

出國報告（出國類別：國際會議）

出席國際影響評估協會  
(International Association for  
Impact Assessment, IAIA)  
2014 年研討會出國報告書

服務機關：行政院環境保護署

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派赴國家：智利

出國期間：103 年 4 月 6 日至 103 年 4 月 14 日

報告日期：103 年 7 月

## 摘 要

本屆國際影響評估協會(International Association for Impact Assessment, IAIA) 2014 年研討會主題為社會與經濟發展的影響評估(Impact Assessment for Social and Economic Development)，在本次的研討會中有多篇報告討論此項課題；許多研究及學者指出，在進行政策環境影響評估(Strategic Environmental Assessment；SEA)時，宜因地制宜針對不同國家、地理環境、生態資源環境等不同而有所差異，例如在島嶼的相關評估作業中，應基於島嶼地區的侷限性、環境的脆弱性與氣候變遷的因應等進行影響評估，這些均是在島嶼地區進行影響評估時比較重要的課題。

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## 壹、出國目的

國際影響評估協會 (International Association for Impact Assessment, IAIA) 成立於 1980 年，為一國際性民間組織，其涉足之領域涵括環境、社會、經濟、文化、生態及健康風險等各項領域，在國際間之影響評估範疇中，為最具規模者。本次參與 2014 年研討會，除參與研討會議外，並以海報展示及說明方式分享我國「政府政策環境影響評估制度－以桃園航空城政策環評為例 (Development and Implementation of Strategic Environmental Assessment in Taiwan – Case Study of TAOYUAN Aerotropolis Project)」之經驗，與其他國家經驗交流並分享我國環評環境影響評估制度，期能藉由參與本次會議，瞭解國際間環境影響評估發展之趨勢，作為我國環境影響評估制度檢討與改進之參考。

## 貳、行程

日期	地點	工作內容
4 月 6 日	臺北至智利 (Viña del Mar Chile, 比尼亞德爾馬)	啟程
4 月 7 日	智利 (比尼亞德爾馬)	報到, 海報張貼
4 月 8 日	加拿大 (卡爾加利)	研討會
4 月 9 日	加拿大 (卡爾加利)	研討會
4 月 10 日	加拿大 (卡爾加利)	研討會
4 月 11 日	加拿大 (卡爾加利)	研討會
4 月 12 日~14 日	智利 (比尼亞德爾馬) 至臺北	返程

## 參、關於智利比尼亞德爾馬 (Viña del Mar, Chile)

智利(Chile)位於南美洲的西邊，南北長約 4,300 公里，國土面積約 756,950 平方公里，東倚安第斯山脈(The Andes)與太平洋之間，智利西邊及南面臨太平洋，北接秘魯，東與玻利維亞(Bolivia)及阿根廷(Argentina)交界，東西平均寬度約 200 公里，最寬處 434 公里，最窄處僅 90 公里，為全世界國土最狹長的國家。

智利因國土南北狹長的特色，由北而南可概分為 3 種不同地形樣貌；北部多為高山、沙漠形態，氣候乾燥溫和，許多山峰高達 4,000 公尺以上，且有全球最乾燥的阿塔卡馬沙漠(Atacama)，在智利北部可以看到那壯麗的安第斯山脈風景，而阿塔卡馬沙漠則有獨特的奇特地貌；中部因地中海型氣候因素，為肥沃之丘陵平原，首都聖地牙哥(Santiago)位於此區；南部緯度高，寒冷多雨，有獨特的凍原、島嶼以及峽灣等景觀。

智利國民所得約 1 萬 5,000 美元，人口約 1,600 萬人，首都為位於中部的聖地牙哥，為智利的第一大城，人口數約 500 萬人，將近三分之一的智利人口都居住在此。

比尼亞德爾馬(Viña del Mar)位於智利中部的海岸邊，距離首都聖地牙哥約 119 公里，南與智利第一大港瓦爾帕萊索(Valparaiso)相鄰。比尼亞德爾馬西班牙文意為「海上葡萄園」，有「花園城市」之稱，城裡的花鐘為當地著名的旅遊景點，這裡也是南美洲太平洋沿岸的著名旅遊城市之一，更是智利的渡假勝地。



比尼亞德爾馬著名地標 - 花鐘 (Flower Clock)

## 肆、活動地點及內容

2014 年「國際影響評估協會 (International Association for Impact Assessment, IAIA) 年會」於 2014 年 4 月在智利比尼亞德爾馬的德爾馬飯店 (Hotel Del Mar) 舉行。

本次會議內容共有 8 場主題論壇 (Theme Forums)、120 場分項座談會 (Concurrent Sessions)、400 篇以上論文發表 (Papers) 及 40 篇以上海報展示 (Posters)、多場技術參訪 (Technical Visits) 與訓練課程 (Training Courses) 等。大會議程詳如附錄一。



2014 年國際影響評估協會暨研討會舉辦地點 - Hotel Del Mar

## 伍、參加人員

此次年會參加人員包含智利（地主國）、美國、阿根廷、中國、巴西、秘魯、芬蘭、加拿大、日本、烏拉圭、瑞典、澳洲、挪威、丹麥、英國、德國、墨西哥、南韓、印度、南非、巴拿馬、義大利、瑞士、荷蘭、香港、西班牙……等國家的人員參加，共約 1,000 人左右。我國僅本署派 1 人代表參加。



## 陸、IAIA 2014 年會概要

### 一、本次會議主題

本屆會議主題為「Impact Assessment for Social and Economic Development」，在「社會與經濟發展的影響評估」的這個課題中，年會及研討會的引言人說明，社會與經濟的發展不僅僅是一種收入增長與減少貧困的結果，在發展過程中，其包含了平等、環境正義、文化認同與政治的民主化等內涵，社會發展與經濟進步可以導引更好的生活質量，然而這個程序可能會對環境產生負面的影響，進而造成生物多樣性或自然資源的不利影響，因此，在辦理影響評估過程中，增加公眾參與的決策程序，是社會與經濟發展過程中的重要關鍵。

### 二、主題論壇 (Theme Forums)

本次會議主題論壇共有 8 場，除就本次會議主題進行討論外，亦就農業、林業及漁業 (Agriculture, Forestry and Fisheries)、生物多樣性 (Biodiversity)、氣候變遷 (Climate Change)、文化資產 (Culture Heritage)、能源 (Energy)、健康 (Health)、公眾參與 (Public Participation)、社會影響評估 (Social Impact Assessment) 等議題之探討，經由論壇方式，彼此廣泛的交流、討論及經驗分享。



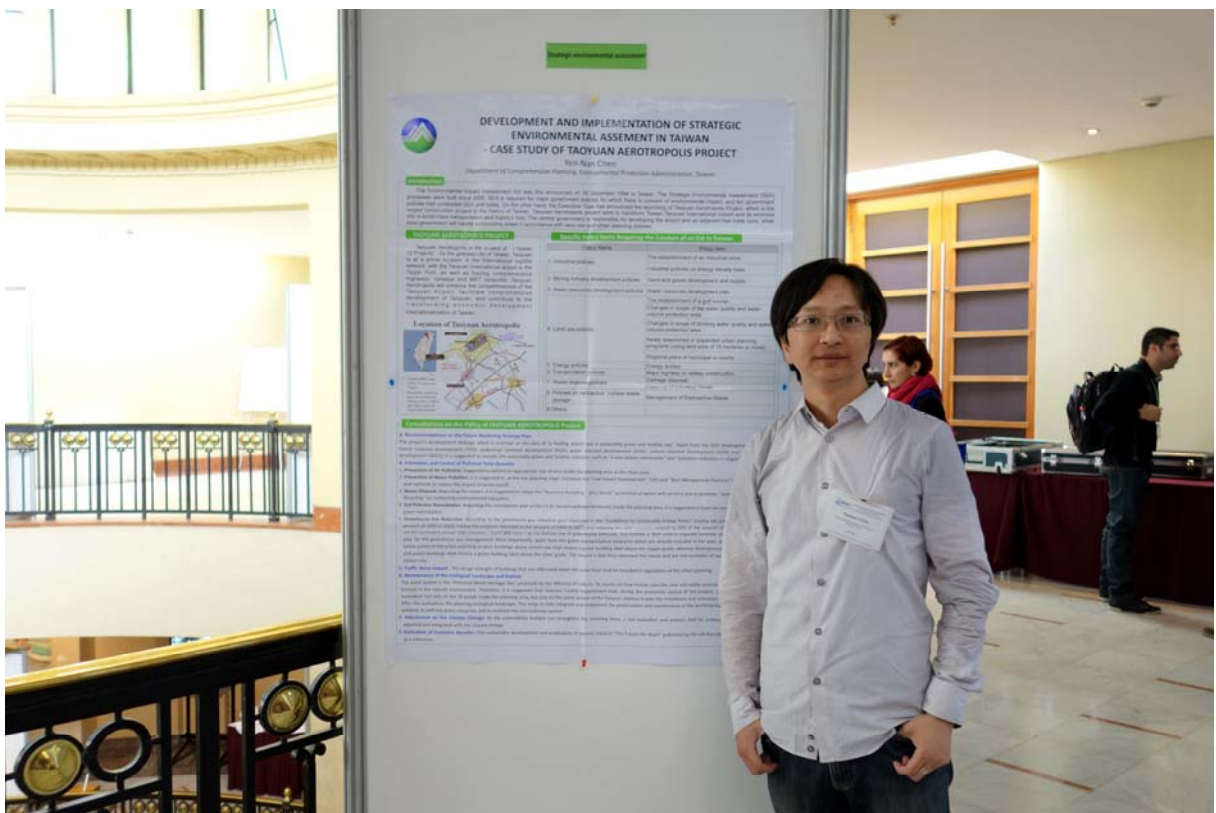
主題論壇討論（一）



主題論壇討論（二）

### 三、本署發表內容

本次年會，本署代表以海報展示及說明方式，分享我國政府政策環境影響評估制度－以桃園航空城政策環評為例（Development and Implementation of Strategic Environmental Assessment in Taiwan – Case Study of TAOYUAN Aerotropolis Project）之經驗，依主辦單位安排，海報展示及說明於開幕當天全體會議後舉行，全部與會者均會參與，參與人員相當踴躍。



海報發表情形（一）



海報發表情形（二）



海報發表情形（三）

#### 四、分項座談會 (Concurrent Sessions)

本次會議論文發表相當踴躍，250 篇以上論文發表，120 場分項座談會，大會安排同時間不同場次的分項座談會進行分組探討，主要議題除上述之大會主題及論壇外，尚包含生物多樣性與生態、風險評估、健康影響評估、公眾參與、社會影響評估、政策環境影響評估、永續評估、能源……等。

#### 五、會議參與情形摘述

本屆會議主題為「Impact Assessment for Social and Economic Development」(社會與經濟發展的影響評估)，有鑒於國內近年對於開發計畫涉及社會經濟議題的影響評估日益增加，同時本次會議也有報告針對香港司法審查對於香港環境影響評估決策影響之說明，以下就相關內容摘述如下，其餘內容，請詳見附錄一。

香港的「環境影響評估條例草案」於 1996 年送交香港的立法會審議，而後「環境影響評估條例」於 1998 年 4 月 1 日正式生效。另一方面，香港基本法第 35 條第 2 項 (Article 35 (2))：「香港居民有權對行政部門和行政人員的行為向法院提起訴訟。」賦予香港居民經由司法來挑戰行政機關的決定權。

香港居民如果對於香港政府做出的決定有異議，最常使用的方式為提出「司法覆核」(judicial review)，從法院的判決中，司法審理主要在於審查政策決定的過程，亦即審查所做之決定是否涉及行政瑕疵，是否涉及程序不合理或不適當。而在法院有關環境影響評估的決策司法覆核案件中，法院通常著重於決策的過程，以及行政機關是否依環境影響評估條例的規範辦理。

在座談會中，報告人以近年來香港的幾件重大環境影響評估案件的司法覆核判決作為案例，包括 2002 年香港國際機場永久航空儲油設施 (Permanent Aviation Fuel Facility for Hong Kong International Airport, 2002)、2010 年港珠澳大橋 (Hong Kong-Zhuhai-Macau Bridge, 2010)、2012 年綜合廢棄物處理設施 (Integrated Waste Management Facilities, 2012) 以及 2013 年香港大埔龍尾

海灘計畫 (The recent Development of a Bathing Beach at Lung Mei, Tai Po, 2013) 進行說明，依判決內容主要包括下列幾項關鍵議題：

(一) 定量風險評估 (Quantitative Risk Assessment)

「香港國際機場永久航空儲油設施」案為香港機場管理局於決定在香港屯門地區興建永久航空煤油儲油設施，本案引起爭議之關鍵議題在於，位於儲油設施周邊的鋼鐵廠認為儲油槽與鋼鐵廠相鄰，儲油槽如果發生漏油將引起鋼鐵廠的爆炸意外，因而提起司法覆核。

本案經香港法院的審理後，認為本案環評報告中僅就儲油設施發生漏油意外進行風險評估與安全因應措施，惟未針對儲油設施完全漏油（雖然可能發生的機率為 15 萬年 1 次）的意外進行風險評估，不過仍應在環境影估報告中進行評估，而判決香港環境保護署敗訴。

(二) 空氣品質影響評估 (Air Quality Impact Assessment)

港珠澳大橋計畫係連接香港大嶼山、澳門與廣東珠海的 1 座跨海橋梁，於 2009 年通過環境影響評估，並於同年開始施工，原預訂於 2016 年完工通車。

在 2010 年 1 月時，香港一名民眾向香港法院提出司法覆核，而經法院判決認為環評報告中，未評估比較港珠澳大橋興建前後空氣污染程度的變化，且未詳實說明評估港珠澳大橋通車後，車流增加但空氣品質未超過法規標準的理由，違反「環境影響評估條例」，法院判決香港環境保護署敗訴。之後經香港環境保護署提起上訴後，香港法院則改判香港政府勝訴，認為在環評報告中，已經將港珠澳大橋通車後對環境之影響評進行全面的評估，至於是否應將零方案（即沒有港珠澳大橋）的情形納入評估，則屬於香港環境保護署的專業，香港法院不應干預。

(三) 香港環境保護署的角色衝突 (Conflicting Role of EPD)

「綜合廢物管理設施」案係香港政府規劃於香港石鼓洲南部興建焚化爐，香港石鼓洲當地居民認為香港環境保護署同時身兼焚化爐的環評報告申請人，又同時是環評報告的審查人，自既是該項工程環境影響評估報告的申請人，又

同時是環評報告的審批人，違反審查原則。

本案經香港法院審查後，認為香港環境保護署署長具專業判斷，事件不涉及其個人利益，且署長有權否決報告，署長審核報告時，除了代表政府亦能兼顧公眾利益，並無違反相關法令。

#### (四) 生態影響評估 (Ecological Assessment)

香港大埔龍尾泥灘位於香港東邊的海岸邊，香港政府計畫將龍尾泥灘改建為人工沙灘，並依程序進行諮詢及環評作業等程序後，於施工前，招致環保團體反對，而向香港法院提起司法覆核。

環保團體表示，本件之環評報告之生態調查不詳實，香港環境保護署係依據錯誤的資訊作出通過環境影響評估的決定，建議將之改建為人工沙灘並且進行有關諮詢程序後，隨即招致環境保護團體反對，香港法院已受理本件司法覆核，目前仍在審理中。

綜上所述，近十幾年間，香港法院就環境影響評估案件受理司法覆核與判決顯示，香港民眾對於環境的議題與環評的進程序之關切度，均顯示有大幅增加的情形。

## 陸、心得及建議

### 一、分享臺灣經驗，強化國際交流合作，提升我國環保形象

在環境影響評估領域中，國際影響評估協會（IAIA）年會為國際間最具規模之組織，該協會每年皆辦理大型國際研討會，廣邀各國人士進行專題演講、發表論文與經驗分享，每年皆有近百國、500 人以上參與，為環境影響評估國際交流與學術研討之重要平台。今年之年會參與之人員雖仍以歐美人士占大多數，但依本署歷年參與之經驗，亞洲鄰近國家（例如中國大陸、日本、香港、韓國等）近年來參與度日趨積極與活躍，各國積極透過各分項座談會分享成功之環境影響評估經驗，藉此宣揚環境保護績效。

我國自民國 83 年底公布施行環境影響評估法迄今，環境影響評估制度已實行將近 20 年，規範各種開發行為，在規劃階段應同時考量環境因素，無論是環境影響評估承諾及審查結論之落實、標準化之環境影響評估審查流程、專業之審查技術規範、多元化之公眾參與管道及政策環境影響評估之推動……等皆有相當之成果，上述成果如能透過專家學者、開發單位、環保團體、其他政府機關代表及本署代表……等，以專題演講、發表論文或海報展示等方式，多元展現於國際影響評估協會（IAIA）年會上，相信將可吸引更多國際人士進一步認識我國環境影響評估制度及環境保護上之努力，對於我國政績之宣揚極有助益。因此，建議未來可考量透過補助計畫，鼓勵專家學者或環保團體積極參與國際影響評估協會年會，或於石化高值化產業、水利工程開發及高科技產業園區開發等重大開發案環評審查結束時，邀請科技部、經濟部（工業局、能源局、水利署）或國營事業等單位，一同參與該年度之年會，適度擴大參與程度，並強化國際交流合作，及分享我國在環評制度之努力成果。

### 二、與世界接軌注重氣候變遷在環境影響評估之課題

本屆研討會會議主題為「Impact Assessment for Social and Economic Development」，在“社會與經濟發展的影響評估”的這個課題中，研討會的引言人



說明，社會與經濟的發展不僅僅是一種收入增長與減少貧困的結果，在發展過程中，其包含了平等、環境正義、文化認同與政治的民主化等內涵，社會發展與經濟進步可以導引更好的生活質量，然而這個程序可能會對環境產生負面的影響，進而造成生物多樣性或自然資源的不利影響，因此，在辦理影響評估過程中，增加公眾參與的決策程序，是社會與經濟發展過程中的重要關鍵。

今年的會議共約有 1,000 餘位各國人士參加，總計有 250 篇以上的文章發表，除社會與經濟發展的影響評估主題外，討論議題包括能源、生物多樣性、健康風險評估、公眾參與、氣候變遷、文化遺產…等，且有許多與議題相關之案例分享；主辦單位依各議題之相關性，分不同會場討論，與會人員可以選擇當日有興趣之議題參與，藉此瞭解其他國家在影響評估領域之意見及案例，因與本署辦理環評審查所涉及議題相關，有助於推動相關業務。

本屆會議主題為社會與經濟發展的影響評估，研討會中有學者指出，在進行政策環境影響評估（Strategic Environmental Assessment；SEA）時，宜因地制宜針對不同國家、地理環境、生態資源環境等之不同而有所差異，例如在島嶼的相關評估作業中，應基於島嶼地區的侷限性、環境的脆弱性與氣候變遷的因應等進行影響評估，這些均是在島嶼地區進行影響評估時比較重要的課題。

另一方面，在最近一兩年間，本署受理審查環境影響評估書件之審議過程中，因應極端氣候的「避災」與「防災」課題，已是本署環境影響評估審查委員所特別關切的議題，藉以促使開發單位先行針對極端氣象條件下，開發行為可能受到之衝擊及其預為因應之對策等事項。從今年的研討會中，現場聆聽多場有關氣候變遷座談會後發現，在一些將氣候變遷課題納入環境影響評估的討論中，所探討之影響層面含括了區域環境影響評估（Regional EIA, REIA）或累積性之影響評估（Cumulative Impact Assessment, CIA）等評估方式，其中荷蘭是藉由政策環境影響評估（Strategic Environmental Assessment；SEA）的方式，將氣候變遷的課題納入評估，另有一些研究中認為在進行影響評估時，亦應考量各種減緩措施以及適應計畫等內容，並且研擬包括災難管理計畫等環境管理計畫。

在未來這一年間，包括環境保護、水利、礦業、地質、國家公園、森林保育、氣象、水土保持與生態保育…等事務將整併成環境資源部，身為地球的一份子，我國更須因應世界潮流，以因應氣候變遷之影響，於政府決策時，將其整合至政策制定內，進而提出有效而公平之對策。

Courtesy of Municipalidad Viña del Mar

34th Annual Conference of the International Association for Impact Assessment



# IMPACT ASSESSMENT FOR SOCIAL AND ECONOMIC DEVELOPMENT

## Local host and organizer



**SEA**  
Servicio de Evaluación Ambiental



IN ASSOCIATION WITH  
Municipalidad de Viña del Mar



## FINAL PROGRAM

34th Annual Conference of the  
International Association for Impact Assessment

final program sponsor



premiere sponsor



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## Welcome reception

The Environmental Assessment Service of Chile (SEA) together with the Municipality of Viña del Mar have the pleasure to invite you to a welcome reception to be held in Espacio Sporting Viña del Mar. This event is free of charge for all registered attendees. We will have typical Chilean dishes and the presentation of a folk dance show by BAFOVI (Viña del Mar folkloric ballet). Do not miss the opportunity to share and enjoy with your friends and colleagues a nice night with typical Chilean customs.

Free transportation by bus will be provided for the 20-minute ride from the Enjoy conference center, beginning at 19:00 (7 busses will each make two circuits). The busses will return to Enjoy from 23:30.

**Sponsored by SEA and Municipality of Viña del Mar.**

**Tuesday 8 April | 20:00 - 23:30 | Espacio Sporting (Los Castaños 404, Viña del Mar)**

**Pre-registration is required.**

## Training courses

IAIA offers a wide range of exceptional pre-meeting training courses. Note: Registration after 15 February is subject to availability, instructor consent, and receipt of payment. In consideration of the trainers and their need to prepare appropriate quantities of course materials, registrants may not change courses after 19 March.

## Poster session and exhibits

Every conference features exhibitors and an increasingly sophisticated presentation of posters. This year will not disappoint. Browse the exhibits at your leisure throughout the conference, meet the poster presenters at the special poster session on Tuesday, and cast your vote (page 58) for Public Choice Best Poster.

New this year: poster presenters were invited to make videos of their presentations. See submitted videos at <http://bit.ly/IAIA14VideoPoster>.

**Tuesday 8 April | 12:40-13:30**

## 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 Wednesday and Thursday, with the opportunity to “schedule” your topic throughout the day. The informality and spontaneity guarantee a lively end to each day’s sessions.

To participate, write the topic you would like to discuss on the sign-up sheets in the registration area, 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.

## Special-interest Sections

How can I get more involved in IAIA? Where can I find people with similar special interests?

Much of the cutting-edge work of IAIA is the direct result of Section and Committee activity, and the only chance for members to meet throughout the year is at the annual conference.

Every delegate is welcome to attend a Section meeting. All Sections will meet at 12:30 on Tuesday. Check the schedule on pages 8-9 for additional meeting times and plan to attend the Section meeting of your choice. Section meetings are scheduled multiple times throughout the conference, and tables are reserved for Section members at lunch on Wednesday and Thursday, so there are several opportunities to connect with people in the same topic area if your special interest is focused, or once or twice with people in more than one topic area if your interests are cross-cutting.

## Committees

Committee members are appointed annually. If you are interested in serving on an IAIA Committee, please contact [info@iaia.org](mailto:info@iaia.org).

## Annual General Meeting (AGM)

All conference participants are encouraged to attend the annual business meeting of the Association. You will meet the IAIA Board of Directors, hear the Treasurer’s report, and be present for the prestigious Rose-Hulman Award recipient’s acceptance speech. See the agenda on page 50.

**Wednesday 9 April | 12:40-13:30 | Pacífico**

## Council meeting

The IAIA Council serves as an advisory resource to the IAIA Board of Directors. The Council is composed of the Board, all Committee chairs, representatives of Affiliates and Branches, the Executive Director and Headquarters representatives, Section coordinators, and the conference program chairs for the current-year conference and any future known conferences. However, Council meetings are open; all IAIA members are encouraged to attend. The 2014 Outstanding Service Award will be presented at the Council meeting. See the agenda on page 50.

**Thursday 10 April | 12:40-13:30 | Picadilly 2**

## Affiliates forum

A special session is dedicated to the activity of IAIA’s Affiliates and Branches. This session is open to all conference participants. See page 37 for a description of the discussion.

Posters are also being displayed by some of these groups. Stop by during the poster session to visit with representatives of the Affiliates and learn more about their organizations and activities.

**Tuesday 8 April | 16:30-18:00 | Estrella 3**

## Connect: Do you?

If you would like to learn more about IAIA's professional networking site and how it can benefit you, bring your questions, and we will walk through online discussions, sharing resources, and finding other members with similar interests. We can even take your photo and upload it to your profile!

**See the demonstration table in the exhibition area during afternoon coffee breaks on Wednesday and Thursday, or stop by the registration desk.**

## Technical visits

See page 44 for the variety of technical visit options. Technical visits provide multiple opportunities to participate, network, and enhance your understanding of impact assessment issues in the region.

Registrations are accepted on a first-come, first-served basis until the visits reach the maximum number of participants. Registrations are confirmed in the order that payment is received, and pre-registration is required.

## Student fee waiver program

IAIA is pleased to offer a student fee waiver program. This program allows up to ten students a waived conference registration fee in exchange for providing in-kind services on-site in Viña del Mar. Selection of students took place in December 2013.

**Student Fee Waiver Program Orientation  
Monday 7 April | 08:15-08:45  
Meet at registration desk**

## Students & early professionals

All students are invited to attend the Students and Early Professionals Section meeting. This meeting is scheduled separately to allow students and early professionals to meet and network with each other as well as to attend other Section meetings and network with members of the topical-interest Sections.

**Student and Early Professionals Section Meeting  
Tuesday 8 April | 08:00-08:50  
Picadilly 1**

## Live Tweeting at #iaia14

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 #iaia14. A summary of the tweets will contribute to the main conclusions and recommendations at the closing plenary. Why not follow one of the IAIA accounts: @hiablog (Health), @sia\_iaia (Social Impact Assessment), @IAIAConference?

## Mentor/Buddy program

The intent of this program is to help students and early professionals (SEPs) and first-time conference attendees feel more comfortable and less overwhelmed with their first IAIA conference experience.

The mentor is an experienced IAIA member with the same interest area as the applicant (wherever possible). The mentor acts as a discussion partner on common topics of interest for the professional development. Mentees do not shadow mentors, but rather meet at the conference to begin conversation that extends beyond the conference.

Matching of mentors and mentees takes place prior to the conference.

If you would like to be a mentor or mentee at a future conference, e-mail [impact@iaia.org](mailto:impact@iaia.org) or notify staff at the registration desk.

## Book share

Drop off one or two of your favorite environmental reference books, new or recycled, as a contribution to the book share table in the exhibition area. The books are available on a first-come, first-served basis to delegates who might not readily find such books in their own locales.

## Speed mentoring

Like speed dating, we will put you together with a number of mentors so you can seek advice and ideas from these mentors on how to advance your career, improve your networking and anything else you would like to ask. See page 43 for more information.

**Wednesday 9 April | 11:00-12:30 | Esmeralda**

## Banquet

The week is almost over and it is time to relax with your friends and colleagues. Enjoy dinner accompanied by various dances of the host country, Latin America, and its main ethnic groups, sharing experiences of this conference and making plans for next year's meeting.

**Thursday 10 April | 21:00 onward | Grand Ballroom (3rd floor)  
Pre-registration and pre-payment is required.**

## Awards

IAIA's awards are presented throughout the conference and at the awards ceremony in the closing plenary. Who will win the honors associated with the annual awards?

## IAIA14 at-a-glance

Sunday 6 April

**Training courses** All day  
**Technical visits** All day

Monday 7 April

**Training courses** All day  
**Technical visits** All day

Tuesday 8 April

**Plenary, forums, sessions** All day  
**Poster session, Section meetings** Afternoon  
**Welcome reception** Evening

Wednesday 9 April

**Committee meetings** Morning  
**Forums, sessions, AGM** All day  
**Committee & Section meetings** Afternoon  
**Networking event** Evening

Thursday 10 April

**Committee meetings** Morning  
**Forums, sessions, Council meeting** All day  
**Committee & Section meetings** Afternoon  
**Banquet** Evening

Friday 11 April

**Sessions, plenary** Morning  
**Special meeting** Afternoon

# Welcome



**Greg Radford**  
*President, IAIA*  
**ESSA Technologies Ltd.**

I have been a member of IAIA for most of my career, and have found that IAIA has a unique ability to promote global best practices needed for the mounting environmental and social stresses facing our planet.

I encourage you to take full advantage of this extraordinary multidisciplinary gathering of experts, researchers, practitioners, policy makers, students and visionaries to collaborate, share, network, and carry out IAIA's goal "to provide an international forum for advancing innovation and communication of best practice in all forms of impact assessment so as to further the development of local, regional, and global capacity in impact assessment."

*Bienvenido a IAIA14.*



**Jorge Troncoso**  
*Executive Director*  
**Environmental Assessment Service, Chile**

The Environmental Assessment Service has accepted the challenge of co-organizing this conference in order to update and improve IA knowledge in the national and regional realm. For this purpose we have prepared a complete and varied program that stresses the social and economic aspects of impact assessment, including instruments, processes, and techniques that are both innovative and useful. Many of these topics are illustrated by applied experiences and case studies that describe the current situation in regions where a wise combination of social and economic development is much needed. The technical program includes a regional forum for Latin America. This sequence of sessions—given in Spanish with simultaneous translation to English—will offer an opportunity to learn about the region, discuss its challenges, diffuse institutional development experiences, and identify professional opportunities.

Finally, we encourage all delegates to combine session participation with some time to sit down and chat with colleagues or to attend the networking events we are featuring during the conference.



**Pablo Badenier**  
*Environment Minister*  
**Government of Chile**

On behalf of the Government of Chile, I welcome you all to our country. It is a great honor for us to host the 34th IAIA Conference on "Impact Assessment for Social and Economic Development" (IAIA14), which gathers a renowned group of prestigious professionals, scholars, corporate leaders, and consultants.

This will be a paramount occasion for sharing knowledge, ideas, experiences, best practices and technical concepts among professionals from the private and public sectors. We envision this interchange will assist us in making decisive progress on the way we include the many environmental variables in impact assessment, while we introduce innovative practices that aim at promoting social and economic development, which will ultimately improve people's quality of life.

I invite each of you to enjoy our country, especially the Region of Valparaiso, where you may enjoy delightful beaches, as well as tasty seafood and our award-winning wines.

## Impact Assessment for Social and Economic Development

Can social and economic development be mutually compatible? Social development should be understood not only as a result (income growth and poverty reduction) but also as a process of change that leads to equality, social and environmental justice, cultural recognition, and democratization of politics. For this, increase in public participation in decision-making is a fundamental component of social development.

Social and economic progress can lead to a better quality of life, but at what cost? Economic progress often generates environmental effects that, even though they are not immediately evident, may adversely impact biodiversity and natural resources.

At IAIA14 we look at the role of the various instruments of impact assessment in the promotion of social and economic development, considering the importance of the assessment process itself as well as its results. At the conference, experiences and ideas will be shared about how IA outcomes may include efficient and innovative ways to promote social and economic development to benefit quality of life, now and for future generations.

Delegates are encouraged to discuss how the various instruments of impact assessment can assist developers, industry, decision-makers, financial institutions, development cooperation providers, and the public to integrate environmental, social, and other concerns in impact assessment.

## Keynote speakers



**Janine Ferretti**  
*Environmental Safeguards Unit Chief*  
**Inter-American Development Bank**

### Using impact assessment to help maximize economic, social and environmental benefits from infrastructure projects

Infrastructure is fundamental for economic growth. Many regions of the world presently face the dual challenge of previously underfunded investment and growing demand. In LAC, 250B USD of investment will be required every year to close the gap between demand and capacity. Infrastructure can also aggravate pressures on social and environmental support systems—where these systems are already under severe strain. Rather than view this from the perspective of a potential point of conflict, we need to view the infrastructure demand as an opportunity to develop quality projects that provide and enhance existing services to people and so support economic, social, and environmental sustainability.

Ms. Ferretti joined the IDB in 2003 after being Executive Director of the North American Commission for Environmental Cooperation, leading regional environmental initiatives. Previously, she was Executive Director of Pollution Probe and worked with other international organizations. Ms. Ferretti holds an M.E.S. in Environmental Policy from York University (Toronto, Canada).



