FINAL PROGRAM SPONSOR

D'APPOLONIA

CONSULTING, DESIGN, OPERATIONAL & MAINTENANCE ENGINEERING

PREMIER SPONSOR

European Investment Bank

The Edl Bank
Emergency phone numbers

» 112 - European emergency number
» 113 - Police
» 115 - Fire brigade
» 118 - First aid

In addition to Italian, the calls are answered in English, French and German. In some areas, they may also be answered in Slovenian.

Reception staff of Firenze Fiera (telephone +39 055 497 2003) will also be available to help delegates with an emergency call.

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.
IMPACT ASSESSMENT IN THE DIGITAL ERA

New technologies are influencing all aspects of our societies, and they play a pivotal role in promoting impact assessment and sustainability worldwide. The conference aims to advance a multidisciplinary discussion on the challenges and opportunities associated with the use of new digital technologies for promoting sustainability. Could smart cities and digital technologies be an opportunity for ecosystems and social resilience? How can big data strategies and online social participation improve sustainability? How do we face emerging social responsibility awareness of planning effects on health and sustainability of our future?

Welcome!

Miguel Coutinho
President, IAIA

It is my honor and privilege to welcome you to the IAIA15 Conference in Florence. For the 35th consecutive year, impact assessment experts from all over the world gather to learn from each other.

The theme of this year's conference is fascinating: digital. The Latin origin of this word is digitus (finger). And it's true: now we have the entire world in our fingers. We don't even need to press, just touch. How will this amazing soft technology change the world? How will it affect the way people communicate? How will it transform the way we collect and process information? The way decisions are made?

I am confident that the exceptional historical setting of Florence will provide opportunities to network among colleagues, learn from experts, rethink the way we do our jobs and share experiences that will energize us for the work ahead.

Enjoy the conference and your week in Florence, meeting new and old friends!

Keynote speakers

Christopher Hurst
Director General of the Projects Directorate, European Investment Bank, Luxembourg

Christopher Hurst is Director General of the Projects Directorate of the European Investment Bank. Composed of sector specialists, this directorate is responsible for project appraisal (including technical, economic, environmental and social issues) and the monitoring of project implementation, as well as for sector studies and policy.

Mr. Hurst joined the EIB in 1989 as an economist. After working on operations both inside and outside the EU, he was appointed Head of the Chief Economist's Office in 1996. From 2002 onward he has held a number of management positions within in the Project Directorate including responsibility for the Transport, Energy, and Water sectors.

Prior to the EIB, Mr. Hurst held research and teaching positions at Oxford and London Universities, and worked in management consultancy in the US. He has a doctorate from Harvard University and a degree in engineering from Imperial College, London.

Giuseppe Magro
Chair, IAIA15

Digital technologies are deeply changing the perception of the world around us, and it is very difficult for those who have the responsibility of strategic choices not to consider this new mainframe. Introducing new rules and limits without increasing cultural awareness of the advantages of sustainability for everyone and everyday life will make it difficult to convince the more than 7 billion people on the planet to adopt more responsible choices. Availability of data and information deriving from global digital connections will play a crucial role in sharing best practices and will involve institutions, companies, and people in collaborative promotion of social responsibility.

The goal of “Impact Assessment in the Digital Era” is to explore emerging governance strategies in an international context for collaborative inter-institutional and social promotion of Sustainability in our countries, in our cities, in our neighborhoods.

I welcome everyone to IAIA15 in Florence, a historical event in a historical city, to plan our future inspired by the amazing revolutionary birthplace of the Renaissance.

Giuseppe Magro, MSc in nuclear engineering, is an impact/risk assessment consultant specialized in predictive modeling and decision support systems. He is President of IAIA-Italia and creator of Q-cumber, the worldwide data platform for sustainability and governance in smart cities.

Ian Bailey
ERM Regional CEO for Europe, Middle East, and Africa

Ian Bailey is the Regional Chief Executive Officer for Europe, Middle East, and Africa at Environmental Resources Management (ERM), a leading global sustainability consultancy. He is a member of ERM’s Global Executive Committee and Senior Leadership Team.

Ian graduated from the University of Newcastle upon Tyne in 1979 with a BSc (single hons.) in Plant Biology. He then went on to complete an MSc and DIC in Environmental Technology at Imperial College, London, in 1980.

Ian has thirty years’ experience spanning the fields of contaminated land assessment, environmental risk assessment, environmental auditing and due diligence. He has worked across a number of key industry sectors including oil and gas, manufacturing, chemicals and pharmaceuticals, power, food and drink, and infrastructure and the built environment.
Experience IAIA conferences in a whole new way!

Keep important parts of IAIA15 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.
» Connect with other delegates based on shared interest or regions.
» 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.

The IAIA15 mobile app is proudly sponsored by ARCADIS.

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 jen@iaia.org.

If you are posting IAIA15 photos on your Instagram, Facebook, or Twitter account, please tag #iaia15 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 #iaia15. A summary of the tweets will contribute to the main conclusions and recommendations at the closing plenary.

VIDEO/AUDIO POLICY

Individuals officially identified by IAIA may photograph, videotape, and/or audiotape conference events. By attending the conference, you agree to allow your image to be used by IAIA.

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.

SUSTAINABLE CONFERENCES

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

• Limit printed materials, including a shorter final program made possible by the new mobile app and e-mail/Web communications
• Contract to the greatest extent possible with venues that participate in green programs (e.g., hotels that provide a linen and towel reuse program)
• Wherever possible, 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 return name badge holders

As per the IAIA Sustainable Event Policy, a post-conference report of the event will be prepared.

Reducing the Carbon Footprint

IAIA continues to strongly support the need to reduce the carbon footprint around our conferences.

To this end, US$5 from every conference registration will be donated to Treedom to help offset the carbon footprint of this conference.

Treedom promotes agroforestry projects, in particular, the planting of new trees to create environmental and social benefits. See www.treedom.net for more information.

Delegates are welcome to make additional suggestions on the IAIA15 conference evaluation form (which will be distributed electronically to delegates following the conference) or by contacting IAIA HQ any time.
Global Environment Award

Mathis Wackernagel was chosen to receive the IAIA Global Environment Award for developing the Ecological Footprint, a science-based measurement tool that tracks the planet’s ecological resources and human demand on those resources, thereby translating the complexity of humanity’s impact on the environment into a compelling, understandable, and actionable form.

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

Maria Partidário receives the Lifetime Achievement Award for her sustained and significant contributions to IAIA and to strategic environmental assessment theory, education, and practice, which has had notable international influence in advancing SEA to be widely accepted as a critical part of the decision-making process.

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.

Corporate Initiative Award

The European Bank for Reconstruction & Development (EBRD) was selected for the Corporate Initiative Award for its new Environment and Social Impact Assessment policies, showing EBRD’s commitment to deliver sustainable projects and its use of extensive stakeholder engagement in the development and implementation of such policies.

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.

Institutional Award

The Millennium Challenge Corporation (MCC) was chosen to receive the Institutional Award because of its ongoing commitment to environmental stewardship, as exemplified in its inclusion of natural resource management indicators in its country selection process, its early establishment of environmental guidelines and recent adoption of the IFC Performance Standards, and for specific efforts to address potential problem activities.

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.

IAPA Best Paper of 2014

The 2014 IAPA Best Paper Award is presented to Sara Bice and Kieren Moffat on behalf of all contributors to the December 2014 special issue on “Social licence to operate and impact assessment” (IAPA Vol.32, No.4).

Regional Award

The European Investment Bank (EIB) was selected as recipient of the Regional Award for its promotion of sustainable development—particularly the protection and enhancement of environment, the fight against climate change, and the respect of human rights—in its lending strategies and objectives.

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.

Individual Award

Peter Duinker was selected for the Individual Award for his dedication to improving and promoting impact assessment through his teaching, research, and practice, and for his approach to Valued Ecosystem Components (VECs), which changed the way many practitioners approach environmental and cumulative impact assessment.

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 Angus Morrison-Saunders, Australia, and Francois Retief, South Africa, for their dedicated work as co-editors of Impact Assessment and Project Appraisal from May 2009 to August 2014.

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

Angelo Jonas Imperiale, Italy, was selected as the recipient of the first Rita R. Hamm IA Excellence Scholarship. Angelo is a PhD researcher through the University of Groningen in The Netherlands, focusing on social impact assessment, community resilience, cultural geography, and rural development.

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.

If you would like to nominate an individual or organization for a 2016 award, please submit name and justification to the IAIA registration desk or e-mail info@iaia.org. Online nominations will open soon.
Conference overview

PRE-CONFERENCE

**Friday 17 April**
- 07:00: Registration for training courses
- 08:30: Technical visits
- 09:00: Training courses

**Saturday 18 April**
- 07:00: Registration for training courses
- 08:00: Technical visits
- 09:00: Opening plenary

**Sunday 19 April**
- 07:00: Registration for training courses
- 08:00: Technical visits
- 09:00: Opening plenary

**Monday 20 April**
- 07:00: Registration for training courses
- 08:00: Technical visits
- 09:00: Opening plenary

REGISTRATION DESK HOURS
- Friday 17 April: 16:00-18:00
- Saturday 18 April: 08:00-10:00
- Sunday 19 April: 08:00-17:00
- Monday 20 April: 08:00-16:30
- Tuesday 21 April: 08:30-16:30
- Wednesday 22 April: 08:30-14:30

**Opening reception**

**Tweet about your session at #IAIA15!**
Conference overview

All delegates are invited to the AGM...

Vote for your favorite poster by 11:00 today!
## Daily Schedule

### Friday 17 April

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<th>Time</th>
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<td>16:00-18:00</td>
<td>Registration (training course participants only)</td>
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### Saturday 18 April

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<tr>
<td>08:00-10:00</td>
<td>Registration (training course participants only)</td>
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<tr>
<td>09:00-17:00</td>
<td>Training courses <em>(room locations will be provided at check-in)</em></td>
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<tr>
<td></td>
<td>1. Quality Assurance in EIA: Guide and Review</td>
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<td></td>
<td>2. Human Rights and Impact Assessment</td>
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<td></td>
<td>3. Integrated Environmental Management: How to Make EA More Effective</td>
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<tr>
<td></td>
<td>5. Multicriteria Analysis for Impact Assessment: Theory and Practice</td>
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<td></td>
<td>6. Social Impact Assessment and Management</td>
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<td>7. Strategic Thinking SEA for Sustainability</td>
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<td>8. Raising the Bar of Biodiversity in Impact Assessment for Promoting Inclusive Development</td>
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<td>9. Resettlement and Livelihoods</td>
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<td></td>
<td>11. Cumulative Effects Assessment</td>
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<td>12. Towards More Sustainable Oil and Gas Sector Projects</td>
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### Sunday 19 April

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<th>Time</th>
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<td>08:00-10:00</td>
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<td>11. Cumulative Effects Assessment</td>
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<td>12. Towards More Sustainable Oil and Gas Sector Projects</td>
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<tr>
<td>10:00-16:00</td>
<td>Technical visit B: Medici Villas</td>
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<tr>
<td>10:00-16:00</td>
<td>Technical visit C: Chianti Region &amp; Antinori Winery</td>
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<tr>
<td>13:30-17:00</td>
<td>Exhibit and poster setup <em>(Villa Passi Perduti)</em></td>
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<tr>
<td>15:00-18:00</td>
<td>Technical visit D: Walking Tour of Florence</td>
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<tr>
<td>17:10-17:30</td>
<td>Student Fee Waiver Program Orientation <em>(Affari Adua 1)</em></td>
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<tr>
<td>17:30-18:00</td>
<td>Mentor/Buddy meeting <em>(Affari Adua 1)</em></td>
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<tr>
<td>17:30-19:00</td>
<td>Committee Meeting <em>(Sections Coordinating Committee)</em></td>
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### Monday 20 April

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<th>Time</th>
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<tr>
<td>07:45-08:35</td>
<td>IAPA Editorial Board Meeting <em>(Villa 5)</em></td>
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<tr>
<td>07:45-08:35</td>
<td>Section meeting <em>(Villa 5)</em></td>
</tr>
<tr>
<td>08:00-16:30</td>
<td>Registration</td>
</tr>
<tr>
<td>09:00-10:30</td>
<td>Opening plenary <em>(Villa Auditorium)</em> <em>Sponsored by ERM</em></td>
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<td>Chair: Giuseppe Magro, IAIA15 Program Committee Chair</td>
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<td></td>
<td>Giuseppe Magro. Opening remarks.</td>
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<td></td>
<td>Miguel Coutinho, IAIA President. Welcome and opening comments.</td>
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<td></td>
<td>Gianluca Galletti, Italian Environment Minister. Institutional speech and greetings.</td>
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<td></td>
<td>Peter Croal, IAIA Awards Committee Chair. Presentation of the IAIA Regional Award.</td>
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<td></td>
<td>Christopher Hurst, Director General, European Investment Bank. Acceptance of IAIA Regional Award.</td>
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<td></td>
<td>Keynote address: “IA in the Digital Era.”</td>
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<tr>
<td>10:30-11:00</td>
<td>Break <em>(Villa Passi Perduti)</em></td>
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<tr>
<td>11:00-12:30</td>
<td>Theme forums and concurrent sessions</td>
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<tr>
<td>12:40-13:30</td>
<td>Poster session <em>(Villa Passi Perduti)</em> <em>Sponsored by Golder Associates</em></td>
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<tr>
<td>13:30-14:20</td>
<td>Lunch <em>(Villa Passi Perduti)</em></td>
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<td></td>
<td>Buffet of Ideas <em>(see reserved tables; see page 52)</em></td>
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<tr>
<td>14:30-16:00</td>
<td>Concurrent sessions</td>
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<tr>
<td>16:00-16:30</td>
<td>Break <em>(Villa Passi Perduti)</em></td>
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<tr>
<td>16:30-18:00</td>
<td>Concurrent sessions</td>
</tr>
<tr>
<td>18:15-20:15</td>
<td>Welcome reception <em>(pre-registration required; see page 52)</em> <em>(Congress Center Garden)</em></td>
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### Tuesday 21 April

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<th>Time</th>
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<tr>
<td>08:00-08:50</td>
<td>Committee meeting <em>(Awards)</em></td>
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<tr>
<td>08:30-16:30</td>
<td>Registration</td>
</tr>
<tr>
<td>09:00-10:30</td>
<td>Theme forums and concurrent sessions</td>
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<tr>
<td>10:30-11:00</td>
<td>Break <em>(Villa Passi Perduti)</em></td>
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<td>11:00-12:30</td>
<td>Concurrent sessions</td>
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<tr>
<td>12:40-13:30</td>
<td>Annual General Meeting and Lifetime Achievement Award Presentation <em>(Affari Groundfloor)</em></td>
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<td>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, be present for the prestigious Lifetime Achievement Award recipient’s acceptance speech, and share in the commemoration of IAIA founding member Charlie Wolf.</td>
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<tr>
<td>13:30-14:20</td>
<td>Lunch <em>(Villa Passi Perduti)</em></td>
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<tr>
<td></td>
<td>Sections Rendezvous: See reserved tables</td>
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<tr>
<td>14:30-16:00</td>
<td>Concurrent sessions</td>
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</table>
16:00-16:30 Break (Villa Passi Perduti)
16:30-18:00 Concurrent sessions
18:10-19:10 Indabas (see page 52 and flip charts in Villa entrance for information)
20:00 onward Dine-Outs (see page 52)

### WEDNESDAY 22 APRIL

07:00-08:00 Fun Run (pre-registration required; see page 52)
08:00-08:50 Committee meetings
Training & Professional Development (Villa 103)
Publications (Villa 102)

08:30-14:30 Registration
09:00-10:30 Theme forums and concurrent sessions
10:30-11:00 Break (Villa Passi Perduti) Sponsored in part by Taylor & Francis
11:00-12:30 Concurrent sessions
12:00-13:30 Council meeting (Onice)
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.

13:00-17:30 Special meeting: World Bank Group Special Meeting Chair: Peter Croal, IAIA Awards Committee Chair.

13:30-14:20 Lunch (Villa Passi Perduti)
Sections: Rendezvous: See reserved tables (page 52)

14:30-16:00 Concurrent sessions
16:00-16:30 Break (Villa Passi Perduti)
16:30-18:00 Concurrent sessions
18:10-19:10 Indabas (see page 52 and flip charts in Villa entrance for information)

18:10-19:10 Section Meetings
Agriculture, Forestry, & Fisheries (Villa 4)
Biodiversity & Ecology (Villa 101)
Climate Change (Villa Onice)
Cultural Heritage (Villa 202)
Disasters & Conflicts (Affari 4th Floor)
Oil, Gas, & Renewable Fuels (Villa 105)
Social Impact Assessment (Villa 5)

19:10-20:00 Banquet (pre-registration required; see page 52) (Teatro dell’Opera)

### THURSDAY 23 APRIL

09:00-10:30 Concurrent sessions
09:00-10:30 Affiliates and Branches Forum (Villa 203)
10:30-11:00 Break (Villa Passi Perduti)
11:00-12:30 Closing Plenary (Villa Auditorium)
Sponsored by Canadian Environmental Assessment Agency
Chair: Giuseppe Magro, IAIA15 Program Committee Chair
Giuseppe Magro, Conclusions.

Peter Croal, IAIA Awards Committee Chair.
Presentation of the IAIA Corporate Award, Institutional Awards, and Individual Award.

Yaw Amoyaw-Osei, IAIA President-Elect.
“The Year Ahead for IAIA”

Sachihiko Harashina, IAIA16 Program Chair.
Invitation to IAIA16.

Giuseppe Magro, Closing remarks.

13:00-17:30 Special meeting: World Bank Group Special Meeting
(pre-registration required) (Affari 4th Floor)
13:30-16:00 Exhibit and poster dismantle
15:00-19:00 Technical visit E: Florence App Tour

### FRIDAY 24 APRIL

08:00-21:00 Technical visit F: Narni and TerneEnergia

### TECHNICAL PROGRAM: TOPICAL STREAMS

**CONFERENCE STREAMS**

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<td>E-Governance forum</td>
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<td>E-governance and impact assessment (CEA, SEA, BIA, SIA)</td>
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<td>EMS and social responsibility</td>
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<td>European forum</td>
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<td>Exploring opportunities and risks of global networking society</td>
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<td>Growing urbanization and smart cities solutions</td>
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<td>How communication technology is changing the role of experts and non-experts</td>
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<td>How instant availability of information is influencing impact assessment</td>
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<td>How stakeholder consultation is changing through new social participation</td>
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<td>New tools for risk assessors and managers</td>
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<td>New technology’s role in visualizing societal changes associated with major projects</td>
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**IAIA and IAIA SPECIAL-INTEREST SECTION SESSIONS**

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<td>Biodiversity &amp; Ecology</td>
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<td>Climate Change</td>
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<td>Corporate Stewardship &amp; Risk Management</td>
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<td>Cultural Heritage</td>
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<td>Disasters &amp; Conflicts</td>
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<td>IAIA special sessions</td>
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<td>Indigenous Peoples</td>
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<td>Indigenous Peoples and Cultural Heritage (joint session)</td>
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<td>Oil for Development</td>
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<td>SIA</td>
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<td>Students and Early Professionals</td>
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# Technical program overview

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<tr>
<th>Time</th>
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<tr>
<td>Monday 20 April</td>
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<td>09:00-10:30</td>
<td>Auditorium</td>
<td>Opening plenary</td>
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<td>11:00-12:30</td>
<td>Auditorium</td>
<td>30 Years of EIA of projects: Challenges in transposing the revised EIA Directive (II) (p45)</td>
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<td>12:40-13:30</td>
<td>Villa Room 5</td>
<td>Poster session (Villa Passi Perduti)</td>
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<td>14:30-16:00</td>
<td>Auditorium</td>
<td>Emerging uses of strategic environmental assessment (II) (p42)</td>
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<tr>
<td>15:00-16:30</td>
<td>Auditorium</td>
<td>Climate change: Assessment and decision making under uncertainty (p16)</td>
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<td>30 Years of EIA of projects: Challenges in transposing the revised EIA Directive (II) (p45)</td>
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<td>Social media and participation (p13)</td>
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<td>Tuesday 21 April</td>
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<td>09:00-10:30</td>
<td>Auditorium</td>
<td>Climate change, risk-management, and impact assessment in the digital age (p16)</td>
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<td>Ex ante assessment of economic governance (p45)</td>
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<td>Auditorium</td>
<td>E-learning in impact assessment: Meeting a demand? (p12)</td>
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<td>Evaluating the implementation of the SEA Directive (II) (p45)</td>
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<td>15:00-16:30</td>
<td>Auditorium</td>
<td>E-Governance in future cities: Needs &amp; opportunities (p25)</td>
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<td>Auditorium</td>
<td>Ecosystem services in SEA for regional spatial planning (II) (p27)</td>
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<td>09:00-10:30</td>
<td>Auditorium</td>
<td>Collecting and visually communicating IA data to decision makers (p20)</td>
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<td>The WBG and social media engagement (p13)</td>
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<td>Council meeting</td>
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<td>Capacity building and participation (II) (p46)</td>
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<td>E-Governance in future cities: Win-win strategies (p25)</td>
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<td>Ecosystem services in SEA and EIA (I) (p41)</td>
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<td>TI: Towards a systems approach to SEA capacity development: Lessons learned (p46)</td>
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**Technical program overview**

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**BIG DATA**

**Innovative decision support tools for impact assessments (I)**

*Monday 20 April | 14:30-16:00 | Villa 105*

**Innovative decision support tools for impact assessments (II)**

*Monday 20 April | 16:30-18:00 | Villa 105*

**DIGITAL MEDIA IN IMPACT ASSESSMENT**

**E-learning in impact assessment: Meeting a demand?**

*Wednesday 22 April | 11:00-12:30 | Villa 4*

**Online capacity building for sustainable development**

*Jean-Roger Mercier*

Exploring the potential of online courses to enhance capacity in the management of sustainable development based on real-life private initiatives.

**SEA and EIA: Face-to-face versus distant learning**

*Iris van Duren, Joan Looijen, Henk Kloosterman*

A distance course with emphasis on the use of spatial information in environmental assessment requires a different approach and specific e-learning tools than a similar face-to-face course.

**SEA distance learning: Trial and error?**

*Ineke Steinhauer*

SEA distance learning in Bolivia has been successfully applied in the last two years, but challenges remain.

**The process of shaping e-learning**

*Leila Neimane*

The research is a contribution to the modeling of an e-learning concept and using the e-learning method in the improvement of EIA effectiveness at the local level and abroad.

**Social media, impact assessment, and community voices**

*Monday 20 April | 14:30-16:00 | Villa 104*

**Panel Discussion**

*Chair(s): Will Rifkin*

Individuals and communities are today better able to voice concern about negative environmental or social impacts than ever before. Social media is at the center of this capability. But our understanding of how communities use social media to assert concern and control over impacts is limited. We explore ways individuals and communities are using social media in relation to project proposals and development.

**Enhanced public participation via digital tools**

*Tom Streather, Felix Rottmann*

The rapid expansion in access to affordable information and communications technology presents new risks and opportunities related to public participation in infrastructure projects.

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**Concurrent sessions**

**Impact assessment practitioners and academics present studies that illustrate how modelling and decision support tools and techniques can be used during the assessment of policies, plans or projects, with particular reference given to the use of new digital technologies, “big data,” and social networking.**

**Innovative decision support tools**

*Gernot Stoeglehner*

With strategic planning and assessment methods dialogues between planners, decision-makers and stakeholders can be supported by addressing the strategic nature of plans and assessments concerning visions, values, and measures.

**Scenario Room Project to support EIA in São Paulo**

*Maria Silvia Romitielli, Rodrigo Ferreira da Silva, Vinicius Travatini*

A Scenarios Room Project has been developed to support EIA in São Paulo State. It comprises a geoportal where projects are georeferenced and linked to an information database.

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**Big Data**

*The authors present a discussion of how IA data* is being integrated into decision-making in organizations from multiple sectors, suggesting a fundamental shift in the evolution of impact assessment.

**Policy assessment of forest bioenergy options**

*Ulla Mortberg, Xi Pang, Ola Saltinas*

Bioenergy from forestry is promoted for climate change mitigation, which may increase biodiversity impacts. GIS-based models were applied to estimate bioenergy yields and biodiversity impacts of forest management policy scenarios.

**Project lifecycle approach to decision making**

*Ben Witchalls*

Project lifecycle approach to an effective Social, Environmental and Health Impact Management Process (eSHRIMP) within the oil and gas industry: update on progress.
Social media and environmental enthusiasts
Fardin Alikhah, Sammaneh Kheirandish
This paper focuses on a web-based environment group that mobilises environmental enthusiasts via social media. Relying on the web content of Environment Cleaner Group's site as well as interviews, data were collected.

A social license, coal seam gas, and Twitter: #OMG
Sara Bice, Fiona Haines, Helen Sullivan
This study offers a critical evaluation of the concept of the social license to operate as expressed in the coal seam gas sector in Australia through an ongoing Twitter campaign.

SLO by community development and new social media
Eelco de Groot, Carla Martinez
Managing community expectations around oil and mining projects, with the use of new social media and governance bodies, to assure the social license to operate (SLO) and community development.

The role of digital media in IA
Wednesday 22 April | 16:30-18:00 | Villa Verde
Pecha Kucha
Chair(s): Marla Orenstein, Lindsay McCallum
As digital media emerge, how can we best position ourselves to take advantage of new opportunities? And what pitfalls should we beware of? This entertaining and engaging presentation will discuss the importance of EIA communications in social media.

From information provision to creative learning
Mania Partidário
This presentation shares thoughts on how digital technologies can improve the future of IA in the face of a needed transformation of IA practice from normative to learning dynamics.

