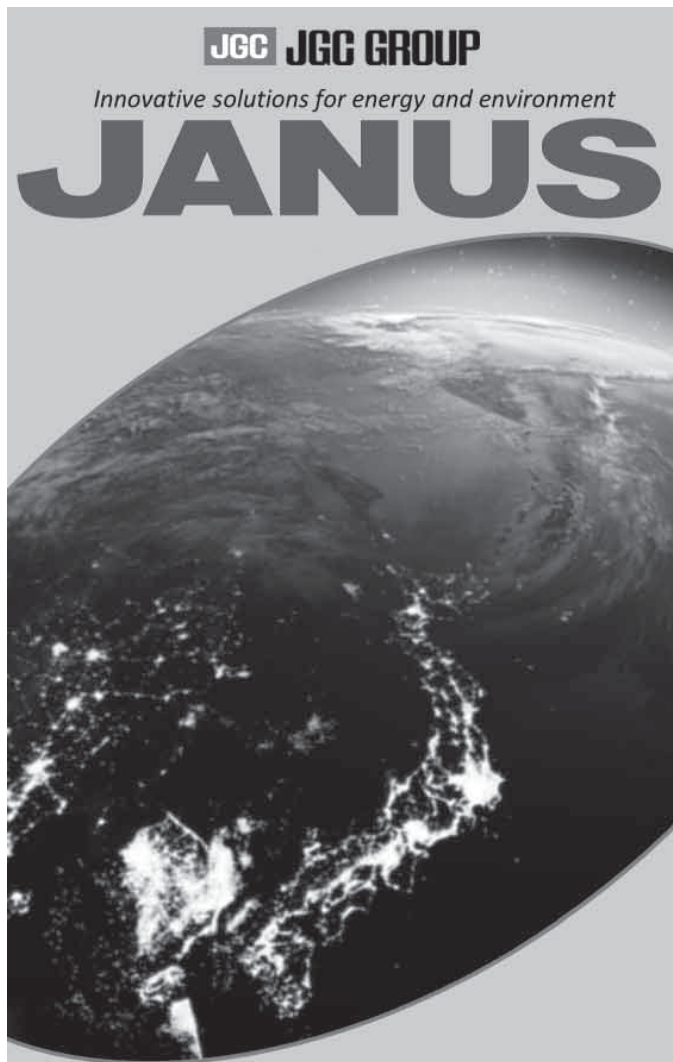
The cumulative effects of everything (I): A Pecha Kucha Experience!

Friday 7 April | 11:00-12:30 | Salon 1

Pecha Kucha

Chair(s): *Pablo Baranao, Miles Scott-Brown*

Can we really assess the cumulative effects of everything in a project-level cumulative effects assessment? How do we address questions of scale, inclusion, significance, and our real ability to manage cumulative effects/impacts once identified? The cumulative effects of everything Pecha Kucha experience will feature ten lively presentations on a wide range of current and exciting cumulative effects topics including practice and methodological considerations, global megatrends and future scenarios, cumulative effects and indigenous peoples, VEC selection, wildlife, and alternative energy. Come join us for this action-packed session and get the latest insights as to whether it really is possible to assess the cumulative effects of everything.



Belonging to the JGC Group, JANUS is a leading environmental and energy consultancy in Japan.

With a history of more than 40 years, we have assisted a wide range of clients in Japan and other regions by preparing impact assessments, conducting due diligence for project finance, and providing environmental management services.

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Global megatrends and their implications for EA

King, Nicholas

Analysis of global megatrends highlights the need for continued evolution of EA practice, moving away from predictable single outcomes towards multiple scenarios capable of responding to rapid change.

Significance thresholds to integrate CEA

Joseph, Chris; Failing, Lee; Taylor, Zeeg; Angus, David; Osborne, Anna; Mutrie, Erin

Significance thresholds can be used to meaningfully integrate CEA into project-level assessment. Revolution is not necessary; use tools we already have.

Anticipating future development scenarios in CEA

Lerner, Jackie; Dowlatabadi, Hadi

To better anticipate "reasonably foreseeable future projects" for consideration in CEAs, we develop a statistical model of probable future scenarios based on historical development patterns.

The advertisement features a black and white photograph of two field workers in a wooded area. One worker is kneeling and looking at a device, while the other is sitting on a rock and looking at a tablet. Overlaid on the image is the text 'SPECIALISTS FOR ENVIRONMENTAL IMPACT SOLUTIONS' in large, bold, white letters. At the bottom, there is a dark banner with the WSP logo and the tagline 'ENGINEERING A WORLD OF POSSIBILITIES'. Below the banner are social media icons for Facebook, Twitter, and LinkedIn, along with the website 'wsp-pb.com'.

SPECIALISTS FOR ENVIRONMENTAL IMPACT SOLUTIONS

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WSP

The advertisement for Conservation International features the organization's name in large, bold, grey letters on a white background. To the right of the text is a large, stylized logo consisting of a circle with a vertical bar extending downwards from its center. The background of the advertisement is dark grey.

CONSERVATION INTERNATIONAL

Concurrent sessions

Sami-state collaboration on cumulative effects

Larsen, Rasmus; Raitio, Kaisa

Indigenous-state collaboration in a facilitated a dialogue between Sami reindeer herders and Swedish permitting authorities in mining, wind energy, and forestry.

Cumulative effects and indigenous knowledge

Clark, Timothy

This paper will present methodologies and methods to integrate indigenous perspectives on cumulative effects with the prevailing project-centric assessment frameworks.

Considering wildlife in CEA

Drukis, Shailyn; Slocombe, Scott

Wildlife is a key part of best practice CEAs. Our Yukon case-study calls for institutional guidance, CEA guides and tools, monitoring and filling data gaps, and improved collaboration.

Cumulative effects: UK practice for offshore wind

Durning, Bridget

Cumulative effects assessment is a complex process, particularly when assessing the impact of major infrastructure on a dynamic marine environment. This paper presents findings of UK practice.

CEA of natural gas projects in British Columbia

Vypovska, Anna; Johnson, Laura; Millington, Dinara; Fogwill, Allan

The study analyzes cumulative effects from natural gas and liquefied natural gas (LNG) projects in British Columbia where the EA process was completed. Indigenous groups' concerns about cumulative effects were also discussed.

The cumulative effects of everything (II): The Great Debate

Friday 7 April | 13:30-15:00 | Salon 1

Debate

Chair(s): Miles Scott-Brown

HEAR YE, HEAR YE! COME ONE AND ALL TO THE GREAT CUMULATIVE EFFECTS OF EVERYTHING DEBATE! Cumulative Effects Assessment (CEA) has been around since the 1980s. Many have questioned its effectiveness, or even whether it should be done at all. A lively debate featuring experienced CEA practitioners will examine the question as to whether cumulative effects/impact assessment is really needed. The yes side will argue for the practice of CEA as currently done and its benefit at the Project level. The No side will present arguments that CEA should not be done at all and that other assessment tools are more effective. After the debate has concluded and a winner has been declared, discussion will be opened to the audience. Opportunities for questions arising from the previous Pecha Kucha session will also be available.

The order of Yes/No will be decided in the session with a coin toss.

Yes Side:
Bill Ross
George Hegmann

No Side:
Juan Quintero
Pablo Baranao

Challenges and potential solutions to assessing and managing cumulative effects to coastal marine ecosystems

Thursday 6 April | 16:30-18:00 | Salon 1

Workshop

Chair(s): Sonya Meier

Assessing potential cumulative effects to marine species and ecosystems from the development of oil, gas, and transportation terminals and their associated vessel traffic on Canada's coasts poses multiple challenges. This workshop will explore CEA in coastal marine environments, including uncertainty, regulatory complexities, mitigation and adaptive management, and regional initiatives.

DISASTERS AND CONFLICT

Impact assessment and disasters, conflict, and other crises (I)

Wednesday 5 April | 14:30-16:00 | Salon 4

Paper session

Chair(s): C. Kelly

Section: Disasters and Conflict

Ensuring that crises, conflict, and disasters are part of assessing impact is essential to avoid unnecessary harm to humans and the larger environment. The session brings together papers covering crisis, conflict, and disasters and impact assessment for a cross-discipline understanding of how impact assessment can reduce the negative impacts.

Erosion and climate change challenges: Anambra State

Chinweze, Chizoba

Soil erosion in the study area arising from increases in precipitation levels and heavy runoffs due to climatic variability has led to ecological disasters with its attendant human vulnerability.

Impact assessment and DLDD: Nigeria Case Study

Chinweze, Chizoba; Suleiman, Abbas; Alonge, John; Hassan, Buka

The cause-effect relationship is essential for designing appropriate interventions for drought/desertification and land degradation (DLDD). Assessing the impacts is fundamental for making suitable responses.

Actions to combat desertification in Algeria

Halima, Kadi-Hanifi; Selwa, Abdelli; Louai, Benseghir

In Algeria the steppe is a habitat of national and even international interest given its diversity of flora and fauna. This terrain has undergone intense degradation.

Mitigation of wildfire risks

Duffy, Patrick

Climate change demands attention to wildfire risks on the urban/forest fringe. Current efforts in British Columbia offer useful lessons for interface communities elsewhere in Canada and overseas.

Impact assessment and disasters, conflict, and other crises (II)

Wednesday 5 April | 16:30-18:00 | Salon 4

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Health impacts of a tailings dam failure

Shandro, Janis; Winkler, Mirko; Jokinen, Laura; Stockwell, Alison

This paper reports on a health impact assessment of a tailings dam failure in British Columbia, Canada. This incident represented a major mining disaster in Canada.

Beyond command and control approach in disasters

Imperiale, Angelo Jonas; Vanclay, Frank

This research analyzes the failures of the command and control approach in disaster areas and underlines the role social sciences can play in the disaster management cycle by introducing SIA.

Updating the rapid environment impact assessment

Kelly, Charles

The history of the Rapid Environmental Assessment (REA) tool, development of complementary tools, the degree to which the REA can be revised, and the role it may play in the future.

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

Socio-economic management plans and planning

Thursday 6 April | 16:30-18:00 | Salon 3

Paper session

Chair(s): Mark Shrimpton

Presentations on, and discussion of, the role, aims, contents and effectiveness of socio-economic effects management plans, industrial benefits plans, and other plans which seek to optimize the socio-economic effects of large projects.

Socio-economic effects management in BC, Canada

Bohlken, Frank; Hasselmann, Daria; Roberts, Stephen; Sims, Kelly

This paper discusses socio-economic effects management planning in British Columbia, Canada, in context with Canadian and international experience.

Romaine Complex : Follow-up of social impacts

Proulx, Jean-Rene

The adaptation of social impacts follow-studies of a major hydroelectric project to answer local communities' concerns and improve social acceptability of the project.

The Hebron Benefits Plan: Two Steps Forward ...

Shrimpton, Mark

A review of the requirements, approaches and contents, and implementation successes and shortcomings, of the Benefits Plan for ExxonMobil's \$14-billion Hebron offshore oilfield development project in Newfoundland and Labrador.

Commentary: Effectiveness of SE management plans

Storey, Keith

A commentary on the role of socio-economic and other management plans in optimizing the socio-economic effects of large projects.

The role of ODA for implementation of SDGs

Wednesday 5 April | 11:00-12:30 | Salon 4

Paper session

Chair(s): Jong-Gwan Jung

For an effective and substantial program of ODA, practicing agents should keep in mind each project and relevant plan according to the sustainability standards. In this context, to guarantee the sustainability of ODA needs stakeholders' participation, including local communities where the projects are implemented in the recipient countries. This session seeks sustainability for the achievement of SDGs by the evaluation of projects which are associated with planning and performance management.

ODA support for responsible infrastructure development

Ellis, Jeanne; Rich, Gerome

The IS4D Program is an effective partnership to build capacity of public sector officials to unlock bottlenecks and promote responsible development in large infrastructure projects in Africa.

Ex-post evaluation on ODA projects for waste

Lee, Hi Sun; Cho, Kongjang; Shin, Kyung-Hee; Seo, Aram; Lee, Jeongmin

Two projects for hazardous waste in Egypt and municipal solid waste (MSW) in Mongolia were ex-post evaluated by OECD DAC criteria, which is a useful tool for ex-post evaluation.

Biodiversity in EIAs in development cooperation

Hugé, Jean

By studying EIAs in West Africa, we propose and apply a framework for biodiversity integration, consisting of discourse, representation, and decision-making context.

GENDER RELATIONS AND ENVIRONMENTAL IMPACT ASSESSMENT

Sexual orientation and gender identity in impact assessment

Thursday 6 April | 14:30-16:00 | Ballroom East

Workshop

Chair(s): Francesca Viliani, Afshan H. Khawaja

The workshop responds to the World Bank's development of a draft guidance on SIA that looks at non-discrimination, especially on groups discriminated against due to sexual orientation and gender identity. Participants will discuss the methodology that can address the potential impacts of projects on this specific vulnerable group.

GOVERNANCE AND REGULATIONS

Interjurisdictional collaboration: Opportunities and challenges

Friday 7 April | 11:00-12:30 | Salon B

Paper session

Chair(s): Anjala Puvananathan, Mike Atkinson

Projects spanning geographic and administrative boundaries require interjurisdictional collaboration when assessing environmental effects. Such collaborations endeavor to ensure a rigorous analysis of effects, clarity and efficiency of process, and adherence to legislative requirements. This session will examine the challenges and opportunities related to interjurisdictional collaboration in meeting these goals.

Substitution in action: Case studies from BC

Haines, Kate

This paper will explore case studies on the implementation of substitution in British Columbia (BC), including observed benefits.

Fostering collaboration: UK perspective

Durning, Bridget; Broderick, Martin

Collaboration within the EIA process in England occurs early in the decision making process for projects of national significance due to the inquisitorial nature of the decision making framework.

Institutionalizing health in EIA in LMICs

Silva, Filipe; Pfeiffer, Michaela; Bos, Robert; Vohra, Salim

The presentation explores lessons, challenges, and benefits of intersectoral and interjurisdictional collaboration on health in EIA and HIA, in various African and Asian low and middle income countries (LMIC).

Collaborative assessment of Great Lakes fisheries?

Hickey, Gordon; Temby, Owen; Song, Andrew

Analyzes the relationships between power and authority in the various organizations responsible for Great Lakes fisheries assessments and considers the implications for collaborative governance.

Canada/U.S. transmission line impact assessment

Hagan, Leigh; Solomon, Patrick

Evaluation of impact assessment for Canada/U.S. electric transmission line project that highlights international and U.S. coordination and interjurisdictional consultation.

Fit for purpose? IA process and regulatory frameworks for the renewable industry

Thursday 6 April | 14:30-16:00 | Salon 5

Paper session

Chair(s): Katharine Gotto Walton; Rauno Sairinen, Kevin Hanna, Ben Bradshaw

Regulatory frameworks for the impact assessment process have a fundamental role in formally understanding and supporting effective management of environmental/social impacts. This session explores, using case studies, the influence, challenges and potential solutions that national regulatory frameworks are and could have on sustainable development outcomes of renewable projects.

Growing pains for Indian renewable energy

Randall, Simon; Barat, Sumit

Based on recent Indian experience, this presentation will focus on the key environmental and social challenges to sustainable growth of wind and solar energy capacity, and suggest some solutions.

EIA method for wind farm in Japan

Inoue, Naomi; Abe, Tatsuya; Nagashima, Tetsuya; Yokoyama, Kishiko; Aida, Yoshiaki

The Ministry of Environment in Japan (MOEJ) has included wind farm projects in EIA law since 2012 and considered EIA methods for offshore wind farms according to the environmental situation in Japan.

IA in Chile: Making the energy matrix renewable

Grez, Sara; Baranao, Pablo

Impact assessment has played a crucial role in changing the energy matrix in Chile, in the span of a decade, mainly through a shorter and a lower risk environmental permitting process.

Compliance and enforcement in environmental assessment (II)

Wednesday 5 April | 11:00-12:30 | Ballroom East

Paper session

Chair(s): Steve Chapman, Davis Jones

This session will bring together international experience in the field of compliance and enforcement as it relates to environmental assessment. Topics of investigation include the drafting of enforceable conditions, enforcement experience in the field, tools that enable compliance and facilitate monitoring, and efforts to promote compliance.

