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IA and climate change followup and next steps: 2016

Format: Roundtable
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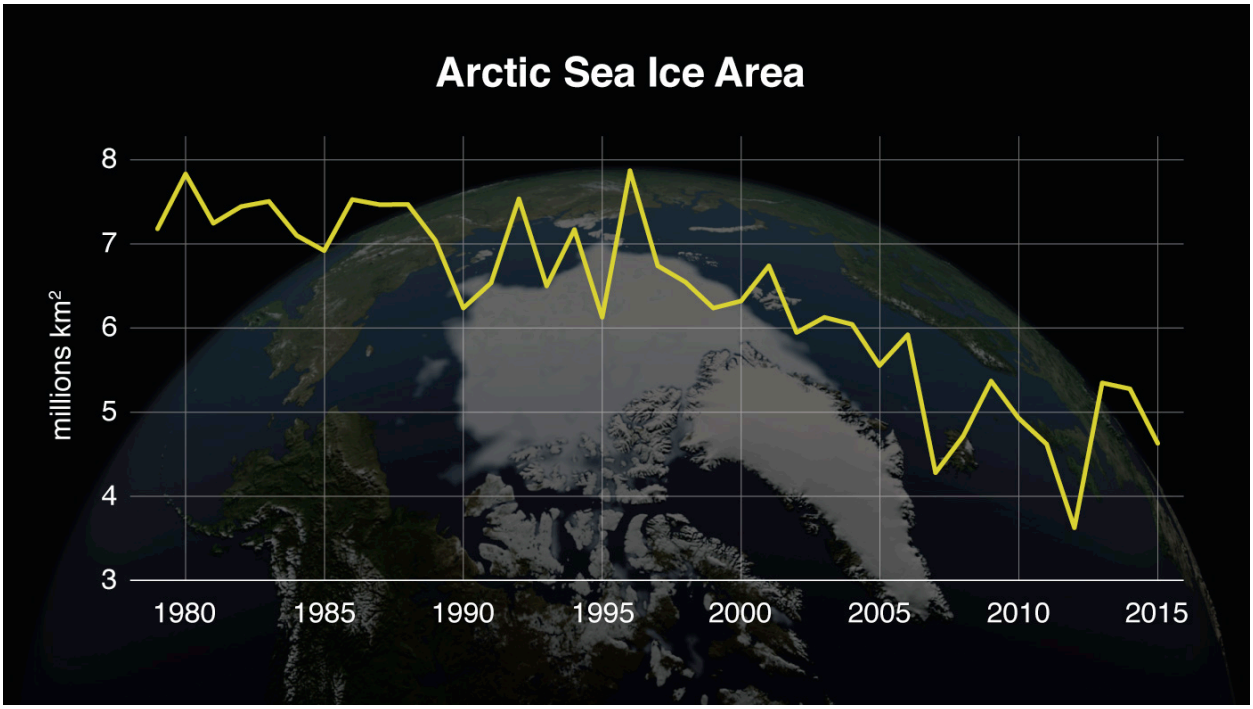
IAIA Section: Climate Change

This roundtable will use the "IA and Climate Change Follow up and Next Steps 2016" document as the starting point for discussing accomplishments to date, constraints to more effective action, and how we might best apply the power of our Association and our members to respond to the challenges before us. The results of the roundtable will serve as the foundation for an updated "IA and Climate Change Follow-up and Next Steps" document.



See: http://climate.nasa.gov/interactives/global-ice-viewer/ Credits: Written and produced by: Laura Faye Tenenbaum and Randal Jackson. Design and development: Moore Boeck. Science consultants: Eric Rignot, Ronald Kwok, Josh Willis, Isabella Velicogna. Image and video credits: Puncak Jaya in 1936 and 1972 by J.J. Dozy, USGS. Other glacier pairs are from the National Snow and Ice Data Center (NSIDC), NASA, and courtesy Panopticon Gallery and Alton Byers/The Mountain Institute. Arctic video animation: Goddard Scientific Visualization Studio. Greenland time-lapse movies: Extreme Ice Survey.