Digital era without power sockets: IA in Africa
Pedro Bettencourt, Sara de Sousa, Nuno Silva, Pedro Moreira, Claudia Fulgencio
The digital era came with new tools and new possibilities in IA, but not in the whole world. Nemus’s experience in IA in Africa tells a whole different store.

Images with impact: Use of digital media in E/SIA
David Buack
A presentation of examples of effective use of graphics in E/SIA and the documentation of environmental conservation and sustainable development. Thoughts on the future use of media in E/SIA.

Promoting PE through digital media in Hong Kong
Chi Chung Chris Wong
This paper explores the relationship between information transparency and public aspirations in the EIA process.

Digital facilitation in EIA: The Hong Kong context
Tung-shing So, Chi-ying Law, Claras U
The paper gives an overview of the development in applying digital tools to facilitate the EIA process and public engagement in Hong Kong since the implementation of the EIA Ordinance.

Using digital media in stakeholder engagement
Lucian Wilkinson, Steve Green
Digital media can be used in IA to assist stakeholder’s understanding of technical issues and the project, allow more meaningful input, and improve engagement in consideration of project alternatives.

The WBG and social media engagement
Wednesday 22 April | 09:00-10:30 | Affari Groundfloor
Theme Forum
Chair(s): Mauricio Athie, Aaron Rosenberg
For a number of years, the World Bank Group has been using digital communication tools for the dissemination of project information, publications, and other Bank products. We introduce key elements of the WBG’s approach to social media engagement and present examples of how the WBG use social media globally followed by a panel discussion.

Examples of social media engagement in the WBG
Mauricio Athie, Christine Montgomery, Jude Hanan
World Bank Group encourages staff to make use of social media in a safe and productive way. This paper presents examples of how of social media is used by the Bank.

Engagement through social media: IFC’s experience
Aaron Rosenberg
This presentation will discuss the International Finance Corporation’s (IFC) experience in using social media to improve engagement and accountability with stakeholders and the challenges social media can present as well.

Social media in Eurasia: A World Bank perspective
John Mackendon, Paul Clare
This discussion focuses on the use of three social media channels in Europe and Central Asia: Facebook, Twitter, and Vkontakte. The focus will be on lessons learned and best practices.

How can ICT improve the WBG EHS Guidelines?
Gael Gregoire
Information and communication technologies helped the World Bank Group improve the Environmental, Health and Safety (EHS) Guidelines, their content, their usability and, ultimately, their development impact.

Use of satellite imagery as environmental impact assessment tool
Wednesday 22 April | 11:00-12:30 | Affari Groundfloor
Paper Session
Chair(s): Ernesto Monter
Large infrastructure projects have the potential to produce unexpected and/or induced environmental impacts. The use of improved digital tools, such as satellite imagery, unmanned aerial vehicles, and mobile networks can improve the interpretation of data and overall enhance the environmental impact assessment process of infrastructure projects located in remote areas.

Satellite imagery: A value for baseline definition
Christopher Polglase, Emien Myers, Doug Park
Satellite imagery supports efficient and accurate identification of baseline conditions for large and remote green field areas. Examples are provided from two recent mining EIAs in Ethiopia’s Danakil Depression.

Satellite imagery and mobile net in airport EIA
Ran Li
Based on the case study of an airport EIA project, we introduce the applications of the satellite imagery technology and mobile network which can improve efficiency of EIA investigation.

UAV aerial survey applications in EAs
Cori Stefan, Michael Bender, Barbara Wernick
Unmanned aerial vehicle (UAV) surveys have a variety of uses related to environmental assessments. This presentation will provide some recent examples using UAVs for baseline studies, monitoring, and interpretation of change.

Social media in public participation: Virus or vaccine?
Tuesday 22 April | 11:00-12:30 | Affari 4th Floor
Paper Session
Chair(s): Marco Sumini
Social media is increasingly used by communities and project proponents to make impact assessments more participatory. This session will present experiences from the perspectives of actors involved in the process on how social media can be used and measured more effectively.

Challenges of transparency and clarity of EIS
Elisa Vallius, Sakari Granlund, Jorma Jantunen, Jyrki Mustajoki, Jenni Neste, Sanna Vienonen
This paper presents some challenges in IA and suggests how to improve the quality of impact assessment and understandability of assessment reports by combining enhanced public participation and MCDA.

How social media supports stakeholder engagement
Tjark Huisman, Tjark Huisman, Frank Soree, Constantijn van Eys, Mark de Groot
Social media in project development: how big data can support stakeholder consultation. A case study where sentiment is being measured, influencers are determined, and stakeholder networks are mapped.

Social inclusion as follow-up strategy
Giuliana Faria, Silvana Ramos, Edna Silva
This paper shows how local environmental licensing committees’ (CALIAM) being responsible for licensing procedures can increase social participation in these processes.

The influence of social media in Australian EIA
Anthony Sutton
Social media is revolutionizing public participation in environmental impact assessment in Australia. This paper uses a number of recent case studies to demonstrate how social media enhances the EIA.
E-GOVERNANCE AND IMPACT ASSESSMENT (CEA, SEA, EIA, SIA)

Environmental assessment back and forth: Monitoring in the digital era

Wednesday 22 April | 16:30-18:00 | Villa 104

Paper Session
Chair(s): Alessandro Bonifazi, Mara Cassu

How is the rise of the digital era going to reshape monitoring and follow-up in environmental assessment? In this session, we discuss:

- Integration between monitoring processes
- Territorial strategies and integrative concepts (resilience, vulnerability)
- Feasibility of monitoring systems
- Shift towards flows of knowledge and decisions
- Conflicts in re-orienting decision making

Romaine hydro complex: 32 years of monitoring
Louise Emond

The Romaine complex will include four hydroelectric developments generating a total average annual output of 8.0 TWh. The environmental monitoring program was planned for a 32-year monitoring program from 2009-2040.

SS-turbidity correlation for monitoring dredging
Worawut Hamarn, Kittiphong Songrukkiat, Tongpol Pirunsup, Penrug Pengsombut, Yaowalak Chuchot

Turbidity measurement is often used as a real-time indicator of suspended solids monitoring if the correlation curve in that place has been completed prior to commencing dredging activity.

Advanced governance systems for impact assessment
Giovanni Caldana, Giuseppe Magro, Stefania Pellegrini, Gianvito Petruzzelli, Roberta Vicentini, Cinzia Vischioni

The presentation focuses on cases of governance tools application for participatory processes and cumulative impacts assessment by public administrations and consultants.

E-governance within Scotland
Vincent Onyango, Dumiso Moyo

The digital era is reshaping overall effectiveness of environmental assessment regimes. What lessons in terms of good practice, opportunities, and constraints can we learn from Scotland's experience?

Monitoring SLO through mobile phone use
David Jijelava, Frank Vanclay

The use of a mobile phone platform in monitoring makes it possible to track social license to operate and empower local communities.

SEA and decision making: Are we pressing the right buttons?

Wednesday 22 April | 16:30-18:00 | Villa 4

Paper Session
Chair(s): Peter Tan, Bryony Walmsley

SEA is “flavor of the year” in many countries nowadays, and perceived by many to be a magic cure. Governments, donors, lenders, and NGOs are commissioning SEAs in the belief they will improve decision making. SEAs should achieve this goal, but do they? We take a critical look at the role of SEA in influencing decisions.

The paradox of SEA progress and performance
Barry Sadler

Global environmental change is unprecedented over recent millennia and sets a profoundly different context for taking a critical look at the role of SEA in decision-making.

SEA Effectiveness in China and The Netherlands
Rob Verheem

The Chinese and Dutch Environment Ministries have an ongoing exchange on SEA experiences. The Appraisal Center for Environment and Engineering (ACEE) and Nethrlands Commission for Environmental Assessment (NCEA) have documented resulting insights.

Effectiveness, impacts, and benefits of SEA
Anders Ekborn

Review of effectiveness, impacts and benefits of SEA applications in developing countries and emerging economies: findings and recommendations to improve SEA practice at case level and system level.

SEA influence in policy formulation in Latin America
Santiago Enriquez, Ernesto Sanchez-Triana, Ana Luisa Gomes Lima

This paper reviews six policy SEAs conducted in Argentina, Colombia, Mexico, and Peru between 1999 and 2005 targeting both sectoral reforms and national environmental planning processes.

SEA country experience

Wednesday 22 April | 14:30-16:00 | Villa 104

Paper Session
Chair(s): Margarida Monteiro

This session presents SEA experiences conducted at the national level (on different continents) and aims at identifying a series of lessons learned, with a special focus on governance challenges. The final goal is to encourage practitioners to reflect on the progress made at the national level in conducting SEAs and identifying the remaining stumbling blocks.

Reflecting on SEAs usefulness in Italy
Paola Gazzola, Alessandro Rinaldi

By reflecting on the Italian context, this paper explores the extent to which political and technical limitations might be affecting SEAs usefulness and its ability to support decision-making for sustainability.

SEA of electricity plans in Korea
Ji Young Kim, Young Joon Lee

An SEA on national electric energy plans in Korea was hypothetically prepared. Four energy mix alternatives are reviewed with various environmental, economic and social factors. The SEA recommendations are listed.

SEA in Brazil: Legal-institutional challenges
Marina Montes Bastos

For SEA to be implemented in Brazil, it is necessary to develop more restrictive rules regarding administrative discretion in order to create an obligatory SEA procedure by the government.

Environmental assessment policy in China: Progress
Yuan Zhu, Huixian Zhao

The presentation summarizes the progress of China in policy environmental assessment and offers advice on its implementation under the new situations.

Transparency, Competence and Sustainability

A global provider with over 60 years of experience of highly qualified professional, technical and management Integrated Advisory Services to a broad range of key Players in the development of complex infrastructure projects, able to support from the early phases of conceptual design and definition of specifications up to implementation, optimization and validation.

Dedicated teams of environmental engineers, scientists and consultants, continuously supporting Financial Parties throughout the investment process in the oil&gas, energy and infrastructure sectors.

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Twitter! #iaia15
EMS AND SOCIAL RESPONSIBILITY

External environmental and social consulting: Changing roles and lessons learned (I)

Tuesday 21 April | 11:00-12:20 | Villa 101

Paper Session

Chair(s): William Johnson, Gianluca Cassulo

Over the past decade, major changes have taken place in terms of the way EIAs and ESM systems are prepared for development projects subject to financing by lenders. Stringent new lender requirements and the application of new communications technologies have made the development process challenging. External E&S consultants are increasingly called upon to work with lenders either directly or as independent consultants to reduce E&S risks to stakeholders. This session reviews this experience.

Adaptive ESMs: Dealing with complexity and uncertainty

Carlos Arias

The International Finance Corporation’s (IFC) environmental and social (E&S) risk management system is an adaptive system designed to effectively engage clients on E&S risk management, methodically identify risks, and define and communicate IFC’s expectations.

The view of an export credit agency: SACE

Claudio Falciano, Antonella Gentili

Environmental and social assessment for export credit agencies (ECAs) is related to the exporter’s role within a project. This presentation reviews the experience of SACE (the Italian ECA) when assessing environmental and social impacts of supported projects.

Infrastructure development partnership experience

Martin Lednor, David Blatchford

This presentation illustrates the experience of Infrastructure Development Partnership’s (IDP) working as project interface advisor to support and represent the project to both lenders and their independent consultants.

External environmental and social consulting: Changing roles and lessons learned (II)

Tuesday 21 April | 14:30-16:00 | Villa 101

Paper Session

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The project, the banks, borrowers and consultants

Ximena Herbas, Pablo Taborga

This presentation illustrates lenders’ requirements to finance complex development projects; borrowers’ obligations with respect to the projects; and independent consultants’ advice, assistance, and reporting on the projects’ performances.

D’Appolonia: Challenges and opportunities for IESC

Giovanni De Franchi, Alessandro Casartelli, Gianluca Cassulo

This presentation reviews D’Appolonia’s experience and describes how the approach to the independent environmental and social consultant’s (IESC) role has evolved thanks to new tools and technologies and refinement of financial institutions’ policies.

Raise the bar and lower the risk

Cleone Botelho, Randy Schulze

International financial institutions (IFIs) are focused on minimizing and controlling risks associated with international projects. This presentation presents critical success factors to be achieved in environmental, social and health, and safety.

An Equator Principles Bank’s view: Intesa Sanpaolo

Antonella Bernasconi

This presentation reviews Intesa Sanpaolo’s experience since the adoption of the Equator Principles (EP) in 2006 and their implementation through drawing up and applying the operating guidelines that drive each EP transaction.


click to view

NATURE – OUR HEALTH, OUR WEALTH

Green Week, Brussels, 3-5 June 2015

http://ec.europa.eu/environment/greenweek/

Nature is vital for our health and our wealth. Natural resources make life possible and drive the economy. Maintaining Europe’s competitiveness and protecting nature go hand-in-hand, as policies for nature and biodiversity play a key role in creating jobs and stimulating investment. Green Week 2015 will look at the countless benefits nature provides, and the framework we need to safeguard this essential asset.
Concurrent sessions

Environmental assessment of fracking: Is it enough?

Tuesday 21 April | 14:30-16:00 | Villa 6

Paper Session
Chair(s): Iñigo Sobrini

Many countries are banning fracking or approving regulatory constraints against it. Although these projects are generally EIA submitted, detractors argue that no assessment, no matter how deep or conscious it is, can guarantee no environmental damage. Being this evident, can EIA reduce impact probability so that projects achieve enough environmental security?

Exploring health impacts and EIA: “Another pebble?”

Sophie Grinnell

Health, including social determinants of health (socioeconomic factors), are not adequately considered within environmental impact assessments and associated planning considerations when undertaken for hydraulic fracturing.

The impacts and benefits of fracking

Fernando Rodriguez

While fracking enables more oil and gas to be extracted worldwide, the key is to reduce the environmental risks and impacts while capitalizing on the benefits of unconventional hydrocarbon development.

EIA for fracking projects: It is not enough

Nonita Yap

The paper uses risk analysis to conclude that EIA is not as yet a reliable tool that enables projects to be permitted with sufficient environmental security.

Alternatives analysis for GHG reduction: What is good practice?

Wednesday 22 April | 11:00-12:30 | Villa 104

Paper Session
Chair(s): Richard Grassoetti

IFC Performance Standard 3 and the recently-updated Equator Principles stipulate that projects emitting more than 100,000 tonnes of CO2e per year should undertake an alternatives analysis. This involves evaluation of technically and financially feasible and cost-effective options to reduce project-related GHG emissions, which poses many fundamental questions for projects which are often not fully considered. This session discusses best practice for alternatives analysis of GHG reduction.

Pollution abatement improvements via BAT licensing

Giancarlo Battistella, Giuseppe Di Marco

IPPC environmental permits for pollutant emissions abatement via adoption of best available techniques (BAT) conclusions, with monitoring and control and inspection also providing new opportunities for research matching the “new deal.”

Don’t pat ourselves on the back just yet!!

Mark Liskowich

Has the reduction of air emissions in certain jurisdictions actually resulted in an improvement—or an overall negative environmental impact to the environment?

GHG assessments: What are the alternatives?

Ian McCubbin, Charles Allison, Lisa Constable

This presentation reviews possible approaches to alternatives analysis and proposes elements of good practice based upon practical EIA experience within major global projects.

EXPLORING OPPORTUNITIES AND RISKS OF A GLOBAL NETWORKING SOCIETY

Climate change, risk management, and impact assessment in the digital age

Tuesday 21 April | 09:00-10:30 | Affari 2nd Floor

Theme Forum
Chair(s): Kin Che Lam

Kin Che Lam will discuss “Reshaping Impact Assessment for Climate Change in the East Asia Pacific Region.” Peter Croal will address “Using Social Media to Address Climate Change.” Philip Byer will provide an overview of best practices from recent climate change and IA assessments in the mining industry, and Weston Fisher will summarize “IAIA and Climate Change: Progress & Challenges.” Suggestions for new initiatives will be solicited from the audience.

Reshaping impact assessment for climate change

Kin Che Lam

The East Asia Pacific region will be significantly impacted by climate change, which calls for changes in the modality of impact assessment assisted by information technology.

Using social media to address climate change

Peter Croal

The presentation looks at the status of using social media to address climate change and how IAIA and its members can contribute to this global issue.

Best practices for addressing climate change risks

Philip Byer, Erik Sparling, Simon Eng, Caroline Rodgers, Al Douglas

Presentation of best practices for considering climate change and adaptation, findings from an analysis of recent assessments of mines against these best practices, and common challenges faced in these assessments.

Climate change and IA: Progress and challenges

Weston Fisher

This year’s “Status Report on IAIA Climate Change Actions” outlines IAIA’s accomplishments and helps define other needed actions. New ideas are welcome in this forum and the accompanying roundtable discussion.

Global perspectives on EA in mine closure

Thursday 23 April | 09:00-10:30 | Villa 5

Paper Session
Chair(s): Theunis Meyer, Reece Alberts

Globally, mines are closing, giving rise to concerns about potential environmental legacies. Environmental assessment (EA) is an important tool to identify and control such legacies. The session invites critical reflection on the use of EA in mine closure. Through sharing global perspectives, we seek to strengthen the use thereof.

Legacy of legacy mines in Canada and Philippines

Nonita Yap

This presentation looks at some legacy mines in Canada and the Philippines and suggests how EA can be a better tool for minimizing the negative legacy of abandoned mines.

From here to eternity: Assessing perpetuity

Alan Ehrlich

Assessing projects that require perpetual care involves different social and technical considerations. Perpetuity presents new challenges in terms of risk assessment, public concern, and communicating over very long time periods.

Sustainable closure: A new paradigm

Hermanus Prinsloo, Frank Pieterse

Anglo American Platinum is committed to retaining its social license to operate and as a result developed a new land stewardship paradigm that will support sustainable living beyond mining!

Climate change: Assessment and decision-making under uncertainty

Monday 20 April | 16:30-18:00 | Villa Verde

Paper Session
Chair(s): Leonardo Marotta

This session explores how risk and uncertainty have been dealt with or could be addressed within an impact assessment process.

IAIA and climate change: Progress and challenges

Weston Fisher

IAIA’s support to climate change adaptation and mitigation: how can we do more?

Risk decision-making in an uncertain world

Nicholas King

In a climate-uncertain world, new “smart” approaches to planning are needed based on risk assessment, enabling flexible and adaptive planning, and development, through decentralized but networked “grids” of infrastructure.

Metrics for evaluation and offsets in impact assessment

Leonardo Marotta, Lorenzo Benini, Gianmario Deandrea

The measurement of impact must be accurate, scientifically credible, and easy to understand. Our goal is to define a general metric in order to evaluate impacts (including cumulative ones) and sustainability.

A methodology to determine climate change impacts

Ronni L. Wilcock, Venkat Kolluru, Shwet Prakash

As future climate patterns become more uncertain, using historical climate to predict future climate risk becomes tenuous. We outline a forward-thinking method for predicting future climate risks.
**Launching EIA in new sectors presently underserved in practice**

**Wednesday 22 April | 16:30-18:00 | Villa 101**

**Paper Session**
Chair(s): Dick van Straaten

This session reflects on the challenges of conducting EIA in new or underserved sectors, and what can we learn from other practices and experiences.

**Assessing impacts on food security: EIA or SIA?**
Jeannette Tramhel

Growing concerns over food security demand that EIA, in addition to SIA, be launched in this underserved sector, particularly regarding impacts on the first pillar—“availability” (re: production).

**Adoption of guidelines on small-scale fisheries**
Ijeoma Vincent-Akpu, Bolaji Babatunde, Nenibarini Zabby

The voluntary guidelines for securing sustainable small-scale fisheries (SSF) if properly implemented will form the basis for achieving food security, poverty eradication, and equitable and sustainable development.

**“Assessment of Alternatives” in EIA reports of development**
G.V. Reddy, M. Srinivasa Reddy, Jyothirmai Janjanam

“Assessment of Alternatives” in EIA reports of development projects in India during 2009 - 2014. The EIA reports are reviewed for description and assessment of alternatives.

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**Why does EU not use SIA?**

**Tuesday 21 April | 11:00-12:30 | Villa 6**

**Panel Discussion**
Chair(s): Steef van Baalen

The objective is to learn if there is a need for better implementation of SIA in Europe and how we (the Europeans) might learn from experiences from outside the EU to translate into EU. Is Europe lagging behind or is there no need for SIA? We start with a presentation of South American experience, and then dive into the European perspective, guided by three speakers, followed by an interactive panel with the audience to find an answer to the session title.

**Social impact assessment as a negotiation tool**
Basílio Verduczco, Lucio Flores, Maria Basilia Valenzuela, Jacob Ramiro Reynoso, Joel Salvador Gallegos

This paper shows how stakeholders may use the information produced in SIA to establish priorities and negotiation strategies and to identify options that may result in mutual benefits.

**Three cases of conflict**
Anne Merid Hansen, Sanne Vammen Larsen, Sara Bjørn Aaen, Eva Ritter, Ivar Lynne, Helle Nielsen

Three energy projects in Denmark. Three environmental assessments lacking social impacts. Three cases of conflict.

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**Lessons learned from SIA in the EU state of Malta**
Steven Vella, Mark Reed, Ana Attlee

Maltese case studies explore the role of local context and disciplinary background of SIA practitioners in SIA implementation, discussing tensions between local context versus sharing good practice between Member States.

**Reflections on the development of SIA in Sweden**
Jon Halling

The SIAIs studied indicate a not-entirely-satisfying development of SIA in Sweden: one where developers seem to seek social arguments for their project or plan rather than social justice.

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**Crowd sourcing wisdom on the future of impact assessment in the digital era**

**Monday 20 April | 11:00-12:30 | Affari Groundfloor**

**Theme Forum**
Chair(s): Angus Morrison-Saunders, Jenny Pope, Francois Retief, Alan Bond

New technologies are influencing all aspects of our societies, and they play a pivotal role in promoting sustainability worldwide. The aim of this conference is to advance a multidisciplinary discussion about the challenges and opportunities associated with the use and diffusion of new technologies in impact assessment. Could “smart” cities and solutions be an opportunity for institutions, businesses, practitioners, and society in a web-connected world? How do we face social differences and challenges for planning the sustainability of our future?
Concurrent sessions

**Challenging resettlement - 2nd edition (I)**

**Tuesday 21 April | 11:00-12:30 | Villa Onice**

Panel Discussion

Chair(s): Luciano Campelo Bornholdt, Jorge Villegas

The first session presents the state of the practice in resettlement, land acquisition, and livelihood restoration, as well as innovative sectoral and national approaches. The second session focuses on cases from different countries and sectors illustrating how some of the complex challenges in the field have been addressed.

**Land access and resettlement: The state of practice**

Michael Steyn, Eddie Smyth, Ana Maria Esteves, Daniel Franks, Renal Vaz

Resettlement is failing communities. Livelihood restoration is not being properly planned or implemented. Professional planning and proper community negotiations are key. Practice is improving but requires more resources.

**Challenging centralized approaches to resettlement**

Christopher Johnson

An examination of innovative approaches to livelihood restoration in resettlement.

**India’s new Land Acquisition and Resettlement Act**

I.U.B. Reddy

Application of India’s New Land Acquisition and Involuntary Resettlement Act in World Bank-assisted projects in India.

**Innovative approach for resettlement in Uganda**

Mirko Palmesi, Magali Pollard, Amoahney Saad, Didas Muhammua, Moses Oteng, Marion Mayoba

Introducing the approach undertaken by three oil and gas (O&G) Joint Venture partners to address key challenges linked to resettlement planning in the Albertine Graven, Uganda.

**Challenging resettlement - 2nd edition (II)**

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**Economic displacement: Disaster or opportunity?**

Sunrita Sarkar

This presentation discusses the opportunities for creating sustainable livelihoods for economically displaced communities. Using case studies and examples from countries like Mozambique, upcoming trends and innovative practices will be presented.

**Promoting rather than avoiding resettlement**

Jimmy Mnsi

Resettlement can be viewed as an opportunity in some communities. Resettlement practitioners need to revisit the meaning of “minimize resettlement.”

**Resettlement in Moldova: Challenging aspects**

Grigore Stratulat, Gordon Appleby, Karen Fadely, Corneliu Busuioc

Resettlement in Moldova: peculiarities of using the digitized cadastre database and Moldovan legislation.

**Growing urbanization and smart cities solutions**

**Impact assessment and resilience to environmental stress in urbanized deltas**

**Wednesday 22 April | 14:30-16:00 | Villa 4**

Paper Session

Chair(s): Jan Nuesink

Growing cities in river deltas face environmental challenges to safeguard a sustainable future. Urban development, intensive land use, congestion, or climate effects increase vulnerability. Improved resilience to environmental pressures and water management challenges is in demand. This session explores cases and role of IA in interventions addressing resilience in delta areas.

**Cumulative environmental impacts of cascade hydropower**

Wanli Shi, Denghua Yan

Through the case of the middle and lower reaches of Yangtze River, the cumulative environmental effects of cascade hydropower on river ecosystems was assessed.

**The case of Cartagena: Canal del Dique, Colombia**

Hugo Woesthuis

Case study of the Canal del Dique project (Colombia), its background, and the way resilience is dealt with in the planning study.

**Resilience in the face of natural disasters**

Prince Mmom, Iboroko George-Opuda

Most parts of the Niger Delta were hit by severe flooding in 2012. This presentation reviews the traditional adaptation strategies for the 2012 flooding in parts of the Niger Delta, Nigeria.

**Dilemmas in the appraisal of multi-functionality**

Julieta Matos Castano, Timo Hartmann, Geert Dewulf

We provide a practice-based study about the challenges that practitioners face while defining and selecting function combinations in a multifunctional project in the South West Delta in The Netherlands.

**IA and urban resilience planning: A happy couple?**

Jan Nuesink

This presentation explores interrelationships of urban resilience planning and IA. Considerations elaborate on global case examples to feed discussion on (strategic) assessment’s role and conditions in delivery of sustainable resilience outcomes.

