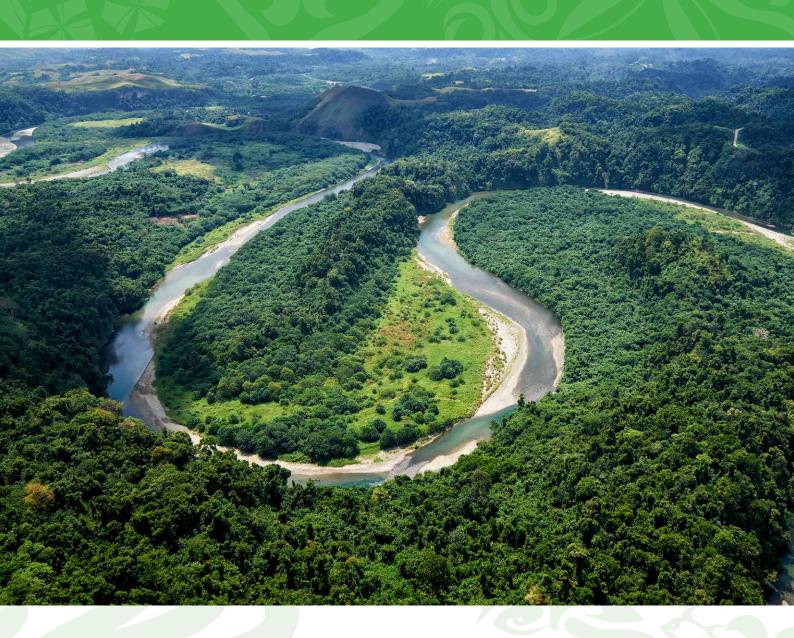
STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)

GUIDELINES FOR PACIFIC ISLAND COUNTRIES AND TERRITORIES







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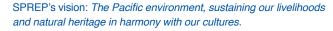
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This publication provides general guidance to support a strategic environmental assessment (SEA) process. It is designed to be tested and revised over time based on experiences in the Pacific island countries and territories, and the development and progression of SEA in the Pacific region. For specific direction and guidance SPREP member countries should refer to their national legislation and relevant Multilateral Environmental Agreements and/or consult with an SEA specialist.

Cover photo: Lunnga River mouth, Solomon Islands © Stuart Chape



UN environment programme







STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)

GUIDELINES FOR PACIFIC ISLAND COUNTRIES AND TERRITORIES







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The development of the Strategic Environment Assessment (SEA) Guidelines for Pacific Island Countries and Territories was made possible through a series of extensive consultations with SPREP Members and partners which culminated in the approval of the Guidelines by the SPREP Executive Board meeting, 2020.

The development of the Guidelines was spearheaded by the SPREP Environment Monitoring and Governance Programme and the process started in September 2018 and concluded in May 2020. The development of the Guidelines was made possible with funding contribution through the EU ACPMEA2 project and the UNEP Swedish Fund which supported the consultations and the review process. Mr Tim Strange was engaged by SPREP to assist with the drafting of the Guidelines. Our sincere appreciation to the 14 Pacific island representatives for their technical review and workshopping of sections of the Guidelines during the New Zealand Association Impact Assessment (NZAIA) conference held in New Zealand in 2019. Appreciation is also extended to Professor Richard Morgan and Nick Taylor of NZAIA, the International Association of Impact Assessment (IAIA) particularly Bryony Walmsley; Environmental Institute of Australia and New Zealand (EIANZ) Assessment; and University of the South Pacific (USP); United Nation Environment Program (UNEP), New Zealand Ministry of Foreign Affairs and Trade (MFAT) for the invaluable input, feedback and advice which guided the finalisation of the Guidelines.

A special thank you to Vanessa Fread and Jorg Anson of the Federated States of Micronesia Ridge to Reef project for the SEA case study from FSM.

Last but not least, my sincere appreciation to the staff of SPREP who worked tirelessly in developing the Guidelines including those who provided input and comments.

Thank You.

FOREWORD

Director General of SPREP

The SPREP Strategic Plan 2017-2026 has identified Strategic Environmental Assessment (SEA) as a tool for strengthening national sustainable development planning. Whilst SEA might be a relatively new concept in our region, globally, it has been around since the late 1960s. SEA provides a systematic process by which environmental and climate change considerations are required to be fully integrated into the preparations of development plans, proposed sector policies and strategies, and development programmes prior to their final adoption.

In our region, there have been only a few examples of SEA application that is known. In this regard, the development of the SEA Guidelines is



crucial and timely given the increasing interest to effectively address new emerging issues such as seabed mining and multiple development projects in the region and within countries. It also ensures environmental assessment is fully embedded in broader national and sectoral policy, planning and programmes to achieve sustainable development at a much larger scale.

The SEA Guidelines was developed through a highly consultative process which entailed the following:

In September 2018, SPREP under the UNEP EU ACP-MEA Capacity Building project phase 2 initiated the development of the Strategic Environment Assessment guidelines at a regional workshop at SPREP Headquarters which was attended by representatives of twelve Pacific island countries.

The first draft of the SEA guidelines was circulated in April 2019 to Members for comments

The revised draft and completion plan was presented to the 29th SPREP Meeting where the process to gauge further input and feedback from Members was endorsed

In November 2019, a regional consultative workshop was held in Auckland, New Zealand which gathered further input and feedback from Members to revise the draft

The revised draft of the Guidelines was further circulated to Members in May 2020 for comments

In September 2020, the Guidelines was endorsed by the SPREP Executive Board

I am pleased to say that the Guidelines promote inclusiveness and gender equality with respect to working with stakeholders, communities, and partners to integrate environmental, social, and economic objectives and interventions into programs, plans, and policy processes.

Finally, I would like to encourage all those who are responsible for national planning, policy and programmes to make good use of the Guidelines to fully realise the benefits that can be achieved through its targeted use to ensure that environmental considerations are integrated into policies, plans, programmes and projects. The Guidelines can also be used by other Sectors and non-government organisations to guide the development and implementation of new policies, plans and programs.

I look forward to the successful application of the Guidelines by SPREP Members, Partners, and key stakeholders to support sound planning and decision making at all levels.

Soifua.

Mr Kosi Latu

Director General, SPREP



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ACRONYMS

CO, Carbon Dioxide

DP **Development Proposal**

EIA **Environmental Impact Assessment**

ESIA Environmental and Social Impact Assessment

ESS Environmental and Social Safeguards

FSM Federated States of Micronesia

MARPOL International Convention for the Prevention of Pollution from Ships

MEAs Multilateral Environmental Agreements

NEPA The United States of America National Environmental Policy Act 1969

NGO Non-Government Organisation

OECD Organisation for Economic Co-operation and Development

PICTs Pacific Island Countries and Territories

Policy, Programme or Plan PPP

SEA Strategic Environmental Assessment

SPREP Secretariat of the Pacific Regional Environment Programme

ToR Terms of Reference

UNCLOS United Nations Convention on the Law of the Sea

UNDP United Nations Development Programme

UNECE United Nations Economic Commission for Europe

UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate Change

United States Ship USS

USAID United States Agency for International Development **USCEQ** United States Council for Environmental Quality

WWF-SPP World Wide Fund for Nature, South Pacific Programme

WWII World War 2







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Mooréa, French Polynesia © Stuart Chape

GLOSSARY

Adaptation: adjustment in natural or human systems to a new or changing environment, so as to enhance positive impacts, avoid or mitigate negative impacts. Climate change adaptation refers to anticipating the negative impacts of climate change and taking well-planned, early action to prevent or minimise the damage they can cause; or anticipating the positive impacts and taking advantage of opportunities that may arise.

Baseline: a description of pre-development or current environmental (including social and economic) conditions in a defined area for factors specific to an assessment.

Climate change: long-term changes in climate conditions, i.e. changes in the mean and/or the variability of a climate property such as precipitation, temperature, or wind force. These changes persist for an extended period, typically a decade or longer. With climate change, disaster risks can change in terms of scale, scope, frequency, and intensity.

Cumulative impacts: changes in the environment and socio-economic conditions, resulting from the combined, or incremental effects of past, present and future human activities, as well as environmental change processes (e.g. climate change) and physical events. The physical events can be of natural or human origin, and may include extreme weather events and natural disasters.

Disaster: severe, adverse disruption to the normal functioning of a community, society, or ecosystem due to hazardous events interacting with vulnerable social and/or ecological conditions, which causes widespread human, material, economic or environmental losses.

Environment: encompasses environmental (natural and physical environment, including natural hazards and climate change), social (people, culture, health, heritage, aesthetics, amenity) and economic aspects, as well as the relationships between these different aspects.

Environmental assessment: a term that covers both assessment processes referred to in this document, i.e. environmental impact assessment (EIA) and strategic environmental assessment (SEA).

Environmental hazard: an event or action that has the potential to cause significant impacts on a community, society, or ecosystem. Environmental hazards can be natural (e.g. cyclone, flood, earthquake, tsunami, volcanic eruption, drought, landslide), human-induced (e.g. oil spill) or technological (e.g. infrastructure failure) in origin. They are not impacts (or disasters) in themselves but have the potential to cause them.

Environmental impact assessment (EIA): a two-way process for identifying and managing a development's impacts on the environment, and assessing the potential impacts of the environment on a development, i.e. the impacts arising from environmental hazards and environmental change processes, including climate change. In this document, environmental impact assessment includes the consideration of socio-economic matters, as per the definition of 'environment' above. Note as per the definition of EIA here, ESIA is deemed equivalent to an EIA in this document.

Environmental impact assessment report (EIA report) or environmental impact statement

(EIS): a detailed document that describes a proposed development project; the likely impacts the development will have on environmental and socio-economic conditions; the likely impacts the environment will have on the development; the consequences and significance of those impacts; and ways to modify, mitigate and/or manage different aspects of the development so as to avoid or lessen negative impacts and enhance positive impacts.

Environmental and Social Impact Assessment (ESIA): A process for predicting and assessing the potential environmental and socio-economic impacts of a proposed project, evaluating alternatives and designing appropriate mitigation, management and monitoring measures. For the purposes of this guidance document reference is only made to EIA, which is deemed to include consideration of socio-economic matters.

Exposure: people, property and/or ecosystems that are present in hazard zones and hence subject to loss, disruption, damage or degradation.

Green economy: economic development that is based on the efficient use of natural resources and energy, and which minimises carbon emissions, waste and pollutant outputs, biodiversity loss and environmental degradation.

Impact: a negative or positive change in the environment as a result of an action, activity or event. Refers to the impact of a project on the environment, as well as the impact of the environment on a project due to an environmental hazard or environmental change process (including climate change). Examples of negative impacts include environmental degradation, loss of life or injury, property or infrastructure damage, loss of livelihoods and social unrest. Examples of positive impacts include environmental recovery and restoration, increased food security, property or infrastructure improvements, and growth in local job opportunities.

Multilateral Environmental Agreement: an environment-related treaty, convention, protocol or other binding instrument between three or more states.

Policy: A general course of action or proposed overall direction that a government is or will be pursuing and that guides ongoing decision making.

Practitioner: a participant in the Strategic Environmental Assessment process e.g. government officer; consultant; scientific or technical expert; community member or stakeholder.

Plan: A purposeful forward looking strategy or design, often with co-ordinated priorities, options and measures that elaborate and implement policy.

Programme: A coherent, organised agenda or schedule of commitments, proposals, instruments and/or activities that elaborate and implement policy.

Resilience/resilient: the ability of a community or system (human or environmental) to sustain itself; to respond to and recover from extreme events and disturbances; and to use extreme events and disturbances as an opportunity for renewal and positive transformation.

Risk: a measure of the consequences and probability (likelihood) of an impact. Risks arise from the interaction between environmental hazards and vulnerability.

Stakeholder: any person, organisation, institution or business who has interests in, or is affected by, a proposed policy, plan and/or programme. Includes local community members and customary land/resource owners.

Strategic Environmental Assessment (SEA):

a higher-level assessment process that can be used in three main ways: (1) to help to prepare a strategic development or resource use plan for a defined land and/or ocean area;(2) to examine the potential environmental impacts that may arise from, or impact upon, the implementation of government policies, plans and programmes; and (3) to assess different classes or types of development projects, so as to produce general environmental management policies or design guidelines for the development classes/types.

Vulnerability: the sensitivity of a development, community or ecosystem to damage and loss resulting from a hazardous event or disturbance.

STRUCTURE OF THE GUIDELINES

The Guidelines are set out in the following sections with the description of each section. This will guide the focus of the guidelines and how it is practically applied.