Fines applied in Chile in the new environmental framework

Bergamini, Kay; Pérez, Cristian; Araya, Gino

Knowledge of real scenarios of enforcement and compliance is important for working practitioners. This presentation provides tools for a better understanding of the fines as applied in Chile.

Concurrent sessions

TMS improves environmental quality

Lee, Sang Hee; Choi, Jong Woo Choi

Compliance and the enforcement of telemonitoring systems (TMS) have improved environmental quality and prevented environmental accidents via an alarming system in Republic of Korea.

Development of enforceable conditions in Canada

Provençal-Vincent, Laurence; Devin, Sarah

This presentation will discuss Canada's evolving approach, challenges, and lessons learned in developing enforceable conditions under the Canadian Environmental Assessment Act 2012.

Promoting compliance with the EIA Directive

Pölonen, Ismo

The paper examines potential regulatory responses and practical tools for supporting implementation and compliance with the revised EIA Directive.

New Port of Veracruz follow-up monitoring

Ramírez-Macías, José Isaac; Liaño-Carrera, Francisco; Baños-Illana, Jorge E.; Gómez-Barrero, Arturo E.; Guzmán-Ricardo, Carlos R.

A follow-up monitoring case study in the Port of Veracruz expansion project, combining surveillance and compliance objectives.

Bridging IA and mediation in natural resource conflicts

Thursday 6 April | 16:30-18:00 | Ballroom East

Workshop

Chair(s): Lasse Peltonen

Environmental conflicts are becoming harder due to pressures on resource use and complex knowledge demands in a post-truth landscape. This workshop builds a dialogue between conflict mediation and the IA community: What can we learn from mediators in preventing conflict? How can IA contribute to conflict resolution and prevention?

Mediation as a tool for IA and resource management

Brown, Michael

Mediation and structured dialogue are tools that can prevent, manage, or resolve conflict associated with natural resources and IA. The nature, relevance, and suitability of these to IA are highlighted.

Integrating conflict mediation with SIA

Sairinen, Rauno

The presentation argues that social impact assessment (SIA) is a valuable tool when seeking possibilities for integration between impact assessment and conflict management

Facts in conflict: And the lessons of joint fact finding

Peltonen, Lasse

IA practitioners can draw meaningful lessons from the treatment of knowledge production in collaborative/conflict resolution processes—such as the practice of joint fact finding.

HEALTH IMPACT ASSESSMENT (HIA)

IA in support of green infrastructure for healthy towns and cities

Wednesday 5 April | 16:30-18:00 | Salon 5

Paper session

Chair(s): Thomas B. Fischer and Julia Nowacki

Evidence is presented for impact assessment (including SEA, EIA, HIA and any other form of IA) suggesting that the development of green and blue infrastructure can benefit human health.

HIA: Creating a healthy community green space

Green, Liz

How HIA was utilized to support the creation of a "green space" in a deprived urban area in Wales. It outlines the process, participation, and how it influenced the final outcome.

IA and infra re-development: Concepts and dilemmas

Arts, Jos; Luis, Martins Dias; Paul, Eijssen; Arjan, Hijdra

Recent practices of infra re-development in The Netherlands, what role IA might play and what dilemmas have to be dealt with.

IA and the development of green spaces for health

Fischer, Thomas; Nowacki, Julia; Jha-Thakur, Urmila;

Fawcett, Peter

We report on a WHO project on examining the role of impact assessments (SEA, EIA and HIA) on the development of green spaces for public health reasons.

Healthy planet, healthy people: The role of impact assessment

Frida 7 April | 13:30-15:00 | Salon 4

Paper session

Chair(s): Francesca Viliani, Marvyn Mason

This session seeks to explore how the biodiversity and ecosystem services could be better integrated with the animal and human health components in the impact assessment process in order to deliver "healthy planet, healthy people"; furthermore, it aims at facilitating a dialogue across different groups of practitioners to better effect/enable the "one health" approach; and finally the presentations will address the possible linkages between "one health" and SDGs.

Heavy metal impact on aquatic life and human health

Shah, Alkesh

Humans consuming affected fish are in turn affected by damage to livers, kidneys, hearts, and joints. The liver and kidneys produce metallothioneins, causing toxicity that is hazardous to human life.

Status quo of Korean HIA, problems and remedies

Lee, Youngsoo; Choi, Sangki; Kang, Yoojin; Moon,

Nankyoun

We analyzed the status quo of Korean Health Impact Assessment, found problems, and prepared remedies. There are 3 important issues and 2 remedies.

Assessing impacts of lead pollution

Sanchez-Triana, Ernesto; Awe, Yewande; Lima, Ana Luisa; Hoossein, Shafick

The paper identifies sources of lead pollution and their impacts as well as alternative interventions to present and mitigate lead poisoning in developing countries.

Addressing food security in regional SEA

Rohr, Veronica; Blakley, Jill

Consistent with efforts to deliver a more effective and sustainability-driven SEA process, this research presents a conceptual framework to appropriately address food security in regional SEA.

Health impact assessment

Tuesday 4 April | 15:30-17:00 | Salon 5

Paper session

Chair(s): Francesca Viliani

This session seeks to explore the latest development in Health Impact Assessment and inclusion of health related issues in other forms of impact assessment, including the possible linkages between health, sustainability and SDGs.

Is environmental health consultant a dirty word?

Ollson, Christopher

Health scientist practitioners in IA are often caught between the polar extreme views of NGO/special interest and project proponents. Highlighting the importance of ethical use of data.

HIA in transportation: A systematic scoping review

Waheed, Faiza; Cole, Donald; MacLellan, James; Ollson, Christopher; Ferguson, Glenn

This project is an international systematic scoping review of health impact assessments (HIAs) conducted on transportation projects, plans and policies.

Steps towards Dutch health and sustainability

van Alphen, Theo; Staatsen, Brigit

Development of an integral health impact assessment approach to promote health and citizens' participation when spatial plans are designed and conducted under the new Environmental Act.

IA for engaging resource extraction in SDGs

Winkler, Mirko

The HIA4SD project aims at exploring how to make full use of impact assessments as a regulatory mechanism to support producer regions in sub-Saharan Africa to work towards the SDGs.

Case study: Experience of combining health impact

Xiao, Yina; Macera, Erasmo; Uberti, Filippo; Mortara, Simone; Namer, Giada

Eni, based on its best practices, will present possible advantages and experience of this approach.

Climate change impacts on human health

Wednesday 5 April | 11:00-12:30 | Salon 5

Paper session

Chair(s): Geetha Ramesh, Tamer Alexan Gorgy

Sections: Climate Change, Health

Most climate change research has focused on environmental effects and not health effects. Humans are exposed to climate change directly through changing weather patterns and indirectly through changes in air, water food quality and quantity, ecosystems, agriculture, and infrastructure. This session deals with different effects of climate change on human health.

Comparative analysis of vulnerabilities of coastal communities

Ojile, Meshach; Koulibaly, Cheikh; Ibe, Chidi

Study reports on comparative analysis of differential vulnerabilities and adaptation strategies of coastal communities and populations in Nigeria and Senegal requiring concerted actions at all levels.

CRFs for Korean HIA on climate change impact

Ha, Jongsik

This presentation introduces the methodology of HIA in South Korea, and suggests concentration-response functions (CRF) for AP-HRA, part of a Korean HIA on climate change impact.

Health impact assessment and climate change in EA

McCallum, Lindsay

Health is a key consideration in evaluating climate change impacts. This paper summarizes methods for integrating health impact assessment and climate change into environmental assessment processes.

Climate change and health: A resilience framework

Schramm, Paul; Manangan, Arie; Luber, George

Climate change is a significant threat to human health. This presentation will describe the Centers for Disease Control and Prevention's (CDC) Building Resilience Against Climate Effects (BRACE) framework and guidance on vulnerability assessment and intervention assessment.

Climate change health impact assessment and risk-based decision making

Wednesday 5 April | 14:30-16:00 | Salon 5

Paper session

Chair(s): Emma Hartnett

Climate and health researchers will present quantitative and qualitative methodologies for predicting, monitoring, and evaluating the health consequences of climate change impacts. Through a series of case studies, presenters discuss health impact assessment and approaches as they relate to decision-support in adapting to the threats to health.

Vulnerability mapping for sensitive populations

Orenstein, Marla

Vulnerability mapping is a potentially useful way of helping municipalities understand and prepare for health effects that may arise under different climate change-related extreme events.

Assessing the health impacts of severe weather

Saunders-Hastings, Patrick; Wiles, Anne; Sparling, Erik; Auld, Heather; Comer, Neil; Mattison, Don

The results of a literature-based, all-hazards approach to the health impact assessment of severe weather events in the Toronto area.

Mitigating extreme heat impacts in Karachi City

Eyzaguirre, Jimena; de la Cueva, Patricia

The prospect of more frequent heatwaves is alarming for densely-populated cities with a pronounced "urban heat island effect" such as Karachi. A systems-based approach can help mitigate the risks.

Climate change impact on drinking water risks

Hartnett, Emma; Margaret, Wilson; Auld, Heather; Sparling, Erik; Smith, Ben

We developed a quantitative risk assessment model exploring the impact of climate change on drinking water health risks in small communities across Canada.

IMPACT ASSESSMENT LAW AND POLICIES

The role of impact assessment within the project finance cycle

Thursday 6 April | 11:00-12:30 | Salon 3

Panel discussion

Chair(s): Peter Moore

This session will examine impact assessment good practices (and challenges) within the project finance cycle. The panel is composed of an Equator Principles Financing Institution, an international EHSS consultancy, an industry executive, a social management consultant with experience working with project-affected communities, and an environmental NGO.

A lender's view of EIA best practice and challenges

Pullen, Christopher

Lending institutions are becoming more effective in ensuring the projects they support lead to positive outcomes while managing EIA, developer, and financing timelines.

The independent environmental consultant's role

Blaha, David

An overview of the role of the independent environmental and social consultant in the project finance cycle.

Securing project finance: A process of pain and pleasure

D'Souza, Kevin

The realities of working through local and international ESIA processes—and the challenges of developing partnerships with local stakeholders, consultants, government regulators and financiers.

There is no time; what is memory?

Macdonald, Gary

Maybe it's time to commoditize basic social due diligence in project finance so social specialists can "get off the tour" and focus on key areas of proponent capacity and risk to communities.

A civil society view on good practice

Wells, Zachary; Weikel, Marielle; Diaz, Paula

Drawing from Conservation International's experiences, this presentation will explore challenges and benefits of civil society engagement in IA on biodiversity/ecosystem services within project finance.

Impact assessment for promoting the Sustainable Development Goals

Tuesday 4 April | 15:30-17:00 | Salon 4

Workshop

Chair(s): Geetha Ramesh, Filipe Silva

Section: Impact Assessment Law, Policies, and Practice

This session will explore how the different impact assessment practitioners and other development actors can play in supporting the SDGs, strengths and weaknesses of the current intersections between IA activity and SDGs, and the needs and opportunities for maximizing IA as a process that supports their realization.

Ethical dilemmas in impact assessment

Wednesday 5 April | 11:00-12:30 | Salon B

Panel discussion

Chair(s): Marla Orenstein

This interactive, panel-based session seeks to foster discussion on some of the uncomfortable ethical issues that impact assessment practitioners encounter. By sharing our problems, experiences, and solutions, participants will realize they are not alone and may learn new approaches for resolving ethical dilemmas.

Imposition of study instrument on SIA expert

Ojile, Meshach

Story is an ethical dilemma faced by Dr. Ojile from Nigeria where an oil/gas multinational had imposed the use of a study instrument on an SIA expert and expected quick report preparation.

Change under pressure

Horvath, Celesa

One of the most egregious ethical dilemmas faced by the IA practitioner is pressure to change one's assessment conclusions. This paper will examine the spectrum of solutions to such dilemmas.

Reflections on ethical issues in impact assessment

Adusei-Asante, Kwadwo

This paper discusses ethical issues in impact assessment practice.

Ethical challenges of the IA industrial complex

Curti, Giorgio

This paper discusses the inherent ethical dilemmas involved with being an IA practitioner within the problematic relations and conditions that compose the IA industrial complex.

Concurrent sessions



Building next generation EA for Canada: moving federal process reform forward (I)

Friday 7 April | 11:00-12:30 | Salon 3

Panel discussion

Chair(s): Anna Johnston, A. John Sinclair

This session will be an open sharing of issues and options that have emerged in the current Canadian federal EA processes review, with particular attention to the key EA reforms needed for next generation EA in Canada. Short introductory panel presentations on key developments will seed in-depth discussion.

Is Canada on the path to next-generation EA?

Johnston, Anna; Sinclair, John

Canada's EA laws are under review. What is the scope of that review, and how well do current proposals match up with the "pillars" of a next-generation EA law?

Sustainability in Canada's EA processes review

Gibson, Robert

How well sustainability purposes and implications have been incorporated in the Canadian federal EA review discussions and recommendations so far, and what might be done to address inadequacies.

Needed reforms for jurisdictional cooperation

Sinclair, John

This paper considers the reforms necessary for "co-operative assessment" that ensures processes harmonize upward to the highest standard in order to achieve efficacy, efficiency, and fairness.

Can it be done? Making FPIC a reality in EA

Sadiq, Somalia

Reflecting on areas of reform, this presentation discusses how free, prior, and informed consent (FPIC) can be implemented within the federal environmental assessment process.

Building next generation EA for Canada: moving federal process reform forward (II)

Friday 7 April | 13:30-15:00 | Salon 3

Panel discussion

Chair(s): Anna Johnston, A. John Sinclair

This session will be an open sharing of issues and options that have emerged in the current Canadian federal EA processes review, with particular attention to the key EA reforms needed for next generation EA in Canada. Short introductory panel presentations on key developments will seed in-depth discussion.

EA reform and regional cumulative effects

Blakley, Jill

How regional and strategic forms of assessment, including cumulative effects assessment, are being addressed in the current federal review of EA legislation.

Climate change in Canadian EA laws: Review and recommendations

Godbout-Beaulieu, Émilie

A Canadian EA legislative review and case study to support recommendations of legislative changes, including mitigation and adaptation thresholds for a climate-sensitive EA process.

HIA process in Canada: Success or failure?

Barss, Peter

Health impact assessments (HIA) and associated health risk assessments (HRA) should ensure early triage and elimination in the EIA process of resource projects with unacceptable health risks.

The federal EA panel: Expectations vs. reality

Atlin, Cole

This paper reviews the material presented in three federal panel sessions, as well as publicly-available submissions, and compares it to the conclusions of the panel.

INDIGENOUS PEOPLES

Traditional knowledge and traditional land use in environmental assessment (I)

Wednesday 5 April | 14:30-16:00 | Drummond West

Paper session

Chair(s): Colin Buchanan

EAs typically focus on assessment of objective, measurable phenomena from a Western scientific perspective, while traditional knowledge (TK) and traditional land use (TLU) tends to be qualitative, subjective and experiential. This session explores how TK/TLU or local knowledge may be meaningfully and respectfully considered in EA.

Improving indigenous knowledge study practice

Labour, Sherri

The inclusion of indigenous knowledge in the field of impact assessment is only about 20 years old in Canada. Sharing our knowledge and experience is critical to improving our practice.

Thresholds and significance in indigenous IA

Whittaker, Carolyn; Candler, Craig

This paper outlines approaches to identifying thresholds for determining significance within indigenous impact assessment that can be respectful and build both trust and credibility.

Politics of knowledge production

Sasvari, Anett

Land appropriation for wind power production, Saami herding rights and the politics of knowledge production.

Indigenous knowledge from an indigenous worldview

Whitehead, Matthew

Indigenous knowledge from an indigenous worldview.