**John Ruggie**  
*Professor*  
**Harvard University**

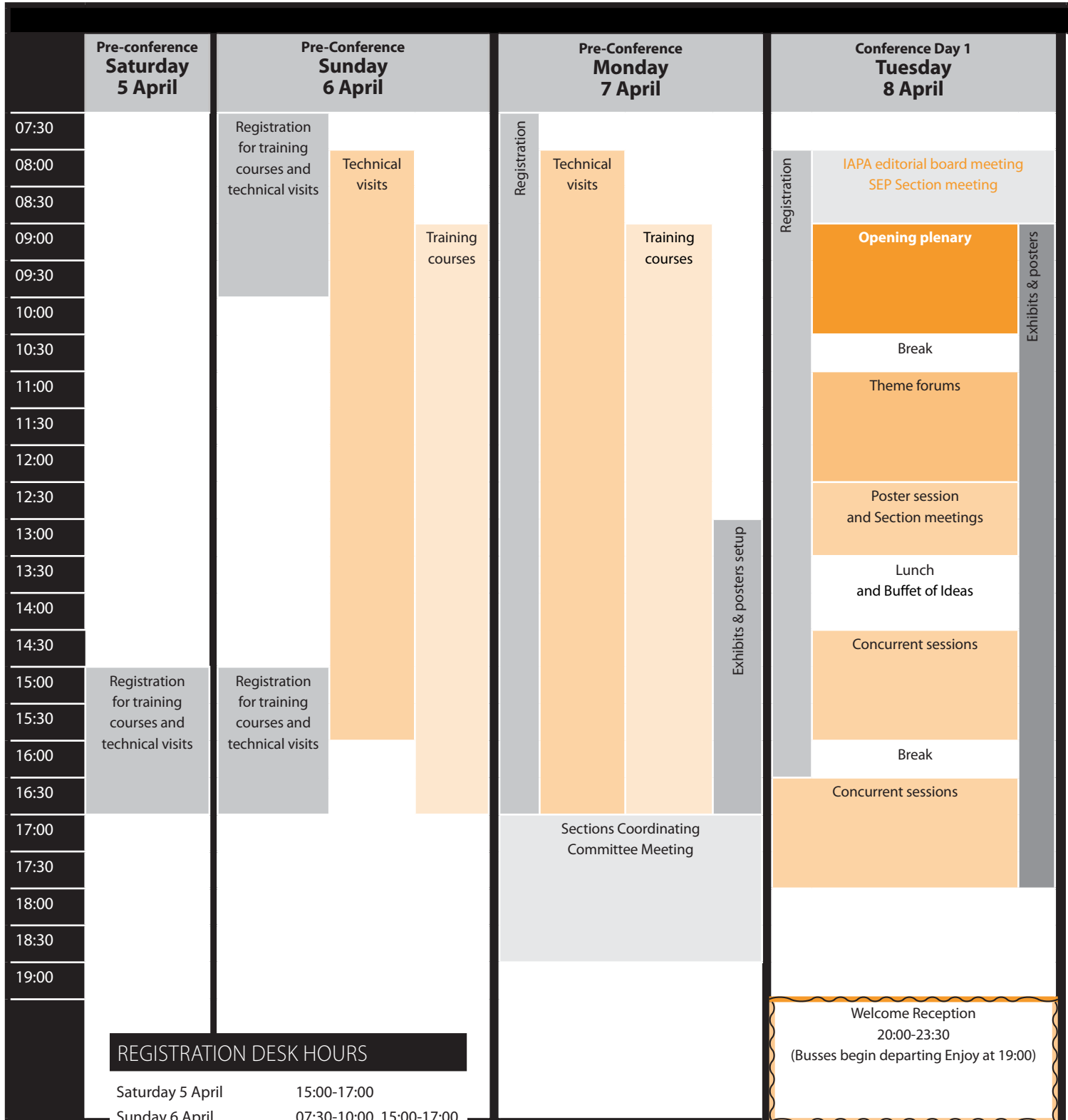
### Social development and impact assessment

John Ruggie is the Berthold Beitz Professor in Human Rights and International Affairs at the Harvard Kennedy School of Government, and an Affiliated Professor in International Legal Studies at Harvard Law School.

In 2005, then United Nations Secretary-General Kofi Annan appointed John as his Special Representative for Business and Human Rights, a post he continued to hold under the UN administration of Ban Ki-Moon until the end of his term in June 2011. At the close of his mandate, John presented to the UN Human Rights Council a set of Guiding Principles for Business and Human Rights. The Council unanimously endorsed the Guiding Principles, establishing them as the authoritative global reference point on this issue.

John served from 1997 to 2001 as UN Assistant Secretary-General for Strategic Planning to Kofi Annan. Trained as a political scientist, he has made significant intellectual contributions to the study of international relations, focusing on the impact of economic and other forms of globalization on global rule making.

# Conference overview



## REGISTRATION DESK HOURS

Saturday 5 April	15:00-17:00
Sunday 6 April	07:30-10:00, 15:00-17:00
Monday 7 April	07:30-17:00
Tuesday 8 April	08:00-16:30
Wednesday 9 April	08:30-16:30
Thursday 10 April	08:30-14:30

Welcome Reception  
20:00-23:30  
(Busses begin departing Enjoy at 19:00)

TWEET ABOUT  
YOUR SESSION  
TO #IAIA14!



# Conference overview

Conference Day 2 Wednesday 9 April		Conference Day 3 Thursday 10 April		Conference Day 4 Friday 11 April		
						07:30
	TPDC meeting		Awards Committee meeting Publications Committee meeting			08:00
Registration	Theme forums	Registration	Theme forums	Concurrent sessions	Exhibits & posters	08:30
	Break		Break	Break		09:00
	Concurrent sessions		Concurrent sessions			09:30
	Annual General Meeting		Council meeting			10:00
	Lunch and Section rendezvous		Lunch and Section rendezvous			10:30
	Concurrent sessions		Concurrent sessions			11:00
	Break		Break	Closing plenary		11:30
	Concurrent sessions		Concurrent sessions			12:00
	Section meetings		Section meetings	World Bank Group Meeting		12:30
	Indabas		Indabas			13:00
					Exhibits & posters dismantle	13:30
						14:00
						14:30
						15:00
						15:30
						16:00
						16:30
						17:00
						17:30
						18:00
						18:30
						19:00
Dine Outs (Evening: see signup sheets for departure times)		Banquet 21:00 onward				

ALL DELEGATES  
ARE INVITED  
TO THE AGM.

VOTE FOR YOUR  
FAVORITE POSTER  
BY 11:00 TODAY!

VOTE FOR YOUR  
FAVORITE  
PRESENTATION  
BY 11:00 TODAY!

# Daily schedule

## SATURDAY 5 APRIL

**15:00-17:00** **Registration** (training course and technical visit participants only)

## SUNDAY 6 APRIL

**07:30-10:00** **Registration** (training courses and technical visit participants only)

**08:00-19:00** **Technical visit B: Ovejería Dam and Santiago City**

**08:30-18:00** **Technical visit C: Port City San Antonio**

**09:00-18:00** **Technical visit J: El Molle sanitary landfill and the hills of Valparaíso**

**09:00-17:00** **Training courses** (room locations will be provided at check-in)

- Cumulative Effects (in Spanish)
- Cumulative Effects & Follow-Up in Impact Assessment
- EIA for Project Management (in Spanish)
- Integrated Environmental Management: How to Make EA More Effective
- Involuntary Resettlement
- Quality Assurance in EIA: Guide and Review
- SIA and Management: Principles & Practice (in Spanish)
- Weaving Ecosystem Services into IA: Towards Addressing the Social Implications of Environmental Impacts

**15:00-17:00** **Registration** (training courses and technical visit participants only)

## MONDAY 7 APRIL

**07:30-17:00** **Registration**

**08:15-08:45** **Student Fee Waiver Program Orientation** (Meet at registration desk)

**08:00-19:00** **Technical visit E: Quintero Bay and Conchalí Lagoon**

**08:00-19:00** **Technical visit F: El Yali National Reserve**

**10:00-18:00** **Technical visit H: Casablanca Valley Wineries**

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

**13:00-17:00** **Exhibit and poster setup**

**17:15-19:00** **Committee meeting**

- Sections Coordinating Committee Estrella 1

### Conference lunch

Lunches will be provided in four restaurants at Enjoy: Bingo, La Banquera, Savinya, and Enjoy del Mar (across the street), and one restaurant a short walk (250m) from Enjoy: Chez Gerald.

Prior to lunch break, please select a restaurant ticket from the bowls in the registration area. Restaurants and tickets will be matched by name and color. La Banquera provides a vegetarian option.

See page 53 for additional information about lunches.

## TUESDAY 8 APRIL

**07:45-08:50** **IAPA Editorial Board Meeting** (Caracola 2)

**07:45-08:50** **Section meeting**

- Students and Early Professionals (Picadilly 1)

**08:00-16:30** **Registration**

**09:00-10:30** **Opening plenary** (Grand Ballroom)

*Sponsored by IDB*

*Hernán Joglar (Chair) SEA, IAIA14 Program Chair*

- **Welcome** | **Virginia Reginato Bozzo**, Mayor of Viña del Mar
- **Opening remarks** | **Pablo Badenier**, Environment Minister of Chile
- **Keynote** | **Janine Ferretti**, IDB  
“Economic development and impact assessment”
- **Keynote** | **John Ruggie**, Harvard University  
“Social development and impact assessment”
- **Welcome** | **Greg Radford**, IAIA President
- **Presentation of the IAIA Global Award** | **Peter Croal**, IAIA Awards Committee Chair
- **Welcome from the local organizers** | **Jorge Troncoso**, Executive Director of SEA

**10:30-11:00** **Break**

**11:00-12:30** **Theme forums and concurrent sessions**

**12:40-13:30** **Poster session**

**12:40-13:30** **Section meetings**

- Agriculture, Forestry and Fisheries (Picadilly 2)
- Biodiversity & Ecology (Estrella 1)
- Climate Change (Estrella 2)
- Corporate Stewardship and Risk Management (Estrella 3)
- Cultural Heritage (Caracola 3)
- Disasters & Conflicts (Caracola 2)
- Energy (Caracola 1)
- Health (Palma)
- IA Law, Policies, and Practice (Palma)
- Indigenous Peoples (Esmeralda)
- Integrated Assessment of Trade-Related Policies (Estrella 1)
- Public Participation (Estrella 2)
- Social Impact Assessment (Esmeralda)
- Strategic Environmental Assessment (Cabaret)
- Students and Early Professionals (Cabaret)

**13:30-14:20** **Lunch** | Buffet of Ideas (reserved tables, see page 43)

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

**16:00-16:30** **Break**

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

**16:30-18:00** **Affiliates Forum** (Estrella 3)

**20:00-23:30** **Welcome reception** (pre-registration required; see page 2)  
Sponsored by Environmental Assessment Service of Chile and the Municipality of Viña del Mar (Location: Espacio Sporting)

## WEDNESDAY 9 APRIL

- 08:00-08:50 Committee meeting**
- Training & Professional Development (Picadilly 2)
- 08:30-16:30 Registration**
- 09:00-10:30 Theme forums and concurrent sessions**
- 10:30-11:00 Break**
- 11:00-12:30 Concurrent sessions**
- 11:00-12:30 Speed Mentoring (Esmeralda)**
- 12:40-13:30 Annual General Meeting and Rose-Hulman Award Presentation (Pacífico)**
- The AGM is the annual business meeting of the Association. All members are encouraged to attend.
- 13:30-14:20 Lunch | Section Rendezvous (reserved tables, see page 43)**
- 14:30-16:00 Concurrent sessions**
- 16:00-16:30 Break**
- Sponsored by Golder*
- 16:30-18:00 Concurrent sessions**
- 18:10-19:10 Section Meetings**
- Agriculture, Forestry and Fisheries (Caracola 3)
  - Corporate Stewardship and Risk Management (Caracola 2)
  - Cultural Heritage (Caracola 1)
  - Health (Estrella 2)
  - Impact Assessment of Trade-Related Policies (Picadilly 2)
  - Public Participation (Estrella 3)
  - Strategic Environmental Assessment (Esmeralda)
- 18:10-19:10 Indabas (see page 2 and flip charts in the registration area for information)**
- Evening Dine-Outs (see page 43)**

## THURSDAY 10 APRIL

- 08:00-08:50 Committee meetings**
- Awards (Caracola 2)
  - Publications (Caracola 3)
- 08:30-14:30 Registration**
- 09:00-10:30 Theme forums and concurrent sessions**
- 10:30-11:00 Break (Location)**
- 11:00-12:30 Concurrent sessions**
- 12:40-13:30 Council meeting (Picadilly 2)**
- The Council is an advisory resource for the Board. Committee chairs, Section coordinators, Affiliate and Branch representatives and conference program chairs for current and future conferences comprise the Council. All members are encouraged to attend and meet the leadership of IAIA. Presentation of the Outstanding Service Award.
- 13:30-14:20 Lunch | Section Rendezvous (reserved tables, see page 43)**
- 14:30-16:00 Concurrent sessions**

- 16:00-16:30 Break**
- Sponsored in part by Taylor and Francis*
- 16:30-18:00 Concurrent sessions**
- 18:10-19:10 Indabas (see page 2 and flip charts in the registration area for information)**
- 18:10-19:10 Section Meetings**
- Biodiversity & Ecology (Caracola 2)
  - Climate Change (Esmeralda)
  - Disasters & Conflicts (Picadilly 2)
  - Energy (Estrella 1)
  - IA Law, Policies, and Practice (Caracola 1)
  - Indigenous Peoples (Estrella 3)
  - Social Impact Assessment (Estrella 2)
- 21:00 onward Banquet (pre-registration and pre-payment required)**  
(Grand Ballroom, 3rd Floor)

## FRIDAY 11 APRIL

- 09:00-10:30 Concurrent sessions**
- 10:30-11:00 Break**
- 11:00-12:30 Closing plenary (Grand Ballroom)**
- Sponsored by Colbún*  
*Chair: Hernán Joglar, SEA, IAIA14 Program Chair*
- **Main conclusions and recommendations of IAIA14** Luis Sánchez and Simon Catchpole
  - **Presentation of Awards | Peter Croal, IAIA Awards Committee Chair**
  - **Presidential address | Miguel Coutinho, incoming President of IAIA**
  - **Invitation to IAIA15 | Giuseppe Magro, Program Chair; Francesca Viliani, Marcello Iocca**
  - **Farewell address | Jorge Troncoso, Executive Director of SEA**
- 13:00-17:30 Special meeting: World Bank Group (Pacífico)**
- 13:30-16:00 Exhibit and poster dismantle**



# Technical program overview

	CABARET	ESMERALDA	PALMA	CARACOLA 1	CARACOLA 2	CARACOLA 3
<b>Tuesday 8 April</b>						
09:00 - 10:30			Opening plenary			
11:00 - 12:30	A proposal for new IAIA SEA performance criteria: Bringing SEA to the next level (p35)	Integrating IA processes in national development framework: Nigeria (p20)	The role of international standards in impact assessment (p30)			
14:30 - 16:00	Indigenous Peoples engagement in EA: Experiences from around the world (I) (p27)	Asian SEA, EIA and ecosystem service assessment (I) (p23)	Advances on SEA in Latin America (I) (p30)	Company-community interactions and impact assessment (p18)	Assessing the social dimensions of environmental impacts: Notes from the field (p32)	A better life for the orphans of impact assessment? (p17)
16:30 - 18:00	Indigenous Peoples engagement in EA: Experiences from around the world (II) (p27)	Asian SEA, EIA and ecosystem service assessment (II) (p24)	Advances on SEA in Latin America (II) (p30)	Impact assessment and aquatic offsets: biodiversity, function, services or all three? (p14)	Beyond livelihoods: The social dimensions of environmental impacts (p32)	Do we need alternatives? (p35)
<b>Wednesday 9 April</b>						
09:00 - 10:30	Extractive industries and IA in developing countries (p23)		LATIN AMERICAN FORUM Reforms and trends in the EIA Systems in Latin America (p40)			
11:00 - 12:30	Glaciers and EIA: facing the future challenges (p35)	Speed mentoring (p42)	Managing environmental and social impacts of hydropower plants in Latin America (p40)	Preventing conflict through participatory processes (p29)	Suitable Biodiversity and Ecosystem Services indicators ("BES metrics") (I) (p13)	Effective collaboration for social performance in oil & gas (p25)
14:30 - 16:00	Indigenous views on health and wellbeing (p27)	SEA in territories with specific features (I) (p35)	Integration and challenges from the required infrastructure in Latin America (p40)	Hydropower construction: Mitigation and best practices (I) (p36)	Suitable Biodiversity and Ecosystem Services indicators ("BES metrics") (II) (p14)	International experiences on environmental offsets policy (p25)
16:30 - 18:00	Extractive activities and Indigenous People: Litigation or CSR (p34)	SEA in territories with specific features (II) (p35)	The role of sustainability standards in economic development in Latin America (p41)	Hydropower construction: Mitigation and best practices (II) (p36)	Challenging resettlement (II) (p33)	Biodiversity considerations for Regional Advance Mitigation Planning (RAMP) programs (p13)
<b>Thursday 10 April</b>						
09:00 - 10:30	Integrating the indigenous vision in development (p27)	Is simple (IA) stupid? (p21)	Impact assessment in Latin America: Is it done better than 25 years ago? (p41)			
11:00 - 12:30	Cultural Heritage: How we know what we know and why we protect it (19)	Uncertainty in impact assessment (p17)	Managing environmental and social risks by the private sector: From ESIA documentation to successful implementation (p41)	Governance, IA and capacity building (I) (p15)	The 2010 Chile earthquake: The impact of impact assessment on sustainable recovery (p19)	Modeling and decision support tools for environmental assessment (I) (p20)
14:30 - 16:00	Cultural heritage in urban and rural landscapes (p19)	Strategic environmental assessment and climate change (p17)	Water resources management in a changing climate (p41)	Governance, IA and capacity building (II) (p15)	Inspection, monitoring & follow up: Practices, procedures & new technologies (I) (p28)	Modeling and decision support tools for environmental assessment (II) (p20)
16:30 - 18:00	Cultural heritage in EIAs: Theory and practice (p19)	Climate change and impact assessment: Good practice cases (p18)	Systems and tools for managing environmental and social impacts and risks in financial and real sectors (p41)	Towards a review of the 2001 EU SEA Directive (p25)	Inspection, monitoring & follow up: Practices, procedures & new technologies (II) (p28)	Modeling and decision support tools for environmental assessment (III) (p21)
<b>Friday 11 April</b>						
09:00 - 10:30		Inclusive assessments: Integrating gender equality and excluded groups (p34)	Large infrastructure driving conservation and developments in Latin America (p36)	To No Net Loss of biodiversity and beyond (p14)	Enforcement of environmental regulation and compliance promotion (p28)	Modeling and decision support tools for environmental assessment (IV) (p21)
11:00 - 12:30			Closing plenary			

# Technical program overview

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<b>Tuesday 8 April</b>									
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<b>14:30 - 16:00</b>									
<b>16:30 - 18:00</b>									
<b>Wednesday 9 April</b>									
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<b>14:30 - 16:00</b>									
<b>16:30 - 18:00</b>									
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<b>11:00 - 12:30</b>									
<b>14:30 - 16:00</b>									
<b>16:30 - 18:00</b>									
<b>Friday, 11 April</b>									
<b>09:00 - 10:30</b>									
<b>11:00 - 12:30</b>									

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## DESIGN YOUR PROGRAM

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## Biodiversity

### Biodiversity Considerations for Regional Advance Mitigation Planning (RAMP) Programs

Wednesday 9 April | 16:30-18:00 | Caracola 3

#### Panel

*Chair(s): Dennis Grossman*

Organizations are working to address integrated infrastructure and conservation planning goals through the Regional Advance Mitigation Planning (RAMP) approach. This expert panel session will review the biodiversity components and experiences of successful RAMP processes and outcomes. This session may create an IAIA RAMP Working Group for continuity of this discussion.

#### Panelists

#### Steve Edwards, IUCN

IUCN tools and protocols for offsets, No Net Loss and Net Positive Impact: The NPI Review Protocol is intended as a tool for independent review of progress towards Net Positive Impact, and can be easily adapted to quantify NPI and develop biodiversity offsets.

#### Akira Tanaka, Tokyo University

Developing Japanese Style Biodiversity Banking: "Satoyama Banking" in the Regional Context: Feasibility studies indicate that "Satoyama Banking" has the potential to play an important role promoting regional-based strategic environmental mitigation in areas where there are no legal requirements for biodiversity offsets.

#### Ernani Pilla, InterAmerican Development Bank

Status of Environmental Mitigation and Offset Programs in Latin America: An overview of biodiversity offsets as a mitigation mechanism and examples of different types of regional regulatory and voluntary initiatives adopting this concept, as well as highlighting challenges and opportunities.

#### Robin Mitchell, The Biodiversity Consultancy

Regional Assessments and Mitigation for NNL /NPI: Three case studies (Latin America, Africa, Asia) test if advanced regional scale mitigation planning promotes biodiversity outcomes; would it underpin the ecosystem approach or facilitate out of kind mitigation?

#### Nick King, Private Consultant

Information Needs and Challenges for Setting Regional Conservation Targets: This presentation will review the conservation information required to develop and implement effective assessment, mitigation and offsets measures - and the challenges we face in meeting these requirements.

#### Dennis Grossman, Strategic Growth Council, State of California, US

Biodiversity Considerations for Regional Advanced Mitigation Planning: History of Theory and Practice in California.

### Biodiversity offsetting programs in Latin America: Practical ideas and tools (I)

Thursday 10 April | 11:00-12:30 | Estrella 1

#### Paper session

*Chair(s): Jaime Rovira, Lorna Püschel*

Biodiversity offsets are increasingly being applied around the world, posing challenges but also providing experiences and ideas to combine conservation policies with private interests both in development and biodiversity protection, especially in economies based on natural resources. The session will analyse proposals and lessons learned from the implementation of offsetting programs and other innovative mitigation measures.

#### No net loss: Where to from here?

*Ektrom, Jonathan; Rainey, Hugo*

Companies, governments, and banks are increasingly taking on the concept of no net loss for biodiversity management. What does this mean for practitioners and biodiversity?

#### Indicative map for biodiversity offsets in Brazil

*Oliveira-Silva, Raphael; Silva, Jessica;*

*Mendonça, Érica; Ranieiri, Victor*

This work discusses the biodiversity offset mechanism in rural properties in Brazil, proposing an indicative map for compensation of legal reserve, considering aspects like spatial proximity and the ecological equivalence.

#### Analysis of mitigation measures in wildlife

*Parada, Oscar; Lammerant, Johan*

Chilean authorities have requested controlled disturbance techniques to mitigate impacts in linear projects, which merit exhaustive analysis of methods, resulting impacts, and monitoring indicators to ensure that techniques are successful.

### Biodiversity offsetting programs in Latin America: Practical ideas and tools (II)

Thursday 10 April | 14:30-16:00 | Estrella 1

#### Paper session

*Chair(s): Jaime Rovira, Lorna Püschel*

Biodiversity offsets are increasingly being applied around the world, posing challenges but also providing experiences and ideas to combine conservation policies with private interests both in development and biodiversity protection, especially in economies based on natural resources. The session will analyze proposals and lessons learned from the implementation of offsetting programs and other innovative mitigation measures.

### Monitoring biodiversity: Lessons from LNG

*Dallmeier, Francisco; Alonso, Alfonso;*

*Servat, Grace; Taborga, Pablo*

The LNG Company PERU LNG approached the Smithsonian Conservation Biology Institute to design and implement the Biodiversity Monitoring and Assessment Program (BMAP). This presentation summarizes methods, results, and lessons learned.

### Developing Japanese-style biodiversity banking "Satoyama Banking" in the regional context

*Tanaka, Akira; Kobatake, Masashi*

The idea of "Satoyama Banking," which is "biodiversity banking" without legislative mandate of biodiversity offset in development, was proposed at IAIA 2010. This paper analyzes feasibility of "Satoyama Bank" through case studies and proves its contribution to habitat networking in regional context. Three types of the bank: government, private, and the combination of government/private are suggested to forward "Satoyama Banking" in Japan.

### Offsets: Can we use them to reverse the loss?

*King, Nick; Brownlie, Susie*

Dramatic changes in how biodiversity offsets are addressed in IA are required to reverse the growing global-to-local ecological deficit, achieve net gain, and build resilience to future changes.

### Suitable Biodiversity and Ecosystem Services indicators ("BES metrics") (I)

Wednesday 9 April | 11:00-12:30 | Caracola 2

#### Paper session

*Chair(s): Johan Lammerant*

Globally accepted and uniform indicators for expressing the biodiversity and ecosystem services (BES) footprint of activities do not exist. This session explores current approaches to express BES impacts as well as possible ways to come to more standardized approaches and indicators.

### Is the development of standardized BES metrics possible?

*Lammerant, Johan; Peters, Richard*

A globally accepted indicator for expressing the biodiversity footprint of an activity does not exist. This presentation explores possible ways to come to more standardized approaches and indicators.

### Biodiversity assessment for Japanese urban forest

*Hayashi, Kiichiro; Yonekura, Yusuke;*

*Hasegawa, Yasuhiro*

This study tried to develop a comprehensive biodiversity/ecosystem service assessment in an urban forest by utilizing GIS through field survey in Nagoya, Japan.

# Concurrent sessions

## Guidance note on natural habitats and biodiversity

*Imanaka, Yukiko; Nagase, Toshio*  
JICA's new Guidance Notes on Natural Habitats (GN), an operational reference material to support project design and decision making in development projects impacting natural habitats and biodiversity, is presented.

## Suitable Biodiversity and Ecosystem Services indicators ("BES metrics") (II)

Wednesday 9 April | 14:30-16:00 | Caracola 2

*Paper session*

*Lammerant, Johan*

Globally accepted and uniform indicators for expressing the biodiversity and ecosystem services (BES) footprint of activities do not exist. This session explores current approaches to express BES impacts as well as possible ways to come to more standardized approaches and indicators.

## Global vs. local priorities for biodiversity values

*Langstroth, Robert*

International lender policies such as IFC PS 6 include criteria for identifying or designating critical habitats that are often based on global or international perspectives. Local contextualization through stakeholder and expert engagement is an important step. However, the values and priorities of local communities are often at odds with international criteria. Biodiversity-inclusive consultation with local communities and specialists is key for success.

## Ecosystem services in IA: A review of five cases

*Sanchez, Luis; Rosa, Josianne*

A review of recent ESIA reports including ecosystem services showed that in the cases where its analysis was integrated with other topics, identification of additional impacts and mitigation resulted.

## The "bee-side" of pollination: Wild ecosystems

*Tapia, Daniel*

Ecosystemic services and pollination gain growing interest. This presentation discusses factors that can affect pollination of wild systems and that should be considered in environmental impact assessment.

## Impact assessment and aquatic offsets: Biodiversity, function, services, or all three?

Tuesday 8 April | 16:30-18:00 | Caracola 1

*Panel*

*Chair(s): Ernani Pilla, Ray Victorine*

Aquatic biodiversity offsets will be explored through latest thinking and field experiences through presentations of relevant case studies from the US and Latin America. We highlight opportunities for implementation of conservation and restoration efforts through established regulatory frameworks

and lending requirements; demonstrate opportunities for use of innovative financial mechanisms and markets to achieve conservation outcomes; introduce new tools, methods, technologies and partnerships to restore and conserve aquatic habitats; and review experience with offset metrics for measuring impacts and evaluating loss and gains in aquatic systems.

*Panelists*

### George Kelly, Environmental Banc & Exchange (LLC), US.

Wetland/stream and conservation banking in the US: An illustration of biodiversity offsets driven by regulation.

### Joe Whitworth, The Freshwater Trust, US.

Operationalizing water markets for environmental and economic gain.

### Mariana Montoya, Wildlife Conservation Society (WCS), Peru

Developing a science-based framework to inform policies and project licensing processes to promote river basin conservation in the Madre de Dios and Iñambari basins in southeastern Peru.

### Paloma Vejarano Alvarez, WCS Colombia

Methodological proposal for the development of compensation plans for biodiversity loss in Andean riverine ecosystems.

## To No Net Loss of biodiversity and beyond

Friday 11 April | 09:00-10:30 | Caracola 1

*Panel*

*Chair(s): Jonathan Ekstrom*

*IAIA Section: Biodiversity and Ecology*

With increasing emphasis on biodiversity in the mitigation hierarchy, no net loss and their integration into EIA; is it working in practice? Panelists and attendees will discuss the challenges facing practitioners: are both the tools and the incentives in place? Session outcomes will inform a global conference in London in June.

*Panelists*

### Dennis Grossman

California Strategic Growth Council

### Derek Melton

Golder Associates Ltd.

### Ernani Pilla

Inter-American Development Bank

### Joseph Kiesecker

The Nature Conservancy

# Capacity building for better IA systems

## Doing effective EIA when governments want to streamline or cut green tape

Thursday 10 April | 16:30-18:00 | Pacifico

*Workshop*

*Chair(s): Garry Middle*

The theme is doing effective EIAs in a political climate of streamlining or "cutting green tape." Selected short papers will be presented on experiences in doing EIA effectively and efficiently, followed by a participative discussion aimed at producing useful strategies to do effective EIAs in this political climate.

## Improving EIA in Finland: A private sector perspective

*Lesser, Pamela; Koivurova, Timo*

Although environmental impact assessment is primarily implemented by the private sector, companies are rarely consulted with respect to the effectiveness of the system and how it can be improved.

## Effective EIA systems in low-income countries

*Kolhoff, Arend*

Comparative study of EIA cases in Georgia and Ghana provides results in better understanding of EIA system performance. Based upon this research, recommendations for more effective capacity development are given.

## Cutting one's cloth to suit the climate

*Jardine-Orr, Andrea; Fraser, Tim*

The presentation discusses an approach to address the impacts of major projects on local communities and coordinate government agency planning.

## Ethics and principles of practice

*Bingham, Charlotte*

The challenges and roadblocks to conducting impact assessment practice ethically are daunting. Some code words clients/managers use to ask for ethical compromises and actions we can take are discussed.

## Media, politicians, and the debate on streamlining EIA

*Middle, Garry*

This presentation analyzes statements by public figures and news stories on the debate about streamlining EIA in Australia and identifies the evidence used as part of this debate.

What did you think of the last session?

Tweet your thoughts at #IAIA14!



## Improving the effectiveness and efficiency of EA information

Wednesday 9 April | 11:00-12:30 | Picadilly 2

Paper session

Chair(s): Steve Bonnell

This session will explore innovative approaches that have been developed and used to optimize the effectiveness and efficiency of recent EAs. Case studies will highlight EA structures and methods that have been designed and applied to present information and analyses (baseline and effects) in a clear, concise and meaningful way.

## Rethinking impact studies for greater effectiveness

Fecteau, Louise

Impact studies are the heart of the impact assessment process. We are at a turning point where we need to optimize our work to keep it useful, credible, and effective.

## Evolution of biological baseline studies in Peru

Valencia Franke, Claudia

Lessons learned from Peru: The evolution and improvement over the past 10 years of biological baseline studies for environmental impact assessments in the tropical Andean region.

## Impact matrices for critical habitat

Knopff, Kyle; Stefan, Carol

How critical habitat assessments can be concisely and meaningfully presented, and the appropriate use of impact classification matrices.

## Relationships in EIS contents: A web-based system

Valenzuela Jara, Claudia

A web-based system is being designed to systematize information in EIS reports, facilitate access to the information, and improve its quality, considering relationships between different contents of EIS reports.

## Developing KPIs for SEA effectiveness in Ireland

Dwyer, Nicola; O'Mahony, Tadhg;

O'Regan, Bernadette; Moles, Richard

A Ker Performance Indicator (KPI) framework for SEA effectiveness was developed based on practitioner opinions of effectiveness. The KPIs can be used to refine the SEA process and improve SEA effectiveness.

## Supportive technologies for IA

Wednesday 9 April | 16:30-18:00 | Estrella 2

Paper session

Chair(s): Greg Radford

Technology such as GIS, modeling, and remote sensing often provide greater certainty and scientific validity to IA. How can technology improve IA outcomes? What are the most supportive technologies being utilized today? Are there recent successful case studies where technology has contributed to IA outcomes validity?

## Leveraging IT to enhance IA outcome validity

Joglar, Hernán; Cavieres, Maria

Based on data gathered over several years, This presentation analyzes the effects of IT systems on attaining environmental license validity. Several enlightening lessons are distilled from the experience.

## Environmental sensitivity mapping

Gonzalez, Ainhoa

Framework for the development of an environmental sensitivity mapping webtool, based on systematic, transparent, and participative approaches to environmental factor selection and assessment, to support SEA and enhance its effectiveness.

## Satellite tracking of South American camelid

Meneses, Jaime; Iturriaga, Jaime; Iriarte, Agustín

Satellite tracking of the South American camelid Vicuña (*Vicugna vicugna*) in the highlands of northern Chile.