**How communication technology is changing the role of experts and non-experts**

**Effect of information and knowledge technologies in impact assessment**

**Tuesday 21 April | 11:00-12:30 | Villa 9**

Workshop

Chair(s): Luis E. Montañez Cartaxo, Javier Claussen, Elizabeth Brito

The continuous increase in the use of information and knowledge technologies (IKT) is changing the ‘game rules’ of impact assessment (IA) dynamics. This raises many questions, such as “Do IKTs ensure transparency, availability, and accessibility of information and knowledge for stakeholders’ participation?” Questions of this kind will be addressed after a few very short presentations. Come and have your say.

**EIASS as a web-based information service in Korea**

Kongjang Cho, Jung Ho Yoon, Tae Yun Kim

The EIASS (environmental impact assessment support system) web site was opened in Korea. EIASS is the online information service to provide information such as GIS data, local environmental quality, and spatial analysis data.

**Green ICT platform for environmental assurance**

Henry Leung, Andy Chung

DANTE Manager is the latest showcase of MIT’s culture of adopting green information and communications technologies (ICT) for operational efficiency and environmental assurance.

**A pressure-state-response approach to cumulative IA**

Luis Sanchez, Ana Claudia Neri, Patricia Dupin

The limitation of available project-level information to derive indicators for assessing cumulative impacts of spatially-concentrated mining projects showed that standardized databases are needed to provide landscape/watershed scale mitigation and management.

**ICTs and islanders regarding wind energy**

Judith Priam

For Puerto Rico, information communication technologies (ICTs) are part of IA since the first wind farm projects. For Guadeloupe, a European outermost region, a recent Directive modified the ICTs’ importance.

**Information technology for Inuit EIA participation**

Ryan Barry, Volter Blazevic, Amanda Hanson Main, Cesare Tatarelli

Information management for Inuit participation in environmental impact assessments in Nunavut, Canada.

**Knowledge integration in IA and mine closure plans**

Ross Mitchell, Bryan Leach

This presentation examines knowledge integration in environmental impact assessment and mine closure plans through three main questions, and recommendations are made for future incorporation of knowledge for the extractive sector.
HOW STAKEHOLDER CONSULTATION IS CHANGING THROUGH NEW SOCIAL PARTICIPATION

The digital interface with local community

Monday 20 April | 11:00-12:30 | Villa Verde
Theme Forum
Chair(s): Daniel Franks, Antoine Heuty
Digital technologies are reshaping the relationship between project developers and the communities around their projects. This session will hear from technology developers and community relations practitioners who are implementing mobile phone, software, and handheld digital technologies to complement traditional community engagement, social impact assessment, and management techniques.

Real time complaints handling using SMS technology

Antoine Heuty
The paper presents progress toward implementing a short message service (SMS) based information platform that connects communities to mining companies in areas of conflict, facilitating information flow between stakeholders.

Interfacing with community through IMS

Patrick Greigore
Information management systems (IMS) are powerful tools to deploy community teams on the ground. If properly implemented they can support team competencies, measure social performance, and improve relations with communities.

Measuring social license real time using mobiles

Kieran Moffatt, Airong Zhang, Naomi Boughen
This presentation describes a series of pilot projects in Australia and South Africa to generate a “real time” understanding of community sentiment using online and mobile phone technology platforms.

Empowering community with water monitoring devices

Flaviano Bianchini
The paper reports on support provided to communities to empower them to undertake monitoring with both “old” and “new” digital technologies.

Oil industry and stakeholders

Wednesday 22 April | 16:30-18:00 | Villa 105
Paper Session
Chair(s): Roberto Mezzalama
This session presents new tools and experiences of stakeholder engagement in the environmental and social impact assessment of oil and gas projects.

The use of tailored stakeholder management tools

Emanuele Bobbio, Sara Valentini, Roberto Mezzalama, Francesco Belfi, Vito Betti
In early phases of environmental and social impact assessment (ESIA) and project design, tailored stakeholder management tools provide valuable support in mapping stakeholders’ positions and analyzing their evolution, allowing a focused implementation.

Stakeholder engagement in Nigeria’s oil and gas industry

Chiakob Chivweze, Chiny Kennedy-Echetebe, Ijeoma Onyen
Judging from the maze of agitations from virtually every quarter in the country, particularly the “host communities,” it could be deduced that their stake is grossly marginalized.

A “Boundary Object” for a natural gas region

Will Rijkink, Vicki Uihmann, Jo-Anne Everingham, Katherine Witt
Development of onshore natural gas requires collaboration across business, government, and the community; one example is our co-creation of a decision tool, based on socioeconomic indicators, as a “boundary object.”

New ways of communication with stakeholders in the oil and gas industry

Monday 20 April | 11:00-12:30 | Affari 2nd Floor
Theme Forum
Chair(s): Arne Dalfelt, Peter Tarr
The digital era may lead to changed minds in the traditional oil and gas industry because of enhanced public knowledge and awareness leading to demands for changes towards more sustainable alternative energy sources.

Working together: A panacea for environmental management in oil and gas development

Koj Aghenoo-Efunan
Environmental management in the oil and gas sector in developing countries such as Ghana requires concerted effort from government, industry, development partners, and communities working together in partnership.

OECD/DAC ENVIRONET and developing countries oil/gas

Peter Croal
How OECD/DAC ENVIRONET can assist developing countries with environmental challenges related to the oil and gas sector.

Regulatory challenges in Timor-Leste’s petroleum industry

Yavarwi Corte Real de Oliveira, Jose Goncalves
History, challenges, and opportunities in the oil and gas industry in Timor-Leste.

Benefits of social media to oil and gas

Fernando Rodriguez
Similar to the use of digital technology for production, social media brings the capability to remotely troubleshoot potential problems at an earlier stage and maintain a license to operate.

Analysis of efficacy of environmental management

Arnold Waswa Ayiaza
The current policy, legal, and institutional framework for the management of environmental aspects of oil and gas, approaches, challenges, and proposed measures in mitigating the challenges.

NEW TECHNOLOGY’S ROLE IN VISUALIZING SOCIETAL CHANGES ASSOCIATED WITH MAJOR PROJECTS

Spatial models and data for land use planning

Thursday 23 April | 09:00-10:30 | Villa Verde
Paper Session
Chair(s): Tamara Hochstrasser
Innovative tools are sought for addressing conflicting policy targets regarding land use. With the help of case studies, this session will discuss how system models and spatial data infrastructures (SDIs) can help identify and resolve conflicts in land use policies.

Scoping land-use policy issues in Ireland

Tamara Hochstrasser, David Meredith, Alex Herzig, Alan Renwick, Nicholas M. Holden, Maarten Nevenhuijsen
Policy issues (including greenhouse gas mitigation) regarding land-use change in Ireland and appropriate modelling frameworks for policy appraisal are discussed.

New industrial cities: Planning for air quality

Marc Blanche, Ian James
The paper examines options available to the regulator at a planning stage that promote the sustainability of the industrial area in terms of ambient air quality.

Impact assessment as a design tool

Thursday 23 April | 09:00-10:30 | Villa 6
Paper Session
Chair(s): Elsa João
IA should be a proactive agent in sustainable development and not a regulatory hurdle. Enhancement can increase the value and business case of IA, and make better projects. However, IA can be criticized by people who fail to grasp its true potential. This session explores the use of IA as an inspiring design tool.

EA as a design tool: Lessons, impediments, enablers

Steve Borell
This paper explores recent experience in the perception and use of EA as a design tool and identifies key factors that have facilitated and hindered its use in this manner.

IA and decision-making in the spotlight

Clare Gronow, Lex Brown, Angus Morrison-Saunders
Attempts to demonstrate the substantive effectiveness of IA encounter theoretical and methodological hurdles. New research directions focus on better understanding the mechanisms by which IA affects decision-making and project design.

Integrating EIA with popular design methodologies

Neil Cachane, Elsa João
This presentation examines opportunities for environmental practitioners to work more closely with the broader design community by identifying areas where EIA outcomes can integrate with, rather than precede, construction design.
Using IA to design R&D programs
Ivar Lyhne
This paper documents how IA performs as a voluntary design tool in the case of a Danish R&D programme. IA, for example, influences focus areas, allocation of funds, and performance requirements.

Putting impact assessments into action
Douglas Mason, Jonathan Richart
We explore opportunities to ensure that environmental and social impact assessments recommendations are put into practice, both up front as a design tool as well as throughout project implementation.

Using EIA as a design tool for irrigation plans
Farahnaz Sabavari, Reza Khalili
This paper discusses the experience of applying qualitative and quantitative impact assessment methods simultaneously, so EIA can be used as a design tool for plans based on the environmental criteria.

Visualizing and data management

Thursday 23 April | 09:00-10:30 | Villa 105
Paper Session
Chair(s): David Burack
This session aims at promoting different methods of managing data and visual representations and reflects on how these can lead to better impact assessment.

Turning survey data into digital data overnight
Beni Patel
Surveys are paper-based forms that require manual transcription into digital format before the data can be used for analysis and decision making. See how technology can completely transform that process.

Visual impact assessment of hydropower plant
 Mojca Golobic, Nadja Penko Sedli, Alenka Cof, Jelka Hudfokin, Lucija Griti
An impact assessment of the hydropower plant on the Mura River (Slovenia) on the visual characteristics of the landscape is presented in this paper.

The ART of EIA: Creating a masterpiece
Richard Grossetti
This presentation differentiates on the art and science of preparing effective EIAs, focusing on often-overlooked subjective art of the EIA.

Portraying the local voice in public participation
Anna-Sofie Sjövold
This paper presents a research frame including photographic portraits of local representatives in northwest Greenland as a method to gain access to their opinions, values, and thoughts for the future.

NEW TOOLS FOR RISK ASSESSORS AND MANAGERS

Collecting and visually communicating impact assessment data to decision-makers
Wednesday 22 April | 09:00-10:30 | Affari 2nd Floor
Theme Forum
Chair(s): Teresa Bernhard
An accurate understanding of the environmental baseline situation is required in any impact assessment process to characterize impacts and risks, and inform decision-making. We showcase and provide an opportunity for dialogue on innovative digital approaches to collecting and visually communicating impact assessment data to decision-makers.

Do I have to read another million-word ESHIA?
 Dan Mistle, Tony Coggan, Iolina Sanchez, Chris Pratt
A discussion of the utility of visualization (specifically infographics and 3D animation) in environmental social and health impact assessment (ESHIA) and its application for multiple audiences and technical functions.

Who else cares about environmental information?
Charles Hemrick, Carrie Stokes
With visualizations, impact assessors can maximize the transferability of environmental information gathered and interpreted through the impact assessment process—particularly on land use—so it resonates with non-environmental development efforts.

Scenarios, data visualization, and mitigation
Joseph Kiesecker, Jeff Evans, Christina Kennedy
Scenario-based analysis and data visualization methods can help improve the value of EIA so that it can become more effective in fostering sustainable development.

Natural capital: Sweating the baseline data assets
Mengy Ma, Brendan Hart, Aiden Stope

Participatory GIS for resource mapping in SIA
Meshach Ojile, Deji Bodunde, Rekiyatu Okhade
A community/stakeholder integrated participatory GIS study undertaken as part SIA for airport project, involving a detailed resource inventory, mapping, and sensitivity of project environment.

Tools to integrate epidemiology and risk assessment in HIA
Monday 20 April | 14:30-16:00 | Villa 5
Workshop
Chair(s): Nunzia Linzalone
The evaluation phase in the process of HIA has been deepened in different studies in Italy. Tools to optimize the integrated use of the methods of epidemiology and risk assessment in the HIA process will be presented and presentations of methods and application in case studies will be provided.

Scenarios for air quality management in São Paulo
Simone Miraglia, Ricardo Popescu Junior, Karina Abe
A community/stakeholder integrated participatory GIS study undertaken as part SIA for airport project, involving a detailed resource inventory, mapping, and sensitivity of project environment.

Silent danger: A tragedy of cumulative impacts of pollution
Aungkana Boonsem, Passanan Assavarak
Cumulative impacts are overlooked during the EIA process. Most laborers did not have diseases prior to working in some areas; however, after 3-5 years, they started to develop health issues.

The national project “Tools for HIA” (t4HIA)
Marinella Natali, Adele Balkanini
The Italian project “Tools for HIA” addresses the need to provide tools for public health professionals and proponents to adequately develop the health component within SEA and EIA procedures.

Improving the participation of stakeholders in HIA
Nunzia Linzalone, Alessandra Pedone, Roberto Romizi, Tommaso Pagliani, Fabrizio Bianchi
Stakeholder participation is critical to identify methods, impacts, and actions for effective HIA.

Use of GIS to foster multidisciplinary ESIA
Wednesday 22 April | 11:00-12:30 | Villa 101
Panel Discussion
Chair(s): Jeremy Ansell, David Gibson
Complex land issues, production suitability, and environmental requirements are restricting critical investment in agriculture and forestry. This panel will review promising geospatial applications and tools that support accelerated and interdisciplinary ESIA for land-based investments. Panelists will explore GIS applications and remote sensing instruments for land use planning, forestry, and agriculture.

Using GIS to add value to ESIA
David Gibson
This presentation illustrates several applications of GIS in assessing and implementing forest management programs in several regions.

Landscapes modeling with GIS
Frank Altamirano
Geoprocessing tools, developed by GIS technologies and enhanced with good basemap baseline mapping, can estimate potential landscape impacts in a mine exploration at the southeast region of Peru in the Apurimac Region.

Resource region impact visualization tool
Will Riffkin, Bev Kubat, Alex Lechner, Margarette Scott, Neil McIntyre
Development of an integrated visualization tool promises to enable taking a risk-based approach to assessing trade-offs in land use among different development pathways for a mineral-rich resource region.

Assessing the energy-water-land use nexus
Ulla Mortberg, Lucia deStrasser, Mark Howells, Sara Gordon
System models addressing the nexus of energy, water, and land use in transboundary watersheds. Issues of stakeholder involvement and integration of ecosystem aspects in nexus assessments are discussed.
Use of UAVs in the development of ESHIAs  
David Blatchford, Martin Lednor  
The use of unmanned aerial vehicles (UAVs), in combination with traditional forms of data acquisition, potentially leads to more accurate assessments of impacts, reduced risks and costs, and enhanced environmental and social outcomes.

Digital technologies for spatial analysis of ecosystems and biodiversity  
Thursday 23 April | 09:00-10:30 | Villa 104  
Paper Session  
Chair(s): Lorenzo Bertole  
This session focuses on the last applications of digital technologies for spatial analysis of ecosystems and biodiversity.

Sensitivity analysis and ecosystem mapping in Peru  
Claudia Valencia  
Multi-criteria sensitivity analysis for the sustainable management of projects: a methodology was developed based on GIS and geo-spatial drone technology for studying sensitive ecosystems affected by linear projects in Peru.

Habitat mapping in a tropical environment using remote sensing  
Marco Rusmini, Jessica Hughes, Simone Poli, Lorenzo Bertole  
Remote sensing can assist IA experts in defining habitat distribution. This study demonstrates the value of fieldwork combination and remote sensing as a reliable approach for remote areas habitat mapping.

Digital database for 4 eco-channels in Hong Kong  
Mark Shea, Bin Chen, Vincent Liu  
A digital database developed by integrating ecological survey data from four eco-channels in Hong Kong to an existing web platform served for channel management and free public access.

Short-term data to long-term gain  
Carol Stefan, Amy Darling, Scott Grindal, Chris Godwin  
Regional trends for bird and bat species were evaluated using short-term data collected over many years. Results were used to inform coarse-scale data, resulting in more accurate and efficient assessments.

A new prize for best impact assessment inspired design?  
Tuesday 21 April | 16:30-18:00 | Villa 101  
Workshop  
Chair(s): Elsa Jodo  
It is important to find ways to communicate worldwide the best and most clever outcomes of impact assessment, to enthuse developers, engineers, politicians and decision-makers. This workshop discusses a potential new international competition of impact assessment: local and regional winners compete for national awards, and eventually an overall global winner is found.

Towards a global prize for best impact assessment  
Elsa Jodo, Sheena Boyd  
An international prize/competition of impact assessment could help communicate worldwide the best and most clever outcomes of impact assessment. This paper proposes how this competition could be carried out.

Showing excellence: The IAIAsa Premium Awards  
Carli Steenkamp, Francois Retief  
This paper examines how the IAIAsa Premium Awards programme has been implemented in South Africa since 2002.

The National Impact Assessment Program in Pakistan: Outcomes and lessons  
Thursday 23 April | 09:00-10:30 | Villa 101  
Panel Discussion  
Chair(s): David Annandale  
The National Impact Assessment Program (NIAP) was a trendsetting initiative of the government of Pakistan, IUCN, and the NCEA. It helped to significantly strengthen the EIA regime and to introduce SEA. It is hoped that lessons will be used by governments and donors to better design and implement similar programs in challenging developing countries.

NIAP in Pakistan: Overall introduction  
David Annandale  
For four years until its completion in 2014, the National Impact Assessment Programme (NIAP) broke new ground in Pakistan.

NIAP EIA Handbook and EIA curriculum for Pakistan  
Thomas Fischer  
The EIA Handbook and EIA course curriculum for higher education institutions in Pakistan were developed on the basis of a total of seven National Impact Assessment Programme in Pakistan (NIAP) workshops conducted between 2011 and 2013.

Revitalizing industrial growth in Pakistan: SEA  
Emesto Sanchez-Triana, Santiago Enriquez, Javaid Afzal, Ana-Luisa Gomes-Lima  
This presentation discusses the SEA approach adopted to identify environmental priorities and develop policy options to revitalize manufacturing in Pakistan by stimulating green industrial growth through appropriate reforms and investments.

EIA guidance for coal-fired power plants  
Miguel Coutinho  
A specific EIA guidance for coal-fired power plants in Pakistan was developed to support Pakistani provincial EPAs, financial institutions, and civil society to address its environmental and social concerns.

Transboundary natural gas pipelines  
Peter Tarr  
EIA guidelines for transboundary natural gas pipelines were developed to help the authorities and other stakeholders in identifying, avoiding, and mitigating major environmental and social impacts.

Partnership in capacity development  
Bobbi Schiff  
The Netherlands Commission for Environmental Assessment (NCEA) provided technical support to the National Impact Assessment Programme (NIAP) of Pakistan. We share some of the lessons learned from this experience.

Sustainability assessment: Latest research and emerging trends (II)  
Tuesday 21 April | 14:30-16:00 | Aduna 2  
Paper Session  
Chair(s): Jenny Pope  
Sustainability assessment (SA), defined as a process that directs decision-making towards sustainability, has been the subject of considerable recent research, both conceptual and practical. This session showcases some of the latest thinking in the field, including contributions to the forthcoming book Handbook of Sustainability Assessment.

Setting and measuring objectives in SA  
Samuel Hayes, Thomas Fischer  
This discussion, and the book chapter to which it relates, considers one of the fundamental aspects of many forms of sustainability assessment: the use of objectives.

Overcoming lock-in: A new tool for sustainability  
Amar Siuon En Wa, Jos Arts  
This paper discusses practical experiences with a new tool to assess sustainability of project scopes in early planning stages and the potential for sustainable area development in order to overcome lock-in.

Recent sustainability assessment tools: Urban apps  
Fodi Fadli  
This presentation sheds light on the use of sustainability assessment tools (SAs) in evaluating and measuring the sustainability levels of neighborhoods and urban districts.
Possibility of sustainability assessment in Japan
Sachihiko Harashina, Yoichi Kuwabara
The possibility of introducing sustainability assessment into Japan will be examined by analyzing a case of the planning process of a new national stadium for the 2020 Tokyo Olympic Games.

Sustainability content in Brazilian ethanol planning
Carlo Duarte, Tadeu Fabricio Molheiros, Amorim, Lucia Castelli Figueiredo Gallardo, Luis Sanchez
We gauge to what extent Brazilian national energy planning embraces sustainability thinking when framing ethanol strategies.

Alternatives: The backbone of EIA
Monday 20 April | 16:30-18:00 | Affari 4th Floor
Paper Session
Chair(s): Inga Carlan, Anna Longueville
As time has passed, the purpose and practice of investigating alternatives seems to have been lost. This session critically explores how the fundamental issue of the alternatives analysis has become one of the most abused parts of the EIA tool.

Why is the backbone softening?
Hein van Gins
Possible scenarios for handling the softening of the requirement for alternatives are discussed and include accepting the status quo and regulating environmental assessment differently.

EIA alternative analysis: Case studies
Pedra Bettencourt, Maria Grada, Nuno Silva
Discussion of EIA alternative analysis for two types of projects, one in Portugal and one in Brazil.

Alternatives in Swedish nuclear waste management
Antoinette Wambäck
The results highlight that over time, interactions between implementer and regulator have resulted in adoption of a shared understanding concerning downgrading the need for more thorough investigation of alternative methods.

Good practice on alternatives: The Portuguese case
Julio Jesus
The EU EIA Directive is quite weak regarding alternatives, Portugal is an example of good practice, with the public involved in the selection of alternatives submitted to the EIA process.

The zero alternative in EIA
Elina Baheram, Charlotta Faith-Ell
Exploring the purpose of the zero alternative and describing different interpretations and approaches to the zero alternative in Sweden.

What’s wrong with the alternatives analysis?
Anna Longueville, Inga Carlan, Patience Whitten
Some critics believe that the international community has passively allowed meaningful alternatives analysis to disappear in practice. If true, what are the reasons for this, and at what cost?

Art in impact assessment
Tuesday 21 April | 14:30-16:00 | Affari Groundfloor
Panel Discussion
Chair(s): Matthew Cashmore
This session seeks to foster discussion on how art might contribute to impact assessment and, in so doing, improve the political and social relevance of this family of policy tools. Panelists will be asked to reflect upon how art may help society understand and engage with such issues as alternatives, impacts, trade-offs and the long-term future. The panel includes established IA professionals and practitioners. The session will also involve short "interventions" that illustrate the potential contribution of art to impact assessment. The interventions will take the form of provocative think pieces, which include "pecha kucha"-style presentations and display items, as opposed to formal papers. Audience participation in the discussions will be strongly encouraged. Prepare to be inspired.

Images with Impact: Use of digital media in E/SIA
David Baruck
A multi-media presentation of examples of effective use of graphics in E/SIA and the documentation of environmental conservation and sustainable development. Thoughts on the future use of media in E/SIA.

Land art: Re-imagining impact assessment
Caroline Henderson
Our failure to address environmental issues is not a failure of information but a failure of imagination. A data-driven approach won’t drive a sustainable future. We need more emotional engagement.

But is it any good? The search for quality in impact assessment (I)
Tuesday 21 April | 09:00-10:30 | Affari Groundfloor
Theme Forum
Chair(s): Ben Cave, Alan Bond, Luke Sandham
How do different bodies involved in IA address quality? What makes for a good quality assessment? How do quality assurance systems differ between countries and sectors? We examine the simple, but central, challenge: how do we know if an impact assessment is any good?

Difficulties of EIA in urban development projects
Gabriele Burger
The requirement of EIA in urban development projects leads to a range of difficulties in the course of implementation, e.g., forecasting noise or air emissions on future residents.

Environment without humans?
Sandra Kainz
A biophysical understanding of environment in association with EIA risks the loss of the added value of EIA and the deferment of problems in subsequent project phases.

Minimum Elements and Practice Standards (MEPS) for HIA
Maria Orenstein, Murray Lee
This presentation will introduce the MEPS guidance document and describe its purpose, evolution, uptake, and weaknesses in order to stimulate discussion on how to define or identify quality in HIA.

EIA report quality: Lessons from the first 17 years
Luke Sandham, Alan Bond
EIA report quality in South Africa is satisfactory, but the perception of EIA is negative. The question is to what extent report quality is representative of EIA quality and effectiveness.

But is it any good? The search for quality in impact assessment (II)
Tuesday 21 April | 11:00-12:30 | Villa 203
Paper Session
Chair(s): Alan Bond
How do different bodies involved in IA address quality? What makes for a good quality assessment? How do quality assurance systems differ between countries and sectors? We examine the simple, but central, challenge: how do we know if an impact assessment is any good?

Quality control for environmental appraisal tools
Matthew Cashmore, Ivan Lyhne, Hens Runhaar, Frank van Loenhoven
The effects of quality control are investigated through surveys and in-depth interviews with actors centrally engaged with EA implementation and the testing of five hypothesis developed from conventional premises on quality control.

Is a quality mark a mark of quality EIA?
Josh Fothergill, Thomas Clayton, Peter Jones
The latest data from the UK’s ground breaking EIA Quality Mark scheme will be released, allowing four years of data across over 50% of UK assessments to be analyzed.

Pythia: An evaluation algorithm for EIA studies
Georgios Phakon Papakonstantinou, Panagiotis Kazamias, Constantinos Cassios, Dimitris Papakonstantinou
Pythia: A quality algorithm for evaluation of environmental impact assessment studies.

Aligning EIA with regulatory frameworks
Celesa Horvath, Jeff rey Barnes
Existing regulatory and management frameworks are often inadequately considered when determining the need for and scope of EIA and administering EIA processes. These issues are examined and practical improvements are recommended.

But is it any good? The search for quality in impact assessment (III)
Tuesday 21 April | 14:30-16:00 | Villa 203
Paper Session
Chair(s): Luke Sandham
How do different bodies involved in IA address quality? What makes for a good quality assessment? How do quality assurance systems differ between countries and sectors? We examine the simple, but central, challenge: how do we know if an impact assessment is any good?