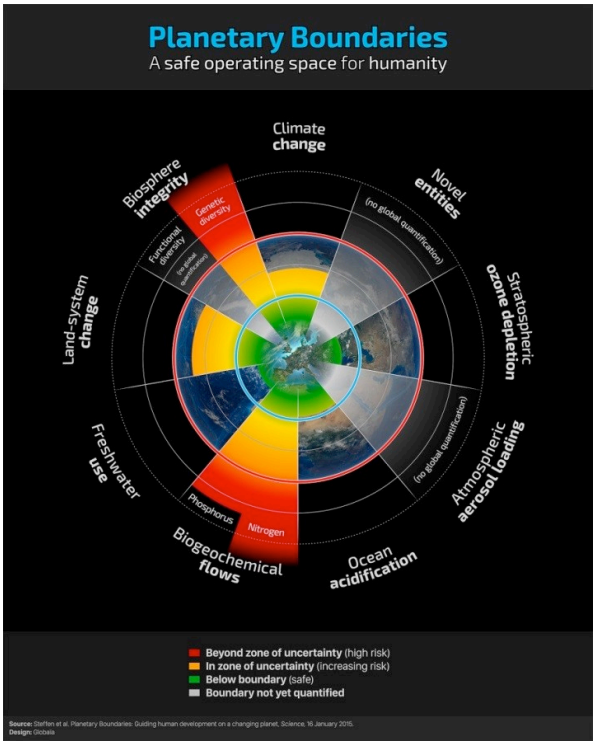
International Association for Impact Assessment (IAIA): Climate Change and Impact Assessment Follow-up and Next Steps

Six years ago IAIA organized two special symposia on climate change and impact assessment in Aalborg, Denmark and Washington, D.C. Following these two events an IAIA Climate Change Section was formed, and an international group of IAIA members and practitioners began to discuss and develop a set of observations, recommendations and an action plan that were reviewed at IAIA '13 in Calgary, Alberta, IAIA '14 in Viña del Mar, Chile and IAIA '15 in Florence, Italy as part of roundtable discussions. This draft is based on an updated review and additional refinements from IAIA '15.

Comments are welcome at any time and should be forwarded to info@iaia.org.

I. Key Observations

Integration of Climate Change with Other Planetary Impacts. In addition to its significance for inter- and intra-generational equity, climate change can adversely affect the ability of governments and the private sector to alleviate poverty and to strengthen sustainable economic and environmental systems, including improvements in food security, health and other aspects of human well-being. However, climate change cannot be considered in isolation. In September 2009, *Nature* published an article by a group of leading scientists that suggested humanity must stay within defined planetary boundaries to provide a safe operating space for a range of essential Earth-system processes so as to avoid catastrophic environmental change.[1] As measures to assess planetary boundaries they identified several major indicators of change. Note that in the diagram to the right, they conclude that four boundaries may have already been transgressed, of which biogeochemical flows may be the most serious, followed by loss of



[1] (Nature 461, 472–475; 2009). In proposing the concept of 'planetary boundaries', Johan Rockström of the Stockholm Resilience Centre and co-authors present a new framework for measuring stress to the Earth system and define a safe operating space for human existence. He explains the issues eloquently in a 2010 TED talk https://www.youtube.com/watch?v=RgqtrlixYR4 Another article from *Nature* by AD Barnosky (June 2012) *Approaching a state shift in the Earth's Biosphere* examines the plausibility of a planetary-scale 'tipping point,' highlighting the need to improve biological forecasting by detecting early warning signs of critical transitions on global as well as local scales. This article receives special focus in the Slate News Science video Earth Could Reach Devastating Ecological Tipping Point by 2025. This work is also summarized in a 7 minute video presentation on planetary boundaries. See https://www.youtube.com/watch?v=5PaHAgvv2Xs.

genetic diversity, land system changes and then climate change. They posit that crossing even one of these planetary boundaries risks triggering abrupt or irreversible changes that would be very damaging or even catastrophic to global society and ecosystem services. Furthermore, if one boundary is transgressed, they postulate there is a more serious risk of breaching others.

