Development of Strategic Environmental Assessment (SEA) Guidelines for Renewable Energy Facilities

INCEPTION REPORT

Presented to the International Association for Impact Assessment (IAIA)

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Contents

Acronyms

ADB	Asian Development Bank
AfDB	African Development Bank
AIIB	Asian Infrastructure Investment Bank
CBD	Convention on Biological Diversity
CEA/CIA	Cumulative Effects/Impact Assessment
CFPP	Coal-Fired Power Plant
CSP	Concentrated Solar Power
CT	Core Team
DPSIR	Drivers, Pressures, State, Impact and Response
EMP	Environmental Management Plan
EIA	Environmental Impact Assessment
EIB	European Investment Bank
ESIA	Environmental and Social Impact Assessment
ETM	Energy Transition Mechanism
FMO	Dutch Entrepreneurial Development Bank
GHG	Greenhouse Gas
GIS	Geographical Information System
IA	Impact Assessment
IADB	Inter-American Development Bank
IAIA	International Association for Impact Assessment
ICOLD	International Commission on Large Dams
IEA	International Energy Agency
IFC	International Finance Corporation
IFI	International Finance Institution
IHA	International Hydropower Association
IPCC	Intergovernmental Panel on Climate Change
IRENA	International Renewable Energy Agency
IUCN	World Conservation Union
LAC	Limits of Acceptable Change
LMIC	Lower and Middle Income Countries
NGO	Non-Governmental Organisation
OECD-DAC	Organisation For Economic Cooperation and Development – Development Assistance Committee
PA	Protected Area
PPP	Policy, Plan and Programme
RE	Renewable Energy
SD	Sustainable Development
SEA	Strategic Environmental Assessment
SEMP	Strategic Environmental Management Plan
SESMP	Strategic Environmental and Social Management Plan
SESA	Strategic Environmental and Social Assessment

SIA	Social Impact Assessment
TAC	Technical Advisory Committee
ToC	Table of Contents
ToR	Terms of Reference
UNECE	UN Economic Commission for Europe
UNEP	Un Environment Programme
UNESCO	UN Educational, Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank
WWF	Worldwide Fund for Nature

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- Kate Lazarus (International Finance Corporation)
- Emma Marsden (Asian Development Bank)
- Bryony Walmsley (IAIA Board and Southern Africa Institute for Environmental Assessment - South Africa)
- David Annandale (Consultant, UK)
- Arend Kolhoff (Netherlands Commission for Environmental Assessment, and IAIA climate section)
- David Bancroft (Executive Director, IAIA)

1. Introduction – the challenge of climate change

Climate change is arguably the most critical existential challenge faced by the world today. The evidence for immediate urgency to address this issue has been presented by the Intergovernmental Panel on Climate Change (IPCC). The most recent IPCC report - the Sixth Assessment Report, released on 18th March 2022, states that, *"in 2010-2019, average annual global greenhouse gas emissions were at their highest levels in human history, but the rate of growth has slowed; and that without immediate and deep emissions reductions across all sectors, limiting global warming to 1.5°C is beyond reach."*

Through various UN agreements reached at Conferences of the Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC), countries have committed to address climate change by reducing emissions of greenhouse gases and to support the Energy Transition Mechanism (ETM) which requires the retirement of coal and other fossil fuel power facilities and movement towards renewable energy (RE) supplies (wind, hydropower, solar, tidal, bioenergy & geothermal).

To support the energy transition, some countries are developing national energy plans and sector specific plans, whilst multilateral development banks and others are providing financial support for ETM activities.

But such plans and implementing the ETM will not be benign. They may give rise to environmental and socio-economic impacts (some positive, but many potentially negative, if not managed and mitigated). The opportunities can be enhanced, and the risks minimized by applying impact assessment tools, particularly environmental and social impact assessment at the individual project level (e.g., the retirement of a coal-fired power station, the closure of a coal mine, or the development of renewable energy generation facilities – including their associated infrastructure). At the higher levels of policies and plans to move energy generation away from fossils fuels to renewable sources, strategic environmental assessment (SEA) is the most appropriate tool to support ETM planning and decision-making to respond to environmental and socio-economic concerns.

There has been very limited application to date of SEA for renewable energy development and guidelines for its application do not exist but are critically required by practitioners and government decision-makers. In addition, there is an urgent need for capacity strengthening and outreach, beyond the development of guidance, to explain to planners and decision-makers in the energy sector and others how SEA can help: what is its role and key steps, how it can benefit the energy transition, the decisions that need to be made, and how to engage all interests in the SEA process.

2. Background to the IAIA project to develop SEA guidelines for RE

As noted in Section 1, climate change is a major driver of the energy transition away from fossil fuels. Recognizing the necessary shift required towards the use of more renewable energy, the International Association of Impact Assessment (IAIA)[1] has launched a multi-phase initiative to:[2]

- ***Develop guidance*** (building on relevant existing initiatives) for the application of strategic environmental assessment (SEA) to policies, plans and programmes for renewable energy development - focusing, for now, on the hydropower, solar, wind (onshore and offshore), geothermal, tidal and bioenergy sub-sectors and the retirement of coal fired power plants (CFPP) and associated closure of coal mines;

- ***Establish a learning platform*** to share experiences with a broad group of stakeholders using the guidelines and other platforms;

- ***Support application of the guidelines*** in selected countries to strengthen capacity and raise awareness (with training and coaching of stakeholders), to implement an outreach plan, and to gather experience from supporting SEA case applications of the guideline (as of yet to be determined), and

- ***Launch a help desk team*** of experienced experts in the field of SEA and energy planning facilitated by respective practice organizations in this field.

2.1. Why are SEA guidelines needed for renewable energy?

Traditional environmental impact assessment (EIA) conducted at the individual project level has proven to be insufficient to deal with the bigger picture beyond project level impacts, to address cumulative impacts from multiple projects/developments and to protect the public interest. A more strategic higher-level approach is required to support policy-making and long-term planning by public and private actors in the energy sector. SEA is now a well-established procedure that supports such planning by ensuring that relevant alternatives are assessed that all environmental and social effects are evaluated and that stakeholder interests are balanced. It has been adopted by about 100 countries, nearly all high-income countries, and an increasing number of low- and middle-income countries. In those countries without SEA legislation, the tool is voluntarily applied and supported by IFIs and/or bilateral donors. As the global renewable energy sector is expected to expand significantly in the coming years, there is an immediate and pressing need for guidance to deal with siting issues, the overall lack of a comprehensive regulatory framework, concerns about environmental, social and health related impacts and increasing

[1] 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 (www.iaia.org).
[2] IAIA has contracted Barry Dalal-Clayton and Miles Scott-Brown to lead this initial launch phase.

public concerns about the over-saturation of renewable energy projects in the landscape. These concerns can only be addressed at a strategic level, not at the individual project level.

2.2. A partnership approach

IAIA aims to develop the guidelines in partnership with the renewable energy sector, international and UN organisations, international finance institutions, bilateral donors, civil society representatives and other organisations, to promote their uptake and international acknowledgement, and to build capacity throughout the renewable energy sector. A collaborative partnership-based approach is required across multiple organizations, interests and the various renewable sectors for these guidelines to assist planning efforts of the ETM.

2.3. Project phases

The project, as originally envisaged, included the following phases:

- Phase A. Launch Phase - development of draft table of contents for the guidance note and preparation of a project implementation strategy (January – June 2022);

- Phase B. Preparation of Draft Guidance (July – December 2022 approximately);

- Phase C. Preparation of Final Guidance (January-December 2023). This duration of this phase is not fully determined at this time and will depend on the review process and buy-in of sectoral and other interests, and

- Phase D. Operationalization, application of guidance and capacity development and outreach (5 years to 2028).

The implementation of these phases and their delivery dates has now been modified in consideration of learnings from this launch phase (see Section 5).

3. Steps of the launch phase (Phase A)

The launch phase involved several steps beginning with the announcement of the project by the IAIA management committee (David Bancroft and Arend Kolhoff) in January 2022.

3.1. Project kick-off

The IAIA Executive Director announced the launch of the project in a notification to the IAIA membership on IAIA-Connect on 27 January 2022. This provided an ***Information Note*** (Annex 5) setting out the aims, objectives, and phases of the project, and sought IAIA membership assistance and expressions of interest to be involved and kept informed of project progress.

3.2. Establishment of a Technical Advisory Committee

A Technical Advisory Committee (TAC) has been established to support this project. The role of its members is to help to guide and steer the technical development process and to act a sounding board for ideas and options, both to IAIA and the consultant team (TOR for the Advisory Committee are set out in Annex 2). The Technical Advisory Committee reports to the IAIA management committee.

The Committee is deliberately of limited size to facilitate meaningful interaction and build a collegiate and integrated working approach. Currently, it comprises the following members with expertise in SEA:

- Kate Lazarus (International Finance Corporation);
- Emma Marsden (Asian Development Bank);
- Bryony Walmsley (IAIA Board and Southern Africa Institute for Environmental Assessment - South Africa);
- David Annandale (Consultant, UK);
- Arend Kolhoff (Netherlands Commission for Environmental Assessment, and IAIA climate section), and
- David Bancroft (Executive Director, IAIA) (to end of May 2022).

In future, it is hoped that TAC will also include representatives from the renewable energy sector with experience of and/or responsibilities for environmental and social assessment and management.

To date, the Technical Advisory Committee has met twice (by video-link): 24 March and 19 April 2022.

3.3. Partners Council

The principal aim of the Partners Council is to provide guidance and oversight for the Guidelines initiative, and to foster interest and enable ‘buy-in’ for the initiative. The Partners Council is still being formed.

Its membership is envisaged to include representation from:

- IAIA;
- Organisations with a focus on and/or close interest in the renewable energy sector;
- Organisations that finance energy development (e.g., private sector companies, IFIs/MDBs, bilateral donors);
- Organisations that are able to make a contribution (financially or in kind) to the initiative;
- Private sector renewable energy companies;
- Interested governments, and
- International NGOs.

To date the following have accepted to serve on the Partners Council:

- Kate Lazarus (International Finance Corporation);
- Bruce Dunn (Asian Development Bank;
- Maninder Gill (World Bank), and
- Executive Director IAIA (new ED to be named).

The Partners Council will;

- Review project background documents (e.g., the Concept Note; Inception Report, Draft Guidelines);
- Monitor progress in the initiative;
- Advise on sources of funding and support;
- Advise on opportunities to pilot/apply the guidelines;
- Recommend possible additional members of the Partners Council, and
- Advocate for uptake and application of the SEA guidelines for renewable energy.

It is envisaged that the Partners Council will convene on an 'as needs' basis, but at least twice per year. This will be by video conference, but opportunities for members to meet at annual international events will be explored (e.g., the yearly IAIA Conference).

It is hoped that one (or more) of the international bodies covering the renewable energy sector will also accept to join the Partners Council, (e.g., World Renewable Energy Association, World Council for Renewable Energy, International Renewable Energy Agency, UNEP and others). Additional members may be co-opted as necessary.

The arrangement seeks to build this initiative as a joint venture between IAIA and the renewable energy industry from the outset and to foster co-ownership and production of joint products. This will be essential to maximise uptake of the guidelines within both the renewable energy sector and by other external interested parties.

3.4. Establishment of a Reference Group

A larger group of individuals and organizations that are interested in the project is being established as a ***Reference Group*** to broaden debate and information/experience gathering and to build support for the project and its outputs, and subsequent uptake. Initially, this voluntary group will comprise IAIA members, but it is planned to broaden membership to include interested individuals/organizations in the renewable energy sector. In this way, it is hoped to further strengthen buy-in to the initiative, co-ownership of the guidelines and increase the potential for them to be followed. The Reference Group is open to anyone with an interest in the project.

3.5. Development of a reference list of actors and organizations in (renewable) energy that make reference to SEA

The participation and engagement of the renewable energy sector is key to the success of the SEA initiative. Therefore, to assist in development of the guidelines and to broaden its reach for capacity building and information dissemination, a reference list of actors and organizations has been initiated that refer to SEA or are interested in its application to RE development. This began, following circulation of the Information Note, when a range of IAIA members provided information on names and organizations to this reference list. The list has also been augmented by internet searches. Annex 7 provides an initial draft of the reference list.