Impact assessment amid corporate transitions
Garth Thomson
This presentation discusses the effect of transitions in management and/or ownership at mining projects on relationship building, regulatory compliance, and impact assessment.
Effectiveness of ESIA in mining finance decisions
Emily Harris
This presentation draws on direct experience from conducting and reviewing environmental and social impact assessment (ESIA) processes in the mining industry to consider the effectiveness of ESIAs in meeting project finance requirements.

What is under the table of fishery diagnostic?
Davi Rodrigues, Cards Priscila, Loureiro Barbara, Carolina Figueiredo, Samir Silva
Fishery activity diagnoses lack uniformity, and this fact is inducing conflicts between the oil and gas industry and the fishery community.

The weak link in EIA effectiveness: Challenges
Jeffrey Barnes, John Bayle
Observations of negative trends in the administration of EIA process in Canada that contribute to a decrease in EIA effectiveness and related quality are considered.

But is it any good? The search for quality in impact assessment (IV)
Tuesday 21 April | 16:30-18:00 | Villa 203
Paper Session
Chair(s): Peter Duinker
How do different bodies involved in IA address quality? What makes for a good quality assessment? How do quality assurance systems differ between countries and sectors? We examine the simple, but central, challenge: how do we know if an impact assessment is any good?

Improving screening practice: South Australia empirical case study
Beverley Clarke
This paper presents an empirical study from South Australia that investigates the adequacy of its discretionary screening process for development proposals between 2009 and 2014 and suggests practical improvements.

Quality-ensuring health impact assessments
Liz Green
An overview of the Welsh experience of regularly quality-ensuring health impact assessments (HIAs) reflects on many of the issues encountered and how they are being addressed.

The “grey” assessment practice of IA screening
Morten Bistrup
Through a case study, this presentation elaborates on the wider implications of the assessment-like practice which surrounds IA screening in Denmark.

IA research: Achievements, gaps and challenges
Thomas Fischer, Bram Note
A summary is provided of statements written by 20 leading global impact assessment (IA) researchers on achievements, gaps, and future challenges of IA research.

But is it any good? The search for quality in impact assessment (V)
Wednesday 22 April | 11:00-12:30 | Villa 203
Paper Session
Chair(s): Peter Duinker
How do different bodies involved in IA address quality? What makes for a good quality assessment? How do quality assurance systems differ between countries and sectors? We examine the simple, but central, challenge: how do we know if an impact assessment is any good?

Streamlining EIA in Australia
Carolyn Cameron, Dean Knudson
Australia is undertaking major reforms to streamline environmental regulation while maintaining high environmental standards and providing certainty and cost savings for industry.

Cross-country comparison of quality control in EA
Markus Gunther, Johann Koeppe
We analyzed approaches of quality control for environmental assessments in Canada, The Netherlands, United Kingdom, and the United States, and identified good practice elements.

Definitions: Baseline vs. VC integrity
Celesa Horvath
Defining significance based on degree of change from baseline can influence the adequacy of cumulative effects assessment. Defining significance based on valued component integrity is recommended to address the issue.

Narrative approach for significance determination
Kyle Knappfl, Carol Stefan
Biodiversity assessment examples illustrating a reasoned narrative approach taking impact assessment beyond impact classification matrices to a more transparent, meaningful, and relevant determination of significance that is easier to understand.

Impact significance in sugarcane industry
Carlos Duarte, Luis Sánchez
We evaluate the impact significance determination in Brazilian sugarcane mill projects, seeking to identify if impact significance is applied and how and if mitigation measures are associated with significance results.

How was it for you? The quest for quality
Ben Cave, Alan Bond, Luke Sandham
Did IAIA15 respond to our simple, but central, challenge: How do we know if an impact assessment is any good? We will discuss conference findings concerning quality in IA.

Increased complexity in impact assessment
Wednesday 22 April | 16:30-18:00 | Villa 203
Paper Session
Chair(s): Shirley Sau Ling Lee
Impact assessment is a constantly evolving process, and an increased number of issues are addressed by both decision-makers and project proponents in the assessment. This session presents aspects of complex projects and the SEA process and aims to identify emerging trends.

ECOstatus: Mapping a vision for urban rivers
Kari Fuller, Rebecca Skinner, Ross Marshall, Mark Ross, Angela Gurnell
Urban rivers are valued local resources and require sensitivity if positive relationship are to be maintained between the developer and local communities. Careful baseline assessment helps identify risks and opportunities.

Using CEA for urban expansion planning in China
Ning Yang, Juan Quintero
The EIA for an urban and industrial expansion project in southwestern China addressed environmental and social impacts at strategic level and incorporated cumulative impacts issues.

Integrating poverty, social, and environmental assessment
Javaid Afzal, Santiago Enríquez, Ernesto Sanchez-Triana
A review of the integrated strategic environmental, poverty, and social assessment that was prepared to enhance the sustainability of reforms in Pakistan’s trade and transport sector.

HOW INSTANT AVAILABILITY OF INFORMATION IS INFLUENCING IMPACT ASSESSMENT

Practical approaches to impact significance assessment (I)
Tuesday 21 April | 14:30-16:00 | Villa 104
Paper Session
Chair(s): Mika Marttunen
There is an increasing need for generic systematic approaches to support impact significance assessment. However, increasing systematization also involves several challenges including how to still keep the assessment and reporting illustrative and compact.

The enigmatic pursuit of significance
Jeffrey Barnes
This paper explores the pivotal nature of significance in decision-making in Canada and issues around its determination and contemplates the utility of the concept.

Defining significance: Baseline vs. VC integrity
Celesa Horvath
Defining significance based on degree of change from baseline can influence the adequacy of cumulative effects assessment. Defining significance based on valued component integrity is recommended to address the issue.

Narrative approach for significance determination
Kyle Knappfl, Carol Stefan
Biodiversity assessment examples illustrating a reasoned narrative approach taking impact assessment beyond impact classification matrices to a more transparent, meaningful, and relevant determination of significance that is easier to understand.

Impact significance in sugarcane industry
Carlos Duarte, Luis Sánchez
We evaluate the impact significance determination in Brazilian sugarcane mill projects, seeking to identify if impact significance is applied and how and if mitigation measures are associated with significance results.

IMPERIA: Impact significance assessment framework
Jyri Mustajoki, Mika Marttunen, Joonas Hokkanen, Sakari Gronlund, Timo P. Karjalainen, Anne Vehmas
We introduce an integrated framework providing new tools and guidance for supporting the coherent and transparent realization of the EIA process. The framework is based on experiences of real-life EIA projects.

Practical approaches to impact significance assessment (II)
Thursday 23 April | 09:00-10:30 | Affari 4th Floor
Paper Session
Chair(s): Lea den Broeder
There is an increasing need for generic systematic approaches to support impact significance assessment. However, increasing systematization also involves several challenges including how to still keep the assessment and reporting illustrative and compact.
Concurrent sessions

The UK’s approach to transitioning practice
Josh Fothergill, Peter Jones, Thomas Clayton
The approach EIA practitioners are taking to ensure the UK has a smooth transition to meeting the amended EIA Directive’s requirements.

Dealing with challenges: EA research needs in NL
Hans Runhaar, Jos Arts
Engaging in ongoing debates in other domains is essential to prepare for new challenges and may enrich both EA research and practice by fostering learning and innovation.

Practical challenges in the Netherlands
Hugo Woesthuis, Paul Eijssen
This presentation deals with the practical challenges in The Netherlands in implementing the new EU EIA Directive.

Effect characterization and the human disciplines
Marla Grenstein, Susan Dowse
Definitions for effect characterization are often formulated with reference to environmental disciplines and are not well-suited for human disciplines. We discuss characterization approaches suited for all disciplines in environmental assessment.

Accessing and applying
digital data: Successful and unsuccessful EIA case studies
Monday 20 April | 14:30-16:00 | Affari 4th Floor
Paper Session
Chair(s): Aaron Goldschmidt
Presenters will describe project-specific examples and discuss innovative methods to identify, access, and apply data via digital/electronic mechanisms. Further, presenters will share how access and application of these data to describe existing environmental and social conditions have either: 1) facilitated impact analyses resulting in project time and cost savings while maintaining positive public engagement and trust, or 2) prolonged project schedules and increased budgets that resulted in damaged project reputations.

IT applied to impact assessment in Brazil
Isabela Cardoso, Luis Correia, Marcio Rodrigues, Leandro Cordeiro
Achievements related to information and knowledge management tools in Brazil aimed at availability of data, information, and knowledge regarding EIA.

Stakeholder engagement in the digital age
Russell Foxwell, Iain Wood, Vanessa Sanderson, Barnaby Burman
Technological advances have increased the opportunity for stakeholders to engage. This presentation examines a transboundary gas pipeline that developed an innovative database to respond to this changing landscape.

Digital media in impact assessment during construction
Mohamed Hasan Isa
Monitoring records as per EIA and EM&A are regularly put on the website, including the stage of construction with photos for public view.

Application of big data in public participation
Jianbiao Tang, Wen Zhou, Yuhuan Zhang, Daku Wang
The general theory of emergency public participation and the applications of big data in static and dynamic decision-making.

Collaborative processes and spatial
data portals for enhanced IA
Thursday 23 April | 09:00-10:30 | Villa 4
Paper Session
Chair(s): Miles Scott-Brown
This session will examine how these new technologies and universal access to information can make for better impact assessment. Case study approaches and challenges will be presented.

Big data (gaps) and EIA
Rufus Howard
Exploring the benefits and challenges faced by the management and accessibility of big data in environmental impact assessment.

Geospatial tools to enhance ESIA quality for IFIs
Mandar Parasnis
Experiences of applying geospatial information tools to enhance the quality and depth of environmental and social impact assessments (ESIA) during the International Finance Corporation’s (IFC) investment due diligence of some complex projects.

Simple tools for smart results in the digital age
Alan N. Cochran
How increased access to data is enabling quicker, cheaper, and more flexible tools for better decision making at the strategic planning stage: an SEA case study in Namibia/Angola.

Spatial data portal enhances stakeholder relations
Kyla Jacobson, Claire Preece, Tim Taylor
Spatial data portal enhances stakeholder relations consultation and compensation process through increasing collaboration, transparency and efficiency.

An ontology-based knowledge network for EIA
Sanaz Sanaye Goldouz
An ontology model is a way to specify a conceptualization, and it has some nice properties for EIA knowledge sharing among artificial intelligence (AI) software.

Collaborative processes and IA data portals
Miles Scott-Brown, Tim Taylor, Kyla Jacobson
Static EIA/ESI reports do not provide access to EIA data. New technologies and approaches are clearly needed to assist in project planning and IA decision-making. We have the solution!

Looking for employees? Post your job listings on the jobs bulletin board.
Looking for a new job? See the jobs bulletin board.
Their administrative boundaries do not correspond to cities.

Cities also have a key role in the effort to mitigate discrimination, and poverty also exist.

Their administrative boundaries do not correspond to the physical, economic, cultural, or environmental reality of urban development, and they require new models of governance that are more appropriate and more flexible.

E-government tools, together with innovative practices of vertical and horizontal collaboration between different institutional levels, can represent items that can meet the challenges facing the cities of the 21st century.
Concurrent sessions

Agriculture, Forestry, and Fisheries

An expanded repertoire for the Agriculture, Forestry, and Fisheries Section

Tuesday 21 April | 16:30-18:00 | Villa 4
Panel Discussion
Chair(s): Patrick Duffy, Ijeoma Vincent-Akpu

To include the following in our AFF work: agriculture, biodiversity, fisheries and aquaculture, forestry, livestock and animal husbandry (including ranching), fertilizers and pesticides, water development, socio-economic audits, and gender considerations.

We seek your participation in this panel/attendee session, from which a journal publication will be prepared.

Biodiversity impact assessment: Methodological and technological advances

Tuesday 21 April | 14:30-16:00 | Villa 4
Panel Discussion
Chair(s): Elizabeth Clarke, Pippa Howard

What needs to be in place to demonstrate no net loss, and what really counts when it comes to the mitigation hierarchy? What approaches are most likely to help achieve this at a site, landscape and ecosystem scale? Short presentations on innovative tools and panel discussion from the business-biodiversity interface.

Biodiversity & Ecology

Biodiversity conservation and management challenges faced by IFIs

Tuesday 20 April | 11:00-12:30 | Villa 4
Panel Discussion
Chair(s): Alistair Clark

This panel session is intended to shed light on the role of, and challenges faced by, all international finance institutions (IFIs) in managing biodiversity. Through audience participation, the session will share pragmatic lessons learned gained through multi-sectoral and regional project experience to help further advance biodiversity conservation and management best practices.

Can one effectively achieve NNL on the ground?

Eva Mayerhofer

International financial institutions (IFI) standards are based on the mitigation hierarchy with an objective of no net loss (NNL). There is a divide between conceptual appropriateness and practical experiences, which the EU could bridge.

Leveraging biodiversity management action through infrastructure projects in Latin America and the Caribbean

Graham Watkins

In Latin America and the Caribbean, new infrastructure is being built close to, or within, important habitats. Engagement with governments and infrastructure project sponsors can help minimize impacts and potentially improve land use planning and management.

ECAs and biodiversity: Problems and lessons learned

Claudio Falciano

Assessment of impacts on biodiversity produced from the projects in which export credit agencies (ECAs) are involved is somewhat challenging. Using case studies, this presentation will summarize SACE’s (the Italian ECA) experience in facing biodiversity issues.

To go or no go: A look at IFI lending requirements

Peter Moore

An inside perspective into international financial institutions’ (IFI) project appraisal and biodiversity risk management approach.

Digital biodiversity data for fast-tracking impact assessment

Monday 20 April | 14:30-16:00 | Villa 4
Paper Session
Chair(s): Vinod Mathur, Asha Rajvanshi

This session is aimed to help impact assessment professionals share their delights, despair, and new hopes of evolving mechanisms of sharing, generating, and processing biodiversity relevant data in the digital age.

Designing alternatives for landscape in IA

Willemijn Smal

The Netherlands Commission for Environmental Assessment has developed an approach to give landscape a more prominent role in Dutch IA practice and will share some experiences.

Digital biodiversity data for EIA decision-making

Vinod Mathur, Asha Rajvanshi

Digitally-available biodiversity data has the potential to enhance quality of the EIA decision-making process. Nevertheless, several barriers have to be addressed to make the best use of data publishing frameworks.

Geodatabases for impact assessment

Hein van Gils

We suggest a contract clause for submission of original biodiversity data in a prescribed format in a dedicated geodatabase. Further, the inclusion of a standard budget-line for geodatabase products for impact assessments is advocated.

Survey for African freshwater fish using eDNA

Suzi Corry, Phil Atkinson, Alfred Vogler, Douglas Yu

ERM has teamed with researchers to trial environmental DNA as a commercial survey technique for freshwater fish in Africa. The technique uses DNA extracted from water to identify species present.

Collecting quality biodiversity data digitally

Kyle Knopf, Carol Stefan

This paper presents examples of how digital recording tools and other technological innovations are improving the ability of impact assessment practitioners to efficiently and accurately collect data for biodiversity baselines.

How much data is enough? Baselines and big data

Mervyn Mason

The benefits and challenges of using big data for biodiversity baselines for four projects on three continents.

Integrated regional planning: A prerequisite for impact assessment

Monday 20 April | 14:30-16:00 | Villa Onice
Paper Session
Chair(s): Dennis Grossman

This session showcases the benefits of an integrated regional planning approach for the assessment of development projects and to guide the application of mitigation resources to protect regional conservation priorities.

Gray and green: Planning for advance mitigation

Douglas Wheeler

California’s Natural Communities Conservation Planning (NCCP) program demonstrates the feasibility of advance mitigation to protect biodiversity on a landscape scale while facilitating the development of much-needed infrastructure.
The process for drafting a regional plan
Elke Nickel, Jerzy Ruszczynski, Zdzisław Petlicki
The challenges for drafting an integrated regional development plan for a river in Poland, the process designed to meet those challenges, and its contribution to a future EIA.

Merging bottom-up and top-down approaches in IRPs
Nicholas King
Communities on South Africa’s Wild Coast are driving “bottom-up” planning in opposition to externally-imposed top-down planning. Recent cooperative meetings suggest a more integrated regional planning approach may be possible.

Operationalizing biodiversity offsetting via EIA
Rachel Morrison, Adam Barker, Carys Jones
Operationalizing biodiversity offsetting through environmental impact assessment: interactions and outcomes for no net loss of biodiversity.

Biodiversity impact assessment: 10-year review
Monday 20 April | 16:30-18:00 | Aduna 2
Roundtable
Chair(s): Elizabeth Clarke
It has been 10 years since “Biodiversity in Impact Assessment” was published by IAIA. Facilitated by the Biodiversity and Ecology section co-chairs and attended by experts working on the business-biodiversity interface, this roundtable will review the document. A core working group will be established to discuss the document in advance, before meeting at the conference to discuss both possible amendments to the document and potential new guidance, and effective means of communicating best practice.

Ecosystem services in SEA for regional spatial planning (I)
Tuesday 21 April | 14:30-16:00 | Affari 4th Floor
Paper Session
Chair(s): Roel Slootweg, Ulrike Troeger
Spatial planning is often characterized by a demand-driven approach, producing a wish list of development plans. Ecosystem services assessment in SEA for such plans looks at development opportunities and constraints of a region and the supply side. Lessons from practical experiences will lead to best practice recommendations and an IAIA FastTip.

Feasibility study on “Satoyama Banking” in Japan
Akira Tanaka, Masashi Kobatake
The first “Satoyama Banking” pilot project involving multiple stakeholders of one 6.4 ha Satoyama ecosystem consisting of former paddy fields and second-growth forests in a Chiba City suburb has feasibility.

Subjective assessment of forest ESs in Japan
Kichiro Hayashi, Makoto Ooba, Yasuhiro Hasegawa
Mountain rural towns in Toyota City, Japan, were selected for the study. A drop-off and pick-up method was used for the survey of 12 forest ecosystem services.

Nature conservation in regional spatial planning
Nunu Pesu
A focus on nature conservation in regional spatial planning in Finland. I use the driver-pressure-state-impact-response (DPSIR) framework and several digital materials and GIS databases that make this research possible.

CES provision and pressure in compacting Stockholm
Juan Azcarate, Jan Hass, Ulla Mortberg, Sara Odelius, Bent Balfores
Valuations of green area cultural ecosystem services (CES) provision-pressure relations and SEA can contribute to improve green area planning and place CES in the compact city planning agenda.

SEA on hatchery resource management plans in US
Pamela Gunther
SEA for hatchery resource management plans to determine biodiversity impacts and appropriate mitigation for Puget Sound salmon and steelhead hatcheries that produce 146 million fish per year.

Ecosystem services in SEA for regional spatial planning (II)
Tuesday 21 April | 16:30-18:00 | Affari 4th Floor
Paper Session
Chair(s): Roel Slootweg, Ulrike Troeger
Spatial planning in Africa’s growth corridors
Andrea Athanas
Using participatory land and resource planning in growth corridors across Africa to secure rights and benefits for communities and to ensure ecosystem services needed for economic development are sustained.

People, plans, nature and wealth: Tana Delta, Kenya
Peter Nelson
An examination of the role that ecosystems service analysis has played in the land use plan and SEA for the Tana Delta in Kenya.

SEA for land use plan: Tana Delta, Kenya
Arend Kolhoff
Lessons learned from a comparison between two studies for Tana delta, Kenya: SEA for a land use plan (2013) versus an ecosystem services valuation study (2014).

Ecosystem service assessment in SEA in Namibia
Ulrich Scheiffer, Ulrike Troeger, Roel Slootweg
First time to include ecosystem services in SEAs for Namibia’s regional planning process.

Green infrastructure: Using a holistic approach
Tuesday 21 April | 14:30-16:00 | Villa 202
Paper Session
Chair(s): Francisco Dallmeier, Benjamin Wilson
A holistic understanding can benefit development before implementing the mitigation hierarchy, which addresses actions to reduce environmental impacts. Presenters discuss the economic analysis of alternatives, cooperative planning for environmental management, ecosystem services, and how a holistic view can provide additional alternatives and benefits that are not normally assessed.

Concurrent sessions

Humboldt penguin at PERU LNG marine terminal
Antibol Diaz, Martha Ly
How green infrastructure can protect and preserve endangered species on the Peruvian coast, a rich upwelling ecosystem with no background on similar artificial penguin colonies.

Smart green infrastructure for transport corridors
Leanne Farrell, Andrey Kuslin
Challenges and good practices from South and Southeast Asia are highlighted for integrating biodiversity considerations, especially wildlife migration and movement, into development of regional trade and transport corridors.

Promoting avoidance through cost-effective routing
Geoffrey Mwedeke, Grace Nanjendo, Dan Segan, Irene Burgulis Area, Rhona Barr, Andrew Plumptre
This presentation shows how economic and GIS tools can be used when routing linear infrastructure to avoid biodiversity loss in a cost-effective manner.

Identifying priority ecosystem services in Peru
Helen Nyul, Oriol Lopez
Reposl and Fauna & Flora International’s (FFI) ecosystem services risk management project in Peru identified the importance of coordinating a multi-disciplined team and the need to strengthen and align social and biodiversity baselines.

Sustainable infrastructure in Latin America
Graham Watkins, Boulet Emmanuel
This presentation examines the application of the mitigation hierarchy in case studies of "sustainable infrastructure" projects in Latin America including innovative approaches to offsets.

Mitigation hierarchy best practices: Green infrastructure case studies
Tuesday 21 April | 16:30-18:00 | Villa 202
Paper Session
Chair(s): Raymi Beltran, Francisco Dallmeier
Effective guidelines to integrate conservation priorities with development needs are being developed and revised globally. Examining current legislation to promote avoidance, raising awareness of natural solutions for restoration, and exploring financial incentives to promote implementation, authors present new toolkits and potential guidance to integrate development and conservation.

The avoidance stage of the mitigation hierarchy
Samir Whitaker, Genevieve Hayes
Birdlife International, in collaboration with several partner organizations, aims to provide decision support tools on the avoidance phase of the mitigation hierarchy based on real-world examples of global best practice.

Gt: Nature-based solutions for business
Johan Lammerant, Violaine Berger, Tatiana Fedotova, Ginny King
There is a strong business case for companies to invest in green infrastructure. This presentation presents the intermediary outcomes of the World Business Council for Sustainable Development (WBCSD) “Investing in Green Infrastructure” business solution.

Financial incentives for the mitigation hierarchy
Irene Burgués Area, John Reil, Alfonso Malky
This presentation explains the logic of linking EAs and financial incentives to insure application of the mitigation hierarchy. It also highlights some of the most common financial incentives options.
Offset planning: Green infrastructure case studies

Tuesday 21 April | 14:30-16:00 | Villa 105

Paper Session
Chair(s): Lori Conzo, Francisco Dallmeier

Offsets have become an important component for addressing impacts, but lack extensive planning. However, offsets can be effective if prepared appropriately and managed on a regional or national level. Panelists will use case studies to discuss internal offset planning and cumulative benefits from regional coordination.

Using biodiversity plans to guide mitigation
Jessica Hughes, Mark Botha, Susie Brownlie, Phil Desmet

Biodiversity offset planning for a mine in a global biodiversity hotspot in South Africa relied on conservation planning tools to identify offset areas following a spatially-explicit process.

Green infrastructure as a biodiversity offset
Mojca Golobic, Katja Novak

Integrating biodiversity offset measures into green infrastructure enables their use for recreation and education and justifies the involved costs as well as increases their long-term environmental benefits.

Funding conservation through biodiversity offsets
George Ledec, Sally Johnson

Biodiversity offsets provide an underutilized opportunity to mobilize substantial new funding for protected areas and similar conservation investments. An emerging challenge is supplementing project-specific offsets with an aggregated offsets system.

Reviewing mitigation hierarchy implementation

Tuesday 21 April | 16:30-18:00 | Villa 105

Paper Session
Chair(s): Alfonso Alonso, Benjamin Wilson

The mitigation hierarchy provides guidance for conservation, but it is important to review implementation and its benefits. Presenters examine case studies where implementation was reviewed and discuss reasons for success or failure. Projects include a pipeline in Peru, a highway in China, the metro in Portugal, and infrastructure in Denmark.

Challenges of quantifying the mitigation hierarchy
Francisco Dallmeier, Pablo Taborga

Science-based monitoring provides adaptive management feedback to set the basis for “no net loss.” PERU LNG with Smithsonian’s Center for Conservation designed an effective methodology to quantify the mitigation hierarchy.

Environmental supervision in China: YiBa Highway
Juan Quintero, Ning Yang

Independent environmental supervision is proven highly valuable for large-scale infrastructure projects that are carried out in environmentally sensitive areas.

The Red Line (Oriente-Aeroporto) of Lisbon’s Metro
Ana Cerdeira

This presentation describes the environmental follow-up developed in the last decade and during the infrastructure project of Lisbon’s Metro, the Red Line, between Oriente and Aeroporto.

Mitigating for nature in infrastructure projects
Sanne Vammen Larsen, Lone Kørnøv, Per Christensen

This paper presents results of a Danish study of suggestions for, and implementation of, mitigation efforts directed at nature protection in EIA of Danish infrastructure projects.

Mitigation hierarchy best practices for roadways

Wednesday 22 April | 11:00-12:30 | Villa 105

Paper Session
Chair(s): Benjamin Wilson, Francisco Dallmeier

Presenters discuss the use of the mitigation hierarchy to reduce impacts and integrate conservation priorities with road development needs. Presentations cover an economic analysis of alternatives for avoiding impacts, the benefits of reduced road development, designs to reduce the environmental impact, and a review of current offset practices.

Making the economic case to promote avoidance
Irene Burgues Arrea, Aaron Bruner, Rhona Barr, Alfonso Malky, Anna Behm Masozera, John Reid

This presentation shows how economic tools, such as cost benefit analysis and valuation, can be used to demonstrate that the avoidance of biodiversity loss makes economic sense.