- Section 1 Introducing the SEA Guidelines.
- **Section 2** describes what a Strategic Environmental Assessment is, providing an overview of SEA, how it has been developed, the benefits of using SEA, and who can benefit from it.
- Section 3 introduces the SEA process, identifying objectives, key performance criteria and providing
 considerations and recommendations for effective SEA in the Pacific. This also highlights the
 importance of stakeholder engagement.
- Section 4 focusses on the first steps of carrying out an SEA, in particular how to screen policies, plans and programmes to determine whether an SEA should be carried out, i.e "what triggers an SEA?" and then how to develop the scope of the SEA and prepare a Stakeholder Engagement Plan.
- Section 5 describes the process of identifying potential environmental and socio-economic impacts, assessing their risk and considering how they can be avoided or mitigated, and how any opportunities can be maximised.
- **Section 6** addresses the importance of transparent decision making, demonstrating how the SEA findings have been taken into account when finalising proposed policies, plans and programmes.
- Section 7 introduces tools to assist with the understanding and implementation of SEA.



Oil palm plantation, Guadalcanal, Solomon Islands. © Stuart Chape



1 INTRODUCTION

The Secretariat of the Pacific Regional Environment Programme (SPREP) was established in 1993 by the Governments and Administrations of the Pacific as the regional intergovernmental organisation charged with protecting and managing the environment and natural resources of the Pacific.

The current strategic direction for SPREP is clearly set out in the 2017-2026 SPREP Strategic Plan Vision for "A resilient Pacific environment, sustaining our livelihoods and natural heritage in harmony with our cultures". SPREP is mandated to promote cooperation in the Pacific islands region and to help protect and improve the environment for present and future generations. SPREP's mandate is delivered through technical and policy advice and support in the key strategic priority areas of climate change resilience; islands and oceanic ecosystems; waste management and pollution control; and environmental monitoring and governance. The Strategic Plan contributes to the key decision and commitment of the Pacific Leaders to leave no one behind under the 2030 Agenda for Sustainable Development. It aims to assist in the achievement of the SDG targets and indicators; the SAMOA Pathways; and Multilateral Environment Agreements addressing bio-diversity and conservation, climate change; and waste management.

Promotion of environmental assessment remains an important priority for SPREP, as stated in Regional Goal 4, Objective 4.1 of the organisation's Strategic Plan. With the increase in development and new emerging issues for economic growth in the Pacific region, human and natural environment and vulnerability indicators point to specific challenges facing the Pacific Island Countries and Territories. To support its members by safeguarding them from the driving forces of climate change and emerging environment issues, SPREP developed these Guidelines on Strategic Environmental Assessment (SEA), as a strategic planning tool that would support the path towards attaining environmental sustainability and sustainable development. These SEA Guidelines can be applied to higher-level processes, such as the development of better policies, plans and programmes to assist with the integration of environmental and social considerations.

These SEA Guidelines build on the success of the regional "Strengthening Environment Impact Assessment (EIA) Guidelines for the Pacific Islands and Territories" which was developed by SPREP with Member countries and partners in 2016.

1.1 Purpose and target audience

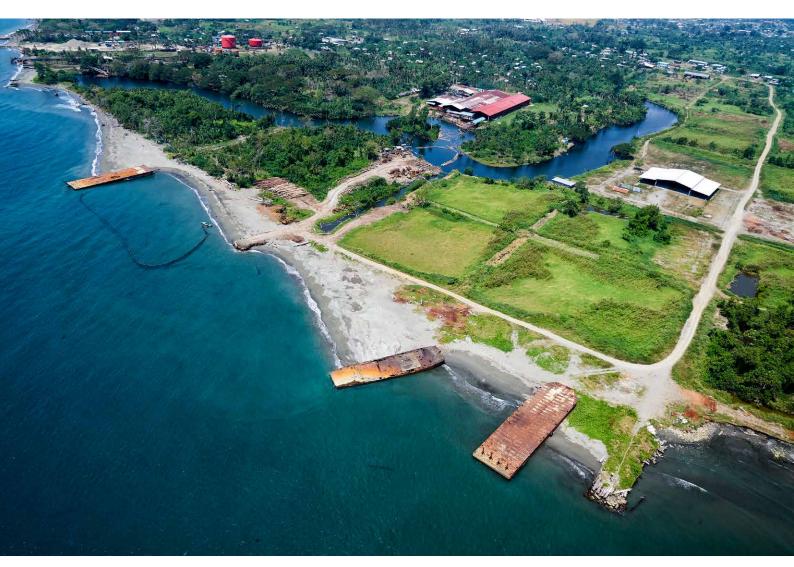
This publication 'Strategic Environmental Assessment – Guidelines for Pacific Island Countries and Territories' has been prepared to provide guidance on the application of SEA as a tool to support environmental planning, policy and informed decision making. It provides background on the use and benefits of SEA as well as providing tips and guiding steps on the process, including case studies, toolkits and checklists for conducting an SEA in the Appendices.

These guidelines are intended to assist the national and local authorities such as Environment Agencies and National Planning Offices, development control agencies, municipal authorities, provincial administrations and Strategic Development Offices in Pacific Island Countries and Territories with an understanding of what Strategic Environmental Assessment is, the benefits that can be achieved through its targeted use, and how and when to apply it to ensure that environmental and social matters are integrated into policies, plans, programmes and projects. The guidelines can also be used by other government sectors in terms of developing and implementing new policies and programs for the government. These guidelines can also provide useful assistance to non-governmental organisations, communities and all those seeking to broaden their capacities, with a view of better informed public participation in strategic planning.

SEA helps decision makers:

- to make informed decisions that are strategically sound;
- to achieve environmentally sound and sustainable development through improved planning and programming;
- to save time and money by avoiding costly mistakes and severe environmental effects;
- to identify new opportunities for development;
- to ensure efficiency and transparency of decision-making;
- to strengthen governance and build public trust and confidence in decision making

To avoid confusion, references to 'environment' in these guidelines covers environmental (natural and physical environment, including natural hazards and climate change), social (people, culture, heritage, aesthetics, amenity, health) and economic aspects. This broad definition is particularly important in the Pacific context, with extensive customary land ownership and direct linkages between community livelihoods, subsistence lifestyles, natural resource conditions and sustainable and resilient development.



Lunnga River mouth, Guadalcanal, Solomon Islands. © Stuart Chape

2

2 OVERVIEW OF STRATEGIC ENVIRONMENTAL ASSESSMENT

2.1 Important Concepts

Many readers may be familiar with Environmental Impact Assessments and wonder where and how they fit in or differ from Strategic Environmental Assessments. While both are forms of environmental assessment that apply a two-way process to assess impacts on the environment and potential impacts from the environment on the proposal, it is the scale at which each is applied that sets them apart. It is important to understand the purpose and value of SEA and EIA, along with how they interact and complement each other, and this is explained in Section 2.2. But firstly, let's define SEA and EIA:

Strategic Environmental Assessment (SEA), is applied at the *policy*, *plan or programme scale* – a higher-level process that can be used in two main ways: (1) to assess the environmental assets, features, resources and values of a defined land and/or ocean area so as to establish a plan for sustainable and resilient development, or (2) to examine the potential environmental impacts of a draft policy, plan or programme.

Environmental Impact Assessment (EIA), is applied at the *project scale* (*single development scale*) –for identifying and managing: (1) a development's potential impacts on the environment, and (2) the potential impacts of the environment on a development, i.e. the potential impacts that may arise from environmental hazards and environmental change processes, including climate change. EIA also incorporates risk assessment, which involves an evaluation of the consequences, probability and significance of identified impacts, in order to help guide environmental management. Examples of development projects that may be subject to EIA include a new wharf, tourist resort, airport upgrade, renewable energy project, fish cannery, mining or logging operation.

Comparative differences between SEA and EIA

	SEA: POLICY, PLAN AND PROGRAMME SCALE	EIA: PROJECT SCALE
OBJECTIVE	To promote sustainable and resilient development by embedding sound environmental management within policies, plans and programmes	To minimise and mitigate environmental impacts for projects, by setting specific environmental performance and management standards
SCOPE	Identifies environmental impacts related to a broad policy, plan or programme for development	Identifies environmental impacts for a specific project and location
PERSPECTIVE	Broad, strategic perspective, more general environmental details	Narrow perspective, high level of site-specific detail
TYPE OF PROCESS	Multi-stage, flexible and iterative process	Well-defined process, clear beginning and end
ALTERNATIVES	Considers a broad range of feasible development alternatives across a development sector, theme or land/oceanscape	Considers a limited number of feasible development alternatives, within the scope of a project
CUMULATIVE IMPACTS	Early warning of cumulative impacts	Limited review of cumulative impacts
MONITORING	Focuses on the outcomes of policy, plan and programme implementation	Focuses on measuring actual impacts

TABLE 1

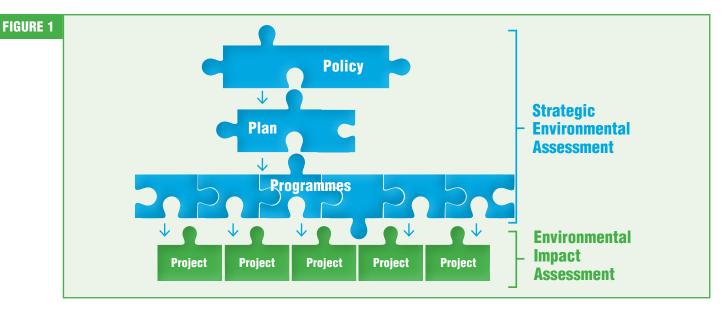
2.2 What is Strategic Environmental Assessment?

This section will describe what SEA is and where it fits in the suite of impact assessment tools.

Strategic Environmental Assessment (SEA) is a means of systematically evaluating the environmental and related socio-economic impacts and cumulative impacts of **Policies**, **Plans and Programmes (PPP)** to **ensure that opportunities can be maximised**, **risks can be mitigated and alternatives** can be considered during the early stages of PPP development. SEA enables integration of environmental and socio-economic considerations into PPP initiatives, promoting collaboration and stakeholder engagement at an early stage and continuously throughout the development cycle so that better environmental outcomes can be made.

SEA has been defined as 'the formalized, systematic and comprehensive process of identifying and evaluating the environmental consequences of proposed PPP to ensure that they are fully included and appropriately addressed at the earliest possible stage of decision-making on a par with economic and social considerations'. Since this original definition the field of SEA has rapidly developed and expanded, and the number of definitions of SEA has multiplied accordingly. SEA is a rapidly evolving field with numerous definitions and interpretation in theory, in regulations, and in practice. SEA is required by legislation in many countries and carried out informally in others. There are also approaches that use some or all of the principles of SEA without using the term SEA to describe them (e.g. urban planning, strategic development planning.).

SEA shares much in common with EIA, as they are both used as a means of evaluating and mitigating potential effects of a proposal. However, EIA is applied on a project basis, whilst SEA is generally applied at an earlier stage, during the development of policies, plans and programmes, as illustrated in Figure 1 below. Because of this SEA do not require the same level of in-depth investigations to gather data and information; SEA are not intended to be overly burdensome or gather new data. Unlike EIA which require location specific detailed data it is acceptable for SEA to rely on existing information and even non-quantifiable data when needed.



Environmental assessment tools applied in policy, plan, programme and project development

Because SEA is applied at an earlier stage than EIA, there is greater opportunity to influence environmental and socio-economic outcomes by integrating these considerations into the PPP before it is implemented. This process enables identification and promotion of positive environmental and socio-economic outcomes, and can allow significant adverse impacts to be avoided entirely. For instance, by conducting an SEA it is possible to influence where and what type of development occurs i.e. steering suitable developments towards less sensitive areas, rather than simply trying to minimise the impacts in a specific location once a project proposal has been submitted.

¹ Sadler and Verheem, 1996. Strategic Environmental Assessment. Status, Challenges and Future Directions, Ministry of Housing, Spatial Planning and the Environment, The Netherlands: 188 pp.

More specifically, SEA can establish a sustainable and resilient development context for EIA by: identifying what forms of development are environmentally sound and appropriate; pinpointing locations where developments are not permissible; stipulating desired types and characteristics of developments; and identifying broad environmental management measures that need to be followed. For example, an SEA of a Tourism Development Plan might result in guiding principles and standards to help beachfront developments avoid the impacts of climate change and natural disasters. SEA will help to identify critical issues for the tourism industry that need to be considered with proposals for a new resort, e.g. liquid/solid waste production and management, increasing numbers of tourism arrivals and associated impacts on village communities and users of the coast. An SEA could result in development of training programmes and employment for locals, conservation principles for sustainable use of the area for long term tourism attraction i.e setting eco-tourism standards, minimisation of groundwater drawdown, appropriate set-back of buildings and infrastructure, or traffic management.