Follow up to this initial list will include the following considerations:

- How to engage – from no engagement through to joint ownership of the SEA guidelines;
- Assessment as to how support can be obtained during Phase B, and
- Description of the range of activities that could be developed with support – e.g., technical meetings, conferences, specific project support etc.

3.6. Development of an inventory of existing SEA guidance

An inventory of existing SEA guidelines is presented in Annex 4. This has been developed through internet searches and information provided by IAIA members and others. The inventory lists SEA guidelines and related documents that contain guidance material. It does not aim to list academic books, research papers, reviews, or available SEA reports.

The inventory includes guidelines issued by official government authorities, international organizations, UN agencies and others and are presented for convenience in the various categories (Table 1). In total the inventory lists 142 documents: 95 are actual SEA guidelines and 28 are thematic or issue reports/guidelines. Many are EIA guidelines, and other useful books and papers that will be of value to developing the guidelines (Table 1).

Analysis of existing SEA guidelines suggests the following categories can be found:

- '***Full' generic guidelines*** that cover all types of application - covering context, history of SEA and theory (e.g., objectives and principles, comparison with EIA, costs and benefits, stakeholder engagement), legal aspects, process steps, available tools, and methods, reporting requirements, developing SEMP, quality assurance, etc.). These tend to be less common (e.g., Bhutan, Kenya, Thailand);

- 'Full' guidelines which ***focus on a particular theme or sector*** such as hydropower (e.g., Pakistan), transboundary (e.g., Kenya), health (e.g., UK);

- Those that are more ***skeletal and cover partial aspects*** of a 'full' guideline (e.g., Nigeria);

- Those which provide a mix of actual guidance and other background and academic overview materials concerning SEA (e.g., India), and

- Those that mainly ***set out government formal requirements*** (e.g., what SEA must be applied to, responsibilities, required scope/content, etc.) (e.g., Cote d'Ivoire) - sometimes available only as online guidance (e.g., UK). These tend to lack specific guidance on process and good practice.

Table 1: Categories of SEA guidelines and numbers cited in the inventory (Annex 4)

Category	Number of guidelines/documents
Africa	15
Asia	20
Middle East	0
Caribbean and South and Central America	02
Europe	37
North America	01
Mediterranean	01
Australia, New Zealand, and Pacific	02
UN and international organisations	14
IFIs and bilateral donors	03
Themes and topics	28
Others	19
Total	142

3.7. Preparation of a Final Inception Report

This report provides an early outline of the proposed contents of the SEA Guidelines for Renewable Energy. The Technical Advisory Committee has provided initial comment on a prior version of the Inception Report and on this revised final version.

3.8. Progress report to IAIA'22

The consultants made a PowerPoint presentation on 6th May at IAIA'22 in Vancouver outlining the scope of the project and reporting on progress to date. Comments by conference participants have been considered in finalising this report. Key questions arising from the presentation are provided in Annex 6.

4. Proposed contents of SEA guidelines for renewable energy

4.1. A single volume guidance document

It is recommended to develop a single SEA guideline document for the RE sector rather than separate guidelines covering hydropower, wind, solar, tidal, geothermal, bioenergy and coal fired power plant retirement. SEAs for all these sub-sectors will inevitably share many common elements in terms of SEA theory and process. It is recognized that this guideline will be extensive and that there is a potential for repetition. However, there should be separate chapters setting out material issues specific to each RE type. This will cut down on redundancy and improve efficiency. This approach has been used by other organizations in preparation of their guidance documents, e.g., IHA.

Separate guidance for each of these renewable energy sectors is sought due to the unique E&S issues associated with project construction and operation. In addition to the three commonly known renewable energy sectors of wind, solar and hydroelectric, bioenergy, tidal and geothermal are included as these are emerging both in terms of application and usage. Bioenergy is particularly important as a source of energy for the poor and related to land use planning. Geothermal is gaining ground as costs continue to decline and it is an important source of energy where thermal energy is found in abundance e.g. Iceland. Tidal energy, although limited at present, is another unexploited energy source. Finally, the ETM cannot be assessed without also assessing the impacts associated with coal fired power plant closure and that of its supply chain implications such as the closure of coal mines.

The format of the guideline (hard copy, online as PDF), its final production and dissemination have yet to be determined.

4.2. Conversion to an online information portal

The guidelines are expected to be lengthy. As described above one option is that the document be made available as an online resource (on the IAIA website – with links from other websites) and made attractive and easy-to-use. It should also be a rolling resource, updated as and when

required and when new materials become available. Case studies, videos (e.g., to illustrate application or particular challenges, to show SEA tools in action, testimonies from planners and decision-makers on how useful the SEA process was, etc.), and additional materials can be added. It is hoped that this initiative can result in the establishment of a dynamic information portal on SEA for RE that is updated on a regular basis rather than resulting in production of a static guideline report that may quickly become outdated.

4.3. Case examples and case studies

The proposed contents presented below in sections 4.4 and 4.5 set out the main elements of the guidance. To make them relevant and to provide illustrations for best practice, the use of boxes with examples of application is recommended. Examples might illustrate how particular steps were well done or how a particular SEA principle was well met.

'Whole SEA' case studies can also be developed (not part of the guidelines) to provide a full picture of SEAs – from inception to completion to follow-up (e.g., monitoring). These examples would be better presented on the proposed guidelines portal rather than as annexes to the guidance.

4.4. Brief overview of general scope and content of existing SEA guidelines

As shown in the inventory of existing SEA guidelines (Annex 4), guidelines have been prepared by a variety of agencies and organizations:

- National government agencies (commonly departments or bodies responsible for the environment) – aiming to set formal requirements (e.g., focused mainly on indicating when an SEA is needed, procedures to be followed, documents to be produced, etc.) but not often providing much guidance on theory, principles, good practice, etc.). They include a mix of online and documentary guidance;
- Inter-governmental bodies (e.g., The European Union/Commission) – aiming to set standardized procedures and practices for SEA;
- UN and international/national NGOs – usually presenting good practice guidance and case examples, and aiming to promote capacity development, and
- IFIs – setting out their requirements for SEA to support major projects and development aid programs. SEA is often only one of a series of instruments required to be applied by borrower governments under IFI environmental and social safeguards.

Commonly, SEA guidance documents set out background information (e.g., on the origins of SEA and its relationship with EIA/SIA), basic principles of good practice, basic steps, stakeholder participation, available tools and techniques, timeframes, costs, etc.

4.5. Draft proposed table of contents for SEA guidance for renewable energy

Table 1 presents the proposed contents for the guidelines. This has been reviewed and agreed to by the Technical Advisory Committee.

Table 1: List of Contents for SEA Guidelines for the Renewable Energy Sector

***Notes*:**

1. *It is suggested that the text and annexes (where useful or appropriate) contain boxes and examples that illustrate how key principles of SEA have been followed or how elements of good practice or particular approaches/methods have been used/implemented.*
2. *SEA as described in this document also includes social aspects, and is synonymous with Strategic Environmental and Social Assessment (SESA).*
3. *This table can be considered as forming two parts; Sections 2-5 cover those aspects of SEA which are general or generic and will be common to all applications. Section 5-12 are chapters which are specific to different energy/renewable energy types.*
4. *The aim is to first prepare text for all the sections of this table of contents. But the document will inevitably be lengthy. Subsequently, it is proposed to convert the text to an online resource (on the IAIA website) as a rolling resource that can also include case studies, videos and other source materials.*

SECTION				TITLE	COMMENTS/ISSUES TO COVER
				Preface	Note on the role of and aspirations for the guidance – signed by President of IAIA and main partners
				About IAIA	Short note about IAIA, its role and mission
				Acknowledgements	Noting partners, funders, authors, contributors, and others who have helped develop the guidelines or support the project
				Abbreviations and acronyms	
				Definitions of terms	See Thai guidelines and OECD DAC guidelines for some definitions
				Aims of the of guidelines	● Capture internationally accepted principles and good practices for SEA, while being tailored to RE ● Promote common approach and best practice ● Indicate target groups for guidelines ● Discuss context relative to RE sector and energy transition
				Structure of the guidelines	Brief guide to the organisation/content/scope of the guidelines and how they can be used
				The IAIA SEA Guidelines for Renewable Energy Initiative	● Brief introduction to the challenge of climate change ● Outline of why SEA guidelines are needed for renewable energy ● Partnership approach to developing the guidelines ● Initiative phases ● Initiative governance ● Guideline structure
				List of Contents	

SECTION				TITLE	COMMENTS/ISSUES TO COVER
1.0				**BACKGROUND TO SEA**	**Origins and uptake of SEA**
	1.1			What is SEA and how does it differ from Environmental Impact Assessment (EIA) and Cumulative Impact Assessment	● SEA to EIA decision-making level hierarchy (diagram plus narrative) ● Comparison of SEA and EIA (table) ● Purpose of SEA ● Relationship to CIA ● Baseline vs objectives-led SEA
	1.2			The relationship between SEA and the PPP process	● When can/should SEA be carried out (ex ante, during PPP development, ex post) ● SEA relationships to PPP/planning processes such as spatial development frameworks, environmental and social management frameworks, integrated development plans, master plans, land use plans etc (narrative plus diagram) ● Difference between SEA for plans and programmes and SEA for policies ● SEAs for multiple similar projects concentrated in time/space; and for 'mega projects' ● SEA in situations where PPP not in place or proposed ● Role of legislation ● Windows of opportunity to influence planning and decision-making
	1.3			SEA benefits at a glance	● Summary of key benefits of SEA
	1.4			Basic objectives and principles for SEA	● Internationally agreed principles of SEA ● Factors to be aware of in designing an effective SEA process ● How to maximise influence/utility of SEA
	1.5			Cost of SEA	● Brief outline of range of costs of SEA, as determined by length and complexity of process
	1.6			Scale and time required for an SEA	● There is no one-size-fits-all approach to SEA. In all circumstances, an SEA will need to be thought through and designed according to a range of possible background factors. ● Compare costs and advantages/benefits of 'full' to rapid SEAs.
	1.7			Who should carry out SEA?	● Explain required knowledge, experience and expertise ● Need for integration with teams developing PPPs
	1.8			Stakeholder roles and responsibilities in SEA	● Roles and responsibilities of stakeholders (narrative and table) ● Methods to engage with stakeholders ● Grievance mechanisms
	1.9			Institutional arrangements	● Which government authority drives the SEA process (is the lead agency) and issues an approval or authorisation? In what form? ● Role and structure of an SEA steering committee ● Government accountability ● Stakeholder involvement

SECTION				TITLE	COMMENTS/ISSUES TO COVER
2.0				**LEGAL REQUIREMENTS AND COMMITMENTS TO APPLYING SEA**	
					● Explain that SEA and EIA are the only SD tool that have a legal requirement and government bodies dedicated to their application – it is required by law/directive in many countries/jurisdictions (national, regional) and many have issued formal regulations/rules for SEA. It can also support constitutional commitments ● Note that (i) some countries have no SEA legislation (ii) some have framework SEA legislation (but SEA may not be yet formalised by regulation) and (iii) others have SEA legislation + regulation(s) + procedure ● Many IFIs/donors require SEA (or equivalent processes) under environment/social safeguards and as part of due diligence ● How SEA can help to satisfy commitments/obligations under international accords (treaties, conventions, etc) ● How SEA can also help organisations meet commitments to sustainable development/SDGs, combat climate change and promote corporate social responsibility. ● Brief review of scope of legal instruments, regulations, rules and international accords/commitments concerning SEA ● Differentiation of country requirements and realistic national-level performance versus SEA best practice. Acknowledge that country system requirement and regulation for SEA may differ from those of external actors/financiers (e.g., WB, EIB) which are usually focused on international principles and need for good practice. But it may not be feasible for domestic practice to meet the ambition s of international good practice – as set out in these guidelines (at least not in the early stages of SEA application in a country).
3.0				**STAGES AND STEPS FOR UNDERTAKING SEA**	
	3.1			The SEA process at a glance (actions & decisions)	● Brief overview of main stages and steps (table)
	3.2			***Screening***	● Role of screening ● Screening criteria ● Screening process (including diagram)
	3.3			***Preparatory steps and scoping***	
		3.3.1		Preparatory tasks	● Describe (list/table) of tasks – for proponents, SEA team, external funders (eg IFI/donors) ● Review of PPP for which SEA is to be conducted