Since 2009, the framework has been subject to scientific review and increasing interest and discussion of efforts to advance global sustainability. It has now been updated and published in Science in January 2015.[2] This improvement in planetary boundary data provides vital baseline information for '*backcasting*' necessary global and regional impact assessment mitigation and monitoring strategies and plans.

- *Integration of Climate Change Assessment into Impact Assessment Processes*. Given the risks summarized above, far greater attention needs to be placed on the systematic processes of Cumulative Effects Assessment (CEA), Strategic Environmental Assessment (SEA), risk management and sustainability assurance to guide policies, plans, programs and projects (P4s). These same processes can be applied to the impacts of P4's on climate and the impacts of climate and greenhouse gas (GHG emissions) on P4s. SEA can offer a wide spatial and temporal view of approaches to risk management, and the changes societies need to make to mitigate and adapt to climate change.[3] SEA addresses both environmental and social issues and is carried out before project-level assessments. Further guidance is needed to incorporate climate change adaptation and mitigation into EIA/SEA, such as the OECD SEA Task Team SEA and Climate Change Adaptation Advisory Note

We live in a world that is home to three times as many people—7.4 billion—as when I was born in 1936, adding a net of about 250,000 each day and heading for more than 2 billion additional people by mid-century, just 34 years from now.

Half of us live in extreme poverty, at less than $2 per day; some 800 million of us are malnourished to the point where our brains and bodies can't develop properly; 100 million of us are on the verge of starvation at any one time. Oxfam has estimated that 62 people own half of the world's wealth.

We are using, according to an estimate by our sustainable capacity than exists. As we do so, the world is continuously becoming less resilient, less beautiful, less rich, and less sustainable. (What this means is that if the sustainable capacity of the world were to be increased immediately by 50 percent, we would be no better off than we are now, but we would not be depleting our future capital.)

Peter Raven, President Emeritus of the Missouri Botanical Garden,

From Andrew Revkin's New York Times blog Dot.Earthhttp://dotearth.blogs.nytimes.com/2016/03/16/while-they-were-shouting-a-botanists-lament-about-presidential-politics/?module=BlogPost-ReadMore&version=Blog%20Main&action=Click&contentCollection=politics&pgtype=Blogs&region=Body#more-57246

2 Steffen et al. 2015. Planetary Boundaries: Guiding human development on a changing planet. Science, January 2015. DOI: 10.1126/science.1259855 See the Stockholm Resiliency Centre webpage on this study at http://www.stockholmresilience.org/21/research/research-news/1-15-2015-planetary-boundaries-2.0---new-and-improved.html This site also links to a critique posted on Andrew Revkin's New York Times blog January 15, 2015.

3 See the video prepared by IAIA contributor Peter Croal on the value of SEA at http://www.youtube.com/watch?v=XZyFiUj8W_w

(October 2010).

- *Further Strengthening of EIA/SEA.* The rigorous processes of EIA/SEA help address and prioritize climate change adaptation and mitigation. However, to fulfill their potential to contribute to climate change mitigation and adaptation, IA practitioners should:

    - seek ways to test and harmonize the proliferation of analysis protocols that have been developed to incorporate climate change considerations into impact assessment processes

    - develop procedures and legal requirements to ensure that climate related information is gathered and incorporated with data gathered as part of the EIA/SEA

    - give due consideration to the use of worst-case analysis/events

    - given the uncertainties associated with climate change, place significant emphasis on monitoring systems and broaden them to allow for periodic revisiting of EIA conclusions as mitigation commitments are implemented and adaptation programs are implemented

    - promote comprehensive assessment of both mitigation and adaptation options so synergies between them are maximized and trade-offs are properly assessed

    - give special consideration to the impacts of climate change on water resources.

    Above all, seek to apply the systematic approaches of EIA/SEA to address how people at the center of climate change are, or may be, affected and ensure they have a strong role in finding and providing solutions.