Traditional knowledge and traditional land use in environmental assessment (II)

Wednesday 5 April | 16:30-18:00 | Drummond West

Paper session

Chair(s): Colin Buchanan

EAs typically focus on assessment of objective, measurable phenomena from a Western scientific perspective, while traditional knowledge (TK) and traditional land use (TLU) tends to be qualitative, subjective and experiential. This session explores how TK/TLU or local knowledge may be meaningfully and respectfully considered in EA.

A review of methods for determining significance

Tam, Jordan; Macdonald, Alistair

We review methods for assessing the significance of effects on the current use of lands and resources for traditional purposes to better understand tradeoffs in the choice of methodologies.

Traditional use assessment via pathways of effects

Léger, Marc; Cox, Loraine; Puvananathan, Anjala; Wright, Tracy

Visual pathways of effects strengthen assessments of project impacts on traditional use by linking changes to air, water, land, plants, fish and wildlife to effects on indigenous groups.

Traditional knowledge, climate change, and EAs: Exploring Linkages

Bourbonnais-Spear, Natalie; Therien, Tania

Exploring how climate knowledge of northern indigenous peoples can inform effects of climate change on development projects, and proposing avenues in which this knowledge can be used directly in EAs.

McMurray Métis' cumulative effects management

Fortna, Peter; Clark, Tim; Donald, Gillian; Pickard, Darcy

This presentation will explain how McMurray Métis propose to create a program informed by Métis research methodologies that monitors cumulative effects as observed by community members.

Traditional knowledge and EA

Thursday 6 April | 14:30-16:00 | Salon C

Paper session

Chair(s): Michele Gilbert

Indigenous people hold a wealth of environmental, social and cultural knowledge of a geographical location that is not recorded or available from other sources. How can this knowledge be incorporated in EA and IA processes? How does science incorporate traditional knowledge? This session looks at the challenges and successful methodologies.

Empowering indigenous worldview in decision making

Morgan, Te Kipa Kepa

Worldview sensitivity analysis simultaneously reveals drivers of actions exacerbating climate change and indigenous opposition. The Mauri Model decision making framework (DMF) could improve IA best practice by empowering indigenous knowledge (IK).

Indigenous cultural IA: Addressing the challenges

Page, Justin

This paper guides IA practitioners in the assessment of indigenous cultural impacts. Particular emphasis is placed on the value of participatory research design and social science methods.

The role of UNDRIP in Canada's federal EA process

Saely, Analise; Mulvena, Christina; Anderson, Candace

This presentation will focus on the participation of indigenous groups in decision making, and how to better incorporate traditional knowledge in Canadian federal EA methodology and analysis.

The social license to operate and indigenous communities: Obligation or opportunity (II)

Friday 7 April | 11:00-12:30 | Drummond Centre & East

Paper session

Chair(s): John-Paul Murdoch

Sections: Indigenous Peoples, CSRM

This session will explore the social license to operate for recent projects undertaken on indigenous lands. More specifically, we would like to examine whether procuring a social license to operate is an obligation under Corporate Social Responsibility or are there additional opportunities to obtaining acceptance from communities?

Social impact assessment in an age of consent

Munday, Jane

Exploring the contribution of public participation to enriching SIAs and social performance, with a focus on working with First Nations peoples.

Consent and SLO in indigenous communities

Olmos, Santiago

Development of the concept of social license to operate (SLO), in the context of free, prior, and informed consent (FPIC), is discussed. A case study from the oil and gas sector illustrates key issues of SLO in indigenous communities.

"Yes, Prime Minister"

Dekker, Corey; Neil, Ross

As Crown consultation leads for a controversial pipeline project in Western Canada, the authors describe their efforts to affect Prime Minister Justin Trudeau's new commitment to Indigenous Peoples.

Company-community TK partnerships in the Arctic

Prno, Jason; Pickard, Matthew; Kaiyogana, John

This presentation will describe two traditional knowledge (TK) partnerships. Sabina Gold & Silver Corp. is participating in with local organizations in Nunavut, Canada, to help advance a proposed gold mine.

Resource entanglements: Indigenous peoples and resource extraction

Friday 7 April | 13:30-15:00 | Drummond Centre & East

Paper session

Chair(s): Monica Mulrennan

This session explores the entanglements of large-scale natural resource extraction with indigenous groups. It addresses various strategies and mechanisms indigenous groups and their advocates have availed of to either counter and resist or negotiate and engage with extractive resource industries.

Sami rights and mineral permitting in Sweden

Raitio, Kaisa; Allard, Christina; Lawrence, Rebecca

Socio-legal analysis of mining policies, regulations, and permit practices in Sweden concerning Sami indigenous peoples' rights, to explain failed IAs concerning Sami culture and reindeer herding.

Sami landscape planning and impact assessment

Larsen, Rasmus; Inga, Niila; Stinnerbom, Jonas; Nygård, Jakob; Raitio, Kaisa

An emerging process of Sami landscape planning and impact assessment, wherein reindeer herding communities, with support from researchers, develop an alternative to state and corporate steered practices.

Is FPIC the new elephant in the room?

Sadiq, Somalia

Is Consent the new "big C" Consultation? This presentation will outline some key perspectives on why Canada is wrestling with free, prior, and informed consent (FPIC)—particularly in the extractive industries.

Aboriginal health risks and opportunities and LNG

Shandro, Janis; Witzke, James

In 2016, over 25 proposed industrial projects were planned for Gitxaala territory. This presentation reports on an impact and opportunity assessment related to liquefied natural gas (LNG) through the lens of Aboriginal Health.

Supporting indigenous decisions in complex IAs

Usborne, Anna

By examining the complex context of recent large-scale IAs on Canada's northwest coast, we share lessons for professionals who support Indigenous decision makers facing industrial development.

Concurrent sessions

Practical implications of UNDRIP for Canadian EA

Wednesday 5 April | 11:00-12:30 | Drummond West

Panel discussion

Chair(s): Heather Smith, Kevin Jardine

Section: Indigenous Peoples

This session explores the impact of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) on Canadian project assessment—the opportunities and challenges of indigenous involvement in project planning, EA, monitoring, and follow up programs, and resource management after project approvals.

Legal framework for consulting aboriginal groups

Chan, Debbie

An outline of the Canadian legal framework regarding government's duty to consult and accommodate Aboriginal groups on project impacts in an EA, and how emerging models can align with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

Learning to listen: Aboriginal participation in EA

Noble, Bram

Snapshots of indigenous participation in EA are presented—what has worked and for whom. Meaningful participation can be context-specific, based on the needs and expectations of the communities.

Squamish EA process: Getting to informed consent

Bruce, Aaron

The federal and provincial EA processes do not provide a place for indigenous informed consent. The Squamish EA process was initiated to address this shortcoming.

Accommodation of Labrador Inuit in EA

McLean, Carl

Practical insights from the Labrador Inuit experience in EAs, monitoring and follow-up for major projects, implementation of land claims agreements, and development of Nunatsiavut's EA legislation.

Aboriginal participation in BC EAs

Jardine, Kevin

Using examples drawn from provincial EA processes, this presentation will discuss the mechanisms that B.C. EAO uses to promote the active participation of Indigenous groups in EA.

Indigenous Peoples and traditional knowledge: EA best practice (I)

Thursday 6 April | 14:30-16:00 | Salon 7

Panel discussion

Chair(s): Rachel Olson, Alistair MacDonald, Martin Haefele

Section: Indigenous Peoples

This session will discuss best practices for the consideration and integration of indigenous knowledge in various stages of the EA process. Topics will include methods for engaging with Indigenous communities, and processes and protocols for integrating Indigenous knowledge, and what difference they have made.

Co-application of indigenous knowledge in EIA

Dunn, Carolyn; Graham, Meagan

Examines co-application of indigenous knowledge (IK) in effects assessment, identifying baseline conditions and mitigation, and significance determinations. IK is useful for more than land use assessments.

Eabametoong First Nations experiences with EA

Siebenmorgen, Peter; Yesno, Andy

This presentation will explore the experiences of Eabametoong First Nations as they navigate industrial development in their traditional territory.

Using traditional knowledge for mine reclamation

Croal, Peter; Boyden, Mary; Millen, Martin

The presentation describes how to use traditional knowledge (TK) for mine reclamation near a gold mine.

Indigenous Peoples and traditional knowledge: EA best practice (II)

Thursday 6 April | 16:30-18:00 | Salon 7

Paper session

Chair(s): Rachel Olson, Alistair MacDonald, Martin Haefele

Section: Indigenous Peoples

This session will discuss best practices for the consideration and integration of indigenous knowledge in various stages of the EA process. Topics will include methods for engaging with Indigenous communities, and processes and protocols for integrating Indigenous knowledge, and what difference they have made.

Medicinal plants: Description of an experience

Lavoie, Kathia; Mestokosho, Georgette

Innu-Natukuna: Members of the Ekuanitshit Community Gather Medicinal Plants – Description of an Experience with Hydro-Québec.

Cree Knowledge and Cisco in the Rupert River

Durocher, Carine; Dion, René

This paper presents how the participation of a Cree community and the inclusion of their knowledge in a follow-up on an anadromous fish produced a unique corpus of information.

Indigenous participation in renewables projects

Gilbert, Michele

Global case studies that review participation of indigenous people in renewable energy projects. What works and what does not?

Applying indigenous knowledge to design fauna crossings

Quintero, Juan; Botero, Rodrigo

Using indigenous knowledge provided critical information for defining mitigation and compensation strategies and improving the design of fauna crossings for a road in a sensitive habitat in Colombia.

NA Indigenous Peoples and IA: The good, the bad, and the ugly

Thursday 6 April | 14:30-16:00 | Drummond West

Panel discussion

Chair(s): Pat McCormack, Daniel Stuckless

Section: Indigenous Peoples

This session offers a snapshot of different experiences of Canadian and US Indigenous Peoples with IA. The spectrum ranges from the innovative and exemplary to the ineffective. Many IA and regulatory practices still encourage the persistence of inequality and colonial relations. Presenters will highlight key aspects of their situations.

Protecting Cree rights and environment

Saganash, Melissa

The James Bay Advisory Committee on the Environment plays an active role in upgrading the environmental and social protection regime of the James Bay and Northern Québec Agreement.

Following-up Cree health determinants in James Bay

Durocher, Carine

This presentation gives an overview of a health determinant environmental follow-up done in collaboration with a Cree health agency.

EA for Indian fisheries harvest

Gunther, Pamela

This presentation describes effects of the 2016-2017 salmon harvest on fish, wildlife, recreation, socioeconomics, water quality, and other resources through results of an environmental assessment.

Will all our benefits from fishing be protected?

Hammond, Matt; Osborne, Anna

Impacts on First Nations may be better evaluated, communicated, and avoided in project EA by integrating ecosystem services. Experiences from EAs on Canada's northwest coast will illustrate this idea.

Refusaland traditional land use mapping in Alberta

Joly, Tara; Longley, Hereward

This paper discusses moments indigenous community members refused to fully participate in traditional land use (TLU) studies to critique TLU methodology and offer suggestions for its improvement.

IA failure at indigenous participation and consent

Behr, Towagh

A review of the routine failure of Canadian EAs to establish the free, prior, and informed consent of indigenous peoples and discussion of innovative ways to improve indigenous engagement.

The clearances of Northern Alberta: Failure of IA

McCormack, Patricia

Contemporary Aboriginal displacement from their traditional lands in northern Alberta, facilitated by processes of IA, is comparable to the infamous 19th C Highland clearances.

Expanding IA by including indigenous concepts of inter-relationships

Thursday 6 April | 11:00-12:30 | Drummond West

Paper session

Chair(s): Kapa Morgan,

Section: Indigenous Peoples Section

Indigenous knowledge sees reality in ways that link people to place. Are global efforts addressing climate change cognizant of the disproportionate impacts experienced by Indigenous Peoples due to their place-based identities? Can IA adapt to address these complex realities and produce enduring solutions to climate change?

Empowering indigenous community voices within IA

Fa'aui, Tumanako; Morgan, Kapa

This paper presents how the Mauri Model in conjunction with an indigenous based methodology empowered a Māori community in New Zealand within the recovery process, following the 2011 Rena disaster.

When fire is sacred

Edelstein, Michael

Some native Hawaiians oppose geothermal energy as an affront to the worship of Pele, Goddess of Fire. Psycho-social impact assessment is employed as a basis for valuing such indigenous concepts.

Interconnectedness and indigenous knowledge in IA

Clark, Timothy

This paper will present methodologies and methods to capture the interrelationships of indigenous ways of life and assess how industrialization and climate change impact indigenous communities.

Incorporating traditional knowledge into IA

Ingles de Sousa, Cássio; Hanna, Philippe

Drawing from various indigenous understandings of nature and society, how traditional knowledge can inform IA with essential input for more resilient and inclusive decision making will be presented.

The complexity of climate change and Indigenous Peoples

Thursday 6 April | 16:30-18:00 | Drummond West

Panel discussion

Chair(s): Angeles Mendoza Sammet, Inge Lindblom,

Veronique Simon

Sections: Indigenous Peoples, Health, and Cultural Heritage

A holistic approach is required to integrate in IA practice the values and needs that determine the interrelations among Indigenous Peoples (and vulnerable groups), their wellbeing, culture, and associated landscapes, to better address climate change adaptation and mitigation. We look for ideas and examples from different IA practice areas.

Indigenous peoples and climate change adaptation in Brazil

Garcia, Katia; Paz, Luciana; Matos, Denise

This article discusses climate change and indigenous peoples in Brazil, proposing a framework for the development of adaptation actions aligned with the Brazilian National Adaptation Plan.

"I'll never stay off the land"

Dunn, Marc; Tapiatic, Robbie

Remediating the cumulative impacts of climate, environmental and project-induced change.

Sami people: Natural resources and climate change

Pinto-Guillaume, Ezequiel

The Sami people are strongly dependent on the natural resources available. How they perceive their natural resources and climate change must be taken into consideration when we work with assessments.

Aashukan: Highlights and lessons learned

Tuesday 4 April | 15:30-17:00 | Drummond West

Workshop

Chair(s): Marc Dunn, Paul John Murdoch

Section: Indigenous Peoples

This session will summarize the main outcomes, findings and conclusions from Aashukan, a two-day indigenous event held prior to the IAIA 2017 conference in Eeyou Istchee, northern Québec, Canada. A rapporteur will present to the audience and an open discussion will follow. All IAIA participants are welcome.

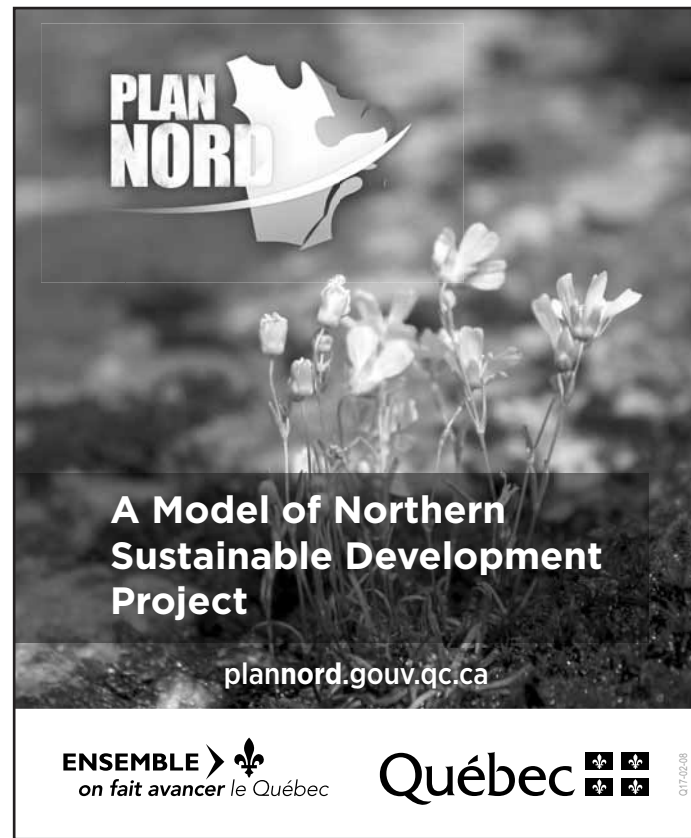


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Concurrent sessions

LARGE-SCALE TERRITORIAL DEVELOPMENTS AND ASSESSMENT

Green vs. green: Does IA offer the objective framework for decision making?