Camisea
Sandra Martinez, Gustavo Mange

The offshore inland approach used in the Camisea Gas Project (Cuzco, Peru) is discussed, presenting the results of over a decade of intensive socio-environmental monitoring.
**CLIMATE CHANGE**

**Assessing climate change and natural disaster impact on urban area**

*Wednesday 22 April | 16:30-18:00 | Affari 4th Floor*

**Paper Session**

Chair(s): Juchul Jung

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

**Use of green infrastructure for climate adaptation**

Jung Eun Kang, Hyunjoo Bae

This study is to develop a green infrastructure planning model to reduce negative impacts caused by flooding, urban heat islands, and air pollution closely associated with climate change.

**Flood mitigation by adaptive use of urban infrastructure design**

Taejung Kwon, Jongdong Kim, Kwangwoo Nam, Hong Gyu Kim

Recently-approved flood-sensitive underpass road design by the municipal government of Busan, Korea, is introduced to facilitate further discussion and future development of creative flood-sensitive urban infrastructure design.

**Estimation of future economic damages from floods**

Dong Keun Yoon, Junsung Park, Dong-Hyun Cha, Seung-Hu Jeong

The purpose of this study is to estimate future economic losses from floods based on simulated outputs from five different regional climate models at local communities in Korea.

**Building resilience in cities**

Marcus Ip, Michael Nolan, Thomas Tang

Resilience of cities is crucial. The use of tools for developing resilience capacity and strategies is presented with case studies, through the use of a scorecard for local governments.

**Climate change risk management: Achievements, lessons learned, and challenges in international development**

*Wednesday 22 April | 14:30-16:00 | Villa 203*

**Practitioner Exchange**

Chair(s): Hope Herron, Hilary Hoogland-Grey

This session seeks to build a community of practice for climate change through exchange of lessons learned and shared experiences. Perspectives from the IDB, World Bank, and IFC will first be provided followed by an interactive facilitated discussion to promote practitioner exchange.

**Climate change risk assessment and risk management**

Hilary Hoogland-Grey

Lessons learned on climate change risk assessment and adaptation from the Inter-American Development Bank perspective.

**Supporting data, information, and knowledge sharing tools to mainstream climate change**

Rita Cestti

Lessons learned on climate change risk assessment and adaptation from the World Bank perspective.

**Climate adaptation opportunities**

Douglas Maron

This presentation highlights initiatives to mainstream climate adaptation and explores areas for collaboration.

**Supporting tools to engage private sector on climate change adaptation**

Mauricio Athie

Lessons learned from climate change risk assessment and adaptation from the International Finance Corporation (IFC) perspective.

**Communicating climate change science and impacts**

Hope Herron

Lessons learned on communicating climate change science working with MFIs and the development community.

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

*Wednesday 22 April | 11:00-12:30 | Villa Onice*

**Paper Session**

Chair(s): Arend Kolhoff

Good practice cases from around the world are presented that show how policies, approaches, and methods can be used to integrate climate change (adaptation and mitigation) in a variety of impact assessment tools.

**Assessing GHG in agriculture modeling approach**

Miguel A. Casermeiro, Sergio Gonzalez-Ubierna, Ignacio Jorge-Mardomingo, Beatriz Capstick, Arnaldo Santander, Javiera Perez

This paper introduces the legal system of adaptation to climate change in the Indus Basin. Stress is placed on the need for policymakers to understand the impacts of climate change on agriculture, particularly in developing countries. The paper also discusses the role of international organizations in supporting adaptation efforts through capacity building and financial assistance.

**Climate change adaptation in the mining sector**

Samantha Arnold, Allison Barrett, Sean Capstick, Arnaldo Santander, Javiera Perez

An illustration through a series of case studies how mines in Africa, North America, and South America are dealing with a changing climate in their environmental and social impact assessments.

**Sustainable coastal planning in Athens, Greece**

Evangelia Siavola, Ilia Armatas, Panagiotsi Koliotis

Urban adaptation to climate change in coastal Athens, Greece. The role of information and communication technologies (ICTs) in the environmental impact assessment of the metropolitan physical plan.

**Climate change and hydropower in the Indus Basin**

Michael Clarke

The Indus Basin is vulnerable to climate change. Impacts and adaptations that should be considered as hydropower development in Pakistan enters a period of unprecedented expansion are discussed.

**Tool for risk management related to climate change**

Virginie Defromont

A presentation of methods that enhance environmental assessment by taking into account climate change, industrial risks, and ecosystem services.

**Climate change and Brazilian SEA practice**

Amarilis Gallardo, Veronica Nadruz

After analyzing 40 Brazilian SEA reports, the results of this research showed that the climate change issues have been poorly addressed in Brazilian planning supported by SEA.
The European Investment Bank
is the bank of the European Union

Our shareholders are the 28 Member States of the EU. We are the world’s largest multilateral lender by volume, providing finance and expertise for sound and sustainable investment projects within and outside the EU.

Through our activities, which include lending, blending and advising, we support the implementation of EU policy objectives. The promotion of sustainable development, in particular the preservation of environmental and social capital that exists today for future generations, underpins the EIB’s lending strategy and objectives.

To this end the EIB Statement on Environmental and Social Principles and Standards sets the policy context for the protection of the environment and human well-being. The EIB Environmental and Social Handbook provides an operational translation of those standards.

Together with our ambition, these standards ensure that not only are the potential negative impacts of projects minimised, but that the highest standards and smart forward-looking solutions tackling the challenges ahead are consistently promoted and applied.

It is in these respects that the EIB can make a difference by adding an important non-financial value to the projects it is financing.

For more information: [www.eib.org](http://www.eib.org)
Climate change and impact assessment: Good practice cases (III)

Wednesday 22 April | 16:30-18:00 | Villa Onice

Paper Session
Chair(s): Arend Kolhoff

Good practice cases from around the world are presented that show how policies, approaches, and methods can be used to integrate climate change (adaptation and mitigation) in a variety of impact assessment tools.

Climate change foresight in EIA

Alexandra Jinicka, Sanja Voeller, Markus Leitner, Friedrich Wachter

Within a two-year research project funded under the Austrian Climate Research Program, the capabilities and perspectives of actors involved in EIA were examined regarding the consideration of climate change.

Klimatkalkyl: A model for climate calculations

Cecilia Kjellander, Malin Kotake

Klimatkalkyl is an important tool to limit energy use and the carbon footprint of the Swedish Transport System. The model is owned by the STA but openly accessible at http://www.trafikkverket.se/klimatkalkyl/.

Guidance for climate-proofing project planning

Markus Leitner, Sanja Voeller, Sabine McCallum, Alexandra Jinicka

Practical guidance for climate-proofing infrastructure, and in which phases of the EIA can consequences of climate change (CC) best be considered.

Adapting to climate change in Sierra Leone

Peter Nelson, Ranita Sand-Koroma

Presentation of an African Development Bank study aimed at building climate change resilience into the rural water and sanitation programme for five districts covering one-third of Sierra Leone.

Role of IA in Mongolia’s climate-influenced future

Vigya Sharma, Byambajav Dalai buyan

Findings from a recent multi-stakeholder capacity building project undertaken in Mongolia and exploration of how IA principles may be applied to manage climate change risks across multiple industries in Mongolia.

New metrics on E&S risks and impacts and business decision making

Wednesday 22 April | 11:00-12:30 | Villa 9

Panel Discussion
Chair(s): Carlos Arias, Mauricio Athie

Leading organizations around the world have realized that their business decisions must address E&S performance. Thus, an environmental and social risk and impacts metrics is required to inform strategic decisions. Explore new approaches to measurement, monitoring, and reporting that interprets performance relative to social and environmental thresholds. We focus on explaining these developments and collecting active feedback.

How big data can support E&S risk management

Alexandra Mihaiulescu Cichon

In a hyper-transparent and hyper-connected world with rapidly changing stakeholder expectations, big data and open-source intelligence can help support the effective management and mitigation of E&S risks.
Concurrent sessions

Waste treatment: Which facilities to be preferred?
Giovanni Corbetta
According to the waste hierarchy, certain waste is to be treated with preference to recycling and, only as second best solution, to energy recovery and, in exceptional cases, to disposal.

Moringa oleifera for treatment of batik wastewater
Hefni Effendi, Raden Delima Sari, Sarwani Hasibuan
The best treatment combination was demonstrated by dose treatment of 5000 mg/l and 180 minutes deposition, with reduction result of turbidity (61 NTU) and TSS of 170 mg/l.

CULTURAL HERITAGE

Beneath the waves: Underwater archaeology and IA
Thursday 23 April | 09:00-10:30 | Villa 202
Paper Session
Chair(s): Christopher Polglase
During this session we will summarize the development of the technologies used to identify submerged cultural heritage sites. As archaeologists have developed techniques to remotely identify submerged sites, they also have developed appropriate standards for applying these techniques. The evolving tools and standards used by underwater archaeologists will be presented.

Marine geophysics: From survey to significance
Paul Baggaley, Caroline Budd
Collaboration between archaeologists and engineers can allow geophysical and geotechnical surveys to be used for multiple purposes, giving improved archaeological interpretations and leading to improved advice on significance and mitigation.

Managing impacts: Digital data and Dogger Bank
Victoria Cooper
How spatial representation of digital data has been fundamental to the advancement of strategies to avoid impacts through embedded mitigation within the Dogger Bank offshore wind zone.

Developing underwater archaeology standards for IA
Christopher Polglase, Benjamin Siegel
This presentation calls for underwater archaeological standards that are fit-for-purpose for international impact assessment. The authors provide examples of projects to highlight the need for standardized survey and mitigation approaches.

Cultural heritage in IA: Collaborative approaches
Wednesday 22 April | 14:30-16:00 | Villa 202
Paper Session
Chair(s): Arlene Fleming
The spatial approach of impact assessment offers the potential for identifying material cultural heritage and contributing to a country’s record of human habitation. Realising this potential requires increased participation by cultural experts in IA, systematic transmission of findings to cultural authorities, and a framework for integrating and managing the information.

Material culture identification in mining projects
Michele Fulcher
A discussion of two case studies where the identification of material culture has significantly informed the record of human habitation, thereby ensuring a prominent role for cultural heritage in development.

Any old iron? In search of Congo’s heritage
Paul Wheelhouse
Local knowledge is key to the successful identification, recording, and analysis of cultural heritage, and the rewards of collaboration are multifarious.

Archaeology as added value: Bring in the locals!
Dietse Bedeaux
Community archaeology to create added value: bring in the locals! Minimize risks and create value propositions through involvement of local people.

Impact assessment for historical sites in ROW
Kittiphong Sangrukkait, Worawut Hamarn, Penrug Pangsomut, Narassak Choithamlong, Paramate Sukhum, Yoowalak Chuchat
Impact assessment for archaeological and historical sites in rights-of-way of natural gas transmission pipeline to establish specific mitigation and measure plans.

Systematizing impacts on cultural heritage
Carlos Eduardo Candelari
Proposition of a systematization of the impacts caused by large undertakings on cultural heritage goods.

Cultural heritage in IA: The intangible social layers
Wednesday 22 April | 16:30-18:00 | Villa 202
Paper Session
Chair(s): Ihsanolsen Odaua, Vincent Roquét
Investment projects can have considerable impacts on cultural heritage and associated socio-economic and cultural practices. Digital technologies present useful tools for engaging discussions on these multiple layers and complex relationships between the seen and the unseen. These digital tools can in turn contribute to effective mitigation, planning, and community engagement.

CHIA in Iran and the role of social networks
Behzad Raisiyan, Rehanah Esmaeelipoura
In this study, we reviewed the potential and actual role of social networks in impact assessment in Iran, where there is no requirement for public participation in impact assessment.

Artisan-Fez Medina Project: Social dimensions
Vincent Roquét
An overview of lessons learned from two cultural heritage projects in the Fez Medina, with a focus on the social dimensions of these development and conservation projects.

Socio-cultural impacts of proposed Lamu Port, Kenya
Ihsanolsen Odaua, Karel Bakker, George Abungu
The proposed Lamu port development will have far-reaching impacts on cultural heritage and social practices in the Lamu archipelago.

Revealing the socio-economic potential of CH
Anna Augustyn, Gustav Nemes, Gabor Soos
Our project develops a multidisciplinary methodology to assess the local socio-economic impacts of Investments into cultural heritage, integrating various impact assessment narratives and using trans-disciplinary methodology in an iterative process.

DISASTERS AND CONFLICTS

Impact assessment across disasters and conflict (I)
Monday 20 April | 14:30-16:00 | Villa 101
Paper Session
Chair(s): Charles Kelly
This session brings together presentations on conflict or disasters, the assessment of their impacts, and how these assessments can be used to reduce the impact of these events.

Winter floods: Role of EIA in disaster recovery
Kevin House, Ross Marshall, Richard Woodward
A case study identifying the management and development of a river-dredging EIA to aid recovery during a national flood risk management emergency.

Impact assessment of Typhoon Haiyan
Stephanie Sangalang
Because the impacts of natural disasters on typhoon-affected communities in the Philippines are not well understood, a new IA framework is needed.

Impact of radioactive waste after nuclear disaster
Takehiko Murayama
After a nuclear disaster in 2011, a tremendous volume of radioactive waste was generated. After reviewing the current situation, this paper suggests viewpoints for resolutions as well as lessons learned.

Tsunami, aquaculture and donor intervention impact
Laila Wijaya, Jesmond Sammut
Following the 2004 tsunami, donor interventions in the aquaculture industry in Aceh, Indonesia, brought changes to the industry and community. This study investigated factors that produced and constrained these changes.

Impact assessment across disasters and conflict (II)
Monday 20 April | 16:30-18:00 | Villa 101
Paper Session
Chair(s): Charles Kelly
This session brings together presentations on conflict or disasters, the assessment of their impacts, and how these assessments can be used to reduce the impact of these events.

Environmental intelligence in impact assessments
Birgitta Liljeahl, Annica Waleij
Environmental intelligence can provide indications of the environmental conditions and environmental changes in a region and inform early warning capabilities, i.e., anticipating future events, weak signals detection, and trends analysis.

Public involvement in disaster-related EAs
Ryo Tajima, Tomohiro Tasaki, Masahiro Osako
Public involvement in EAs within the context of disaster management will be discussed based on literature reviews and results of a survey on environmental risk perception in emergency circumstances.
Concurrent sessions

Measuring performance standards in fragile states
Gary MacDonald, Krista Hendry
This presentation will review current lessons learned from work with the International Finance Corporation (IFC) on how to implement the performance standards in fragile and conflict areas focusing on the role of assessments.

Assessing disaster impacts on IAIA
Charles Kelly
This presentation looks at the impacts of disaster on a professional association like IAIA, identifies the risks from these impacts, and how these risks can be addressed.

ENERGY

Environmental monitoring and compliance on energy
Monday 20 April | 16:30-18:00 | Villa 4

Panel Discussion
Chair(s): Yuan Xu

To effectively control and mitigate environmental impacts in energy supply and consumption, monitoring, reporting, and verification (MRV) are necessary to detect non-compliance. This session compares and analyzes MRV systems and cases in developed and developing countries, particularly from technological and institutional perspectives.

Improving China’s MRV system on coal power plants
Yuan Xu, Zhenzhong Yang
A technology-management-mixed method is explored to enhance the effectiveness and cost-effectiveness of the monitoring, reporting, and verification (MRV) system with imperfect satellite data for implementing environmental regulations in China’s coal-fired power plants.

Assessing disaster impacts on IAIA
Charles Kelly
This presentation looks at the impacts of disaster on a professional association like IAIA, identifies the risks from these impacts, and how these risks can be addressed.

Compliance monitoring on offshore oil and gas
Cristiano Vilardo, Vanessa Horta
Compliance monitoring on offshore oil and gas: lessons from Brazil and Norway. Follow-up remains a critical challenge to EIA. What are the best practices? What is an adequate level of oversight?

Methods in environmental assessment of renewables
Sverker Molander, Rickard Arvidsson
A framework combining life-cycle thinking and environmental risk assessment approaches is presented and the relationship between non-site-dependent and site-dependent methods is exemplified using some Scandinavian renewable energy systems.

Is compliance MRV for Hong Kong energy sector effective?
Shirley Lee
The Hong Kong energy sector monitoring, reporting, and verification (MRV) experience will be shared with session participants to stimulate ideas to overcome current limitations, improve effectiveness, and allow “leap frog” progress towards sustainability.

Understanding independent Environmental Control Officers
Jan-Albert Wesels, Angus Morrison-Saunders, Francois Retief
The study confirms the benefits of having adaptable, proactive, experienced, and independent EIA follow-up verifiers such as environmental control officers (ECOs) on major energy construction projects.

Energy

Tuesday 21 April | 11:00-12:30 | Villa 104

Paper Session
Chair(s): Jan Nuesink

National and regional energy plans are nowadays based on a mix of technologies and energy resources; however, each resource is associated with a set of different and distinct challenges that make comparisons problematic. This session presents issues that emerged while conducting impact assessment of energy projects and plans and aims at identifying aspects of common concern.

Gender dimensions of energy planning
Andrea Athanas, Lorena Aguilar, Ana Rojas, Jackie Siles
Transmission infrastructure is central to the changes in energy systems and a determining factor in the energy mix used. IUCN and USAID are exploring gender dimensions energy developments.
**ESIA and adaptive management: GIS in forestry**
David Gibson, Jeremy Ansell
The presentation will illustrate the recent innovations in the use of GIS to support multidisciplinary ESIA processes in adaptive forest management through applications case studies from Africa and Latin America.

**Tourist response to visual impacts: Geothermal plant**
Shigeo Nishikizawa, Kenta Tsukakura, Takehiko Murayama
This study focused on geothermal developments in national parks and clarified the tourists’ evaluations on visual impacts with photomontage simulation.

**Biodiversity in the energy sector: Latest developments in wind power and oil and gas**

**Monday 20 April | 14:30-16:00 | Villa 6**

**Paper Session**

Chair(s): Johan Lammerant, Steef van Baalen

**Different examples of the way biodiversity is taken into account in energy projects like hydropower plants, windfarms, LNG facilities, shale gas developments, etc. The focus lies in practical implementations of biodiversity in ESIA studies for energy-related projects.**

**Impacts of developments in sensitive ecosystems**
Justine Namara
Uganda parks have been experiencing pressure from oil and gas, hydropower, and mining. The sensitivity atlas for Murchison Park is one of the tools to minimize the impacts.

**GIS mapping biodiversity and endangered species**
Jeanne Ellis, Neil Brody, Tamara Klug, Margaret Anderson
Cardno developed an online GIS mapping system tool of US endangered species for use by oil and gas companies to ensure regulatory compliance with the Endangered Species Act.

**Addressing rare plant data limitations in IA**
Randall Krichbaum
Methods to evaluate potential project impacts on rare plants given incomplete distributional data. A case study from a major proposed hydroelectric project in Canada is presented.

**Mitigation and restoration to enhance biodiversity**
Paul R. Krause, Will Gafa, Maria Hartley
Recent energy-related projects have shown that with careful design a significant increase in biodiversity and ecological enhancement can be made. Case studies from both offshore and onshore projects are included.

**Avoiding harm: Potential in wind energy?**
Genevieve Hayes, Samir Whitaker, Benedict Gove
BirdLife International aims to review a range of literature and case studies relating to current avoidance measures being used by the wind energy sector to reduce its impact on biodiversity.

**Tackling bird fatalities in wind farms in Mexico**
Genevieve Beaulac
The Inter-American Development Bank (IDB) is involved in the financing of numerous wind farms in this region. This presentation explains the pattern of bird and bat fatalities, the efficiency of the mitigation measures implemented, and more.

**Wind energy and species protection in Germany and the U.S.**
Victoria Gartman
AN examination of trans-Atlantic commonalities and differences at/around onshore wind facilities in terms of use of the mitigation hierarchy and compensatory measures for endangered species or species of concern.

**Can African biodiversity survive powering Africa?**
Caroline Henderson
As Africa approaches an “electrical” age, do those who value its spectacular biodiversity need to prepare for the “satanic mills” that decimated Europe’s biodiversity? Some thoughts on preventing a replay.

**Spatial conservation data for wind farm siting in Lesotho**
Jessica Hughes, Grant Benn, David Allan, Andrew Jenkins
Conservation plans and bird locations for the Lesotho Highlands were used to identify biodiversity risks of wind farm siting. The study confirmed high risks to a declining vulture population.

**Biodiversity in the energy sector: Latest developments in wind power and oil and gas**

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Different examples of the way biodiversity is taken into account in energy projects like hydropower plants, windfarms, LNG facilities, shale gas developments, etc. The focus lies in practical implementations of biodiversity in ESIA studies for energy-related projects. What specific issues are related to these projects, and which challenges are still there? The first session focuses on biodiversity issues related to wind power. The second session focuses on oil and gas related developments.

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Mainstreaming HIA: Experience from England
Salim Vohra, Chimeme Egbutoh, Judy Kunth, Filipe Silva
England has attempted to mainstream health impact assessment (HIA) for a long time. Stoke-on-Trent and Luton are two areas that have made good attempts at embedding HIA. Key barriers and enablers are discussed.

Strategic health impact assessment (sHIA) in Ghana
Edith Clarke, Patrick Harris, Francesca Villiani
The presentation describes a procedure for conducting a strategic health impact assessment (HIA) in the oil and gas sector through a learning-by-doing approach. This process has not been achieved elsewhere.

Health evaluation in impact assessment (I)
Wednesday 22 April | 11:00-12:30 | Villa 5
Paper Session
Chair(s): Christopher Olsson
Globally, consideration of health effects is a key component in impact assessment. This session brings together practitioners to share their experiences on how they integrated evaluation of potential health effects into the process.

Identifying vulnerable communities in HIA
Sarah Hartsig, Trimph Lin
This presentation showcases the use of a topic-tailored vulnerability score to identify geographical areas that might be at greatest risk for disproportionate health effects and its application in HIA.

A learning by doing approach to HIA
Katie Hirona, Fiona Haigh
This presentation examine the process and strengths of a learning-by-doing approach to HIA training.

Use and impact of HIA in directing health programs
Gertrude Musunka, Mark Divall, Milka Oewar, Anna Pascall
Health impact assessment (HIA) can be integrated into the EIA process as an effective tool in anticipating and mitigating impacts related to HIV and AIDS, with monitoring systems to effectively evaluate intervention success.

Challenges in public access to HIAs by FOI request
Peter Bars
Freedom of information (FOI) legislation is a potential source of access to suppressed health impact assessments (HIAs) and EIAs. Users should be aware of all potential blockage points in access and how to appeal.

Health evaluation in impact assessment (II)
Wednesday 22 April | 14:30-16:00 | Villa 5
Paper Session
Chair(s): Christopher Olsson
Globally, consideration of health effects is a key component in impact assessment. This session brings together practitioners to share their experiences on how they integrated evaluation of potential health effects into the process.

Do health impacts vary in rural and urban settings?
Margaret Douglas, Martin Higgins
Impact assessments of rural developments like windfarms present challenges. Understanding the complexity of rural development—context, scale, direct, indirect—should enable better, more nuanced mitigation and enhancement strategies.

Alberta’s oil sands and human health
Bart Koppe, Christine McFarland, Karl Breeze
This presentation discusses whether or not Canada’s oil sands are posing a risk to the health of Indigenous Peoples in northeastern Alberta.

Impact assessment for mining in Thailand
Phontape Wiwatadote
Examining the measure of community-based health impact assessment (CHIA) in legislation to ensure more effective impact assessment.

Challenges in valuing health care services in EIA
Galina Ivanova, Delwar Adbar
Challenges in valuing health care services at a regional level as a part of the EIA are discussed. Suggestions on how to increase industry’s value in the region are made.

Health in environmental assessments: Institutional approaches
Tuesday 21 April | 11:00-12:30 | Villa 5
Paper Session
Chair(s): Julia Nowacki, Francesca Villani, Michaela Pfeiffer
Despite many discussions on HIA and health integration into environmental assessment, these often lack either consideration of health or health is not considered adequately and in an effective and comprehensive manner. We move the discussion a step ahead through discussing institutional approaches, practical applications, and stakeholder engagement.

Health in environmental assessments: Moving a step ahead through practical applications
Tuesday 21 April | 14:30-16:00 | Villa 5
Paper Session
Chair(s): Julia Nowacki, Francesca Villani, Michaela Pfeiffer
Although health impact assessment (HIA) has been a part of project and policy development in England, Health in EIA/SEA has been limited due to a perceived lack of legal framework, guidance, and experience.
Concurrent sessions

Using HIA in EA for proposed oil drilling project
Christopher Olsson, Mary McDaniel, Kathleen Souweine, Lindsay McCallum
Integration of health impact assessment (HIA) into environmental assessment is challenging, especially on highly-contentious and politically-polarized projects. Lessons learned and successes on how to effectively communicate results will be presented.

Scoping by stakeholders of infrastructure HIA
Loes Geelen, Lea den Broeder, Monique Scholtes, Kai Yin Chung, Annemieck Van Overveld
“We are all experts!” An approach to engage stakeholders in scoping, combining expert and lay/local knowledge, was piloted in a high-impact railway extension project. Results show potential, but also pitfalls.

EA consultants’ capacity to influence practice
Mari Kågström
To improve health integration in EA, there is a need to better understand EA practitioners’ roles in EA, and their different capacity to influence practice.

Social determinants of risk perception
Martin Birley
New information does not lead to a convergence of risk perceptions. It’s what we feel that counts. Risks become amplified or attenuated, and this affects mitigation.

Meet the editor of Impact Assessment and Project Appraisal
Wednesday 22 April | 11:00-12:30 | Villa 202
Workshop
Chair(s): Riki Therivel
Are you considering writing an article or professional practice paper on impact assessment? Would you like to be a guest editor for IAPA? Do you have a good idea for the journal? The new editor of IAPA, Riki Therivel, would love to discuss your ideas, and offer support and advice on publishing in IAPA.