## Using ecological modeling

Arjona, Andrea; Garcia Marquez, Jaime;

Gonzalez, Diego; Paez, Carlos Andres

Ecological modeling can help assess how tourism infrastructure projects may affect the dynamics of ecosystems and the services they provide, supporting sustainable project design and the identification of conservation opportunities.

## The case of baseline data management

Madrid, Katia; Robichaud, Francois; Grégoire,

Patrick; Lanciault, Jean-Charles

Robust information management systems are valuable assets for baseline data management. New technological advancements bring even more flexibility and options to users.

## Governance, IA and capacity building (I)

Thursday 10 April | 11:00-12:30 | Caracola 1

Paper session

Proudly sponsored by EIB.

Chair(s): Matthew Arndt, Louis

Meuleman, Maria Partidário

This session explores the relations between IA and governance. How to build self-governance in the absence of an organized civil society? How to make participation desired by authorities? How to implement transboundary EIA/SEA especially in conflicting countries? How to apply metagovernance for IA, i.e. creating successful governance style combinations?

## EIB experiences with IA, participation and capacity building

Arndt, Matthew

## Governance system may influence the success of SEA

Monteiro, Margarida; Partidário,

Maria; Meuleman, Louis

The capacity of different systems of governance to "steer" SEA practice and the extent those systems, their cultures, and traditions may influence the success of SEA.

## The "single window" mechanism in the Chilean EIA

Soler, Carolina

The Chilean Environmental Impact Assessment process involves obtaining of all the environmental permits granted by the government agencies with environmental competence. This is called the "single window" mechanism.

## Governance of mainstreaming poverty and environment in Tajikistan

Meuleman, Louis; Challe, Sarah

The potential of metagovernance to enhance mainstreaming of poverty and environment concerns in Tajikistan.

## Discussion and main conclusions

## Governance, IA and capacity building (II)

Thursday 10 April | 14:30-16:00 | Caracola 1

Paper session

Proudly sponsored by EIB.

Chair(s): Matthew Arndt, Louis

Meuleman, Maria Partidário

This session explores the relations between IA and governance. How to build self-governance in the absence of an organized civil society? How to make participation desired by authorities? How to implement transboundary EIA/SEA especially in conflicting countries? How to apply metagovernance for IA, i.e. creating successful governance style combinations?

## Development of EIA in Zambia

Banda, Paul

Development of EIA in Zambia started 1985. In 1990 environmental legislation was promulgated at the time the mine industry was being liberalized. EIA processes have since progressed while facing many challenges.

## EIA screening criteria in Brazil: A logical test?

Fonseca, Alberto; Rocha, Caroline

This study is arguably the first one to compare EIA screening criteria across four Brazilian state jurisdictions. It discusses the implications of the findings to policy-makers and scholars.

## Assessment of the independence of ZEMA

Kanjelesa, Moono Irene; Hikachila,

Cifwala; Fwemba, Isaac

Ensuring sustainable development by regulating development through impact assessment is the key role of regulatory authorities in the environment sector. To do so effectively and efficiently, independence is key.

## Cumulative impacts assessment in renewable energy

Rosnati, Chiara; Corbia, Roberto

Renewables incentives involve unexpected environmental consequences due to competition against other land uses, particularly food agriculture. SEA applied to the energy sector highlights the importance of implementing CEA at the territorial scale.

# Concurrent sessions

## SEA for governance enhancement

Monteiro, Margarida; Partidário, Maria

A framework for research on how can SEA act as a governance enhancement public policy instrument.

## Discussion and main conclusions

## Mitigation follow-up in impact assessment: Global experiences

Wednesday 9 April | 14:30-16:00 | Picadilly 2

Paper session

Chair(s): Elsa João

In the quest for regulating the adverse impacts of infrastructure development on biodiversity values, mitigation measures have a critical role to play. However, experience suggests that the mitigation measures in practice are either not applied or inadequately applied, thereby defeating the very purpose and leading to deterioration of environment and loss of biodiversity values. This also leads to a loss of faith in the IA process by society and a belief that there is a lack of rigor in the EIA as a tool for regulating development. This session will distill experiences both from the developing as well as the developed world and will make recommendations for improving IA practice.

## Aerial passes design for Mexican roads

Fernandez, Norma; López Noriega, Sergio

Mitigation measures on roads need to be in concordance with normativity and standards, from right-of-way restoration to wildlife passes; this highlights the need to develop particular technical specifications.

## Can partnership on EIA follow-ups enhance IAs?

Lee, Shirley

The Hong Kong railway sector has been making good, steady progress on EIA follow-ups via close partnership with the EIA authority and the public, especially during project planning and construction.

## Reviewing performance of mitigation wetlands in Hong Kong

Yip, Jackie

Post-project monitoring data were reviewed to evaluate the performance of mitigation wetlands in Hong Kong. Recommendations were made to improve the cost-effectiveness of monitoring programmes.

## Good corporate social responsibility governance and impact assessment

Tuesday 8 April | 16:30-18:00 | Estrella 2

Paper session

Chair(s): Elsa João

Corporate Stewardship & Risk Management

This session explores the current, developing and potential linkages between IA and good corporate governance. How are IA practices and results linked to strong corporate governance in contemporary practice? What benefits to communities can be achieved where IA is linked to governance mechanisms? To what extent

does the commitment to voluntary, frameworks influence IA? Drawing from case studies, to what degree does IA influence good governance?

## CSR and the extractive industry

Zuleta, Carmen María

An introduction to the actual social scenery within the extractives industrial activities, companies vs. communities, social impact assessment, a switch to strategic impact assessment, sustainable exploration, and social footprint management.

## Applying lessons of CIP to other extractive industries

Vyas, Bhavin; Nunan, Karin; Cundy, Joanna

Managing the strategic social sustainability and philanthropic practices of oil and gas projects by applying lessons learned from successful case studies of CSR (Corporate Social Responsibility) and CIP (Community Involvement Program) to other extractive industry projects.

## Why assess ecosystem services when not required?

Stefan, Carol; Mendoza Sammet,

Angeles; Mason, Mervyn

Considering the interactions between a company's assets and ecosystem services presents new opportunities for business organizations to innovate and increase their financial, social, and environmental performance.

## Environmental supervision on road expansion and maintenance

Maglio, Ivan; Nader, Eduardo; Monteiro, Guilherme

The experience of the environmental supervision that is being done by the Departamento de Estradas e Rodagem (Road Department of the state of São Paulo).

## Implementing compensation programs that contribute to social development

Friday 11 April | 09:00-10:30 | Estrella 1

Paper session

Chair(s): Daniel Gordon

In order to achieve successful and effective environmental compensation programs, it is necessary to involve the local community: results are more useful and contribute more effectively to social development. Different experiences will be shared in this session.

## GNL Quintero and its commitment with the community

Salinas, Alfonso

Insufficiency of the social license approach as an attempt to gain communal approval is discussed. Alternatively, an approach not based on self-interest, but on ethical commitment is developed.

## Santa Maria power plant: Particulate matter emissions

Perret, Julian; Izurieta, Maria Ines

Overview of an emission compensation program from a coal-fired power plant in Chile, which has been partially developed working together with the community, thereby contributing to the social development of the area.

## Ensuring that EMPs contribute to environmental and social well-being

Erasmus, Diane

Exploring the link between EIA, EMP, and sustainability goals, and questioning why good planning is not being translated into good environmental and social management. Recommendations on how to improve EMPs within EIAs to provide a stronger link between the social and environmental well-being of vulnerable communities and areas affected by the drive for development.

## Use of social networks at Brazilian Amazon: Case study

Labruna, Marcio Bahia

This presentation shows how economic and geopolitical decisions from the installation of large projects, such as a mining and metallurgical pole, generate new forms of urban reinvention and reflection. We place programs related to large mining and metallurgical projects installation in terms of socio-environmental licenses and their compensations and mitigations. Using the city of Marabá – Pará as an example, we conclude that the formation of socio-institutional networks recognized by local communities show strong social and political empowerment as a mechanism of social and economic development.

## Hard choices: Biodiversity or ecosystem services?

Knopff, Kyle; Stefan, Carol; Mendoza Sammet, Angeles

This presentation focuses on the potential challenges of achieving both biodiversity conservation and social development, and discusses solutions using community participation.

## When multiple EIA legislations collide: Reconciling guidance and standards

Wednesday 9 April | 16:30-18:00 | Picadilly 2

Paper session

Chair(s): Aaron Goldschmidt

Shared EIA responsibility across jurisdictions presents inherent challenges; recognizing and reconciling these issues is important to the success of EIA programs. Presenters will describe project-specific examples or policy advances and will facilitate discussion of lessons learned, successes and failures, and opportunities for streamlining and consolidating competing legislations – regardless of geography.

## SEA and the international treaties on environment

Lanchotti, Andressa

The integration of environmental conservation when public policies are formulated is a requirement to translate economic growth into sustainable development and SEA is an indispensable tool to provide this integration.

## Coordinated EIA process in British Columbia

Paredes, Alvaro; Kunzmann, Kathrin

Adjustments to the environmental assessment process are required in British Columbia for projects that fall under both federal and provincial jurisdictions.

## EIA best practice in Brazilian state agencies

*Fonseca, Alberto; Resende, Larissa*

The study surveyed EIA best practices in Brazilian state agencies. Findings are critically discussed in order to strengthen the conceptual understanding of "best practice" from the agencies' point of view.

## Apples and oranges: Global approaches to mine closure

*Alberts, Reece; Meyer, Theunis*

Perspectives on open pit mine closure in South Africa vis-à-vis the developed and developing world. Is the SA framework comparable to global legal frameworks, trends, and practice?

## Challenges of GSM regulation in Nigeria

*Suleiman, Abbas*

Disadvantages of overregulation of GSM regulation in Nigeria.

## A better life for the orphans of impact assessment?

**Tuesday 8 April | 14:30-16:00 | Caracola 3**

*Panel*

*Chair(s): Francois Retief, Jos Arts*

There is a continual need to re-emphasize the fundamentals of impact assessment. For the past five IAIA conferences, so-called "orphans sessions" have aimed to provide a platform to discuss the fundamentals of impact assessment. In this session we reflect on alternatives, non-technical summaries and dealing with science and communication.

## A better life for the orphans of impact assessment

*Arts, Jos; Retief, Francois*

There is a need to continually reflect and maintain the basics and fundamentals of impact assessment. Only by this we can ensure that IA strengthens its roots towards improved practice.

## Non-technical summaries: Due care and attention?

*Devlin, John; Gonzalez, Ainhoa*

Intermittent reviews of non-technical summaries (NTSs) from Ireland suggest that these important documents have not been taken seriously enough. This mirrors a general weakness in the theoretical advocacy for NTSs.

## Summary or afterthought?

*Duncan, Joy*

Lessons learned from an analysis of executive summaries to effectively outline key issues in EIAs and the readability of documents to meet the needs of different audiences.

## Hey, geeks! Citizen-science-communication

*Poschmaier, Birgit*

On the edge between science and decision making, communication of results is crucial for the sustainability of impact assessments and the buy-in from decision makers.

## Enhancing Irish practice on SEA alternatives

*Gonzalez, Ainhoa; Therivel, Riki; Fry, John; Foley, Walter*

International review generated best practice recommendations to enhance identification and development of SEA alternatives; their assessment, comparison and selection; and documentation of the process and reasons for selecting preferred options.

## The heart and soul of EIA

*Whitten, Patience*

This presentation will make the case for why a meaningful analysis of alternatives is so essential, yet so difficult to achieve in the effective practice of EIA around the world.

# Climate change

## Uncertainty in impact assessment

**Thursday 10 April | 11:00-12:30 | Esmeralda**

*Paper session*

*Chair(s): Sanne Vammen Larsen*

*IAIA Section: Climate change*

Impact assessment is inherently about the future, and the future is inherently uncertain. In some jurisdictions, studies have shown that this uncertainty is not explicitly dealt with and communicated. Also, certain environmental factors, such as climate change, appear to stress the issue because they are prominently uncertain. The session presents papers addressing whether or not uncertainty is dealt with and communicated in impact assessment, consequences of this and whether and how practice should be developed.

## Uncertainty in impact assessment: EIA in Denmark

*Vammen Larsen, Sanne*

The paper presents a study on the extent of focus on uncertainty in EIA and SEA reports and discusses consequences of and reasons for the found practice.

## The future isn't what it used to be anymore

*Montañez-Cartaxo, Luis E.; Catchpole, Simon*

Risk and uncertainty are difficult concepts for many people, but nowadays almost everybody has experienced important climate changes. Let's benefit from this situation to explain the uncertainties associated with IA.

## SEA: An answer to uncertainty and public acceptability?

*Gauthier, Mario; Chiasson, Guy; Robitaille,*

*Martin; Doucet, Chantale*

How can SEA address the challenges of uncertainty and public acceptability? The case of the shale gas industry in Québec (Canada) sheds some light on this mechanism's potential and limits.

## Assessing uncertainty in EIA related to groundwater

*Walker, Patricia*

The regulatory and practical approach used in Chile to address uncertainty in environmental impact assessment related to groundwater will be presented. A real example will also be shown.

## Predictions error of hydrogeological models

*Herrera, Rodrigo; Ortiz, Cristian; Lopez, Daniel*

Uncertainty in groundwater models predictions is critical to environmental decision-making process, as the impact assessment relies on these predictions. We look to create awareness of this for the Chilean context.

## Strategic environmental assessment and climate change

**Thursday 10 April | 14:30-16:00 | Esmeralda**

*Paper session*

*Chair(s): Kin-Che Lam, Wes Fisher*

What implications will climate change have on the feasibility and sustainability of policies, plans and programmes (PPP)? How should we embrace considerations of climate change risks in the SEA process? With practical examples, this special session will provide practical guidance on the planning, design and operation of PPP with climate change considerations in mind. The session will be conducted by international experts and professionals sharing experiences and interactive discussion with all participants.

## All change: The climate is changing, how about us?

*King, Nick*

What do we, as IA professionals, need to be doing to adapt to the realities of climate change? A complete transformation in mindset, skills and approaches are all required.

## Conflict mitigation through river basin management

*Poschmaier, Birgit*

Watershed management systems, e.g., for the Danube or the Nile, provide conflict mitigation tools and methods that can potentially be included in impact assessments.

## Incorporating climate change impacts

*Capstick, Sean; Barrett, Allison; Janya,*

*Kelly; Penailillo, Reinaldo*

This paper will discuss this approach and present best practices and document the implementation of this process through case studies utilized in both North and South America.

## Strategic environmental assessment: Hong Kong experience

*Lai, Raymond*

The experience of implementation of strategic environmental assessment in Hong Kong.

# Concurrent sessions

## Climate change and impact assessment: Good practice cases

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Thursday 10 April | 16:30-18:00 | Esmeralda

Paper session

Chair(s): Arend Kolhoff

Integration of climate change in EIA and SEA is still a new field of interest for the impact assessment community. In this session, good practices from around the world are presented and shared.

### Best practices in climate change assessment

Herron, Hope

The overall goal of this presentation is for practitioners and planners to have a better idea of how to apply tools and methodologies for climate change assessment.

### Climate change and SEA in northern Chilean Andes

Romero, Hugo; Opazo, Dustyn; Alencar, Keyla; Mendonca; Magaly

The necessity to incorporate climate variability and change recorded in the Chilean Andean Altiplano is a critical factor in the EAE of Regional Land Management Plan and Regional Strategy of Development.

### Mining in a changing climate: Impacts and responses

Sharma, Vigya; Franks, Daniel M.

Findings from climatic extremes since 2000 in Central Queensland and identification of impacts on, and responses from, the mining industry and other stakeholders to inform their future adaptation pathways.

### Climate change in EIA in the Netherlands

Kolhoff, Arend; Barten, Bart

Lessons learned are presented on how climate change issues are integrated in EIA and SEA in the Netherlands.

## Impact assessment and climate change: Next steps and action plan

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Friday 11 April | 09:00-10:30 | Estrella 3

Roundtable

Chair(s): Wes Fisher, Arend Kolhof, Kin-Che Lam, Peter Croal, Rita Cestti

This roundtable will use the recommended action items in IAIA's "Impact Assessment and Climate Change Next Steps" document as the starting point for a continuing discussion of how best to apply the power of IAIA members to respond to the great challenges before us over the next 50 years. The results of the roundtable will be used to pursue actions recommended in the discussion document as well as others that participants may recommend.

# Corporate stewardship and risk management

## Community development and impact assessment

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Wednesday 9 April | 16:30-18:00 | Estrella 3

Paper session

Chair(s): Marja Prinsloo

IAIA Section: Corporate Stewardship & Risk Management

This interactive session will explore several central questions concerning community development and IA. Brief presentations will be followed by a panel discussion, including the audience. Join us to discuss the relationships between, methods for, and benefits of crafting improved linkages between impact assessment and community development. Current trends and challenges in progressing community development through impact assessment will be presented, and speakers will offer examples of good practice from across the industry.

### Local social development program: Madeira River

Ribeiro, Miriam

Actions to support communities downstream of the Madeira River have demanded that local leaders develop integrative ways of overcoming the difficulties and advance research in sociotechnical enablers of sustainable business.

### Local images of the future and oil projects in Italy

Mezzalama, Roberto; Bazzini, Davide;

Saccorotti, Raoul; Bobbio, Emanuele

Understanding the local development geography and the communities' images of the future is a necessary preliminary step for assessing social impacts and preparing effective stakeholder management tools in high-income countries.

### Challenges for effective use of EIA

Anyanwu, Chukwudi

There is need to overcome certain challenges for effective use of EIA in development.

### ESIA and off-shore investments: Case in Patagonia

Zuleta, Carmen María

The Gulf of San Jorge in Argentina means a competitive advantage to place Argentina in the world markets for oil, gas, mining, fisheries, agro products, and development of marine resources.

### Joint social impact baseline study in Greenland

Krarup, Hans Christian; Hansen, Anne

Merrild; Bjornsson, Haukur

The process and findings of a recent Social Baseline Study (SBS) that five oil companies recently undertook jointly in Baffin Bay, Greenland.

## Company-community interactions and impact assessment

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Tuesday 8 April | 14:30-16:00 | Caracola 1

Paper session

Chair(s): Patricia McCormack

Investment projects can play a significant role in the development of local communities, therefore, it is essential to understand and improve the linkages between impact assessment and community development. This session brings together different case studies and innovative approaches on community development and IA.

### Mitigation of social impacts in Campos Basin

Ben Lior, Patricia; Serrão, Mônica;

Vicente, Anderson; Narahara, Karine

IBAMA's mitigation measures on socio-environmental impacts caused by the offshore oil and gas industry are focused on affected social groups that are under greater conditions of socio-environmental vulnerability.

### Land tenure and resource development projects

Kone, Natasha; Havers, Linda

Land tenure is transforming from traditional to market systems. This study examines impacts in communities near development projects, and the role of SIA in developing management strategies to limit deprivation.

### Ways to enable company-community dialogue

Lyra, Mariana

The interest in learning through collective engagement has led to a growing popularity of the concept of "social learning" as a working tool in the area of sustainability.

### Community development, challenges, and opportunities

Martinez, Carla; Franks, Daniel

The research explores, through a comparative analysis, the links between corporate-sponsored community development and the social license to operate. The linkage between community development work and social and environmental impact assessment studies is a desirable endeavour toward maximizing community development outcomes.

### Mining IA and community water governance

McElroy, Caitlin

Evaluating the regional impacts of extractive industry water use as a process of designing better water governance capacities and improving community development.

## Cultural heritage

### Cultural heritage: How we know what we know and why we protect it

Thursday 10 April | 11:00-12:30 | Cabaret

Paper session

Chair(s): Christopher Polglase

IAIA Section: Cultural Heritage

Definitions and practice of cultural heritage determine what we choose to protect. We will consider varying definitions, technical approaches, and cultural heritage practice. We hope to identify good practice to educate the IA community and assist the IAIA Cultural Heritage Section in preparing a statement of Best Practice Principles.

### Development and implementation of a methodological approach: Indigenous cultural heritage

Carvallo, Lorena; Toledo, Macarena

Development and implementation of a methodological approach to determine and protect indigenous cultural heritage from their own worldview perspective can be useful for large-scale projects located near an indigenous presence.

### Understanding U.S. cultural heritage laws

Polglase, Christopher

A description of the legal and regulatory context of U.S. cultural heritage protection and explanation of some differences between that protection framework and those found in other countries.

### Strengthening EIA through indigenous knowledge

Ramirez, Daniella

A comprehensive and effective EIA needs to incorporate the understanding on the environment and its complexities that has been held by Indigenous Peoples throughout time.

### When trees are gods: Preserving heritage in the Congo

Wheelhouse, Paul

Mining companies risk causing inadvertent damage to cultural sites during the exploration phases of their projects. Early consultation and engagement with local communities during the planning for exploration is recommended.

### Discussion

### Cultural heritage in urban and rural landscapes

Thursday 10 April | 14:30-16:00 | Cabaret

Paper session

Chair(s): Inge Lindblom

IAIA Section: Cultural Heritage

The focus of this session is how to manage cultural heritage in urban and rural landscapes in an EIA and SEA setting. The topic is often regarded as challenging and difficult because of its interdisciplinary character. The focus is broad and consists of various papers related to sustainable development in culturally significant areas.

### The first-ever EIA of an artwork

Athié, Mauricio

This presentation will review the pioneering EIA of Christo's artwork, the Running Fence in the California countryside, and its legacy on various aspects of IA knowledge, including aesthetic impact assessment.

### Conditional valuing according to scale

Berg, Sveinung Krokann

Questions raised concern change in heritage value due to the scale in which it is valued, and whether criteria for cultural and economic value can be merged.

### ELC development strategy/ process tool: Statsbygg

Lilleland, Hege

The European Landscape Convention (ELC) as development strategy and process tool in Norwegian government projects under Statsbygg. Case study: Life Sciences Centre, University of Oslo.

### The Chilean connection

Wolf, Charlie

The Chilean Connection brings together impact history, tourism, and assessment to enrich participants' conference experience and broaden their outlook on problems and possibilities of IA here and throughout the world.

### Cultural heritage in EIAs: Theory and practice

Thursday 10 April | 16:30-18:00 | Cabaret

Paper session

Chair(s): Ezequiel Pinto-Guillaume

IAIA Section: Cultural Heritage

Cultural Heritage plays a crucial role in EIAs. However, experience often shows that theory and practice are far from being the same. We will debate the differences we notice when working with the theory and practice of assessing cultural heritage for EIAs.

### Local participation in the licensing process

Anker, Matilde

This presentation calls upon how local interests within cultural heritage and landscapes are involved in the process of granting license to overhead power lines.

### Archaeological potential models and ESIA's

Robertson, Cameron; Day, Chris; Brousseau, Travis

Demonstrating how GIS archaeological potential models can be of great assistance guiding fieldwork and identifying cultural heritage sites, particularly in mountainous terrain and dense rainforest.

### Heritage impact assessments in the Tapajós River

Caldarelli, Carlos Eduardo

Account of two cultural heritage impact assessments performed for the construction of two hydropower plants at the Tapajós river basin in the Brazilian Amazon.

### Scoping cultural heritage with land use patterns

Muir, Bruce; Fox, Gretchen

Scoping valued components of Indigneous groups with a community-based approach increases the effectiveness of impact assessment processes relating to mining projects.

### Cultural heritage in EIA: Theory and practice (notes from the field)

Pinto Guillaume, Ezequiel

Subjectivity versus objectivity in recording cultural heritage has direct effect on the contents of EIAs. Theory is far from practice when subjective interpretation is used for assessment.

### Debate and conclusion

## Disasters and conflicts

### The 2010 Chile earthquake: The impact of impact assessment on sustainable recovery

Thursday 10 April | 11:00-12:30 | Caracola 2

Paper session

Chair(s): Charles Kelly, Anita van Breda

IAIA Section: Disasters & Conflicts

The session focuses on impact assessments following the 2010 earthquake, how these assessments defined recovery planning, and the impact of actual recovery programs in the disaster-affected areas of Chile using a sustainable recovery process, with reference to earthquakes in New Zealand.

### The 2010 Chile earthquake rapid environmental impact assessment

Kelly, Charles A.

A review of the rapid environmental impact assessment following the 2010 Chile earthquake.

### What to do with an REA (Rapid Environmental Assessment)? Green recovery and reconstruction

Van Breda, Anita

Exploring ways and means for the disaster and environment sectors to build back more safely by building on assessments crafting environmentally responsible approaches to disaster recovery and reconstruction.

### Social vulnerability and resilience in cities affected by the 2010 earthquake

Romero, Hugo; Contreras, Yazna; Vidal,

Claudia; Albornoz, Christian

Analyses and assessment of the Chilean tsunami of 27 February 2010, in terms of social vulnerability and reconstruction processes observed in Constitucion and Talcahuano cities.

### SIA of recent New Zealand earthquakes

Taylor, Nick; Taylor, Cilla

Recent damaging earthquakes in Canterbury, New Zealand, provide lessons for SIA practice in a tight, stressed timeframe. Social impacts are over viewed using a social well being framework.

# Concurrent sessions

## Economic impact assessment

### Integrating IA processes in national development framework: Nigeria

Tuesday 8 April | 11:00-12:30 | Esmeralda

Theme forum

Chair(s): Adebajji Adekoya, Abbas Suleiman

This session provides practitioners the opportunity to share experiences on how national IA frameworks are applied to manage the impact of rapid economic transformation and industrial expansion. The objective is to share valuable experiences and develop a blueprint for promoting integration of environmental sustainability considerations in national development policy of developing countries.

### Setting the stage: Impact assessment and national development priorities

**Adebajji Adekoya**, sustainable development analyst at Shell with nearly two decades of experience in various aspects of social and environmental impact assessment.

### Integrating IA process in national development framework and sectoral development

**Kehinde Odusanya**, Director of Environmental Assessment, Nigeria Federal Ministry of Environment and the custodian of Nigeria's impact assessment framework.

**John Alonge**, Deputy Director of Environmental Assessment in Nigeria's Federal Ministry of Environment, a seasoned IA practitioner with many years of experience across sectors.

## EIA methodology and practice

### Assessment of next generation mining projects

Wednesday 9 April | 11:00-12:30 | Estrella 1

Panel

Chair(s): Pablo Daud, Ximena Espoz

### Introduction by the session chair

Panelists

**Craig Vogt**: Deep sea tailings disposal technique: existing facilities and development of regulations and guides.

**Jens Skei**: Methodologies for environmental assessment of deep sea tailings disposal projects.

Q&A

### Modeling and decision support tools for environmental assessment (I): Valuation approaches

Thursday 10 April | 11:00-12:30 | Caracola 3

Paper session

Chair(s): Camille Fertel, Jean-Philippe Waaub

This session objective is to present continuing development of modeling and decision support system tools and their role in environmental assessment. Cross-cutting issues and complex relationships must be taken into account with a more integrated analysis. Those tools can contribute to provide helpful information for exploring and comparing scenarios and better assessment, take into account sustainability issues, and help highlight those issues to stakeholders and decision makers.

### Avoided cost analysis: Beyond risk identification

**Canassa, David; Battelo, Edson; Rezende, Frineia**  
Votorantim developed a risk assessment tool based on technical, legal, and cost criteria. The tool also allows for costing, enabling the quantification of avoided impact costs.

### EROVA ecosystem services impact assessment tool

**Fuenzalida, Gabriel; Spurgeon, James**

The Environmental, Risk, Opportunity and Valuation Assessment (EROVA) tool is explained, using Chilean mining company examples and highlighting its use alongside ESIs to help value and manage biodiversity and ecosystem services.

### Stakeholder ES and biodiversity impact assessment

**Mason, Mervyn; Drury, Maree; Hart, Brendan**

The method recognises the need to allow affected communities to rank the intrinsic, social, and cultural values they obtain from the environment alongside the anthropocentric economic benefits of projects.

### Value and use to financial institutions of EA

*Montgomery, Robert*

The use and value to a financial institution of monetization of environmental and social impacts and associated management measures in order to facilitate consideration in future EAs.

### Modeling and decision support tools for environmental assessment (II): MCDA and GIS approaches

Thursday 10 April | 14:30-16:00 | Caracola 3

Paper session

Chair(s): Camille Fertel, Jean-Philippe Waaub

This session objective is to present continuing development of modeling and decision support system tools and their role in environmental assessment. Cross-cutting issues and complex relationships must be taken into account with a more integrated analysis. Those tools can contribute to provide helpful information for exploring and comparing scenarios and better assessment, take into account sustainability issues, and help highlight those issues to stakeholders and decision makers.

### Toward more deliberative decision making

*Neste, Jenni; Karjalainen, Timo P.*

Toward more adaptive and deliberative environmental decision making: an MCDA approach supporting stakeholder participation in EIA.

### Decision Matrix: Tool for choosing project location

*Paley, Maria Claudia; Augusto, Luis*

The "Decision Matrix" tool helps identify the best sites and those that will have lower costs during the implementation and operation of the project, considering its major social and environmental issues.

### Software web application and method for EIA

*Nikacevic, Nikola; Lekic Rasovic,*

*Snezana; Tubic, Suzana*

Eon Plus is developing a user-friendly web based application which facilitates the work of environmental experts with an efficient system for impact identification and assessment, graphical representation, and EIA reports generation.

### 3-Dimensional EIA: A greener tool to plan and design

*Wong, Charles Yee-Kwong; Ngo,*

*Lawrence; Tsang, Terence*

With this 3D Green Tool, professionals can preview and browse the terrain in a 3D environment, make decisions on project development options, and produce 3D digital models in a Virtual Reality Environment.

## Modeling and decision support tools for environmental assessment (III): Energy sector approaches

Thursday 10 April | 16:30-18:00 | Caracola 3

Paper session

Chair(s): Camille Fertel, Jean-Philippe Waaub

This session objective is to present continuing development of modeling and decision support system tools and their role in environmental assessment. Cross-cutting issues and complex relationships must be taken into account with a more integrated analysis. Those tools can contribute to provide helpful information for exploring and comparing scenarios and better assessment, take into account sustainability issues, and help highlight those issues to stakeholders and decision makers.

### Social criteria for sugarcane ethanol assessment

Mendizábal Cortes, Alejandra; Malheiros, Tadeu

This research is an analysis of social key criteria to be considered in a sustainability evaluation model for ethanol production, as part of an ex ante tool in GIS environment.

### Designing oil and gas plant siting alternatives

Leonardi, Marco; Di Caro, Giuditta;

Invernizzi, Valentina; Dellasanta, Luca

This presentation describes a Spatial Multicriteria Decision Analysis (SMDA) for selecting priority areas for locating oil and gas plant and facilities on the West African coast, in an early (conceptual) stage of the project.

### Improving the selection of cascade alternatives

Rocha Leal Da Paz, Luciana; Matos, Denise;

Costa, Fernanda; Raupp, Igor

When selecting alternatives of electric energy generation during inventory studies, one must consider the environmental impacts of complementary energy that's abandoned when the chosen one doesn't have the highest potential.

### Energy technology assessment in Canada

Waaub, Jean-Philippe; Fertel, Camille

TIMES-Canada model for long term energy and environmental policy analysis is used for assessing energy transition paths. We analyze the implementation of contrasted and challenging Canadian GHG (greenhouse gas) emission reduction targets.

## Modeling and decision support tools for environmental assessment (IV): Environmental management approaches

Friday 11 April | 09:00-10:30 | Caracola 3

Paper session

Chair(s): Camille Fertel, Jean-Philippe Waaub

This session objective is to present continuing development of modeling and decision support system tools and their role in environmental assessment. Cross-cutting issues and complex relationships must be taken into account with a more integrated analysis. Those tools can contribute

to provide helpful information for exploring and comparing scenarios and better assessment, take into account sustainability issues, and help highlight those issues to stakeholders and decision makers.

### The status and extent of environmental management

Cilliers, Dirk; Retief, Francois

An environmental management framework (EMF) serves as a strategic-level decision support tool used when dealing with EIA applications. The tool considers the spatial context of EIA applications.

### The VDWHS EMF: UNESCO vs. private land owners

Meyer, Theunis; Alberts, Reece

Goliath vs. Goliath: Reflection on experiences in the development of an environmental management framework (EMF) for the Vredefort Dome World Heritage Site (VDWHS) in South Africa.

### A new tool for large projects and mature programs

Reinke, Danny

Development and use of the tool will be discussed and demonstrated.

### Noise impact assessment in China

Li, Lu

Management and the application of the EIA model as well as achievements are introduced. Moreover, barriers of noise management and trends of noise impact assessment in China are discussed.