- *Improved Tools for Risk Assessment*. When making use of climate change scenarios, impact assessment practitioners need to take full account of the associated uncertainties around climate change and plan for robustness through adaptive management. Risk management frameworks can be used to understand the implications of uncertainties about climate change impacts when informing planning, investment and operation decisions. Various alternative criteria and approaches are available for decision-making under uncertainty, including well-established criteria such as minimizing the maximum adverse effect, and adopting no-regret measures. Adaptive management, in turn, requires that flexibility be built into P4s to respond to changes in the future.

- *Improved Procedures and Increased Resources.* To be able to continue to play a significant role in shaping climate change policy and in addressing climate change impacts, Multilateral Development Banks (MDBs) and other International Financial Institutions (IFIs) must secure the resources to carry out environmental assessment policy updates; develop new tools to enable better assessment of climate impacts on financial performance of investments, and cumulative effects assessment methodology.[4]

[4] See "World Bank Group Sets New Course to Help Countries Meet Urgent Climate Challenges", April 7, 2016 at http://www.worldbank.org/en/news/feature/2016/04/07/world-bank-group-sets-new-course-to-help-countries-meet-urgent-climate-challenges . Also See the World Bank Climate Change Overview Catalyzing Climate Action at http://www.worldbank.org/en/news/feature/2016/04/07/world-bank-group-sets-new-course-to-help-countries-meet-urgent-climate-challenges, which outlines the Bank's Climate Action Plan in response to COP21. Also see

- *Improved Climate Projections at Required Levels of Specificity*. Systematic consideration of climate change requires the availability of specific climate change scenarios at regional and local levels that are credible and accepted by stakeholders. Currently, this information is growing. However, lack of country-specific climate change scenarios should not be a deterrent to incorporating adaptation and mitigation considerations into P4s. Simple rules of thumb and tools available to the impact assessment community can be used to engage in dialogue and help influence decisions. Such guidance has already been developed by the OECD/DAC Task Team on SEA and Climate Change and by the Netherlands Commission on Environmental Assessment (NCEA).

- *Private Sector Outreach to Increase the Appreciation of the Value of SEA*. While SEA has been used as a public sector tool, new approaches are needed to promote its use in private financing and in the private sector. Greater attention needs to be placed on addressing the risks faced by banks and insurance companies in the face of climate change. SEA and CEA should play a much more prominent role in investment/risk management in an era ofthat baseline climate data can no longer be trusted fully, since climate change is happening. As a result we are trying to predict weather to avoid losses and injuries etc in an era of data confusion and uncertainty. Therefore IA and SEA is needed more than ever to improve and help address these greater uncertainties in risk scenario modeling. Promoting awareness and building capacity is needed among corporate managers and across the private sector to strengthen understanding of the impacts of climate change and related ecosystem services issues on businesses and industries, and surrounding communities.

- *Partner with the Insurance/Reinsurance Industry*. A simple search for "insurance companies and climate change", yields over 2 million hits A simple search for "insurance companies and climate change", yields over 2 million hits! IAIA initiated an outreach effort on Impact Assessment for the Insurance/Reinsurance Industry in November 2010 at the IAIA Special Symposium on Climate Change held at the World Bank.[5]

- *Partner with the legal profession.* In the past, IAIA has collaborated with the *Sabin Center for Climate Change Law* at Columbia University and the American Bar Association's Section of Environment, Energy, and Resources. Partnering could improve the promulgation of strong climate impact assessment legislation and regulations, as well as mitigation and monitoring requirements.

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http://www.worldbank.org/en/topic/climatechange/overview#2 A valuable point of entry for up to date descriptions of World Bank climate change mitigation and adaptation programs and projects. Also see the IFC's Climate Financing is Model for Innovation at COP-20. Dec 2014 http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/cb_home/news/feature_cop_jan2015 Also see the European Investment Bank's climate portal http://www.eib.org/projects/priorities/climate-action/index.htm Financing low-carbon growth and climate resilience.