IAIA Affiliates and Branches Forum
Thursday 23 April | 09:00-10:30 | Villa 203
Workshop
Chair(s): TBC
This year our topic is “Taking Advantage of new Technologies” within the context of the digital era. IAIA gives background to Affiliates and Branches, but current and new communication technologies could permit much more information exchange between HQ and Affiliates and Branches, and between Affiliates and Branches themselves. The discussion will center around determining new ways to improve interaction in order to achieve best Affiliate and Branch efficiency, always looking for our common final goal: improving impact assessment.

Emerging trends in community-based and indigenous impact assessment
Monday 20 April | 16:30-18:00 | Villa 202
Paper Session
Chair(s): Jill Baker
Local communities can count on an increased number of options to promote a stronger and more coordinated voice when decisions about projects are taken. This session presents experiences of community- and or indigenous-led impact assessment or processes with an improved community involvement.

"It’s not reindeer herding”: Mini on Saami lands
Rasmus Klocker Larsen, Rebecca Lawrence
This presentation discusses a community-based impact assessment undertaken by the authors together with an indigenous Saami reindeer herding community in Northern Sweden.

Accommodating various discourses in mangroves IA
Jean Hugé, Tom Woes, Francoise Benitez, Nibedita Mukherjee, Nico Koedam, Fird Dahdouh-Guebas
The effectiveness of IA in supporting decision-making in complex socio-ecological tropical systems (mangroves) is illustrated by way of a discourse-accommodation perspective focusing on the often-marginalized perspectives of local communities.

Enhancing Society Together
Royal HaskoningDHV is an independent, international engineering and project management consultancy with over 130 years of experience in sustainable development and innovation. Through our global expertise in Impact Assessment, together with our clients, we are working to become part of the solution to a more sustainable society now and into the future.

Royalhaskoningdhv.com
Canadian First Nations take control of IA
Janis Shandro, Aleck Osty, Mirko Winkler
Three Canadian First Nations have partnered with researchers to understand the risks and impacts of resource development on health. This presentation reviews these projects and provides recommendations for impact assessment.

The Reappropriation and Continued Use Agreement
Marc Dunn
The Reappropriation Agreement, signed between Cree First Nation and Hydro-Québec, creates a precedent for impact and benefit agreements (IBAs): impacted communities assume mitigation responsibilities on behalf of the proponent.

Indigenous Peoples and cumulative effects
Monday 20 April | 16:30-18:00 | Villa 104
Panel Discussion
Chair(s): Angeles Mendoza Sammet
This session explores how to improve the qualitative and quantitative analysis of cumulative effects, with a special focus on addressing the impacts on Indigenous Peoples’ livelihoods, lands, resources, cultures, and spirituality.

Gaps in cumulative effects for Indigenous Peoples
Angeles Mendoza Sammet, Veronica Chirino Baker
This paper presents preliminary results of a revision to identify best practices and gaps in the assessment of cumulative effects of development projects on Indigenous Peoples.

Indigenous cultural landscapes, indigenous protests, and IA
Wednesday 22 April | 11:00-12:30 | Villa 6
Paper Session
Chair(s): Patricia McCormack, Angeles Mendoza Sammet
How to better include Indigenous cultural landscapes, which are often invisible to outsiders, in impact assessments.

The seen and unseen in mining impact assessment
Michele Fulcher
This presentation illustrates, through case studies and the author’s experience, the living dynamism of cultural landscapes and how to assist others to acknowledge the validity of how landowners see it.

Aboriginal trails and cultural landscapes
Patricia McCormack
Overland trails are key aspects of historic and modern Aboriginal cultural landscapes in northern Alberta, yet they are ignored in current impact assessment for oil sands and other industrial projects.

Forms of indigenous protests
Philippe Hanna, Frank Vanclay
Indigenous protest is necessary to achieve respect for Indigenous rights, frequently enhances the quality of life, and builds social capital for Indigenous Peoples likely to be impacted by large projects.

Maintaining social cohesion
Itohah Scott-Enns
Diamond mines are socially impacting Tlicho women and families as Tlicho men are being taken out of the community for work. However, Tlicho stories offer ideas for building better support.

The use of media to inform impacted communities
Marc Dunn
Various communication media were successfully utilized to communicate the environmental monitoring program to communities, including traditional and social media. However, for impacted hunters, fishers and trappers, personal contact remains preferable.

OIL FOR DEVELOPMENT
Wednesday 22 April | 11:00-12:30 | Adua 2
Practitioner Exchange
Chair(s): Morgan Hauptfleisch
Presenters highlight key issues encountered in their own work with impact assessments in the oil and gas sector in their home countries, with a focus on digital tools and social media. The facilitator will then engage all participants in a discussion of lessons learned and experiences as to the importance and usefulness of digital tools and media when working with IA in the oil and gas sector.

Handling challenges in environmental governance in the oil and gas sector in Ghana
Kojo Agbenor-Efunam
Gas flaring is undesirable in many countries that are developing hydrocarbons resources. However, challenges in the sector could result in revision of the zero-flare policies adopted by countries.

Requirement for IA in oil and gas industry in Timor-Leste
Verawati Corte Real de Oliveira, Jose Goncalves
Process and challenges of assessing IA submission for oil and gas activities.

Donors use of Impact assessment for oil and gas
Peter Croal
The presentation focuses on lessons learned with respect to the use of impact assessment by the donor community in developing countries’ oil and gas sector.

IFC guideline implementation in Africa: Challenges
Ian James
Insight into the challenges associated with the implementation of the International Finance Corporation (IFC) General EHS Guidelines and Performance Standards, with reference to the oil and gas sector in Africa.

Regulating the oil and gas sector in Uganda
Arnold Wallsa Ayazika
This paper discusses the EIA process in Uganda in relation to the oil and gas sector and the challenges faced by the regulatory agencies and practitioners.

Permitting in a changing regulatory environment
Henry Camp, Kenneth Kirkby
Exploration of strategies being used to manage environmental permitting processes in an uncertain regulatory environment. Case studies from oil and gas exploration and development in Africa will be used.

Getting back on track: Issue management and IA
Jay Wagner, Murray Jones
This presentation explores the rationale, process, and outcomes of an issue-identification and management process that was applied to a large-scale oil development in Madagascar.

New ways of negotiating impacts and impact mitigation with oil and gas companies
Wednesday 22 April | 14:30-18:00 | Villa 101
Role Playing Workshop
Chair(s): Arne Daaloft, Morgan Hauptfleisch, Peter Farr
This workshop demonstrates negotiation techniques in practice. It focuses on providing negotiated information to be used in the decision making process after an impact assessment has been done. The negotiations will be based on a fictitiously-planned oil or gas project with five or six interest groups involved in the negotiations. These groups will represent the project proposer, the government, the locally affected population, and various interest groups. A public hearing will be held by the Ministry that received the project proposal.

Country experiences with impact assessment in the digital era (I)
Monday 20 April | 16:30-18:00 | Villa 203
Paper Session
Chair(s): Peter Farr
Representatives from oil for development countries and others present examples of how environmental concerns have been addressed under new digital and technological settings in oil and gas developments.
Concurrent sessions

Environment impact assessment and digital media in Lebanon
Roula El Cheikh

PP in HKEIA: Transparent system, limited influence
Cho Nam Ng, Chi Chung Chris Wong
An exploration of the extent to which the transparent EIA process meets rising public expectation and demand in Hong Kong.

Preparing for an oil and gas industry in Myanmar
Nay Aye

Planning tools in Brazilian petroleum exploration
Francisco Fabbrini-Neto, Marcelo Pereira de Souza
This paper analyzes the planning tools in the land use and natural resources applied in Caraguatatuba, SP, Brazil, based on the amount of projects concerning the deep petroleum and gas exploration areas.

Country experiences with impact assessment in the digital era (II)

Thursday 23 April | 09:00-10:30 | Villa Onice

Paper Session
Chair(s): Arne Dalfelt

Representatives from oil for development countries and others present examples of how environmental concerns have been addressed under new digital and technological settings in oil and gas developments in their own countries, including legislation, administration, cooperation between government departments, social media involvement, public consultations with new technologies, etc. What has worked and what has not?

Communication in post-commissioning IA in Nigeria
Edward Bristol-Alagbatiya
The ongoing NLNG fish-catch and biological health studies of the Bonny River Estuary demonstrate the significance of communication among stakeholder-groups, especially effective communication with host-communities, in post-commissioning IA in Nigeria.

Digital 21 Strategy and EIAs in Hong Kong
Andy Chung, Henry Leung, Wm To
How new technologies are leveraged following the Digital 21 Strategy—the latest trends of EIAs in Hong Kong.

Pressures for change in Brazil's EIA system
Alberto Fonseca, Luis Sanchez
The study critically analyzed four recent documented proposals that lobby for significant changes in Brazil's EIA system.

Comparison between Chinese and Cambodia EIA system
Fang Zhao, Zhao Fang, Li Dong
By comparing the two environmental impact assessment systems, the study comprehensively summarizes Chinese experience in construction project environmental management and provides a reference for Cambodia.

Public participation

Information exchange and logistics in public participation

Monday 20 April | 16:30-18:00 | Villa Onice

Panel Discussion
Chair(s): Timothy Peirson-Smith, Lisa Odparlik, Kevin Hanna
A sharing of best international practice in planning, organization, and the logistics of public participation events through to post-event follow-up and feedback processes and discussion on the role and requirements to provide EA documents and process information for participation, where aspects like “fair notice,” “time to prepare,” and the “readability” of documents play an important role.

Public participation events in EIA in NU, Canada
Amanda Hanson Main, Ryan Barry
The presentation highlights challenges associated with undertaking public consultation EIA events in Canada’s Arctic, steps to facilitating successful events, and lessons learned for improvement and evolution of EIA participation programs.

SIA, participation, and mediation on the ground
Steven Vella, Mark Reed, Julian Siddoli del Ceno, Ana Attlee
The realities of participation in EIA are contrasted with best practice using three Maltese case studies to explore the role of the SIA practitioner as mediator between disciplines and stakeholders.

Digital information and Canadian EA processes
Kevin Hanna, Brandon Gregg
This study examines Internet and GIS-based mechanisms used for participation and communication, and the management of information used in the assessment and review of EA applications in Canada.

Are agencies turning a blind eye on access to EA information?
Lisa Friedenke Odparlik
This paper examines implementation of legal requirements providing access to environmental assessment information in Germany’s grid expansion and transport planning sectors with criteria based case study analysis of agency websites.

GIS and cumulative effects assessment in BC
Kevin Hanna, Eric Valdal
A cumulative effects framework in British Columbia will coordinate information and data sources and systems as part of providing a comprehensive tool to support the review of resource development applications.

Public participation in strategic environmental assessment (SEA) (II)

Wednesday 22 April | 16:30-18:00 | Adua 2

Paper Session
Chair(s): Mario Gauthier, Guy Chiasson, Louis Simard

The objective of this panel is to explore the links between public participation and SEA. How have public participation practices evolved in different extracting industries and energy sector such as shale gas, mining and oil, or wind power?

Contested participation: Shale gas in Quebec, Canada
Mario Fortin, Yann Fournis
Public participation appears to be the main channel to gain social acceptability. But results are not always those expected, as shown by the SEA launched on shale gas in Quebec.

SEA in shale gas sector: Public acceptability
Guy Chiasson, Mario Gauthier
In contemporary social sciences, public acceptability has many meanings. The case of the SEA on shale gas in Quebec is used to examine what type of public acceptability is promoted.

Public participation in SEA: Dutch experiences
Rob Verheem, Ineke Steinhauer
This presentation reflects on recent practice experience in The Netherlands on public participation in SEA. It outlines principles and recommendations for effective participation illustrated with practice examples.

Public participation in EIA: What lessons for SEA?
Mario Gauthier, Louis Simard
The objective of this communication is to explore the links between public participation and SEA in the natural resources and energy sector.

The role of digital and social media to facilitate public participation (I)

Wednesday 22 April | 14:30-16:00 | Villa 9

Paper Session
Chair(s): Gwen Brice

This session looks at the role, use, and effectiveness of a variety of digital and social media tools in consultation programs. Case studies from around the world illustrate how these innovative tools are changing how we engage with the public and contribute to successful project planning and outcomes.

Public participation effect in uranium mining
Jong-Gwan Jung, Sang-Wook Han
Public participation should be fully incorporated into environmental assessment and decision making processes, and it should be recognized by local government and communities of the processes in the SEA requirement.

Adapting SEA to the Kenya context
Harry Spaling, Heidi Walker, A. John Sinclair
How can public participation in SEA be adapted to Africa? We evaluated emerging SEA practice in Kenya using SEA principles and criteria adapted to the Kenyan context.

Public participation in strategic environmental assessment (SEA) (I)

Tuesday 21 April | 16:30-18:00 | Affari Groundfloor

Paper Session
Chair(s): Mario Gauthier, Guy Chiasson, Louis Simard
The objective of this panel is to explore the links between public participation and SEA. How have public participation practices evolved in different extracting industries and energy sector such as shale gas, mining and oil, or wind power?
The digital and stakeholder engagement: Cameroon
Lendzemo Larissa Tokwa, Francois Roger Nguene, Suzanne Aimee Nien Ngopout
Improving the effectiveness/efficiency of stakeholders engagement strategy in the environmental assessment process in Cameroon via incorporating the right combination of adapted digital tools to suit the socioeconomic context of Cameroon.

Social media and citizen role in policymaking (Iran)
Maryam Najibi Rabiei
This presentation reviews impacts of social media on managers’ decisions or implementation of policies in Iran and presents suggestions for re-defining the non-governmental stakeholder’s role in the policymaking cycle.

IA and community-based monitoring: Potential of crowdsourced data
John Devlin
How social media platforms designed for social engagement could serve as tools to encourage community-based monitoring and how “knowledge to action” initiatives as project problems are identified.

Facebook or open houses: Planning considerations
Gwen Brice
Planning considerations when designing a public consultation program to include social media tools.

The role of digital and social media to facilitate public participation (II)

Wednesday 22 April | 16:30-18:00 | Villa 9

Paper Session
Chair(s): Gwen Brice

This session looks at the role, use, and effectiveness of a variety of digital and social media tools in consultation programs. Case studies from around the world illustrate how these innovative tools are changing how we engage with the public and contribute to successful project planning and outcomes.

Digital technologies enabling public participation
Svetla Petrova, Robert Weymouth, Janette Hartz-Karp, Brian Sullivan
This presentation demonstrates an innovative online deliberation platform that enables people to engage in a meaningful conversation and collaboratively solve problems.

Open access assessment in collaborative planning
Nick Taylor, Mike Mackay
In Canterbury, New Zealand, collaborative land and water policy and plan-making processes require dedicated catchment webpages to provide participating stakeholders with access to requisite information and iterations of technical reports.

Usefulness of the Internet in public participation
Anne Vehmas
Introducing successful experiences of online surveys and social media in facilitating public participation, the EIA, and the technical design of projects.

The influence of social and digital media
Leonardo Marotta, Iania Bernardo, Roberta Laíto, Francesca Maietta, Fabiola Vozza
In an increasingly knowledge-based society and economy, environmental knowledge and public participation in environmental policies can be supported, by information and communication technologies as well as mobile applications.

Contention, social movements, and the politics of impact assessment (II)

Monday 20 April | 14:30-16:00 | Villa 9

Paper Session
Chair(s): John Devlin

Impact assessment is a recurrently contentious process. Project proponents seeking a social license to operate perceive contention as undesirable. Project opponents often see contention as the only way to offset business and government power. This session presents cases exploring these divergent approaches to public participation in impact assessment.

Ready to fight: Local government satisfaction in EA
Robin Lattimer, Virginia Maclaren
In light of mounting political tension and opposition in Canada, our research outlines key factors influencing local government satisfaction with EA processes and outcomes.

EIA challenges as perceived by entrepreneurs
Alberto Fonseca, Sander Rodrigues, Tamires Paiva
The study surveyed the perception of 320 business representatives of EIA challenges in the Brazilian State of Minas Gerais. Data show an overall concern with time and cost factors.

Deal or no deal? HIA and public debate of the TPP
Kate Hirono, Fiona Haigh
This presentation will discuss the health impacts of an international free trade agreement and the involvement of an advocacy steering committee in the HIA process.

Measuring the role of local governments in EA
Robin Lattimer, Virginia Maclaren
In light of mounting political tension and opposition in Canada, our research outlines key factors influencing local government satisfaction with EA processes and outcomes.

Power of residents in EIA
Bomi Kim
Our research reviews how to expand the participation and role of residents and local governments in the process of EIA of national projects through a comparison of national and regional newspaper.

Contention, social movements, and the politics of impact assessment (II)

Monday 20 April | 16:30-18:00 | Villa 9

Paper Session
Chair(s): John Devlin

Impact assessment is a recurrently-contentious process. Project proponents seeking a social license to operate perceive contention as undesirable. Project opponents often see contention as the only way to offset business and government power. This session presents cases exploring these divergent approaches to public participation in impact assessment.
Main problems in marine environment protection
Ouyang Yurong, Juanjuan Dai, Yaqian Wu, Ling Cai
Contradictions have emerged in the process of marine environment protection in Fujian province.

Stakeholders’ perspectives on small islands SEA
Alexandra Polido, Elsa João, Tomas Ramos
This research investigates and ascertains the different stakeholders’ perspectives on SEA in small islands and the key factors are to be introduced in SEA of these territories.

A study on the EIA of offshore wind farms
Taeyun Kim, Junho Maeng
This study suggests strategies for selecting locations of offshore wind farms in consideration of the environment in the coastal areas.

Ecological compensation in China: Meizhou Bay case
Ning Yang, Juan Quintero
A dredging project EIA leads to a comprehensive review of SEAs for coastal area development in southeast China and results in biodiversity compensation plans.

Integrated marine management planning in Norway
Terje Lind
In order to meet enhanced demand for revisions, more detailed plans, international obligations and cooperation initiatives, a system for digital data supported marine spatial planning is now being developed.

 Vulnerability indices for SWI assessment
Mutsumi El Fadel, Grace Rachid, Ibrahim Almadloub, Majdi Abu Najm
Development of vulnerability indices using spatial analysis to assess saltwater intrusion in coastal aquifers along the Eastern Mediterranean.

Public engagement in SEA: A new kind of democracy in digital era?

Wednesday 22 April | 14:30-16:00 | Adua 2
Paper Session
Chair(s): Giorgio Baldizzone, Carlo Rega
Public and stakeholder engagement in SEA holds a tremendous potential as a tool to influence decision-making and public cooperation initiatives, a system for digital data. But can equality of stakeholders be guaranteed purely online? Are e-tools used to promote equality or to avoid personal contacts with stakeholders?

Equality in on-line participation
Hanna Herkkula
E-tools offer tempting possibilities for communication. But can equality of stakeholders be guaranteed purely online? Are e-tools used to promote equality or to avoid personal contacts with stakeholders?

Sustainability and stakeholder engagement framework
Aki Muhammad Alizar, Anas Nikoyan, Cheoruinsa Noor Syahid
This paper discuss how the private sectors embrace the stakeholders of development actors (which are government and community) to achieve sustainable development without ignoring their business objectives.

Toward a systems approach to SEA capacity development: Lessons learned

Wednesday 22 April | 16:30-18:00 | Affari Groundfloor
Paper Session
Chair(s): Bobbi Schijf, Daniel Slunge, Anna Francis Olsson
Many low and middle income countries are developing their SEA capacity. How can SEA capacity best be developed in different country contexts? Can a systems approach be useful? In this session representatives from different countries and their international partners share experiences and results from SEA capacity development.

A systems approach to SEA capacity development
Bobbi Schijf
The Netherlands Commission for Environmental Assessment has developed a systems approach for SEA capacity development. We briefly outline this approach and share some experiences with its application.

Capacity of individuals, organizations, or systems?
Daniel Slunge, Anna Francis Olsson
We take stock of the experiences from an ambitious international SEA training programme. Participants from Kenya, Vietnam, and Cambodia discuss challenges in developing SEA systems in their respective countries.

SEA capacity development in India
Asha Rajajanshi, Vinod B. Mathur
The Indo-German cooperation supported by Federal Agency for Nature Conservation (BfN) of Germany has been successful in promoting SEA as a promising approach for integrated planning in India.

Application of NCEA systems approach in Pakistan
Hamza Butt, Ahmad Saeed
This paper will present experience of applying systems approach to 7 jurisdictions in Pakistan, a middle-income country with a devolved institutional framework.

Why concise EIA had not been introduced into Japan
Sachihiko Harashina
Japanese EIA systems are applied only to special types of huge projects that cannot respond to various public concerns. We analyze why this happens by showing the historical backgrounds.

Lessons learned from EIA for 35 years
Myungjin Kim, Jyeon Kim
Lessons from 35 years of EIA to develop and comprehend not only formal rules but also informal rules.

EIA systems in South Asian countries
Enreno Sanchez-Triana, Bilal Rahill, Ana Luisa Lima, Santiago Enriquez, Jaiwad Alial, Shikil Ferdausi
A review of EIA systems in South Asian countries suggests that these procedures focus predominantly on managing the negative environmental impacts of specific projects rather than on strengthening decision-making processes.

The nonpoint source pollution of economic activity
Sang Hee Lee, Soo Hyung Lee, Dongho Kim, Jun Bae Lee
The impact of nonpoint source pollution of economic activities was assessed using the emission load per unit gross regional domestic product (GDP) related to the economic activities in Chuncheong region, the Republic of Korea.

Asian SEA, EIA, and ecosystem services assessment: Ecosystem and ecosystem services

Tuesday 21 April | 11:00-12:30 | Villa Verde
Paper Session
Chair(s): Jong-Gwan Jung
Participating in this session will give you a good overview of the EIA/SEA system and good practices in the Asian region and will also provide you with a good human network in Asia.

Integrating SEA and Ramsar Convention for India
Parthish Dasgupta, Reet Balfour, Kedar Uttram, Shyam Asokar
Integrating SEA and Ramsar guidelines for biodiversity to develop an ecosystem services-inclusive SEA methodology for the sustainable future of Sewri wetlands in India.

Biodiversity offset assessment case study in Japan
Kiichiro Hayashi, Makoto Ooba, Keizo Fukushima, Keiko Oomori
The forest assessment methods of biodiversity offsets were studied as a hypothetical case study in Aichi prefecture, Japan.

Assessment of ecosystem services with land use maps
Makoto Ooba, Kiichiro Hayashi, Hideyuki Ito, Minoru Fujii, Yashiro Hasegawa
A system was developed and validated for the assessment of offset ability of forest ecosystems on a regional scale based on quantitative evaluation terrestrial ecosystem services.

Topographic linkage for sustainable forest
Yongwon Mo, Dongkun Lee, Hoog Kim, Jinhan Park, Sunyong Sung
The study is about finding comprehensive topographical linkages around protected areas to maintain sustainable forest ecosystems using generic topographical classification.

Asian SEA, EIA and ecosystem services assessment: EIA system in Asia

Tuesday 21 April | 09:00-10:30 | Villa Verde
Theme Forum
Chair(s): Kiichiro Hayashi
Participating in this session will give you a good overview of the EIA/SEA system and good practices in the Asian region and will also provide you with a good human network in Asia.
Asian SEA, EIA, and ecosystem services assessment: Ecosystem management

Tuesday 21 April | 14:30-16:00 | Villa Verde

Paper Session
Chair(s): Sachihiko Harashina

Participating in this session will give you a good overview of the EIA/SEA system and good practices in the Asian region and will also provide you with a good human network in Asia.

Developing the Satoyama Quantitative Evaluation Method

Akira Tanaka, Masashi Kobatake

We developed a comprehensive quantitative ecosystem evaluation method incorporating habitats, landscape aesthetic values, and human-wise-use called the "Satoyama Evaluation Process" (SEP) and used SEP methods to evaluate Satoyama conservation plans.

A case study of Xiamen City in China

Juanjuan Dai, Yaqian Wu, Yurong Ouyang

This study is conducive to the further calculation of ecological footprints and the comparison of ecological footprints. The sustainable development trends of natural capitals in China can be reflected.

Study of restoration of Gobiobotia Naktongensis

Jin-Young Na, Ji-Youn Yoo, Sang-Chul Hwang, Hyun Yang

In this study of restoration for Gobiobotia Naktongensis of Naesong stream, it is confirmed discharged fry have moved widely along the stream and adapted themselves to natural environmental condition successfully.

Environmental monitoring of a butterfly reserve

Richard Cheung, Ophelia Chu, Macy Fung, Queenie Lo, Colleen Chiu, Nelson So

Baseline environmental monitoring of a butterfly reserve in Hong Kong Special Administrative Region, China. Baseline water quality monitoring (dissolved oxygen, turbidity) and background information were collected in recent years.

Asian SEA, EIA, and ecosystem services assessment: Various EIA systems (II)

Wednesday 22 April | 14:30-16:00 | Affari Groundfloor

Paper Session
Chair(s): Keizo Fukahshima

Participating in this session will give you a good overview of the EIA/SEA system and good practices in the Asian region and will also provide you with a good human network in Asia.

SEA for geothermal development in Japan and New Zealand

Yuki Shibata, Yuki Tsukimura, Yuriko Takeda

This paper compares the planning systems for geothermal development in Japan and New Zealand and clarifies the lessons to learn for making the Japanese geothermal planning process more effective and efficient.

Public participation in China:
Weaknesses and strengths

Bert Enserink, Manuela Gheo-Aberton, Dusica Radovic, Peggy Lerman

Analysis of the strengths and weaknesses of the Chinese legal EIA system, focusing on the public participation practices and lessons learned in the provinces of Shandong and Yunnan.