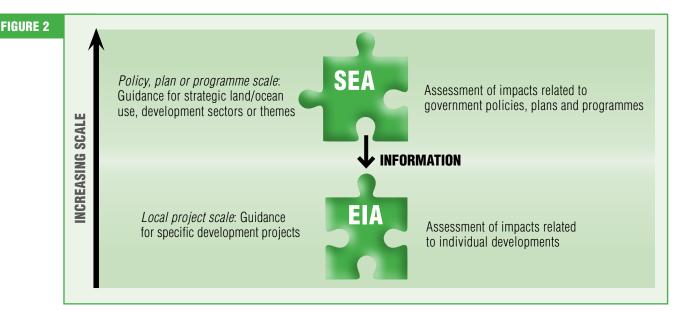
For example, an SEA of a Tourism Development Plan can:

- result in guiding principles and standards to help beachfront developments avoid the impacts of climate change and disasters.
- identify critical issues for the tourism industry that need to be considered during an EIA process for a new resort.
- be used to set standards and guidance for future developments, in matters of liquid/solid waste production and management, managing increasing tourism arrivals and associated impacts on village communities, requirements for developing of training programmes and employment for locals.
- define conservation principles for protecting the sustainable use of the area for long term tourism attraction i.e setting eco-tourism standards, minimisation of groundwater drawdown, appropriate set-back of buildings and infrastructure, traffic management.

SEA, by its nature, covers a wider range of activities². This is a key difference between EIA and SEA, with the latter usually applied to a wider area and often over a longer time span than the EIA of projects. SEA might be applied to an entire sector (such as a national policy on energy, for example) or to a geographical area (for example, in the context of a regional development scheme or land use plan). SEA does not replace or reduce the need for project-level EIA, but it can help to streamline and focus the incorporation of environmental concerns (including biodiversity) into the decision-making process, making project-level EIA a more effective process. As shown in Figure 2 they are not mutually exclusive and there is a great deal of benefit from applying both tools at different stages in the development process to maximise environmental and socio-economic outcomes. This is because the level of detail and certainty improves as policies are translated into plans, and then into programmes, and ultimately into projects usually at a reducing scale. SEA is a very useful tool for influencing PPP development to ensure the significant environmental and socio-economic matters are addressed before new projects are conceived. This can reduce the effort required in preparing EIAs for projects by identifying key risks and potential mitigation measures, but will not remove the need for EIA entirely. An EIA is still likely to be required to address the residual risks that could not be mitigated through the preparation of an SEA.

EXAMPLE

² Sadler and Verheem, 1996. Strategic Environmental Assessment. Status, Challenges and Future Directions, Ministry of Housing, Spatial Planning and the Environment, The Netherlands: 188 pp.



SEA and EIA are applied at different scales and levels of detail with SEA best at considering multiple aspects and broader concepts while EIA is focused on single project; an SEA can guide EIA.

For instance, SEA can establish a sustainable and resilient development context for EIA by identifying which forms of development are environmentally and socially sound and appropriate pinpointing locations where developments are or are not permissible stipulating desired types and characteristics of developments, setting broad environmental quality objectives (or limits of acceptable change) and identifying broad environmental management measures that need to be followed to minimize cumulative and potentially synergistic effects.

An SEA can provide context and criteria to screen types of development that are deemed suitable or not suitable for particular locations, thus enabling EIAs to focus on the additional information needed to assess the severity and likelihood of impacts from a particular development. This can provide a framework then for future proposed projects to work within; ie are the types of project appropriate, are they in an appropriate location and are their potential impacts within limits of acceptable change?

A good-quality SEA process informs planners, decision-makers, and affected public about the sustainability of strategic decisions; it also facilitates the search for the best alternative and ensures a democratic decision-making process. To support sound decision-making that is consistent with the principles of sustainable development, the SEA should take place along with economic analyses of the proposal. Most importantly, the SEA must demonstrate that environmental (including social) factors have been integrated into the decision-making process and must show how these findings have influenced the final product.



Yap, FSM: Impact Assessment Training and SEA engagement workshop. Photo: Greg Barbara

2.3 History of SEA

Although SEA is relatively new in some regions/countries it was conceived in the late 1960's, and first put into practice through the National Environmental Policy Act 1969 in the United States of America. Since then several international initiatives have subscribed to the need to consider environmental impacts at a more strategic level, than is possible through EIA. The key milestones in the global development and implementation of SEA are summarised below.

The National Environmental Policy Act 1969 was passed by the US Congress, mandating all federal agencies and departments to consider and assess the environmental effects of proposals for legislation and other major projects. US Council for Environmental Quality (USCEQ) issues regulations for NEPA which apply to USAID specific requirements for programmatic assessments	
	and
The World Bank adopted an internal directive (O.D. 4.00) on EIA which allows for the preparation of sectoral and regional assessments	f
The European Economic Community issues the first proposal for a Directive on the Environmental Assessment of Policies, Plans and Programmes	
The UNECE Convention on EIA in a Transboundary Context promotes the application of EA for poliplans and programmes	cies,
The OECD Development Assistance Committee adopted a set of principles calling for specific arrangements for analysing and monitoring environmental impacts of programme assistance	
1995 The UNDP introduces the environmental overview as a planning tool	
The Council of the European Union adopts a proposal for a Council Directive on the assessment of effects of certain plans and programmes on the environment	the
The first Ramsar Strategic Plan 1997-2002 Action 2.5.4 establishes the role of SEA in this process by calling for the application of "Integrated Environmental Management and Strategic Environmental Assessment (at local, provincial and catchment/river basin or coastal zone levels) when assessing impacts of development proposals or changes in land/water use".	al
The UNECE issues a draft protocol on Strategic Environmental Assessment applying to policies, plant and programmes	ans
Council of the European Union adopts the Council Directive 2001/42/CE on 27 June on the assess of the effects of certain plans and programmes on the environment	ment
2003 Action 2.2.3 of the Ramsar Strategic Plan 2003-2008 reaffirm[ed] the call for SEA practices to be a	oplied.
2003 The UNECE adoption of the Kyiv SEA protocol ¹	
The CBD, Ramsar and also the Convention on Migratory Species (CMS) endorsed Impact Assessing Guidelines for the use of SEA. This marked a significant step forward in ensuring that consistent guits made available to Parties for their harmonized national implementation of both conventions on is common ground.	iidance
2008 European Union ratifies the Kyiv SEA protocol.	
The CBD² calls for Parties to "introduce appropriate Handbook 16: Impact assessment (SEA) arrange to ensure that the environmental consequences of its programmes and policies that are likely to have significant adverse impacts on biological diversity are duly taken into account" (CBD Article 14b).	
SPREP develop and release 'Strengthening Environmental Impact Assessment – Guidelines for Palsland Countries and Territories', which highlights the benefits of using SEA.	cific
2017 Strategic Plan 2017-2026 is released by SPREP, identifying the importance of environmental assest tools, such as SEA in Regional Goal 4, Objective 4.1.	sment

2.4 How can SEA be used?

SEA is a process that can be used in three main ways:

1. To assist prepare a strategic development or resource use plan for a defined land and/or ocean area;

Explanation on the application to Land Use Planning

This is the systematic assessment of land potential and alternatives for optimal land uses and improved economic and social conditions through participatory processes that are multi-sectoral, multi-stakeholder and scale dependent. The purpose of land-use planning is to support decision makers and land users in selecting and putting into practice those land uses that will best meet the needs of people while safeguarding natural resources and ecosystem services for current and future generations. Tools and methods for land-use planning at appropriate scales should encourage and assist the diverse and often competing users of land resources in selecting land-use and management options that increase their productivity, support sustainable agriculture and food systems, promote good governance over land and water resources to meet the needs of society.

EXAMPLE

The Sperrgebiet land use plan, Namibia

Background and objectives

The Sperrgebiet is a biodiversity-rich, desert wilderness area in southwest Namibia, which also comprises a licensed diamond mining area. It has been a prohibited area since 1908. In 1994, the exclusive prospecting and mining licenses of the non-diamondiferous areas were relinquished and considerable interests arose in the area for a variety of conflicting uses. In consultation with Namdeb (the mining licence holder) and NGOs, the government agreed that a land use plan should be formulated to ensure long term sustainable economic and ecological potential in the fragile Sperrgebiet before it was opened up.

Approach

An SEA-type approach was used to develop the plan, involving several steps:

- 1. A thorough literature review with gaps filled through consultation with specialists.
- 2. Development of a series of sensitivity maps for various biophysical and archaeological parameters.
- **3.** An extensive public consultation programme that included: public workshops, information leaflets and feedback forms, land use questionnaires, and a technical workshop with selected specialists.
- **4.** The establishment of a list of possible land use options for the area and their evaluation in terms of the environmental opportunities and constraints.
- 5. Formulation of a vision that the entire Sperrgebiet should be declared a Protected Area.
- 6. Development of a zoning plan to provide a framework to guide immediate decisions regarding land use.
- 7. A technical workshop including specialists to discuss and refine the draft-zoning plan.
- 8. A preliminary economic analysis of the main land use options. Development of an administrative framework outlining the legal processes required for land proclamation, the formation of a Management Advisory Committee and definition of its role, ecotourism models, zoning, future access control and integration into the surrounding political and economic structures. For each potential land use, guidelines were prepared outlining what needs to be included in a project-specific EIA and EMP.

Outcomes

The Land Use Plan was finalised in April 2001. In April 2004, the Sperrgebiet was proclaimed a National Park. The recommendations of the Land Use Plan were accepted.

Source: Walmsley, SAIEA, South Africa.

2. To examine the potential environmental impacts that may arise from, or impact upon, the implementation of government PPP;

Explanation on application to PPP

SEA is a good mechanism to facilitate consultation and public participation in the evaluation of environmental aspects of policy, plan, or program formulation. Consultation and public participation at the beginning of the planning process brings valuable information into the SEA and thus increases the credibility of the policy, plan, or program that is finally accepted. The benefits of applying SEA to national sectoral policies, plans and programmes are well recognised by development agencies and governments in developed countries. The scale and nature of programmes require more than traditional EIA. SEA examines the environmental and health risks associated with the PPP reforms, support and investments in a sector, and enables a framework for environmental and health management and monitoring to be agreed and built into the specific elements of the sector programme and its implementation mechanisms. As an example it can consider the interactions of the PPP and health ie how the PPP may increase or decrease ability to respond to outbreaks or particular communities access to essential services. SEA can also influence the overall shape and design of the sector programme by focusing on the linkages of the sector in question with other sectors and the possible cumulative environmental or health effects of the current programme.

The Kenya Education Support Programme

Background and objectives

The Kenya Education Support Programme (KESSP) is the programme through which the Government of Kenya, development partners, civil society, communities, and the private sector have come together to support education sector development for the period 2005-10. The programme fits within the framework of national policy set out in the Economic Recovery Strategy (ERS) and has been developed through a Sector Wide Approach to Planning (SWAP). The donor community views initiatives such as KESSP as central to the achievement of international development objectives such as the Millennium Development Goals. An SEA of KESSP was undertaken before the investment programmes had been fully designed, so it was important that the SEA i) assessed the potential impacts that the investment programmes might have in tackling some of the key (and crosscutting) social and environmental issues related to education; and ii) provide guidance on how to mitigate these potential impacts in the design and implementation of KESSP's investment programmes.

Approach

The SEA aimed to:

- 1. Provide an environmental and social situational analysis, by identifying key issues and stakeholders in the education sector in Kenya.
- 2. Through fieldwork, stakeholder interviews and desk research, identify the likely strategic environmental and social impacts of the KESSP and analyse the severity, significance and risk of those impacts.
- **3.** Develop measures to manage or mitigate any negative impacts identified, and to enhance any positive impacts.
- **4.** Integrate these measures into an Environmental and Social Management Plan which could be mainstreamed into the design and operation of the programme.
- **5.** Make recommendations for the design of the KESSP, including identifying gaps and opportunities, as well as potential cost savings.
- 6. Make recommendations for any further studies needed.

EXAMPLE

cont.

Outcomes of the SEA:

- Influenced the design of the KESSP at early stage.
- Strengthened the environmental and social sustainability of implementation.
- Made institutional recommendations to enhance implementation.
- Improved donor co-ordination by maximising the use of resources, avoiding duplication effort and integrating different donor aims and priorities.

Source: DFID/ERM (2005).

3. To assess different classes, sectors or types of development projects, so as to produce general environmental management policies or design guidelines for the development classes/types.