## Is simple (IA) stupid?

Thursday 10 April | 09:00-10:30 | Esmeralda

Theme forum/Debate

Chair(s): Angus Morrison-Saunders, Francois Retief

Has impact assessment (IA) become complicated and confusing by the split into specialist branches (e.g., SEA, HIA, SIA, etc., etc.)? Is it time to return to basics and keep IA simple? How can we better integrate all of our respective specializations into effective IA?

The March 2014 issue of *Impact Assessment and Project Appraisal* journal featured a roundtable discussion by a panel of international writers on this topic. Several of these roundtable authors and other international IA experts including **Bill Ross** (Canada), **Bryony Walmsley** (South Africa), **Behzad Raissiyan** (Iran), **Francesca Viliani** (Italy), **Garry Middle** (Australia) and **Kim Myungjin** (Korea) will kick off the debate.

Participative audience discussion will then be invited, so come along and join the debate and have your say!

## Water quality and quantity: EIA praxis and challenges toward sustainable use

Wednesday 9 April | 14:30-16:00 | Estrella 1

Paper session

Chair(s): Pablo Pastén, Patricia Walker

Water supports life in natural ecosystems and is a critical resource for urban development, mining, industry, energy, agriculture, and to sustain ancestral uses. This session aims to share

experiences on conceptual and quantitative models, management tools, mitigation, and to identify the lessons and challenges related to water quality and quantity.

### Building a guideline to improve EIA on groundwater

Walker, Patricia

A guide to the best practices of mathematical modeling was made in order to improve the EIA of groundwater extraction. The procedure, scope, challenges, and some key issues are presented.

### Improving water buffer management in Latin America through IA

Clausen, Javier

Challenges to improve sustainable groundwater management strategies through IA-based decision support in Latin America and groundwater as a valued ecosystem component (VEC) and for managing the water buffer for climate change adaptation and preparedness for drought.

### Benefits from applying integrated basin management

Pastor, Montserrat; Penailillo, Reinaldo

This presentation will discuss the approach of integrated basin management for mining projects in the new regulations for EIAs context (D.S. N°40/2012).

### Natural non-point source management using LID

Lee, Jaewoon; Kwon, Heon Gak;

Kal, Byung Seok; Kang, Du Kee

Non-point source, modeling, low impact development (LID).

### Zero waste water emission of coal chemical project

Ye, Yang

Based on the feasibility analysis of the techniques of zero waste water discharge of coal chemical projects, this presentation discusses issues of concern such as environmental impact, planning and management.

### Technical aspects of groundwater modelling for EIA

Ortiz, Cristian; Lopez, Daniel; Herrera,

Rodrigo; Walker, Patricia

The Environmental Assessment Service of Chile has elaborated a guide for the best practice of numerical modelling. The most relevant technical aspects of the guide will be presented.

## Streamlining IA and transport infrastructure planning: Good, bad, ugly?

Wednesday 9 April | 16:30-18:00 | Estrella 1

Paper session

Chair(s): Jos Arts, Charlotta Faith-Ell, Heikki Kalle

This session discusses the interrelationships between transportation infrastructure planning and impact assessment. Worldwide experiences with streamlining will be discussed: does it make planning more effective and/or efficient?

# Concurrent sessions

## Streamlining IA and transport infrastructure planning

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

This presentation introduces the interrelationships between transportation infrastructure planning and impact assessment. Worldwide experiences with streamlining will be discussed: does it make planning more effective and/or efficient?

## Streamlining IA in Dutch transport planning

*Dias, Luis Martins; Arts, Jos*

Experiences with streamlining of IA procedures in Dutch transport infrastructure planning are shared and discussed. Preliminary conclusions are drawn whether streamlining has led to more effective and efficient transport planning.

## Streamlining experiments in Estonia

*Kalle, Heikki*

Discussing first impressions introducing changes in EIA and planning legislation. Issues are related to the quality of environmental considerations and public participation in the process.

## Streamlining infrastructure EIA in Sweden

*Faith-Ell, Charlotta*

Exploring implications on the practice of EIA from the introduction of a new infrastructure planning system in Sweden.

## Assessment of alternatives in mine planning

**Wednesday 9 April | 14:30-16:00 | Estrella 2**

*Paper session*

*Chair(s): Alvaro Paredes, Kathrin Bonnemann*

Assessment of alternatives with limited environmental and social background information is normally conducted during initial stages of mine planning, and key decisions need to be made before proceeding with more advanced stages of mine design. This session invites practitioners to share positive and negative experiences of conducting assessment of alternatives for mining projects.

## Sustainable mining: An oxymoron?

*Blaha, David; Trippel, Alan*

This presentation draws on experiences with mines across the world and proposes a paradigm for how mining can move toward sustainability and leave a legacy in closure that is sustainable.

## Caught in the maze of alternatives

*Kunzmann, Kathrin*

Recent examples of mining projects will be presented and lessons on how to improve the assessment of alternatives process will be drawn.

## Designing for closure: An axiom of mining project

*Castillo, Jose*

EIA, closure plan, air quality and dispersion models, acid, mine, drainage.

## The state of SEA in Danish aggregates planning

*Bidstrup, Morten; Hansen, Anne M.*

A state-of-practice analysis within Danish aggregate SEAs. The research explores peculiarities of the sector as well as draws conclusions on future possibilities and restrictions for better planning.

## Local content in mining, oil and gas: Applying IA for regional development

**Wednesday 9 April | 16:30-18:00 | Pacifico**

*Workshop*

*Chair(s): Ana Maria Esteves*

*IAIA Section: Social impact assessment*

Participants will design a baseline impact assessment and strategy that informs project procurement and supplier development with three objectives: impacted communities have capacity to benefit from opportunities, industry has reliable suppliers and workforce nearby while meeting local content obligations, and government fulfils policies for local economic development and industry development.

## Approach and treatment of perceptual, cumulative and synergistic impacts

**Tuesday 8 April | 14:30-16:00 | Pacifico**

*Paper session*

*Chair(s): Steef van Baalen*

This session will compare varying perspectives, methods, and regulatory frameworks used by different nations and organizations to assess and manage cumulative impacts. The goal is to highlight differing perspectives among different countries, with emphasis on successful features that can benefit all. We will dive into cumulative impacts related to SIA, explore easy to use indicators and travel round the world in three project examples from Nigeria, USA and Nepal.

## Where to begin? Cumulativity and existing operations

*Tucker, Claire; Crispin, Christine;*

*Fentener van Vlissingen, Rita*

Applying a "theory of change" methodology in a proponent-led SIA to help untangle the cumulative effects of an expansion to an existing mining operation.

## Indicators of cumulative impacts in Queensland gasfields

*Rifkin, Will; Uhlmann, Vikki; May,*

*Kylie; Everingham, Jo-Anne*

Development of indicators of cumulative impacts on housing, business, employment, liveability, and trust in government in Queensland's contentious gasfields provides insight into the allocation of responsibility inherent in such assessments.

## NLNG PICA projects and community concerns in Bonny Kingdom

*Bristol-Alagbariya, Edward T.*

NLNG PICA could address environmental, socio-economic, health, and historical/cultural heritage concerns in Bonny Kingdom, in order to ensure better quality of life for the Kingdom's present and future generations of mankind.

## CEAM for river diversion hydropower projects

*Canter, Larry; Swor, Tom*

Review of challenges and opportunities related to planning and implementing CEAM studies for multiple river diversion hydropower projects.

## Cumulative impact assessment in hydros in Nepal

*Karki, Pravin; Cardinale, Pablo; Kaasa,*

*Halvard; Selvam, Panneer*

The challenges of developing hydropower projects in Nepal and guidelines for cumulative impact assessment using the six-step process recommended in the IFC Handbook for cumulative impact assessment.



## Energy

### Country experiences with extractive industries and the environment

**Tuesday 8 April | 14:30-16:00 | Picadilly 2**

*Paper session*

*Special session of the Oil for Development Program*

*Chair(s): Peter Tarr*

The purpose of this session is to give representatives from Oil for Development countries the opportunity to present examples of how environmental concerns have been addressed in oil and gas developments in their own countries, including legislation, administration, cooperation between government departments, industry, etc. What has worked and what has not?

### Coexistence of oil and conservation in Uganda

*Namara, Justine*

Petroleum development and conservation may co-exist if proper measures are put in place. EIA is one of the tools that can make this coexistence possible.

### Environmental impact assessment systems in Lebanon

*Sheikh, Rola*

### Environmental compliance and enforcement in Tanzania

*Ntakamulenga, Robert*

### Status of impact assessment in the oil and gas sector in Ghana

*Appiah, Nana Yaa*

### Environmental degradation and coping strategies in Nigeria

*Ekpenyong, Otu*

### Negotiating impacts and impact mitigation with oil and gas companies

**Thursday 10 April | 14:30-16:00 | Pacifico**

*Role-playing workshop*

*Special session of the Oil for Development Program*

*Chair(s): Peter Tarr, Morgan Hauptfleisch*

This workshop will demonstrate negotiation techniques in practice. It will focus 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 being involved in the negotiations.

The chairpersons will initially explain the purpose and the process, and thereafter divide the participants into smaller groups who will represent various interest groups. These groups will present their viewpoints, and a negotiating process will follow.

### Extractive industries and IA in developing countries

**Wednesday 9 April | 09:00-10:30 | Cabaret**

*Theme forum*

*Special session of the Oil for Development Program*

*Chair(s): Morgan Hauptfleisch*

What does the rapid global growth of the oil and gas industry and other extractive industries mean for biodiversity and local communities, in particular in developing countries? Societies are increasingly concerned with widespread industrial pollution of water, soil and air as well as fragmentation and loss of biodiversity hot spots.

### The status of the extractive sector and the environment in South America

*Croal, Peter*

### The challenges of operating extractive industries in biodiversity hot-spot areas in Oil for Development countries

*Sjong, Mari Lise*

### The role of EA in guiding the oil and gas sector: Southern African experience

*Tarr, Peter*

### The Norwegian Oil for Development Program: Status, experiences and results

*Lind, Terje*

### Working with IA in the oil and gas sector in developing countries

**Thursday 10 April | 16:30-18:00 | Estrella 1**

*Workshop*

*Chair(s): Peter Tarr, Bryony Walmsley*

The conveners will give a short introduction to how a number of Oil for Development (OfD) countries have worked with impact assessment, followed by a presentation of IA experiences from three countries. A panel will seek to engage the participants in a discussion of expectations and experiences as to the use of IA tools related to the oil and gas sector.

Initial presentation by conveners followed by panel.

## Evaluation and evolution of national EIA systems

### Asian SEA, EIA and ecosystem service assessment (I)

**Tuesday 8 April | 14:30-16:00 | Esmeralda**

*Paper session*

*Chair(s): Kii Hayashi, Jong-Gwan Jung*

This session shares experiences, good practices, case studies and lessons learned in Asian countries. It is an opportunity to discuss any practical solutions or strategies to overcome obstacles, promote innovation in practices, and build and sustain better institutions for applying SEA, EIA, or ecosystem service assessment.

### Current situation for EIA in Japan

*Uesugi, Tetsuro; Ito, Takaaki; Sato,*

*Hiroki; Nakamura, Sho*

The current situation of EIA in Japan.

### Lessons from restoration of estuarine ecosystem

*Jung, Jong-Gwan; Kim, Im-Soon*

In the case of impact assessment in estuarine restoration, it is desirable to take long-term regional impact assessment for anticipatory research works forward.

### EIA procedures for renewable energy in Japan

*Uesugi, Tetsuro; Ito, Takaaki; Sato,*

*Hiroki; Nakamura, Sho*

The Ministry of the Environment Japan will continue efforts for coexistence of appropriate environmental consideration and renewable energy promotion.

### JICA approach for environment/ social consideration

*Shinoda, Takanobu; Nagase, Toshio*

The Japan International Cooperation Agency (JICA) formulated the Guidelines for Environmental and Social Considerations in 2010. This presentation reviews the achievements to date, and issues and future challenges are presented with special focus on Asia.

### Streamlining IA and Transport Infrastructure Planning: Good, Bad, Ugly?

*Raissyian, Behzad*

This study evaluates whether "road safety" is adequately addressed in IA requirements and practice, and suggests a set of actions to improve this aspect of IA.

# Concurrent sessions

## Asian SEA, EIA and ecosystem service assessment (II)

Tuesday 8 April | 16:30-18:00 | Esmeralda

Paper session

Chair(s): Kii Hayashi, Jong-Gwan Jung

This session shares experiences, good practices, case studies and lessons learned in Asian countries. It is an opportunity to discuss any practical solutions or strategies to overcome obstacles, promote innovation in practices, and build and sustain better institutions for applying SEA, EIA, or ecosystem service assessment.

### A review of the SEA process in Hong Kong

Ng, Cho Nam; Wong, Chi Chung

This presentation presents the results of a preliminary review of the operation and implementation of the SEA process in Hong Kong.

### Mainstreaming poverty-environment in Kyrgyzstan

Palerm, Juan; Abdykalykova, Gulnara; Ten, Lubov

The poverty-environment nexus is being developed in Kyrgyzstan through a combination of top-down and bottom-up approaches. Lessons and challenges are explored, especially regarding strategic planning, SEA and budgeting processes.

### Forest evaluation method using integrated HSI model

Hayashi, Kiichiro; Ito, Hideyuki

This develops a forest evaluation method using integrated HSI models and applies it to four forest areas in Nagoya University's campus as a case study.

## EIA lessons, experiences, and cases in Africa (I)

Wednesday 9 April | 11:00-12:30 | Pacifico

Paper session

Chair(s): Charlotte Bingham

The purpose of this session is to provide an opportunity to share experiences and practices regarding impact assessment in African countries. The presenters will address several issues and challenges regarding sustainable development of the continent, such as competition for resources, dire need of electricity, and conflict between different stakeholders involved in development projects.

### SEA of Ghana's oil and gas sector

Fredua, Kwame; Asare, Christine; Badu-

Yeboah, Kwabena; Dogbey, Dziedzorm  
Key issues identified need to be addressed and looked at critically to ensure that this resource becomes a blessing rather than a curse for the nation at large.

### EIA regulation in Nigeria

Odubela, Modupe; Odusanya, Kehinde;

Alonge, John; Suleiman, Abbas

Conflict between environment and development on one hand and between government and non-government organizations on the other.

## EIA lessons, experiences, and cases in Africa (II)

Wednesday 9 April | 14:30-16:00 | Pacifico

Paper session

Chair(s): Charlotte Bingham

The purpose of this session is to provide an opportunity to share experiences and practices regarding impact assessment in African countries. The presenters will address several issues and challenges regarding sustainable development of the continent, such as competition for resources, dire need of electricity, and conflict between different stakeholders involved in development projects.

### Energy development in sub-Saharan Africa

Brown, Diane

The challenges of environmental and social review in the assessment of energy development in Sub-Saharan Africa.

### Assessing agriculture-based poverty reduction projects

Weiss, Eric

A methodology is presented for estimating crop yields in sub-Saharan Africa to enable assessment of agriculture-based poverty reduction programs without depending on farmer recall. Results and challenges are also discussed.

### From waste to a resource:

#### Windhoek case study

Ntesa, Clarence; Hauptfleisch, Morgan; Siebel, Martin

The social, financial and environmental benefits that can be derived from composting the organic fraction of municipal waste in Windhoek, currently a neglected resource.

## How do we improve certainty in the IA review process?

Tuesday 8 April | 11:00-12:30 | Pacifico

Theme forum

Chair(s): Miles Scott-Brown

Three experienced practitioners from Australia, Canada, and Brazil, countries with varying degrees of mature IA systems in place, will tap the specific features of their IA systems that contribute to IA certainty and validity, and will share successful cases and experiences that illustrate how IA certainty is achieved in their respective countries. In addition to general discussion on what constitutes certainty in IA, presenters will address the following questions:

- How is IA certainty defined in your jurisdiction/country?
- What factors do or do not contribute to IA certainty in your jurisdiction/country?
- What complications can arise that affect IA certainty?
- What is being done to address IA certainty and improve the IA process?

Robin M. Junger, Partner, McMillan LLP

Angus Morrison Saunders, Associate Professor in Environmental Assessment, Murdoch University, Australia

Thales Teixeira, General Legal Manager, Environment, Logistics and Energy, Vale S.A.



The professional's forum: make your point!

## Governance

### Effective collaboration for social performance in oil and gas

Wednesday 9 April | 11:00-12:30 | Caracola 3

Panel

Chair(s): Jenny Pope

There is growing recognition of the need for collaborative approaches to managing the cumulative impacts of oil and gas development and delivering shared value. This panel comprising social practitioners from industry, government and academia will lead a discussion on the opportunities and challenges of collaboration. Audience participation is invited.

Panelists

Rita Sully

Ainslie Bourne

Andrea Jardine-Orr

Will Rifkin

### International experiences on environmental offsets policy: Toward an ideal framework

Wednesday 9 April | 14:30-16:00 | Caracola 3

Panel

Chair(s): Ana Villarroya Ballarin, Joseph Kiesecker

We seek to strengthen the basis for offset policy development through a review of major policy frameworks from various countries/regions. By comparing key issues highlighted in these frameworks and distilling important commonalities and differences, our aim is to provide guidance for informing decisions on the implementation or update of offset policies.

#### Introduction to the session

Joe Kiesecker

#### 40 years of experience with wetland and stream offset program

Kelly, George

Overview of the U.S. program, resources that are regulated, implementation protocols, how impacts and offsets are calculated, how long offsets must be maintained, and requirements for landscape-level considerations.

#### Biodiversity offsets in South Africa

Retief, Francois; King, Nick

Offsets have been commonly used as a mitigation option in South Africa. This presentation introduces the approach and lessons learned with its application.

#### Biodiversity offsets in Latin America: The case of Colombia

Villarroya, Ana

Several Latin-American countries have enacted offset policies during the last 15 years in response to increasing development. Here we will review in detail the case of Colombia.

#### Case studies in biodiversity offsets and no net loss: practice and policy

Ektrom, Jonathan

Companies, banks and governments have taken on the idea of "going biodiversity neutral." I will discuss the model developed by the extractive sector and how this may serve as a model for replication.

#### Open discussion with presenters and audience

What can we learn from the experiences presented? What should we change? Defining an "ideal offset framework" in theory and in practice.

### Toward a review of the 2001 EU SEA Directive

Thursday 10 April | 16:30-18:00 | Caracola 1

Workshop

Sponsored by EIB

Chair(s): Louis Meuleman, Maria Partidário

What should be addressed in the first review (2016) of the European Union SEA Directive (2001)? The Directive has strongly influenced SEA all over the world. Irrespective of where you come from, we'd like to hear your views on more fundamental issues that can enhance SEA through this legal framework.

#### Alternatives within alternatives? Irish SEA

Fry, John; Gonzalez, Ainhoa; Therivel, Riki; Foley, Walter

An Irish guidance manual relating to SEA Alternatives is nearing completion. This presentation considers the implications of including divergent advice pathways addressing the individual SEA needs of specific sectors.

#### Stakeholder expectations on SEA Scottish practice

Polido, Alexandra; João, Elsa; Ramos, Tomás

An assessment of the problems and issues addressed by the latest Scottish Strategic Environmental Assessment guidance, as compared to former guidance, complemented with key stakeholder interviews.

#### Brainstorming

What to address in the EU SEA Directive Review, with active contribution from the European Investment Bank (EIB).

## Health

### Human and ecological risk assessment in support of EIA

Thursday 10 April | 14:30-16:00 | Estrella 3

Paper session

Chair(s): Christopher Ollson

Human health and ecological risk assessments are of critical importance in EIAs. This session brings together risk assessment and health assessment practitioners from around the world to discuss new and integrated techniques of chemical risk assessment into EIAs to ensure their regulatory and community acceptance.

#### Mercury pollution of the environment by artisanal miners

Afenu, Richard Kofi

Mercury use by artisanal and small scale miners, the dangers it poses to the environment, mitigation factors, and consideration for an alternative method devoid of the use of mercury.

#### Risk assessment tools in assessing natural habitat

Booth, Pieter; Podolsky, Richard; Menzie, Charles

Use of ecological risk assessment tools for the assessment of impacts to special status species: a call for refinements to lender standards and guidance?

#### Risk, relationships with communities and corporate

Hanna, Philippe

How "risk" has become part of the corporate culture, especially regarding large infrastructure projects, and the the impact of this corporate risk culture on communities. These issues will be discussed from a social science, community perspective.

#### Use of HHERA in waste-to-energy projects

Ollson, Christopher; McCallum, Lindsay;

Whitfield Aslund, Melissa; Knopper, Loren

Human health and ecological risk assessment (HHERA) form a critical part of understanding potential health risks that EFW facilities could have on people and local environment and appropriate pollution control requirements.

#### HHERA in an SAGD Oil Sands application in Alberta

Ramesh, Geetha; Treissman, Dierdre; Baulk, Emily

Example of a human health risk assessment and screening level ecological risk assessment (HHERA) for submission to the Alberta regulators as part of an EIA for a proposed SAGD application.

# Concurrent sessions

## Recent developments in health impact assessment

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Tuesday 8 April | 14:30-16:00 | Estrella 3

Paper session

Chair(s): Marla Orenstein

IAIA Section: Health

This session provides an opportunity to hear about Health Impact Assessments (HIAs) that have recently been completed. Presenters will share information on challenges that they have faced, learnings that they would like to share with other practitioners, and results of recently completed studies.

### Health impacts during the construction of a mine

Shandro, Janis; Ostry, Aleck; Scoble, Malcolm

This presentation reports on observed health impacts (positive and negative) specific to the construction phase of a large copper-gold project in Northern British Columbia, Canada.

### Health impact evaluation of a biofuel project

Winkler, Mirko; Knoblauch, Astrid;

Divall, Mark; Utzinger, Jürg

A baseline and three-year follow-up health survey was conducted in communities affected by a biofuel project development in Sierra Leone. Such evidence-based evaluation makes an important contribution to impact assessments.

### Integrating HIV and gender-related issues into EA

Walmsley, Bryony

An overview of a 3-year multi-country study relating to the integration of HIV and gender issues in the environmental assessment process and how these important aspects can be better addressed.

### When to introduce HIA in waste-to-energy planning

McCallum, Lindsay; Ollson, Chris

If employed earlier in the process, health impact assessments can be more effective in aiding policy and decision makers in understanding health trade-offs when dealing with residual solid waste.

### HIA of resource recovery and reuse business models

Winkler, Mirko; Fuhrmann, Samuel;

Medlicott, Kate; Cissé, Guéladio

The RRR project aims to analyse waste-based resource recovery business models. The project provided a unique opportunity to apply the HIA (Health Impact Assessment) approach and served as platform for HIA capacity building.

## Incorporating health in major project EAs: Sharing global experiences

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Thursday 10 April | 11:00-12:30 | Pacifico

Workshop

Chair(s): Patrick Harris, Francesca Villiani,

Marla Orenstein, Geetha Ramesh

IAIA Section: Health

This session aims to share and understand practitioner experiences of the major factors allowing for inclusion of health as best practice for major project EA. The focus will be how health is considered as a technical issue and the supporting conditions, capacities, and skills to successfully incorporate health.

## IA law, policies, and practice

### Emerging trends in the regulatory frameworks for environmental assessment

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Wednesday 9 April | 09:00-10:30 | Pacifico

Theme forum

Chair(s): Ana Zuñiga

A comparative analysis of key developments in the regulatory and voluntary mechanisms used to generate "social license to operate" agreements for complex projects. Regulatory experience from various countries (including Chile) will be compared with trends in emerging global good practice.

### Introduction to global legislation and regulatory frameworks

Steeff van Baalen (Global Knowledge

Network ARCADIS)

Local examples

### Regulatory impact assessment in New Zealand

Morgan, Richard; Gerry, Jess

Does regulatory impact assessment in New Zealand offer any hope to the wider impact assessment community, or is it a narrow tool purely for the economists?

### Tiering in the 2013 Portuguese EIA legislation

Partidário, Maria; de Jesus, Júlio

The 2013 Portuguese EIA legislation identifies two main project design phases (preliminary studies and detailed project), establishing two decision processes. Data of this tiering approach will be presented and discussed.

### IA review and associated risks to socio-economic development

Amoyaw-Osei, Yaw

The IA system in Ghana is a main tool for promoting sustainable development. However, the administrative setup is vulnerable to abuse and could potentially impede social and economic development.

### A resource on funding government tasks in EA

Verheem, Rob

Presentation of the results of a new study on how financing of the EIA system could be made part of the EIA regulatory system.

### Discussion

Which lessons could be learned from global perspective and from local examples? Any suggestions for the Chilean situation? Discussion based on statements by participants.

### Environmental litigation regarding impact assessment

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Tuesday 8 April | 14:30-16:00 | Estrella 2

Paper session

Chair(s): Robin Junger, Lorna Püschel

This session aims to answer some questions regarding environmental litigation that are faced around the world, especially in developing countries. For that purpose, what is the standard that courts should apply in order to review environmental decisions? Are courts prepared to solve these issues? Are environmental courts necessary?

### Technical/strategic issues in litigation

Booth, Pieter; Menzie, Charles

Environmental litigation in developing countries is increasingly more common and poses many challenges. IA practitioners should consider the potential for future litigation in developing study designs over the ESIA process.

### EIA ordinance: Walking with a two-edged sword

Tsang, Terence Sai-Wing; U, Clara

EIA law provides coercive powers for the authorities to exercise strict control on EIA studies/projects, but on the other hand it may become a hindrance to project implementation.

### Judicial review of EIA decision-making in Hong Kong

Wong, Chi Chung; Ng, Cho Nam

This presentation seeks to explore the extent to which the past judicial review cases on EIA decisions reflect the deficiencies of the current EIA process in Hong Kong.

## Indigenous Peoples

### Integrating the indigenous vision in development

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**Thursday 10 April | 09:00-10:30 | Cabaret**

*Theme forum*

*Chair(s): Angeles Mendoza*

*IAIA Sections: Indigenous Peoples, Public Participation*

Speakers and audience will recapitulate on key points from previous indigenous sessions and discuss 1) how indigenous views and needs could be better integrated into the western and north/south perspectives of development, and 2) IAIA's role promoting an indigenous agenda to improve IA outcomes for Indigenous Peoples and sustainable development.

*Panelists*

**Philippe Hanna**

**Maria Partidário**

**John Devlin**

**Janis Shandro**

**Angeles Mendoza Sammet**

### Indigenous Peoples engagement in EA: Experiences from around the world (I)

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**Tuesday 8 April | 14:30-16:00 | Cabaret**

*Paper session*

*Chair(s): Tobin Seagel*

This session brings together case studies and experiences from around the world that speak to the role of Indigenous Peoples in environmental assessment and decision making, and the role of EA practitioners addressing Indigenous Peoples' concerns and issues. The objective is to highlight best practices in order to improve decision making with respect to considerations of indigenous peoples in environmental assessment.

### Living with a large development project

*Pachanos, Violet; Erless, Ryan*

The experience of local First Nations communities in the face of large development projects on their traditional territory. We show that communities can organize to maximize their benefits.

### Hydropower, Aboriginal Peoples, and environmental assessment

*Shantz, Phil*

This presentation will provide an overview of the involvement of First Nations and Aboriginal Peoples in hydropower environmental assessment projects in Northern Ontario and Canada.

### Hydropower plants and indigenous lands in Brazil

*Paz, Luciana; Matos, Denise; Garcia,*

*Katia; Damazio, Jorge Machado*

An analysis of the process involving hydroelectric plants and indigenous lands in the Amazon region, looking for feasible paths towards sustainable development.

### Maintaining acceptance for a project

*Murdoch, John Paul; Courcelles, Real*

The benefit sharing agreement signed between the Cree First Nation and Hydro-Québec for a recent project has assured the social acceptability of the project over its lifetime.

### Knowing the impacts on Indigenous Peoples

*Escobar, Jose*

Indigenous Peoples have turned into a relevant actor for environmental evaluation in Chile after implementation of new Chilean law in the year 2010; however, the environmental evaluation is still very complex due to the fact that the Indigenous Peoples develop their traditional activities in "indigenous territory," a place that does not present a clear geographical limit and definition. The present investigation tries to deliver a solution route to this problem through a practical example.

### Indigenous Peoples engagement in EA: Experiences from around the world (II)

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**Tuesday 8 April | 16:30-18:00 | Cabaret**

*Paper session*

*Chair(s): Tobin Seagel*

This session brings together case studies and experiences from around the world that speak to the role of Indigenous Peoples in environmental assessment and decision making, and the role of EA practitioners addressing Indigenous Peoples' concerns and issues. The objective is to highlight best practices in order to improve decision making with respect to considerations of indigenous peoples in environmental assessment.

### Consultation lessons from a hydroelectric project

*Dunn, Marc; Tapiatic, Robbie*

The different structures developed and their outcomes for the various consultation structures developed and introduced for a large hydroelectric project, including lessons learned and future opportunities.

### Monitoring the social impacts of a hydroelectric project

*Durocher, Carine*

This presentation describes the methodology established in cooperation with the Cree communities to follow up on the social impacts of an hydroelectric project in James Bay Area (Canada).

### FPIC under the new Chilean IA regulations

*Gajardo, Paula*

This presentation focuses on the challenges that the Chilean Environmental Authorities might face regarding new regulations, which require that FPIC be obtained whenever relocation of indigenous communities is considered necessary.

### Niskamoon Corporation: A model to alleviate development on traditional territory

*Tapiatic, Robbie; Dunn, Marc*

Niskamoon Corporation is a non-profit aboriginal organization charged with managing funds meant to alleviate the impacts of hydroelectric development on the traditional territory. It is a model for aboriginal governance.

### Indigenous methodological approach in developing the human component

*Sepulveda, Andrea Vilma Perez*

The methodological framework for working with Indigenous Peoples in developing the human component of an EIA is based on incorporating the indigenous worldview through participatory, inclusive, and culturally-relevant methodologies.

### Indigenous views on health and well-being

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**Wednesday 9 April | 14:30-16:00 | Cabaret**

*Workshop*

*Chair(s): Janis Shandro, Gabriela Factor,*

*Francesca Vilianni, Angeles Mendoza Sammet*

Definitions and indicators of health and well-being commonly used in IA do not necessarily reflect health values for Indigenous Peoples. Therefore, impact assessments and associated plans often fail to fully address the real situation. A case study will be presented, followed by group discussions.

# Concurrent sessions

## Monitoring and follow-up

### Enforcement of environmental regulation and compliance promotion

Friday 11 April | 09:00 – 10:30 | Caracola 2

Paper session

Chair(s): *Andrea Reyes, Paloma Infante*

This session focuses on the analysis of different environmental enforcement and compliance systems around the world. Through a theoretical and empirical exercise, global structural aspects, as well as particular relevant aspect such as principles and tools, the effectiveness on enhancing compliance, inner connections and mutual demands between the environmental impact evaluation process and enforcement actions, will be reviewed with the objective to contribute to the identification of the main challenges on the subject.

### Designing rules to better achieve compliance

*Jones, Davis; Silberman, Jon*

Principles and tools are presented for designing effective rules that build in compliance and effective implementation decreasing violations that reduce the expected benefits to health and the environment.

### Environmental enforcement campaigns in China

*Xu, Yuan*

Through models and empirical analysis, this presentation studies the organization of environmental enforcement campaigns in China and the effectiveness on enhancing compliance rates in the short and long terms.

### The new Chilean environmental enforcement system

*Reyes, Andrea; Infante, Paloma*

The objective of this work is to contribute, through a comparative perspective, to the identification of the main challenges facing the new Chilean environmental enforcement framework.

### EIA and enforcement: Closing the cycle

*Urbina, Ignacio*

Analysis of the inner connections and mutual demands between the EIA process and the enforcement action taken by public agencies and its practical implications.

### Realities of environmental compliance

*Mato, Rubhera*

Compliance to environmental legislation is slowly increasing in Tanzania despite inherent bottlenecks. Training and step-by-step improvement approach will enhance compliance in many developing countries without straining the economy.

### Environmental impact assessment reform in Peru

*Ernesto, Loayza; Fernando, Castro, Mariano;*

*Sanchez-Triana; Lima, Ana*

Environmental reforms undertaken by Peru to strengthen the national system of environmental impact assessment and complementary actions to promote incentives to encourage compliance with environmental regulations.

### Inspection, monitoring, follow up: Practices, procedures, new technologies (I)

Thursday 10 April | 14:30-16:00 | Caracola 2

Paper session

Chair(s): *Carlos Sierralta, Rodrigo Núñez*

This session explores the multiplicity of inspection experiences and monitoring techniques used by countries to promote compliance with environmental laws, with particular focus on examples of inspection, monitoring and follow up programs developed.