Bangladesh: SIA and addressing inequality

Margriet Hartman

There is an opportunity for social impact assessment in Bangladesh to address relative inequality and support inclusive development by improving its quality and therewith supporting changes in governance and society.

Quantitative and qualitative analysis of EIA reports in China

Jiaying Xu, Takehiko Murayama, Shigeo Nishikizawa

Studying the characteristics of EIA reports in China by analyzing the EIA documents of the year 2014 from two viewpoints.

Ecosystem services in SEA and EIA (III)

Wednesday 22 April | 14:30-16:00 | Affari 4th Floor

Paper Session
Chair(s): Thomas Fischer, Ross Marshall

Case studies are presented on how the ecosystems services approach has been used in SEA and EIA. In this context, the usefulness of digital data is explored.

Ecosystem services in SEA and EIA (II)

Wednesday 22 April | 11:00-12:30 | Affari 4th Floor

Paper Session
Chair(s): Ross Marshall

Case studies are presented on how the ecosystems services approach has been used in SEA and EIA. In this context, the usefulness of digital data is explored.

Ecosystem services in SEA of spatial policies

Davide Genielli

An application of an ecosystem service approach for the SEA of a spatial development policy is presented. The findings are discussed and compared with more conventional SEA approaches.

A Swedish case study on ecosystem services

Alles van Rijn, Antoinette Walshe

One main finding was that it was difficult for the stakeholders to relate to some of the values that comprise the total economic value.

Ecosystem services review for impact assessment

Jo Trewick, Florence Landsberg, Sarah Prinsloo, Philippe Bouzet, Robert Lwanga

This presentation presents some practical experiences of integrating ecosystem services review with impact assessment in a Ugandan context, focusing on baseline assessment to support future environmental and social impact assessments (ESIs).

Ecosystem services: (AULNES) method and toolkit

Niels Madsen, Anna Stedje

This presentation presents some practical experiences of integrating ecosystem services review with impact assessment in a Ugandan context, focusing on baseline assessment to support future environmental and social impact assessments (ESIs).

Ecosystems services in SEA and EIA

On Wednesday 22 April, sessions are held in Affari 4th Floor from 14:30 to 16:00. The topics include:

- **Paper Session**
  - **Chair(s):** Keizo Fukahshima
  - **Title:** Various EIA systems (II)
  - **Date:** Wednesday 22 April 2015
  - **Location:** Affari Groundfloor

- **Public participation in China:
  Weaknesses and strengths**
  - **Authors:** Bert Enserink, Manuela Gheo-Aberton, Dusica Radovic, Peggy Lerman
  - **Date:** Wednesday 22 April 2015
  - **Location:** Affari Groundfloor

- **Bangladesh: SIA and addressing inequality**
  - **Author:** Margriet Hartman
  - **Date:** Wednesday 22 April 2015
  - **Location:** Affari Groundfloor

- **Quantitative and qualitative analysis of EIA reports in China**
  - **Authors:** Jiaying Xu, Takehiko Murayama, Shigeo Nishikizawa
  - **Date:** Wednesday 22 April 2015
  - **Location:** Affari Groundfloor

- **Ecosystem services in SEA and EIA (II)**
  - **Chair(s):** Ross Marshall
  - **Date:** Wednesday 22 April 2015
  - **Location:** Affari 4th Floor

- **Ecosystem services in SEA and EIA (III)**
  - **Chair(s):** Thomas Fischer, Ross Marshall
  - **Date:** Wednesday 22 April 2015
  - **Location:** Affari 4th Floor

- **Ecosystem services in SEA of spatial policies**
  - **Author:** Davide Genielli
  - **Date:** Wednesday 22 April 2015
  - **Location:** Affari 4th Floor

- **A Swedish case study on ecosystem services**
  - **Authors:** Alles van Rijn, Antoinette Walshe
  - **Date:** Wednesday 22 April 2015
  - **Location:** Affari 4th Floor

- **Ecosystem services review for impact assessment**
  - **Authors:** Jo Trewick, Florence Landsberg, Sarah Prinsloo, Philippe Bouzet, Robert Lwanga
  - **Date:** Wednesday 22 April 2015
  - **Location:** Affari 4th Floor

- **Ecosystem services: (AULNES) method and toolkit**
  - **Authors:** Niels Madsen, Anna Stedje
  - **Date:** Wednesday 22 April 2015
  - **Location:** Affari 4th Floor

These sessions cover various aspects of ecosystem services in SEA and EIA, providing insights into the application of these services in different contexts and regions.
Incorporating ES to the study of ecosystems in EIA
Claudia Valencia
Two Peruvian cases are presented to illustrate how the incorporation of ecosystem services (ES) to the study of fragile ecosystems in EIAs led to the development of effective mitigation and compensation strategies.

Mainstreaming the global environment
Fereshteh Mirzaee, Naghmeh Mobargheei
Through a comparison between the EIA process and the economic valuation of ecosystem goods and services, an integrated model has been proposed.

**Emerging uses of strategic environmental assessment (I)**

**Monday 20 April | 14:30-16:00 | Affari Groundfloor**

Paper Session
Chair(s): Zsuzsa Banhalmi-Zakar, Sanne Vannen Larsen

For more than a decade, strategic environmental assessment has been incorporated into legislation in the European Union and has become a valuable addition to the toolbox of environmental practitioners worldwide. This session seeks to shed light on the non-traditional uses of SEA in informing and improving decision-making and developmental outcomes.

**Potential SEA use in corporate strategic planning**
Steve Bonnell
Exploring the potential use of SEA in corporate strategic planning, including organizational decision-making around whether, why, and how to voluntarily adopt and apply SEA.

**Assessing wastewater investment plans using DSS**
Mutsam El-Fadel, Rania Maroun, Majdi Abou Naja
Majed Decision support system (DSS)- based assessment of investment plans to alleviate the impacts of wastewater discharge on river water quality.

**SEA to build a sustainable Djibouti-ville**
Laura Verdier, Raafaeel Gorjux
SEA of Djibouti-ville urban plan can demonstrate how the SEA process could be used as a sustainable planning tool.

**SEA to enhance sustainability in Piaui, Brazil**
Santiago Enriquez, Ernesto Sanchez-Triana, Ana Luisa Gomes Lima, Marcelo Montaño
This presentation will focus on the potential benefits of undertaking strategic environmental assessments that integrate social and poverty dimensions, focusing on the experience of the government of Piaui, Brazil.

**Emerging uses of strategic environmental assessment (II)**

**Monday 20 April | 16:30-18:00 | Affari Groundfloor**

Paper Session
Chair(s): Zsuzsa Banhalmi-Zakar, Sanne Vannen Larsen

For more than a decade, strategic environmental assessment has been incorporated into legislation in the European Union and has become a valuable addition to the toolbox of environmental practitioners worldwide. This session seeks to shed light on the non-traditional uses of SEA in informing and improving decision-making and developmental outcomes.

**SEA for renewable energy in South Africa**
Lydia Cape-Duclauxe, Cornelius van der Westhuizen
The outputs of the study will be submitted to the Ministers for gazetting in 2015 and thereafter will form part of the new environmental impact assessment regulations of South Africa.

**SEA and long-range hydropower planning**
Michael Clarke
A discussion of the recommendations of a strategic sectoral and environmental and social assessment (SSESA) to address cumulative impacts of multiple hydropower projects in the Indus Basin at a system level.

**SEA and biomass energy industries planning**
Chiara Rosinati, Marcello Mangone, Quirico Antonio Cassu
There are still several problems in renewable energy field, particularly in the assessment of cumulative impacts and environmental sustainability. SEA and good planning are essential instruments to solve these problems.

**SEA for sustainable energy planning in Brazil**
Helen Tambolim, Marcelo Montaño
This study identifies how SEA and some aspects of the Dutch experience on the use of this tool may contribute to the incorporation of sustainability to Brazilian energy planning.

**The research of control GHG in SEA**
Wang Yanyan
This presentation discusses the necessity and the operability of control greenhouse gases (GHG) in SEA, forms the technology route map, and sets the accessing index of control GHG in SEA.

**Exploring the role of SEA as a facilitator for sustainable planning (I)**

**Wednesday 22 April | 14:30-16:00 | Villa 6**

Paper Session
Chair(s): Charlotte Faith-El, Bert Balfors, Thomas Fischer, Antoinette Warnback, Kristina Lundberg
This session explores the role of SEA in planning and critically discuss recent experiences of reforming SEA in different legal systems. Further, the session discusses various mechanisms behind linkages between SEA and planning, identifying potential synergies but also highlight potential challenges.

**Exploring transport infrastructure sustainability**
Anna Furberg, Holger Wallbaum, Sverker Molander
Reviewing academic literature of practices in sustainability assessment and in planning of transport infrastructures leads to the conclusion that, in general, there is a need for wider perspectives.

**SEA for local and neighborhood plans in England**
Mark Fessey, Steve Smith, Alex White
Leading SEA practitioners exploring an issue that may well be at the heart of long-standing misconceptions around the SEA process.

**The use of SEA for municipal plans in Sweden**
Kristina Lundberg, Bert Balfors, Christina Hornberg, Johan Hogstrom, Maria Johansson
Swedish governmental agencies have noted difficulties in the implementation of SEA, but systematic examinations are missing. This paper provides such scientific state-of-the-art of SEA practice in municipal planning between 2004-2014.

**A case study of SEA screening practice in Sweden**
Charlotte Faith-El, Jon Holling, Elina Baherent
The paper builds on a study of the practice of screening with regards to the application of the SEA Directive within Swedish municipalities.

**SEA applications (I)**

**Tuesday 21 April | 11:00-12:30 | Villa 105**

Paper Session
Chair(s): Chiara Rosinati

Strategic environmental assessment is nowadays used worldwide to address a wide range of polices and societal challenges. This session presents SEA conducted for specific topics or issues. The final aim is to reflect more broadly on the lessons learned across sectors and governance challenges.

**“Shirtfronting” Australian banks about CC**
Zsuzsa Banhalmi-Zakar, Leila Eslami-Andargoli
We challenge the climate change disclosure practices of 68 Australian banks.

#iaia15
Integrating green qualities and densification projects

Sara Khoshkar

Opportunities and challenges for integration of green qualities in the densification of regional cores of Stockholm green qualities.

SEA and river basin management plans

Bruce Munro, Ross Marshall, Andy Guifogg, Karl Fuller

This presentation sets out the approach adopted by the UK Environment Agency's National Environmental Assessment Service (NEAS) to the river basin management plans's (RBMP) SEA.

SEA applications (II)

Chair(s): Ana Maria Esteves, Galina Ivanova

Margarida Monteiro, Maria Partidário

This presentation sets out the approach adopted by the UK Environment Agency's National Environmental Assessment Service (NEAS) to the river basin management plans's (RBMP) SEA.

How is governance addressed in SEA?

SIA

Zsolt Szilvacsku

This presentation sets out the approach adopted by the UK Environment Agency's National Environmental Assessment Service (NEAS) to the river basin management plans's (RBMP) SEA.

The use of SEA for long-term spatial policy plan

Dick van Straten, Katrien Debeuckelaere

Flanders (Belgium) in 2050: how can SEA influence the development of impact assessments means the decision-making process for a long-term spatial policy plan, and which methodology can be used? 

How is governance addressed in SEA?

Margarida Monteiro, Maria Partidário

This presentation sets out the approach adopted by the UK Environment Agency's National Environmental Assessment Service (NEAS) to the river basin management plans's (RBMP) SEA.

Culturization model of SEA and better integration

Baharéh Khalilaparast, Stephen Knight-Lenihan, Jenny Dixon

This presentation discusses developing a new approach for better integration of SEA to decision-making. A culturization model that considers culture in the SEA process is proposed.

The use of SEA for long-term spatial policy plan

Dick van Straten, Katrien Debeuckelaere

Flanders (Belgium) in 2050: how can SEA influence the decision-making process for a long-term spatial policy plan, and which methodology can be used? 

How is governance addressed in SEA?

Margarida Monteiro, Maria Partidário

This presentation sets out the approach adopted by the UK Environment Agency's National Environmental Assessment Service (NEAS) to the river basin management plans's (RBMP) SEA.

The effective Umbrella SES for spatial development

Deolinda Nunes, Odete Semiao

The effectiveness of the Umbrella Strategic Environmental and Social Assessment (SESA) for spatial development planning project.

Regulation and participation for SEA

Ziota Szilvacsku

The development of impact assessments means the renewal of the public management systems from a social-ecological perspective, and the development of decision-making culture focusing on the values of sustainability.

SIA

Local content policies, benefit-sharing, and sustainable regional development

Tuesday 21 April | 16:30-18:00 | Onice

Paper Session

Chair(s): Ana Maria Esteves, Galina Ivanova

Local content presents new challenges and opportunities for IA practitioners who work actively in the design of projects to ensure they maximize the benefits for local and regional communities. Included in this session is an introduction to the new IPIECA guidance for local content for oil and gas.

IPIECA update of local content guidance

Helen Murphy, Ana Maria Esteves

IPIECA, the global oil and gas industry association for environmental and social issues, is updating its local content guidance document. This presentation focuses on the implications for socio-economic impact assessments.

IA and local content in a Greenlandic context

Rikke Carlsen

Based on lessons learned from conducting several SIA processes in Greenland, this paper addresses how the IA process supports local content policies, benefit sharing, and sustainable regional development in Greenland.

Local procurement and development to avoid enclave

Evanro Marcos, Sergio Pulice, Daniel Roquet

Concepts used in economic development theories can be useful to address phenomena triggered by projects, therefore contributing to the understanding of local procurement benefits and negative impacts.

Exploring regulatory stimuli

Jan-Albert Wessels

Developing countries such as South Africa incorporate green and new technology use stimuli into policies and project strategies, and promoting the implementation thereof in EIA follow-up.

International Guidance for SIA

Monday 20 April | 11:00-12:30 | Affari 4th Floor

Theme Forum

Chair(s): Frank Vanclay

This theme forum celebrates the launch of IAIA's recently-published guidance document, Social Impact Assessment: Guidance for assessing and managing the social impacts of projects. Key stakeholders will share what the guidance document will mean for them.

SIA and CSR in natural resources industries

Monday 20 April | 14:30-16:00 | Villa 202

Paper Session

Chair(s): Rauno Sairinen

This session focuses on the social impact assessment and corporate social responsibility activities of various natural resources industries and their relations. We ask how these practices can benefit each other and sustainable local development.

Putting the "social" in shale gas development

Cait Wilson, Tiffany Morrison, Daniel Franks

Social impact assessment, United States, shale gas, resource extraction, private governance, community and not-for-profit organizations, housing affordability in resource towns.

Coupling SIA and CSR in unconventional oil and gas

Ross Mitchell

This paper outlines how SIA and CSR can be linked using a sustainable livelihoods framework (SLF) during the exploratory phase of a shale gas operation in eastern Poland.
STUDENTS AND EARLY PROFESSIONALS

Early professionals and students: Sharing technical advances and innovation

Tuesday 21 April | 11:00-12:30 | Adua 2
Pecha Kucha
Chair(s): Alexandra Polido, Anne Caroline Malvestio, Claudia Valencia, Adam Wright

Students and early professionals present their research/work in a Pecha Kucha format, inviting the audience to provide comments. The session will have two presentations by experienced professionals to help future IA professionals understand their role in the IA community and will also provide a networking opportunity between young and senior practitioners.

EIA effectiveness: Conceptual basis for an integrative approach
Fernanda Veronez, Marcelo Montaño

The research proposes a set of criteria, based on a known framework, to evaluate the effectiveness of EIA practice in Brazil considering procedural, substantive, and transactive aspects.

Stakeholder engagement: Lessons from HRIAs
Anne-Marie Levesque

Using lessons from recent human rights impact assessments (HRIAs), this presentation will set out some of the key issues in stakeholder engagement practice and propose some innovative responses to these challenges.

Engaging in key issues for IA effectiveness
John Boyle

Session participants will be challenged to consider how IA effectiveness is influenced by people, their strengths and weaknesses, and the culture and systems they work within.

Paul Sage
Guest speaker.

Aaron Goldschmidt
Guest speaker.

The future of the African EIA professional development program

Tuesday 21 April | 16:30-18:00 | Villa 9
Practitioner Exchange
Chair(s): Dieudonne Bitondo, Hussein Sosovele, Peter Tarr

This open meeting will provide the opportunity for African EIA professionals and donors to examine past successes, suggest improvements, and commit to strengthening the Professional Development Fellows Programme as a vital contribution to building the capacity of a new generation of EIA professionals in Africa. Costs are approximately $25,000 per Fellow. Donors and others are now interested in refining and building upon the Programme, which has been dormant for the last 3 years.

MEET THE IAIA SECTIONS

IAIA is a member-based organization which has numerous special-interest Sections that cover different types and aspects of impact assessment. IAIA Sections provide opportunities for IAIA members with these mutual interests to share experiences and discuss ideas in an informal setting. Sections provide a forum for active topical debate and for development and promotion of good practice.

IAIA Sections have a chance to meet during each annual conference, and they also have a rolling program of work throughout the year.

The members of the Sections and their activities are the life-blood of IAIA: through the Sections, IAIA members can feed into the organization of each annual conference, publish different materials, and develop new lines of thought.

When you pay the non-member conference rate, you automatically become an IAIA member and are eligible to join one or more Sections.

WHERE CAN I FIND THE SECTIONS AT IAIA15?

- Sessions that have been organized by the Sections are clearly identified in the preliminary and final programs.
- Each Section will hold one or more Section meetings during the conference, which everyone is welcome to attend.
- Rendezvous tables will be identified at lunch times, where Sections can meet informally to continue discussions.
- Section chairs will be identified by ribbons on their name tags so that you can find them during the conference.

ANY QUESTIONS?

Please contact Angeles Mendoza Sammet, and Jill Baker, co-chairs of the Sections Coordinating Committee (angeles@angelesmendoza.com and jill@iaia.org), or visit www.iaia.org > Sections for more information.

SPECIAL-INTEREST SECTIONS

- Agriculture, Forestry and Fisheries
- Biodiversity & Ecology
- Climate Change
- Corporate Stewardship & Risk Management
- Cultural Heritage
- Disasters & Conflicts
- Health Impact Assessment
- Indigenous Peoples
- Oil, Gas, and Renewable Fuels
- Power Generation and Transmission
- Public Participation
- Strategic Environmental Assessment
- Social Impact Assessment
- Students and Early Professionals

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The EU impact assessment systems: To which extent a global role model?

Monday 20 April | 11:00-12:30 | Villa Auditorium
Theme Forum
Chair(s): Aurel Ciobanu-Dordea, Matthew Arndt
The European Union’s IA mechanism for policies and legislation (IA), plans/programs (SEA) and projects (EIA) is sometimes a role model for countries that are setting up such mechanisms. We discuss what can be learned from the introduction of the EU systems into countries outside Europe.

The EU’s IA system: Recent changes
Rosalinde Van der Vlies
Recent changes introduced in the Commission’s impact assessment system, possible further improvements, and the relevance of the EU system for countries outside Europe will be discussed.

SEEA Directive elements: Applicable beyond EU?
Jin Dusik
Key strengths and weaknesses of the SEEA directive: can it serve as a global role model for impact-centered SEA approaches?

EU-EIA policy for IPA projects in Turkey
Ali Albayrak, Seda Neriman Arzık, Volkan Turan
The EU supports environmental infrastructure projects and improves the life quality in Turkey. For this purpose, how the Instrument for Pre-Accession Assistance (IPA) project application process works and challenges to achieve EU requirements.

EU Directive and Dfi Environmental and Social Policies
Jean-Noel Rouleau
The presentation discusses the coherence between the EU Directive (in particular Directive 2011/92/EU of 13 December 2011) with the environmental and social policies and procedures of development financial institutions.

Ex ante assessment of economic governance: Potential benefits of comprehensive IAs for economy and environment
Tuesday 21 April | 11:00-12:30 | Affari 2nd Floor
Paper Session
Chair(s): Louis Meuleman, Adina Relicovschi
The European Commission and European Investment Bank will discuss the results and follow-up of a study on the cost-avoidance potential of impact assessments of (environment-related) economic policies of EU Member States. The study assesses which essential elements of IAs are present, and what cost-avoidance impacts such IA (elements) may have.

Potential of IA to support environmental goals
David Fleet, Daniel Venclovas
Study for the European Commission identifying key criteria and assessment of EU Member State impact assessment systems and procedures in relation to environmentally-relevant policies.

Determining the benefits of IA: A business method
Angus Morrison-Saunders
This paper outlines a methodology for determining the benefits of impact assessment to proponents and other stakeholders based on learning from the business and management professions.

30 Years of environmental impact assessment of projects: Challenges in transposing the revised EIA Directive (I)
Monday 20 April | 14:30-16:00 | Affari 2nd Floor
Paper Session
Chair(s): Georges Kremils, Piotr Otawski

The Italian experience toward new EIA Directive
Paola Ceoloni, Margherita Cudemo, Valentina Pucci, Monica Turchio, Antonio Venditti
A focus on the Italian EIA system and its best practices in line with the provisions of the revised EIA Directive, in particular regarding access to information via digital media.

A Portuguese perspective on the amended Directive
Julia Jesus
What are the challenges of the transposition of the amended EIA Directive from a Portuguese perspective? And what should the stakeholders do to improve EIA and ensure a smooth transposition?

Impact of transposing EIA Directives in Flanders
Jan de Mulder
The experience of transposing and implementing the EIA Directives in Flanders is presented and assessed within a broader regulatory and policy development framework to enhance the use of IA tools.

25 years of the UK EIA system: SWOT analysis
Urmila Jha-Thakur, Thomas Fischer
This paper evaluates the EIA system of the UK upon completion of 25 years using SWOT analyses while drawing comparisons with Glasson’s (1999) review of the first 10 years of the UK EIA system.

Lessons learned from Canadian EA legislation
John McCauley, Ron Hallman
Insights from implementing the 2012 Canadian Environmental Assessment Act will be shared.

30 Years of environmental impact assessment of projects: Challenges in transposing the revised EIA Directive (II)
Monday 20 April | 16:30-18:00 | Affari 2nd Floor
Paper Session
Chair(s): Georges Kremils, Piotr Otawski

From defensive to proactive EIA quality assurance
Lone Karran, Ulf Kjellerup
The transposition of the EIA Directive can lead to a defensive quality assurance: how to secure a more proactive quality assurance, which goes beyond merely ensuring the quality of the report.

The role of international organizations and development banks
Javaid Ata, Santiago Enriquez, Ernesto Sanchez-Triana
The role of international organizations and development banks in Pakistan’s environmental impact assessment practices.

Concept of reverse environmental impact assessment
Leila Neimane
The research examines to what extent the new EU EIA Directive contributes to strengthening the new legal discipline “climate change law” and integrating it in the EIA.

Evaluating the implementation of the EU SEA Directive (I)
Tuesday 21 April | 14:30-16:00 | Affari 2nd Floor
Paper Session
Chair(s): Stephanois Amptzis, Matthias Sauer, Waltraud Petek
In 2016, the European Commission will prepare its second report on the application and effectiveness of the EU Strategic Environmental Assessment Directive (2001). The current challenges are related to a large extent to implementation issues. The session identifies possible ways of addressing such challenges.

Approaches to evaluation of SEA implementation
Lone Karran, Ulf Kjellerup
Presentation of possible approaches on how to evaluate the application and effectiveness in future evaluation of the SEA Directive.

Bottlenecks in SEA implementation
Antonio Ledda, Andrea De Montis, Amedeo Ganciu, Simone Caschili, Mario Barra
SEA implementation is hindered by a number of factors. Guidelines are crucial documents for identifying them and increasing effectiveness in SEA integration in planning processes.

SEA fitting the nature of plans/programs
Maria Partidário
This presentation discusses how the EU SEA Directive is fit for plans and programs if it so faithfully resonates the EIA model which has been successful mainly with development projects.

Why not finally make SEA relevant?
Felix Sternath
Guidelines and handbooks concerning SEA according to the EU Directive demonstrate a shift from a rather narrow and biological to an increasingly wider and holistic understanding of SEA.

Power distribution in the SEA European Union model
Margarida Monteiro, Maria Partidário
This paper aims to create evidence on how power is distributed and responsibilities are set in the European Union model for SEA.

Evaluating the implementation of the EU SEA Directive (II)
Tuesday 21 April | 16:30-18:00 | Affari 2nd Floor
Paper Session
Chair(s): Stephanois Amptzis, Matthias Sauer, Waltraud Petek
In 2016, the European Commission will prepare its second report on the application and effectiveness of the EU Strategic Environmental Assessment Directive (2001). The current challenges are related to a large extent to implementation issues. The session identifies possible ways of addressing such challenges.

SEA in Germany: State of the art and future needs
Mario Hanusch
This presentation reflects on the application of SEA in Germany, building on numerous practical cases from different planning sectors. Based on the findings, future needs of SEA will be discussed.
SEA application in Germany
Anke Reichhausen, Gesa Geissler
We present the analysis of empirical data on SEA practice in Germany and discuss strengths and weaknesses and point to challenges for effective federal level SEA application in Germany.

SEA practice in Austrian spatial planning
Gernot Stoegelehner
Starting from the EU SEA Directive, regulatory frameworks reveal pitfalls for effective SEA implementation. This paper presents ideas how an often-ineffective assessment instrument can be transformed to a valuable planning instrument.

Capacity building and participation (I)
Wednesday 22 April | 11:00-12:30 | Affari 2nd Floor
Paper Session
Chair(s): Norbert Hahn, Elizabeth Smith
Impact assessments are part of good governance systems. Key elements of IA are public consultation and participation. We discuss if investing in capacity building and participation in general strengthens implementation and enforcement capacities and can nudge governments into taking the next step and improving IA legislation.