For instance, SEA could include the development of a water resource management plan for a catchment or aquifer, to support sustainable water use and water security; the preparation of a whole-of-island agricultural development plan, with an aim of increasing local food security; the development of a multi island infrastructure prorgramme such as for harbours or rural roads; or the development of a marine spatial plan that is based on informed and coordinated decisions about how to use a range of marine resources sustainably, within a defined area.

EXAMPLE

Implementing an Integrated "Ridge to Reef" approach to enhance ecosystem services and sustain local livelihoods in the Federated Stated of Micronesia.

The Ridge to Reef approach is an ecosystem-based approach to land-use management and biodiversity conservation that focuses on the terrestrial, aquatic, estuarine and coastal ecosystems and their linkages. Through this approach the Government of the Federated States of Micronesia aims to enhance the sustainability of natural resources and conservation of biodiversity by understanding and promoting sustainable land-use practices and strengthening management capacity. This work is still in progress.

Source: Pohnpei Environmental Protection Agency, Federated Stated of Micronesia UNDP R2R project

Another example of this type of application for SEA is the Integrated Strategic Environmental Assessment of the Northern Province of Sri Lanka carried out by the Central Environmental Authority in Sri Lanka in 2009–2014. Further information on this SEA is provided in Appendix 1. SEA might also be used to assess the potential environmental and socio-economic consequences of a variety of proposed policies, plans or programmes, which could range in subject matter from issues such as urban and rural development to disaster risk reduction and climate change adaptation to extraction of mineral resources.

EXAMPLE

Strategic Environmental Assessment of Neiafu Master Plan (Vava'u, Tonga)

This Strategic Environmental Assessment (SEA) was initiated by SPREP in order to consider the environmental impacts of the proposed Neiafu Master Plan. This examined the Neiafu Master Plan, its links to wider policy initiatives for Vava'u and for Tonga as a whole. The components of the plan were examined in a broad manner to identify significant environmental implications and consider how these impacts were distributed between biophysical and social environments. The findings and recommendations of this SEA were subsequently fed back into the development process.

Further information on this SEA is provided in Appendix 1.

Furthermore, SEA can include a broad assessment of development types/classes for a given sector, especially if they are clustered in relatively small areas or regions, e.g. tourism sector developments, quarries, power generation, coastal roads or coastal housing subdivisions. Using it in this manner can help develop guiding principles and standards for sustainable and resilient development, avoiding undesirable cumulative impacts.

Strategic Environmental Assessment of Tourism Development Plan (Fiji)

In 2003, the World Wide Fund for Nature – South Pacific Programme carried out an SEA of Fiji's Tourism Development Plan, which called for 'step change' growth in tourism to compensate for losses in the sugar industry. The SEA considered the likely environmental and social impacts of this plan by comparing the current environmental, social and economic baseline and likely trends under the Tourism Development Plan against sustainability objectives. This allowed an assessment to be made of whether or not the Tourism Development Plan was sustainable.

Further information on this SEA is provided in Appendix 1

Another example of this is the Strategic Environmental Assessment of the hydropower sector in Myanmar, which has been carried out by the Ministry of Electricity and Energy and Ministry of Natural Resources and Environmental Conservation with support from the Australian Government and International Finance Corporation. Further information on this SEA is provided in Appendix 1.

WHY UNDERTAKE A STRATEGIC ENVIRONMENTAL ASSESSMENT?

Strategic decisions usually affect many people, for a long time. Formulating policies, plans and programmes typically involves identifying desired outcomes and the necessary steps to achieve them. Much less typical is considering whether in achieving those outcomes there may be unexpected outcomes and problems along the way. For example, a government might decide to expand intensive agriculture to improve the general standard of living through wider employment, and to increase export earnings. But that policy (implemented through specific plans and projects) might draw people from employment in other sectors (e.g. fishing), reduce local food production, lead to over-use of marginal land causing soil degradation or erosion, or lead to land ownership disputes. Such effects would impose costs (monetary, social, health, cultural, ecological, or physical) that undermine the intentions of the original policy. SEA is the tool that helps PPP developers think through such implications before a government commits to a course of action. It helps prevent unexpected costs and supports better policies and plans by encouraging a more thoughtful and reflective approach.

EXAMPLE

REASON 1

2.5 Examples of SEA in the Pacific

Four occasions SEA has been carried out in the Pacific

1996	SPREP conducted an SEA of the development projects that had been proposed for the town of Neiafu, on the island of Vava'u, Tonga, as part of the Vava'u Development Programme.
2001	SPREP, Asia Pacific ASA and Sea Australia conducted an SEA and evaluated potential future shoreline impacts of oil spills from WWII shipwreck <i>Hoyo Maru</i> on Chuuk Lagoon in the Federated States Of Micronesia.
2003	The World Wide Fund for Nature conducted an SEA of Fiji's Tourism Development Plan in collaboration with the Ministry for Tourism
2003	SPREP prepared an SEA on the wreck of the USS Mississinewa, a sunken WWII US military oil tanker, to determine the environmental impacts of the oil spill in the Federated States Of Micronesia.

In addition, the Government of the Federated States of Micronesia recently commissioned an SEA to inform integrated land and sea planning and management.



Yap, FSM: Impact Assessment Training and SEA engagement workshop. Photo:Greg Barbara



Pacific Island representatives SEA Guidelines consultation workshop, Auckland. Photo: Faasipa Lemalu

WHY UNDERTAKE A STRATEGIC ENVIRONMENTAL ASSESSMENT?

REASON 2

SEA is increasingly required by international funding agencies, because it supports better proposal design and better decisions, and in the end encourages more effective use of funds provided by those agencies.

2.6 What are the Benefits of SEA?

The key benefits of SEA are that it:

- Ensures that PPP development is consistent with the national policy and legal framework and promotes achievement of the Sustainable Development Goals (SDGs);
- Encourages the integration of environmental and socio-economic considerations into national/ government policies, plans and programmes during the early stages of their development. This can, in turn, help to establish a governance framework for sustainable and resilient development;
- Adds value to decision-making processes, by highlighting the key opportunities and risks, enabling opportunities to be maximised and risks to be avoided or mitigated;
- Promotes transparent governance by encouraging public involvement in policy development and planning;
- Provides early warning of cumulative and transboundary impacts as well as any unintended consequences from the PPP, as cumulative effects are best anticipated at a strategic level.
- Identifies trade-offs between environmental, economic and social issues and enhances the chance of finding win-win options;
- Sets a broad environmental and sustainable development vision for defined land/sea areas, economic sectors or themes, which in turn sets the context for project specific EIA and supports consistent decision-making for individual development projects;
- Provides a strategic environmental management plan (SEMP) which sets out the management actions to be taken, the responsible person or organisation, the timeframe and budget to achieve the actions to be taken. The SEMP will also include the institutional arrangements that will be necessary to 'drive' the implementation of the SEMP, including the coordination of several different government and nongovernmental organisations.
- Provides confidence to development agencies and stakeholders that environmental and social safeguards have been incorporated into the PPP development process, and that specific project proposals are developed within a sustainable framework;
- Reduces the time and effort required for project EIA by addressing the more significant risks at an earlier stage.

Results-based monitoring in the water and sanitation sector in Colombia

Background and objective

The Colombian government passed a Presidential Decree in 2004 requiring regional autonomous corporations, responsible for regional environmental management, to prepare three-year action plans, including outcome-based commitments. These new plans replace the previous three-year plans which focused mainly on administrative commitments. Examples of outcome-based commitments include indicators for child mortality and changes in incidences of water-borne diseases. These indicators are consistent with the findings of an SEA for the water and sanitation sector conducted in Colombia, conducted in 2000 by the Ministry of Economic Development for the WorldBank-financed Water Sector Reform Assistance Project

Outcomes

This SEA identified the deterioration of water resources as the first priority, due to its significant impact on human health (e.g. diarrhoeal illnesses estimated to cost USD 315-400 million a year). The establishment of such an institutional monitoring and reporting mechanism is an important first step in focusing attention on development outcomes in the sector.

EXAMPLE

Conversely, the risk of not utilising an approach like SEA during PPP development is that there may be unforeseen, and preventable environmental and socio-economic impacts when PPPs are implemented. For instance, developments may occur in sensitive areas or impact on vulnerable communities. Whereas, SEA would help to pinpoint locations where developments are or are not permissible and this can be taken into account when planning development. This can in turn facilitate the EIA process by demonstrating early engagement and consideration of stakeholders' views, building social license to operate.

It is also increasingly important to demonstrate environmental and social credentials when obtaining project finance, as more and more financial institutions and development agencies adopt sustainable finance initiatives. In this context, SEA can be used to demonstrate that there is a sustainable framework for development, and how particular projects meet these criteria.

Other potential policy and institutional benefits extend from the use of SEA beyond the gains of undertaking the SEA itself. They centre on changes to the culture of decision-making that accompany what the World Bank refers to as 'mainstreaming' the environment, i.e., making it part of the mandate and operation of economic agencies. Such changes are expected to be long term and gradual, but some could be instituted sooner (e.g. meeting obligations of a country under the conventions on biodiversity and climate change).

2.7 Who should do SEA?

Some countries in the Pacific are working towards recognizing SEA as an environmental planning Policy and this is driven through other international agreements and negotiations (e.g. UNECE, CBD, BBNJ). Many of the drivers for SEA are from transboundary issues or cumulative impacts that extend far beyond any single project. These issues include urbanization and costal development, sea-level rise, unsustainable fishing, invasive species, waste management, oceanic waste and emerging issues such as deep-sea mining and bioprospecting. As new laws and international agreements (i.e. MEAs such as CBD) continue to incorporate provisions for SEA it is important for Pacific Island countries and territories to recognize the requirements of SEA.

SEA can be applied by a range of users, to provide significant benefits to a variety of stakeholders in a range of circumstances. In public sector developments, the government takes leadership on the SEA processes, is supported by partners and stakeholders. While it is common for SEA to be led by governments, it can also be carried out by the private sector and donors:

2.7.1 Government Agencies

Because of the breadth of their responsibilities there are numerous applications for SEA by government agencies, including:

- during the development of national/regional/district strategies, plans or programmes, such as disaster risk reduction plans and climate change adaptation plans;
- during the development/review/reform of policies;
- for sector-based initiatives, such as strategies/plans/programmes for the development of renewable energy resources;
- when preparing plans and programmes for the development of infrastructure, such as roads, ports and waste management;
- as a tool to support applications for financial assistance by development agencies and financial institutions that require a demonstration of sound environmental and social governance.

2.7.2 Development Agencies

Due to the increasing importance, and application of environmental and social safeguards by development agencies, SEA has become increasingly valuable as a mechanism for guiding how development agencies provide support. SEA may be used to evaluate:

- donors' country assistance strategies and plans;
- partnership agreement with other donor agencies;
- donors' sector-specific policies; and
- donor-supported public-private infrastructure support facilities and programmes.

Development agencies also increasingly look for evidence of strategic environmental and social planning by countries seeking their support.

2.7.3 Private Sector

For private industry and developers, SEA can support their development strategies. By investing upfront in an SEA developers can use the process to identify major risks and avoid costly investment in plans that are unlikely to gain government or public approval. For instance, an energy company looking for opportunities to expand or develop new generation technologies might use SEA as a tool for mapping prospective locations and evaluating the potential environmental and socio-economic impacts with a view to developing sites with best access to the resources it needs but minimise the impacts on the environment and communities.



Cruise ship, Apia harbour, Upolu, Samoa. © Stuart Chape

Tonga fish market. Photo: Sela Soakai-Simamao

When considering PPP for large scale tourism it is important to consider impacts on local food supplies as well as requirements for healthcare, waste management and other national resources including water and power that will be required to support thousands of visitors.

WHY UNDERTAKE A STRATEGIC ENVIRONMENTAL ASSESSMENT?

REASON 3

SEA is a tool to help governments meet SDG requirements. A key component of sustainability is avoiding, reducing, or mitigating adverse impacts on people, communities, natural and physical environments. In taking action to meet specific SDGs, it is critical that governments check to ensure there will be no significant negative consequences that will limit achievement of other SDGs.



3 STRATEGIC ENVIRONMENTAL ASSESSMENT IN PRACTICE

Having introduced SEA in Sections 1 and 2, this section begins to explain the process of conducting SEA. It sets out the objectives, key performance criteria and SEA process, with further detail on each step in the process further described in Sections 4-7.

3.1 Objectives

SEA has three key objectives:

- Encourage the integration of environmental and socio-economic considerations into PPP, thus establishing a sustainable framework for future development;
- To add value to decision-making, through the identification of risks and opportunities so that risks can be avoided or minimised and opportunities can be maximised;
- To create a strategic culture in decision-making, promoting collaboration and cooperation, which creates
 a better understanding of values and how to avoid conflicts.