[5] The Manager for the Willis Research Network (WRN) (www.willisresearchnetwork.com),, Rowan Douglas, organized a highly informative *Panel on Insuring Against Climate Change* at this Symposium**.** Chaired by Rowan, the panel included the following presentations/presenters: Insuring Against Climate - Debra Ballen, Institute of Building & Home Safety; Climate Risk and Opportunity: An Insurer's Perspective - Lindene E. Patton, Zurich Financial Services; Insuring Against Climate Change - Francis Ghesquiere, World Bank; Impact of Climatic Events – Avoidance and Mitigation, Chris Johnson, FM Global; Identifying and Mitigating the Risks Associated with Climate Change - Rick Hawkinberry, Willis Environmental Practice. The video recordings for these presentations are still available under the Proceedings page for the Symposium at the IAIA website, or at https://www.youtube.com/view_play_list?p=BF9B54A1FA43CB80 ***We urge anyone wishing to explore IA-Insurance-Climate Change interests view these – particularly Rowan's introductory video.***

- *Improved Public Access to Climate Information*. One of the best means of tracking the latest information on global warming and climate change is through the New York Times' site http://topics.nytimes.com/top/news/science/topics/globalwarming/index.html which provides continuously updated summaries and links to important climate change news and event. This site includes commentary and archival articles published in The New York Times and many other sources. In many countries information on national and regional climatology is scant and even where it exists it is often not available to a wide range of stakeholders. Substantial long-term investments are needed to provide climate-related information to the public. The latest climate related information needs to be readily accessible online and linked with geographic information systems (GIS). Such information is essential to the effective use of EIA/SEA. For example, see NASA's website *Global Climate Change Vital Signs of the Planet* http://climate.nasa.gov/ for excellent visual news, information and educational materials. The rapid reduction in the area of cover and thickness of the arctic ice cap is the focus of a major earth observation program currently undertaken by the European Space Agency. A report prepared for the World Bank by the Potsdam Institute in Germany entitled "*Turn Down the Heat*" indicates the world is on a path to be 4 C warmer by the end of the 21st century under current greenhouse gas emission conditions[6,7]. These efforts should tap new social media approaches to knowledge sharing and coordinated action on impact assessment and climate change, available through the internet, Facebook, mobile phone technology, YouTube, etc.

- *Integrating Considerations of Climate Change in the Life-Cycle of Infrastructure Investment Decisions*. Alternatives for addressing future climate impacts should be presented to decision-makers in SEA and CEA formats that are familiar or useful to them for life-cycle decisions on infrastructure projects.

- *Improved Communication Between the Scientific Community and Impact Assessment Practitioners*. New and more effective communication tools are needed between the climate change community and impact assessment practitioners so that climate change information can be judiciously incorporated within EIA/SEA. Similarly, in order to keep each other updated on technical developments, continuous communication is vital between impact assessment practitioners, sector experts, social science experts, and climate experts. Such cross-communication is not easily achieved among professionals with specialized *siloed* areas of expertise. IAIA can play a key role in fostering cross-disciplinary application of EIA/SEA and CEA among these specialists.

II. Recommended Actions

Many specialists believe that engaging different stakeholders and reaching climate scientists on EIA/SEA processes is essential in addressing climate change challenges. New EIA/SEA and CEA tools and approaches to engaging and reaching out to the climate science community and investment/risk

[6] http://www.worldbank.org/en/news/feature/2012/11/18/Climate-change-report-warns-dramatically-warmer-world-this-century

[7] In many ways public awareness at large is vital, not just the findings of scientists and social scientists, to fostering 'foresight' intelligence among decision-makers. See Ehrlich PR, Ehrlich AH. 2013. Can a collapse of global civilization be avoided? Proc R Soc B 280: 20122845. http://dx.doi.org/10.1098/rspb.2012.2845

management are essential to achieving successful integration of climate change considerations into decision-making processes.