### Advanced monitoring technologies to improve compliance

*Jones, Davis; Herrera, Esteban*

Advanced monitoring technologies can make emissions more visible, making enterprises, government enforcement agencies, and the public more aware of pollution problems in increasing the effectiveness of prevention techniques.

### Creation of the South American Network for Environmental Enforcement and Compliance

*Pérez, Cristian; Monckeberg, Juan Carlos; Bergamini, Kay*

This presentation outlines the efforts carried out to create the South American Network for Environmental Enforcement and Compliance, focusing on the reasons behind its creation, ultimate goal, and specific objectives.

### Compliance monitoring on offshore oil and gas

*Guimarães, Cristiano; Horta, Vanessa*

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?

### Pipelines in Canada: Socio-economic monitoring

*Card, Katherine; Hoyle, Meaghan;*

*Robitaille, Tasha; Dowse, Susan*

A review of the current state of socio-economic monitoring plans in the Canadian pipeline industry. This presentation presents recommendations to regulators and practitioners.

### Inspection, monitoring, follow up: Practices, procedures, new technologies (II)

Thursday 10 April | 16:30-18:00 | Caracola 2

Paper session

Chair(s): *Carlos Sierralta, Rodrigo Núñez*

This session explores the multiplicity of inspection experiences and monitoring techniques used by countries to promote compliance with environmental laws, with particular focus on examples of inspection, monitoring and follow up programs developed.

### Monitoring and followup: What do we measure and what for?

*Ugalde, Gonzalo*

The current status of monitoring and tracking environmental commitments associated with biodiversity is discussed and the results of a monitoring program are presented, discussing the scope of the methodology used.

### SMA inspections: The aquaculture case

*Ramirez, Hugo; Sierralta, Carlos; Bergamini, Kay; Johnson, Juan Eduardo*

The Superintendencia del Medio Ambiente (SMA) is a three-year-old office that has plenty of capability to enforce environmental regulations in Chile.

### Challenges for the implementation of socio-environmental impacts

*Medina, Angélica Andrea; Gallegos, Gloria*

Lessons learned while enforcing socio-environmental aspects, through the analysis of methodologies and practices carried out by the Superintendencia del Medio Ambiente (SMA) during its first year of practical work in Chile.

## Public participation

### Public participation in action: A real tool for rising effectiveness in SEA

Thursday 10 April | 16:30-18:00 | Estrella 3

Paper session

Chair(s): *Ernesto Pirillo*

A participative SEA can be extremely effective, if not limited to a simple "presentation" of the plan/program. Case studies show how good participatory strategies are useful in reducing the time of planning and coping with uncertainties/conflicts, while increasing ownership and alternate visions, deepening key themes, raising democracy, and ultimately improving the financial plan/program.

### Public participation: Brazilian licensing process

*Iasson, Moara; Inglez, Ana Paula*

The legal provision for public participation and initiatives in Brazil for improvement and effectiveness through case studies.

### Next generation public participation

*Leung, Henry; Chung, Andy; Lo, Louise; Wai Ming, To*

The current public participation approach in Hong Kong and how we could move to the next generation of public participation by incorporation of today's international best practices.

### Contrasting priorities of residents and planners

*Llausas, Albert; Beilin, Ruth; Buxton, Michael*

The research analyzes the misalignments between the 2040 vision of an Australian peri-urban area proposed by planners and that of residents. Deliberative SEA process can address shortcomings of regional planning.

### Best practice public participation in IA: Nigeria

*Ojile, Meshach; Bodude, Oladimeji*

Practice of public consultation/participation in Nigeria's EIA system falls short of international requirements, but international funding requirements are now giving a boost to best practice, illustrated by a case study example.

## Bullets & Aprons: SEA participation in Liberia

*Sandhu, Amy*

Ex-combatants and women are integral parts of the social fabric in post-conflict Liberia. Their involvement in participatory processes of SEAs is critical to the success of development projects.

## Preventing conflict through participatory processes

**Wednesday 9 April | 11:00-12:30 | Caracola 1**

*Paper session*

*Chair(s): David Plumb*

Throughout the world, increasingly mobilized citizens are demanding a voice in the economic activity that might affect them. Impact assessment often becomes a flashpoint for conflict. This session will explore participatory and collaborative processes that are being used to prevent and manage destructive conflicts related to the impact assessment process.

## A review of citizen participation in EIAs in Chile

*Camaño, Andrés; Pastor, Montserrat*

The study presents the revision of citizen participation within the framework of environmental assessment processes in Chile, including the analysis of some case studies to illustrate the subject.

## Stakeholder liaison group (SLG) in public participation

*Peirson-Smith, Timothy J.*

Analyzing the SLG process under EIA approval permit conditions, this presentation aims to demonstrate the value of SLGs in public participation and explain key components of effective SLG advisory processes.

## Hydro-Québec transmission lines good practices

*Gagnon, Benoit*

How can stakeholders' perceptions, impacted populations' needs, and new environmental regulations become opportunities for Hydro-Québec to develop new mitigation and offset measures in transmission lines projects?

## Lessons from the Tasmanian forest peace process

*Schirmer, Jacki*

This presentation draws lessons for participatory conflict resolution from a case study of the Tasmanian forest peace process, which sought an end to three decades of "forest wars."

## Environmental conflicts: An anthropological approach

*Serra, Daniela*

To prevent socio-environmental conflicts, it is imperative to gain communities' trust through meaningful participation.

## Contention, social movements, and the politics of IA (I)

**Thursday 10 April | 11:00-12:30 | Estrella 2**

*Paper session*

*Chair(s): John Devlin*

*IAIA Section: Public participation*

Project proponents put economic valuations foremost while social and environmental concerns are given secondary consideration. This session demonstrates how public participation seeks to redress this imbalance and the movements and political dynamics that such efforts create. Cases are drawn from Australia, Peru, India, Hong Kong, Mexico, Zambia, Chile, and Canada.

## Mining democracy: Coal seam gas exploration and community responses in eastern Australia

*Arashiro, Zuleika*

New social alliances emerging around coal seam gas explorations and their potential to challenge the democratic deficit associated with social and environmental impact assessments in eastern Australia.

## Social movements as transformative forces in environmental impact study processes in Peru

*Arbeláez-Ruiz, Diana*

Examples of Peruvian social movements to demonstrate that building social consensus around mining projects requires attention to political and social considerations in addition to environmental arguments.

## "Stepping on the heads of our gods": Community action and learning in response to tourism development in Manali, India

*Sinclair, A. John; Sherpa, Yangji; Henley, Thomas*

Public participation activity associated with a Himalayan ski village development proposal in India demonstrates that most oppositional activity occurred outside the formal decision-making process.

## EIA as a learning process

*Lam, Kin Che*

Key actors involved in the EIA process are learning from the interactions, resulting in either resistance or compromises. This learning process can be managed to facilitate conflict resolution.

## Contention, social movements, and the politics of IA (II)

**Thursday 10 April | 14:30-16:00 | Estrella 2**

*Paper session*

*Chair(s): John Devlin*

*IAIA Section: Public participation*

Project proponents put economic valuations foremost while social and environmental concerns are given secondary consideration. This session demonstrates how public participation seeks to redress this imbalance and the movements and political dynamics that such efforts create. Cases are drawn from Australia, Peru, India, Hong Kong, Mexico, Zambia, Chile, and Canada.

## Social movements, politics, and impact assessment in Mexico

*Mendoza Sammet, Angeles*

This contribution discusses the role of social movements in changing decisions made about development projects and the political and regulatory deficiencies that contribute to public opposition to projects.

## Barriers and drivers to community participation

*Chirambo, Brian*

The study has shown that environmental issues are secondary to issues of jobs and poverty. However, health threats on human life from mining activities dominated the other factors.

## Financial institutions' response to HRIA

*Parsons, Jan*

Financial institutions are involved in projects in many ways and can have a strong influence on human rights impact assessment (HRIA). This presentation examines how some institutions are using that influence.

## Social movements, EIA, and communication power

*Soler, Carolina; Bitar, Cristina*

Today, civil society is empowered, among others, by "social media." In Chile, they had acted as the binder of social movements in opposition to particular environmental projects.

## Oppositional coalitions as social movements: Getting to "No!" in Canada

*Devlin, John; Yap, Nonita*

The relationship between project opponents and oppositional opportunities created by formal impact assessment institutions using Canadian case examples.

# Concurrent sessions

## SEA/EIA in Latin America

### The role of international standards in impact assessment

Tuesday 8 April | 11:00-12:30 | Palma

Theme forum

Chair(s): *Mauricio Athié*

This session focuses on various types of international standards for impact assessment (IA) set by various specialized organizations. A diverse panel of experts will examine the potential of these standards to enhance quality of impact assessment and management as well as their role in the stability of the environmental license.

### The role of international standard-setting bodies in strengthening and assessing environmental performance

*Baldwin, Gunnar*

How three types of institutions help inform the development of performance indicators for the coordination of environmental impact assessment (EIA) and environmental compliance and enforcement (ECE) functions in developing countries that are refining their environmental governance systems: public sector legal and institutional frameworks, practitioner networks and associations, and international financial institutions.

### A comparative analysis of EIA in Latin America

*Acerbi, Marcelo; Sánchez-Triana, Ernesto; Enríquez, Santiago; Tiffer-Sotomayor, Ruth; Gomes, Ana Luisa; Siegmann, Katharina; Clemente-Fernandez, Pilar; Nkrumah, Nyaneba E.*

In many Latin American countries, EIA has become *de facto* a substitute for biodiversity conservation regulations, pollution control regulations, and effective land use planning. This presentation assesses differences in roles and responsibilities of project proponents, authorities, and communities' consultation throughout the EIA process. The analysis finds that such differences have a substantial impact on whether EIA is a valuable tool to prevent and reduce environmental and social impact or a red tape for project development.

### Effectiveness of lender ESIA for wind farm project

*Davies, Nicola*

Securing project finance is becoming an increasingly important factor in the successful development of wind projects as investor confidence in the Latin America region increases. Investment by Equator Principle Financial Institutions can facilitate economic development and are supported by ESIA. This presentation highlights some of the practical challenges facing developers of wind farm developments in applying best practice environmental and social assessment practices in line with the assessment guidelines of finance institutions and where improvements can be made to merge national and lender requirements more successfully. It will also look at the practical role investors can play in communicating and promoting national and local economic benefits, promoting developer commitments to community engagement and social responsibility and the application of best practice in environmental management and mitigation measures.

### IA Standards Gap Analysis: Peru vs. IFC and friends

*Martens, Estefanie*

This presentation will review the evolution of Peruvian national regulations on IAs in the mining industry, focusing on the latest requirements and authorities involved in their assessment. It will then compare them with international standards, providing a gap analysis in an attempt to demonstrate the important role international organizations have towards assuring a more sustainable mining industry. Finally, empirical cases will be presented, and the need to embed international standards in IAs when national regulations are weak will be stressed, in order to develop a responsible and respected mining industry that contributes towards achieving sustainable development.

### Implementing international best practices

*Gonzalez, Mariela*

Central America is becoming a hot spot for wind energy. This presentation analyzes GLOBELEC Mesoamerica Energy's (GME) experience in implementing both tools during the design, construction and operation of two wind farms in Honduras and Nicaragua to help understand what worked well and what the challenges were. Working together with the financier/insurer on environmental and social risk management from early development stages has allowed GME to improve its performance in both areas by applying their recommendations. Consequently, implementing international best practices has proven to be a successful tool for GME to do business in a sustainable way.

### Advances on SEA in Latin America (I)

Tuesday 8 April | 14:30 – 16:00 | Palma

Paper session

Chair(s): *Elizabeth Brito, Marcelo Montaña*

While in the past, practice was driven mainly by activities of development banks, more recently many cases have emerged that have been triggered by national, regional, or local administrations. Furthermore, the framework of SEA systems is now advancing in several Latin American countries, with promising examples in Chile, Mexico, Colombia, Brazil and other countries currently experimenting with more formalized set-ups. This session is inspired by papers that will be published in a special issue on SEA in Latin America in the Journal of Environmental Assessment Policy and Management. All presentations critically reflect on experiences with SEA applications in Latin America of both theoretical and practical nature.

### SEA's potential to influence policy formulation

*Enríquez, Santiago; Sanchez-Triana, Ernesto; Gomes, Ana Luisa*

A review of seven policy SEAs conducted in Argentina, Colombia, Mexico, Panama, and Peru between 1997 and 2007 which targeted both sectoral reforms and national environmental planning processes.

### The road to SEA implementation in Mexico

*Tejeda González, Juan Carlos; Alfaro de la*

*Torre, Catalina; Medellín Milán, Pedro*

This presentation analyzes the lack of linkages

among the planning tools in the land use and natural resources applied in Caraguatatuba, state of São Paulo, Brazil, based on the number of projects concerning the deep petroleum and gas exploration areas called Pre-Salt.

### SEA model: The case of Chile

*Jiliberto, Rodrigo*

Structured description of Chilean SEA legislation in order to understand the SEA as policy instrument.

### SEA in Loreto-Peruvian larger Amazonian region

*Patrón, Patricia*

Scoping and analytical tools of SEA applied to the development plan of Loreto-Peruvian larger Amazonian region. The plan will promote hydrocarbons, forestry, agribusiness activities, and transportation and energy infrastructure.

### Advances on SEA in Latin America (II)

Tuesday 8 April | 16:30-18:00 | Palma

Paper session

Chair(s): *Elizabeth Brito, Marcelo Montaña*

While in the past, practice was driven mainly by activities of development banks, more recently many cases have emerged that have been triggered by national, regional, or local administrations. Furthermore, the framework of SEA systems is now advancing in several Latin American countries, with promising examples in Chile, Mexico, Colombia, Brazil and other countries currently experimenting with more formalized set-ups. This session is inspired by papers that will be published in a special issue on SEA in Latin America in the Journal of Environmental Assessment Policy and Management. All presentations critically reflect on experiences with SEA applications in Latin America of both theoretical and practical nature.

### SEA distance learning in Bolivia

*Steinhauer, Ineke*

This SEA distance learning course was the first of its kind in Bolivia. Why was this course developed, how was it designed, and was it successful?

### Recent application of SEA in Latin America

*Brito, Elizabeth; Verocai, Lara*

Review of application of Strategic Environmental Assessment (SEA) in Latin America, in multiple countries and sectors (transportation, energy, biofuels, mining), summarizing the lessons learned and the good practices in SEA.

### SEA and transboundary impacts in South America

*Montaña, Marcelo; Torres, Angela*

International experience on transboundary impact assessment (TIA) to discuss the potential benefits of its adoption in South America and the influence to the development of SEA within the continent.

### Contributions to land use planning of rural areas

*Santos, Mariana; Ranieri, Victor*

To improve the debate and suggest guidelines for land use planning of rural areas, this presentation makes a parallel of two countries' practices, searching for useful inputs to the discussion.



## Social impact assessment

### The practical use of impact assessments by the corporate sector (I)

Thursday 10 April | 11:00-12:30 | Estrella 3

Paper session

Chair(s): Jerome Donovan

Impact assessments offer the corporate sector a method for which they can identify, assess and determine appropriate ways of responding to issues and impacts associated with their activities and potentially generate positive social, economic and ecological capital in the communities they operate within. We look at new insights into how the corporate sector is using impact assessments.

### An investigation into how businesses utilize IAs

Donovan, Jerome; Masli, Eryadi; Vanichseni, Teerin; Arce Gomez, Antonio

The use of impact assessments by the corporate sector within Thailand, with a focus on the manufacturing sector.

### Ex-ante integrated impact assessments

Lion, Hermann; Donovan, Jerome; Masli, Eryadi; Manzin, Gregoria

This study develops a conceptual framework based on a comprehensive examination of integrated impact assessment literature.

### A development divide or shared mission?

Masli, Eryadi; Kuncoro, Mudrajad; Lion, Hermann; Donovan, Jerome

This presentation examines the use of integrated impact assessments by the corporate sector, and specifically large foreign multinationals, in Indonesia.

### Managing trade-offs in a multidisciplinary process

Lion, Hermann; Donovan, Jerome; Bedgood, Rowan; Masli, Eryadi

Impact assessments are tools addressing impacts of human activity on environmental, social, and economic dimensions. This presentation aims to understand how uncertainties and trade-offs are managed within integrated impact assessments.

### IA effectiveness in the business context

Arce Gomez, Antonio; Donovan, Jerome

Substantive effectiveness in the business context: are impact assessments producing outcomes that support achieving sustainable development?

### IA-based corporate sustainability indicators

Garcia, Katia; Matos, Denise; Paz, Luciana

The use of indicators based on IA can contribute to implementing improvements concerning key sustainability issues, improving communication with stakeholders, maximizing economic/social benefits, and minimizing impacts.

### The practical use of impact assessments by the corporate sector (II)

Thursday 10 April | 14:30-16:00 | Picadilly 2

Paper session

Chair(s): Jerome Donovan

Impact assessments offer the corporate sector a method for which they can identify, assess and determine appropriate ways of responding to issues and impacts associated with their activities and potentially generate positive social, economic and ecological capital in the communities they operate within. We look at new insights into how the corporate sector is using impact assessments.

### Exploring business IAs in Lao PDR

Masli, Eryadi; Souvannasao, Phouthasack; Arce Gomez, Antonio; Donovan, Jerome

The use of integrated impact assessments by a large foreign multinational operating in Lao PDR.

### Integrated regional planning in mineral-rich regions

Johnstone, Christopher; Hassen, Michelle

This presentation illustrates how comprehensive engagement and integrated planning at both the local and regional scales are key ingredients to realize opportunities associated with resource extraction.

### Empirical insights from Vietnam on business IAs

Donovan, Jerome; Masli, Eryadi; Quoc Nguyen, Viet; Lion, Hermann

This study focuses on the use of integrated impact assessment by large Japanese organisations operating within Vietnam.

### The link between IAs and sustainable development

Arce Gomez, Antonio; Donovan, Jerome; Bedgood, Rowan; Masli, Eryadi

An expanded understanding of how the information produced by IAs can be used to ensure that the process delivers in the pursuit of sustainable development.

### The practical use of impact assessments by the corporate sector (III)

Thursday 10 April | 16:30-18:00 | Picadilly 2

Paper session

Chair(s): Hermann Lion, Antonio Arce Gomez

Impact assessments offer the corporate sector a method for which they can identify, assess and determine appropriate ways of responding to issues and impacts associated with their activities and potentially generate positive social, economic and ecological capital in the communities they operate within. This track seeks to explore a range of theoretical and practical insights into business practices around the use of impact assessments, and how this contributes to broader social and economic development. Papers are invited that contribute new insights into how the corporate sector is using impact assessments.

### SEA use in corporate strategic planning

Bonnell, Steve

The potential use of SEA in corporate strategic planning, including organizational decision-making around whether, why, and how to voluntarily adopt and apply SEA.

### Analyzing sustainability contributions of EIA

Grigoletto Duarte, Carla; Enrique Sánchez, Luis

Criteria for assessing sustainability contributions of EIA that can be applied to the Brazilian sugarcane industry.

### Risk and opportunity integration in new ventures

Prinsloo, Marja

Non-technical risks are by far the biggest contributor to project delays in the oil and gas sector. Shell focusses on integration of risks and opportunities when setting up new ventures.

### The ethics of stakeholder management in HIA

McCallum, Lindsay; Ollson, Chris; Stefanovic, Ingrid

Managing stakeholders in an ethical and effective manner is vital to the success of any project and must be considered an integral part of the impact assessment process.

### Making a human development impact with private sector projects

Thursday 10 April | 09:00-10:30 | Pacifico

Theme forum

Chair(s): Daniel Franks

Private sector projects have the potential to lead to improvements in human and social development, but this potential is often not realized. In this panel session, speakers will share practical efforts to use impact assessment to align community development to local priorities, design infrastructure for shared use, coordinate the activities of multiple development actors, and partner with government and civil society to positively influence livelihoods.

Panelists

### Coordinating mining projects for collective development impact

Daniel Franks, Centre for Social Responsibility in Mining, The University of Queensland, Australia

### Collaborative development planning in the Chilean copper mining industry

Juan Pablo Schaeffer Fabres, Centre of Public Policy, Pontificia Universidad Católica de Chile

### Can SIA be used as a tool for social development?

Ilse Aucamp, Ptersa Environmental Management Consultants, South Africa

### Development of interested and uninterested publics in the Chilean gas industry

Alfonso Salinas Martinez, GNL Quintero, Chile

# Concurrent sessions

## Social impact assessment in the context of the current environmental system (I)

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Thursday 10 April | 16:30-18:00 | Estrella 2

Paper session

Chair(s): Ilse Aucamp

This session presents models or experiences that serve as a basis for discussion on the need for the assessment of environmental and social components with the same level of effort and rigor, giving as a result effective indicators of sustainability beyond the regulatory system.

## Validation of social measures with the Colla indigenous community

Armisen, Juan Pablo; Fernández,

Cristina; Fuentes, Rodrigo

The search process and signing of agreements between indigenous communities and La Lobo Marte Mining Company through participatory processes.

## Distribution of impacts in the biofuels industry

Grigoletto Duarte, Carla; Wegg, Tina; Alves Dibo, Ana

Paula; Lucia Casteli Figueiredo Gallardo, Amarilis

A study about distribution of impacts of an ethanol mill, including stakeholders' views in the production site in São Paulo, Brazil, and consumers based in the UK.

## Worldwide social for participation in 2.0 planning

Magro, Giuseppe; Carruthers, David

Qcumber is the growing web/mobile platform for 2.0 sustainability promotion in smart cities context and enables citizens, institutions and other interested persons to collaboratively manage their city and/or area.

## Social Impact Assessment for Fisheries Management

Mengerink, Kathryn; Whitten, Patience

Examining SIA for fisheries management in the U.S.

## Social impact assessment in the context of the current environmental system (II)

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Friday 11 April | 09:00-10:30 | Estrella 2

Paper session

Chair(s): Ilse Aucamp

This session presents models or experiences that serve as a basis for discussion on the need for the assessment of environmental and social components with the same level of effort and rigor, giving as a result effective indicators of sustainability beyond the regulatory system.

## Community response of coastal wind farms

Nishikizawa, Shigeo; Handa, Tetsuya;

Murayama, Takehiko

Residents' responses to impacts due to coastal wind farms and their factors from a geographical point of view are clarified.

## Social change prompted by African mining projects

Ramsaroor, Priya

The experiences of people associated with the change from land-based subsistence communities to cash-based settlements. Potential mitigation was found, but certain impacts due to change appear unavoidable.

## Public consultation: EIA-Indian perspective

Reddy, G. V.; Reddy, M. Srinivasa;

Janjanam, Jyothirmayi

The public consultation experience which is based on assessment of draft environmental impact assessment reporting in India for the mining sector during the past five years.

## Human rights impact assessment

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Wednesday 9 April | 14:30-16:00 | Estrella 3

Panel

Chair(s): Susan Joyce, Rita Sully

IAIA Section: Corporate Stewardship & Risk Management

Three years from the endorsement of John Ruggie's Guiding Principles for Business and Human Rights, this session will continue to track the progress of the Principles and how they are being integrated into business practices. Audience participation is invited.

Panelists

Susan Joyce, On Common Ground

Bill Kruse, Banarra

Steve Gibbons, Ergon Associates

## SIA guidelines: Finalization of guidance note

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Wednesday 9 April | 11:00-12:30 | Estrella 2

Workshop

Chair(s): Frank Vanclay

IAIA Section: Social impact assessment

The "Guidance Note for the Social Impact Assessment and Management of Projects" (SIA International Guidelines) results from workshops at the last few IAIA conferences. A draft is now ready for consideration. Broad topics to be discussed include acceptability of the guidelines, what they mean for SIA practice, and next steps.

## Sustainable Chile: What can impact assessment contribute?

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Thursday 10 April | 11:00-12:30 | Picadilly 2

Paper session

Chair(s): C. P. Wolf

IAIA Section: Social impact assessment

The theme of "Impact Assessment for Social and Economic Development" stops short of what is or ought to be the ultimate concern of impact assessment, namely, equitable and sustainable development. This session aims to explore and extend that imperative—impact assessment for sustainable development—at community, country and continental scales.

## A water resources plan for mine companies in Chile

Acuña, Alejandra; Peñailillo, Reinaldo; Camaño, Andrés

Presentation of a methodology to develop water resources strategies that can help to reach a sustainable use of water resources for the mining industry in Chile, especially at scarce areas.

## Chile sustainability procedural analysis

Jiliberto, Rodrigo

Sustainable development isn't a matter of the material world, but of the decision system which shapes it. Sustainability procedural model allows analysis of the sustainability of the social decision making process.

## Sustainability in the new institutional context

Ruiz, Alejandro

The incorporation of sustainability within organizations of all kinds needs to become the major outcome of the Ministry of Environment.

## DS 40 (12/24): A gift for EIA in Chile?

Henriquez, Cristian

This work is part of the critical evaluation of the impact assessment system in Chile, highlighting the progress and setbacks of the new regulation DS 40 (SEIA).

## The abestos and the decree 656/2001 in Chile

Sandy, Wilson

The promulgation of Decree 656/2001 has forbidden use of asbestos within Chile, but what to do with asbestos that was already within buildings? Additional regulations are needed.

## Beyond livelihoods: The social dimensions of environmental impacts

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Tuesday 8 April | 16:30-18:00 | Caracola 2

Workshop

Chair(s): Florence Landsberg, Ana-

Gabriela Factor, Francesca Viliiani

Session participants will be led by the session chairs through discussions on 1) Which impacts are overlooked when environmental, health and social assessments are not integrated and what the consequences for IA and management plans can be; and 2) What methods, approaches, and processes can help consider these overlooked impacts?

## Assessing the social dimensions of environmental impacts: Notes from the field

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Tuesday 8 April | 14:30-16:00 | Caracola 2

Paper session

Chair(s): Florence Landsberg

Social and environmental practitioners will share their successes and challenges in addressing the interconnections between biophysical and socioeconomic impacts of policies, plans, and projects and discuss the implications of environmental impacts on different dimensions of human well-being, including, for example, health, safety, spiritual enrichment and cognitive development.

## Bridging the gap

*Mason, Mervyn*

This presentation explores that apparent disconnect between social and environmental disciplines in ecosystem services assessment.

## Social impacts of water policy reform in Australia

*Schirmer, Jacki*

The interrelationships between environmental impact and human well-being, using a case study of the Murray-Darling Basin Plan, an internationally-significant water policy reform process.

## Risks of de-humanizing environmental impacts

*Tucker, Claire*

Risks arising from using technical language and jargon to dehumanize the consequences of environmental impacts and opportunities for more meaningful dialogue between environmental and social practitioners.

## Assessing ecosystem services with usual ESIA data

*Stefan, Carol; Mason, Mervyn;*

*Mendoza Sammet, Angeles*

Using examples from two projects, we present our approach, including benefits and challenges, for conducting an ecosystem services assessment using only the data collected for typical ESIA's.

## Noise effects and indigenous valued components

*Muir, Bruce*

Noise effects from industrial developments impact indigenous cultures differently. Potential changes to the standardized methods currently used to assess impacts on the valued cultural components are presented.

## Ecosystem services and SEA of rural policies

*Pereira, David; Urquijo, Julia; de Stefano, Lucia*

This presentation presents an analytical framework to use ecosystem services as a conceptual driver to identify and evaluate strategic impacts in SEA of rural development policies.

## Challenging resettlement (I)

**Tuesday 8 April | 16:30-18:00 | Estrella 1**

*Paper session*

*Chair(s): Luciano Bornholdt, Vincent Roquet*

This session will include presentations on challenging resettlement projects and innovative solutions.

Presentations will address many of the complex aspects of resettlement, such as livelihood restoration in the informal sector, access to natural resource areas, as well as the deceptive simplicity of voluntary land donations. Papers will also address resettlement in specific contexts, such as long-term land-take in the mining sector and resettlement as an approach for disaster risk reduction.

## Lessons from informal recycler inclusion projects

*Cohen, Peter; Sturzenegger, Germann*

This presentation draws on experiences with informal recyclers to show how individuals, their relationships, and intangibles such as trust, respect, and enthusiasm can play a critical role in the success of involuntary resettlement actions.

## Evaluating the "Process Framework" as an instrument

*Kiss, Agnes; Hickey, Valerie*

A review of World Bank experience of using "Process Frameworks" to mitigate the impacts and gain community acceptance of new restrictions on access to Protected Areas and their natural resources.

## Perú: Social opportunities

*Matos Marcelo, Sylvia; Dabbs, Alan*

Resettlement of population located in the highlands of Peru by the development of mining projects: an opportunity for social inclusion and economic development.

## Designing culturally-appropriate compensation assessments

*Urresta, Edwin*

This presentation will review a case study in which replacement assets were designed through a fully participative process taking into account their cultural appropriateness.

## Impact assessment in planning community development

*Novozhilov, Roman*

Several project case studies and present recommendations for successful integration of the ESIA process into an effective strategic community investments process for securing social license to operate.

## Challenging resettlement (II)

**Wednesday 9 April | 16:30-18:00 | Caracola 2**

*Paper session*

*Chair(s): Luciano Bornholdt, Vincent Roquet*

This session will include presentations on challenging resettlement projects and innovative solutions. Presentations will address many of the complex aspects of resettlement, such as livelihood restoration in the informal sector, access to natural resource areas, as well as the deceptive simplicity of voluntary land donations. Papers will also address resettlement in specific contexts, such as long-term land-take in the mining sector and resettlement as an approach for disaster risk reduction.

## Voluntary land donation: Risks and opportunities

*Butler, John*

This presentation will explore the risks and rewards associated with the practice of voluntary land donation, in the context of projects requiring land acquisition for a project.

## Resettlement in extractive mining projects

*Appleby, Gordon*

An examination of the implications of continuing, long-term land-take within a mining concession and some lessons learned from past experience for future mining operations.

## Curso Latinoamericano Reasentamiento Involuntario

*Pizarro, Dianna; Moris, Roberto;*

*Anchante, Marlene; Serje, Margarita*

The institutional alliance that offers the Latin American Resettlement Course (CLAR) will share its experience and explore opportunities to build capacity and evolve knowledge and practice of resettlement processes.

## SIA and CSR in natural resources industries

**Friday 11 April | 09:00-10:30 | Pacifico**

*Paper session*

*Chair(s): Rauno Sairinen, Daniel Franks*

*IAIA Section: Social impact assessment*

This session focuses on the social impact assessment practices of various natural resources industries and how they are developed in relation to good corporate governance. What is the role of Corporate Social Responsibility activities in community-corporate relations in natural resources management? And how can CSR benefit from SIA and EIA?

## Emerging best practice in social information management

*Johnstone, Christopher; Hassen, Michelle*

Emerging best practices in social information management that are helping address common challenges in data management, such as lack of flexibility in reporting and analysis.

## Tourism industry meets mining industry

*Jokinen, Mikko*

This presentation promotes management of socially sustainable and responsible natural resource projects.

## Canada's north: Social impacts and lessons learned

*Scott, Roxanne; Havers, Linda*

Northern Canada is active in extractive resource development. This presentation explores lessons learned in socio-economic assessment, planning and monitoring to support regional retention of economic and social benefits.

## Environmental and community impacts of mining: Case of Kylylahti in Eastern Finland

*Mononen, Tuija*

The social acceptance of mining is very dependent on its environmental and community impacts at the local level. This presentation is based on the interviews of different actors connected to the Kylylahti mining project in Finland.

# Concurrent sessions

## Inclusive assessments: Integrating gender equality and excluded groups

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Friday 11 April | 09:00-10:30 | Esmeralda

Paper session

Chair(s): *Michaela Bergman, Ineke Steinhauer, Ineke; Bryony Walmsley*

International standards for impact assessments (IAs) demand inclusion and the integration of gender equality. But what does inclusion and gender equality integration within IAs mean? Does it happen? If a social analysis is part of impact assessment, how are social and gender issues addressed in project design and mitigation measures? How to be inclusive and integrate gender equality to contribute to environmental quality, social and economic development? Experiences and best practices will be shared in this session, which will be informed through the presentation of a number of papers.

### What is inclusion and why is it important to IA?

*Bergman, Michaela, EBRD*

### Gender equality integration into impact assessment

*Steinhauer, Ineke; Ivens, Saskia*

Why is gender equality integration important for impact assessment? And how can a conscious look into gendered differences contribute to more informed decision making about findings of an impact assessment?