Tuesday 4 April | 15:30-17:00 | Salon B

Panel discussion

Chair(s): Jan Nuesink, Margaret Trias

Non-fossil energy transition features mega projects like windfarms with huge turbines increasingly affecting nature, landscapes, identity, and wellbeing of rural communities. People support green energy, but resent local impact burden. Discussion explores "green vs. green" dilemmas and IA as platform to balance impacts and "externalities" of large-scale sustainable energy generation.

How to tackle green dilemmas? Japanese context

Nishikizawa, Shigeo

The current situation of environmental conflicts in Japan and several efforts to tackle the problem will be discussed.

Re-examining knowledge production in IA

Welstead, Jean

How can we be more aware of the knowledge production process and its potential repercussions within an EIA incorporating climate change impacts? Re-examining some assumptions and practices.

Social response for CCS facilities in Japan

Murayama, Takehiko; Iizuka, Fumino

Social responses towards offshore implementation of carbon capture and storage (CCS) facilities in Japan.

Health concerns became the driver of wind approval

Ollson, Christopher

The movement toward wind turbines as green sustainable energy has its challenges. Without strong community support, concerns surrounding potential health impacts have led to the demise of many projects.

MINING AND OTHER LARGE INDUSTRIES

Governance of social and environmental performance of the extractive sector (I)

Wednesday 5 April | 14:30-16:00 | Salon C

Paper session

Chair(s): Rauno Sairinen

Section: Social Impact Assessment

Many policy, management and planning tools exist to address social and environmental issues in the extractive sector, including EIA, SIA, CSR, social impact management plans, community development programs, etc. This paper session provides a platform to analyze and discuss the success and failures of these tools.

Cumulative effects assessment is not so SIMPLE!

Witt, Katherine; Rifkin, Will; Mottee, Lara; Everingham, Jo-Anne

Cumulative effects pose a challenge for SIA practice. To what extent do predictions made in a pre-project SIA match an academic analysis of cumulative, post-project outcomes?

Futuring in the Canadian mining sector

Atlin, Cole

This paper considers the on-going need to include legacies, scenarios, cumulative effects, and alternatives in the environmental assessment processes of Canadian mining, illuminated by two cases.

Human rights impact assessment in the extractives

Götzmann, Nora

Human rights impact assessment trends in the extractive industries are examined and the potential of human rights impact assessment (HRIA) as a tool for improving the environmental and social performance of the sector considered.

EIA and climate change in coal mining: Tanzania

Mwakaje, Agnes

This study presents results of integrated EIA and climate change in coal mining in Tanzania. Findings show that development projects are good for the economy but also contribute to climate change.

Governance of social and environmental performance of the extractive sector (II)

Wednesday 5 April | 16:30-18:00 | Salon C

Paper session

Chair(s): Rauno Sairinen

Section: Social Impact Assessment

Many policy, management and planning tools exist to address social and environmental issues in the extractive sector, including EIA, SIA, CSR, social impact management plans, community development programs, etc. This paper session provides a platform to analyze and discuss the success and failures of these tools.

Shared value in the energy sector

Mitchell, Ross

This paper takes a critical look at how energy companies can deliver stakeholder value by maximizing opportunities, minimizing risks, and delivering local benefits throughout all lifecycle stages.

Oil spills and CSR in Russia's Pechora River

Loginova, Julia

Using Russia's Timan-Pechora oil and gas province as a case study, this paper explores how community concerns over oil spills play out in the corporate social responsibility (CSR) strategies and practice.

Overview of EIA systems of oil-producing countries

Tafida-Isa, Maulud; Jha-Thakur, Urmila

This paper aims to provide an overview of the EIA systems in oil producing countries within Africa and forms part of a PhD study.

OIL, GAS, AND RENEWABLE FUELS

Impact assessment and renewable energy

Thursday 6 April | 14:30-16:00 | Salon 2

Paper session

Chair(s): Katharine Gotto Walton, Rauno Sairinen, Kevin Hanna, Ben Bradshaw

"Renewable" is not necessarily synonymous with "sustainable." In a context of increasing investments into renewable energies as a means of combatting climate change, this session will explore, using case studies, the social and environmental impacts of renewables on communities which are cause of conflict between stakeholders, and discuss potential solutions.

Renewables and social performance:

Emerging realities

Gotto Walton, Katharine

Renewables and sustainability: synonymous or questionable? What are the emerging social issues and trends linked to the renewable industry? Emerging research and learnings from Africa and beyond.

The Industry Evidence Programme

Howard, Rufus

The Industry Evidence Programme analyzes collated data from EIAs, mitigation plans, licence conditions, monitoring, and strategic evidence to benchmark the state of evidence and knowledge.

Conflicts and social impacts: EIA of renewable energy

Vammen Larsen, Sanne; Nielsen, Helle; Merrild Hansen, Anne

The transition to renewable energy is often challenged by conflicts over specific projects. This paper presents results of a research project, analyzing these conflicts and the role of social impacts.

Wind power and Saami consultation processes

Sasvari, Anett

Specific attention will be given to the consultation process and how Saami claims are articulated, interpreted, and then materialized or erased in the consultation activities with wind power corporations.

Monitoring and enhancement programs for salmon

Johnston, Patricia; Guay, Jean-Christophe

Monitoring and long term enhancement programs for Atlantic salmon population are described and results are presented, two years after commissioning of the first hydropower plant in the Romaine River.

Forging partnerships to address climate change issues in the oil and gas sector

Friday 7 April | 13:30-15:00 | Salon B

Debate/Partnerships development

Chair(s): Peter Croal, Arne Dalfelt

Norwegian Oil for Development (OfD) program session

Communities are in need of increased energy at the same time as they are threatened by climate change and environmental degradation. This workshop will look for opportunities to bring people together to form partnerships and problem solve with respect to this dilemma, with a particular focus on developing countries.

This will be a moderated workshop where after an initial short explanation by the Chair, the two Canadian associations: CAPP (Canadian Association of Petroleum Producers) and CEAA (Canadian Environmental Assessment Agency) will present their approaches to the dilemma of energy needs versus needs to reduce climate change drivers. Thereafter the session will open up for questions and comments from the participants in an effort to see where crossing interests may lead to partnerships instead of conflicts.

Country dilemmas between their need for energy, and avoiding climate change

Thursday 6 April | 11:00-12:20 | Salon C

Paper session

Chair(s): Arne Dalfelt, Peter Tarr

Norwegian Oil for Development (OfD) program session

Developing countries are increasingly suffering the consequences of global fossil fuel use leading to climate change impacts and water shortages, while at the same time in need of increasing their fossil energy use for development. This session will hear experiences from developing countries where solutions to the dilemmas are sought, or adaptations done.

Building climate change resilience in Mozambique

Bettencourt, Pedro; Maia, Diogo; Dias, Ana

With Mozambique being particularly vulnerable to climate change, the paper discusses possible contributions towards strengthening the country climate resilience.

Desalination within the water-energy-climate nexus

Walsdorff, Annick; Schreiner, Gregory; Roos, Thomas; Davis, Claire; van Huyssteen, Elsona; Eberhard, Rolfe

While desalination is touted as a means of reducing water scarcity within South Africa's coal-dominated energy mix, it is energy-intensive and indirectly accounts for significant greenhouse gas (GHG) emissions.

Is Nunavut in Canada ready for oil and gas development?

Croal, Peter

The presentation will explore the current issues facing the Arctic territory called Nunavut in Canada that is undergoing rapid climate change as well as interest in exploration by the oil and gas industry.

Policy Instruments for the CCS in Japan

Yanagi, Kenichiro

The background of Japan and the importance of the policy instruments for CCS and their options will be addressed, especially for the early commercial deployment of CCS.

Climate change as a source of conflict in the oil and gas industry

Friday 7 April | 11:00-12:30 | Ballroom East

Role playing workshop

Chair(s): Morgan Hauptfleisch, Arne Dalfelt

Norwegian Oil for Development (OfD) program session

A fun role play about the climate change impacts of a controversial (fictitious) gas field development. The session simulates a public meeting and improves understanding of how impacts are perceived by different stakeholders. An analysis of the debate will be given after the play.

Order: The session chair will initially explain the purpose and the process, and thereafter divide the participants into smaller groups who will represent various interest groups. These groups will after some internal group discussions present their viewpoints, and a public hearing

POWER GENERATION AND TRANSMISSION

Hydropower 2.0: From planning to operation, a new generation of sustainable hydropower?

Wednesday 5 April | 11:00-12:30 | Salon C

Panel discussion

Chair(s): Emmanuel Boulet

Is hydropower a technology of the past or a critical piece in our fight against climate change? Can we identify the right projects, and do them right? This session will explore emergence of a new generation of hydropower projects that could represent a win-win for our society, environment and economy.

Low-hanging fruit hydroelectric projects

Shantz, Phil

Based on recent Canadian experience, this presentation will focus on the key characteristics of successful hydroelectric projects. A discussion of how policy can encourage this will also be included.

Is modern hydropower better for the environment?

Biedermann, Pierre

Based on a review of recent changes in the hydropower sector, the presentation provides an overview of the way technical evolutions can translate in benefits or risks for environmental receptors.

EbA and hydropower generation

Garcia, Katia

The methodological steps and a set of ecosystem-based adaptation (EbA) actions are proposed in the context of hydropower generation in vulnerable areas.

Reasons to approve hydropower projects in Brazil

Andrade, Andre; dos Santos, Marco

The criteria used by the Brazilian Environmental Institute to identify right hydropower projects and examples of environmental improvements due to environmental process.

Compliance during hydro operations

Scott-Brown, Miles

How to ensure the continuation of environmental and social commitments of the Reventazon Hydro Project during the transition from construction to operations.

Guidelines for energy policies, plans and programs SEA

Friday 7 April | 13:30-15:00 | Salon 7

Paper session

Chair(s): Thomas B. Fischer and Manuel Welsch

This session aims at those involved in writing and/or applying guidelines for energy policy, plan and programme SEAs. Experiences are shared and recommendations are to be provided for others interested in energy SEA.

SEA guidance: Toward a more effective approach

Montaño, Marcelo; Fischer, Thomas

Guidance can play different roles within SEA systems, usually focused on the preparation of an SEA report. This paper is about the connection between guidance and the effectiveness of SEA systems.

IAEA guidelines on SEA

Fischer, Thomas; Welsch, Manuel

The International Atomic Energy Agency has engaged in a process of drafting guidelines for nuclear programme SEA. The paper introduces the most-up-to-date draft.

Energy sector development in Africa

Cyr, Mathieu

The completion of SESA in Cameroon and South Sudan in order to provide decision makers and other partners with information on issues related to the energy sector development.

Corporate SEA decisions: Lessons for SEA guidance

Bonnell, Steve

The results of a study of corporate decision making around the voluntarily adoption and use of SEA in the Canadian electricity sector, and discusses its implications for future SEA guidelines.

Concurrent sessions

Early planning: A business rationale

Thursday 6 April | 14:30-16:00 | Salon 1

Panel Discussion

Chair(s): Ana Maria Quintero, Justus Raeppe

This session introduces early planning at the landscape and system-scale, drawn from examples and methodologies from hydropower development in Colombia, and Solar Power in the Mojave Desert. The Nature Conservancy has explored approaches beyond typical strategic environmental assessments to include integrated planning for an entire landscape or a whole system (basin).

Repowering the planet

Raeppe, Justus

This presentation sets the tone for the rest of the session, illustrating the challenge and barriers to renewable energy development.

Decision making support for hydropower planning

Delgado, Juliana

Overview of the application of SIMA (Sistema de apoyo a la toma de decisiones de la Macrocuena Magdalena) to assess cumulative impacts at the system-scale in the Magdalena River Basin.

Solar power development in the Mojave Desert

Moore, Jim

Technical overview of the planning and science behind landscape scale planning for solar energy development in the Mojave Desert.

PUBLIC PARTICIPATION

Rethinking engagement to include the vulnerable

Wednesday 5 April | 11:00-12:30 | Salon A

Paper session and discussion

Chair(s): Alison McCallum

Impact assessments often fail to ensure meaningful engagement, particularly of the vulnerable and voiceless. This session explores factors hindering meaningful engagement; the implications this has in a time of growing vulnerability amongst project-affected people; and seeks to show-case engagement approaches that challenge current practices.

Unique vulnerabilities, out-of-the box engagement

Factor, Gabriella

How and by whom should vulnerability be defined? How to engage with the most vulnerable in a context of multiple vulnerabilities and conflict? Learnings from a participatory and multidisciplinary approach.

How structural issues prevent engaging VPs

Macdonald, Gary

Gaps as long or even longer than ten years between project inception and execution hinder engagement. How can we compensate?

Engaging groups at risk in human rights impact assessment

Bansal, Tulika

Sharing experiences of meaningful participation of groups at risk in the context of human rights impact assessments in Myanmar.

Urban infrastructure construction and the vulnerable

Dabbs, Alan

The presentation reviews experiences engaging vulnerable populations affected by the land acquisition and construction of urban infrastructure improvements in Latin America.

Public Participation International Best Practice Principles

Thursday 6 April | 11:00-12:30 | Salon A

Roundtable

Chair(s): Pierre André, Peter Croal, Bert Enserink, and John Devlin

Section: Public Participation

The Public Participation International Best Practice Principles (PPIBPP) document was published by IAIA in 2006. In preparation for a revision of the PPIBPP and following a broad survey of IAIA members, this roundtable invites an open discussion of what new principles and practices should be included in the revised document.

Practical aspects of public participation organization

Tuesday 4 April | 15:30-17:00 | Salon A

Debate

Chair(s): Timothy Peirson-Smith

Section: Public Participation

This practical session will comprise an open sharing of best public participation practice from around the world it will include aspects about timing, the art of stakeholder mapping, and logistics and outcomes and outputs of the public participation events.

Participatory approaches in EA

Friday 7 April | 11:00-12:30 | Salon A

Paper session

Chair: Patricia Fitzpatrick

The objective of this session is to explore the diversity of approaches to participation in EA: participatory appraisal, extensive and inclusive public engagement, interactive tool for stakeholder engagement, community engagement, etc.

Participatory appraisal of forest bioenergy

Saarela, Sanna-Riikka; Mustajoki, Jyri; Saarikoski, Heli

A participatory impact assessment of forest bioenergy production provides information on the short and long terms impacts of bioenergy production as well as stakeholders' preferences on the issue.

Practical experience of PE in Hong Kong

Wong, Chi Chung

This paper examines the growing trend of extensive public engagement (PE) conducted for regional-scale EAs and engineering feasibility studies in Hong Kong.

Inclusive public participation and visual literacy

Roque de Oliveira, Ana; Partidário, Maria

The resort to visual tools as a common medium may be a decisive approach to enable inclusive public participation while addressing climate change impacts on cosmopolitan and indigenous communities.

Fully interactive tool for stakeholder engagement

Randall, Simon; Hackmesser, Heike

Arcadis and a partner developed a web-based interactive tool that enables the SuedLink project to have direct input from their stakeholders in the scoping phase of the project.

The Legitimacy Project: Building better EIA

Fitzpatrick, Patricia

The Legitimacy Project is a partnership designed to strengthen public confidence through examining what would be required to move from public participation to community engagement in EA.

Governance and public participation in EIA (I): An international overview

Thursday 6 April | 14:30-16:00 | Salon A

Paper session

Chair(s): Mario Gauthier, Louis Simard

The aim of the session is to propose reviews on the state of the art of EIA practices in matter of governance and public participation (PP). Papers explore the meaning and the role of PP in EIA and SEA practices, design principles for best practices, and PP and decision-making.

Reconceptualizing participation as EA civics

Sinclair, John; Diduck, Alan

We develop a new conceptual model of next generation participation processes that is relevant at multiple spatial scales and institutional levels and is applicable to the entire assessment cycle.