Evaluating the effectiveness of EIA training
Luis Sanchez, Michelle Milhomem
A questionnaire survey captured the organizational learning outcomes of EIA training offered to 420 officials at the Brazilian federal environmental agency.

Building EIA capacity together: Central Africa
Gwen van Boven, Dieudonne Bitondo
This regional EIA programme was co-designed, co-implemented, and co-monitored by the participating organizations and the providers of technical assistance. Did this joint approach result in more sustainable strengthening of capacities?

Information system: Estimation of cadmium exposure
Wisa Supangapbon, Wanchana Joobanjong, Orasa Tetiwat
A community information system for estimation of dietary exposure to cadmium was initiated, introduced, and compared to tolerable daily intake (TDI) for the impact assessment of people living downstream from a zinc mining site.

Impact assessment as a tool for capacity building
Naja Marot, Mojca Golobic
A comparison of the power and usefulness of different techniques of public participation for the capacity building process in impact assessments that confront planning policies with sector policies, e.g., health, natural protection, etc.

Capacity building and participation (II)
Wednesday 22 April | 14:30-16:00 | Affari 2nd Floor
Paper Session
Chair(s): Elizabeth Smith, Norbert Hahn
Impact assessments are part of good governance systems. Key elements of IA are public consultation and participation. We discuss if investing in capacity building and participation in general strengthens implementation and enforcement capacities and can nudge governments into taking the next step and improving IA legislation.

Conflict management and participation
Ralph Bergmüller
Conflict management is central in the process of impact assessment and public participation. We highlight potentially fruitful avenues for future development.

Meaningful dialog in the IA process
Kalle Reinkainen, Timo P. Karjalainen
The roles and the tasks of IA and present methods for strengthening confidence towards IA.

Introducing the notion of airport community
Isabel Lavadenz
An introduction to the airport community notion to foster a common identity across neighborhoods, operators, and other stakeholders to improve their capacity to adequately identify and manage environmental and socio-economic risks.

Social risks mitigation and stakeholder engagement plan
Aldi Muhammad Alizar, Anas Nikyjan, Choerunisa Noor Syahid
A comprehensive understanding and innovative knowledge for companies in the development of stakeholder engagement plans to enhance social risks mitigation strategy and action plans (SRMAP), which could move the companies’ action from reactive to proactive.

Capacity building and participation (III)
Wednesday 22 April | 16:30-18:00 | Affari 2nd Floor
Paper Session
Chair(s): Matthias Zoellner
Impact assessments are part of good governance systems. Key elements of IA are public consultation and participation. We discuss if investing in capacity building and participation in general strengthens implementation and enforcement capacities and can nudge governments into taking the next step and improving IA legislation.

Way to strengthen implementation of EIA in Asia
Ikuko Matsumoto
Based on case studies of sound implementation of EIA for development agencies-funded projects in Southeast Asia, this paper explores impacts of these good practices to non-development agencies’ projects.

ZANSEA capacity building in GIS/EIA in Zanzibar
Sigurd Juel Kinn, Makame Omar Makame, Yves Barthelemys
ZANSEA is a capacity building project between Statoil and SUZA to develop a coastal SDI/GIS to support C2M/EIA/SEA as a response to weak national capacities within these subjects in Zanzibar.

Key role in improving regional IA system in Mexico
Javier Clausen, Sergio Contreras
The key role of capacity building and participation in promoting the improvement of a regional impact assessment system's structure and performance in western Mexico.

Do SEAs make a difference?
John Carstensen
Key findings of the 2014 Department for International Development (DFID) Topic Guide on Strategic Environmental Assessment and how to get better evidence of what works.

Information management for IA:
Issues on access and re-use of data and information for IA-enablers in EU legislation

Thursday 23 April | 09:00-10:30 | Affari 2nd Floor
Paper Session
Chair(s): Matthew Arndt, Hugo de Groof
The 2007/2/EC INSPIRE Directive establishing an infrastructure for spatial information in Europe to support community environmental policies, and policies or activities which may have an impact on the environment, should provide the legal frameworks through which efficient measures for information access and re-use are implemented within and across country borders. What is the state of play, what are the main challenges?

The value of INSPIRE for impact assessment
Max Nagla
INSPIRE is a key infrastructure delivering data for EIAs/SEAs, reducing cost and time to access and use the data needed to support them.

Enabling INSPIRE and Sensor Web: A software tool
Cristiano Fugazza, Anna Bosoni, Paolo Carrara, Stefano Menegon, Paolo Tagliolato, Andrea Vianello
An enabling software suite lets environmental researchers overcome information technology (IT) challenges by easily creating their own open geospatial consortium (OGC) services for geo-data and upload dataset and metadata, in compliance with INSPIRE.
**Biodiversity, ecology, and ecosystem services**

**Calculation of nonpoint pollution load in Korea (180)**
Jae Woon Lee, Kwon Heongak, Cheon Seuk
Nonpoint source pollution, management planning, soil and water assessment tool (SWAT).

**Cost-benefit analysis of forest ecosystem services (541)**
Dongkun Lee, Inhye Kong
To compare how much payment for environmental services (PES) compensation is satisfying landowners’ opportunity cost in Vietnam, we analyzed three ecosystem services from preserving forests and potential agricultural income to converting forests into croplands.

**Marker Wadden (580)**
Paul Eijssen
Marker Wadden: an extraordinary bird paradise to be created with the silt from from freshwater Lake Markermeer through an innovative project for nature and technology.

**Biodiversity conservation in dam development (932)**
Ji Yoon Kim, Ji-Woong Choi, Kwang-Guk An
This study was carried out to review restoration attempts made to minimize ecological damage and to suggest a development model that can be used for preserving and sustaining ecological diversity.

**Ecological impact assessments of weir construction (933)**
Ji-Woong Choi, Young-Jin Yun, Kwang-Guk An
Artificial weir, fishway, fish movement, fish monitoring methodologies.

**Influences of water quality on fish community (958)**
Ji Yoon Kim, Ji-Woong Choi, Kwang-Guk An
Self-organizing maps (SOMs), fish community, water quality, longitudinal gradient.

**Eco-health assessments using bioindicators (965)**
Kwang-Guk An, Han-il Kang, Ji-Woong Choi
Evaluation of integrative aquatic ecosystem health of an urban stream using various ecological parameters of bioindicators and biomarkers, physical habitat, and chemical water quality.

**Impacts of aquatic biota in limestone mine streams (1008)**
Sang-Jae Lee
Ecosystem health was evaluated in streams influenced by drainage of limestone mines along with ecological impacts of biological taxa and water chemistry.

**Port management eco-efficiency in Brazil (1166)**
Sandrelly Amigo, Victor Patirini, Augusto Martini, Alessandra Jesus
The eco-efficiency program operating at the Samarco terminal port displays environmental responsibility as a criteria for reducing potential negative impacts and producing new opportunities for the protection of sea turtles.

**Data visualization**

**System mapping for social assessment and consultation (635)**
Letícia Sollaun, Rosetta Moreland
System mapping serves as an innovative tool in social impact assessment and stakeholder engagement planning. By completing the mapping exercise, a project’s impacts on social networks are identified.

**ARVI tool for impact significance assessment (747)**
Jyri Mustajoki, Mika Marttunen, Vesa Riekkinen
We introduce an Excel-based “ARVI tool” for supporting the structured impact significance assessment. ARVI provides help with managing information and producing illustrative charts to present the results.

**Bat3Data: The 3D automated detection of bat flight (794)**
Patricia Jocotet, Hippolyte Pouchele, Martyn Gest
Bat3Data is a field-based technology for detecting and plotting in 3D the flight paths of bats, allowing better interpretation of the impact of infrastructure projects on bat ecology.

**Ecosystem services: (AULNES) method and toolkit (801)**
Nicolas Jocotet
The Egis Ecosystem Services Toolkit, a methodology for the assessment of the impact of a project on ecosystem services throughout the lifetime of a project.

**Environmental sensitivity analysis of Yaran oil field, Iran (842)**
Naghmeh Mobargehi, Mitra Ghasedi, Sedighe MousaviPour
An environmental sensitivity analysis of Yaran oil field in Iran using GIS-based environmental sensitivity index (ESI) maps.

**SoftGIS for impact assessment (1124)**
Ivan Babelon
SoftGIS provides a method and tools for a participative mapping of place values. SoftGIS can be integrated in impact assessment, including for assessing impacts on urban ecosystem services.

**Automatic sorting of camera trapping data (1240)**
Patricia Rodrigues, David Gaspar, Ana Rosa, Joao Gonçalves, Daniel Pires, Vitor Rodrigues
The preliminary result of a method that automatically sorts photographs from camera trapping is presented. Results suggest that the time necessary to sort positive animal identifications could be greatly reduced.

**Environmental impacts of e-government in Iran (1248)**
Lisa Poulak
Digitization of data in Iran has helped in reducing ecological footprints.

**Disasters, conflicts, and climate change**

**Building design factors for disaster prevention (125)**
Seonghwan Yoon, Sukjin Jung, Seonghwa Lee, Jiyoon Kim, Donguk Kim
The purpose of this study was to figure out the problems and seek an improvement plan for the actual condition and recognition of an architecture disaster prevention plan.

**Building damages due to natural disasters in Korea (127)**
Seonghwan Yoon, Sukjin Jung, Seonghwa Lee, Jiyoon Kim, Donguk Kim
An analysis of types of building damage and influencing factors of regional climate change through detailed analysis of building damage.

**National impact assessment of Korea by sea level rise (657)**
Kwangwoo Cho, Junha Maeng, Taeyun Kim, Haemi Lee
This study quantitatively assesses socio-economic impacts and vulnerabilities in coastal zones of South Korea and draws the adaptation measures based on the expected sea level rise under the assumption.

**Do stakeholders have the same resilience strategy? (900)**
Gyongyun Ha, Kyungwan Bae, Juchul Jung, Hyeunjung Park
Evidence through a case study of differences between citizens and public officials about resilience strategies focusing on natural hazard mitigation.

**Regional differences on social vulnerability index (901)**
Juchul Jung, Sungho Lee, Dalhyul Lee, Gyongyun Ha
This study analyzed the difference in social vulnerability results according to social vulnerability index selection.
**Posters**

**EIA**

Discussion on the main issues of the island city (741)  
Yuanyong Ouyang, Yaojian Wu, Juanjuan Dai, Shang Jiang  
Island, city, the overall planning EIA, main issues, Pintan.

EIA and Bonsucro Certification in ethanol industry (890)  
Davi Wilsson Furtado Sozinho, Amarilis Lucia Casteli Figueiredo Gallardo, Carla Grigoletto Duarte  
This research aims to answer to what extent the requirements of EIA and Bonsucro Certification are overlapping for the sugarcane industry.

Minimizing environmental impacts with thermal power plant ash management (903)  
Junho Maeng, Kwangwoo Cho, Donghwan Suh  
Effective uses of coal ashes and the practice of recycling are identified in this study as effective plans to reduce the environmental impacts associated with ashes and to create a society of resource recycling.

CEAM glances at Brazil’s oil and gas EIA practice (1090)  
Rodriguez, Daniel Hernandez Martinez, Luis Enrique Sanchez, Rossana Borioni, Amarilis Gallardo, Carla Grigoletto Duarte  
How may Brazil’s environmental institutions cope with rising effects on booming recent exploration, especially at the pre-salt layer?

How is the Brazilian EIA scoping practice? (1114)  
Rossana Bonioni, Amarilis Gallardo, Luis Enrique Sanchez  
From ten cases related to some of the biggest infrastructure projects, this research has showed substantial differences between international best practices and the Brazilian practices of EIA scoping.

Evaluating the IA system in Western Mexico (1150)  
Javier Clauz, Grace Gomez Quiroga, Rafael Chavez Garcia Silva, Alejandra Torres Rodriguez, Daniel Hernandez Martinez  
Mexican EIA, the only IA tool in this country, is ineffective. An evaluation of the IA system’s performance was carried out, resulting in proposals to address IA quality through a systems approach.

Comparative matrix: EIA framework in Latin America (1317)  
Ruth Tiffer-Sotomayor, Ernesto Sanchez-Triana, Marcelo Acerbi, Pilar Fernandez, Katharina Siegmann, Rosario Navarro  
A snapshot of the current EIA systems that have been adopted in 22 Latin American countries.

Legal framework of environmental impact assessment (1333)  
Ana Luisa Gomes Lima, Bilal Rahill, Ernesto Sanchez-Triana, Santiago Enriquez, Javad Afzal, Shakil Ferdousi  
Summary of a comparative review of the main elements of environmental impact assessment systems in seven South Asian countries.

**HIA**

Health in IAs: An underutilized potential (456)  
Julia Nowacki, Francesca Viliani, Rainer Fehr, Marco Martuzzi  
Prospective impact assessments (PIA), as established around the world, provide unique opportunities for "foresight" which should, and are, used for protecting and promoting human health; nonetheless, there is room for improvement.

Malaria dynamic in Belo Monte’s dam impact area (1116)  
Alexandre Wiefels, Missifany Silveira  
The implementation of large projects causes impacts on the health of populations. This study notes changes in the dynamics of malaria in the impact area of the Belo Monte dam.

Improved health assessments by proxy and digital tools (1266)  
Birgitta Liljedahl, Annica Walej, Louise Simonsson, Per Wikstrom  
By using proxy indicators and digital tools, e.g., satellite imagery, multivariate data analysis, and GIS to generate health exposure proxy metrics, more comprehensive assessments can be made.

**Indicators, technology, and methods**

Overcoming lock-in: A new tool for sustainability (774)  
Amar Sjauw En Wu, Jos Arts  
Practical experiences with a new tool to assess sustainability of project scopes in early planning stages and the potential for sustainable area development in overcoming lock-in.

Tool for risk management related to climate change (783)  
Virginie Defromant  
A presentation of methods that enhance environmental assessment by taking into account climate change, industrial risks, and ecosystem services.

Social Imprint by Egis (810)  
Mireille Falque  
Social Imprint by Egis: the toolbox to add social value into mining projects.

Digital technologies and New Zealand IA (867)  
Richard Morgan  
Slower adoption of digital technologies by competent authorities in New Zealand may be hindering more inclusive and participatory IA processes.

City resilience through the efficiency of LID (904)  
Hyungjun Park, Juchul Jung, Ryungwan Bae, Saewoon Jang  
This study reviews, from an urban planning point of view, the efficiency of the low impact development (LID) in preparation for damages by heavy rainfall.

A review of IA tools for CAP measures (941)  
Christina Mouloungianni, Thomas Bournaris  
A review of impact assessment tools for common agricultural policy (CAP) measures. These tools were analyzed and classified using different criteria.

Results from LIFE+ project IMPERIA (1070)  
Elisa Vollus, Mika Marttunen, Timo Karjalainen, Jyn Mustajoki  
Tools, methods, good practices, and other results from a project aiming to improve the quality and effectiveness of EIA and SEA by bringing good practices and methods from multi-criteria decision analysis (MCDA).

**Policy and decision-making**

Capacity building in IA for Thai local governments (527)  
Pannchai Sitisirikanul, Sarunya Hengnaprom, Surat Bualert, Alongkorn Intharaksa  
Phase 2 of a study aimed at empowering Thai local governmental authorities so that they can handle environmental issues via the processes of IA.
Importance of legalizing SEA in Jordan (931)
Dina Kisbi
The importance of performing EIAs along with demonstrating the intense need for legalizing SEA in Jordan, which can be highlighted through the delays of having wind farm projects in Jordan.

Innovative approaches to site options assessment (1177)
Mark Fessey, Barnaby Burman, Anthony Whitaker
Completed pro formas (communicating the performance of a given site option) and summary tables (summarizing the performance of numerous site options), and exploring their use for consultation/engagement.

SPEAK: Sustainable planning and EA knowledge (1275)
Berit Balfors
Presentation of the SPEAK project and invitation to collaborate in order to meet the challenges of sustainable development through spatial planning and the application of EIA and SEA.

Public participation and community empowerment

EIA and citizen attitudes towards the environment (781)
Andrew Snow, Carys Jones, Adam Barker
EIA, public participation, governmentality, EIA effectiveness, power, environmental governance, environmental citizen.

Participative quality of life study (799)
Mireille Falque
The participative “quality of life study” is a tool that improves the understanding of the values held by a community. Results allow planners to co-design a project with its inhabitants.

IA-supported community-based landscape maintenance (860)
Zsolt Szilvacsku
The main aspects of becoming alive and valuable, accentuating the importance of community- and value-based landscape management with support of impact assessments.

Capacity building in EIA and HIA for a Thai community (892)
Suthat Chaiththi, Pornchai Sthisarankul, Sarunya Hengarprom
This research examines development of the capacity building process in EIA and HIA for a Thai community so that they could solve a lack of both knowledge and community participation in legislation.

Successful community development projects (1106)
Daphne Hartney, Jimmy Mnisi
How to identify a feasible community benefit project, how to identify beneficiaries without causing friction with non-beneficiaries, and how to implement the project.

SEA

Assessment factors applicable to SEA in Korea (337)
Young Han Hwan, Jinkwan Oh
In this study, 17 assessment factors of 6 areas applicable to a policy-level SEA report were suggested to identify whether a proposed plan coincides with environmental policy in Korea.

Strategic assessment for renewable energy in South Africa (929)
Lydia Cope-Ducluzeau, Cornelius van der Westhuizen
The outputs of this study will be submitted to the Ministers for gazetting in 2015 and thereafter will form part of the new environmental impact assessment regulations of South Africa.

SEA and ecosystem services for regional planning (1055)
Daniel Rozas, Davide Geneletti, Christine Fürst, Francisco Munoz
Identifying understanding about SEA and ecosystem services, which is currently managed by institutions with a relevant influence in the decision-making process in spatial planning.

WIP: Social research agenda on mining issues (989)
Mariana Lyra, Olga Seedorenko, Sarah Olivier
Call for collaboration: How is social research going to influence systemic and procedural changes across the mining industry?

Preconditions and tools for social license to mine (1171)
Tuija Mononen
Social acceptance of mining depends heavily on impacts at regional and local level. Thus, practices related to social acceptance must be approached from the view point of local preconditions.

A framework to guide SIA and social management plan (1196)
Eddie Smyth, Frank Vanclay
A new analytical framework grounded on established development theories and informed by practice to identify, measure, assess, and manage social impacts.
ANNUAL GENERAL MEETING

Tuesday 21 April | 12:40-13:30 | Affari Groundfloor

This is the annual business meeting of the Association. All conference participants are encouraged to attend, learn more about the operation of IAIA, and ask questions.

2015 AGM Agenda
1. Welcome, introductions and confirmation of the 2014 AGM Minutes.
2. IAIA 2014: What have we accomplished?
3. IAIA 2015: Where are we going?
4. IAIA’s Financial Report
5. Presentation of the IAIA Lifetime Achievement Award and address by the recipient, Maria Partidário
6. Q&A from members
7. Commemorating Charlie Wolf, IAIA Founding Member

In 1980 Charlie Wolf was one of the founding members of IAIA, together with Alan Porter and Fred Rossini. The story goes that at the end of a good Chinese dinner, Charlie opened his fortune cookie and read: “You will do well to expand your business.” IAIA was born a few months later!

Charlie had since been always active within IAIA, closely following developments and progress within the organization. He served the IAIA Board from 1981 to 1983, was President from 1984 to 1987, and regularly attended IAIA conferences. Charlie received his Ph.D. in sociology from Princeton University in 1963. He taught at Brown University from 1964-1970. Among the other schools and universities where he taught was the Environmental Psychology Program at the City University of New York from 1976-79. He was also Professor of Management Science and Acting Director of Academic Planning at the Federal University of Technology, Yola, Nigeria, 1983-1984. He was among the first to use the expression “Social Impact Assessment.” In 1987 he was the recipient of the IAIA Rose-Hulman award. At the time of his death he was working on a book, Impact Assessment: State of the Art, Science and Craft. In this book Charlie brings together forty years of experience in impact assessment to take stock of the field and looks at its beginnings, current state, and future paths.

Charlie passed away on February 5, 2015, in New York City, and leaves behind his wife Nancy Wolf and Deogratias Niyizonkiza, who joined the family in 1994.
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 11:00 on Thursday, 23 April.

Vote for your favorite poster!

Please drop off your ballot at the registration desk by 11:00 on Wednesday, 22 April.

### OUTSTANDING PRESENTATIONS

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### BEST POSTER: PUBLIC CHOICE

My vote for Best Poster

Poster #:

PLEASE RETURN THIS BALLOT TO THE IAIA REGISTRATION DESK BY 11:00 ON WEDNESDAY, 22 APRIL.
Welcome Reception

Stroll the grounds of the venue while enjoying hors d'oeuvres and the unique setting. The IAIA15 Welcome reception is an excellent opportunity to network, meet old friends and colleagues, and make new ones to get your conference off to a great start. Maggio Musicale Fiorentino will provide live brass music.

Monday 20 April | 18:15-20:15 | Congress Center Garden (Villa Passi Perduti in case of rain)
Pre-registration by 30 March required.

Banquet

The location of the banquet, Teatro Opera, represents a cornerstone of the annual conference. Beyond the meal, which features Italian cuisine, live music will round off the night.

The week's work is nearly over, and the banquet is a cornerstone of the annual conference. Beyond the meal, which features Italian cuisine, live music will round off the night.

Wednesday 22 April | 20:00-24:00 | Teatro dell'Opera (Address: Viale Fratelli Rosselli 15)
Pre-registration by 30 March required.

Dine Outs

The tradition of dine-outs is back for IAIA15! Share an evening with your colleagues at a “pay your own way” dinner. Organizing committee members have that all-important local knowledge about where the best food and the best dining experiences can be found in Florence, and they are ready to take you to experience it!

To join, sign up on the forms posted on the message board in the Villa entrance. Dine-outs are a great opportunity to meet new people and see different parts of the city of Florence.

Tuesday 21 April | 20:00 onward

Mentor/Buddy Program

This program helps students and early professionals (SEPs) and first-time conference attendees feel more comfortable and less overwhelmed with their conference experience.

The mentor is an experienced IAIA member who acts as a discussion partner for a mentee. Mentees do not shadow mentors, but rather meet at the conference to begin conversation that extends beyond the conference. Mentors and mentees with similar interests are matched wherever possible.

Matching of mentors and mentees took place prior to the conference. If you would like to be a mentor or mentee at future conference, e-mail impact@iaia.org or notify staff at the registration desk.

Mentor/Buddy Orientation

Saturday 19 April | 17:15-17:45
Location: Check in at registration desk

Fun Run

The Fun Run continues to grow in popularity. This is a great way to start the day and network with fellow runners. The morning run through the historic center of Florence will invigorate your mind and body and offer a chance to meet people you might not otherwise meet during formal sessions.

Everyone is welcome: runners, walkers, spectators, and volunteers.

Wednesday 22 April | 07:00-08:00
Location: Parco Delle Cascine
See the message board in the Villa entrance for more information.
Pre-registration and nominal fee ($5) by 30 March required.

Buffet of Ideas

IAIA15 continues a simple methodology introduced at IAIA09 for hosting conversation about issues of interest and concern.

The “Buffet of Ideas” is an informal networking session that provides participants the opportunity to create their own workshops in small groups over lunch.

This meeting method allows yet another opportunity for participants to network, sharing ideas on topics of interest and connecting with colleagues who have similar interests, but you might not meet during formal sessions.

At lunch on Monday, select tables will be labeled with discussion topics. Find a table with a topic you would like to discuss and have a seat. Lunch is provided, and discussion flows.

Section Rendezvous

Rendezvous tables will be identified at lunch times on Tuesday and Wednesday, where Sections can meet informally to continue discussions.

Indaba

IAIA provides space for impromptu discussions and “pop-up” topics in unanticipated/unscheduled areas of interest, or to carry on a discussion begun during a session.

“Indaba” or open space sessions, from a concept first introduced at IAIA95 in South Africa, will be held at the end of the day on Tuesday and Wednesday, with the opportunity to schedule your topic throughout the day.

To participate, write the topic you would like to discuss on the sign-up sheets in the Villa entrance, or add your name to a discussion topic already posted. In the late afternoon, a program committee member will assign rooms to selected topics. Selection is based on popularity of the topic and available rooms.

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 main entrance of the Firenze Fiera Conference Center (just outside from IAIA registration at Piazza Adua). 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.

Jobs Board

A bulletin board specifically designated for job advertisements is available in the Villa entrance. If you are looking for a job or if your company has jobs to post, post the announcement! Also see Career Central (www.iaia.org/careercentral) before and after the conference for the latest job openings.

Book Share

Bring one or two of your favorite environmental reference books, new or recycled, as a contribution to the book share table in Salone Club. The books are available on a first-come, first-served basis to delegates who might not readily find such books in their own locales.

Free Workshop

IAIA-Italia invites you our free workshop on “New Governance Opportunity for Italian Cities” and an exhibition of local high-quality Italian food.

The event has the objective of defining the best strategies to start an innovative process of social collaboration for smart communities, where technologies and participation improve the conditions of sustainability and coexistence between people and cultures in future cities.

The event will be attended by institutions, citizens, associations, and representatives of schools who will present their experiences of governance of the territory and teaching of sustainable education. At the end of the event, there will be an open debate and discussion with delegates.

Thursday 23 April | 15:00-19:00 | Palazzo degli Affari-Conference Center Firenze
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Auditorium
Passi Perduti

Affari
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IAIA gratefully acknowledges these companies and organizations for their generous financial and in-kind support of IAIA15.

By sharing their resources, these companies and organizations demonstrate their commitment to the environment and contribute to the improvement of impact assessment around the globe.

When you meet a representative of these sponsors, at the conference or in the months ahead, please be sure to thank them for their contributions.

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Conference venue
Firenze Fiera
Piazza Adua 1,
50123 Florence, Italy

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