SECTION				TITLE	COMMENTS/ISSUES TO COVER
		3.3.2		Interrogating and clarifying terms of reference	● Modification of the ToR as required
		3.3.3		Issues for scoping	● Explain need to establish the focus and the content of an SEA, the scope of the analyses needed, and the relevant criteria for assessment ● List tasks in scoping ● Describe SEA methodologies
		3.3.4		Setting SEA environmental and social objectives	● Discuss baseline-led versus objectives-led SEA ● How to help set SEA objectives ● Examples of SEA objectives and indicators
		3.3.5		Limits of acceptable change	● Discuss how Limits of Acceptable Change (LAC) or thresholds can inform the evaluation of the potential significant environmental and social effects of a PPP, and/or to determine appropriate indicators
		3.3.6		Stakeholder identification and participation	● Indicate minimum requirements for participation ● Discuss use of stakeholder analysis, development of a participation strategy and communication plan
		3.3.7		Identifying scenarios and alternatives to a PPP or elements of a PPP	● Discuss use of scenarios in SEA, types of scenarios and how to frame them. ● Note that scenarios can also be used as alternatives for assessment ● Discuss sources that may help identify scenarios and alternatives ● Include hierarchy of alternatives ● Types of alternatives ● Questions to guide development of alternatives
		3.3.8		Identifying baseline information requirements, initiating collection, and situation analysis	● Indicate scope/range of required baseline information ● Categories of baseline data ● Need to initiate a situation analysis by evaluating and interpreting the environmental and social baseline information. This analysis should be informed by the scoping process and, in turn, help to inform it. ● Use of various tools that can be used to collect this information, at a regional-level scale including national mapping systems and databases, GIS etc
		3.3.9		Consistency analysis of PPPs	● To check the consistency of the PPP to be reviewed/developed with existing other PPPs: m (i) to identify overlaps and antagonisms (particularly in terms of their environmental and social objectives) and avoid potentially conflicting objectives, and (ii) to increase the effectiveness of the revised/new PPP. ● An inventory of PPPs (bv sector) will be required during scoping. ● Compatibility matrices can be used to compare how different PPPs may interact. Sometimes PPPs can generate synergies and opportunities for win-win outcomes
		3.3.10		Submission and review of scoping report	● Report submission, review and disclosure process ● Typical contents

SECTION				TITLE	COMMENTS/ISSUES TO COVER
	3.4			***Assessment***	
		3.4.1		Introduction	● Discuss how the stages of the main assessment may differ depending on what the SEA is focused on (e.g., a single PPP versus multiple PPPs)
		3.4.2		Assessment of a proposed PPP and scenarios/alternatives to a PPP or its components	● Aim is to determine the full spectrum of likely environmental and social impacts including positive/negative, direct/indirect, cumulative, transboundary, synergistic/antagonistic ● Impacts should be considered over time and spatial scale (e.g. short-, medium- and long-term). ● May involve general initial assessment of all scenarios or alternatives to a proposed/existing PPP
		3.4.3		Assessment of the preferred scenario or alternative	● Deeper assessment of preferred scenario or alternative (that is considered most likely to have a sustainable development pathway)
		3.4.4		Conducting the assessment	● Introduce what the assessment should address: o the character of the risks/impacts (what exactly causes these risks/impacts or assumptions for the predictions); o the probability and key uncertainties; geographic scale - directly and indirectly affected geographic areas that will become of specific concern; o frequency, duration and reversibility; and o key concerns associated with the impacts. ● List methods commonly applied (details in annexes or ref to sources)
			3.4.4.1	Direct, indirect and cumulative impacts	● Discuss range of types of impacts that need to be identified/explored ● Methods to show cumulative impacts (tables, linkage diagrams, CEA, trend analysis, etc.)
			3.4.4.2	Evaluating the significance of impacts	● How to rate significance/scale of impacts
		3.4.5		Identification of measures to enhance opportunities and mitigate adverse impacts	● Achieving win-win situations ● Mitigation hierarchy – consider siting avoidance up front
		3.4.6		Assessing trade-offs	● Need to highlight potential synergies or conflicts between elements of the PPP or between the assessed PPP and other PPPs – that will require trade-offs; ● Types of trade-off decisions: compensation and substitutions; and net gain and loss calculations ● Tools for dealing with trade-offs
		3.4.7		Stakeholder engagement	● Discuss stakeholder engagement during the assessment process including inputs on mitigation and management plans
	3.5			***Strategic Environnemental Management Plan***	● Note: Can also be called a Strategic Environmental Social Management Plan (SESMP) or framework.

SECTION				TITLE	COMMENTS/ISSUES TO COVER
					● Identify monitoring requirements, institutional arrangements, monitoring indicators and a corresponding evaluation procedure and indicated methodology, costs, training and capacity-building requirements, etc ● Example table of contents of SEMP (annex)
	3.6			***Reports and review***	
		3.6.1		Inception report	
		3.6.2		Scoping report	
		3.6.3		Interim SEA report	
		3.6.4		Special reports	
		3.6.5		Draft SEA report	
		3.6.6		Draft Strategic Environmental Management (SEMP) Report	
		3.6.7		Quality assurance / technical review of SEA/SEMP	
			3.6.7.1	Administrative review	● Who should do this?
			3.6.7.2	Scrutiny workshop	● Who should organise and participate?
			3.6.7.3	Lead agency and stakeholder review	● Period for submitting comments
			3.6.7.4	Public review	● Use of notices, period for comment
			3.6.7.5	Formal technical review	● Who to undertake and how long to do?
			3.6.7.6	Key questions and criteria for reviewing the SEA report	● Review system ● List of review criteria
	3.7			***Evaluation of the SEA and PPP***	● Evaluation is important to determine whether the outcomes have been achieved, fully or in part, and also to ensure quality control of the SEA process itself. ● Role of evaluation and monitoring ● Institutional arrangements for monitoring and enforcement ● Use of checklists ● Reporting
4.0				**KEY ISSUES FOR SEA NATIONAL/REGIONAL ENERGY PPPs**	
					● When to do SEA in RE sector? ● Consideration of mix of RE types in SEA ● Baseline data considerations
5.0				**KEY ISSUES FOR SEA IN THE HYDROPOWER SUB-SECTOR** [note: examples below and in sections 7 – 12, are illustrative, not complete or exhaustive – to be fleshed out in Phase B]	
					● The need to consider geographical scale and consider a river basin-based planning approach ● Need also to consider associated infrastructure and facilities. ● Consideration of alternatives

SECTION				TITLE	COMMENTS/ISSUES TO COVER
					● Baseline data considerations Key E&S issues are as follows: ***Environmental*** ● Changed land use ● Flooding ● Loss of habitat, biodiversity & ecosystem services ● Changed E-flow & silt loads ● Changed riverine ecology ● Changed downstream hydrology & limnology ● Eutrophication of dams ● Loss of ecosystem services ● Disruption of river system ● GHG emissions ***Social*** ● Displacement of communities/people (including indigenous & traditional communities) & need to resettle ● Impaired estuarine livelihoods ● Loss of cultural heritage ● Economic development, employment, livelihood opportunities ● Public health, safety & security issues ● Migrant workers during construction ● Social conflict ***Other Contextual Risks***
6.0				**KEY ISSUES FOR SEA IN THE WIND POWER SUB-SECTOR**	
					● Need to be split into both onshore and offshore wind power, & associated infrastructure/access roads. ● Consideration of alternatives ● Baseline data considerations Key E&S issues are as follows: ***Environmental:*** ● Impacts on birds & bats (collisions), & cetaceans ● Land clearing/deforestation, habitat fragmentation ● Associated facilities – e.g. roads/transmission lines ***Social:***

SECTION				TITLE	COMMENTS/ISSUES TO COVER
					● Visual & noise impacts ● Interference with radar, telecoms, aviation ● Land acquisition ● Benefit-sharing ● Health and aesthetic impacts ● Indigenous & traditional communities ● Loss of physical cultural resources ● Migrant workers during construction ● Social conflict ***Other Contextual Risks***
7.0				**KEY ISSUES FOR SEA IN THE SOLAR POWER SUB-SECTOR**	
					● Need also to consider associated infrastructure and facilities. ● Consideration of alternatives Key E&S issues are as follows: ***Environmental*** ● Impacts on land use and ecology ● Land clearing (changed drainage, soil erosion) ● Increased water demand (for cooling) – problem in arid areas ● Recycling/disposal of solar panels (heavy metals used in panels) ● Fire and dust hazards ● Toxic liquid chemicals in CSP systems ***Social*** ● Direct & indirect economic opportunities ● Migrant workers during construction ● Visual impact ● Sterilisation of land ● Social conflict ***Other Contextual Risks***
8.0				**KEY ISSUES FOR SEA IN THE BIOENERGY SUB-SECTOR**	
					● Need also to consider associated infrastructure and facilities. ● Consideration of alternatives ● Baseline data considerations

SECTION				TITLE	COMMENTS/ISSUES TO COVER
					Key E&S issues are as follows: ***Environmental*** ● Impacts on air quality ● Reduced water quality due to pesticides & fertilizers on energy crops ● GHG emissions ● Soil erosion from harvesting, and collecting residue ● Toxic chemicals storage ***Social*** ● Job opportunities ● Production of energy crops can affect food security ● Health impacts when biomass used for indoor cooking ● Zoonotic diseases from manure handling ● Social conflict ***Other Contextual Risks***
9.0				**KEY ISSUES FOR SEA IN THE GEOTHERMAL ENERGY SECTOR**	
					● Need also to consider associated infrastructure and facilities. E.g. transmission lines and roads ● Consideration of alternatives ● Baseline data considerations Key E&S issues are as follows: **Environmental** • Land clearing and changes to land use from drilling wells and building roads • Land subsidence and instability • Many facilities close to PAs – increased access • Release of emissions to air – Odors, H_2S, SO_2, methane, ammonia, CO_2 • Hot water has high levels of sulphur, salt, minerals, heavy metals – need a close loop system. Potential leaching of hazardous materials • Some geothermal plants may generate mercury emissions • Water may also be extracted for cooling and reinjection purposes • Drilling impacts – fluids • Earthquake and seismic risk **Social** • High upfront investment costs • Jobs and work opportunities • Loss of land and use of it – relocation and resettlement

					• Safety impacts – air quality, wells, hot equipment • Impacts to vulnerable peoples • Impacts to indigenous peoples • Impacts to cultural resources
10.0				**KEY ISSUES FOR SEA IN THE TIDAL ENERGY SECTOR**	
					● Need also to consider associated infrastructure and facilities. ● Consideration of alternatives ● Baseline data considerations Key E&S issues are as follows: **Environmental** • Predictable energy source • Shoreline changes and to salinity • Site availability constraints • Sites needed close to land • Damages to marine life – fish and cetaceans • Turbine noise – fish and cetaceans • Water quality impacts • Impacts to sediment movements • Associated facilities **Social** • Jobs and employment • Dredged material disposal • Impacts to navigation • Impact to fishing • Noise and aesthetics • Cultural heritage • Tourism impacts related to wildlife • Local flood risk due to erosion and restriction of outfalls • Reduction in wellbeing
11.0				**KEY ISSUES FOR SEA IN RETIREMENT OF COAL-FIRED POWER STATIONS AND ASSOCIATED MINE CLOSURES**	
					● Need also to consider associated infrastructure and facilities. ● Consideration of alternatives ● Baseline data considerations

					Key E&S issues are as follows: **Environmental** • Mine closure issues • Air quality • Water quality • Waste management • Soil quality • Land reclamation and site restoration • Biodiversity • Associated facilities **Social** • Jobs and retrenchment • Retraining • Local economy • Health impacts • Supply chain issues • Legacy issues