Public participation in EIA: Trends in Denmark

Lyhne, Ivar; Nielsen, Helle; Aaen, Sara Børn

This paper will present an overview and key learnings from four years of public participation research in infrastructure development and EIA processes in Denmark.

Public participation window, time, and outcomes

Hung, Shiu Fung; Fischer, Thomas

EIA practices in Hong Kong have abundant public participation, yet some seem still unsatisfied. The presentation makes an in-depth analysis on the settings to discuss the reasons.

PRA for public participation in South Africa

Sandham, Luke; Chabalala, Jason; Spaling, Harry

We explore the use of participatory rural appraisal (PRA) as an alternative approach to improve effectiveness of public participation for solar energy EIAs among poor and illiterate communities.

Public participation in the Québec EIA procedure

Gauthier, Mario; Simard, Louis

The aim of the paper is to propose a review of EIA's state-of-the-art practices on governance and public participation (PP), based on the Québec (Canada) experience of over 35 years of practices.

Governance and public participation in EIA (II): Canadian experiences

Thursday 6 April 16:30-18:00 | Salon A

Paper session

Chair(s): Mario Gauthier, Louis Simard

The aim of the session is to propose reviews on the state of the art of EIA practices in matter of governance and public participation (PP). Papers explore the meaning and the role of PP in EIA and SEA practices, design principles for best practices, and PP and decision-making.

Recent federal Canadian public consultation

Ponsford, Catherine

This overview considers recent face-to-face public consultation sessions hosted by the Canadian Environmental Assessment Agency and concludes with lessons learned for a successful, effective session.

Social acceptability during the BAPE's hearings

Baril, Pierre; Bergeron, Jasmin; Mondor, Sylvie; Nadeau-Gagné, Annabelle; Plasse, Catherine

The BAPE (Bureau d'audiences publiques sur l'environnement) wanted to know how social acceptability has evolved and been covered throughout the organization's 40-year history in its inquiry and public hearings reports.

Discontent with public participation in ESIA/IBAs

Grondin, Jacques; Reid Forget, Julie

This presentation discusses conflicts generated from IBAs and ESIA's, and approaches such as co-constructing mitigation and benefit-sharing measures to improve the social integration of projects.

Romaine hydroelectric complex: 10 years' perspective

Emond, Louise

The Romaine complex will include four hydroelectric developments (8,0 TWh). An overview of the extensive impact assessment study, public participation, and development of main mitigation measures.

Stakeholder engagement in Rio Tinto's SEIA

Malo-Sauvé, Julie; Lamy, Étienne

Stakeholder engagement throughout SEIA: Challenges and Opportunities for Rio Tinto.

Don't confuse me with the facts!

Wednesday 5 April | 11:00-12:30 | Salon 7

Panel discussion

Chair(s): Jeffrey Barnes

IA administrators face pressures from rapidly articulated positions in social media that are sometimes not confused by fact, political in nature, and highly critical and dismissive of proponent's evidence. Panelists from academia, ENGOs, and professional consulting explore their perspectives on the implications of this for evidence based decision-making.

Don't confuse me with the facts

Green, Jeffrey

The rapid pace and nature of social media is undermining the evidentiary basis of IA and is affecting the conclusions and decisions made in IA as a consequence.

Participants are smart, too

Johnston, Anna

Removing barriers to meaningful public participation and seeing participation as an opportunity, not a burden, are critical to achieving fairer, more informed, and sustainable decisions.

Heading down the rabbit hole

Hanna, Kevin

Are we moving away from the manageable scientific and evidentiary basis of good EA practice? Adding imprecise information requirements to the EA process can only make processes more cumbersome.

Digital impact assessment (I)

Wednesday 5 April | 14:30-16:00 | Salon 6

Paper session

Chair(s): Jona Bjarnadottir, Jan Nuesink

The session focuses on the on-going efforts in the IAIA community to use the potential of our digital era to facilitate continuous improvement in engaging stakeholders and assessing impacts. This session inspires discussion by sharing experience with digital IA methods, pilot projects, and interactive tools to support informed decision making.

Part-time graduate programmes and short courses

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Concurrent sessions

Digital IA reporting: Results of a pilot study

Eijssen, Paul

IA reporting is still very much about old school text and paper formats. This event highlights the results of a pilot project and discuss opportunities and challenges for digital and interactive IA.

Opportunities and constraints for digital IA

Barten, Bart; Eijssen, Paul; Nuesink, Jan; de Vries, Hans; Arts, Jos

This paper will discuss opportunities and challenges for governments with the ambition to apply digital and interactive IA. It is based on a pilot project on digital IA.

UrbanStrategy tool: Engage stakeholders better

van Baalen, Steef; Sanders, Hannes; Borst, Jeroen
UrbanStrategy enables fast integral analysis of initiatives impact for spatial development. This method enables co-creation with stakeholders where the impact of solutions is displayed immediately.

Information and EIA project management system

Broderick, Martin; Barter, Julian; Waterfield, Tim

The optimal goal in building new electric lines is to effectively minimize the negative impacts on people and the environment while ensuring safety, reliability, and cost savings for the utility.

Digital impact assessment (II)

Wednesday 5 April | 16:30-18:00 | Salon 6

Paper session

Chair(s): Jona Bjarnadottir, Jan Nuesink

The session focuses on the on-going efforts in the IAIA community to use the potential of our digital era to facilitate continuous improvement in engaging stakeholders and assessing impacts. This session inspires discussion by sharing experience with digital IA methods, pilot projects, and interactive tools to support informed decision making.

GIS based impact calculation tool

Dragan, Massimo; Ferneti, Michele; Gulen, Sibel; Manzone, Livia; Mezzalama, Roberto

An automated GIS based system was developed for the calculation and representation of the environmental and social impacts of the TANAP pipeline.

Mapping landscape values via social media

Chen, Yan; Parkins, John; Sherren, Kate

An approach of collecting, filtering, coding, and mapping geo-tagged social media data is feasible and effective to reveal the spatial patterns of social and cultural landscape values.

TransCanada's Socio-Economic Assessment Catalogue

Mendoza Gutierrez, Gustavo; Snyman, Stevie

A digital tool developed under TransCanada's Socio-Economic Program to analyze and enhance socio-economic assessments and assist in the development of socio-economic impact management measures.

Contention, social movements and the politics of impact assessment (I)

Wednesday 5 April | 14:30-16:00 | Salon A

Paper session

Chair(s): John Devlin

Section: Public Participation

Economic valuations dominate assessment decisions while social and environmental concerns are given secondary consideration. This session presents cases from China, Australia, Colombia, Brazil, Denmark, the USA, and Canada demonstrating how publics mobilize to redress this imbalance, the political dynamics of such efforts, and some techniques for increasing effective participation.

Infrastructure and social conflict in Latin America

Mueller, Sven-Uwe; Georgoulas, Andreas

We analyzed conflicts related to infrastructure projects across Latin America, evaluated the patterns of how projects have been affected, and identified best company practices to deal with conflicts.

Promises and pitfalls of simplified EIA

Fonseca, Alberto

The presentation conceptualizes "simplified EIA" and analyzes the perceived outcomes of a number of simplified EIA processes in southeastern Brazil.

The most engaged citizens and mobilization in IA

Lyhne, Ivar; Nielsen, Helle; Aaen, Sara Børn

The group of most engaged citizen (called a.o. "fire souls") often play an important role in IA. But why do they invest numerous hours in policy-making?

Non-state approaches to tailings dams regulations

Tovilla, Edgar; Webb, Kernaghan

Private sector and civil society are playing increasingly important regulatory governance roles for environmental protection, arguably in need of an international tailings dam integrity certification program.

Civil society, IA processes and ethics

Bice, Sara

This paper explores the convergence of social media technologies with civil society advocacy/protest practices and considers implications for IA practice, drawing on Australian cases.

Contention, social movements and the politics of impact assessment (II)

Wednesday 5 April | 16:30-18:00 | Salon A

Paper session

Chair(s): John Devlin

Section: Public Participation

Economic valuations dominate assessment decisions while social and environmental concerns are given secondary consideration. This session presents cases from China, Australia, Colombia, Brazil, Denmark, the USA, and Canada demonstrating how publics mobilize to redress this imbalance, the political dynamics of such efforts, and some techniques for increasing effective participation.

Contestation in China

Enserink, Bert; Michalakeas, Dimosthenis; Dang, Wenqi
Poor implementation of public participation provisions in environmental impact assessment in China gives rise to public contestation. Outbreaks of public protests may result in cancellation of a project.

Multi-stakeholder HRIAs for greater participation

Bansal, Tulika

This presentation highlights multi-stakeholder approaches to human rights impact assessment (HRIA) and proposes a new model to overcome lack of meaningful participation of project-affected peoples and power imbalances in assessments.

Case study of proactive environmental legislation

Ross, Christopher

Proactive measures in environmental legislation are imperative to addressing environmental impacts before they become problematic.

Social dynamics prevent 400 MW hydropower-Force IV

Amaya, Andres; Ruiz, Yaddy; Sanchez, Fabio

Migration of over 10,000 persons during the preconstruction phase prevented project development: the Force IV hydropower case.

Discursive framing and community mobilization

Devlin, John; McEvoy, Rebecca

The paper discusses social movement messaging and illustrates why the requirement for an EA contributed to the unexpected withdrawal of an application for an open-pit limestone quarry in Ontario.

SOCIAL IMPACT ASSESSMENT

Mind the gap: An ecosystem services approach to integrated IA

Friday 7 April | 11:00-12:30 | Salon 4

Workshop

Chair(s): Helen Temple, Gabriela Factor, Katharine Gotto, Susan Joyce, Mervyn Mason

The ecosystem services approach is a framework for integrating diverse aspects of IA. We focus on practical ways to improve integration, with a socio-ecological focus. How can social, environmental, and engineering teams work more effectively together? This is a pragmatic, solution-focused session based on international case studies.

Mervyn Mason: From ecosystem science, to service knowledge – lessons over the last five years.

Susan Joyce: What's missed if S/E/HR/HIAs are not integrated?

Gaby Factor (co-authors Jo Treweek and Liz Wall): Ecosystem services in IA: opportunities and benefits,

Integrating human rights into impact assessment

Thursday 6 April | 16:30-18:00 | Salon B

Panel with audience participation

Chair(s): Irit Tamir

Current case studies expose key opportunities and challenges for integrating human rights into IA and due diligence. Snappy case presentations will be followed by an interactive session where experts assist participants in working through key issues to take home new methods and approaches. Discussion will stress the importance of a human rights-based approach as contributing to the effectiveness of IA, with methods and case examples shared.

Community-led human rights impact assessment in Mexico

Cokelet, Benjamin

The Project on Organizing, Development, Education, and Research (PODER) and allies accompanied local communities to conduct Mexico's first community-led human rights impact assessment (HRIA) on a Canadian mining project. It adapted the Getting It Right tool to include training and advocacy phases.

Good practices and enduring challenges of company-supported HRIAs

Joyce, Susan; Lipsett, Llyod

A practitioner's perspective on the emerging good practices and enduring challenges of company-supported human rights impact assessments (HRIA) from around the world.

Sector-wide impact assessment on mining in Myanmar

Götzmann, Nora; Kyaw Soe, Aung

Key findings and recommendations of the sector-wide impact assessment (SWIA) on Mining in Myanmar will be presented, focusing on the human rights impacts of limestone, gold and tin mining.

Impact assessment of policies

Wednesday 5 April | 14:30-16:00 | Salon 2

Paper session

Chair(s): Kwadwo Adusei-Asante

Beyond its significance as a tool for measuring the impacts of resource-type projects on relevant communities, the current SIA framework has been found to be adjustable for assessing policy impacts. This session focuses on ideas and examples of how the SIA framework could be adapted for assessing public policies and development programs.

Reframing SIA methods for oil sands landuse planning

Hopkins, Debra; Wall, Kaitlyn; Orenstein, Marla; Angel, Angela; Dowse, Susan; Westwood, Erica

Reframing SIA for land use planning in Alberta's oil sands to deliver practical solutions using natural and social science methods for evaluating potential impacts to quality of life.

Practitioner perspectives of SIA in South Africa

Sandham, Luke; Kruger, Leandri

We explore the perspectives of SIA practitioners on the orphan status of SIA in South Africa and discuss their findings which are generally positive but with warnings and conditions.

Proposed adjunct policy-specific SIA model

Adusei-Asante, Kwadwo

Since its evolution three decades ago, social impact assessment (SIA) has largely focused on resource-type projects. Expansion of the SIA fraternity as well as the relevance of the SIA framework for measuring the social impact of policies.

Hot topics in resettlement and livelihoods

Thursday 6 April | 11:00-12:30 | Salon 4

Panel discussion

Chair(s): Eddie Smyth, Frank Vanclay

Additional panelists:

Vincent Roquet, World Bank
Liz Wall, Shared Resources

Every year millions of people suffer reduced wellbeing through being displaced by dams, infrastructure, mining, agriculture, forestry, and climate change. This session will include short presentations on land rights, grievance mechanisms and voluntary vs. involuntary resettlement followed by an expert panel discussion on these and other hot topics in resettlement.

Land rights in Brazil

Tamir, Irit

This presentation looks at how two soda giants are helping to resolve a case involving their supplier in a land conflict following both company-led and community-led human rights impact assessments.

Grievance mechanisms for resettlement

Olmos, Santiago; Robichaud, François

Key features and advantages of effective grievance mechanisms are discussed, with specific reference to land acquisition and resettlement.

Assessing livelihoods in social impact assessment (I)

Thursday 6 April | 14:30-16:00 | Salon 4

Paper session

Chair(s): Marielle Rowan

Natural resource based livelihoods present a human dimension of climate change. This session reflects on experiences addressing livelihood impacts in social impact assessments. Topics include access and use of natural resources, ecosystem services, community resilience, diversity of economic resources, induced development, and enhancing sustainable livelihoods.

Exploring livelihood effects in a Canadian context

Hoyle, Meaghan; Dowse, Susan; Card, Katherine

This paper discusses livelihood effects in Canadian project-specific socio-economic assessments. Livelihoods is a meta-theme that requires consideration of cross-value linkages and community context.

Using resilience to offset cumulative impacts

Carthew, Ruari; Hubert, Chuck

Incorporating regional resilience in environmental assessment to assess significance: a case study on adaptation from a diamond mine expansion and climate change in Canada's North.

Laying the foundations for measuring resilience

Wilson, Dave; Yaron, Gil

We share lessons learned from conducting an impact evaluation using quasi-experimental methods to detect and measure changes in household resilience in Ethiopia, Myanmar, and Niger.

Livelihoods and ecosystem services in ESIA's

Rowan, Marielle; Mills, Hannah; Lupton, Marianne

The cross-cutting nature of ecosystem services with livelihoods impacts and economic displacement remains relatively underexplored. This paper discusses their baseline, significance, and mitigation.

Assessing livelihoods in social impact assessment (II)

Thursday 6 April | 16:30-18:00 | Salon 4

Paper session

Chair(s): Marielle Rowan

Natural resource based livelihoods present a human dimension of climate change. This session reflects on experiences addressing livelihood impacts in social impact assessments. Topics include access and use of natural resources, ecosystem services, community resilience, diversity of economic resources, induced development, and enhancing sustainable livelihoods.

"Restoring" rural livelihoods in an economic zone

Stockwell, Alison; Shandro, Janis

Lessons learned in assessing and transitioning livelihoods amid involuntary resettlement, rapid industrialization, worker influx, and the shift to a cash economy.

Conflicting use of natural resources in Alcantara

Caldarelli, Carlos Eduardo

The paper summarizes an environmental conflict between the builders of a rocket and satellite launching center in Alcantara, Brazil, and fishing villager descendants of Brazilian black slaves.

Ex-ante resettlement impacts of large dam projects

Kirchherr, Julian; Walton, Matthew

The first comprehensive analysis of dams' ex-ante resettlement impacts. Significant negative cultural, social, and economic impacts were found. These impacts need to be accounted for in SIAs.