3.2 Key Performance Criteria

In accordance with the performance criteria for good quality SEA, established by the International Association for Impact Assessment³, an SEA should:

- Establish clear goals, objectives and targets of the PPP;
- Be integrated with existing policy and planning structures;
- Be flexible, iterative and customized to context;
- Analyse the potential effects and risks of the proposed PPP, and its alternatives, against a framework of sustainability objectives, principles and criteria;
- Provide explicit justification for the selection of preferred options and for the acceptance of significant trade-offs;
- Identify environmental and other opportunities and constraints;
- Identify cumulative effects;
- Address the linkages and trade-offs between environmental, social and economic considerations;
- Involve key stakeholders and encourage public involvement;
- Include an effective, preferably independent, quality assurance system;
- Be transparent throughout the process, and communicate the results;
- Be cost effective avoid duplication of efforts and encourage synergies;
- Encourage formal reviews of the process after completion, and monitor PPP outputs; and
- Provide opportunities to build capacity for both its undertaking and use.

³ In 2002 IAIA published the "Strategic Environmental Assessment Performance Criteria" as its official under-standing of good quality SEA process. The SEA Performance Criteria was the result of a discussion over three years amongst members of the SEA Section led by Rob Verheem. IAIA 2002. "SEA Performance Criteria," IAIA Special Publication Series No. 1. Available from www.iaia.org/publicdocuments/special-publications/sp1.pdf

3.3 Considerations and Recommendations for Effective SEA

Since its introduction, SEA has been used extensively worldwide, primarily in countries that have implemented legislation mandating its use. Through the implementation of this legislation and use of SEA, a great deal of experience has been developed and lessons learned. Based on this experience, it is recommended that particular regard be paid to the following matters when implementing SEA in the Pacific. The objective is to identify potential unintended consequences of the PPP and to draft measures to address them.



3.4 Stakeholder Engagement

Regardless of who initiates an SEA, carrying out an effective SEA requires a team of people to deal with the different aspects of the project, including project governance, stakeholder engagement, coordination of work streams, and development of specific studies to inform the SEA. There is also great value in collaboration with other stakeholders to achieve integrated development and informed decision making. Identification of relevant stakeholders is a key part of the scoping phase of SEA and is explored further in Section 4.2.4.

As SEA is a holistic planning approach for assessing proposed PPP its has crosscutting implications on multiple sectors and ministries; it is recommended when choosing to carry out an SEA that external independent expertise is utilized to assist with conducting SEA and preparing relevant reports. This should include engaging independent practitioners to peer review the outputs from the SEA process. By engaging independent specialists to lead the SEA and external reviewers individual bias can be reduced.

An essential component of SEA is stakeholder engagement with meaningful consultation with relevant government agencies, industry, non-government organisations, civil societies and members of the public/local community during each step of the SEA process. By having effective engagement with relevant stakeholders they are able to have ownership in the decision making process. Incorporating stakeholder ownership of the SEA process, through their "buy-in" to the process, is key to effective stakeholder engagement. To ensure that the appropriate level of engagement is carried out, it is beneficial to prepare a Stakeholder Engagement Plan very early in the SEA process that identifies the appropriate stakeholders, the issues they are likely to be interested in and describes the proposed timing and mechanisms for engagement.

In the Pacific, we value our national culture, traditions and knowledge. There is extensive customary land ownership and direct linkages between community livelihoods, subsistence lifestyles, natural resource conditions and sustainable development. So, it is essential to engage in a meaningful, culturally appropriate, way with the different groups to promote social accountability and reduce the potential for future conflicts.

The nature and frequency of stakeholder engagement and public consultation should reflect the scale and complexity of the proposed PPP as well as the level of potential impact on the environment and socio-economic conditions. The aim is to:

- Provide transparency in decision-making;
- Build a comprehensive understanding of baseline conditions, including key community concerns and values;
- Gain an understanding of the potential environmental and socio-economic impacts at an early stage in the SEA process and then to test this with stakeholders again later, following further analysis;
- Obtain feedback on options/alternatives and understand potential trade-offs;
- Build and maintain constructive relationships between all parties;
- Design and implement suitable monitoring programmes for the SEA
- Improve understanding and avoid unnecessary controversy and delays in the decision-making process due to public opposition arising from a lack of engagement and understanding.

A good SEA will facilitate constructive debate and discussion amongst stakeholders, starting early in the SEA process, and again during each step of the process as illustrated in Figure 3 (Section 3.5 SEA Process). During these engagement activities it is important to promote participation, listen to and record the opinions of stakeholders and demonstrate how these have been taken into account in decision-making processes. A useful tool can be the inclusion of a grievance mechanism.

EXAMPLE

Grievance Mechanism (as part of a Stakeholder Engagement Plan)

- Is a register of grievances, concerns, suggestions, inquiries and compliments raised by stakeholders throughout the process that records the nature, timing and any proposed mitigation measures and agreements.
- Should be proportionate to the nature of the PPP and potential risks and impacts being assessed in the SEA
- Where feasible and suitable may use existing formal and informal grievance mechanisms supplemented as needed
- · Supports submission of grievances at multiple locations through multiple mechanisms
- · Is a way of tracking performance of stakeholder engagement

It is also important to continue to communicate following completion of the SEA, during the implementation phase of the PPP. This will help with understanding whether the PPP has had any unforeseen impacts in addition to those that were anticipated.

The key opportunities for stakeholder engagement are identified for each step of the SEA process below (Figure 3). These guidelines emphasize the importance of stakeholder engagement with tips boxes throughout each section and further information in Appendix 5: Guidance on Stakeholder Engagement.







Tonga, Stakeholder Consultation. Photo: Paul Anderson
Top: Solomon Islands, Gold Ridge Tailings Dam consultation and inspection.
Photo: Greg Barbara



Kiribati South Tarawa Environmental Planning reviews. Photo: Greg Barbara Top: Yap, FSM: Impact Assessment Training and SEA engagement workshop. Photo: Greg Barbara

3.5 SEA Process

Over the last decade the use of SEA has been evolving, with the tool being adapted and applied for different purposes in different parts of the world. For the Pacific context, the basic SEA process can be defined as follows (note that Stakeholder Engagement is conducted at every step of SEA):

SEA Stage	Description	Section
Screening	Determining whether an SEA should be done	4.1
Scoping	Identifying the key issues to be addressed and the boundaries of the SEA	4.2
Assessment of Impacts	Collection of baseline data and assessment of potential impacts of the PPP and any viable alternatives	5.1-5.2
Mitigation	Consideration of how to avoid or minimise significant risks and maximise opportunities	5.3
Monitoring, Evaluation & Compliance	Description of the proposed plan for monitoring the outcomes of implementing the proposed PPP	5.4
Reporting	Preparation of the SEA report describing the findings of the evaluation of the PPP	5.5
Quality Review	Review of the SEA report for quality assurance purposes	5.6
Making Decisions	Deciding how to address findings of the SEA process and implement the SEMP	7.0

This process, as illustrated in Figure 3, is not necessarily linear. This reflects the nature of PPP development whereby proposals and possible alternatives are developed, evaluated and then further refined/modified to address the findings of impact assessments and engagement with stakeholders. As a result, this general SEA process needs to be tailored to the needs of each PPP.

The trigger for an SEA will depend on the relevant country legislation and nature of the PPP. Within different jurisdictions there may be existing legislation that facilitates SEA or it may be a recommendation under an international agreement (e.g. MEAs such as Ramsar and CBD endorse the use of SEA and have guidelines for SEA) or development partner policy (e.g. OECD members who have guidelines for applying SEA).

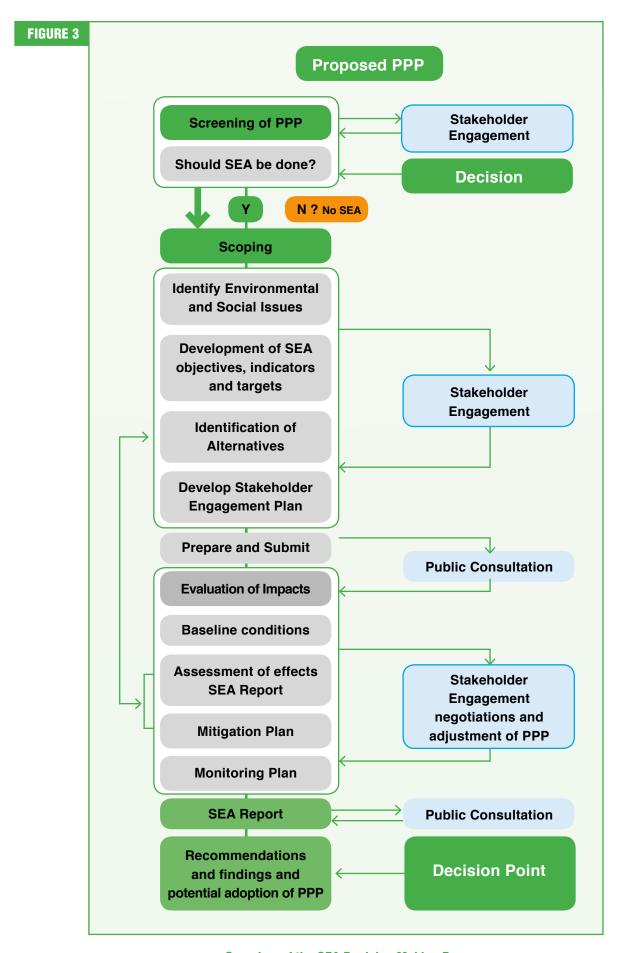
Examples of legislative triggers and rationale for SEA

European Directive 2001/42/EC – SEA Directive to conduct an assessment of the effects of certain/prescribed types of plans and programmes on the environment for matters such as transboundary impacts or national networking transmission lines (further triggers are defined in the UNECE SEA protocol).

Scottish Environmental Assessment Act 2005, refers to significant environmental effects as a trigger for SEA. Schedule 2 sets out specific criteria for determining the likely significance of environment effects of a plan. The need for an assessment can be triggered by either be positive or negative effects, providing they are significant.

Canada: all Government of Canada departments and agencies that are developing policy, plan and program proposals are obligated to implement the Cabinet directive. A preliminary scan screens proposals for potential, important environmental effects, which can be either positive or negative. If important environmental effects are identified, a strategic environmental assessment is required.

EXAMPLE



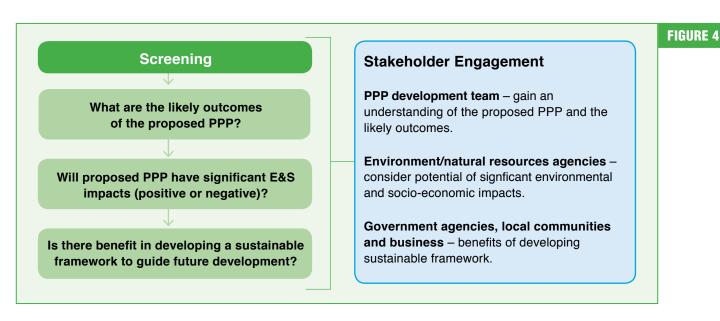
Overview of the SEA Decision Making Process

4 SCREENING AND SCOPING

4.1 Screening

Screening is undertaken to determine whether an SEA should be carried out. It is a procedure aimed at determining whether a plan or program should or should not be subject to the Strategic Environmental Assessment procedure. In many countries SEA is a requirement of legislation⁴, therefore screening processes focus on helping relevant parties to determine whether their PPP is captured by the legislation. However, as there is little SEA legislation in Pacific Island Countries and Territories, there is no mandatory requirement to carry it out and no direction on when SEA should be initiated. It is therefore important to look for windows of opportunity to initiate SEA at key points in PPP development and decision making based on whether a proposed PPP is likely to have significant environmental and/or socioeconomic impacts.

Figure 4 illustrates the key questions that should be considered during the screening process. It also identifies the importance of stakeholder engagement to obtain appropriate information and make informed decisions about whether or not to conduct a SEA. If screening determines an SEA is needed it is important to continue to build on the Stakeholder Engagement throughout the SEA.



Further detail on SEA screening step

This is described further in Sections 4.1.1-4.1.3 with an example screening checklist provided in the Toolkit Appendix 2: Screening Checklist.

⁴ In some cases Multilateral and Bilateral Agreements have Policy recommendations that trigger SEA, such as the UNECE ESPOO

4.1.1 What are the likely utcomes of the Policy, Plan or Programme?

In order to consider the potential environmental and socio-economic impacts of a proposed PPP it is first necessary to identify the likely outcomes from implementing the proposed PPP. These could be:

Physical changes	The PPP may result in physical changes, such as development of infrastructure (roads, water treatment plants, waste water treatment, airports, coastal defences).
Behavioural change	As well as direct physical change, the PPP may result in changes in the behaviours of communities, businesses and government agencies.
Communities	Changes to land ownership, customary practices, patterns of settlement, modes of transport, energy consumption
Businesses	PPP could lead to increased competition, greater drain on resources, legislative change of shop trading hours, changes in management of waste materials/recycling, reduced/increased rate of manufacture
Government	How the PPP may effect infrastructure implication, provision of social services.