Climate change raises new uncertainties and risks, introducing challenges to the establishment of baselines and use of predictive science, and to the application of the rigorous and systematic processes of EIA and SEA. Decision-makers should not use the existence of complexity and uncertainties as an excuse for no-action, nor should impact assessment practitioners throw up their hands in confusion. *Increasingly, elements of complex systems are yielding to computational simplification and modeling*. As practitioners we need to accept discomfort and engage with uncertainty in science and policy making by: (i) acknowledging that there are new risks, uncertainties and complexities in a world with climate change; (ii) explaining them clearly so that the uncertainties are well understood by decision-makers; and (iii) being explicit about the assumptions made.

A need exists to build a broader constituency that supports IAIA's effort to make a paradigm shift from "looking at only the impacts of the project on the environment" to also "looking at the impacts of the environment on the project."

Continuing efforts are needed to document and analyze cases from all countries in the use of EIA and SEA processes to address climate change challenges; to compare and harmonize the different protocols that are being applied; to translate them into people friendly terminology; to draw on the expertise of communication specialists; and to engage decision-makers from these countries in broad discussion of climate change and impact assessment issues. These efforts should also help assure climate change is integrated in EIA/SEA processes. This could build on the stock-taking being carried out by the OECD/DAC Task Team on SEA and Climate Change.

Guidance is needed on how to obtain and improve upon the collection and analysis of climate data for assessments in regions of interest over the next 30-40 years.

Similarly, monitoring impacts under the conditions of new uncertainty posed by climate change requires new guidance.

Be realistic. Pursue an agenda whose outcomes are within the realm of possibility for the Association and its membership.

Recommended Near-term Actions and Status

Based on feedback from IAIA's Climate Change Symposia and discussion by IAIA specialists and the IAIA Climate Change Section, key near-term recommended actions are provided below, together with a status report as of April 2016:

Key: Limited Progress (LP); Moderate Progress (MP); Significant Progress (SP)

1. Publicize and promote the new IAIA Climate Change in Impact Assessment International Best Practice Principles. This guide includes IAIA's statement on climate change and impact assessment, describing the challenge of global climate change and how impact assessment can assist in improving decision-making to mitigate GHG emissions and prepare for global climate and ecosystem changes.

   Status: On-going with greater prominence provided through IAIA's website (MP).

2. Publicize the IAIA Fastips on Climate Smart Decisions to IA practitioners and others wishing to apply IA processes to Climate Change mitigation and adaptation.

   Status: On-going with greater prominence provided through IAIA's website (MP).

3. Document and publicize case studies of where IA has made a difference in Climate Change adaptation and mitigation.

   Status: Arend Kolhoff of the Netherlands Commission for Environmental Assessment (NCEA) is leading an initiative to produce good practice cases where impact assessment (IA) has resulted in more 'climate-smart' development, specifically where IA has either: proven that the initial design of the project/plan was already climate-smart, or resulted in the development of a climate-smart(er) project or plan. When NCEA haa gathered about 15 cases they will prepare an interactive document. Once 30 cases have been compilied NCEA plans to prepare a publication together with IAIA.

4. Form a working group within the IAIA Climate Change Section to develop a practical plan of action to strengthen and prioritize outreach and dialogue with other communities and stakeholders beyond IAIA, starting with those sectors where clear interest and opportunities for further collaboration exist. In particular, engage with professionals and experts from the legal, insurance/reinsurance, financial and engineering sectors.[8] Reach and work with Private Sector Thought leaders. See http://www.getlittlebird.com/blog/climate-change-thought-leaders-which-fortune-20-are-engaged-on-social

   Status: Working group formed with an emphasis on reaching out to the insurance/reinsurance sector and preparation for IAIA 17 in Montreal where the Conference Theme is Climate Change and Impact Assessment (MP).

5. Apply Sustainability Assessment and Cumulative Effects Assessment (CEA) processes, since they allow for more comprehensive consideration of social, intra- and inter-generational equity, economic, and environmental impacts and actions.

