

# A Sustainability Assessment of the International Association of Impact Assessment Conference

Seeking Environmental, Economic and Social Gains for the IAIA Conference

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## ABSTRACT

A Sustainability Assessment of the International Association for Impact Assessment (IAIA) conference was undertaken based on a seven-step process. It evaluated the most sustainable means of achieving the IAIA's conference objectives. The assessment utilized a **win, win, win**, approach to sustainability, seeking simultaneous **social, economic and environmental** gains. A decision-making protocol was created to choose between the alternatives of No Conference, a Traditional Conference, a Virtual Conference or a Hybrid Conference approach. It is recommended that IAIA utilize a Hybrid approach, as this is the most sustainable means of achieving their objectives.

## INTRODUCTION

This report presents the findings of a Sustainability Assessment (SA) into the IAIA conference. It reviews current literature to present and evaluate alternatives and options to enhance the sustainability of the conference. The Sustainability Assessment process utilized was derived from the work of Pope (2007).

### *What is Sustainability Assessment Anyway?*

Sustainability Assessment originated from earlier more reactive environmental management tools such as Environmental Impact Assessment and Strategic Environmental Assessment. The ultimate aim of the Sustainability Assessment is to integrate environmental, social and economic considerations into the decision making process to ensure that the actions implemented are truly sustainable (Pope et al 2004). This is achieved by considering these factors throughout project design, rather than only once a decision has been made (Morrison-Saunders 2006).

## STEP ONE – ISSUE TO BE ADDRESSED

This Sustainability Assessment addresses the alternatives available to the IAIA to achieve their mission statement of providing an international forum to enhance the best practice of Impact Assessment (IA) around the globe (IAIA 2007).

## STEP TWO – DESIRED OUTCOMES

*The aim of this Sustainability Assessment is to determine the most sustainable means of the IAIA providing an international forum for advancing best practice in all forms of impact assessment around the globe*

### *What do you mean 'Sustainable'?*

Sustainability is integrating Social, Environmental and Economic considerations to manage each to meet the needs of the present without compromising the future (WCED 1987). To be truly sustainable Environmental, Economic and Social factors must be considered at the same time, and the relationships between each must be explored (Gibson 2006). This assessment utilizes a **win, win, win** approach to sustainability. This means to be sustainable there must be social, environmental and economic gains. Wherever there is overlap each factor is considered of equal importance. Offsets may be used to provide a net benefit within a factor, but one factor cannot be traded off in favour of another (Morrison-Saunders and Therivel 2006).



### STEP THREE – SUSTAINABILITY DECISION MAKING PROTOCOL

The sustainability decision-making protocol provides the basis for guiding and distinguishing between alternatives (Pope 2007). Targets provide quantitative measures to assess alternatives against while acceptability criteria are the baselines that alternatives must at least maintain in order to be viable. Considerations that can be easily mitigated have not been included in the decision making protocol. These will be included at the management stage.

### STEP FOUR – ALTERNATIVES AND OPTIONS

The following alternatives are entirely different ways to achieve the IAIA's objectives for its conference. Variations within an alternative have been described as options (Therivel 2004).

The **No Conference** alternative has been presented to determine if a conference is necessary for the IAIA to achieve its objectives. Existing IAIA activities may feasibly meet the IAIA's strategic vision (eg Journal & website).

A **Traditional Conference** brings people together to participate in a face-to-face sharing of knowledge through seminars, presentations, workshops and interactive sessions. Options include an *International Conference* (hosted in one location requiring

<i>Sustainability Decision Making Protocol</i>		
Decision Making Criteria	Acceptability Criteria	Targets
<b>Social Progress</b>		
Does the conference allow for formation of personal relationships and the development of new international partnerships? Can the conference effectively advance IA best practice? Does the conference provide opportunities to all world members?	IAIA08 should provide opportunities for international member participation and allow interaction between international attendees. At a minimum the conference must be accessible to attendees from Australia, North and South America, Europe, Asia and Africa.	Provide for at least 800 attendees Attract attendees from at least 7 different countries Develop new international working partnerships during conference period
<b>Economic viability</b>		
Will the conference be economically viable at a minimal cost to attendees?	IAIA conference should at a minimum be cost neutral to organizers and affordable to most environmental professionals.	Conference takings to equal or better conference expenditure Conference at low cost to attendees
<b>Prudent use of natural resources</b>		
Does the conference minimize kilometers traveled? Can the conference maximize use of renewable energy sources?	IAIA08 must ensure resources are consumed responsibly and that the conference avoids release of carbon dioxide to the atmosphere and offsets that which cannot be reduced	To offset 100% of carbon dioxide emissions 50% of electricity from renewable energy sources Offset total projected energy use

participants to travel to the event from around the globe) or a *Satellite Conference* (a series of independent conferences run in different regions that achieve common objectives but source presentations locally)