At this stage in the SEA process it is important to focus on the key changes that are likely to occur. This can be best determined through consultation with the PPP team.

If it is determined an SEA is needed during the screening process then further work is then carried out during the Assessment of Effects stage (Section 5.2) to prepare a more comprehensive list of possible outcomes.

STAKEHOLDER ENGAGEMENT

In order to gain an understanding of the proposed PPP and the possible outcomes from its implementation it is important the SEA team engages with the team developing the PPP rather than rely exclusively on its own interpretation of documentation relating to the proposed PPP. This engagement will provide the opportunity for the PPP development team to provide further detail and for the SEA team to ask questions and seek clarification.



Tonga, Stakeholder Consultation. Photo: Paul Anderson



Kiribati South Tarawa Environmental Assessment Workshop. Photo: Greg Barbara

4.1.2 Are there likely to be significant impacts?

Once the key outcomes of the PPP have been identified in consultation with the PPP development team, the main potential environmental and socio-economic impacts (positive and negative) can be identified.

Some common issues that may trigger an SEA are summarised in Table 2 below. Note the following Table 2 is not exhaustive and therefore should not be used to limit the application of SEA.

Examples of potential environmental, social and economic issues that may trigger an SEA.

Environment*	Social	Economic
Native plants, animals, habitats and ecosystems	Public health and wellbeing	Livelihoods and employment
Invasive plants and animals	Indigenous communities and cultural heritage values	Public/private sector financing and revenue
Ground, surface, and marine water	Public services, utilities and infrastructure	Resource extraction
Soil and land resources	Population	Industry development
Air quality, pollution and waste (liquid, solid, gas)	Village settlements and housing	Distribution of costs and benefits
Climate change and climate variability	Traffic and transportation	Land and sea tenure
Extreme events, natural hazards and disasters	Aesthetics	Global markets (imports, exports)
Genetic resources	At risk/disadvantage groups (gender, poverty, indigenous, people with disability)	Fair trade practices

^{*} Includes biophysical issues and environmental issues that arise from, or are linked to, human activities, i.e. issues that result from the relationship between people and the environment.

At this stage in the SEA process it is important to focus on identifying the <u>significant</u> environmental and socio-economic opportunities and impacts from the proposed PPP, as well the potential for cumulative effects. This process can be supported by tools such as checklists containing established criteria or lists of questions to ensure a consistent approach is applied to screening. However, it is also important to engage with stakeholders.

At the end of this process, a decision should be made as to whether it is necessary to carry out a SEA. It will be important to consider country specific issues, but in general it would be appropriate to carry out a SEA where the PPP is to likely to:

- to result in significant environmental or socio-economic effects, considering the magnitude, duration and spatial extent of effects;
- be contentious;
- have significant cumulative effects;
- have trans-boundary effects i.e. impacts that are likely to be felt by neighbouring districts, regions and/ or countries;
- lead to significant changes in behaviours of individuals, businesses, NGOs, civil societies or government agencies, such as patterns of settlement/land occupation, intensification of development and increased/ decreased consumption of energy;
- lead to the introduction of new species or genetically modified organism;

TABLE 2

 have impacts on vulnerable receptors, such as poor communities, cultural values or sensitive or highly valued or unique ecosystems;

And/or where:

- There is a high level of uncertainty about the potential effects of the PPP, perhaps due to data gaps or application of new technology whose effects are not well understood;
- Existing environmental quality or resources are close to limits of acceptable change. For instance, water quality may already be degraded or water abstraction from aquifers may already be allocated;
- The impacted area has a recognised local/regional/international conservation/protection status. For instance, Marine Protected Areas.

4.1.3 Is there Benefit in Developing a Sustainable Framework?

There is also an opportunity to use SEA in a more proactive manner, rather than in response to the development of PPP, SEA can be used to develop a sustainable framework to guide future development. As outlined in Section 2.2, SEA could include the development of a water resource management plan for a catchment or aquifer, to support sustainable water use and water security; the preparation of a whole-of-island agricultural development plan, with an aim of increasing local food security; or the development of a marine spatial plan that is based on informed and coordinated decisions about how to use a range of marine resources sustainably, within a defined area.

In the light of an increasing global urban population and climate change, SEA can be a good tool for development plans for towns and cities. It can be used to plan for migration from rural areas to towns and cities as well as new towns and cities or relocation of settlements due to resource restrictions or sea level rise.

STAKEHOLDER ENGAGEMENT

The need to use SEA in this way is best determined through collaboration between responsible agencies and communities. For instance, the Ridge to Reef project initiated by the Federated States of Micronesia is designed to shift the approach to management of natural resources from an adhoc approach to a more holistic ecosystem-based regime by building awareness, knowledge and engaging with a wide range of stakeholders.

Similarly, the Integrated Strategic Environmental Assessment of the Northern Province of Sri Lanka involved undertakings by more than 25 government agencies working together to understand natural resource base and environmental consequences after conflict in the province. This was carried out to provide strategic information to support development.



Photo Yap Historical Housing. Photo: Greg Barbara



Photo Kiribati Sustainable Agriculture Project. Photo: Greg Barbara

4.2 Scoping

Once it has been determined that a SEA is going to be done, scoping of the SEA should be carried out to establish the focus and content of the SEA. This builds on the work carried out in the screening stage by describing the existing legal and policy framework, identifying additional environmental and socioeconomic issues, determining appropriate objectives, indicators and targets for the SEA, as well as identifying possible alternatives to the proposed PPP and relevant stakeholders to be consulted. Scoping is a structured method for identifying key sustainability issues related to the Plan or Program (PPP) under preparation. The SEA scoping phase is essential for an effective SEA process as it sets out the key concerns and investigations that need to be addressed in order to complete the decision-making.

The key components of the scoping stage are shown in Figure 5 below and described in further detail in Sections 4.2.1-4.2.5. The primary output of this stage of the SEA process is the Scoping Report.

Scoping

Identify relevant environmental and socioeconomic issues and consider availability of baseline data (Section 4.2.1)

Establish SEA objectives, indicators and targets (Section 4.2.2)

Identify reasonable alternatives to be considered in the SEA (Section 4.2.3)

Identify stakeholders and prepare Stakeholder Engagement Plan (Section 4.2.4)

Prepare Scoping Report (Section 4.2.5)

Stakeholder engagement

Consultation should be carried out early to:

- Identify available baseline data/information and existing monitoring programmes
- Enable identification of potential impacts, including possible scale and extent
- · Identify relevant stakeholders
- Improve understanding of community concerns/values
- · Identify feasible alternatives
- Help determine appropriate SEA objectives

Once a Scoping Report has been prepared this can be distributed/communicated, to provide further opportunity for comment before SEA proceeds further.

Scoping Process

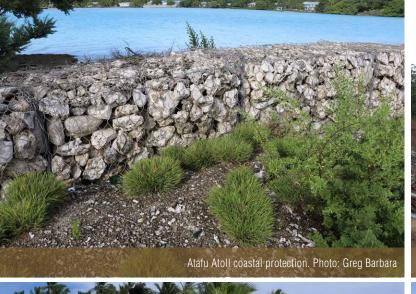






Cook Islands market.

FIGURE 5

















Tonga consultation. Photo: Sela Soakai-Simamao

4.2.1 Identification of Environmental Issues

The scoping stage builds on the work carried out in the screening stage (Sections 4.1.1 and 4.1.2) to develop an initial understanding of the potential outcomes of implementing the proposed PPP and the nature and scale of environmental and socio-economic impacts that are likely to result. During this stage the SEA team should consider:

- The nature of change what will be affected? For instance: air quality, water quality, health, water resources, amenity value and who will be affected
- Receptors How sensitive are the receptors? For instance, are the species that are likely to be affected endangered/protected? Are there communities or groups within communities that are likely to bear the bulk of the impact?
- Scale/degree of change Are the changes likely to be significant or relatively small? Will they be temporary or permanent?
- Geographical location and extent where are the impacts likely to occur? Will they be localised or wide reaching? Is there potential for transboundary effects on other districts/regions/countries? For instance, impact(s):
 - on a water resource that is used by multiple districts.
 - upon road infrastructure that may change the nature or volume of transport between regions.
 - on migratory fish stocks that may affect availability of resources to more than one country.
- Duration and frequency How long and how often will impacts occur?
- Cumulative effects what other things are already taking place in the affected areas? Will there be several actions/activities/behaviours impacting upon the same areas, resulting in a greater level of impact than if they were happening individually
- Probability What is the likelihood of the impacts occurring?

It is important that the scoping phase be used to tailor the SEA to issues that are of most relevance to the PPP. It is helpful to do this in a collaborative and consultative manner to ensure that the appropriate matters are being considered and there is broad agreement on the scope of the SEA.

At this stage, consideration should also be given to the availability of baseline data that is relevant to the identified issues. Whilst SEA typically aims to use existing data rather than require extensive new studies/monitoring to be carried out, if there are critical information/data gaps identified further study/monitoring may be required. The scoping (and indeed a) phases in SEA do not need detailed information: SEA are often making broad strategic judgments.

STAKEHOLDER ENGAGEMENT

There should be continued engagement with the PPP development team to expand the SEA team's understanding of the likely outcomes from implementing the PPP. The SEA team should consider the level engagement during development of the PPP i.e. have the predictions been tested or is there a need for further engagement to understand this?

There should also be continued engagement with government agencies, non-governmental organisations, communities and businesses to gather further information on potential environmental and socio-economic impacts. Through this the SEA team should also try to determine what baseline data already exists, and where this can be sourced.

4.2.2 SEA Objectives

For each of the environmental, social and economic issues to be investigated through the SEA it is necessary to identify criteria against which the PPP can be tested. This process should start with the identification of any objectives or standards established at international, national, regional and/or district level that may be relevant to the PPP, such as commitments to reduce greenhouse gas emissions, prohibit/reduce single use plastics, or improve water quality.

Having done so, the SEA team should consider whether all of these are applicable to the PPP and proposed scope of the SEA. It is important that the objectives are relevant and measurable. For each of the objectives that are chosen the SEA team should then identify appropriate indicators and targets.

Indicators should provide a means of measuring progress towards achieving the stated objective and targets should describe the desirable state in quantifiable terms where possible but not ignoring changes that are otherwise described. For instance:

Examples of environmental, social and economic objectives, indicators and targets

Objectives	Indicators	Target
Reduce greenhouse gas emissions	Tonnes of CO ₂ emitted per year	X Tonnes of $\mathrm{CO_2}$ emitted per year by 2025
Reduce single use plastics	Tonnes of single use plastic waste disposed of	50% reduction in waste disposal by 2022
Improve water quality at beaches	Water quality (i.e. <i>E.coli</i> , dissolved oxygen, Ammonia)	Water quality meets specified levels
Reduction in mortality from non-communicable diseases.	mortality rate due to NCD.	A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases

To be of value, the objectives should be able to be monitored. It will be easiest if this can be done through existing, established monitoring networks. However, if there are available resources for setting up additional monitoring programmes this may also be considered. Whilst quantitative targets are preferable, qualitative indicators should not be completely discounted as they may be the only available options through which to monitor performance.

STAKEHOLDER ENGAGEMENT

TABLE

Engagement with stakeholders at this stage should seek to find out what objectives or standards have already been established at international, national, regional and/or district level that may be relevant to the PPP and SEA. For instance, commitments to reduce greenhouse gas emissions, prohibit/reduce single use plastics, water quality improve water quality or achieve health targets.

The SEA should also seek advice from stakeholders, such as other government agencies, about what monitoring is already taking place that is relevant to objectives chosen for the SEA. If there is relevant monitoring already underway this could provide a source of baseline data (refer Section 5.1) for the SEA and a means of monitoring the outcomes of implementing the SEA (refer Section 5.4).

This engagement should be guided by the Stakeholder Engagement Plan described in Section 4.2.4.

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4.2.3 Alternatives

One of the key aspects of SEA is to develop up to four realistic PPP scenarios which could be based on a number of factors such as economic development (high, medium, low growth scenarios), predicting and planning for climate change scenarios, various sea level rise scenarios, types of tourism (low numbers of long stay vs high numbers of short stay and their related impacts), national power supply options (fossil fuel, hybrid, solar, wind, geothermal etc). With emphasis on realistic options, not options created simply to cover a range of conditions, as too many scenarios is confusing to participants and often results in a lot of unnecessary analysis.