References

SUGGESTED ANNEXES

Glossary of Terms
Analytical methods that can be used in SEA (e.g. DPSIR model, SWOT)
Use of GIS
Consultative methods that can be used in SEA
Outline for setting terms of reference for SEA
List of issues to be covered by SEA report
List of issues to be covered by a Strategic Environmental Management Plan (SEMP)
SEA screening form
SEA submission form
Consolidated checklist for the quality assurance, review, and performance evaluation of a comprehensive SEA
Example of policy reforms, potential environmental linkages, and mitigation measures
Checklist questions for assessing significance of impacts
Matrix for identifying the significance of impacts
Developing SEA environment and social objectives, indicators and targets
Draft Terms of Reference for an SEA Technical Advisory Committee
The Sustainable Development Goals and Targets
Example of objectives compatibility analysis: compatibility of objectives for Poole Port Master Plan (UK) against SEA objectives

Trends analysis
Developing scenarios
Example linkage diagram(s)
The role of a Strategic Environmental Management Plan
Critical principles for SEA
Some Multilateral Environmental Agreements with global scope and relevance
General trade-off rules
SEA quality review methodology
Selected references on (a) SEA and (b) renewable energy

List of possible boxes with sector examples

1 The introduction of SEA
2 The purpose of SEA
3 Screening criteria
4 Preparatory tasks in SEA
5 Tasks to undertake during scoping
6 Baseline-led versus objectives-led SEA
7 Hierarchy of alternatives
8 Required baseline information
9 Role of uncertainties in the SEA
10 Requirements for an Environmental Statement
11 Informal review criteria for SEA reports

List of possible tables

1 SEA and EIA compared
2 Roles and responsibilities of key stakeholders
3 Summary of stages in the SEA process
4 Some example SEA environmental and socio-economic objectives and indicators
5 Example of scale for rating the significance of impacts
6 Forms of recognition of environmental or social attributes
7 Reports produced during SEA

5. Proposed process and steps for Phases B and C

Following completion of the Launch Phase (Phase A), the Concept Note (Annex 3) envisages development of the guidance proceeding through two additional phases:

- Phase B. Preparation of Draft Guidance (6 – 10 months), and
- Phase C. Preparation of Final Guidance (6 - 20 months). This phase was not fully determined at the time and could range up to 20 months, depending on review and buy-in of sectoral and other interests and securing funding support.

As a result of analysis in this launch phase, changes to this original timeline have been made. Phases B and C should no longer be seen as separate steps. Rather, they should rather be merged into a single process over 12 months, provisionally starting in July 2022 (subject to available funding) and ending July 2023. We have now adjusted this to a single-Phase B. Phase D is now renamed as Phase C.

Based on discussions with the Technical Advisory Committee, the following recommendations are made as to how Phase B should proceed.

5.1. Core consultancy for guideline development

It is suggested that the core responsibility for preparing draft text for the guidelines and revising drafts should be assigned to a small team of two consultants. It is extremely difficult and inefficient to share this responsibility amongst a larger team. However, continuity and familiarity with the material will be very important; the Consultants should continue to work with and be guided by the Technical Advisory Committee.

5.2. Continuation of the Technical Advisory Committee (TAC)

For continuity, members of the Technical Advisory Committee should be invited to continue in their role throughout Phase B. IAIA will need to consider renumeration for the consultant members of TAC.

5.3. Drafting of the guidelines

The recommended table of contents was developed in Phase A. This will be expanded upon as described below.

(a) First (proto) draft of guidelines

Draft initial text for the preliminary sections and Chapters 1 – 3 has already been prepared and supported by the International Finance Corporation. In phase B, the first task will be to build on and expand this text to prepare a first full (proto) draft of the guidelines as a basis for review. The latter would be an open process involving the Technical Advisory Committee, Reference Group, Focus Groups (see below) and other interested parties (the draft guidelines should be available to

all on the IAIA website). This does not involve a wide process of consultative review, which would instead be part of Phase C.

(b) Coal-fired power plant retirement and coal mine closure

An implication of transitioning to renewable energy is that this will be accompanied by the retirement of coal-fired power plants (CFPPs) over time. Such retirement will have its own consequences and associated impacts and may lead to coal mine closure and supply chain issues which will also have their own separate environmental and social impacts. Therefore, CFPP retirement and mine closure are included in the draft Table of Contents in addition to different renewable energy types.

(c) Focus group inputs/sessions

It is recommended to establish specialist focus groups (say about 5-6 persons) for each of the renewable energy sub-sectors: hydropower, wind, geothermal, tidal, solar and bioenergy, as well as for CFPP retirement and mine closure. Membership suggestions for these focus groups will be sought from the Technical Advisory Committee. Focus group members should have expertise in one or more of these sub-sectors.

The role of the focus groups should be to help develop lists of key environmental and socio-economic issues likely to be associated with CFPP retirement/mine closure and developing renewable energy options in each sector; and then to help prepare or comment on narratives on these issues.

These draft lists and narratives should be reviewed by the members of each focus group, and comments/edits submitted by email (in track changes). Video-based and/or physical meetings might be arranged, as needed, to review, validate and augment these lists and narratives texts.

Following this process, the consultants should finalize the issue lists for each sector for inclusion into the draft guidelines.

5.4. Presentation of draft guidelines at IAIA23

Given the considerable interest in the guidelines at IAIA22, it is recommended that a dedicated event be organised at IAIA23 with a update on the initiative and presentation of the draft guidelines. This could also be part of a dedicated stream or a special program day on SEA for renewable energy at the conference.

5.5. Reporting for Phase B

Quarterly progress reports for Phase B efforts should be prepared and submitted to IAIA, TAC and the Partners Council, shared with the IAIA membership, and posted on the IAIA website.

In addition, presentations should be made at IAIA annual conferences on progress, and to enable comments and inputs to be made on the initiative.

5.6. Phase B Outcomes

First draft guidelines will be prepared by February 2023 with draft chapters on key issues for each renewable energy sub-sectors, plus for CFPP retirement and mine closure. The draft guidelines will then be subjected to an open review process during March-April 2023. involving the Technical Advisory Committee (overall SEA process aspects), Focus Groups (specific RE sub-sectors), Reference Group and other interested IAIA members (document available on the IAIA website).

The revised draft guidelines will be completed by July 2023 and subjected to a broader consultative review in Phase C.

5.7. Project Governance Issues

Proceeding ahead with Phases B and C, there are several governance issues that will need to be addressed by IAIA and the Partners Council. Solutions are required to issues before the initiative can move forward beyond June 2022.

1. Project management and organization - it is recommended that a Project Secretariat be established to oversee day to day functions of the project, contract details, timelines and deliverables, reporting to the IAIA Board, communications with stakeholders etc. Ideally the Project Secretariat should be run through IAIA. Funding will be required for its operation.
2. Fund raising – substantial funds will be required to complete Phase B and C as envisaged.[3] While the Partners Council can assist in sourcing these funds, fundraising and budget management should be tasked with the Project Secretariat under the direction and coordination of the IAIA Management Committee and Board.

[3] Budget issues are discussed outside of this inception report.

5.8. Timeline for Phase B

See Table 2 below.

Table 2: Steps and timeline for Phase B

The timelines indicate a window in which the task/step will be undertaken. The core consultants are likely to have other work responsibilities and will need to fit in undertaking their tasks on the guidelines alongside such other commitments.

STEPS	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	2022						2023												2024					
	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
PHASE B																								
Appoint core consultants																								
Prepare first (proto) draft of guidelines (consultants)																								
Focus group sessions on RE sub-sectors																								
Review of draft guidelines by AC (AC – paid time)																								
Finalise guidelines											**IAIA'23**													
Approval of guidelines by Partners Council																								
PHASE C (subject to funding and opportunities)																								

6. Preliminary recommendations for operationalising Phase C

Following finalisation of the SEA guidelines for RE facilities, IAIA will work to promote them internationally and particularly amongst organisations engaged in renewable energy development, – either as promoters (e.g., governments), developers, financing organisations or practitioners. IAIA hopes that such organisations and individuals will use the guidelines as a basis for planning/designing and implementing SEAs in the renewable energy sector. There should be a particular focus on government agencies who might be interested in using the guidelines for planning and development of their respective RE sector(s).

As stated at the onset, the SEA guidelines initiative is envisaged to be a multi-phase effort extending over 5 years. Arguably, the real value of the project will not be to produce guidelines as such, but in how they are rolled out and how they can be used by governments and others as a tool for planning sustainable RE development and associated coal fired power plant retirement. Production of the guidelines in Phase B will be relatively straight forward from a technical perspective, involving a small development team, a production budget and a one-year timeline. But their rollout and generation of uptake in Phase C will be much more complex and will depend on how, where and when it will be implemented.

The following key issues will need to be considered when planning for implementation of Phase C:

- **Regional workshops** – originally a series of four to five regional capacity strengthening workshops were considered, with priority given to Asia, Africa, and Latin America. However, production of these workshops will require significant logistical planning and coordination and a significant budget for workshop costs and travel. Rather than planning for stand-alone events, it might be better to seek opportunities to piggy-back of existing planned events, e.g., by including a session on the annual IAIA conference agenda specifically on the SEA guidelines, or even holding a special workshop when the guidelines could be presented with associated training on their use. The Partners Council should discuss whether members are planning regional events when piggybacking might be an option. The regional workshops could be used for a variety of purposes such as presenting the draft guidelines, sharing experiences and perspectives such as case studies and offering training and capacity-building on SEA (both in general and for application to the renewable energy sector).

- **Regional conference** – Following rollout of the guidelines at IAIA 23, a subsequent IAIA regional conference focused on SEA for RE facilities may provide an excellent venue for interchange of ideas and experiences. This will require planning, development, and sponsorship.

- **SEAs for RE Energy** – it is not proposed that IAIA will undertake or fund these SEAs itself. It would up to sovereign governments, possibly funded separately by development partners. These will provide an opportunity to use the guidelines, learnings from the SEA initiative and to prepare subsequent case studies.

- **Case studies** – it is envisaged to prepare a suite of case studies to illustrate SEA application in the renewable energy sector and to raise familiarity with the nature and benefits of SEA for RE and generate buy in. It is recommended that these case studies be regional in nature and that a decision should be made as to how these will be made available (perhaps best on the IAIA website). There have been only a limited number of SEAs conducted to date for renewable energy options, largely in the wind sector. These should be catalogued, and case studies prepared for them. Information from such case studies (if available from Phase B) can be drawn upon in developing the guidelines (e.g., to extract examples of how particular SEA principles were applied or methods used). Opportunities to develop further case studies should be explored, especially those where the IAIA guidelines are applied. A common template should be developed for presenting case studies. This will standardise their format and facilitate cross-comparison and analysis. It is suggested that these templates should be no more than 2-4 pages in length. Several questions remain to be answered in Phase C: Who will fund the case studies? Who will oversee their preparation and review?

- **Partners** –IAIA will also seek opportunities to work with other organisations - such as the MDBs (e.g. the ADB annual Clean Energy Forum), UN organisations, regional organisations, energy sector organisations such as the Geothermal Alliance and IHA - to raise awareness about the guidelines, promote their use, and to build capacity for undertaking SEAs. This might involve identifying opportunities to piggy-back on regional events being planned by other organisations. As these efforts will be regional, it will likely be beyond the capacity of national governments to coordinate and implement the guidelines. Rather this will fall to MDBs, UN agencies, private sector organisations or international NGOs, and even this may not be within their delivery mandate.

- **Delivery** – the workshops, by their nature should require participants to attend in person. However, the uncertainty of ongoing COVID-19 infections may push their delivery to a virtual format. While this is possible, the collaborative and interactive nature of SEA favours their delivery in a face-to-face format.

- **Information portal** – consideration should be given to how information technology can be used to promote the use and uptake of guidance materials on the information portal. Programming, development and production costs need to be budgeted for. Consideration should also be given to who will maintain the portal and review/add materials, including update of guidance, as required.

Annex 1: Summary of Consultants Expertise

Barry Dalal-Clayton

Professor Barry Dalal-Clayton has a wealth of international experience in environmental and social assessment, particularly in strategic environmental assessment (SEA). He has been team leader or senior consultant for 34 SEAs and related initiatives (listed in his CV – see appendix), and has coordinated leading international research on these processes.

For 27 years he was a senior staff member at the International Association for Impact Assessment and led its work on environmental assessment. In 2014, he established Environment and Development Services – International and operates as an independent consultant.