### Integrating HIV and gender-related issues into EA

*Walmsley, Bryony*

An overview of a 3-year multi-country study relating to the integration of HIV and gender issues in the environmental assessment process and how these important aspects can be better addressed.

### Gender equality integration in impact assessment

*Steinhauer, Ineke; Ivens, Saskia*

Why is gender equality integration important for impact assessment? And how can a conscious look into gendered differences contribute to more informed decision making about findings of an impact assessment?

## Social License to Operate

### Earning the social license to operate (SLO): Lessons learned in impact assessment

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Tuesday 8 April | 16:30-18:00 | Pacifico

Paper session

Chair(s): *Todd Hall*

Papers in this session focus on lessons learned from various IA and related work, discussing how SLO was essential, or not, to the development in question. More specifically, these case studies examine if the promotion of social and economic development considered the importance of achieving SLO in the assessment process itself as well as its results. Lessons are shared about how IA outcomes may include efficient and innovative ways that strive to earn SLO, and ultimately lead to more successful projects.

### Social performance: A tool for socio-economic growth

*Abdullah, Azrina; Peterson, Cynthia*

The use of impact assessments by PETRONAS to ensure socio-economic development of its stakeholders, the challenges the company faces and how these are addressed.

### Social management systems: The missing link

*Barron, Tania; Martell, Peter; Schnee, Nicholas*

Moving beyond "assessment" to "social management" is critical if projects are to gain and maintain a social license. Highland Valley Copper shares its experience developing a Social Management System.

### Dancing with the devil? IA and social license

*Kruse, Bill; Crispin, Christine*

Significant risks for the impact assessment profession are identified if it accepts a role in contributing to social licence to operate in the resource sector.

### Public confidence and independent oversight

*Ehrlich, Alan*

This presentation looks at the role of public confidence as part of social license in EIA, focusing on the EIA of the Giant Mine remediation project in Canada.

### Social License to Operate: Lessons from the wind

*Ollson, Christopher; McCallum, Lindsay; Whitfield Aslund, Melissa; Knopper, Loren*

The wind industry in Ontario, Canada, has faced vocal and organized grass roots opposition groups. There are novel approaches that can be taken to ensure the developer's social license to operate.

### Social license to mine in Finland

*Sairinen, Rauno*

The paper studies how national conditions can influence the developments of the SLO in the mining sector. The Finnish case presents how big conflict can improve the national policy programs.

### Extractive activities and Indigenous Peoples: Litigation or CSR

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Wednesday 9 April | 16:30-18:00 | Cabaret

Roundtable

Chair(s): *Angeles Mendoza Sammet, John Devlin*

IAIA Sections: *Indigenous Peoples, Public Participation*  
Speakers will contrast the effectiveness of Social Responsibility and of judiciary and non-judiciary approaches to reduce or solve conflicts. They will also discuss what is needed to incorporate the needs, values, practices and culture of IP in the processes and outcomes of SR policies and of judiciary and non-judiciary processes.

### Methodology to characterize informal mining - Perú

*Murillo, Isabel*

### International standards and Indigenous Peoples

*Molina, Francisco*

### Corporations and the development deficit

*Yap, Nonita*

### Ecosystem services, extractive sector, IP and CSR

*Mendoza Sammet, Angeles*

## Strategic environmental assessment

### SEA in territories with specific features (I)

Wednesday 9 April | 14:30-16:00 | Esmeralda

*Paper session*

*Chair(s): Tomas Ramos, Marcelo*

*Montaño, Alexandra Polido*

SEA is context dependent and has to take into account specific features, such as the type of decision-making, the cultural-political system and the spatial territorial context. This session will focus on what is being done, what are the methods and topics studied within SEA of different contexts.

### Addressing context issues in SEA: A review

*Polido, Alexandra; Malvestio, Anne;*

*Montaño, Marcelo; Ramos, Tomás*

A comprehensive review on issues of "context" in strategic environmental assessment was conducted. As a result, different arguments are systematized revealing the main aspects to overcome context in SEA challenges.

### SEA in developing countries:

#### The role of MDAS

*Tshibango, Ghislain; Montaño, Marcelo*

The number of SEA applications (which must include context and specific features) related to different types of plans and programs in developing countries is increasing over time.

### SEA alternative in specific context

*Malvestio, Anne Caroline; Montaño, Marcelo*

Based on the discussion about the influence of planning context in alternative prediction in SEA, this research seeks to design a methodology to support this SEA step in Brazil.

### How culture, power and political structures shape SEA

*Khodaparast, Bahareh*

This presentation indicates a better positioning for SEA by investigating how cultural principles as well as power and political structures shape concepts and principles of SEA.

### SEA in territories with specific features (II)

Wednesday 9 April | 16:30-18:00 | Esmeralda

*Paper session*

*Chair(s): Tomas Ramos, Marcelo*

*Montaño, Alexandra Polido*

SEA is context dependent and has to take into account specific features, such as the type of decision-making, the cultural-political system and the spatial territorial context. This session will focus on what is being done, what are the methods and topics studied within SEA of different contexts.

### Cumulative social impacts in São Paulo Coast SEA

*Utsunomiya, Renata; Montaño, Marcelo*

Considering the development scenario in São Paulo North Coast, Brazil, a cumulative impact approach is applied based on network diagrams improving indirect social impacts and their cumulative and synergic effects.

### Strategic environmental dimension of tourism: Barú Island, Colombia

*Jiliberto, Rodrigo*

A systemic approach for the description of the environmental dimension of a planning process is developed in the framework of a tourism planning.

### Critical areas ordinance for planning developments

*Gunther, Pam*

The presentation describes use of a critical areas ordinance to help locate development and avoid sensitive natural areas (water, wetlands, plants, animals, fish, geologic, and agricultural sensitive areas).

### A proposal for new IAIA SEA Performance Criteria: Bringing SEA to the next level

Tuesday 8 April | 11:00-12:30 | Cabaret

*Theme forum*

*Chair(s): Rob Verheem, Ineke Steinhauer*

The IAIA SEA Performance Criteria are over a decade old. Did they stand the test of time? At IAIA13 a large audience revisited them. The conclusion? Most of the criteria still apply, but not all. In this session we propose a revamped set and solicit feedback. Intended output is a proposal for a new set of IAIA SEA Performance Criteria, to be formally launched at IAIA15.

## Sustainable development

### Do we need alternatives?

Tuesday 8 April | 16:30-18:00 | Caracola 3

*Panel*

*Chair(s): Patience Whitten, Anna Longueville*

This session will address the future of alternatives in EIA practice. For some, advocates for alternatives need to stop asking applicants to "bring me another rock." For others, the alternatives analysis is a lodestar for future generations and must be used well. Panelists will consider these issues from multiple perspectives.

### The Environmental Lens: A participatory EIA tool

*Åhrgren, Lisa*

The Environmental Lens is a participatory EIA tool to improve the environmental sustainability of small-scale projects and to increase the awareness and the environmental capacity of small organisations.

### Glaciers and EIA: Facing the future challenges

Wednesday 9 April | 11:00-12:30 | Cabaret

*Paper session*

*Chair(s): Pablo Wainstein, Karen Sepúlveda*

The objective is to demonstrate the role of EIA and the new EIA regulation for projects in glacial and peri-glacial environments, considering the challenges of assimilating climatic change and evaluating impacts and ensuring protection of glaciers, given the uncertainty and confusion surrounding mountain glacier conditions.

### Benefits of glacial and periglacial investigations

*Wainstein, Pablo; Arenson, Lukas; Jakob,*

*Matthias; Catchpole, Simon*

The early and thorough investigation of the glacial and periglacial environments in the Andes brings medium and long-term benefits, and considerable cost saving when done in engagement with project planning.

### Environmental impact assessment in Chile

*Salazar, Carlos*

This presentation focuses on the analysis about how this regulation could be a significant improvement for the protection of glaciers.

### Assessing the impact of dust deposition on glacier ablation

*Wainstein, Pablo; Arenson, Lukas;*

*Catchpole, Simon; Jakob, Matthias*

Assessing the impact of dust deposition on glacier ablation is complex and needs to be supported by high quality data.

# Concurrent sessions

## Large infrastructure driving conservation and development in Latin America

Friday 11 April | 09:00-10:30 | Palma

Panel

Chair(s): Ana Cristina Barros, Sérgio Leão

Infrastructure will be presented as driver for sustainable development in Latin America, based on a strategy for adjustments in planning, preparation and licensing, as well as a new needed agenda to direct finance and environmental compensations to transform local realities. Sector leaders will provide their comments, inspiring a debate with participants.

Panelists

### Opening remarks

What is LACC? Objectives of the session, introduction of panelists, and guiding topics for IAIA audience.

Ana Cristina Barros, *The Nature Conservancy*

The Latin America Conservation Council (LACC) was born in 2011, with 30 business leading thinkers and conservationists, aiming to help conserve Latin America's "natural capital." Smart infrastructure is one out of LACC's three priorities and impact assessment practitioners have an important role to play in making infrastructure a driver for sustainable development.

### The LACC's strategy for Smart Infrastructure in Latin America

Sérgio Leão, *Odebrecht*

Results and plans under LACC Smart infrastructure strategy will be presented, based on cases from Brazil, Mexico, Peru, and Colombia. LACC plan introduces an expanded view of mitigation hierarchy, integrated with Positive Agendas for Territories, and financed by early funds, royalties and environmental compensation. Existing concepts and tools are realigned, setting a new horizon for infrastructure in the region.

### Comments and highlights about the Strategy: A bank representative point of view

Robert Montgomery, *The World Bank*

The World Bank is developing a knowledge platform on environmental sustainable infrastructure and also guidance for improving environmental sustainability in LAC road transportation projects guidelines which will be presented, along with a review of the potential role for LACC and its Smart Infrastructure Strategy.

### Comments and highlights about the Strategy: A natural scientist point of view

Joe Kiesecker, *The Nature Conservancy*

Under The Nature Conservancy's Development by Design approach, we look at whole landscapes, assessing the potential collective impacts of all development projects in a region. This promotes more effective mitigation from the start, and we can recommend conservation actions to: 1) avoid the most sensitive areas, 2) minimize damage to wildlife habitat and ecosystems, and 3) compensate (offset) for unavoidable impacts by restoring and protecting similar ecological values elsewhere.

Development is expanding to new frontiers and we have an opportunity to get ahead of the challenge, providing science-based "blueprints" and promoting mitigation systems that can help avoid conflict and support balanced approaches to meeting development and conservation goals.

### Debate on challenges and opportunities for impact assessment practitioners

For inspiring the debate, 3 to 5 guiding questions will be presented to panelists and participants, such as:

- 1) How to make impact assessment studies more interactive with territories and engine for anticipated actions to avoid unnecessary impacts?
- 2) What is, and who should lead, a communication and information approach to local stakeholders during the impact assessment phase?
- 3) Considering planning for infrastructure has a critical role in defining location and size of infrastructure projects, how can IAIA and practitioners influence governments for a review on planning procedures?

## Hydropower construction: Mitigation and best practices (I)

Wednesday 9 April | 14:30-16:00 | Caracola 1

Paper session

Chair(s): Margaret Trias

IAIA Section: Energy

As hydropower development and construction is being carried out intensively in many countries, there is a need for environmental mitigation and best practices to be standardized to help environmental practitioners, developers and review agencies to ensure impacts are minimized and lessons learned are shared.

### Challenges, best practices for hydropower development

Tiffer-Sotomayor, *Ruth*

Different best practices during planning, construction, and operation of hydropower which can contribute to a more green and inclusive hydropower.

### Hydropower development, mitigation, and best practice

Shantz, *Phil*

An overview of the development and implementation of mitigation measures to address the potential negative effects of hydropower development.

### Biodiversity monitoring in hydropower plants

Raimo, *Sandra*; Haller, *Erica*; Los, *Maria Madalena*

The methodological approaches applied in monitoring on biodiversity during implantation of large hydropower plants in the Brazilian Amazon, based on the experience of ARCADIS Logos.

## Environmental management of hydropower projects

Nguyen, *Son*

This presentation takes stock of the environmental management plan during the construction phase of the Trung Son Hydropower Plant (TSHPP) project and draws lessons learned on good practices that can be applied for effective mitigation of environmental and social impacts related to hydropower projects.

## Hydropower construction: Mitigation and best practices (II)

Wednesday 9 April | 16:30-18:00 | Caracola 1

Paper session

Chair(s): Margaret Trias

IAIA Section: Energy

As hydropower development and construction is being carried out intensively in many countries, there is a need for environmental mitigation and best practices to be standardized to help environmental practitioners, developers and review agencies to ensure impacts are minimized and lessons learned are shared.

### Lessons from the Cachapoal Basin

Monreal, *Zandra*

Experience gained with the commissioning of three central, great social and environmental measures and a strategy of sustainable development developed in Cachapoal.

### Cumulative impact assessment: Alto Maipo Hydropower

Baranao, *Pablo*; Espoz, *Ximena*; Quintero, *Juan*

A Cumulative Effects Assessment study (CEA) was performed on the Alto Maipo Hydroelectric Project, which consists of a 531 MW hydroelectric complex comprised of two run-of-river plants hydraulically arranged in series.

### Social Impacts from confrontation to development

Fonseca, *Antonio*

This presentation shows how with a change in attitude considering the affected communities as important stakeholders, the subject and not the object of the development of a project can foster social development.

### Xingu development agenda: Belo Monte HPP

Paley, *Maria Claudia*; Biazzi, *Luis Augusto*;

Andreazza, *Aida*; Pazos, *Luiz*

The development agenda for Xingu's Territory is influenced by the Belo Monte Hydropower Plant (HPP) and comprises a strategic initiatives portfolio and a governance model, aiming for sustainable development.

## IAIA SECTION-SPECIFIC

### Agriculture, Forestry, and Fisheries

#### Urgent key issues and developments for the IAIA AFF Section

**Tuesday 8 April | 16:30-18:00 | Picadilly 2**

*Chair(s): Ann Pacey, Pamela Gunther*

*IAIA Section: Agriculture, Forestry, and Fisheries*

This session is planned to inform and alert members to the urgent opportunities to apply EIA to an expanded repertoire of projects and activities under the AFF Section. These subjects deserve to benefit much more from thorough EIA planning.

### Corporate Stewardship & Risk Management

#### Communities' role in impact assessment of privately-sponsored projects

**Wednesday 9 April | 11:00-12:30 | Estrella 3**

*Paper session*

*Chair(s): Alex Campos*

*IAIA Section: Corporate Stewardship & Risk Management*

Business is under increasing pressure to address company-community relations in ways that advance justice and well-being. Organizations are responding in a variety of ways. However, questions remain about whether the impact assessment process, and the subsequent management plans, really lead to improved community well-being and how grievances can be addressed.

#### Public participation in large-scale mine projects

*Banda, Paul*

Public participation faces challenges that have resulted in poor community involvement in the EIA process in Zambia. This has resulted in inadequate mitigation and ineffective information for decision makers.

#### Policy decisions in the best little beach city

*Butler, Katherine; Souweine, Kathleen; McDaniel, Mary*

Lessons learned from the HIA public participation process will inform strategies to increase understanding of health determinants in other small communities facing difficult policy decisions.

#### Concise EIA for more democratic urban developments

*Kuwabara, Yoichi; Harashina, Sachihiko*

By an empirical study on concise EIA for apartment houses projects in Japanese cities, it was found that residents' proactive engagement in the planning of urban development should be ensured.

#### Challenges of public participation on ESIA

*Martinez, Luz Dary*

Promote reflection on the importance to innovation in strategies to facilitate citizen participation in the structural elements of projects.

## SPECIAL TO IAIA

### Meet the editors: An interactive workshop

**Tuesday 8 April | 14:30-16:00 | Estrella 1**

*Workshop*

*Chair(s): Bill Ross*

Come and meet the editors of leading IA journals including the editors of IAIA's own Impact Assessment and Project Appraisal (Angus Morrison-Saunders and Francois Retief). The editors will give advice to IAIA members and potential contributors of papers about the process of writing and submitting journal articles, including the process of dealing with reviewer comments, being a reviewer and how the publishing process works. It is all about what IAIA members need to know and provides the opportunity to meet the editors and ask questions about the mysteries of publishing a journal article.

### Affiliates forum

**Tuesday 8 April | 16:30-18:00 | Estrella 3**

*Workshop*

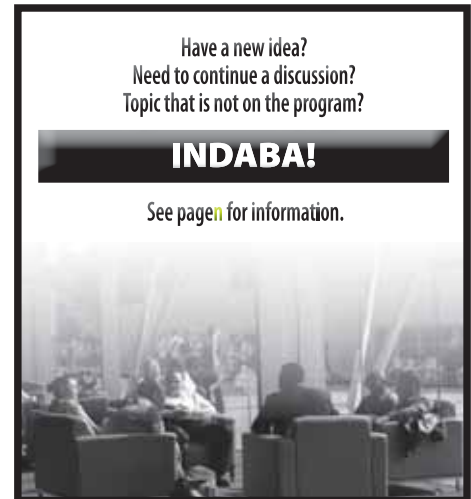
*Chair(s): Iñigo Sobrini*

Affiliates will discuss their plans and projects (past and future), focusing on how they assure cooperation between IAIA and Affiliates to support one another in promoting and enhancing the quality of impact assessment. Our goal must be improving impact assessment, and both IAIA and the Affiliates should be just the tool, never the aim in itself. Are we achieving that?

Have a new idea?  
Need to continue a discussion?  
Topic that is not on the program?

**INDABA!**

See [page 9](#) for information.



# Poster session

Tuesday 8 April | 12:40 - 13:30

Posters are listed by general topic areas and then in alphabetical order by the presenting author.

Use the ballot provided on page 57 to vote for your favorite poster by 11:00 on Thursday 10 April! Drop off your ballot at the registration desk.

## Aesthetic impact assessment

### Showcasing the first EIA of an art work (AE1)

*Athié, Mauricio*

This poster shows the pioneering EIA of Christo's artwork, the "Running Fence" in the Californian countryside, and its legacy on various aspects of IA knowledge, including aesthetic impact assessment.

## Agriculture, forestry, and fisheries

### A fine scale assessment of AEZSP, Sao Paulo, Brazil (AF1)

*Oliveira-Silva, Raphael A.; Ranieri, Victor E.*

An evaluation of different scenarios for the agroenvironmental zoning for sugarcane sector in São Paulo state, Brazil.

## Biodiversity and ecology

### Greenways as reparations, mitigation and compensation (BE1)

*Carrasco, Paula*

Macro-projects within the urban area of Santiago generate large impacts in all aspects such as loss of connectivity, pollution in all its types and the consequent deterioration of the quality of life. This analysis includes environmental impact studies of urban projects with linear geographic distribution conducted in the metropolitan area since 1994.

### Evaluate and assess EIA of completed waterway construction (BE2)

*Choi, Sang Ki; Lee, Jin Hee*

This study was conducted to assess the follow-up investigation by examining water quality and fish as well as performing the water quality modeling at Gyeongin Ara Waterway navigation channel.

### Are solar power plants creating new habitats? (BE3)

*Suuronen, Anna; Morales, David; Kukkonen, Jussi; Miranda, Marcelo*

With the growing solar boom in Chile, it is important to know what environments solar power plant areas are creating and how wildlife is responding. As a result of this study, we recommend how to build solar power plants to increase biodiversity around the solar power plants in Chile.

### Numerical modelling of active layer runoff (BE4)

*Wainstein, Pablo; Arenson, Lukas; Stirling, Jan; Jakob, Matthias*

Geothermal modelling is used to evaluate changes in runoff from the active layer and permafrost degradation in peri-glacial environments under changing climate conditions.

## Health

### Challenges in health impact assessment in Brazil (H1)

*Abe, Karina; Miraglia, Simone*

The study shows the relationship of the environmental aspects on health effects applying the Health Impact Assessment (HIA) methodology through a case study on a hydropower plant in Brazil.

### Enhancing health and social impact assessment in EIA of industrial complexes (H2)

*Lee, Young Soo; Choi, Sang Ki; Choi, Jun Kyu; Kang, Yoo Jin*

We suggested methods to enhance health and social impact assessment in EIA of industrial complexes in Korea.

## Policy and decision making

### Effects of mandatory environmental audit in Brazil (PD1)

*Boto Dantas Neto, Romeu*

The effects of mandatory environmental audit in monitoring environmental impacts and legal compliance through a case study in platforms at Sergipe Alagoas Basin, localized at northeastern Brazil.

### How to promote the quality and unity of EIA? (PD2)

*Jantunen, Jorma*

Developers complain that there are differences in implementation and NGOs complain about the quality of EIAs. The poster describes the challenges and means to promote the quality and unity of EIA.

### Experience of monitoring power transmission line (PD3)

*Mesquita, Renata; Eilers, Vivianne; Santos, Ana*

This work reports the advances obtained in environmental licensing as an experience of monitoring power transmission line in Amazon, Brazil, during implementation and management phase.

### Guide to regulate the social impacts mitigation (PD4)

*Serrão, Mônica; Rodin, Patricia; Dias, Julio; Mendonça, Gilberto*

IBAMA, in Brazil, has developed a set of guidelines to regulate the mitigation and compensatory measures of socio-environmental impacts caused by offshore oil and gas activities.

### Comparison: environmental assessment in Latin America (PD5)

*Tiffer-Sotomayor, Ruth; Sanchez-Triana, Ernesto; Enríquez, Santiago; Gomes, Ana Luisa*

The poster is a snapshot of the different environmental impact assessment (EIA) systems that have been adopted in twenty Latin American countries.



## Resource development

### Gains in power transmission line licensing (RD1)

*Eilers, Vivianne; Mesquita, Renata; Santos, Ana Lucia*  
This work reports the environmental gains obtained on the decreasing of vegetation clearing required for the project implementation of power transmission lines in the Brazilian Amazon region.

### Environmental restoration in Ogoniland, Nigeria (RD2)

*Igbodo, Franklin; Adebajji, Adekoya*  
The Ogoni Project of SPDC Nigeria implements environmental restoration of hydrocarbon impacted sites on and outside its right of way in Ogoniland, collaborating with an appointed body known as HYPREP.

### Treaty of Mining Integration between Argentina and Chile (RD3)

*Pirillo, Ernesto; Murguía, Diego*  
The Treaty of Mining Integration and Complementation between Argentina and the Republic of Chile contemplates the integrated operations and the utilization of natural resources along the entire Andean border.

## Social Impact Assessment

### Community development and the social license (SI1)

*Martinez, Carla*  
The research explores, through a comparative analysis, the links between corporate-sponsored community development and the social license to operate.

### Addressing gender equity through impact assessment (SI2)

*Martinez, Carla; Franks, Daniel*  
This research explores whether an engendered approach to impact assessment can contribute to reduce inequality and women's and men's vulnerability in the frame of large-scale development projects.

## Strategic environmental assessment

### Strategic environmental assessment in Taiwan (SE1)

*Chen, Yennan*  
Strategic environmental assessment; Taoyuan Aerotropolis Project; Taiwan.

## Tools and methods

### Invasive alien plant management by EIA (TM1)

*Bang, Sang-Weon*  
Incorporating invasive alien plant control and management tools into current EIA procedure in Korea.

### The District Environmental Performance Rating and Disclosure System (DEPeRDS) (TM2)

*Fredua, Kwame; Asare, Christine; Badu-Yeboah, Kwabena; Dogbey, Dziedzorm*  
It is expected that the DEPeRDS would create awareness and encourage sustainability among the various district assemblies.

### Environmental risk management procurement process (TM3)

*Chevalier, Diogo; Ricardo, Fontenele; Sanches, Eduardo*  
A preliminary risk analysis technique customized for environmental and social risk management tool can be used to promote sustainable procurement process, over the company's supply chain, the biggest players.

### Evaluation on monitoring of Four Major Rivers Project (TM4)

*Chun, Dong Jun; Eun, Jeung*  
Four Major Rivers Project, environment impact assessment, river environment monitoring, river development project.

### Impact assessment for sustainable development (TM5)

*Kim, Myungjin*  
The impact assessment we want will assist in achieving sustainable development goals by increasing our own effectiveness in conceiving and applying comprehensive and integrated assessment.

### Estimation of nonpoint source load (TM6)

*Lee, Jae Woon; Kwon, Heon Gak; Cheon, Se Uk; Kang, Du Kee*  
Non-point source, HSPF, land cover map.

### Environmental impacts of cooling water discharges (TM7)

*Maeng, Junho; Kim, Taeyun; Suh, Donghwan*  
Cooling water, discharge water, thermal effluent, discharge standards, surface discharge, underwater discharge, measures for impact prediction.

### Climate change vulnerability analysis for NOAA (TM8)

*Sage, Paul; Bilney, Mick*  
An overview of the approach used by National Oceanic and Atmospheric Administration (NOAA) to determine the potential effects of climate change on its mission and operations.

*New this year: poster presenters were invited to create video presentations of their posters. To see submitted videos, go to <http://bit.ly/IAIA14VideoPoster>.*



*Studying a poster presentation.*

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

# Latin American Forum

Organized by

Inter-American Development Bank (IDB)

International Bank for Reconstruction and Development (IBRD)

International Finance Corporation (IFC)

## Overview

IAIA14 includes a forum on the role of environmental impact assessment in advancing economic and social development throughout Latin America. The forum is conducted in Spanish, with simultaneous English translation available.

The first day of the forum revolves around four main environmental themes specific to the region:

- Reforms and trends in the EIA systems in Latin America
- Managing environmental and social impacts of hydropower plants in Latin America
- Integration and challenges from the required infrastructure in Latin America
- The role of sustainability standards in economic development in Latin America

The second day focuses on impact assessment in Latin America:

- Is it done better than 25 years ago?
- Managing environmental and social risks by the private sector: from ESIA documentation to successful implementation
- Water resources management in a changing climate
- Systems and tools for managing environmental and social impacts and risks in financial and real sectors

A final session at the end of the second day will provide an opportunity for defining future steps in consolidating a Latin American network of EIA practitioners.

DAY ONE

## Reforms and trends in the EIA systems in Latin America

Wednesday 9 April | 09:00-10:30 | Palma | In Spanish with translation to English

Theme forum

Chair(s): Ernesto Monter (IDB), Juan David Quintero  
After many decades, many countries in the Latin American region are implementing reforms of their environmental licensing systems aimed at improving efficiency, effectiveness and participation among civil society groups, thus diminishing uncertainty for private and public developers. There are many expectations about the success of these reforms throughout the region. This session will provide a forum to discuss new institutional frameworks, procedures and challenges in the implementation of these environmental licensing systems.

Panelists

**Luz Helena Sarmiento Villamizar**, Minister, Ministry of Environment and Sustainable Development, Republic of Colombia

**Arturo Rodriguez Abitia**, Advisor, Secretary for Environment and Natural Resources (SEMARNAT), United Mexican States

**Rosa María Ortiz Ríos**, SENACE, Peru;

**Pablo Badenier Martínez**, Minister, Ministry of Environment, Chile (TBC)

## Managing environmental and social impacts of hydropower plants in Latin America

Wednesday 9 April | 11:00-12:30 | Palma | In Spanish with translation to English

Theme forum

Chair(s): Emmanuel Boulet (IDB)  
With a total hydropower capacity of about 140,000 MW and bold region-wide plans to respond to the pressures of economic growth, the Latin American and Caribbean (LAC) region is at the forefront of innovation and the global drive for hydropower development. This session will explore both challenges and positive lessons from the LAC region in environmental management of hydropower projects. It will address the following questions: How can environmental and social considerations be integrated into hydropower planning and development at various stages? How can potentially significant residual impacts on biodiversity be managed? What tools are available to help develop and implement sustainable hydropower projects? This session will present several case studies across the region, such as the Alto Maipo Hydropower Project (Chile) and Odebrecht/Chaglla (Peru). The session will further focus on operationalizing the intact river

concept and aquatic offset (IDB/IFC or ICE), as well as applying the Hydropower Sustainability Assessment Protocol (HSAP) in the region.

Panelists

### Lessons learned from the implementation of the Hydropower Sustainability Assessment Protocol

Cameron Ironside, International Hydropower Association (IHA)

### Challenges and lessons from developing hydropower in the Amazon River basin: the case of the Chaglla Hydropower Project in Peru

Luiz Gabriel Todt de Azevedo, Odebrecht

### Hydropower without a dam? Challenges and lessons from the Alto Maipo Hydropower Project, Chile

Jose Antonio Felix-Filho, IDB, and Bill Rahill, IFC

### The Next Frontier of Hydropower Sustainability: Planning at the System Scale

David Harrison, The Nature Conservancy (TNC)

## Integration and challenges from required infrastructure in Latin America

Wednesday 9 April | 14:30-16:00 | Palma | In Spanish with translation to English

Panel

Chair(s): Ernesto Monter (IDB)

The Latin American region is undergoing an unprecedented expansion of road and highway, airport, waterways in order to support plans for regional infrastructure integration and to support agriculture, timber, oil, gas, and mineral extraction. This session will focus on the challenges to preventing and mitigating systemic impacts of regional infrastructure development. The technical, environmental and social aspects of this integration will be discussed through a series of case studies, including the former South America IIRSA initiative, the Expansion of the Panama Canal, the interoceanic railroad in Bolivia and/or electric interconnections in the LA region.

Panelists

### Environmental management of the expansion of the Panama Canal

Javier Moron, Environmental Manager, Panama Canal Authority, Panama

### Alternatives and construction techniques for the Colombia-Panama Power Interconnection

Andrés Villegas Ramelli, Manager, Colombia-Panama Interconnection Project (ICP)

### Strategic environmental and social planning of the interoceanic railway

Luis Fernando Terceros Cardona, Social Environmental Specialist, Railway Technical Unit, Vice Ministry of Transportation

## The role of sustainability standards in economic development in Latin America

**Wednesday 9 April | 16:30-18:00 | Palma | In Spanish with translation to English**

Panel

*Chair(s): Carlos Perez-Brito (IDB), Alberto Villalba (IDB)*  
As economic development expands in Latin American countries, should sustainability standards play a more prominent role in social and environmental impact assessments? Environmental impact assessments (EIAs) have become standard procedure in any major development project. Yet sustainability standards are given little attention in EIAs. When they are included, they are often of poor quality, being little more than a compilation of secondary information that is of little relevance to potential impacts. Because growth in Latin America is largely dependent on development projects, the quality of social assessments and sustainability standards have to improve in order to reduce risk, mitigate negative impacts and potentially increase share value among different stakeholders. This session aims to address these challenges by exploring the relationship between economic development and sustainability standards, as well as by considering the extent to which it is possible to think about joint development models in which governments, developers and communities share risk as well as profits.

**Social and environmental sustainability policies and programs in the paper industry. Experiences from Montes del Plata, Uruguay.**

**Implementing sustainability programs in fruit production and export. Experiences from Subsole, Chile.**

**Promoting social sustainability in the private sector in Peru: Experiences from DanPer, Peru.**

**Opportunities for creating shared value in the private sector – Experiences at the IDB.**

DAY TWO

## Impact assessment in Latin America: Is it done better than 25 years ago?

**Thursday 10 April | 09:00-10:30 | Palma | In Spanish with translation to English**

Theme forum

*Chair(s): Luis E. Montañez Cartaxo, Mauricio Athié (IFC)*  
We analyze what has happened in Latin America in contrast with the establishment of an “agenda for action” to improve the impact of IA issued by a previous IAIA conference: What is the quality of IA statements? Are social issues always considered? Are IAs undertaken before final decisions have been made? What about public participation? Are Indigenous Peoples taken into account? These and other difficult questions will be addressed by experts from the region, including consultants and competent authorities.

Panelists

**Luis E. Montañez Cartaxo**, IAIA Sustaining Member

**Ernesto Sánchez Triana**, Lead Environmental Specialist, IBRD

**Elizabeth Brito**, Consultant, IDB

**Mauricio Athié**, Senior Environmental Specialist, IFC

## Managing environmental and social risks by the private sector: From ESIA documentation to successful implementation

**Thursday 10 April | 11:00-12:30 | Palma | In Spanish with translation to English**

Panel

*Chair(s): Mauricio Athié (IFC), Josefina Doumbia (IFC), Ximena Herbas (IDB)*  
This session will illustrate and demonstrate how a very complex project in Latin America moves from impact assessment and management system documentation to successful implementation. The project is the first private-sector petrochemical complex in Mexico with a high overall developmental mandate (possibly leading to the development of secondary chemical industry in Mexico) and has been sponsored by IFC and IDB, and it is in an implementation stage.