Concurrent sessions

SOCIOECONOMIC IMPACT ASSESSMENT

Taking the blinders off SIA for energy projects

Thursday 6 April | 11:00-12:30 | Salon 2

Paper session

Chair(s): Will Rifkin, Marie-Jose Fortin, Kathy Witt, Julia Haggerty

Installation or closure of a power plant, coal mine, wind farm, etc. SIA for energy projects in rural areas must address history, politics, and socioeconomic impacts at town, regional, and national levels while responding to views from distant urban centers dominant in the media. Conceptual aspirations and practical strategies?

Quality of life in the oil sands: New perspectives

Hopkins, Debra; Wall, Kaitlyn; Orenstein, Marla; Angel, Angela; Dowse, Susan; Westwood, Erica

The results of the South Athabasca Oil Sands Regional Strategic Assessment's Quality of Life approach adds to our understanding of the health and social impact of oil sands development.

Boomtowns: Adapting existing planning models to IA

Haggerty, Julia

The Mobilizing for Action through Planning and Partnerships (MAPP) public health planning model is an example of an existing planning solution that can accommodate oil and gas IA.

SIA as a form of social learning? Insights

Rifkin, Will; Witt, Katherine; Everingham, Jo-Anne

Rents doubled, business income quadrupled. Then the construction phase for natural gas ended in south Queensland. How might impact monitoring cultivate social learning and enhance the legacy?

IA effectiveness in development cooperation

Wednesday 5 April | 11:00-12:30 | Salon 6

Paper session

Chair(s): Jean Hugé, Jenny Pope, Angus Morrison-Saunders

IA is widely used in development cooperation (ODA) in support of decision-making. However, there is a lack of reflection on what a good IA means in that particular context. This session welcomes both practical and theoretical contributions regarding the conceptualization of the effectiveness of IA in development cooperation.

How to improve the EIA system in developing countries

Kamijo, Tetsuya

The study proposes to focus on the quality of an EIS in order to solve constraints of EIA practices, because an EIS is the product of an EIA process.

SEA in EU development cooperation: Lessons learned

Palerm, Juan; Crabbé, Bernard

SEA should lead to environmentally sustainable strategic planning, but does it? Practical lessons that can make a big difference. Learning from 10 years applying SEA in EU development cooperation.

Can SEA influence regional planning in Indonesia?

Annandale, David; Coutinho, Miguel; Smutny, Martin

This paper examines the pre-conditions for SEA to be effective in influencing the design of regional development plans in Indonesia.

Limited E&S competency, limited IA effectiveness?

Fothergill, Josh

IA effectiveness cannot look only at the tool; it will increasingly need to focus on E&S competence of practitioners and borrowers to enable transition from IFI to country E&S safeguards.

DE-BO Partnership for biodiversity in EIAs

Ergeneman, Candan

The education of EIA experts in Bolivia is usually based within the field of environmental engineering, without sufficient access to appropriate tools and methods to account for biodiversity.

Economic impact assessment

Thursday 6 April | 14:30-16:00 | Salon 3

Paper session

Chair(s): Galina Williams, Alla Sushko

Section: Social Impact Assessment

Economic impact assessment (EclA) is important part of EIA. While EclA is limited to reporting output, employment and income multipliers in many cases, many economic impact assessment tools have not been extensively used in practice. A range of international case studies that demonstrate the potential use of these tools is provided.

EclA in western Canada: Case studies and lessons

Joseph, Chris; Gunton, Thomas I.; Knowler, Duncan

EclA is critical to sound decision making, but it gets little attention and scrutiny. Review of EclA in western Canada, including several high profile case studies, and lessons learned.

Economic impact assessment:

Rosignano LNG Terminal

Casartelli, Alessandro; Rametta, Marco; Valotti, Elisabetta; Vergalli, Sergio

An analysis of socio-economic impacts of a liquefied natural gas (LNG) terminal project in a coastal area characterized by opposing stakeholders' interests between tourism and industrial activities.

Dependence at a distance: EIA and the new SICs

Storey, Keith

The paper explores the implications of commute work arrangements in the resource sector which has led to the creation of new single-industry communities at a distance from the resource.

The benefit of air pollution mitigation by EIA

Kim, Yumi; Kang, Eugene; Lee, Young-Joon; Moon, Nankyoung; Lee, Youngsoo

The social benefit for PM10, NO2, and SO2 emissions reduced by EIA for thermal power plants in South Korea during the last 5-years was \$2,137 million (median).

Socio-economic costs of underground and open-cast coal mining, India

Williams, Galina

This paper presents a methodology for assessment of socio-economic costs from underground and open-cast coal mining. It can be used for estimation of social costs of specific coal mining projects.

STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)

The importance of clear aims in SEA

Tuesday 4 April | 15:30-17:00 | Salon 1

Paper session

Chair(s): Antoinette Wärnbäck, Ulrika Gunnarsson Östling

This session will raise a basic but intrinsic question of the importance of clear aims. The importance of transparent SEAs cannot be overemphasized as part of our democratic society. A clear aim is also of importance in order to be able to evaluate whether the plan is fulfilling its aim.

Plan without a clear aim: Is it even possible?

Wärnbäck, Antoinette; Gunnarsson-Östling, Ulrika

This paper explores the use of a clear planning aim in Swedish municipal comprehensive plans and how it affects the EA work.

What are the alternatives?

Gunnarsson-Östling, Ulrika; Wärnbäck, Antoinette

This paper explores how Swedish municipalities consider and reflect upon and also how they formulate alternatives when making comprehensive plans and assessing them.

P/P and environmental aims: Two sides of one coin

Sternath, Felix

Objectives of plans and programmes and environmental protection aims should be considered as equal in SEA. It makes decisions more transparent. The paper shows two approaches from Austrian guidelines.

TOOLS AND METHODS

Methodologies and tools for consideration of climate change in EA and decision making (I)

Thursday 6 April | 11:00-12:30 | Ballroom East

Paper session

Chair(s): Mélissa Gagnon, Sean Carrière

This session will focus on how an EA of a project can allow climate change consideration in the decision making process and what methodologies and tools are available to assess climate change effects and the possible adaptations to those effects, as well as to assess and mitigate GHG emissions.

Robust decision making in the hydropower sector

Huard, David; Vieira, Michael; Thiémonge, Nathalie

Investments in hydropower infrastructures are sensitive to climate change. Here we present a web-based decision-aiding tool to integrate uncertain climate information in the decision making process.

Weather modeling: Noise impacts and climate change

Choquette, Patrice; Rhéaume, Pascal

WSP has developed a tool which predicts weather conditions allowing for accurate predictions of dust and noise emissions. Its aim is to optimize production under changing weather conditions.

NEB Experience with GHGs and pipeline EA

Mulukutla, Usha; Eyre, Marcus; Pfeiffer, Zoe; Randall, Laura
Lessons from Canada's National Energy Board (NEB) in incorporating greenhouse gas (GHG) analysis in energy pipeline projects, discussing methodological challenges, jurisdiction, and other considerations for future EAs.

Finding reason in hydrocarbon cumulative effects

Hegmann, George

The technical challenges, reasonableness, and procedural fairness is examined, including induced upstream and downstream greenhouse gas emissions in hydrocarbon project cumulative effects assessment.

Methodologies and tools for consideration of climate change in EA and decision making (II)

Thursday 6 April | 14:30-16:00 | Salon B

Paper session

Chair(s): Mélissa Gagnon, Sean Carrière

This session will focus on how an EA of a project can allow climate change consideration in the decision making process and what methodologies and tools are available to assess climate change effects and the possible adaptations to those effects, as well as to assess and mitigate GHG emissions.

Climate mitigation in infrastructure projects

Kjellander, Cecilia; Birgitta Aava, Olsson

The presentation will introduce procurement requirements on reduced greenhouse gas emissions as well as climate mitigation in EA processes within the Swedish Transport Administration.

The Turcot interchange, a carboneutral structure

Lagarde, Benoit

Major infrastructure projects are now planned to be "carboneutral." The Turcot interchange is one them. Ins and outs of carboneutrality are studied and discussed.

Strengthening climate change risk assessment in IDB operations

Herron, Hope; Esquivel Gallegos, Maricarmen;

Barandiaran, Melissa

Findings on strategic climate risk assessment approaches and methodologies for Inter-American Development Bank project preparation and initial pilot project results.

GHG of road transport in a Brazilian municipality

Coutinho, Miguel; Ginja, João; Germani, Eduardo; Cunha,

Múcio; Borrego, Carlos

An important tool to include greenhouse gas (GHG) emissions in decision making of urban transport systems in Brazil is presented.

Financial engineering element of ESIA, differentiator to catalyze city transitions

Tuesday 4 April | 15:30-17:00 | Salon 7

Workshop

Chair(s): Erik Schellekens

Section: Climate Change

Arcadis recently developed, tested and successfully applied an innovative Resilience Pathway to accelerate city district transitions, empowering cities to deal with socio-economic and biophysical stressors, e.g., adaptation of cities to extreme weather events and climate change.

This workshop is intended to exchange insights gained and lessons learned while "optioneering" and identify a portfolio of feasible, risk reducing and bankable opportunities. We will learn how to integrate and value financial engineering in a roadmap towards resiliency. Discussion will focus on how to value risk reduction related to bankability and cost-effectiveness of portfolios of opportunities to raise the resilience level.

Experience on the use of impact assessment as a design tool

Thursday 6 April | 11:00-12:30 | Salon B

World Café

Chair(s): Elsa João

This session aims to explore the issues involved in using impact assessment as a design tool and to share the experience gained in this regard. All aspects of impact assessment will be considered. The possibility of a FasTips on this topic will also be discussed.

Good examples of SEA as a facilitator for sustainable planning (I)

Wednesday 5 April | 14:30-16:00 | Salon 1

Paper session

Chair(s): Charlotta Faith-Ell, Thomas Fischer, Berit Balfors

This session discusses proposals and mechanisms for a more effective SEA practice through the presentation of good examples. The session is carried out within the Swedish research program called Sustainable Planning and Environmental Assessment Knowledge (SPEAK).

Transition from impact to strategic thinking SEA

Partidário, Maria; Handayani, Sri

Using strategic thinking SEA requires change in mental models used in impact-based SEA, and participatory and group dynamic techniques can help this transition.

SEAs for major infrastructure programmes in SA

Cape, Lydia; Fischer, Dee; Lochner, Paul

SEAs for the SIPs: major infrastructure programmes in South Africa. Case studies: Renewable Energy Development Zones (SIP8), Transmission Grid Infrastructure (SIP10) and SKA project (SIP16).

Lost in translation? Planning and EA interaction

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

This paper discusses an explorative study that was conducted to seek evidence about discourses in two separate storylines of sequences of programmes, plans and projects with SEAs in Estonia.

An objectives-led approach to SEA

Faith-Ell, Charlotta

Results of an in-depth study of the application of the Swedish environmental quality goals in SEA of infrastructure plans.

The IGF supports 56 nations committed to leveraging mining for sustainable development to ensure that the impacts are limited and the benefits are shared.

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Concurrent sessions

Good examples of SEA as a facilitator for sustainable planning (II)

Wednesday 5 April | 16:30-18:00 | Salon 1

Paper session

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SEA Emsmond-Delfzijl: Are the plans future-proof?

van Baalen, Steef; van der Wel, Karin; Schenau, Yoeri

ARCADIS performed an SEA to test the feasibility of future developments and formulate local policies.

Examining SEA in Swedish municipal energy planning

Wretling, Vincent; Byström, Gustaf; Balfors, Berit; Gunnarsson Östling, Ulrika

The application and effectiveness of EA in the context of municipal energy planning in Sweden, in order to propose measures for a more strategic and holistic approach.

SEA of ore ports development in Maritime Guinea

Diallo, Mariama; Waaub, Jean Philippe; Samoura, Karim; Doumbouya, Alkhaly; Kourouma, Dan Lansana

An innovative approach coupling multicriteria decision aid, spatial analysis, and participatory approach has been tested in the case of ore port SEA in Maritime Guinea, focusing on fishery resources.

SEA TOT in Indonesia under ESP3 Program

Handayani, Sri; Partidário, Maria; Nurlambang, Portugal;

Wiyana, Adi; Wijayanti, Laksmi; Munier, Taswin

Indonesia is pioneering a transition from IA to strategic thinking SEA, adopting experiential learning and participation in TOT that helps participants perform self-expression and extend their learning zones.

SPECIAL TO IAIA

IUCN and IAIA working together for improved results from impact assessments

Wednesday 5 April | 14:30-16:00 | Salon 7

Panel discussion

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

The session will explore how IAIA (a new member of IUCN) can collaborate with IUCN to improve on the ground results from impact assessments. This event will introduce IUCN, focussing on its programmatic goals, global outreach and membership (both NGO and governments). Finally, a plenary debate will identify opportunities for collaboration.

Steve Edwards and Rachel Asante-Owusu: Overview of IUCN structure and quadrennial programme

Jo Treweek: Overview of IAIA including principles for "Principles for Biodiversity in Impact Assessment"

IAIA CommunityConnect workshop

Wednesday 5 April | 16:30-18:00 | Ballroom East

Workshop

Chair(s): Ana Maria Esteves, Kathy Adams

The workshop will seek feedback on IAIA CommunityConnect, a brokering service that connects communities affected by projects with the technical expertise found across the IAIA membership. Workshop participants will make recommendations to the draft operational plan.

Impact assessment and the Sustainable Development Goals dedicated session

Thursday 6 April | 16:30-18:00 | Salon 5

Workshop

Chair(s): Maria Partidário, Rob Verheem

This session is the first meeting of a newly-created task force that is meant as a transversal space for creative discussion and reflection on how impact assessment can be used to enhance the good application of SDGs. The task force aims to bring together existing Section interests to meet under the common goal of SDGs and to address our starting hypothesis that SDGs and IA can mutually strengthen each other. And if this is well accepted, then generate creative thinking about where to start and how can we make it happen, including how to best involve into this discussion all members of IAIA who wish to do so.

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Meet the editors

Proudly sponsored by Taylor & Francis Group

Thursday 6 April | 11:00-12:30 | Salon 7

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.



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Concurrent sessions

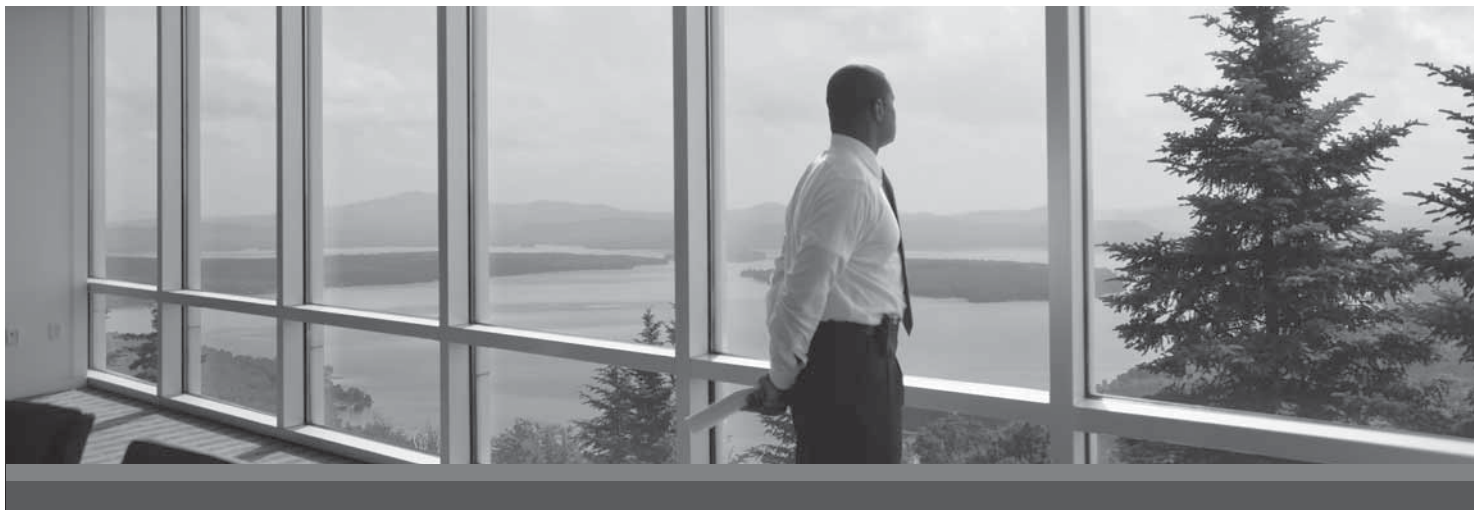

Siyanamukela eThekwini
(isiZulu for "We welcome you to Durban")



**ENVIRONMENTAL JUSTICE
IN SOCIETIES IN TRANSITION**
17-20 May 2018 | Durban, South Africa
38th Annual Conference of the
International Association for Impact Assessment



SAVE THE DATE
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BRISBANE AUSTRALIA



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USAID

FROM THE AMERICAN PEOPLE

Interested in an impact assessment fellowship?