A *Virtual Conference* embraces recent developments in technology to allow practitioners to communicate without having to travel from their home or office (Siemens et al 2008). Options include *Internet Forums* (presentations uploaded to a server available for participants to download and view in their own time (Schubert 2007), *Video Conferencing* (live streaming of a presentation during a set time period), or *Three Dimensional Virtual Platforms* such as Second Life (software platforms that allows people to interact in a virtual environment by moving an avatar (a computer character of themselves) through a 3D virtual world (Linden Research Inc 2008)

A *Hybrid Approach* is a combination of the two previous alternatives.

## STEP FIVE – EVALUATION OF ALTERNATIVES

The No Conference alternative cannot be considered a viable alternative, as it does not promote any development of new international working partnerships. Virtual conferences also have short falls in this area as they present constraints on communication that generate distrust and reduce the educational benefit of the conference (Gammelgaard and Ritter 2008; Warkentin et al 1997). Traditional face-to-face conferences are more effective at developing close working relationships (Nardi and Whittaker 2002) and therefore generate rigorous information exchange, education and enhancement of best practice (Storper and Venables 2004). For these reasons it is apparent that to achieve its *social* objectives the conference must have a Traditional component.

Traditional, Virtual and Hybrid alternatives can each be managed to ensure an *economically* viable conference, however Traditional conferences come at a higher cost to participants due to long distance travel and accommodation expenses. Satellite conferences would have shorter flights, reducing cost considerably, however this does not provide for face-to-face interaction between participants from around the world. This means comparative practice studies could not take place in a face-to-face setting. A Hybrid approach could bridge this gap by providing some interaction between conferences, however logistical issues such as technological infrastructure and time zonation arise. A Hybrid alternative increases social equity and accessibility to the conference as it provides multiple options for cost and involvement.

Traditional conference formats produce high carbon dioxide emissions due to long distance air travel. International aviation is currently responsible for approximately 2.5% to 3% of global yearly carbon dioxide emissions and steadily rising (Scheelhaase and Grimme 2007). Carbon emissions from flights vary depending on the duration of the flight. Short flights actually release more carbon dioxide per kilometer traveled due to the excessive fuel use during take off and landing (CNC Ltd 2008). This means travel related carbon emissions for both forms of Traditional Conference are high.

The amount of carbon dioxide emitted due to any form of IAIA conference is very low when compared with total global emissions. However, it must be considered due to its cumulative nature and the potential for irreversible, large-scale impacts. Carbon offsets can provide mitigation after emissions have been avoided or minimized, although to be truly sustainable carbon dioxide release should be avoided altogether. Effective *environmental* offsets must ensure a long lasting benefit (EPA 2006). Carbon offsets from reforestation have a lifetime of 50years (Climate Trust 2005) this is a relatively short time period in the scheme of climate change. Other sequestration techniques such as geological storage or deep ocean injection may have adverse effects on existing systems and the potential for mass carbon dioxide release remains due to uncertainties in the techniques (Pittock 2005). Therefore in accordance with the precautionary

principle carbon dioxide emissions should be avoided and only residual emissions should be offset during mitigation.

## STEP SIX – PREFERRED ALTERNATIVE

A Hybrid Approach is the most sustainable alternative providing an international forum for advancing best practice in all forms of impact assessment. This format offers the best of Traditional and Virtual conferences in one. The most sustainable options within this alternative are an International Conference and a combination of Internet Forums and Video Conferencing. These options have been selected for their ability to ensure **social**, **economic** and **environmental** gains.

A Hybrid conference provides for valuable face-to-face interaction, while also allowing those who cannot attend the conference in person to still be involved in a virtual setting. Economically the conference is accessible to a larger range of attendees at a range of costs. Environmental concerns regarding carbon dioxide emissions will be overridden by improvements in Impact Assessment best practice producing a net environmental gain. This demonstrates the truly integrated nature of sustainability assessment whereby **social**, **economic** and **environmental** factors must be considered in unison.

## STEP SEVEN– MITIGATION AND MANAGEMENT

To maximize sustainable outcomes the following measures should be taken

- Offset all carbon dioxide emissions
- Minimize travel requirements of attendees during conference period
- Seek energy from renewable energy sources
- Review numbers of working partnerships developed during the conference

## CONCLUSION & RECOMMENDATIONS

I recommend that IAIA utilize a Hybrid Approach for future conferences. This format is the most sustainable means of achieving the strategic vision of the IAIA. The format demonstrates sustainable principles and provides **social**, **economic** and **environmental** gains.

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