Panelists

**Josefina Doumbia**, Principal Environmental Specialist, IFC

**Ximena Herbas**, Senior Environmental Specialist, IDB

**Antonio Santos Souza Galvao**, Sustainability Manager, Braskem - Idesa (Etileno XXI)

**Pablo Taborga**, Quality, Health & Safety and Environmental Manager of PERU LNG

## Water resources management in a changing climate

**Thursday 10 April | 14:30-16:00 | Palma | In Spanish with translation to English**

Workshop

*Chair(s): Crystal Fenwick (IDB)*  
This session will discuss how an integrated approach to water resources management can

address these challenges through an active debate on the following specific challenges: (i) how to better assimilate and manage large amounts of data; (ii) how to encourage water conservation while creating greater awareness of disparity in availability and quality; and (iii) how to improve water governance.

Case studies intended to illustrate the challenges of water resources management in LAC will be presented by selected participants from academia, civil society and government to be followed by active discussion.

**Román Gómez**, National Representative for Mexico, Water Resources Group 2030 (Grupo de Recursos Hídricos 2030)

**Raymi Beltran**, Senior Environmental Specialist, International Finance Corporation

**Mike Zellner**, Southern Andes Director, The Nature Conservancy

## Systems and tools for managing environmental and social impacts and risks in financial and real sectors

**Thursday 10 April | 16:30-18:30 | Palma | In Spanish with translation to English**

Panel

*Chair(s): Robert Montgomery (IBRD)*  
This session will present various activities and initiatives being undertaken to address the challenges and opportunities of environmental and social impact/risk assessment and management tools for the financial sector. The session will also provide an opportunity to discuss how EA practitioners, as part of their work in development and implementation, can better serve the specific needs of financial institutions given their roles, perspectives and interests in a project.

## Capacity building opportunities and tools that respond to the changing needs of financing institutions

*Felipe Varela, Senior Engineer, Inter-American Investment Corporation*

## Challenges and opportunities in the implementation of environmental and social management systems in the financing sector

*Maria da Cunha, Lead Social and Environmental Safeguard Specialist, IDB*

## Program on environmental and social management for financial institutions

*Mauricio Velásquez, Principal Executive Officer, Andean Development Corporation*

## Conclusions and next steps: Latin American/Hispanic American EIA network

*Chair(s): Juan D. Quintero*  
Discussion.

# Section activities

## MEET THE IAIA SECTIONS!

IAIA is a member-based organization which currently has fifteen 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 are 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.

If you paid the non-member conference rate, you automatically became an IAIA member and are eligible to join one or more Sections.

### Why join an IAIA Section?

- Sections are a networking forum for IAIA members where you can meet your colleagues with similar professional interests.
- Sections promote your personal professional development.
- Sections develop interesting activities that you may want to join.
- See [www.iaia.org/sections/](http://www.iaia.org/sections/) for more information.

Did you know that when you paid the non-member conference rate, you received a one-year IAIA membership and are eligible to participate in Sections?

### Where can I find the Sections at IAIA14?

- All 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.

### Questions?

Please contact Angeles Mendoza-Sammet chair of the Sections Coordinating Committee ([angeles\\_mendozasammet@golder.com](mailto:angeles_mendozasammet@golder.com)) or the coordinator of a specific Section as listed at right, or visit [www.iaia.org](http://www.iaia.org) > Sections for more information.

## CURRENT SECTIONS

See page 12 for a list of sessions organized by IAIA Sections.

### Agriculture, Forestry and Fisheries

Patrick Duffy  
[pjduffy@shaw.ca](mailto:pjduffy@shaw.ca)  
Ijeoma F. Vincent-Akpu  
[ijeoma.vencent-akpu@uniport.edu.ng](mailto:ijeoma.vencent-akpu@uniport.edu.ng)

### Biodiversity & Ecology

Liz Clarke  
[elizabeth.clarke@zsl.org](mailto:elizabeth.clarke@zsl.org)  
Denny Grossman  
[denny.grossman@gmail.com](mailto:denny.grossman@gmail.com)  
Jo Treweek  
[jotreweek@gmail.com](mailto:jotreweek@gmail.com)

### Climate Change

Arend Kolhoff  
[akolhoff@eia.nl](mailto:akolhoff@eia.nl)  
Wes Fisher  
[wfisher@cadmusgroup.com](mailto:wfisher@cadmusgroup.com)  
Patrick Driscoll  
[patrick@plan.aau.dk](mailto:patrick@plan.aau.dk)

### Corporate Stewardship & Risk Management

Sara Bice  
[sara.bice@unimelb.edu.au](mailto:sara.bice@unimelb.edu.au)  
Rita Sully  
[ritasully@yahoo.com](mailto:ritasully@yahoo.com)

### Cultural Heritage

Arlene Fleming  
[arlenekfleming@gmail.com](mailto:arlenekfleming@gmail.com)  
Chris Polglase  
[chris.polglase@erm.com](mailto:chris.polglase@erm.com)  
Inge Lindblom  
[inge.lindblom@niku.no](mailto:inge.lindblom@niku.no)

### Disasters & Conflicts

Charles Kelly  
[72734.2412@compuserve.com](mailto:72734.2412@compuserve.com)  
Michel Bouchard  
[michel.a.bouchard@cogeos.com](mailto:michel.a.bouchard@cogeos.com)

### Energy

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[r.diaz-chavez@imperial.ac.uk](mailto:r.diaz-chavez@imperial.ac.uk)  
Steeff van Baalen  
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### Health

Ben Harris-Roxas  
[ben@harrisroxashealth.com](mailto:ben@harrisroxashealth.com)  
Salim Vohra  
[sal@publichealthbydesign.com](mailto:sal@publichealthbydesign.com)

### IA Law, Policies & Practice

Christine Asare  
[christina.asare@yahoo.com](mailto:christina.asare@yahoo.com)

### Integrated Assessment of Trade-Related Policies

(vacant)

### Indigenous Peoples

Kepa Morgan  
[k.morgan@auckland.ac.nz](mailto:k.morgan@auckland.ac.nz)  
Angeles Mendoza Sammet  
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### Public Participation

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### Social Impact Assessment

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### Strategic Environmental Assessment

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Marie Hanusch  
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### Students and Early Professionals

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Claudia Valencia  
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# Networking activities and events

## WELCOME RECEPTION

The Environmental Assessment Service of Chile (SEA) together with the Municipality of Viña del Mar have the pleasure to invite you to a welcome reception to be held in Espacio Sporting Viña del Mar. This event is free of charge for all registered attendees. We will have typical Chilean dishes and the presentation of a folk dance show by BAFOVI (Viña del Mar folkloric ballet). Do not miss the opportunity to share and enjoy with your friends and colleagues a nice night with typical Chilean customs.

Free transportation by bus will be provided for the 20-minute ride from Enjoy, beginning at 19:00 (7 busses will each make two circuits). The busses will return to Enjoy from 23:30.

**Sponsored by SEA and Municipality of Viña del Mar.**

**Tuesday 8 April | 20:00 - 23:30 | Espacio Sporting (Los Castaños 404, Viña del Mar)**

**Pre-registration is required.**

## BANQUET

The week is almost over and it is time to relax with your friends and colleagues. Enjoy dinner accompanied by various dances of the host country, Latin America, and its main ethnic groups, sharing experiences of this conference and making plans for next year's meeting.

**Thursday 10 April | 21:00 onward | Grand Ballroom (3rd floor)**

**Price: \$50**

**Pre-registration and pre-payment is required.**

## BOOK SHARE

Leave one or two of your favorite environmental reference books, new or recycled, as a contribution to the book share table. The books are available on a first-come, first-served basis to delegates who might not readily find such books in their own locales.

## TWITTER!

Tweet about IAIA14 before, during, and after the conference using **#IAIA14**.

## JOBS BOARD

A poster panel specifically designated for job advertisements will be available in the exhibition area. If you are looking for a job or if your company has jobs to post, post the announcement! Also see Career Central (<http://www.iaia.org/careercentral/>) before and after the conference for the latest job openings.

## SECTION RENDEZVOUZ

Reserved rendezvous tables in Bingo restaurant will be identified at lunch times on Wednesday and Thursday, where Sections can meet informally to continue discussions.

## BUFFET OF IDEAS

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, share ideas on topics of interest, and connect with colleagues who have similar interests, but you might not meet during formal sessions.

At lunch on Tuesday, select tables in Bingo restaurant 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.

## SPEED MENTORING

IAIA invites mentees who are currently in post secondary education and young professionals to attend a speed mentoring session. Like speed dating, we will put you together with a number of mentors over the course of an hour so you can seek advice and ideas from these mentors on how to advance your career, improve your networking and anything else you would like to ask.

*How it works:* Mentors will be distributed one per table throughout the space. The mentee will move to a mentor's table for introductions and to ask questions of concern to them with the mentor responding. Every five minutes, a bell will sound, and the mentee will move to the next table to repeat the process. After an hour, each mentee will have had discussions with approximately 12 mentors.

**Wednesday 9 April | 11:00-12:30 | Esmeralda**

## DINE OUTS

Share an evening sampling some of the region's signature food at a "pay your own way" dinner. Being such a long country stretched over a variety of landscapes, Chile has a vast range of food and drink to offer. One of the highlights of Chilean cuisine is its diversity of seafood due to its 4,270 km / 2,647 miles of coastline. Another thing not to be missed while in Chile is its high quality red wine. A local host is organizing the Dine Outs and will help you experience the best of the local cuisine in Viña del Mar and surrounds. To join, sign up on the forms that will be available in the registration area. Dine Outs are a great opportunity to meet new people.



Speed networking

# Technical visits

## About technical visits

Minimum and maximum numbers of participants are noted. **Registrations were accepted on a first-come, first-served basis until 19 March or the visits reached their maximum numbers.** Registrations will be processed in the order that payment is received.

Prices for technical visits are shown in US dollars. **Participants must be pre-registered and pre-paid to participate.** If you must cancel, the fee will be refunded, less an administration fee of 25% of the technical visit cost and contingent upon written notice of cancellation received in HQ by 19 March. After that time, no refunds will be issued.

The tours will be hosted in English.

Family members of registered delegates are welcome to register for technical visits at the same rate.

**Tours depart from the congress center. Plan to check in for the visit a minimum of 15 minutes prior to the noted departure time.**

**Liability statement:** 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.

Participants will be required to sign a liability release waiver upon check-in for the visits.

Reminder: *IAIA advises delegates to plan ahead: prepare and apply for visas and all other travel documents early.* Please apply for your visa at the same time as you send your conference registration to ensure that your visa is received in time for the conference.

## B | OVEJERIA DAM AND SANTIAGO CITY

Ovejeria dam is one of the largest tailing dams in Chile, receiving mining tailings from CODELCO Andina Division. The project was approved in 1994 and was finished at the beginning of 2000. In recent years there have been some infiltration problems that were not foreseen during environmental assessments. This forced to incorporate additional management, such as installing a hydraulic barrier to minimize infiltration of tailings in the groundwater. Nowadays, Codelco seeks to increase the capacity of this dam from the current 1930 to 5800 million tons, while also requires to solve the infiltration problems.

**Sunday, 6 April**

**Depart** 08:00 | **Return** 19:00

**Photo identification is required.**

**Minimum-Maximum** 25-40

**Price** \$120

Price includes bus transportation, lunch, snacks and water, and bilingual city tour guide.

**Special notes:** Moderate level of physical activity. Sports shoes for trekking, jacket for evening or wind, sunscreen, sunglasses, and hat recommended.

The return time on this visit may be subject to change due to the distance involved.

## C | PORT CITY SAN ANTONIO

San Antonio is one of Chile's major ports, and has seen great industrial development in recent years due to its geographical location. Many projects are in the process of impact assessment or construction. Delegates will visit one of Maersk Container Industry's manufacturing facilities for refrigerated containers (one of only three in the world), as well as San Antonio's port, to learn about its expansion plans and projects, including the first strategic assessment process in the city. The trip will end at Isla Negra, a nearby location, to visit the house of famous Chilean poet Pablo Neruda.

**Sunday, 6 April**

**Depart** 08:30 | **Return** 18:00

**Photo identification is required.**

**Minimum-Maximum** 25-40

**Price** \$160

Price includes bus transportation, lunch, coffee, and admission fees.

**Special notes:** Moderate level of physical activity. Wear comfortable shoes for walking. Sunscreen and hat recommended.

## E | QUINTERO BAY AND CONCHALÍ LAGOON

Energy and port facilities have been established at Quintero Bay since the 1960s. After the mid-90s, some environmental impacts have been assessed. Additionally, new regulation and air decontamination requirements have been enacted. Despite these actions, the risk perception caused by the long term release of metals and organic pollutants in the surrounding Quintero Bay and the Campiche coastal wetland, as well as neighboring cities and residential areas, has motivated a complete environmental risk assessment conducted by the Ministry of the Environment.

In contrast, at nearby urban port Los Vilos, the Laguna Conchalí Ramsar Site (a coastal wetland) has been effectively protected by Antofagasta Minerals mining company as part of hydrological and biodiversity impact and landscape impact compensation measures.

**Monday, 7 April**

**Depart** 08:00 | **Return** 19:00

**Photo identification required.**

**Minimum-Maximum** 25-40

**Price** \$75

Price includes bus transportation, lunch, and snacks and water.

**Special notes:** Moderate level of physical activity. Sport shoes for trekking, jacket for evening or wind, sunscreen, sunglasses, binoculars, and hats recommended.

The return time on this visit may be subject to change due to the distance involved.

## F | EL YALI NATIONAL RESERVE

El Yali is a wetland which also has been declared a National Reserve. This area emphasizes the protection of 176 vertebrate species, including various migratory birds, the largest and the most representative group in the Reserve. Actually 26% of its species are under some conservation categories. Many agro-industrial activities surround the area, straining the species and soils; therefore, the Environmental Ministry, associated with Parks Canada, decided to develop recuperation programs in order to solve problems and evaluate how climate changes affect the area and how agriculture might be compatible with conservation and sustainable development.

**Monday, 7 April**

**Depart** 08:00 | **Return** 19:00

**Photo identification is required.**

**Minimum-Maximum** 25-40

**Price** \$140

Price includes bus transportation, lunch, coffee and water, and admission fees.

**Special notes:** Moderate level of physical activity. Sport shoes for trekking, jacket for evening or wind, sunscreen, sunglasses, binoculars, and hats recommended.

The return time on this visit may be subject to change due to the distance involved.

## H | CASABLANCA VALLEY WINERIES

The Casablanca Valley is a wine-growing region of Chile located in the Valparaíso region between the Coast Range and the Pacific Ocean. In this valley, two vineyards stand out: Matetic and Emiliana. Their environmental management incorporates the principles of organic farming and biodynamic wine production. Even though this process will be the main focus of the technical visit, visitors will also experience a landscape of great beauty.

**Monday, 7 April**

**Depart** 10:00 | **Return** 18:00

**Photo identification is required.**

**Minimum-Maximum** 25-40

**Price** \$155

Price includes bus transportation, lunch, and tour fees.

**Special notes:** Moderate level of physical activity. Sport shoes for trekking, jacket for evening or wind, sunscreen and sunglasses recommended.

The return time on this visit may be subject to change due to the distance involved.

## J | EL MOLLE SANITARY LANDFILL AND THE HILLS OF VALPARAÍSO

El Molle is the first sanitary landfill in Valparaíso Province. Still under construction, it has been designed using the best technologies for residential solid waste management. Dr. Marcel Szantó, a well-known researcher and professor and Director of the Solid Waste Group Catholic University of Valparaíso, will guide the visit and show how waste management has been improved. The visit includes lunch at a local restaurant and a walking tour through the hills of Valparaíso, a UNESCO world heritage site. The visit ends at "La Sebastiana," a house of Chilean Nobel Prize poet Pablo Neruda.

**Sunday, 6 April**

**Depart** 09:00 | **Return** 18:00

**Photo identification is required.**

**Minimum-Maximum** 20-40

**Price** \$105

Price includes bus transportation, lunch, water and coffee, and "La Sebastiana" admission fees.

**Special notes:** Sport shoes for trekking short distances, sunscreen and sunglasses recommended.

## WANTED: YOUR PHOTOS!

SEND YOUR CONFERENCE PHOTOS TO  
WEBMASTER@IAIA.ORG.

SELECT PHOTOS WILL BE FEATURED ON THE WEB SITE AND THE IAIA NEWSLETTER. PLEASE IDENTIFY THE PHOTOGRAPHER AND THE SUBJECT(S)!

## WORLD BANK GROUP DAY

This special meeting provides a forum for impact assessment practitioners to get an update on the World Bank safeguards review process, including the evolving ideas concerning the development of the next generation of environmental and social safeguards; to get insights from their respective specialties in the way in which IFC carries out due diligence of environmental and social risks, analyzes strategies issues in its portfolio and informs corporate decision-making; and to discuss recent experiences on the management of environmental and social risk of projects supporting public and private sector activities funded jointly by the World Bank and IFC.

This special event consists of three parts:

- Part 1: Update of the World Bank safeguards review process.
- Part 2: Innovative environmental and social risk management system adopted by IFC for the management of the environmental and social risks of its portfolio.
- Part 3: Managing environmental and social risks of Public-Private Partnerships (PPPs).

**Simultaneous translation from Spanish to English is provided for this special event.**

**Pre-registration by 19 March required.**

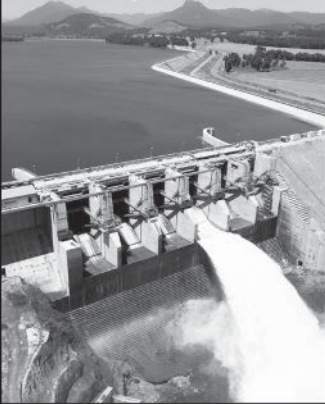
**Friday, 11 April | 13:00-17:30 | Pacifico**

Price includes light lunch and afternoon coffee break and snacks.

## ANGOSTURA, FUTURE'S NEW VISION

In early 2014, Angostura will complete its commissioning. It is an emblematic hydropower project because of the way it approached the local community during the planning and design phase.

Around the new reservoir a variety of recreation sites and visitor infrastructure are set to become an attractive tourist destination for the region.



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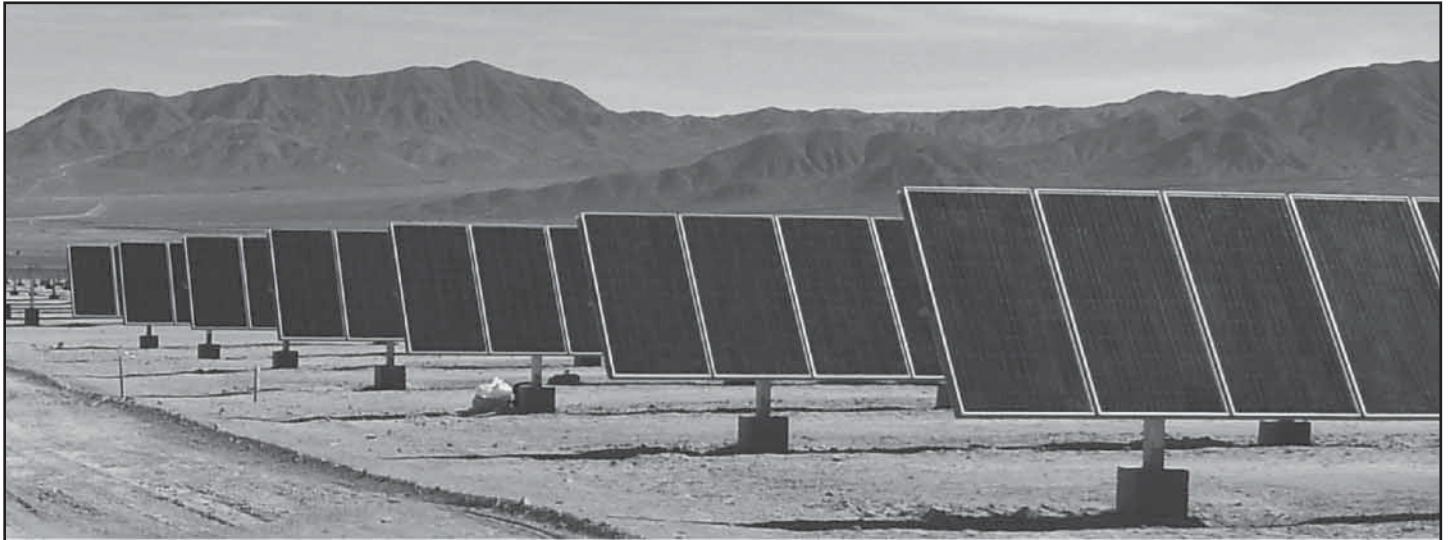
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Post your job or resume at <http://jobboard.iaia.org>.



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### **SUSTAINABILITY AT THE IDB**

At the Inter-American Development Bank (IDB), we believe that long-term economic growth and reduction of poverty and inequality in Latin America and the Caribbean depend on development that is both socially inclusive and environmentally sustainable.

To improve the outcome of projects and the quality of life for people in our region, we work closely with clients from beginning to end to assess, address and monitor environmental and associated social challenges.

### **LATIN AMERICAN FORUM**

The IDB is a proud sponsor of the IAIA's 34th annual meeting. This year, we are also excited to partner with the International Bank for Reconstruction and Development and the International Finance Corporation to host the two-day Latin American Forum at IAIA 14.

The forum focuses on the role of environmental impact assessment in advancing economic and social development throughout Latin America. Presentations are in Spanish with simultaneous translation available to English. See the agenda and full details about the Latin American Forum under the program tab on the IAIA 14 website.

**To learn more about Sustainability and Safeguards at the IDB, visit [www.iadb.org/sustainability](http://www.iadb.org/sustainability).**



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## IAIA AFFILIATES

IAIA encourages the establishment of organizations that serve to spread the mission of IAIA. Current IAIA Affiliates are listed below. All IAIA Affiliates are invited to present a poster; stop by and learn more about their unique regions, goals, and activities.

**Cameroon.** Cameroon Association for Environmental Assessment (ACAMEE)  
acameeonline.org/ | Dieudonné Bitondo, contact | acamee@yahoo.fr

**Germany.** Germany UVP-Gesellschaft e.V. (pilot) (Association for Environmental Impact Assessment in the German Speaking Countries)  
Aranka Podhora, contact | info@uvp.de

**Ghana.** IAIA-Ghana  
Yaw Amoyaw-Osei, contact | wayoma59@hotmail.com

**Iran.** Iranian Association for Environmental Assessment (pilot)  
Lisa Poulrak, contact | lpoulrak@gmail.com | iraneia.ir

**Italy.** IAIA-Italia  
iaiaitalia.org | Giuseppe Magro, contact | info@iaiaitalia.org

**Korea.** Korea Society of Environmental Impact Assessment (KSEIA)  
eia.or.kr/korean/ | Jong-Gwan Jung, contact | asset@cdi.re.kr

**Mozambique.** Associação Moçambicana De Avaliação Do Impacto Ambiental (AMAIA)  
amaia.org.mz/ | Hélder Lima Muianga, contact | info@amaia.org.mz

**New Zealand.** New Zealand Association for Impact Assessment, Inc. (NZAIA)  
nzaia.org.nz/ | Richard Morgan, contact | rkm@geography.otago.ac.nz

**Nigeria.** Association for Environmental Impact Assessment of Nigeria (AEIAN)  
aeian.org/ | Adebajani Adekoya, contact | patrick.adekoya@shell.com

**Ontario, Canada.** Ontario Association for Impact Assessment (OAIA)  
oaia.on.ca/ | Adam Chamberlain, contact | achamberlain@blg.com

**Portugal.** Associação Portuguesa de Avaliação de Impactes (APAI)  
apai.org.pt/ | Ana Roque, contact | apai@apai.org.pt

**Quebec, Canada.** Association québécoise pour l'évaluation d'impacts (AQÉI)  
aqei.qc.ca/ | Françoise Mondor, contact | mondorf@aqei.qc.ca

**South Africa.** IAIA South Africa (IAIA-sa)  
iaia.co.za/home/ | Liz Warren, contact | operations@iaia.co.za

**Spain.** Asociación Española de Evaluación de Impacto Ambiental (AEEIA)  
eia.es/nueva/portada.htm | Iñigo Sobrini, contact | isobrini@eia.es

**Western and Northern Canada.** (IAIA-WNC)  
iaia-wnc.ca/ | Susan Wilkins, contact | swilkins@pgggroup.com

**Zambia.** Impact Assessment Association Zambia (IAAZ)  
Nancy Mushota, contact | muyanje@yahoo.com

Want to know more? Check out these Affiliate posters!

- Cameroon
- Korea
- New Zealand
- Spain
- RHEAS (Spanish language network, a project of AEEIA)

## BOOTHS AND EXHIBITS



Taylor & Francis Group



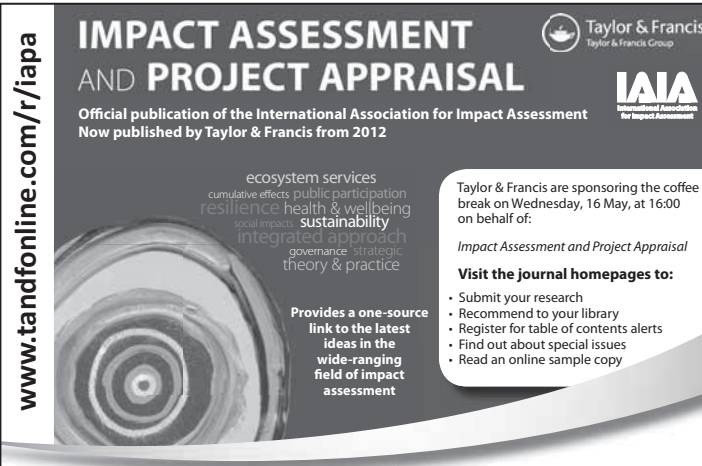
- AMEC
- ARCADIS
- CTQ Consultants
- Golder Associates
- IAIA15: Impact Assessment in the Digital Age | Florence, Italy
- Royal Haskoning DHV
- SEA
- Taylor & Francis Group

## IAIACONNECT

Learn more about IAIA's professional networking site and get your questions answered during afternoon coffee breaks 9-10 April, or stop by the registration desk for information.

Tables are provided for IAIA members to display information, distribute conference papers, or announce/distribute non-commercial items. Delegates must be in attendance personally to display materials.

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



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## About IAIA

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

IAIA members number over 3,100 from over 100 countries, including those from its 16 national Affiliates. IAIA activities are carried out locally and regionally through its extensive network of Affiliates and Branches.

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

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

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

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

### IAIA as an organization promotes the following:

- We compile or review impact assessments with integrity and honesty, and free from misrepresentation or deliberate bias.
- Our personal beliefs should not interfere with fair representation of the potential impacts of policies, plans, programs, and projects.
- We uphold the principle of freedom of access to information and the right of citizens to participate in decisions.
- We subscribe to a holistic approach to impact assessment.
- We seek sustainable and equitable outcomes from human actions that affect ecosystem and social functions.
- We will seek to encourage a process of impact assessment that averts infringement of the human rights of any section of society.
- We do not condone the use of violence, harassment, intimidation or undue force in connection with any aspect of impact assessment or implementation of an intervention arising from impact assessment.
- We conduct impact assessments in the awareness that different groups in society experience benefits and harm in different ways. We seek to take gender and other social differences into account, and we are especially mindful of the concerns of Indigenous Peoples.
- We strive to promote considerations of equity as a fundamental element of impact assessment.
- We give due regard to the rights and interests of future generations.
- We strive for excellence by maintaining and enhancing our own knowledge and skills, by encouraging the professional development of co-workers, and by fostering the aspirations of potential members of the profession.
- We do not advance our private interests to the detriment of the public, our clients or employing institutions.

## Annual General Meeting

**Wednesday 9 April | 12:40-13:30 | Pacifico**

This is the annual business meeting of the Association. All meeting participants are encouraged to attend, learn more about the operation of the organization, and ask questions.

### 2014 AGM Agenda

1. Welcome, introductions, and confirmation of the 2013 AGM minutes.
2. IAIA 2013-14: What have we done and where are we going?
3. Treasurer's presentation of the financial report.
4. IAIA Honors Excellence: Presentation of the Rose-Hulman Award.
5. Address by the Rose-Hulman Award recipient.
6. Any issues submitted in writing by members.
7. Informal discussion of matters that members wish to raise.
8. Closing remarks.

## Council Meeting

**Thursday 10 April | 12:40-13:30 | Picadilly 2**

The IAIA Council serves as an advisory resource to the IAIA Board of Directors. The Council meeting is an opportunity for face-to-face interaction among IAIA leadership, serves to raise awareness of and communicate the scope of IAIA activities, and allows the IAIA President the opportunity to acknowledge the individuals involved in the IAIA Board, Committees, Sections and Affiliates.

The Council is composed of the Board, all Committee chairs, Section chairs, representatives of Affiliates and Branches, the Executive Director and Headquarters representatives, and the Conference Program Chair(s) for the current-year conference and any future known conferences. Council meetings are open; all IAIA members are encouraged to attend.

The current IAIA President introduces Board members. The standard agenda includes *brief verbal reports invited by the President* from the Committee chairs and representatives *for items of general interest to all IAIA*. Issues requiring formal Board action and/or feedback would have been submitted in Committee/Section written reports to the Board, which the Chair should acknowledge receiving. Aside from a vote to close the meetings, no votes are taken at the Council meeting. Any issues raised are included as agenda items for discussion at the Board's next meeting.

### Council Meeting Agenda

1. **Welcome and introduction of IAIA Board of Directors**
2. **Introduction of Committee Chairs and Committee Reports** (as applicable)
  - a. Publications
  - b. Training & Professional Development
  - c. IAPA Editorial Board
  - d. Awards Committee
  - e. Sections Coordinating Committee (SCC) Chair (reporting for all Sections, as appropriate\* and introducing all Sections and Section Chairs)
3. **Affiliates & Branches** (introductions and update re: new/pilot organizations from Affiliate Forum Organizer)
4. **Reports from Conference Chairs: Past/current/future**
5. **Commendations/appreciation for service**
6. **Questions from the floor**
7. **Close of meeting**

\*The SCC Chair may deem it appropriate to ask the Chair of any Section involved in an IAIA



## John Ruggie

### Global Environment Award

John Ruggie was chosen to receive the IAIA Global Environment Award for developing the United Nations Guiding Principles for Business and Human Rights, which highlights the need for impact assessment to consider human rights and flags the development of human rights impact assessment.



## Lex Brown

### Rose-Hulman Award

Lex Brown, Australia, receives the Rose-Hulman Award for his major international contributions to the field of impact assessment and to IAIA over a sustained period through teaching, research and practice, with an emphasis in integrating assessment with planning and development.



## The International Council on Mining and Metals

### Corporate Initiative Award

The International Council on Mining and Metals (ICMM) was selected for the Corporate Initiative Award for promoting sustainable development in the mining sector. ICMM recently released the "Indigenous Peoples and Mining Position Statement," which requires its 22 member companies to begin incorporating Free Prior and Informed Consent into their practices in over 800 project sites around the world.



## The Inter-American Development Bank

### Institutional Award

The Inter-American Development Bank (IDB) has been awarded the Institutional Award because of its ongoing and significant innovative efforts in the fields of environmental and social impact assessment and management and related advisory services in the Latin America and Caribbean region. IDB is also recognized for its ongoing support of IAIA's conferences and special meetings.



## Frank Vanclay

### Individual Award

Frank Vanclay, The Netherlands, was chosen for the Individual Award because of his ongoing and sustained contribution to Social Impact Assessment theory and practice, which has had notable international influence in promoting and shaping the emergence of Social Impact as a significant discipline within Impact Assessment, and for his long-time commitment to IAIA.



## Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais

### Regional Award

The Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais (IBAMA) has been selected to receive the Regional Award. IBAMA was chosen for this award because of the recent initiatives taken by its Environmental Licensing Division to improve its environmental impact assessment practices, including providing EIA training to all technical staff, launching a project to benchmark its EIA practices against those in selected countries, improving internal procedures supporting its environmental analysts to attend IAIA conferences, and supporting the creation of the Brazilian Association of Impact Assessment.



## Weston Fisher

### Outstanding Service to IAIA

Wes is a Principal with the Cadmus Group Inc., founder of the Cadmus Group's Capacity for Impact Assessment and Management (CIAM) Practice, and since 1995 has been a trainer/facilitator in 21 countries. Wes is currently serving as the Interim Executive Director of IAIA and Chair of the Board Nominations Committee, and has served in the past as Board Treasurer, Board member, and TPDC member. He is also Co-Chair of the Climate Change Section and was involved in preparation of IAIA's FastTips Climate Smart Decisions and "Climate Change in Impact Assessment: International Best Practice Principles," Special Publication Series No. 8. He was a key organizer of two 2010 IAIA symposia on Climate Change and Impact Assessment and was the Program Committee Co-Chair for IAIA05 in Boston, MA, USA.