Interested in supporting a rising star in impact assessment?

Over 2001-2009, the Impact Assessment Professional Development Fellows provided practical training and mentorship to Africa's most promising early-career Environmental and Social Assessment practitioners. Piloted with USAID funding in 2001, the award-winning program was supported by USAID, SIDA and World Bank over the decade, with implementation by African institutions.

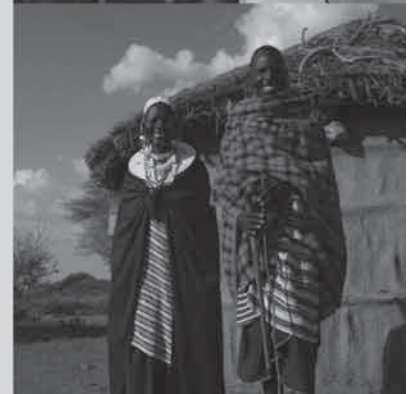
For 2017-2018, USAID is rebooting the program by funding the first fellows class since 2009 and undertaking outreach and planning to place the program on a sustainable, multi-donor funding basis, under African leadership.

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 fellowships cover travel, lodging, meals, and other associated expenses during this period. The experience is also intended to connect fellows firmly to the impact assessment professional community, including funded travel to and participation in IAIA 2018 in Durban, South Africa.

Fellow candidates, host entities able to offer practicum placements, and potentially interested private-sector and international donors are urgently sought!

Please contact: USAIDFellowship@cadmusgroup.com for more information.

Or find Peter Tarr (peter.tarr@saiea.com) or Wes Fisher (weston.fisher@cadmusgroup.com) here at the conference to learn more.





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Networking activities and events

WELCOME RECEPTION

The IAIA17 welcome reception features starter dishes and drinks, and you are invited to be part of a virtual exhibition yourself—get funny pictures and warm memories with old and new colleagues in the photo booths. Come to enjoy conversation between participants from all over the world and celebrate the opening of IAIA17.

Tuesday, 4 April | 18:30-20:00 | Ballroom
Pre-registration by 15 March required.

BANQUET: “COCKTAIL DINATOIRE”

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). Taste wonderful specialties in a cozy and relaxed atmosphere while you move around and admire the beautiful surroundings of the Old Port and the City of Montréal through the glass walls of the Centre des Sciences. Montréal’s Science Centre is dedicated to the popularization of science, promotion of knowledge, and the development of scientific and technical culture. Enjoy an evening of food and drinks, a good show with regional flavor, and dancing to end the night.

Thursday, 6 April | 19:30-23:30
Location: 2 Rue de la Commune Ouest, Montréal
Pre-registration by 15 March required.
No refunds will be given after 15 March, and no cash transactions will be accepted on-site.

DINE OUTS

Spend an evening sampling local food at a “pay your own way” dinner. A local host is organizing the Dine Outs and will help you experience Canadian cuisine. To join, sign up on the forms that are available in the registration area. Dine Outs are a great opportunity to meet new people and see different parts of the city in a relaxed atmosphere.

Wednesday, 5 April
19:30 onward
Sign up on the message boards

FUN RUN

The Fun Run is a great way to start the day and network with fellow runners and walkers. The 5km route to Mt Royal Park will refresh your mind and body and offer a chance to meet people you might not otherwise meet during formal sessions. Everyone is welcome: runners, walkers, and spectators!

Wednesday, 5 April | 07:00-08:00
Starting point: Sheraton lobby
Pre-registration by 15 March required.

WAKE-UP YOGA

Start your day with a one-hour mindfulness and energizing yoga class. Yogis of all levels are welcome to come enjoy poses for flexibility, strength, and tranquility. The class will end with five minutes of relaxing meditation to help you find your breath and feel present for the rest of your busy conference day.

We will meet at 06:20 in the lobby of the La Centre Sheraton on Thursday, 6 April. The yoga studio is about a 20-minute walk from the Sheraton. If you are not staying in the Sheraton, you are welcome to meet us at the yoga studio around 06:50. The class will start promptly at 07:00 and go for one hour.

Mats will be provided at the yoga studio. Come in regular yoga clothes and bring a bottle of water and a towel if you prefer.

At 08:00 we will walk back to the Sheraton, giving us ample time to shower, get some breakfast, and go to our first IAIA sessions.

Friday 7 April | 07:00-08:00

Meet: 06:30 | Le Centre Sheraton lobby - or - 06:50 | Yasmin Yoga Loft, 377 St Paul W, #200

Pre-registration by 15 March required.

TECHNICAL VISITS

Participants must be pre-registered and pre-paid to participate. Delegates are not expected to pay tips to the servers. The tours are hosted in English. Casual clothing and walking shoes are recommended. Tours depart from the Drummond Street side of the Sheraton’s main entrance. Please plan to check in for the visit a minimum of 15 minutes prior to the noted departure time. Busses will not wait for latecomers. Participants will be required to sign a liability release waiver upon check-in for the visits.

“POP UP” MEETINGS

Do you need to meet with colleagues? Continue a discussion? Get together with a potential business partner or client? Salon 8 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.

STUDENTS AND YOUNG PROFESSIONALS (SYP) WORKSHOP

Organized by the IAIA SYP Section and the IAIA17 Program Committee, this workshop is intended to foster the integration of students and young professionals (SYP) into IAIA conferences. See agenda on page 57.

Tuesday, 4 April | 08:00-11:30 | Salon A

Pre-registration by 15 March required.

TOURISME MONTRÉAL

Tourisme Montréal is delighted to welcome you and has grouped together all the information you’ll need to help you plan your stay. Check out

<http://iaia.alaMontréal.com/>

to find general information about Montréal, ideas for fun free-time activities, plus tips on getting around. Best of all, you’ll also find exclusive offers just for IAIA delegates!

- Plan your stay and see what’s going on in the city during your event
- Discover quick facts about Montréal
- Check out the Tourisme Montréal Blog for more insider tips on where to go and what to do
- Visit our video library of Montréal moments
- Discover free activities to enjoy in Montréal
- Download a coupon book



Posters

Biodiversity, ecology, and ecosystem services

Marine infrastructures seascape for conservation

Dallmeier, Francisco; Velez-Zuazo, Ximena; Taborga, Pablo; Ledesma, Karim; Vildoso, Bruno; Alonso, Alfonso
Marine mega-infrastructure can influence major economic development and play an important role in seascape strategies. They have potential of advancing conservation goals if managed synergistically.

Biodiversity information in sugarcane industry CEA

Dibo, Ana Paula; Sánchez, Luis
This paper discusses information availability and adequacy to assess the cumulative effect of reducing species richness in forest fragments in the EIA of sugarcane industry projects in São Paulo State.

Groundwater, IA, and climate change adaptation

Gomez Quiroga, Grace; Clausen, Javier; Carmona, Jessica; Marquez, Miguel; Gutierrez, Marco; Roman, Rigoberto
Through a pilot SEA in Mexico, groundwater is integrated to urban land use planning as the water buffer for climate change, seeking to increase aquifers' ecosystem services tangibility.
Assessment of ecosystem services by utilizing UAV Hayashi, Kiichiro; Katada, Yuya; Sugita, Satoru
The possibility of ecosystem service assessment by UAV (unmanned aerial vehicle) was considered based on forest case studies conducted in Aichi and Gifu Prefectures, Japan.

Long-term changes of green space ecosystem services

Ito, Natsuki; Shibata, Yuki; Sugita, Satoru; Hayashi, Kiichiro; Ooba, Makoto
We clarify how land use development in an urban area near Tokyo after the 1990s has changed ecosystem services by analyzing the decrease in green space.

Mekong River Basin biodiversity impact assessment

Khan, Anwar; Trung, Le Duc; Phuong Nguyen, Hong; Hoang Minh, Duc; Rautenstrauch, Kurt; Schmidt, Cheryl
Findings from an assessment of overall impacts of a planned hydropower cascade on biodiversity resources in the Mekong River Delta and floodplains in Vietnam and Cambodia.

EIA guidelines for offshore waste disposal project

Maeng, Junho; Cho, Kwangwoo; Park, Seonyoung
This study is to formulate EIA guideline for offshore waste disposal facility to assess how waste disposal facility construction projects influence marine life and to establish impact reduction plans.

Climate change

Changing climate: EA for a proposed mine in Yukon

Fraser, Colin; Gjertsen, Jennie; Jackson, Scott; Scott, James
Recent experiences building climate change data into mine design and permitting studies for a proposed gold mine south of Dawson City, YT.

Climate change in Canadian EA laws:

Review and recommendations

Godbout-Beaulieu, Émilie
A Canadian EA legislative review and case study to support recommendations of legislative changes, including mitigation and adaptation thresholds for a climate sensitive EA process.

Climate change in Korea and algal bloom monitoring

Kim, Tae Geun; Choi, Kyoung Sik; Hong, Sang-Pyo
Analyzing the trend of climate change in South Korea and the development of algal bloom monitoring system using KOMPSAT satellite imagery.

Climate change and biodiversity in New Zealand IAs

Morgan, Richard; Waterson, Emily
New Zealand EIAs often lack consideration of climate change matters; biodiversity impacts tend to be covered better, but still not as consistently or rigorously as they could be.

Cumulative effects

Value-added of monitoring for cumulative effects

Cronmiller, Josh; Noble, Bram
Administration and organizational arrangements of regional environmental monitoring face challenges to informing a cumulative effects approach for land-use decision making in Alberta, Canada.

Disasters and conflicts

Further initiatives of nuclear power plant in Korea

Shin, Kyung-hee; Han, Sungju; Lee, Hi Sun; Cho, Kongjang
Analysis of the post-accident management of South Korea's nuclear power plant. Setting the international standard for evacuation plan is an urgent necessity.

EIA

Consideration of climate change in EIA practice

Bae, Chaeyoung; Shin, Jiyoung; Lim, Youngshin; Kim, Wan-hee; Shin, Moon-shik; Baek, Sanghyun
This study suggests the possibility of incorporating climate change adaptation in EIA by presenting changes in Environmental Impact Statements (EIS) in study sites, considering climate change risks

Screening is needed in Korea?

Cho, Kongjang; Kim, Bomi
Although screening is known as the basic EIA procedure, this study shows that there could be exceptions, depending on the countries; screening cannot work effectively in certain countries.

A bibliometric study of environmental impact assessment

Costanzo, Bruno; Sánchez, Luis
A bibliometric study of environmental impact assessment to explore how relevant topics in EIA research and professional practice have evolved over time and permit us to analyze the main topic trends.

Sustainability in EIS of sugarcane ethanol sector

Sozinho, Davi Willson Furtado; Figueiredo Gallardo, Amarilis Lucia
Exploring how the environmental impact assessment embraces sustainability pillars in the Brazilian sugarcane ethanol sector can help to promote better impact assessment of renewable energy.

Arctic EIA: Good practice recommendations

Karvinen, Päivi A.; Rantakallio, Seija
EIA and public participation in EIA in the Arctic: formulating good practice recommendations under the Sustainable Development Working Group of the Arctic Council.

Vulnerability in infrastructure works

Ridente Junior, Jose Luis; Maglio, Ivan Carlos; Aranha, Carlos Henrique; Pagliarani, Fabiola
Vulnerability to climate change in infrastructure projects during environmental assessment in the State of São Paulo, Brazil, needs to consider risks and mitigation for different scenarios.

Climate change within EIA in wind energy sector

Rosa, Susana; Azinheira, Catarina; Santos, Inês; Tome, Ricardo; Rodrigues, Patricia
A state-of-the-art study on climate change and EIA in wind energy sector in Portugal was produced and compared with other countries and with international climate agreements implementation.

Evolution of IA practice in São Paulo State

Sánchez, Luis Enrique; Rinaldi, Edgard Ortiz
The study considering quarry projects shows the EIA process evolution over time in São Paulo, Brazil.

Energy

Archaeology applied to the EIA of Belo Monte HPP

Caldarelli, Solange
Objectives and methods employed in rescue archaeological research on one of the Amazon's most polemic hydroelectric power plants: Belo Monte HPP on Xingu River Basin.

A study of hybrid marine-based energy in South Korea

Kim, Taeyun; Kim, Choongi
This study calculates offshore wind and wave energy and suggests a few suitable sites for hybrid marine-based energy in South Korea.

CEA for operation of power plants in South Korea

Moon, Nankyoung; Ha, Jongsik; Kim, Soontae
This study analyzed the cumulative effects assessment (CEA) of air pollution caused by power plants based on South Korea's Basic Plan on Electricity Demand and Supply.

SEA of the inclusion of renewable energies

Pirillo, Ernesto; Dominguez, Santiago; Fazio, Leandro
This paper discussed the possibility of introducing renewable energy into the SEA matrix by including data for each natural resource and its potential for energy production in some ecoregions of Argentina.

Governance

Regional EA governance vexus: Issues and innovations

Olagunju, Ayodele; Blakley, Jill

Based on a critical analysis of recent research and practice, we characterize issues and innovations in regional EA from a governance perspective and their implications for climate change discourse.

Health

Water quality and health risk assessment

Charoensuk, Panita; Pudpadee, Sukanda; Chaingam, Lamai

This is a study on water quality and health risk assessment on arsenic and manganese exposure of a community located in the border adjoining Phichit, Phetchabun and Phitsanulok Provinces, Thailand.

SOPHIA: A pan-Canadian realist evaluation of HIA

McGetrick, Jennifer Ann; Nykiforuk, Candace

Research, practice, and policy expertise is needed for a logic model in realist evaluation of HIA to improve population health and support healthcare systems across Canada.

Incinerator workers and health risk assessment

Pudpadee, Sukanda; Charoensuk, Panita; Loonsamrong, Wassana; Sirilar, Nuttapon

Workers in this plant were at risk of health effects associated with benzene and xylenes via inhalation exposure. Health promotion and risk communication should be given to them in an appropriate way.

Health impacts of climate change on country foods

Wilson, Wendy; Frenette, Etienne

Health Canada's approach for evaluating the impact that climate change may have on country foods in environmental assessment.

Public participation

Collaboration in action: An EA approach

Nieman, Christal

Presenting the challenges and benefits of provincial, federal, and indigenous collaboration on the assessment of impacts for a cooperative environmental assessment in British Columbia.

Participative SA for public facility management

Ono, Satoru

Public facility management is one of the most urgent problems for Japanese municipalities. This poster illustrates a participative approach for sustainability assessment (SA) from a case study of Yosano-town, Kyoto, prefecture and clarifies the role of sc

SEA

SEA for the SKA project in South Africa

Cape, Lydia

The SEA aims to integrate the environmental authorization process, ensuring that environmental factors are considered and environmental principles are implemented at the strategic planning stage.

Implication measures between SDI and Korean SEA

Hong, Sang-Pyo; Kim, Tae Geum; Choi, Kyoung Sik

A quick and credible diagnosis of the key dimensions of sustainable development (SD) by implicating sustainable development indicators (SDI) into Korean SEA can help develop a shared understanding of priorities of implementation of the Sustainable Development Goals.