He is author of numerous books and papers including Earthscan reference guides and source books (SEA in 2005; sustainability appraisal in 2014), each synthesising evidence and perspectives from networks of planners, decision-makers, experts and practitioners around the world. He also led the development of two international directories of EIA guidelines (1995 and 1998).

During 2010-2014, Professor Dalal-Clayton coordinated an international initiative on environmental mainstreaming which developed a suite of publications and an interactive website (www.environmental-mainstreaming.org) including profiles of tools, methods and tactics for environmental mainstreaming/integration

Between 2004 and 2013, he provided a Technical Secretariat to OECD Task Team on SEA, leading development of OECD Guidance on SEA, a series of Advisory Notes (SEA in relation to: climate change; ecosystem services; post-conflict situations; and disaster management), development of SEA case studies, and tracking development agency SEA activities. He has also developed SEA guidelines for several countries/organisations (e.g Bhutan, Namibia).

He has played a key role in reviewing SEAs. In 2012, he developed a combined desk and stakeholder-based methodology for reviewing SEAs for the OECD, and successfully applied the approach for independent reviews of SEAs.

He is an adviser to various bilateral and multilateral aid agencies, the World Bank and several UN organisations and a member of the UNEP advisory panel integrated environment assessment.

Miles Scott-Brown

Miles Scott-Brown is a specialist in environmental impact assessment, strategic environmental assessment and cumulative impact assessment. He has been responsible for the preparation, coordination and review of over 30 major EIAs and associated projects during his 25-year career. Many of these projects have been for infrastructure and energy projects in western Canada and around the world.

He has significant experience with the preparation of environmental and social impact assessment to International Finance Institution standards. Miles has led a number of EIAs, SEAs, CIAs and compliance monitoring for energy development projects in Asia, the Americas

and Africa and has a thorough understanding of the environmental and social approval requirements and stipulations of international banking organizations, including the IFC Performance Standards and the Equator Principles.

He recently completed a SESA for oil and gas development in a conflict zone in Colombia and led a recent review of Strategic Environmental and Social Assessment in the forest sector for the World Bank. He was project director for the 2011 Mauritania SESA of the oil and gas sector and the 2008 World Bank Petroleum Governance Survey and is team leader for the updated 2021 Mauritania SESA for the Oil and Gas sector.

Mr. Scott-Brown is a certified environmental auditor (EcoCanada) an Adjunct Professor in the Faculty of Environmental Design at the University of Calgary and an instructor at Mount Royal University, Calgary. He is also a long-time member of the International Association for Impact Assessment (IAIA) and is a former member of the IAIA Board of Directors.

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Annex 2: Terms of Reference of the TAC and Partners Council

Technical Advisory Committee (TAC)

The principal aim of the TAC is to provide technical support and guidance for Phase A. It will be of limited size to facilitate efficient and effective discussions and interactions.

The membership of TAC will include representatives from the following:

- Specialist practitioners in SEA;
- Multilateral development banks;
- International renewable energy organizations (e.g., IRENA, IEA); and
- Private sector renewable energy companies.

TAC members will be requested to review and comment on:

- Draft table of contents for the SEA guidelines for renewable energy;
- Proposals for the steps and activities required to take Phases B and C forward;
- The draft Inception Report (which will incorporate 1 and 2), and
- Provide view, perspectives, and suggestions on any aspects of Phase A, B and C.

It is envisaged that inputs by the TAC will be by email responses to shared files and 2-3 video-based workshops (2-3 hours each).

The TAC will be established for Phase A initially (February-June 2022), but may be extended (if members are willing and available) to Phases B and C.

IAIA hope that TAC members will be willing to make these contributions on a voluntary basis.

Partners Council

The principal aim of the Partners Council (PC) is to provide support and oversight for the Guidelines initiative, and to foster interest and supporting 'buy-in' with members and other organizations.

Membership in the Partners Council will include representatives from the following:

- IAIA;
- Organisations with a focus on and/or close interest in the renewable energy sector (e.g., IRENA, IEA);
- Organisations that finance energy project (e.g., IFIs/MDBs, bilateral donors, private banks);
- Private sector renewable energy companies or their supporting member organizations;
- Organisations that are able to make a contribution (financially or in kind) to the initiative;
- Interested governments, and
- International NGOs.

The Partners Council will;

- Review project documents (e.g., the Concept Note; Inception Report, Draft Guidelines);
- Monitor progress in the initiative;
- Advise on sources of funding and support;

- Advise on opportunities to pilot/apply the guidelines;
- Recommend possible additional members of the Council, and
- Advocate for uptake and application of the SEA guidelines for renewable energy.

It is envisaged that the Partners Council will convene on an ‘as needs’ basis, but at least twice per year. This will be by video conference, but opportunities for members to meet at annual international events will be explored (e.g., the yearly IAIA Conference).

Annex 3: Concept Note for Guidance for SEA in the Energy Sector: Supporting the energy transition through impact assessment

June 2021

In addressing climate change, there are a number of areas of Impact Assessment (IA) where international best practice guidance does not exist but would be helpful to practitioners. One such area is the energy sector. Most of the necessary emissions reductions to reach climate change goals will be from greenhouse gases (GHGs) in the energy sector resulting from a major shift of the fuel mix towards the production of more renewable energy. To support the energy transition, countries are developing national energy plans and sector specific plans that can benefit from the use of impact assessment processes such as Strategic Environmental Assessment (SEA). This Concept Note describes the outline of a proposal that should result in internationally acknowledged and applied Good Practice SEA Guidance supporting all types of energy plans. All 194 registered UN countries can apply this guidance. Under this initiative, support will be provided to a number of low- and middle-income countries to apply this guidance in practice. SEA legislation is preferential but not a prerequisite for applying the guidance and receiving support.

1. Rationale

The International Assessment for Impact Assessment (IAIA), preferably jointly with some key actors in the energy sector (to be determined) and International Finance Institutes (IFIs, to be determined), is proposing to develop SEA guidance for strategic energy planning aiming to support the necessary shift towards the use of more renewable energy. The energy sector is the source of around three-quarters of greenhouse gas emissions today and holds the key to averting the worst effects of climate change, perhaps the greatest challenge humankind has faced to date. Reducing global carbon dioxide (CO_2) emissions to net zero by 2050 is consistent with efforts to limit the long-term increase in average global temperatures to 1.5˚C as agreed in the Paris agreement (2015)[4].

IAIA is the world-wide platform organization for people working in the field of impact assessment. IAIA is accepted by all actors in the energy sector as a neutral organization because it has no interests in this sector. A comprehensive analysis of the changes in the energy sector which are needed to dramatically reduce greenhouse gases are detailed in the recent publication, *Legal Pathways to Deep Decarbonization in the United States (Environmental Law Institute, 2019)*. The findings and recommendations of this analysis exemplify that the changes required in both the developed and developing worlds will have profound implications for the impact assessment profession. For example, it would be necessary to establish a programme of building onshore wind, offshore wind, utility-scale solar, and associated transmission that will exceed what has been done to date, by several times, every year out to 2050. Important legal processes and obstacles would be involved in this enormous undertaking including site acquisition and approval, impact assessment, state and local approvals, environmental protection laws, and last but definitely not least, the social acceptance of all measures.

To manage risks, renewable energy development must account for environmental and social impacts at national or regional scales. Strategic-level planning and early identification of risks through screening are effective tools to avoid placing developments in areas of high environmental sensitivity, or those of vulnerable human populations. Developments away from such areas are much more likely to avoid such risks, meet regulatory requirements and align with lender standards and stakeholder expectations.

Traditional IA practices of project-by-project assessment through EIA have shown to be insufficient to address cumulative impacts and protect the public interest. More strategic, long-term planning by public and private actors in the energy sector is required. SEA is an established procedure in support of such planning by ensuring that relevant alternatives are assessed, all environmental and social effects are evaluated and all interests are balanced. The proposed SEA guidance can support the implementation of the planning of this sector. IAIA intends to develop key guidance for national-level planning and for each of the sub-sectors (hydropower, solar, wind and bio-energy). This guidance will build upon relevant existing guidance and refer to it. To increase the use of these guidance

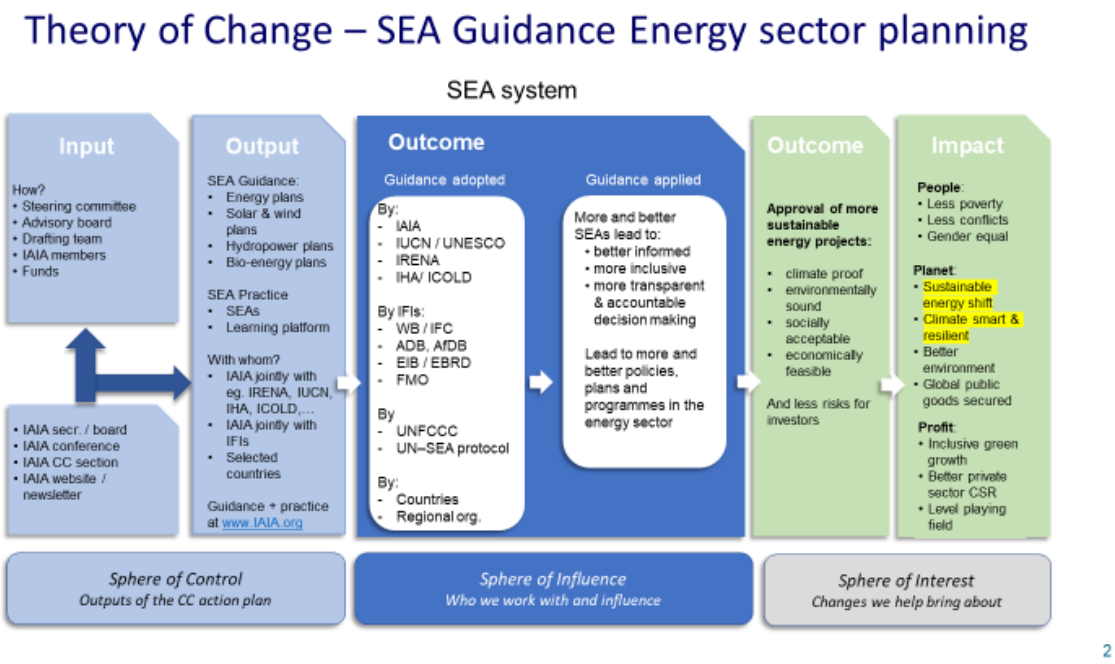
[4] IEA; Net Zero by 2050. A Roadmap for the Global Energy Sector. Flagship report — May 2021.

documents, they would be developed jointly with, and adopted by, relevant international organizations in the energy subsectors, such as the International Renewable Energy Agency and International Hydropower Association. Ideally, these four sets of guidance documents would be developed together as there are significant overlapping elements. In summary, the key problem to be solved by this guidance is the lack of strategic planning of the energy sector that takes environmental and social effects adequately into account.

2. Objectives and outcome

Objectives have been described for the long, medium and short term. The intervention logic is presented in the Theory of Change (see *Figure 1* below). This figure shows how the proposed development of guidance (short-term objective) is expected to contribute to medium- and long- term objectives as described.

Figure 1: Theory of Change



Long term objective (2030 – 2050)

- The proposed SEA guidance aims to support the world-wide shift towards a renewable energy sector, ensuring that the environmental and social effects of this shift are acceptable
- SEA contributes to this transition through the development of evidence-based and accountable policies, plans and programmes in the energy sector

Medium term objective (2023 – 2030)

- Countries
  - acknowledge/adopt the guidance and translate these into national SEA guidelines
  - apply these guidances in practice
- International Finance Institutions
  - require SEA for energy (sub-)sectors conducted by countries as a condition for funding of projects in the energy sector
  - acknowledge/adopt the guidance as framework for assessing the SEA requirement
  - support countries in executing SEAs for energy (sub-)sectors
  - (optional) acknowledge/adopt the guidance and translate these into their policies and guidelines for lending operations

- International organizations in the energy sector
  - acknowledge/adopt the use of the guidance
- Capacity development programme for a selection of LMICs to support the use of the guidance

Short term objective (2021 – 2023)

- Development of SEA Guidance documents to support energy planning, taking into consideration, the diversity of planning contexts.