Okavango Delta, Botswana This SEA considered four scenarios of tourism growth and assessed them against two different potential climate change regimes (hotter, drier and hotter, wetter) and examined the implications of each scenario. Enabling adaptive planning to account for changing climatic conditions.

FSM R2R SEA also examined economic growth influenced by tourism and climate change scenarios. By examining multiple scenarios they were able to determine that significant negative impacts would occur to the economy for either no action or high growth scenarios and able to select a modest growth scenario.

Namibia During the global rush on uranium resources (prior to the Fukushima disaster) this SEA considered 4 mine development scenarios: below expectations (2–3 new mines over 20 years), medium growth (4-6 mines), high growth (7–10 new mines) and boom and bust. At the time the country was preparing for the high growth scenario, but post-Fukushima, this dwindled to the below expectations scenario. But because the SEA had considered and analysed the implications of all the scenarios, the SEA was still relevant. For further details on the uranium rush SEA visit www.saiea.com/publications/

As well as the proposed PPP, the SEA should consider any reasonable alternatives that were considered during development of the PPP, including the status quo (do nothing). Consideration of alternatives in SEA provides the opportunity to identify and explore different ways to deliver the PPP's objectives while addressing the environmental and socio-economic issues. For this reason, it is often preferable to develop, assess, revise and re-evaluate options in an iterative manner throughout the PPP development process as illustrated by the feedback loop in Figure 3. This allows options to be refined/adapted to minimise potential risks and maximise potential opportunities.

However, if the development process has been largely completed it may be more appropriate and practical to set out the alternatives that were considered, evaluate the environmental and socio-economic impacts, compare them and explain the reasons for selecting the preferred option.

For practical reasons it will be necessary to limit the number of alternatives that are considered in the SEA. The alternatives should always, as a minimum, include the 'do nothing' scenario and it is important that they are reasonable/realistic/viable and are not simply chosen or retrofitted to promote the preferred option.

It is recommended that the SEA team identify these reasonable/realistic alternatives in collaboration with the PPP development team, but not be limited to the alternatives identified by them. It is important to note that while each of the alternatives considered in the SEA will be assessed in terms of the environmental and socio-economic impacts, the reasons for selecting alternatives may also include other factors.

EXAMPLES

STAKEHOLDER ENGAGEMENT

Initially the SEA team should engage with the PPP development team to identify the alternatives that it considered when developing the PPP. However, through the SEA process it is also important to engage with a broader range of stakeholders to assess the viability of these alternatives and identify other realistic alternatives that could address risks or maximise opportunities.

This engagement should be guided by the Stakeholder Engagement Plan described in Section 4.2.4.

4.2.4 Identification of Stakeholders

It is beneficial at this point to prepare a Stakeholder Engagement Plan, which identifies the relevant stakeholders, the issues that the SEA team wishes to consult with, collaborate with or notify of the proposed SEA and the proposed timing, frequency and mechanisms for doing so. It should also identify each stakeholder agency/group/organisation mandates/roles and responsibilities and their role in the SEA. This plan should be developed as soon as possible and updated as necessary to inform and guide engagement with stakeholders throughout the SEA process.

Types of stakeholders

As each SEA will be different stakeholders should be determined on a case by case basis, and include:

- government agencies
- potentially affected/interested communities, landowners
- private sector and likely affected businesses
- non-governmental organisations
- civil societies
- industry associations and/or unions, and
- development agencies.

As PPP can have wide reaching impacts it is important to consider disadvantaged or marginalised groups such as, women, disabled, youths, impoverished indigenous peoples and other minorities etc.

Focus for engagement

The SEA team should identify the matters that it would like to engage with stakeholders on. This is likely to include:

- The proposed PPP to improve understanding of the objectives, likely outcomes and realistic alternatives for achieving the objectives
- The potential environmental and socio-economic impacts of the proposed PPP especially on vulnerable or disadvantaged groups
- The potential benefits and opportunities presented by the PPP and the collective 'vision' for the area/region
- Appropriate objectives, indicators and targets for the SEA
- Feedback on the scope of the proposed SEA
- Existing baseline data and monitoring programmes
- Assessment of potential effects and appropriate mitigation for environmental and socio-economic impacts
- Identification of opportunities that could be created through the PPP
- Feedback on the SEA Report.

This plan should also consider the interests of the stakeholders themselves, i.e. what do they want to know, when would they like to know it, and how would they like this communicated. [Appendix 3: SEA Scoping Template.]

Once the Scoping Report has been completed this may be published or otherwise provided to stakeholders to seeking their feedback on the proposed scope of the SEA before commencing the assessment process.

Mechanisms for engagement

Engagement can be done in a range of ways, including, but not limited to:

- Public (open) forums These are useful for broadcasting information to a larger audience i.e. to inform communities about the SEA process and advising how, and who they can contact for further information or to provide feedback. It can be more difficult obtain specific feedback from such sessions, so they may need to be carried out in combination with more targeted engagement;
- Targeted engagement In the Pacific more targeted engagement will be required when there is a need to obtain more specific feedback or input into the SEA from smaller groups or individuals. For instance:
- Workshops with officials from government agencies to obtain input i.e. to understand the possible outcomes of the proposed PPP or to determine the availability of baseline data.
- Meetings with community groups and/or businesses to understand their concerns.
- One on one engagement with individual stakeholders or businesses that may be significantly impacted by the proposed PPP to understand their concerns.

Timing

Identifying and engaging with stakeholders during the scoping process provides the SEA team with the opportunity to seek input from stakeholders early in the process and obtain feedback that will help to refine the scope of the SEA. This should ensure that the SEA reflects the appropriate issues and obtains early 'buy in'. The Stakeholder Engagement Plan should also set out how the SEA team proposes to engage with stakeholders the steps in the SEA process. The typical opportunities for stakeholder engagement throughout SEA are summarised in Figure 6 on next page.



Sufficient coastal buffer should be applied to coastal zoning for developments. Tanna Island, Vanuatu. Photo: Greg Barbara

SEA Process

Screening

Scoping

Opportunities for engagement with stakeholders

Engagement at the screening stage should focus on gaining an understanding of the proposed PPP, the likely outcomes of the PPP and determining whether significant environmental and socio-economic impacts are likely to occur.

Consultation should be carried out early in the scoping stage to:

- Identify available baseline data/information and existing monitoring programmes
- Enable identification of potential impacts, including possible scale and extent
- · Identify relevant stakeholders
- · Improve understanding of community concerns/values
- · Identify feasible alternatives
- · Help determine appropriate SEA objectives

Once a Scoping Report has been prepared this can be distributed/communicated, to provide further opportunity for comment before SEA commences.

Baseline conditions

Assessment of potential effects

Mitigation

Monitoring

SEA Report

- Engagement with government agencies to gather baseline data/information.
- Targeted engagement with communities, businesses, government agencies and NGOs to understand their values, concerns and the opportunities the PPP may present to them.
- Consultation to determine how stakeholders are likely to be affected by the proposed PPP and understand how these impacts could be mitigated i.e. through the use of alternatives.
- Engagement with government agencies in relation to ongoing monitoring of the SEA, in particular whether there are existing monitoring programmes that might be used.

Public release of draft SEA Report for consultation and engagement with stakeholders to find out their views on the proposed PPP and SEA findings. Having obtained feedback, it would be appropriate to update the SEA Report and release a final copy showing how stakeholders' views have been taken into account.

Opportunities for stakeholder engagement during SEA



SEA operation





Engagement can take many forms, including but not limited to formal technical reviews, community presentations and open discussions, visits to stakeholders, round table discussions and planning meetings. L-R: Kiribati, Environmental Assessment review; Auckland Impact Assessment Conference; Solomon Islands, Tailings Dam planning. Photos: Greg Barbara

4.2.5 Scoping report

It is recommended that the outcomes of the screening and scoping process are documented in a Scoping Report. The purpose of this report is to inform stakeholders of the issues, objectives and alternatives that are to be considered in the assessment of impacts to go into the SEA Report and the proposed approach for assessing impacts and engaging with stakeholders. It should be clear and concise, and may include the following:

- Introduction a brief description of the background/context for the SEA and the purpose of the SEA Scoping Report;
- Proposed PPP A summary of the proposed PPP, including its objectives and if appropriate the process for its development. Maps can be used to show the area covered by the PPP;
- Alternatives a brief description of the alternatives that have been considered during development of the PPP and confirmation of those that are being considered in the SEA;
- Issues to be addressed summary of the key environmental and socio-economic issues that are to be considered during the assessment of impacts;
- SEA objectives statement of the objectives, indicators and targets that are going to be used to assess
 the PPP against;
- Stakeholders identification of the stakeholders that will be consulted with and those that will collaborate in the development of the SEA;
- Methodology a summary of the approach for carrying out the SEA, including any baseline studies that
 will be undertaken and by whom as well as an indicative project plan identifying the key steps and times
 for consultation. This may also discuss proposed sources of data/information;
- **Limitations** a brief description of any limitations that have been identified during the scoping stage, such as the availability of baseline data;
- Conclusions any concluding remarks on the scope of the SEA;
- Contact details depending on the scale of the PPP/SEA, it may be prudent to release the Scoping Report as part of the stakeholder engagement strategy. If released the document should include contact details so that anyone with queries or feedback has a point of contact.

Appendix 3: SEA Scoping Template.

Once feedback from stakeholders has been gathered on the Scoping Report; it is then used to guide the assessment of impacts and development of the SEA Report.

STAKEHOLDER ENGAGEMENT

Once the Scoping Report has been completed this may be published or otherwise provided to stakeholders to seeking their feedback on the proposed scope of the SEA before commencing the assessment process.



Pacific Island representatives, SEA Guidelines consultation workshop, Auckland. Photo: Greg Barbara



Auckland Impact Assessment Conference, FSM SEA presentation. Photos: Greg Barbara



Kiribati South Tarawa site visit for discussion of community issues related to proposal. Photo: Greg Barbara



Tokelau, Environmental Assessment Policy Review Engagement with Taupulega, Community and General Fono representatives on Atafu atoll. Photo: Greg Barbara

5 ASSESSMENT OF IMPACTS

The purpose of this stage of the SEA is to identify the potential environmental and socio-economic impacts of the PPP and the selected alternatives, assess the likelihood and significance of the impacts, and consider how to avoid or mitigate the most serious negative impacts, and how any opportunities can be maximised. The keys steps and opportunities for stakeholder engagement are identified in Figure 7 below. The outcome of the assessment of impacts is the SEA Report, used to guide the decision on whether to adjust, reject or adopt the PPP.

Assessment of impacts Gather baseline socio-economic data and describe current and future state (Section 5.1) Identify, describe and assess the potential effects (Section 5.2) Consider appropriate mitigation for risks and how to maximise opportunities (Section 5,3) Develop monitoring plan/programme to review implementation of PPP (Section 5.4) Prepare SEA Report (Section 5.5)

Stakeholder engagement

Government agencies – gather baseline data/information and establish whether there are existing monitoring programmes for ongoing monitoring of effects.

Communities, businesses, government agencies and NGOs – targeted engagement to understand values, concerns and opportunities as well as how stakeholders may be affected and how these impacts could be mitigated.

Public release of draft SEA Report to find out views on the proposed PPP and SEA findings.

Public release of final copy showing how stakeholders' views have been taken into account.

Process for assessing potential impacts

5.1 Baseline Environmental and Socio-Economic Conditions

Before carrying out any assessment of potential effects it is necessary to gain an understanding of the existing environmental and socio-economic conditions that are relevant to the SEA. This not only includes their current state, but a prediction of the future state in the absence of the PPP. This is sometimes referred to as business as usual but business as usual is not often flexible enough to adapt to things like change. It is important to understand; what the impact might be of not implementing the proposed policy intervention, plan or programme; what would these conditions look like in the future? Would existing trends continue or are there other external factors that would result in change. For instance, consider climate change and sea level rise: In the absence of action, what changes would occur as a result of climate change and sea level rise? This process therefore provides an opportunity to consider issues such as climate change and sea level rise and how they are predicted to impact on the country/region/district/community.

FIGURE 7

The collection of baseline information/data should start during scoping, by gathering information/data from existing sources as far as possible. This may require engagement with regulatory authorities to find out what information is already available, and whether there are any ongoing monitoring programmes that might provide relevant information, or for collecting additional information.

The aim of SEA is to use existing data rather than require extensive new studies/monitoring to be carried out. However, if there are critical information/data gaps identified during the scoping stage, to enable the SEA to determine strategic and cumulative impacts a plan is needed for obtaining this additional information.