Coordinating FRM governance through SEA principles

Morrison, Alasdair

Flood risk management in Canada lacks coordination and is an underlying cause of a lack of capacity in FRM governance. SEA principles can be applied to address this underlying coordination issue.

Factors of landscape conflicts in photovoltaic projects

Hori, Ayumi; Shibata, Yuki

We clarified the factors of photovoltaic (PV) landscape conflict by analyzing 16 controversial PV projects in Japan from multi-social aspects.

The IA profession

Scholar and practitioner views on science in EA

Ma, Jie; Duinker, Peter; Walker, Tony

This study investigated the satisfaction levels of EA professionals with the quality of science practiced in the EA process, as well as the factors contributing to these satisfaction levels.

Tools and methods

Satellite imagery: Eyes in the sky

Johansson, Carl

How satellite imagery can be useful at all stages of the environmental assessment, both for the Compliance Promotion and Enforcement Unit of the Canadian Environmental Assessment Agency (the Agency) and for environmental assessment practitioners.

Quantifying the water-energy nexus at the end-use

Kemper Gubetich, Maria Alejandra; Mijic, Ana; De-Stercke, Simon

Quantifying the water-energy nexus and associated GHG emissions provides valuable insight for the design and implementation of initiatives seeking to achieve sustainable use of water and energy.

Shifting practices: Examples of high-level approaches

Larson, Robert

Examples of climate change studies will be discussed to illustrate emerging techniques, including solutions to address projections data limitations and uncertainty.

Environmental petitions

Leach, Kimberley

The Environmental Petitions Process: Do you have an environmental question for the federal government? Write to the Auditor General/ Commissioner of the Environment and Sustainable Development and get answers from Ministers to your questions.

Monitoring system of greenhouse gas emissions

Maglio, Ivan; Franco, Nelson Moreira; Muniz, Carlos Alberto; Alves Neder, Eduardo; Machado Maglio, Leonardo; Verocai, Iara

The project also aims at capacity building and staff training in order to prepare Rio de Janeiro administration to maintain and update the inventories and plans for reducing GHG emissions.

EuropeAid: Mainstreaming environment and climate

Palerm, Juan; Crabbé, Bernard; Topper, Egger; Rodriguez, Patricia

EuropeAid has been stepping up efforts to mainstream environment and climate change in its development cooperation. An update on recent developments and successful examples.

The environmental license in Chile (RCA)

Pérez, Cristian; Bergamini, Kay; Araya, Gino

Impact assessment methodologies have a direct correlation to enforcement and compliance practices. This presentation provides practical examples of the current environmental procedures applied in Chile.

Regional cumulative effects on groundwater

Scott, Margaret; Beckers, Jos; Klebek, Margaret

Two case studies of modelling tools developed to facilitate understanding of potential cumulative effects of mining and in situ oil sand operations on regional groundwater quantity and quality.

Noise impact assessment with noise map

Sun, Hyosung

This presentation introduces the present status of noise impact assessment with a noise map, and suggests a guideline for using a noise map in the stage of environmental impact assessment.

Empowering indigenous groups with baseline data

Trindade, Mariana

A training program for local indigenous groups to collect baseline environmental data under the EA process.

UK action on assessing GHG significance in EIA

Vergoulas, George; Fothergill, Josh

Are all GHG emissions significant in EIA from a UK perspective, and how might this differ between comparative and absolute emissions?

Analyzing effects of climate change on a project

Vigder, Joseph; Scotney, Nicole

Analyzing the effects of climate change on a project: A comparison of methods used for mining project environmental assessments in Canada.

Exhibits | Annual General Meeting

EXHIBITORS



Arcadis Canada Inc.

Boréal

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AFFILIATE POSTERS

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

- **Iran:** Iranian Association for Environmental Assessment (IAEA)
- **Korea:** Korean Society of Environmental Impact Assessment (KSEIA)
- **Nigeria:** Association for Environmental Impact Assessment of Nigeria (AEIAN)
- **New Zealand:** New Zealand Association for Impact Assessment (NZAIA)
- **Ontario (Canada):** Ontario Association for Impact Assessment (OAIA)
- **Portugal:** Associação Portuguesa de Avaliação de Impactes (APAI)
- **South Africa:** International Association for Impact Assessment-South Africa (IAIAAsa)
- **Western & Northern Canada:** IAIA Western & Northern Canada (IAIA-WNC)
- **Zambia:** Impact Assessment Association Zambia (IAAZ)

Tables are provided on levels, 2, 3, and 4 for IAIA members to display information, distribute conference papers, or announce/distribute non-commercial items. Delegates must be in attendance personally 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

Wednesday 5 April | 12:40-13:30 | Drummond Centre & East

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 Bill Kennedy.

Agenda

1. Welcome, introductions, confirmation of the 2016 AGM Minutes
2. Report from the President, Ana Maria Esteves: 2016-17
3. Report from the Executive Director, Jill Baker: 2017-18
4. IAIA's Financial Report from the Treasurer, Morgan Hauptfleisch
5. Presentation of the IAIA Lifetime Achievement Award and address by the recipient, Bill Kennedy
6. Q & A from members

Notes

STUDENTS AND YOUNG PROFESSIONALS (SYP) WORKSHOP

Tuesday 4 April | 08:00-11:45 | Salon A&B

This workshop, organized by the SYP Section, the IAIA17 Program Committee, and IAIA, fosters the integration of students and young professionals into IAIA conferences.

Agenda

07:45-08:00

Registration (Level 4)

08:00-08:15

Workshop opening. Jill Baker, IAIA Executive Director

08:15-09:35

Keynote speakers' presentations. Invited speakers from different sectors present their points of view and share their experience with career issues related to IA career development.

Juan D. Quintero, environmental specialist and independent consultant (consulting sector)

Monica Scatasta, Head of Climate, Environmental and Social Policy, Projects Directorate, European Investment Bank (economic sector)

Bram Noble, PhD, SSHRC Leader, Office of the Vice President Research; Professor, Department of Geography and Planning, School of Environment and Sustainability, University of Saskatchewan (academic sector)

Heather Smith, Vice President of the Canadian Environmental Assessment Agency (CEAA) (public sector)

09:35-09:50

Presentation of a new EIA training course. "Professional Development Program in Impact Assessment" will be introduced by John Boyle, chair of IAIA's Training and Professional Development Committee.

09:50-10:05

Coffee break

10:05-10:45

Elevator-pitch presentations by SYP. Volunteers from among the attendees will present what they are working on so that all participants of the workshop will benefit from the experience of others to upgrade their work.

10:45-11:30

Speed mentoring. Just like speed dating, SYPs introduce themselves to an experienced IAIA member (the mentor) for a short period of time. When time is up, SYPs 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. François Boulanger, IAIA17 Co-chair

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 15:30 on Friday, 7 April, or vote in the mobile app.

OUTSTANDING PRESENTATIONS

Submitted by

Presenter's name

Presentation title

Session Date	Session Time			
Tuesday 4 April				15:30
Wednesday 5 April	09:00	11:00	14:30	16:30
Thursday 6 April	09:00	11:00	14:30	16:30
Friday 7 April	09:00	11:00	13:30	

What makes this presentation outstanding?

.....

Presenter's name

Presentation title

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What makes this presentation outstanding?

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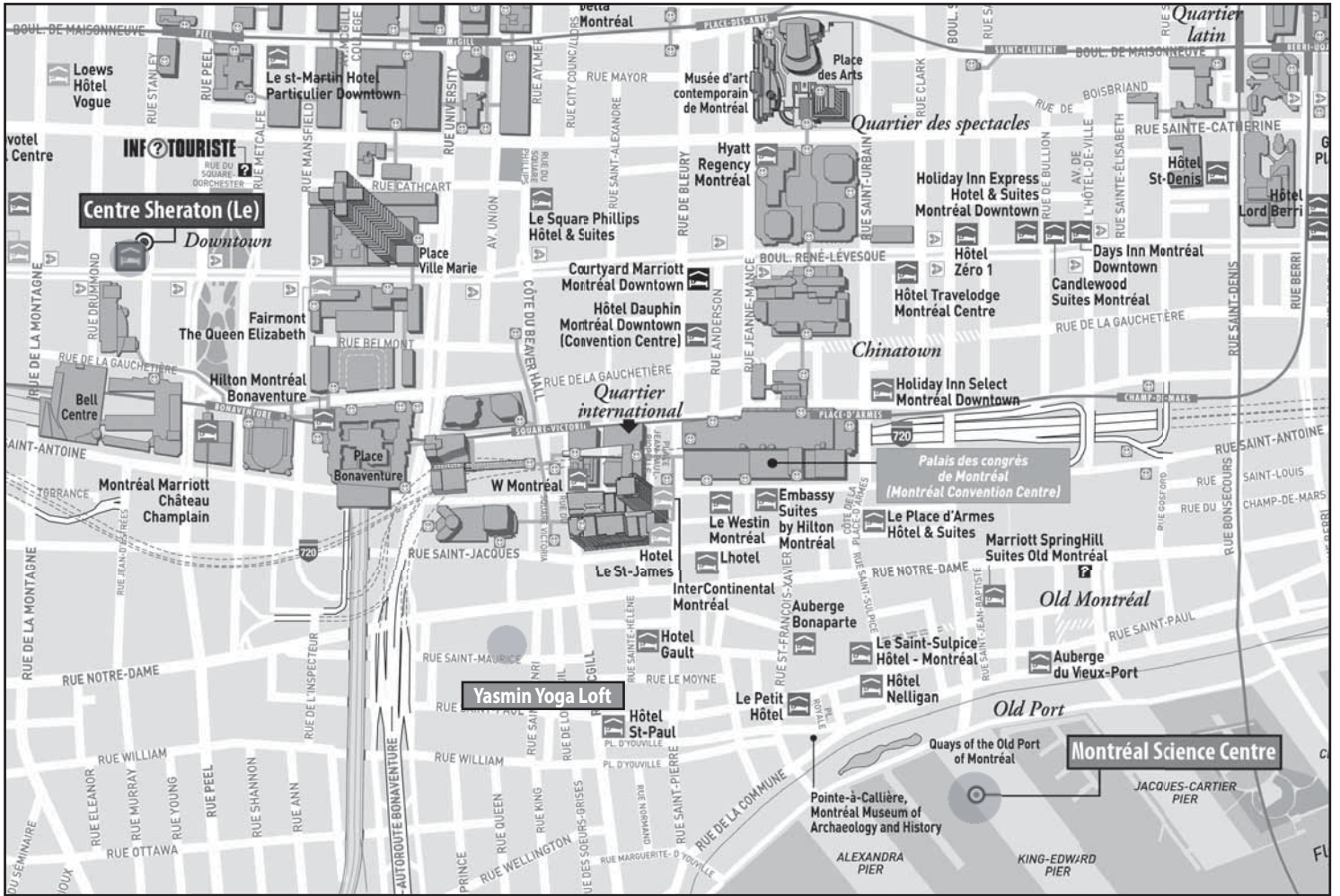
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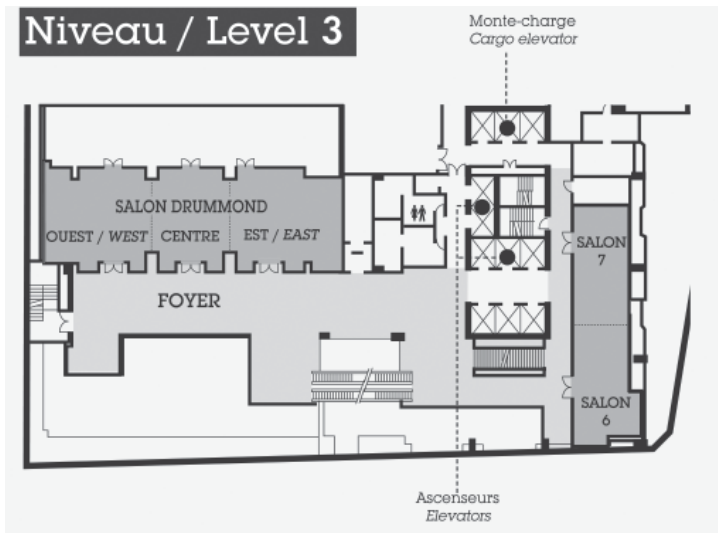
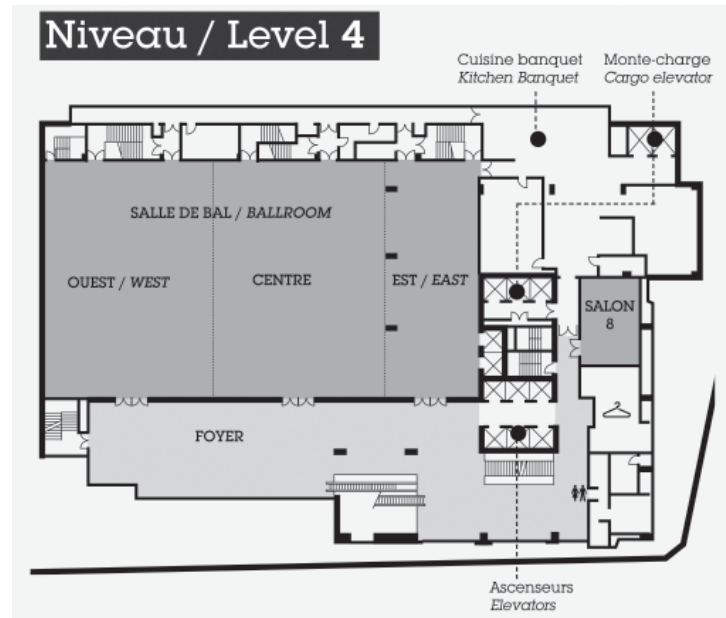
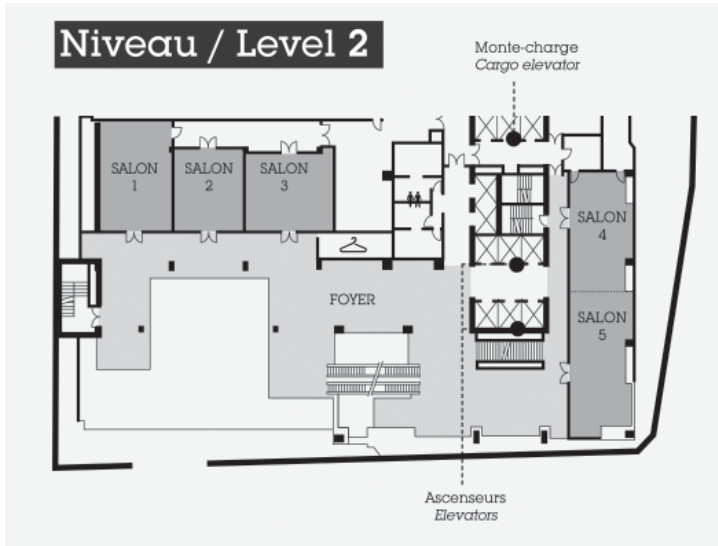
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The **Association québécoise pour l'Évaluation d'Impacts (AQEI)** was founded in 1991 and includes members from different sectors (government, consultancies, industry, non-profit organization, indigenous people organization, university), many of them working around the world in impact assessment.

AQEI's mission is to gather all individuals, professional or non-professional, generally interested in impact assessment in view of:

- Exchanging information on experiences and problems encountered
- Raising the professional standards of impacts assessment
- Broadening and improving the use of impact assessment
- Establishing links, cooperation, and exchanges with Canadian and international associations that share similar objectives

See www.aqei.qc.ca for more information.

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- 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
- Prepare a sustainable event report

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IAIA continues to strongly support the need to reduce the carbon footprint around our conferences.

To this end, we will be partnering with a local program, **Carbone boréal** (<http://carboneboreal.uqac.ca/home/>), selected by our host to offset our footprint. Carbone boréal is both a greenhouse gas offset program, through tree planting, and a research project led by researchers at the Université du Québec à Chicoutimi.

IAIA is donating \$5.00 of your registration toward the program.

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

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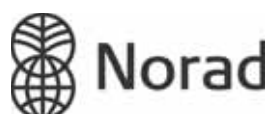
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