3. Target groups

The following possible target groups are distinguished:

1. International organizations in the energy sector; ICOLD, IEA, IHA, IRENA, etc.
2. International Union for Conservation of Nature (IUCN) and other organizations representing civil society such as WWF, The Nature Conservancy, etc.
3. UN institutes: UNFCCC, UN-Environment, UNECE-SEA Protocol, UNESCO, OESO
4. International Finance Institutes, e.g. ADB, AfDB, AIIB, EBRD, EIB, IFC, FMO, IDB, etc.
5. Bilateral donors
6. Recipient countries

The possible roles of the target groups are identified in Table 1. Roles need to be determined in the Launch phase.

Table 1: Possible roles by the identified target groups concerning the SEA guidance component of the initiative

Target groups	Leading	Supporting	Funding	Adopting*
1. Int'l organizations in energy sector	✓	✓	✓	✓
2. IUCN and other civil society orgs.	-	✓	-	✓
3. UN institutes	-	✓	✓	✓
4. International Financial Institutions	-	✓	✓	✓
5. Bilateral donors	-	-	✓	✓
6. Recipient countries	-	-	-	✓

* Adopting: We can aim for that, but it cannot be secured at the start.

Status of SEA `

SEA is acknowledged by a growing number of actors in each of the six distinct target groups, although the differences between the target groups are considerable.

Table 2: Indicative overview of SEA acknowledged by target groups

Target groups	SEA acknowledged
1. Int'l organizations in energy sector	Int. Hydropower Association
2. IUCN and other civil society orgs.	IUCN, WWF
3. UN institutes	UNECE, UNDP, UNEP, UNESCO, CBD
4. International Financial Institutions	WB, ADB, AfDB, IADB, EIB, EBRD
5. Bilateral donors	OECD, Australia, Canada, Japan, Netherlands, Norway, Sweden, United Kingdom,
6. Recipient countries	About 100 countries, legally adopted Other countries voluntarily applied

Source: Inventory by the Netherlands Commission for Environmental Assessment (2020)

All 194 registered UN countries are the most important target group of the proposed guidance. About 100 of these countries have legally adopted SEA. Nearly all high-income countries have adopted SEA and the number of low- and middle-income countries adopting SEA is rapidly increasing. In nearly all countries without SEA legislation, SEA is voluntarily applied and supported by IFIs or bilateral donors. This means that the proposed guidance can be applied by all countries whether it is for mandatory or voluntary SEAs supporting policies, plans or programmes in the energy sector.

SEA guidance supporting the energy planning is the direct outcome of this proposed project initiative. Depending on the level of funding received and the joint interests of funding partners, this could take the form of the following sets of guidance:

A. SEA Guidance for the energy sector plans and programmes for one of the following jurisdictions (international/regional, national, sub-national (state/province) city).
B. SEA Guidance for the hydropower sector plans (Integrated river basin approach and hydropower sector approach, possibly including reservoir dams/pump storage). Cumulative Impact Assessment will also be included.
C. SEA Guidance for plans and programmes for solar and windfarms (on land and water).
D. SEA Guidance for plans and programmes for bioenergy[5].

In addition, the capacity development and outreach components of this proposed initiative will result in the following output:

E. Maximum of twenty SEAs executed for the energy sector and sub-sectors. The lessons learned will become available in a compendium of case studies.
F. Learning platform established sharing lessons learned and experiences by and between the IA and international energy communities (e.g. The Power & Energy Society) , and stakeholders involved in SEAs in the countries.
G. Communication and outreach platform facilitating advocacy and lobbying for this initiative.

[5] Bioenergy is the main source of renewable energy today. IEA modelling also indicates that modern bioenergy is an essential component of the future low carbon global energy system if global climate change commitments are to be met, playing a particularly important role in helping to decarbonize sectors such as aviation, shipping and long-haul road transport. However, the current rate of bioenergy deployment is well below the levels required in low carbon scenarios. Accelerated deployment is urgently needed to ramp up the contribution of sustainable bioenergy across all sectors, notably in the transport sector where consumption is required to triple by 2030." IEA 2017b.

4. SEA Guidance

The ambitions of this guidance are significant. To what extent these ambitions can be fulfilled depends on at least the following main factors: support of IFIs and key organizations in the energy sector, and funding.

In total, eleven starting points have been described. The scope of the guidance will be determined by the level of ambition. Before the start of this project initiative most of the starting points need to be agreed upon.

Starting points for the development of proposed Guidance

1. Guidance should become a world standard and should ideally be adopted by the following leading branch organizations in the energy sector:
    a. International Energy Agency (IEA): the IEA is made up of 30 member countries and 8 association countries
    b. The International Renewable Energy Agency (IRENA): an intergovernmental organization supporting countries in their transition to a sustainable energy future
    c. International Hydropower Association (IHA): a platform for the hydropower sector
    d. International Commission on Large Dams (ICOLD): an organization of member countries

2. Guidance will primarily focus on the overall energy sector including the following main sub-sectors: hydropower, solar, wind and bioenergy. Smaller sub-sectors like geothermal energy, wave energy and other new smaller initiatives will not be included as they are not expected to become substantial part of the future fuel mix in the majority of the countries. Guidance for the non-renewable sectors oil, natural gas, and coal will not be provided because the shift towards decarbonization needs to be supported. Whether guidance for nuclear energy should be included has not yet been agreed upon.

3. The sub-sectors, hydropower on the one hand and solar, wind, and bioenergy on the other hand, should be strongly linked to spatial planning domains, respectively through river basin planning and land use planning. In the present set-up, the proposed Guidance will describe and include the linkages but will not provide guidance for these two latter forms of planning. In the Launch phase the scope of the guidance with respect to planning can be discussed as an option.

4. Guidance will focus primarily on SEAs supporting policies, plans, and programmes. In most situations, these SEAs are the responsibility of the government as they are owner and initiator of policies, plans, and programmes. To respond to the diversity of planning systems in the world the guidance will prepare a typology of these systems. Cumulative Impact Assessment (CIA) is predominantly driven by IFIs to assess the cumulative impacts of one or more projects. CIA will be taken into consideration for some sub-sectors such as the hydropower sector and possibly for solar and wind farm sub-sectors. Other forms of impact assessment supporting strategic planning of the energy sector can be included in the guidance.

5. Guidance should be coherent and developed in a modular way, allowing different donors to fund modules.

6. Guidance should at least consist of the following components:
    a. Practical guidance – how to do SEA for at least the following user groups: government authorities, CSOs, financial institutions, and private sector including consultancy firms. This guidance is informed by the lessons learned of SEA cases made for the sector in general and the sub-sectors, (see component c below).
    b. Examples of SEA-supporting documents like models for ToRs, scoping reports, quality assurance etc. This type of guidance supports efficient preparation and effective implementation of SEAs as many of these documents include general information besides sub-sector/country specific information.
    c. Collection of (good-practice) SEA cases (national level and for sub-sector) supporting agenda setting, awareness raising, and providing inspiration for good practice, such as national energy plans, for example. Recently SEAs have been conducted to support national energy plans in Angola, Bhutan, Cambodia, Vietnam, and Zambia. These experiences should be elaborated in case studies including lessons learned. These cases need to be used to draft the guidance as mentioned under component a above. Compilation of at least five SEA case studies for each of the sub-sectors needs to be made. In addition, from the start of this initiative, SEAs will be conducted as part of the capacity development component. However, it

will take some years before lessons can be gained. These SEA experiences will become part of the collection of SEAs.

d. Proven tools and methods that can be used in the SEA process, because SEA does not prescribe which tools and methods for data collection and analysis need to be used. On the basis of the five SEAs for the general and sub-sector, an inventory and analysis can be made of the methods used and how effective they have been in the specific context.

7. Guidance needs to be developed in a participatory way involving, amongst others, members of IAIA and members of platform organizations in the energy sector. Members of these organizations from low-, middle- and high-income countries need to be involved.

8. Guidance should be available in a user-friendly way on (at least) the IAIA website and at the websites of organizations joining/supporting the initiative.

9. Guidance should be supported by a robust practice-oriented capacity development and outreach program. The capacity development component will guide SEA practices, a learning platform and communication strategy will secure that awareness is raised, and lessons learned are shared and the first step towards institutionalization is made.

10. Communication, outreach, lobby, and advocacy. To meet the objectives of this initiative, a robust and up-to-date communication and outreach strategy needs to be developed and implemented at different levels.

11. Support desk for at least five years should be established, by practice-oriented organizations in the field of impact assessment and the energy planning sector.

5. Capacity development and outreach

Development and adoption of guidance are only the first steps towards structural application of guidance. To secure that the guidance will be applied in practice, it is important that in parallel to the development of guidance, the following main activities will be implemented. These activities will continue for some years after the guidance has been adopted to secure that the use of the adopted guidance will be institutionalized by identified international organisations and selected countries.

1. **LEARNING PLATFORM:** The idea of a learning platform is to facilitate a process of sharing experiences with the use of the guidance between at least the following groups of practitioners: SEA community and energy community. Therefore, an entity will be identified that can preferably be built upon existing learning platform(s).

2. **SUPPORT TO IMPLEMENTING SEA PROCESSES:** The idea is that for each identified guidance's A to D, at least five SEA processes will be conducted by making use of the (draft) Guidance. The experiences gained during the implementation of these SEA processes will contribute to awareness raising and learning by the actors involved and the two identified communities of IA and energy. It is proposed to support at least five SEA processes because even within one sub-sector, experiences learned will have contexts that differ, and as a result the SEA processes also differs. Three processes provide a good insight in the variety and flexibility of SEA as well as the added value of SEA as a tailor-made decision support tool.

   These SEAs will be conducted in a number of selected countries. Ideally, two SEAs will be applied in one country for reasons of effectiveness and efficiency. In total, five SEAs for four categories means in total 20 SEAs included in this proposal.

   To make an SEA process a work and attitude-changing experience for the actors involved is challenging and costly, but it can be done. It requires a rather extensive training and coaching of all stakeholders during the process. It is costly because use needs to be made of international experts providing support.

3. **OUTREACH AND COMMUNICATION:** To optimize the learning experience and effectiveness of the SEA processes implemented, an outreach plan will be prepared for each country where an SEA process will be

implemented. In this plan, country-specific outreach activities will be identified. These activities might include more traditional forms of communication like preparation of a case study, awareness raising, and training, but also more up-to-date forms of outreach such as the launching of a website, a road show, and the preparation of a video. A website hosted by IAIA can also support the transfer of experiences between countries.

To support advocacy and lobbying for this guidance at the international level, a platform will be set that will make use of the SEA experiences gained in the countries.

4. **HELP DESK:** A help desk consists of a team of experienced experts in the field of SEA and energy planning facilitated by respective practice organizations' in this field. This team of experts supports the key players in the country through the development of capacity, but they do not implement the SEA study. This help desk also fulfills a key role in the facilitation of the learning platform.

6. Work plan

The activities can be divided into the following four phases:

- Phase A. Launch phase and implementation strategy (4 months).
- Phase B. Preparation of Draft Guidance (6 – 10 months).
- Phase C. Preparation of Final Guidance (6 - 20 months). Duration of this phase differs from 6 to 20 months. Ideally, the draft guidance is tested in practice, and that takes a lot of time. Possibly 20 months is insufficient.
- Phase D. Operationalization, application of guidance and capacity development and outreach (60 months). This phase starts at the beginning and will continue during the preparation of the Guidance.

A preliminary list of activities and outcomes is presented in table 3.