   Status: Leadership needed to strengthen this initiative (LP)

6. Establish a working group within IAIA's Climate Change Section to explore how IAIA might serve as a catalyst and convener to work with First Nations and the Arctic Council on the application of cumulative effects assessment, strategic environmental assessment and sustainability assessment.[9] First Nations treaties can serve as focal points to address the lack of political support for climate change. Northern countries through the Arctic Council can help lead. Also consider promoting the creation of a treaty for the Arctic similar to the Antarctic Treaty to

[8] Contacts includ: Dr. Yannick Glemarec, Executive Coordinator of the Multi-Partner Trust Fund Office of UNDP; Cristina Rumbaitis del Rio Senior Associate Director, Program for the Rockefeller Foundation: the Sustainability Consortium which has extensive contacts with 30 of the world's largest companies (See http://www.sustainabilityconsortium.org/members/)

[9] See the Arctic councils website http://www.arctic-council.org/index.php/en/

regulate mineral exploration, shipping, and other human activities in a sensitive ecological environment. Also consider engaging UNEP in this endeavor.

Status: With IAIA Board Approval, Paul Sage is leading an effort to obtain IAIA observer status on the Arctic Council. IAIA 17 will focus on these topics in a *Special Forum on Nordic/Arctic Issues.* (MP)

7. *Partner with the Insurance/Reinsurance Industry*. A more concerted effort to engage with the insurance/reinsurance Industry would be advantageous both to IAIA practitioners and insurance/reinsurance professionals. For example, the IAIA Climate Change Section should reach out to UNEP's *Finance Initiative* and *Principles of Sustainable Insurance* http://www.unepfi.org/psi/ and to the CERES initiative on *Insurance: Insuring Our Future Climate* http://www.ceres.org/industry-initiatives/insurance which includes the *Insurer Climate Risk Disclosure Survey Report & Scorecard: 2014 Findings & Recommendations(2014)* *http://www.ceres.org/resources/reports/insurer-climate-risk-disclosure-survey-report-scorecard-2014-findings-recommendations/view* IAIA's Climate Change Section should also consider organizing special events, symposia or workshops specifically to foster greater collaboration.

   Status: An on-going focus of the existing IA and CC working group. (MP)

8. *Partner with the legal profession.* Partnering could improve the promulgation of strong climate impact assessment legislation and regulations, as well as mitigation and monitoring requirements. Very important work is being carried out by the *Sabin Center for Climate Change Law* which develops legal techniques to fight climate change, trains students and lawyers in their use, and provides up-to-date resources on key topics in climate law and regulation http://web.law.columbia.edu/climate-change. Other potential partners might include the Environmental Law Institute's climate change program http://www.eli.org/climate-energy/strengthen-capacity-adapt-climate-change.and the American Bar Association's Committee on Climate Change, Sustainable Development, and Ecosystems http://apps.americanbar.org/dch/committee.cfm?com=NR351000

   Status: Leadership needed to strengthen this initiative (LP)

9. In collaboration with the United Nations Framework Convention on Climate Change (UNFCCC), develop a guide on the Integration of CC in IA.

   Status: IAIA submitted a Board approved position paper on IA's role in climate change adaptation and mitigation. No other action at this time.

10. Continue to promote the principles of the IAIA statement of action to advance the climate change and impact assessment agenda, developed by IAIA for presentation at Rio +20.

    Status: This statement supports the thrust of new Green Economy initiatives. (As above)

11. Develop a user-friendly climate change portal within the IAIA website to provide impact assessment practitioners with information, tools, and methods to accelerate the application of EIA/SEA to climate change adaptation and mitigation, building on IAIA's existing Climate Change Symposium web sites and the Climate Change Section on IAIA Connect.

Status: The IAIA Connect Climate Change Section site is serving as an information source, but greater efforts are needed to post, tools, methods and case studies and to improve member dialogue on the site. (MP)

12. Make use of social media tools such as IAIA Connect, You Tube, Smart Phones and Facebook to facilitate exchange of experiences and promote dialogue among impact assessment practitioners.