## Edwina A. Loxton, Jacki Schirmer, Peter Kanowski

### IAPA Best Paper Award

The 2013 award is presented for the paper "Exploring the social dimensions and complexity of cumulative impacts: A case study of forest policy changes in Western Australia." *Impact Assessment and Project Appraisal*, Volume 31, No. 1, pages 52-63.

If you would like to nominate an individual or organization for a 2015 award, please submit name and justification to the IAIA14 registration desk or e-mail [info@iaia.org](mailto:info@iaia.org). Online nominations will open soon.

# Conference tips and information

## Definition of conference terms

A **session** is a block of time, typically 90 minutes, during which discussion centers on a particular topic. Sessions may utilize a variety of formats, and the length of time available for presentations depends on the format that has been selected by the session chair. Session formats include:

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

**Paper session:** In a paper session, authors orally present the findings of a prepared paper or project. A chaired Paper session typically allows 4-5 presentations of 15-20 minutes each, including time for specific questions. Ideally, the chair allocates time for general questions and open discussion following the presentations.

**Workshop:** In a workshop, the topic is specific and seeks to resolve a defined problem, often through a combination of 2-3 short paper presentations and active discussion.

**Panel discussion:** In a panel, the speakers are invited. The chair introduces each speaker and puts each talk in perspective. Each speaker gives a brief (10-15 minutes) prepared presentation, usually presenting a different view or experience on the topic, followed by debate between the speakers and questions from the audience facilitated by the chair.

**Roundtable:** Involves a group of individuals, some of whom may be invited, holding an informal discussion on a specific topic or problem, with no formal presentations.

**Debate:** A debate takes place between two or more opponents who are experts in their fields as well as being entertaining presenters. The debate topic is clearly defined in terms of a question, with one side presenting the affirmative case and the other the negative case.

**Pecha Kucha** is a presentation methodology in which 20 slides are shown for 20 seconds each (six minutes and 40 seconds in total). This format allows for concise and fast-presentations.

**World Café:** World Café comprises progressive rounds of conversation among groups of 5-6 participants. Each round lasts 15-20 minutes, after which participants are invited to form new groups and continue the conversation drawing in ideas and comments from earlier discussions. The session concludes with a whole-group discussion.

**Indaba:** For issues that arise during the conference and that delegates want to pursue through follow-up discussions. During the morning, participants post potential topics for discussion, and individuals interested in each topic sign up. If a topic generates sufficient interest, space is made available for the discussion to take place in the late afternoon.

## How to get the most from this conference

- **Inform, prepare, and orient yourself.** Check in early and then take time to walk through the venue to familiarize yourself with locations of activities before the rush of the conference begins. Read through the program carefully and highlight the sessions you want to attend. Read the summaries and prepare questions for the speakers.
- **Make a goal sheet.** Why did you decide to register for this program? What is it you expect to gain? Take a moment to think about your goals. Then clarify them by writing them down in your program. Look over your goal page throughout the conference; it will help you keep focused.
- **Meet other people.** This is an excellent opportunity to expand your network of contacts. Sit next to someone you don't know, even if you've come with a group. Mingle during the breaks. Exchange business cards. Every participant here has a specific area of expertise; find out what it is instead of chatting about the weather. Let us suggest that one of your goals be to meet at least one person each day whom you intend to communicate with again on a business or social basis.
- **Participate!** Ask questions. Make contributions. Actively participate in the exercises. You'll benefit much more by participating in the game than sitting on the sidelines.
- **Relate what you learn to yourself.** Don't settle for “abstract” knowledge. Have your current problems, conflicts and interests foremost in your mind. As you learn new approaches and techniques, relate them to your own situation.
- **Make a commitment to review your notes.** Right now, take out your calendar and make a one-hour appointment with yourself in a few weeks to “retake” the program. Don't put your good ideas away with your notes. And consider reviewing your notes each evening during the conference while your ideas and enthusiasm are fresh.
- **Write a “Dear Boss” letter.** If your boss or company sent you to the conference, thank them with a letter. Include a list of your action ideas based on your action plan and goals - what you intend to do or change as a result of what you have learned. If you paid your own way, still send the letter. It will show how committed you are to your own professional growth.
- **Enjoy yourself.** Start relaxed (rest and rehydrate to help recover from jet lag) and you'll leave refreshed, inspired and recharged. Forget about what's happening at the office. This is your conference. Get all you can out of it.

## Presenters: One final quality check!

### Tips for oral presentation

**Build a story.** Presentations are boring when they present large amounts of information without any context or meaning. Instead, tell a story, with the audience as the main characters.

**Keep it relevant.** Audiences pay attention only to stories and ideas that are immediately relevant to them. Consider what decision you want them to make, then build an appropriate case.

**Cut your introduction.** The session chair will introduce you.

**Begin with an eye-opener.** Kick off your talk by revealing a shocking fact, a surprising insight, or a unique perspective that naturally leads into your message and the decision you want made.

**Use facts, not generalities.** Fuzzy concepts reflect fuzzy thinking. Buttress your argument, story and message with facts that are quantifiable, verifiable, memorable and dramatic.

**Never read from your slides.** Your audience can read.

**Practice speaking slowly and clearly, and avoid jargon.** Cut business and company- or sector-specific jargon from your slides and your vocabulary. For much of the IAIA audience, English is a second language. If English is your primary language, consider what it is like for you to listen to a presentation in your second language and adjust your presentation style accordingly.

### Tips for slide preparation

**Make sure each slide builds on the previous slide** and that all slides have a logical progression.

**A graph or chart to illustrate your main point can be worth a thousand words.** Studies show that half of what an audience learns during a presentation is provided by the visuals.

**But keep the slides simple.** People shut off their brains when confronted with complicated drawings, tables, and distracting backgrounds. Don't use your slides as a data repository. Have a separate handout if you want the audience to take away detailed information after your talk.

**Use the 6-6-6 rule:** (maximum 6 words per bullet, maximum 6 bullets per slide, maximum 6 text slides in a row). The fewest words and effective imagery will have the most powerful effect.

**Use high-contrast, easy-to-read fonts** that are common to most computers. Do not use ALL CAPS, italics, and other enhancements that clutter and are distracting. A good guideline is a minimum of 30-point text.

**Don't get too fancy.** You want your audience to remember your message, not how many special effects and visual gimmicks you used.

**Consider adding #iaia14 to your presentation slides** to encourage your audience to share thoughts on the session, receive feedback on your presentation, and help spread the word about the good work being done at the conference.

# Conference tips and information

## Publications

**List of participants:** A list of pre-registered participants is provided in the delegate packets. A final list of participants will be posted online following the conference.

**Proceedings:** IAIA will be publishing reviewed and finalized papers, session fundings, and more online following the conference.

**Accuracy of information:** The program committee and IAIA cannot guarantee the accuracy of presentation or author information received or changed following published deadlines, and/or not submitted via the online system.

**Journal:** Participants are encouraged to submit their papers for possible publication in IAIA's journal, *Impact Assessment and Project Appraisal*. See [www.tandfonline.com/action/authorSubmission?journalCode=tiap20&page=instructions](http://www.tandfonline.com/action/authorSubmission?journalCode=tiap20&page=instructions) for submission information and attend the IAPA workshop on Tuesday 8 April at 14:30 in Estrella 1.

## Presentation equipment

LCD (PowerPoint) projectors and laptop computers are provided in each session room.

Presenters were responsible for arranging and paying in advance for any other equipment needed for their presentations by 15 February. Availability of equipment for on-site requests is not guaranteed, and payment is required on-site.

PowerPoint files should be saved to memory stick. Presenters load their own files on the laptops provided; this should take no more than 2 minutes. Use of the provided laptops is required; use of personal laptops for session presentations will not be permitted. For security reasons, the session rooms and laptops may not be available until the break just prior to the start of the sessions, so plan to load your presentation during the break preceding your session. Preparation of files on a Mac computer is not recommended. Testing of a Mac presentation on an IBM or HP should have been done prior to arriving at the conference, and Mac presenters must provide their own VGA connectors.

## 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.

During the session and abstract submission process, session conveners and presenters gave or denied their permission for recordings of their sessions or presentations to be broadcast online by IAIA; those preferences will be honored.

Individuals are not permitted to record with personal audio or video equipment or other recording devices such as cell phones, cameras or recorders, without prior permission from IAIA.

## Business services and Internet

Presenters are responsible for supplying their own session or poster materials. Because of rental costs that would necessarily be passed on to all delegates in the form of higher registration fees, IAIA does not provide copying, printing, computers, or other business services. Enjoy has a small business office that provides some services for a fee; see the desk near IAIA registration, or check with your hotel.

Free wifi is available at the conference venue.

## Meals and snacks

Lunches will be provided in four restaurants at Enjoy: Bingo, La Banquera, Savinya, and Enjoy del Mar (across the street), and one restaurant a short walk (250m) from Enjoy (Chez Gerald).

Prior to lunch break, please select a restaurant ticket from the bowls in the registration area. Restaurants and tickets will be matched by name and color.

Based on the data collected via registration forms, IAIA has estimated a percentage of vegetarian meals. **This does not guarantee accommodation of individual preference or special need.** Note: *La Banquera is the only restaurant that will provide a vegetarian option.*

Reserved tables for the Buffet of Ideas and Section Rendezvous will be located in Bingo.

## Registration and fees

All conference participants, including delegates, sessions chairs, invited speakers, organizers, exhibitors, and paper and poster presenters, were required to register for the conference by 19 March at the full, student, or exhibitor registration rate. Contact IAIA HQ for information on exhibitor registration.

Full and student registration fees entitle delegates to attendance at all sessions, coffee breaks 8-11 April, lunches 8-10 April, list of participants, delegate satchel, conference proceedings (as available), and special events, unless an additional fee is noted. A small portion of the fee is donated to carbon offsets.

Delegates receive a name badge upon check-in. The badge is an official pass and must be worn to obtain entry to conference functions.

**IAIA members:** If it is more convenient for you to pay your annual membership dues at the same time you register for the conference, please contact [info@iaia.org](mailto:info@iaia.org) for a combined invoice. IAIA will credit your account as having paid an annual 12-month membership fee which will begin on your regular membership anniversary date. Otherwise, you will receive an invoice for membership dues on your regular membership anniversary date. You can also renew your membership electronically if you register online.

**Non-members:** The non-member rate includes a one-year membership to IAIA, with an

electronic subscription to IAIA's journal, *Impact Assessment and Project Appraisal*. Your one-year membership begins when IAIA receives your conference payment.

**Student:** The student rate includes a one-year membership. If you are a current member, your membership will automatically be extended one year from your anniversary date.

**Affiliate members:** Members of IAIA Affiliates having an active MoU with IAIA will be admitted to the conference at the IAIA member rate. This rate does not include IAIA membership. You must provide your Affiliate's number on the registration form to take advantage of this offer.

## Payment and refund policies

Registration fees should accompany the registration form. To qualify for the Early Bird rate, both the registration form and payment must have been received by 31 January 2014.

Fees are accepted by MasterCard, Visa, or American Express and are charged in US dollars (USD). Checks or money orders made payable to IAIA in USD drawn on a US bank are also accepted.

Pre-payment by 19 March was required for IAIA14 due to space limitations at the venue. Cash payments on-site will not be accepted.

Official documentation for registration changes made after 19 March 2014 will be issued after the conference.

IAIA will refund registration fees upon written request received before 19 March. A US\$75 processing fee will be retained. After 19 March, no refunds will be issued for cancellations or no-shows. Substitutions for paid registrants may be made in writing without financial penalty. Refunds will be issued after the conference.

## 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.

## Conference evaluation

An evaluation form will be sent electronically to all participants following the conference.

## Language used (conference)

English is the primary language used at IAIA conferences. Some IAIA14 sessions will be held in Spanish, but unless otherwise noted, all sessions will be held in English.

## Conference attire

IAIA conferences are generally business casual.

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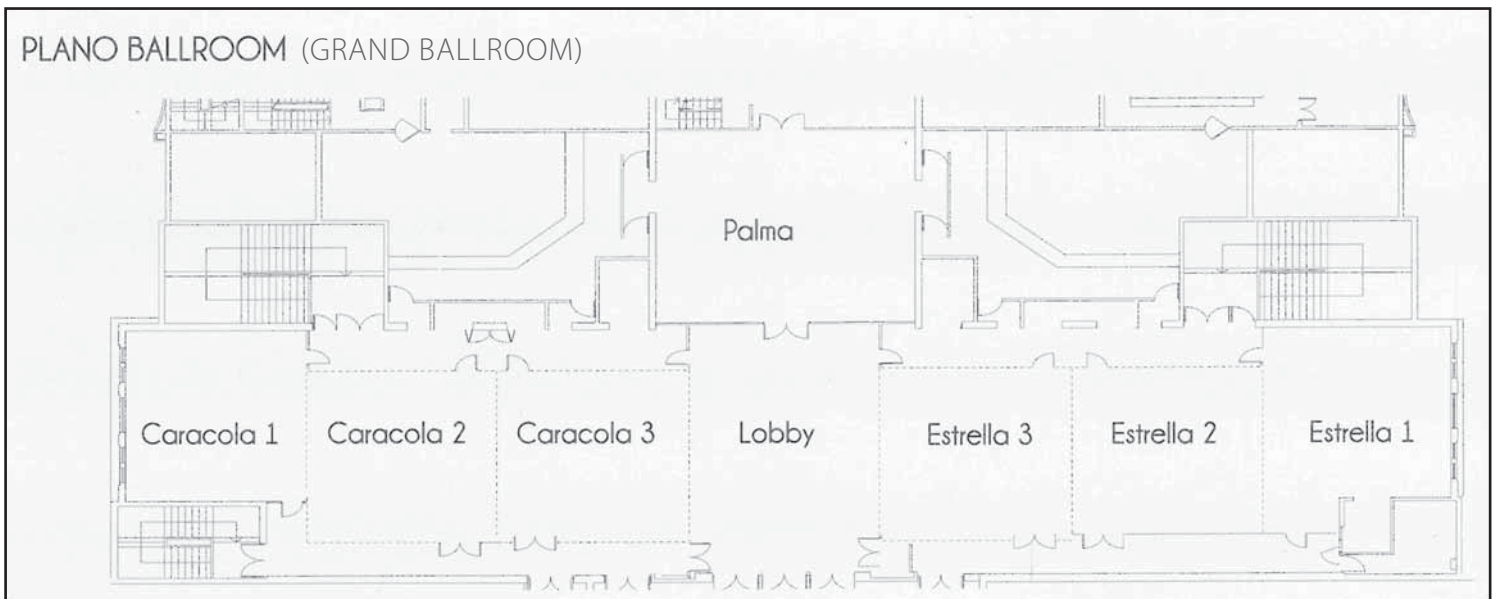
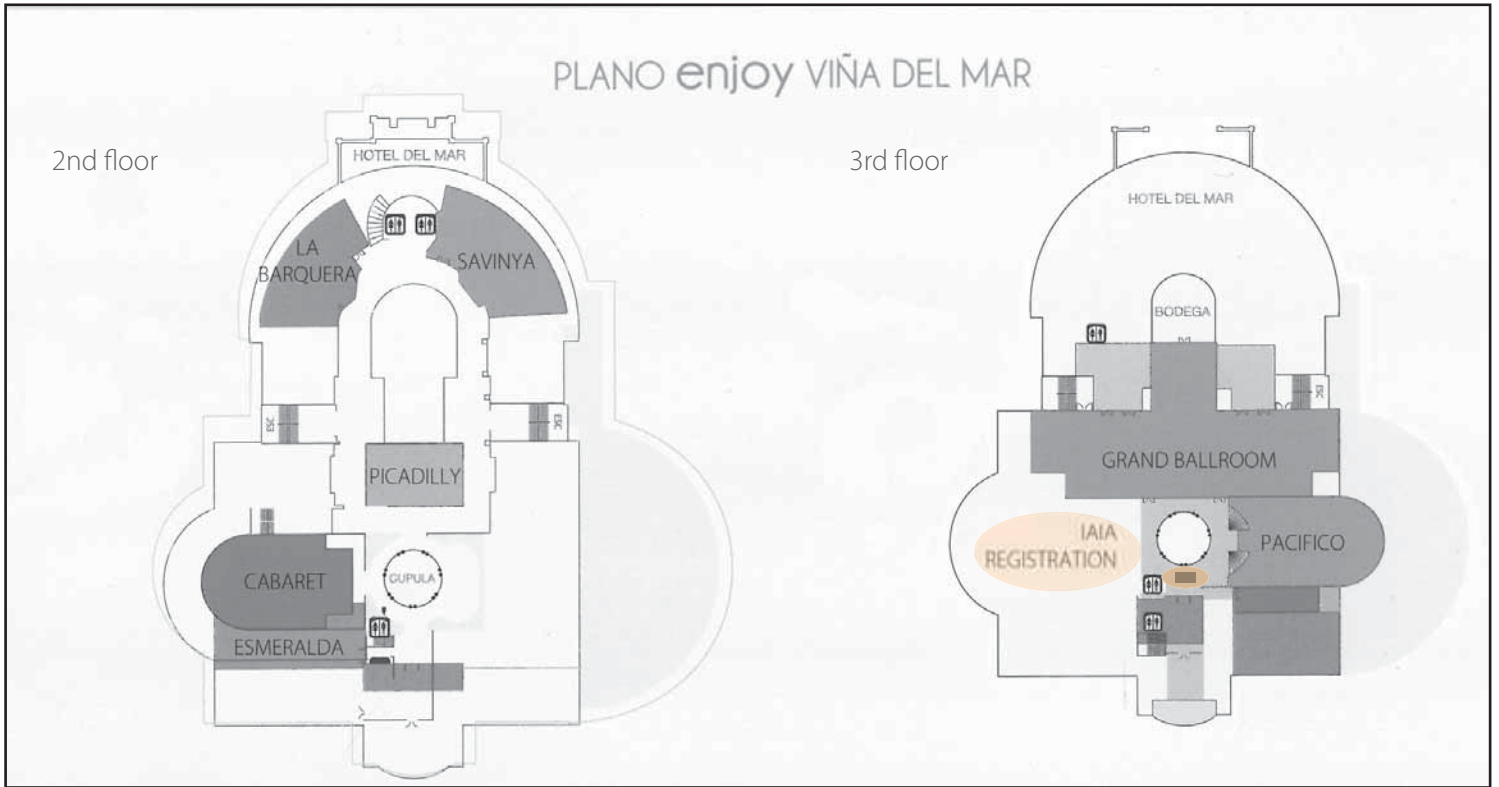
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# Venue map



Bingo restaurant: 1st floor  
 Enjoy del Mar restaurant: across the street from Enjoy (seaside)  
 Chez Gerald restaurant:  
 Avenida Perú 496, esq. 6 Norte (250m from Enjoy)



## Host city

Viña del Mar is located in the Valparaíso Region about 120 kilometers from the capital Santiago. It's known as the "Garden City" for its natural beauty, surrounded by green areas and large floral gardens. One of its main attractions is the coastline of the Pacific Ocean, enjoyed through its 13 beaches. Its numerous palaces that belonged to ancient times recognized families of the city have become important and elegant museums. The city is also characterized by its intense cultural, artistic and entertainment.

## Transportation

Viña del Mar has a public transport system of buses and trains (Metro Valparaíso). You can travel to several interesting places around such as Valparaíso, Reñaca, Con-Con , etc.

**Bus fares:** CHL \$470

**Train fares:** from CHL \$281 to CHL \$1,110 (depending on distance and time)

### Taxis and collective taxis:

**Taxis:** these are black with yellow. Local organizers recommend taxis located outside hotels. Fares are CHL \$ 200-250 (aprox.) for flag fall, then CHL\$ 200 (aprox.) for each additional 200 m.

**Collective taxis:** These have specific routes and are shared with up to 4 passengers. These are more expensive than buses but also faster and safer.

## Business hours

Banks and general public services generally open at 09:00. The opening hours of public banks are Monday to Friday from 09:00 to 14:00. Money Exchange and businesses open Monday to Friday from 10:00 to 21:00.

## Currency and credit cards

The currency in Chile is the "Peso."

There are coins of 1, 5, 10, 50, 100 and 500 pesos and bills of 500, 1,000, 2,000, 5,000, 10,000 and 20,000 pesos.

The US dollar is currently the most widely used currency in international transactions. The value of the dollar in Chile is determined by the market. One US dollar equals \$561 pesos (March 2014). We recommend changing your money in banks or Money Exchange Houses.

## Tipping

10% is considered a reasonable tip in Chile. Some restaurants include it in the bills and others do not. However, the amount given as a tip is voluntary; you can even ask for it to be removed and tip the amount you feel is appropriate. Tipping for other services, such as taxi drivers, porters, or bellhops is not common but is at the discretion of the customers.

## Smoking

It is illegal to smoke in enclosed public places.

## Taxes and tax waiver for visitors

The tax in Chile is 19 % and is included in prices. When entering Chile (by cruise, vehicle or plane), at customs, travelers will need to fill out a tourist card that allows them to stay for up to 90 days. Travelers will have to present the tourist card to Customs officials when leaving the country. Hotels can waive Chile's 19% room tax when the guest shows this card and pays with U.S. dollars or a foreign credit card.

## Holiday advisory

Holy Week (Sunday, 13 April-Saturday, 19 April 2014) is a major travel holiday for Chileans.

## Departure fee

There is a \$30 departure tax to leave Chile. Often it is included in the price of the ticket, but it is best to confirm before purchase.

## OUTSTANDING PRESENTATIONS

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

**Presentation title** .....

Session Date	Session Time			
Tuesday 8 April	11:00	14:30	16:30	
Wednesday 9 April	09:00	11:00	14:30	16:30
Thursday 10 April	09:00	11:00	14:30	16:30
Friday 11 April	09:00			

**What makes this presentation outstanding?**  
 .....  
 .....  
 .....

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

**Presentation title** .....

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 .....  
 .....  
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Friday 11 April	09:00			

**What makes this presentation outstanding?**  
 .....  
 .....  
 .....

## BEST POSTER: PUBLIC CHOICE

**My vote for Best Poster**

Poster #:

\_\_\_\_\_

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 Friday, 11 April.

Vote for your favorite poster!

Please drop off your ballot at the registration desk by 11:00 on Thursday 10 April.

## IAIA15 Impact Assessment in the Digital Age

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?

### Main objectives:

- Exploring opportunities and risks of a global networking society
- Growing urbanization and Smart Cities solutions
- New technology role in modelling and visualizing societal changes associated with major projects
- How stakeholder consultation is changing through the new social participation
- How communication technology is changing the role of experts and non-experts
- How instant availability of information is influencing impact assessment
- New tools for risk assessors and managers

### Conference topics will also include:

- Digital media in impact assessment
- Pitfalls and opportunities of social media in impact assessment
- Electric powered transportation

### Plus IAIA Section special-interest topics:

- |   |                                      |
|---|--------------------------------------|
| ➤ Agriculture, forestry and fisheries       | ➤ Energy                             |
| ➤ Biodiversity and ecology                  | ➤ Health                             |
| ➤ Climate change                            | ➤ IA Law, Policies, and Practice     |
| ➤ Corporate stewardship and risk management | ➤ IA of Trade-Related Policies       |
| ➤ Cultural heritage                         | ➤ Indigenous Peoples                 |
| ➤ Disasters and conflicts                   | ➤ Public participation               |
|   | ➤ Social impact assessment           |
|   | ➤ Strategic environmental assessment |

### Activities and technical visits

In addition to conference sessions, workshops, and training courses, you will be able to choose technical visits, sightseeing tours, networking opportunities, and more. Potential technical visits around the region include:

- The MOSE system safeguarding Venice and the entire lagoon area from high waters.
- Cantinetta Antinori (Winery) in the Antinori Mansion, one of the best examples of 15th century Florentine architecture.
- Cultural walking tour of Florence's main monuments and historical center.
- Eataly facilities, encouraging cultural rediscovery of roots of food and wine in School of Agricultural Sciences, University of Bologna, with various technical locations, labs, and farms
- TerniEnergia in Narni, an integrated energy-from-waste plant with a biodigester and composting sections.

**F**lorence, or *Firenze*, is the capital city of the Italian region of Tuscany. A center of medieval European trade and finance, Florence is considered the birthplace of the Renaissance. The city's attractive and walkable historic center was declared a UNESCO World Heritage Site in 1982 and showcases Renaissance palaces, beautiful bridges, and the domed cathedral of Santa Maria del Fiore. From Michelangelo's iconic *David* to the delicate paintings of Botticelli, Florence is also home to some of the world's finest art.

20-23 April 2015 ➤ Florence, Italy



## ABOUT THE HOST

The Environmental Assessment Service of Chile (SEA) is a government agency created in 2010 to manage the Environmental Impact Assessment System (SEIA), promote quality impact assessment, and encourage public participation. Its mission is to contribute to sustainable development, and preservation of natural resources and quality of life of the inhabitants of the country, by guaranteeing a technical, transparent and efficient environmental assessment. For further information, visit SEA's website: [sea.gob.cl](http://sea.gob.cl).



## ABOUT IAIA

### IAIA as an organization promotes the following:

We compile or review impact assessments with integrity and honesty, and free from misrepresentation or deliberate bias.

Our personal beliefs should not interfere with fair representation of the potential impacts of policies, plans, programs, and projects.

We uphold the principle of freedom of access to information and the right of citizens to participate in decisions.

We subscribe to a holistic approach to impact assessment.

We seek sustainable and equitable outcomes from human actions that affect ecosystem and social functions.

We will seek to encourage a process of impact assessment that averts infringement of the human rights of any section of society.

We do not condone the use of violence, harassment, intimidation or undue force in connection with any aspect of impact assessment or implementation of an intervention arising from impact assessment.

We conduct impact assessments in the awareness that different groups in society experience benefits and harm in different ways. We seek to take gender and other social differences into account, and we are especially mindful of the concerns of Indigenous Peoples.

We strive to promote considerations of equity as a fundamental element of impact assessment.

We give due regard to the rights and interests of future generations.

We strive for excellence by maintaining and enhancing our own knowledge and skills, by encouraging the professional development of co-workers, and by fostering the aspirations of potential members of the profession.

We do not advance our private interests to the detriment of the public, our clients or employing institutions.

## Greening the conference

Does IAIA practice what it preaches? Yes, and more so every year. IAIA takes the following steps (as practical and possible) to mitigate the impacts of our conferences:

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

- Encourage delegates to purchase carbon-offset credits for their flights
- Encourage delegates to return name badge holders
- Provide refillable, reusable bottles and bulk water source

## Reducing the Carbon Footprint

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

A small portion of each registration fee will be used to help offset the carbon footprint of the conference.

*Delegates are welcome to make additional suggestions on the IAIA14 conference evaluation form (which will be distributed electronically to delegates following the conference) or by contacting IAIA HQ any time.*

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# DEVELOPMENT AND IMPLEMENTATION OF STRATEGIC ENVIRONMENTAL ASSESSMENT IN TAIWAN

## - CASE STUDY OF TAOYUAN AEROTROPOLIS PROJECT

Yen-Nan Chen

Department of Comprehensive Planning, Environmental Protection Administration, Taiwan

### Introduction

The Environmental Impact Assessment Act was first announced on 30 December 1994 in Taiwan. The Strategic Environmental Assessment (SEA) processes were built since 2000. SEA is required for major government policies for which there is concern of environmental impact, and ten government policies had conducted SEA until today. On the other hand, the Executive Yuan has announced the launching of Taoyuan Aerotropolis Project, which is the largest construction project in the history of Taiwan. Taoyuan Aerotropolis project aims to transform Taiwan Taoyuan International Airport and its environs into a world-class transportation and logistics hub. The central government is responsible for developing the airport and an adjacent free trade zone, while local government will handle surrounding areas in accordance with land use and urban planning policies.

### TAOYUAN AEROTROPOLIS PROJECT

Taoyuan Aerotropolis is the project of “i-Taiwan 12 Projects”. As the gateway city of Taiwan, Taoyuan is at a prime location in the international logistic network, with the Taoyuan International airport to the Taipei Port, as well as having comprehensive highways, railways and MRT networks. Taoyuan Aerotropolis will enhance the competitiveness of the Taoyuan Airport, facilitate comprehensive development of Taoyuan, and contribute to the transforming economic development internationalization of Taiwan.

#### Location of Taoyuan Aerotropolis



- Airport MRT Line Links Taoyuan and Taipei.
- Reachable within an hour-drive between Taoyuan Int'l Airport and major cities in Taipei and Hsinzhu.

### Specific Policy Items Requiring the Conduct of an EIA in Taiwan

Policy Name	Policy Item
1. Industrial policies	The establishment of an industrial zone.
	Industrial policies on energy density base
2. Mining industry development policies	Sand and gravel development and supply.
3. Water resources development policies	Water resources development plan
4. Land use policies	The establishment of a golf course.
	Changes in scope of tap water quality and water volume protection area.
	Changes in scope of drinking water quality and water volume protection area
	Newly determined or expanded urban planning programs (using land area of 10 hectares or more)
	Regional plans of municipal or county
5. Energy policies	Energy quotas.
6. Transportation policies	Major highway or railway construction.
7. Waste disposal policies	Garbage disposal.
	Clean-up of Industrial Waste
8. Policies on radioactive nuclear waste storage	Management of Radioactive Waste
9. Others	-

### Consultations on the Policy of TAOYUAN AEROTROPOLIS Project

#### A. Recommendations on the Future Marketing Strategy Plan

The project's development strategy, which is oriented on the idea of “a leading airport and a sustainably green and healthy city”. Apart from the 5OD development concepts – transit oriented development (TOD), pedestrian oriented development (POD), green oriented development (GOD), culture oriented development (COD) and water oriented development (WOD), it is suggested to include the sustainably green and healthy concepts, such as “a low-carbon community” and “pollution reduction in stages”, in this project.

#### B. Estimation and Control of Pollution Total Quantity

- 1. Prevention of Air Pollution:** Suggested to delimit an appropriate size of area inside the planning area as the clean zone.
- 2. Prevention of Water Pollution:** It is suggested to, at the site planning stage, introduce the “Low Impact Development” (LID) and “Best Management Practices” (BMPs) concepts and methods to reduce the impact of storm runoff.
- 3. Waste Disposal:** Regarding the wastes, it is suggested to adopt the “Resource Recycling – Zero Waste” promotion program with priority and to promote “Source Reduction and Recycling” by conducting environmental education.
- 4. Soil Pollution Remediation:** Regarding the remediation plan of the 15.41 hectare polluted farmlands inside the planning area, it is suggested to have the land restored through green remediation.
- 5. Greenhouse Gas Reduction:** According to the greenhouse gas reduction goal stipulated in the “Guidelines for Sustainable Energy Policy” (having the emission returned to the amount of 2005 in 2020; having the emission returned to the amount of 2000 in 2025; and reducing the 2050 emission amount to 50% of the amount of 2000), this project has set the estimated annual CO<sub>2</sub> emission – 9,157,000 tons – as the bottom line of greenhouse emission. This number is then used to stipulate concrete reduction goals and audit plan for the greenhouse gas management. Most importantly, apart from the green transportation measures which are already included in the plan, it is suggested to specify below points in the urban planning project: buildings above certain size shall receive a green building label above the copper grade, whereas development activities under the EIA and public buildings shall receive a green building label above the silver grade. The reason is that they represent the nation and are real examples of realizing a sustainable low-carbon city.

**C. Traffic Noise Impact :** The design strength of buildings that can effectively lower the noise level shall be included in regulations of the urban planning.

#### D. Maintenance of the Ecological Landscape and Habitat

The pond system is the “Potential World Heritage Site” proposed by the Ministry of Culture. Its counts on how human uses the new and stable environment system created and formed in the natural environment. Therefore, it is suggested that Taoyuan County Government shall, during the promotion period of this project, conduct a comprehensive evaluation not only on the 24 ponds inside the planning area, but also on the pond system of the Taoyuan plateau to plan the installation and activation of the wetland and pond. After the evaluation, the planning ecological landscape. This helps to fully integrate and implement the preservation and maintenance of the world heritage, to protect ecological wetland, to well use water resources and to maintain the microclimate system.

**E. Adjustment on the Climate Change:** As the vulnerability analysis can strengthen the restoring force, a risk evaluation and analysis shall be conducted to have the project adjusted and integrated with the climate change.

**F. Evaluation of Economic Benefits :** The sustainable development and eradication of poverty listed in “The Future We Want” published by the UN Rio+20 are also recommended as a reference.