Table 3: Preliminary list of activities and outcomes

Activities		Outcome	Months
1.	**Launch Phase**		**4**
1.1	Assign Advisory Committee	Advisory Committee members assigned	
1.2	CT preparation detailed work plan	Detailed work plan	
1.3	Prepare first digital meeting CT + AC present work plan	Work plan	
1.4	Inventory of existing IA Guidance and Guidelines	List of suitable templates	
1.5	Agree most suitable template	Template selected	
1.6	Agree on ToC Guidance A – D	Table of Contents Guidance A – D	
1.7	Prep. Draft Inception Report + Implementation strategy (IS)	Draft Inception Report	
1.8	Consultation Draft Inception Report + IS to AC	Final Inception Report	
1.9	Approval of Inception Report + IS by SC	Approval Inception Report	
2.	**Draft Guidance A – D**		**6 - 10**
2.1	Draft Guidance A		
2.1.1	Preparation first Draft Guidance A by CT	First Draft Guidance A	
2.1.2	First draft-consultation and discussed with AC at IAIA22		
2.1.3	Second draft prepared by CT		
2.1.4	Second draft consultation with AC (virtual)		
2.1.5	Adjusting second Draft Guidance by CT		
2.1.6	Present 2nd Draft Guidance - consultation + approval SC	Second Draft Guidance A	
2.2	*Draft Guidance B (see 2.1)*	*Draft Guidance B*	
2.3	*Draft Guidance C (see 2.1)*	*Draft Guidance C*	
2.4	*Draft Guidance D (see 2.1)*	*Draft Guidance D*	
3.	**Final Draft Guidance A – D**		**6 - 20**
3.1	Preparation Final Draft Guidance A		

Activities		Outcome	Months
3.1.1	Preparation First Draft Guidance A by CT	1st Final Draft Guidance A	
3.1.2	Consultation final draft with AC at IAIA23		
3.1.3	Adjusting final draft by CT and justification to AC		
3.1.4	Approval of Final Draft Guidance by SC	Final Guidance A	
3.2	*Preparation Final Draft Guidance B (see 3.1)*	*Final Draft Guidance B*	
3.3	*Preparation Final Draft Guidance C (see 3.1)*	*Final Draft Guidance C*	
3.4	*Preparation Final Draft Guidance D (see 3.1)*	*Final Draft Guidance D*	
4.	**Operationalization: Capacity development and outreach**		**60**
4.1	*Selection of countries*	*Application in of SEA guidance*	
4.2	*Facilitate a learning platform*	*Compendium of lessons learned*	
4.3	*Implementation of SEAs for A, B, C, and D*	*20 SEA processes*	
4.4	*Help desk*		
5.	**Organization and management**		

7. Organization and management

Duration of this project initiative is at least five years. For the organization and management of this project initiative, the following entities will have these roles:

CORE TEAM (CT): Consultants will be assigned by IAIA to draft the Guidance documents. The team of consultants consists of one leading SEA consultant and a maximum of four consultants responsible for respectively Guidance A to D, with five consultants in total. The lead consultant of the CT will report to IAIA Chair/Secretary and core group of the Advisory Board.

STEERING COMMITTEE (SC): Consists of the following persons/representatives:

- Chair and secretary: IAIA Executive Director and IAIA staff member
- Member: one IAIA board member
- Member: Chair of Climate Change section
- Member: representative of funding agency(ies)
- Members: representative(s) of key partners (IUCN/ IHA, etc.)

The SC is responsible for setting the boundaries of the guidance (consultation with donors), quality assessment (quality, timeliness, efficiency), and approval of the following product:

- Inception Report and implementation strategy
- Draft Guidance Report
- Final Guidance Report
- Operationalization Strategy

To assess the quality of the deliverables, the SC will make use of the advice of the AC. The SC justifies publicly how the advice has been used. SC members can be paid for their time investment if they want.

ADVISORY COMMITTEE (AC): Consists of a small group of six assigned high-profile members and a larger group of selected high-profile members who sign a social contract. These members should have a high-profile CV in the respective energy and IA sector.
AC will be tasked to advise on the following products:

- Draft Inception report and implementation strategy
- First Draft Guidance Report
- Second Draft Guidance Report

- Draft Final Guidance Report
- Operationalization strategy

AC members will be supported to attend IAIA and relevant energy conferences. (See below)

IAIA SECRETARIAT: The IAIA Secretariat will have a supporting role to the Core Team, Steering Committee and Advisory Committee and the IAIA board. They will also support the financial management of the project.

These committees will meet periodically to review progress and adjust actions moving forward. To the extent possible and practical, these groups will take advantage of external, related events at which they can gather for the purposes of this project. These external events include but are not limited to:

ENERGY CONFERENCES: Relevant energy conferences/meetings need to be identified and selected.

IAIA ANNUAL CONFERENCES: The IAIA annual conferences of 2022 (Vancouver) through 2026 will be used to have an extensive discussion between CT and AC on respectively:

- The Inception report/1st Draft Guidance documents A-D (IAIA'22, Vancouver)
- Draft Final Guidance documents A-D (IAIA'23, location to be determined)
- Capacity Building on the Guidance documents A-D (IAIA'24-26, locations to be determined)

8. Budget

It is anticipated that this project will require over $6 million USD to complete. The government of Canada has already committed seed funding to move the project through the Launch Phase.

Annex 4: Inventory of existing SEA guidelines and related instruments

The inventory lists SEA guidelines and related documents that contain guidance material. It does not aim to list academic books, research papers, reviews or SEA reports. It should be considered a work in progress and will be further developed through subsequent project phases

The guidelines include those issued by official government authorities, international organisations, UN agencies and others and are presented for convenience in the following categories:

- Africa
- Asia
- Middle East
- Caribbean and South and Central America
- Europe
- North America
- Mediterranean
- Australia, New Zealand and Pacific
- UN and international organisations
- IFIs and bilateral donors
- Themes and topics
- Others

AFRICA

Cote d'Ivoire

Presidence de la Republique, Republique de Cote d'Ivoire (undated), *Decret relatif à l'Evaluation Environnementale Stratégique des politiques, plans et programmes.*

Ghana

EPA (2016) *Preparation of an Implementation Framework for Operationalizing Strategic Environmental Assessment (SEA) Practice in Ghana.* Final Report. Environmental Protection Agency, Accra (available at: http://www.epa.gov.gh/epa/sites/default/files/downloads/publications/Final_Report_SEA%20Framework%20for%20Implementation.pdf

EPA (undated) *SEA Work Flow Chart*, Environmental Protection Agency, Accra (available at: http://www.epa.gov.gh/epa/sites/default/files/downloads/publications/SEA%20Work%20Flow%20%26%20Minimum%20Requirements.pdf)

Kenya

NEMA (2012), *National Guidelines for Strategic Environmental Assessment*, National Environmental Management Authority, Nairobi.(available at:

https://www.nema.go.ke/images/Docs/Guidelines/SEA%20GUIDELINES%20FINAL%20DRAFT-feb_20_2013.pdf)

Malawi

OPC (2011) *Guidelines for Integrating Environmental Sustainability and Natural Resource Management in Policy Making and Planning in* Malawi Office of the President and Cabinet, Lilongwe, Malawi

Namibia

DEA (2008*), Draft Procedures and Guidelines for Strategic Environmental Assessment (SEA) and Environmental Management Plan (EMP),* Directorate of Environmental Affairs, Ministry of Environment and Tourism, Government Gazette of the Republic of Namibia, Windhoek, April 2008,

Nigeria

FME (2017*) SEA Guideline*, 3rd revised, Federal Ministry of Environment, Lagos (available at: https://ead.gov.ng/wp-content/uploads/2017/04/SEA_GUIDELINE_3rdREVISED_17042017-1.pdf)

Rwanda

REMA (2011) *General Guidelines and Procedures for Strategic Environmental Assessment*, Rwanda Environmental Management Authority, Kigali (June 2011)

South Africa

CSIR (2007) *Strategic Environmental Assessment (SEA) Resource Document: Introduction to the Process, Principles and Application of SEA*. Council for Scientific and Industrial Research, Environmentek, Stellenbosch, South Africa.

DEAT (2004) *Strategic Environmental Assessment*, Integrated Environmental Management Information Series 10, Department of Environmental Affairs and Tourism, Pretoria (available at: https://www.dffe.gov.za/sites/default/files/docs/series10_strategic_environmental_assessment.pdf)

DWAF (2001) *A Guide to Strategic Environmental Assessment for Water Use in Catchments*. Draft. Department of Water Affairs and Forestry, Pretoria,

Tanzania

VPO (2017) *National Guidelines for Strategic Environmental Assessment*, Vice President's Office, Dar es Salaam, Tanzania (available at: https://www.vpo.go.tz/uploads/publications/en-1592644741-NATIONAL-GUIDELINES-FOR-STRATEGIC-ENVIRONMENTAL-ASSESSMENT.pdf)

Uganda

NEMA (2020) *Guidelines for Strategic Environmental Assessment (SEA) in Uganda*, National Environmental Management Authority, Kampala (available at:

https://nema.go.ug/sites/all/themes/nema/docs/Strategic%20Environmental%20Assessment%20(SEA)%20Guidelines%20Pdf%202020.pdf)

Africa Regional

EAC (The East African Community) 2005. *Transboundary Environmental Assessment Guidelines for shared Ecosystems in East Africa*. P.O. Box 1096, Arusha, Tanzania. (available at: file:///C:/Users/Barry/Downloads/EAC%20EIA%20Guideline.pdf)

ASIA

Bhutan

Dalal-Clayton D.B. (2016) *National Guidelines for Strategic Environmental Assessment in Bhutan*, Final Draft, 8 Sept 2016, National Environment Commission, Royal Government of Bhutan, Thimphu

Georgia

REC/UNDP (2006*) A Guide to Strategic Environmental Assessment*, Regional Environment Center for Central and Eastern Europe and UN Development Programme (March 2006), Tbilisi (available at: https://www.unece.org/fileadmin/DAM/env/eia/documents/SEA_CBNA/Georgia_manual_en.pdf)

Hong Kong

EPD (2015) *Hong Kong Strategic Environmental Assessment Manual*, Environmental Protection Department, Hong Kong (online manual accessible at: http://www.epd.gov.hk/epd/SEA/eng/sea_manual.html)

India

Rajvanshi A. (2015) *Strategic Environmental Assessment: A Guidance Tool for Mainstreaming Biodiversity and Sustainability* Wildlife Institute of India, Dehradun, Inida (available at: http://lupm.urban-industrial.in/live/hrdpmp/hrdpmaster/igep/content/e65513/e65614/e69198/e69231/SEAPART_I.pdf)

Indonesia

Grenier L., Kuswartojot T. and Asdak C. (2014) *SEA Guidelines Comparative Study,* Report prepared for Danida Environmental Support Programme (ESP3), Jakarta, Final Version, 29 April 2014

Lao PDR

DEQP (2018) *Guidelines on Strategic Environmental Assessment Lao PDR*, Department of Environmental Quality Promotion Ministry of Natural Resources and Environment (unofficial translation)

Myanmar

NCEA (2019) *How to do Strategic Environmental Assessment in Myanmar*, 1st Draft Technical Guidance, Prepared by the Netherlands Commission for Environmental Assessment

Pakistan

Annandale, D. (2014) *Strategic Environmental Assessment for Spatial Planning - Guidance Document.* Islamabad: IUCN Pakistan. 20 pp.

Annandale, D. and Hagler Bailly Pakistan (Pvt) Ltd. (2014) *Strategic Environmental Assessment for Hydropower Sector Planning – Guidance Material.* Islamabad: IUCN Pakistan. 34 pp

Government of Pakistan and IUCN (2014) *Strategic Environmental Assessment Rules* (Draft), International Union for Conservation of Nature and Natural Resources. 2014. 2014. Islamabad: IUCN Pakistan. 14 pp.

Philippines

DENR (2017) *Manual of Procedures on Biodiversity-focused Strategic Environmental Assessment* for The Department of Environment and Natural Resources, Quezon City (available at: http://www.philchm.ph/wp-content/uploads/BDSEA.pdf)

Sri Lanka

CEA (undated) *A Simple Guide to Strategic Environmental Assessment*, Central Environment Authority, Colombo (available at: http://www.cea.lk/web/images/pdf/SEAGuideline.pdf)

Thailand

ONEP (2009) *Strategic Environmental Assessment: SEA* (in Thai). Bangkok (Thailand): Office of Natural Resources and Environment Policy and Planning (ONEP).