    Status: Champions are needed to work with the IAIA webmaster. (LP)

13. Broaden the reach of OECD/DAC guidance on the application of SEA to climate change adaptation and mitigation.

    Status: (MP)

14. Support the activities of the Climate Change and Global Biodiversity Sections.

    Status: (LP)

15. Establish a Memorandum of Understanding (MOU) with the Global Biodiversity Business Information Forum (GBIF) to facilitate sustainability assessment as well as the assessment of impacts of climate change on ecosystems and on the delivery of ecosystem services and maximize opportunities for climate change mitigation and adaptation. Develop similar MOUs with banks and insurance associations. Tie to the Corporate Social Responsibility (CSR) polices of large corporations.

    Status: No new action.

16. Establish an IAA Climate Change working group to find new and more effective means to communicate the issues above and to engage stakeholders and the public.[10] Make greater efforts to join forces with journalists and media specialists. Journalists and communication specialists can bring to the attention of the public important environmental impact issues and concerns. They are key to helping bring into focus potential alternatives that might otherwise be overridden by special corporate, political or economic interests— interests often driven by short-term gain rather than longer term concerns for the well-being of current and future generations. Journalists IA practitioners can also serve as the ombudsmen for the public where governance and judicial systems are weak or corrupt. IAIA and the Working Group should seek out journalism and communication organizations and begin to work with them to improve public understanding of the importance of the impact assessment process and its many benefits, both short and long-term.[11]

[10] Consider joining The Millennium Alliance for Humanity and the Biosphere (MAHB) http://mahb.stanford.edu/. Consider means for engaging with the Climate Reality Project http://climaterealityproject.org/ and especially *The People vs Carbon* site http://climaterealityproject.org/people-vs-carbon "Many have called for a price on carbon. Now we must act. Jim Yong Kim President, World Bank Group". See also http://350.org/ "We're Building a Global Climate Movement."

[11] For example, the Metcalf Institute provides training to journalists in environmental matters and is part of the University of Rhode Island's Graduate School of Oceanography. IAIA could be reaching out to them, helping to promote incorporation of impact assessment as a topic in their training program for journalists. See http://metcalfinstitute.org/training/connecting-journalists-and-scientists/ and http://www.youtube.com/watch?v=Go3vsLnjEDc&list=FLt2MPff3ixVc8bARriSuSRQ The Society of Environmental Journalists is another important group that IAIA and IA practitioners should be interacting with http://www.sej.org/about-sej/vision-and-mission

Status: A Champion is needed to move this initiative forward. (LP)

17. Publicize examples of effective communication on environmental topics of high interest to the impact assessment and climate change communities.[12]

Status***:*** See Arend Kolhoff"'s moderated case study sessions from IAIA '14, '15 and '16 (MP)

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[12] (1) World Bank. 2013. *World Could Be 4 Degrees Hotter By End of This Century*. Excellent for broad audience and students. 2.27min. http://www.youtube.com/watch?v=CQbOlI0YQNs&feature=player_embedded
(2)The Climate Change logical response. Very good and has been watched by over 5.7 million viewers…suspect they are mainly young people. http://www.youtube.com/watch?NR=1&v=zORv8wwiadQ&feature=fvwp It's only 9.3 minutes long.
(3) http://www.youtube.com/watch?v=cCe7X492q_w&feature=endscreen An excellent presentation on REDD. Code REDD Solution - How REDD Works Animation. CodeREDDNow
(4) Watch the Smithsonian sponsored presentation on Limit's to Growth by Richard Alley of Penn State. It is long but unusually well done. http://www.youtube.com/watch?v=gNxCqU9jbOM
(5) Watch "*The Most IMPORTANT Video You'll Ever See - FULL LECTURE - AlBartlett.org* " https://www.youtube.com/watch?v=DZCm2QQZVYk Excellent presentation on exponential growth and the reality of continuing population growth on the quality of life and the future of the human species and the Earth's environmental systems.
(6) See the National Geographic presentation http://www.youtube.com/watch?v=N5hOM2eHFNg