ICEM (2019) *Strategic Environmental Assessment (SEA) of Rayong Province Development and Revision of the Thai Draft SEA Guidelines*. SEA Guidelines for Thailand. Prepared by ICEM - International Centre for Environmental Management for Thai National Sub-Committee on SEA Guidelines for the National Committee for Sustainable Development (NESDC) and ADB. Hanoi. TA 9204-THA Phase 2:

United Arab Emirates

GAD (2014) *Technical Guidance Document for Strategic Environmental Assessment (SEA)*, Doc. ID: EAD-EQ-PCE-TG-03 Government of Abu Dhabi (available at: https://jawdah.qcc.abudhabi.ae/en/Registration/QCCServices/Services/STD/ISGL/ISGL-LIST/TR-526.pdf

Vietnam

DCE (2008) *Technical Guidelines on Strategic Environmental Assessment (SEA) for Urban Planning in Vietnam*, draft, Vietnam – Denmark Development Cooperation in the Environment (DCE) 2005–2010, July 2008.

Dusik J., Cashmore M. A., Kørnøv L. and Luu Duc C. (2013). *Guidance for integrating climate change considerations into the SEA of urban and Construction plans in Vietnam*. Danish Centre for Environmental Assessment (DCEA), Aalborg University.

MPI and DCE (2011) *Guidelines for Strategic Environmental Assessment (SEA) of Socio-Economic Development Strategies, Master Plans and Plans,* Ministry of Planning and Investment and Vietnam - Denmark Development Cooperation in Environment (DCE) Capacity Development Support for Environmental Planning and Management

MONRE (2008) *General Technical Guidance for Strategic Environmental Assessment*, Department of Environmental Impact Assessment and Appraisal, Ministry of Natural Resources and Environment, Hanoi

Asia Regional

MRC (2011) *Roads and Floods: Best Practice Guidelines for the Integrated Planning and Design of Economically Sound and Environmentally Friendly Roads in the Mekong Floodplains of Cambodia and Viet Nam.* Mekong River Commission, Technical Paper No. 35 (October 2011)

MIDDLE EAST

To be added.

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Annex 5: Information Note on the Renewable Energy SEA guidelines initiative

SEA Guidelines for Renewable Energy

Background

Climate change is a major driver towards today's energy transition away from fossil fuels. Recognizing the necessary shift required towards the use of more renewable energy, the International Association of Impact Assessment (IAIA)[6] is launching a multi-phase project to:[7]

- Develop guidance (building on relevant existing initiatives) for the application of strategic environmental assessment (SEA) to policies, plans and programmes for renewable energy development - focusing, for now, on the hydropower, solar, wind and bioenergy sub-sectors;
- Establish a learning platform to share experiences with a broad group of stakeholders through the use of the guidelines and other platforms;
- Support application of the guidelines in selected countries to strengthen capacity and raise awareness (with training and coaching of stakeholders), to implement an outreach plan, and to gather experience - supporting up to 20 SEA case applications (five for each sub-sector) of the guidelines; and,
- Launch a help desk team of experienced experts in the field of SEA and energy planning facilitated by respective practice organizations in this field.

Why SEA guidelines are needed for renewable energy

Traditional environmental impact assessment (EIA) conducted at the individual project level has proven to be insufficient to deal with the bigger picture beyond project level impacts, to address cumulative impacts from multiple projects/developments and to protect the public interest. A more strategic approach is required to support policy-making and long-term planning by public and private actors in the energy sector. SEA is now a well-established procedure that supports such planning by ensuring that relevant alternatives are assessed, that all environmental and social effects are evaluated and that all stakeholder interests are balanced. It has been adopted by about 100 countries - nearly all high-income countries and an increasing number of low- and middle-income countries. In nearly all countries without SEA legislation, the tool is voluntarily applied and supported by IFIs and/or bilateral donors. As the global renewable energy sector is expected to expand significantly in the coming years, there is an immediate and pressing need for guidance to deal with siting issues, the overall lack of a comprehensive regulatory framework and increasing public concerns about the over-saturation of renewable energy projects in the landscape. These concerns can only be addressed at a strategic level – not at the individual project level.

A partnership approach

IAIA aims to develop the guidelines in partnership with the renewable energy sector, international and UN organisations, international finance institutions, bilateral donors, civil society representatives and other organisations, to promote their uptake and international acknowledgement, and to build capacity throughout the renewable energy sector.

[6] 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 (www.iaia.org).

[7] IAIA has contracted Barry Dalal-Clayton and Miles Scott-Brown to lead this initial launch phase.

Project phases

The project will involve the following phases:

- Phase A. Launch phase - development of draft table of contents for the guidance note and preparation of a project implementation strategy (February – May 2022);
- Phase B. Preparation of Draft Guidance (6 – 10 months);
- Phase C. Preparation of Final Guidance (6 - 20 months). This phase is not fully determined at this time and could range up to 20 months, depending on review and buy in of sectoral and other interests.
- Phase D. Operationalization, application of guidance and capacity development and outreach (5 years).

Progress report at IAIA'22

A progress report will be presented at IAIA'22 in Vancouver. Details will be announced by IAIA.

IAIA needs your support

We have three immediate tasks in this launch phase:

- To identify actors and organizations across the (renewable) energy sector that make reference to SEA as a planning tool (e.g. on websites, case studies or in documents);

- To identify and source existing SEA guidelines (e.g. national, organisational) – we need url addresses or electronic copies of SEA guideline documents).

- To identify IAIA members who have a strong interest in this project, are in a position to provide information and be kept regularly updated.

Contact us

If you can help with these tasks, **please send information (as soon as possible) to both of us:**

Barry Dalal-Clayton (bdalalclay@aol.com) and Miles Scott-Brown (miles@cieragroup.com).

Annex 6: Summary of Questions – Presentation at IAIA22

A presentation on the SEA guideline initiative was made at IAIA22 in Vancouver. The following table summarise questions asked and responses.

Question	Response
What still needs to be done to actualise SEA i.e. guidelines are great, but what do we need to do to make SEA happen?	This will be addressed in Phase C.
Include a chapter on human rights (the Just transition).	The just transition will be included as part of SEA objective setting.
How will you address the different challenges that are faced in each country, e.g., offshore wind farms in the Netherlands vs onshore wind in Jordan?	The guidelines will try to cover the range of circumstances but cannot cover every individual situation.
Will the guidelines be so generic that they will miss local considerations?	The guidelines cannot deal with the huge variety of local conditions but might indicate the issue by giving examples of where things vary. Should indicate need to contextualise during scoping and undertaking the SEA.
How will you deal with situations where the impacts and benefits of RE projects are spatially separated, e.g., RE projects in Africa for the benefit of Europe?	It is clear we will have to address transboundary conditions.
Will the guidelines address transmission lines, substations, battery storage, etc.?	Yes, all associated facilities will be included in the SEA process.
Have you, or will you contact governments? Is it that you are saying “this is what you need”, vs “this is what we want”?	This is a key issue for Phase B and we will need help in this. Maybe UNEP can help with that? It is a budget Issue.
How far up and down the project life cycle will you go? E.g. mining for rare earth minerals and use of power?	Supply chain issues should be addressed
Will the Guidance address the cumulative/antagonistic effects of multiple RE projects in a small area?	Yes, that is what SEA is all about.
What about other forms of RE, e.g. agri-waste to energy?	These issues would form part of the bioenergy guideline.
What happens if there are contradictions between your (IAIA) Guidance and country regulations/guidelines?	The guidelines will address good practice. They cannot account for all the different particularities of country regulations. There are no country-level RE guidelines. The first half will present overall good practice. SEA commissioners/practitioners will always have to decide on the approach to be followed taking into account the national context which includes domestic regulations and guidelines.

Question	Response
What has been/will be the extent of consultation about this guidance document? At what levels and in which countries?	This will be done as part of the consultation process, but it inevitably depends on budget.
Realizing that the energy transition will be across multiple sectors, how do we integrate the various sectors together into SEA?	Integration of renewables is a key component of the energy transition and will be addressed as a key issue in the guidelines.
Some142 guidelines have been identified and compiled. Why would this one be different?	Very few of these specifically address RE. Those that do are for specifical technologies. None cover the whole field. We will not try and re-invent the wheel in creating another general SEA guideline. This one will be different because it focuses on what is needed to be done by governments in planning for the energy transition and integration/replacement of energy supplies by renewable energy.
There was a comment about we are creating a monster. How do we keep the amount of material manageable and useful?	This is very true – the key we believe is not to produce another guideline that no one will read nor use, but rather we will need to focus on how this can be used by governments and others in the planning process for the energy transition.

Annex 7: Preliminary List for Reference Group

The following is an initial list of individuals and organizations contacted or those having interest in the SEA guideline initiative. This list is considered a work in progress and will be regularly updated.

Last Name	First Name	Position/Organization	Location	Issue Discussed
Adomson	Amos	Assistant Programme Officer, EPA	Ghana	adomsona3@gmail.com
Annandale	David	Consultant		
Bancroft	David	Executive Director, IAIA	Washington DC	
Baxter	Martin	IEMA	UK	M.BAXTER@IEMA.NET
Bonvoisin	Nicholas	UNECE		nicholas.bonvoisin@enece.org
Brito	Elizabeth	Consultant, ex IADB		ejgnbrito@gmail.com
Carew-Reid,	Jeremy	International Centre for Environmental Management (ICEM), Hanoi	Hanoi	
Casanueva	Txomin	Consultant	Spain	txomin.casanueva@gmail.com
Clark	Colin	Brookfield Renewable		
Conzo	Lori	Global Biodiversity Lead, International Finance Corporation	Washington DC	
Dunn	Bruce	Director, Safeguards Division, ADB		
Dusik	Jiri	Integra Consulting	Prague	jiri.dusik@integracons.com
Fischer	Thomas	University of Liverpool		
Gaviano	Andrea	Inter-American Development Bank	Washington DC	
Geibler	Gesa	Institute of Landscape Development, Recreation and Conservation Planning, University of Natural Resources and Life Sciences (BOKU)	Vienna	
Gonzalez	Guillermo	Consultant	Paraguay	biologo.gonzalez@gmail.com
Howard	Rufous	Institute for Environmental Management (IERA)		
Isaac	Steve	Jacobs		
Khorlo	Tenzin	National Environment Commission	Bhutan	tkhorlo@nec.gov.bt
Kilajian	Alain	IHA		

Last Name	First Name	Position/Organization	Location	Issue Discussed
Kohloff	Arend	Netherlands Commission for Environmental Assessment;		
Kornov	Lone	Professor, University	Denmark	lond@plan.aau.dk
Lazarus	Kate	Senior ESG Advisory Lead, Asia Pacific Environment, Social and Governance, International Finance Corporation	Bangkok	
Lintner	Stehen	ex World Bank	Washington DC	slintner@gmail.com
Lucius	Hakan	EIB		
Maricic	Tamara	,Institute of Architecture and Urban & Spatial Planning of Serbia		
Marsden	Emma	Asian Development Bank		
Meynell	Peter John	Consultant		
Murayama	Takehiko	Tokyo Institute of Technology	Japan	murayama.t.ac@m.titech.ac.jp
Mwangi-Gachau	Elizabeth	Kenya Electricity Generating Company (KenGen) PLC		Emwangi7@gmail.com
Ndebele	Pancho	EMVELO solar company	South Africa	pancho@emvelo.co.za
Nelson	Peter John	Consultant	UK	peterjonnelson@gmail.com
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Parco	Gerry			
Sheng	Fulai	UNEP	Geneva	
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Tarr	Peter John	Director, Southern Africa Institute for Environmental Assessment	Windhoek, Namibia	peter.tarr@siaea.com
Therivel	Riki	Consultant	UK	
Walmley	Bryony	Southern Africa Institute for Environmental Assessment -	Capetown	

Organizations

American Wind Energy Association		
Geothermal Alliance		
Global Wind Energy Council		
International Hydropower Association		www.iha.org
International Solar Alliance		
International Solar Energy Society		
IRENA		www.irena.org
IUCN		
North American Association of Environmental Professionals		
Norwegian Center for Renewable Energy		
The Association for Renewable Energy and Clean Technology	London	Home - REA (r-e-a.net)
The Renewable Energy Institute	UK	www.renewableinstitute.org
World Bioenergy Association		
World Council for Renewable Energy		
World Wind Energy Association		