When collecting existing data and considering whether new monitoring/studies are needed it is important to carefully consider how much information is necessary to predict the potential impacts with reasonable confidence. In some instances, e.g. traditional knowledge, it may be enough to rely on expert opinion/judgement without extensive quantifiable data this is particularly relevant in the Pacific where historical or baseline data may not be recorded beyond spoken lore. This is to avoid the SEA become a burdensome and expensive data collection exercise and allows it to progress without unreasonable delay.

Once collected, the information/data should be used to prepare a description of the existing and predicted future environmental and socio-economic conditions that are relevant to the scope of the SEA.

- Remembering no two SEA are the same. Therefore the assessment needs to be issues driven, and the baseline needs to reflect the issues, relevant features of the study area and priorities identified during scoping. The following list provides an overview of some of the features that could be included:
- Climate, including temperature, rainfall, winds, flooding, drought, extreme weather events and climate change projections;
- Topography, geology and soils, landscape and visual amenity;
- Land cover map, land use pressure map, Maps of zoning and biodiversity threats, including ownership
 if relevant;
- Water resources, including surface and groundwater quality and quantity, catchment and local hydrology, water users;
- Marine coastal processes, including tides, waves, currents as well as salinity, storm surge, temperature, water depth, water quality, and marine habitats
- Air quality and existing sources of air emissions;
- Noise ambient noise and key noise sources and sensitive receptors;
- Flora and fauna including species and communities, native, endemic, threatened/protected, invasive or culturally significant species, and species, communities or habitats that are vulnerable to environmental hazards and environmental change;
- Institutional structures at national, regional and local level and the delivery of social services such as education, healthcare, waste management, water and electricity, transport and communications infrastructure, etc.;
- Visual impacts, including impacts on sense of place;
- Human communities towns/villages/settlements, population and local demographics, access to education, literacy level and educational attainment, housing, energy and water resource access and use, land use, gardens and subsistence dependency, natural resource use, transport and other infrastructure, cultural traditions, community structure and governance systems, marginalised groups, community health status, social infrastructure and services, such as health care, education, recreation and vulnerability to environmental hazards and environmental change;
- Local and national economy, including skills, livelihoods and formal/informal employment, economic and business conditions, distribution of income and major sectors and industries;
- Social/cultural resources and heritage, including objects or sites of social/cultural significance, cultural and archaeological assets. When preparing this, it is important that any assumptions or limitations be stated.

Engagement should focus on stakeholders who may have access to existing baseline data and/or be conducting monitoring programmes already. This is likely to include regulatory authorities and may also include environmental NGOs, civil societies, local government and development agencies.

This engagement should be guided by the Stakeholder Engagement Plan described in Section 4.2.4.

5.2 Assessment of Potential Effects

Building on what has been determined through the scoping stage (Section 4.2) the aim of this task is to finalise the description and analysis of the outcomes that are expected as a result of implementing the PPP and alternatives. It is then possible to complete the task of identifying the potential implications for the environment and socio-economic conditions. For instance, the development of infrastructure may result in the removal of habitat or changes in the pattern of human settlement, changes in energy consumption will affect CO₂ emissions, and intensification of land use for farming may lead to a decline in water quality through the discharge of nutrients or pathogens to water ways.

- To identify the potential impacts, consider:
- What will be impacted?
- Who will be impacted?
- How sensitive are the receptors?
- Are the changes likely to be significant?
- Where are the impacts likely to occur?
- Will they be localised or wide reaching?
- Is there potential for transboundary effects?
- How long will the impacts last for?
- How frequently will they occur?
- Will there be several actions/activities/behaviours impacting upon the same area resulting in a greater level of impact than if they were happening individually (cumulative impacts)?
- What individual impacts cause cumulative impacts?
- What is the likelihood of the impacts occurring?

What options are there to mitigate the impacts?

It is important to consider indirect impacts as well as direct impacts and impacts that may arise from unforeseen, abnormal or accidental events. One of the benefits of using SEA, is that this will also enable the consideration of longer term and cumulative impacts, such as how the impacts of the proposed PPP may be affected by climate change and disasters. It can also be used for considering changes of landuse, for example post mining or relocation and resettlement areas for those affected by disasters and climate change impacts.

In some cases it may be possible to provide a high level of detail about the potential impacts. There may be a high degree of certainty about the actions that are going to occur in response to the PPP, which enables a more focused quantitative assessment of its potential effects. However, in other cases there may be a much lower level of certainty about the potential outcomes, making this more difficult. It is therefore important to consider the probability of impacts occurring when carrying out an assessment.

Predictions of impact can be qualitative and quantitative, and both approaches are valid/useful. For instance, modelling could be used for predicting potential impacts on water use, air quality, water quality as well as for predictions of severe weather events, such as flooding. These tools can provide specific predictions of change. In other cases it may only be possible (or desirable) to predict the direction of change, such as a decrease in CO₂ emissions, in a qualitative manner or through the professional opinion of relevant experts. An example of the simple approach used for analysing the Neiafu Master Plan is summarised below.

EXAMPLE

Strategic Environmental Assessment of Neiafu Master Plan

The Neiafu Master Plan comprised a set of policies concerning land use and building standards, together with specific projects for upgrading infrastructure and enhancing the urban landscape. The SEA of this master plan used a simple matrix to map out the broad environmental impacts of the various proposals. This took a high level approach to evaluating the plans implications, enabling a comparison of the various initiatives and the distribution of impacts. The intention of this SEA was not to provide definitive judgements about the impacts of each project as this would be done through EIA studies in the future.

A detailed case study of this SEA is provided in Appendix 1: Case Studies

The results of impact analysis can be presented in summary form via tables, as was done for the Neiafu Master Plan (Appendix 1: Case Studies). This provides a broad understanding of the potential impacts, and should always be supported by further description of the potential impacts, so that it is clear what has been considered, and why the conclusion has been reached. To aid decision making, this assessment of potential impacts should always be considered within the context of the SEA objectives, including any known limits or thresholds of acceptable change and/or standards, policy and other criteria (e.g. SDGs), and of course seeking stakeholder response to possible impacts. For instance, if defined limits of acceptable change have been set for water quality, and the proposed PPP is likely to lead to exceedance of this level, then particular attention may need to be paid to alternatives that could avoid or limit this change. It is then necessary to determine the significance of the predicted impacts and developing mitigation and monitoring plans to address these.

STAKEHOLDER ENGAGEMENT

Targeted engagement with potentially affected stakeholders is required in order to evaluate the nature and significance of the impacts upon them. For instance, if the proposed PPP is likely to result in purchase of productive land from a farmer, how will this impact upon their livelihood, and will they be able to adapt to this change? Engaging with such stakeholders can provide further detail and help identify other options that have not been previously considered.

This engagement should be guided by the Stakeholder Engagement Plan described in Section 4.2.4.

5.3 Mitigation Plan

Once the potential impacts have been assessed, the next step is to consider whether it is possible to mitigate them, particularly any that have been identified as being significant and cumulative or that are unintended consequences of the proposed PPP. This should involve considering whether the impacts can be avoided altogether, or their severity/likelihood could be reduced to an acceptable level. Further, if they cannot be avoided, can steps be taken to remedy the impact(s) or compensate for them once it/they have occurred?

Avoiding impacts may require changes/refinements to the proposed PPP, as discussed in Section 4.2.3. It is particularly important that alternatives be considered at this stage. For instance, can the proposed PPP be modified to promote development in less vulnerable/sensitive areas, which could avoid impacts on endangered habitats/species or human populations? Such consideration will be important to providing justification for the PPP or selected alternative(s). This feedback loop is illustrated in Figure 2.

As well as mitigating potential adverse effects it is important that there be consideration of how to maximise opportunities from the proposed PPP. For instance, can the PPP promote habitat restoration, and improve peoples' livelihoods and wellbeing? Such matters can be specific goals/objectives of the PPP.

STAKEHOLDER ENGAGEMENT

At this stage of the SEA, engagement with stakeholders should focus on identifying appropriate means of mitigating risks. For significant risks to particular communities, businesses or individuals, engagement should be focussed on these potentially affected parties. There may also be circumstances where government agencies, or the services/facilities they provide are likely to be impacted, and in such circumstances they should be consulted. As a minimum there should be engagement between the SEA team and the PPP development team to determine whether there are viable alternatives to the proposed PPP and/or modifications that could be made to mitigate risks and maximise opportunities.

This engagement should be guided by the Stakeholder Engagement Plan described in Section 4.2.4.

5.4 Monitoring Plan

Monitoring is important to examine the implementation of a PPP and ensure any unforeseen impacts are identified, that appropriate remedial or risk reduction actions are being taken, and that the PPP is contributing to sustainable and resilient development. To ensure this is done effectively a monitoring plan/programme should be developed that is consistent with the SEA objectives, indicators and targets (Section 4.2.2). Monitoring of the implementation of a PPP can be undertaken by government sectors or parties that are responsible for the PPP or in some case the National Planning Office of a government.

Consideration should be given to implementing this monitoring plan/programme prior to implementation of the PPP, particularly if further baseline data is required against which to compare the outcomes of the PPP.

STAKEHOLDER ENGAGEMENT

When preparing the monitoring plan/programme the SEA team should engage with government agencies, and if appropriate, environmental NGOs and development agencies that are already implementing related monitoring programmes. The purpose of this is to ensure the SEA monitoring plan is aligned with existing monitoring, and/or determine whether existing monitoring programmes can be adjusted/extended to accommodate the additional monitoring needs.

5.5 Preparation of SEA Report

The SEA process and its findings should be described in a Report, which includes the following information:

- Introduction a brief description of the background/context for the SEA and the purpose of the SEA Report;
- Legal, policy and institutional framework a brief analysis of the current framework to provide the context for the proposed PPP and to determine compatibility with national policy planning
- Methodology a summary of the approach to carrying out the SEA;
- Proposed PPP A summary of the proposed PPP and any alternatives and scenarios that have been considered;
- Outcomes of the PPP A description of the outcomes that may result from implementation of the PPP
- Current state a description of baseline environmental and socio-economic conditions. This should include a description of the future state in the absence of the proposed PPP;
- **SEA objectives** statement of the objectives, indicators and targets that have been used to assess the PPP against;
- Potential impacts a description and assessment of the potential impacts (direct, indirect and cumulative) of the proposed PPP under various scenarios and alternatives;
- Mitigation Explanation of the mitigation measures that are proposed. This may include explanation of how alternatives have been adopted, negative impacts avoided and positive impacts enhanced;
- Monitoring description of the proposed monitoring plan/programme and those responsible for collecting the data, reporting on the findings and any corrective actions that may be required;
- Stakeholders engagement an explanation of the engagement that has been carried out to date as part of the SEA process and any further consultation that is proposed. This section should also explain how stakeholder concerns/suggestions have been taken into account;
- **Findings and recommendations** summary of the key findings and any recommendations of the SEA. This may include findings of significant adverse effects, and recommendations for mitigation, including the use of alternatives;
- Appendices containing the ToR for the SEA, any specialist studies, minutes from all stakeholder meetings and any other supporting materials

For ease of understanding a non-technical summary of the SEA Report should also be prepared for use in consultation with stakeholders.

STAKEHOLDER ENGAGEMENT

Once a quality review has been carried out (Section 5.6), a draft SEA Report and non-technical summary should be published online or otherwise distributed to ensure availability to relevant stakeholders.

The purpose of this is to obtain feedback on the draft findings and recommendations so that these can be taken into consideration when finalising the SEA Report and making decisions on how to implement the recommendations (Section 6).

5.6 Quality Review

The SEA Report should undergo a quality review once completed. As a minimum, the report should be peer reviewed by another member of the SEA team to confirm it meets the SEA requirements stated in the Scoping Report.

Consideration should also be given to commissioning an independent review of the SEA to confirm it has been prepared in accordance with good practice. This review should consider:

- The scope of environmental and socio-economic issues considered;
- The relevance of the SEA objectives, indicators and targets;
- The quality of the data/information used;
- The mechanisms for predicting potential impacts;
- Whether the proposed alternatives and scenarios are realistic;
- The level of stakeholder engagement carried out; and
- How the findings of the assessment and consultation have been taken into consideration.

The findings of quality reviews should be addressed prior to releasing the draft SEA Report for consultation. Appendix 4: SEA Review Checklist.

STAKEHOLDER ENGAGEMENT

A copy of the draft SEA Report should be provided to the PPP development team at the same time as it is undergoing a quality assurance review. This will allow the team to clarify any matters relating to the PPP and alternatives or correct errors resulting from misinterpretation by the SEA team. Early and ongoing engagement between the SEA team and PPP development team should minimise the risk of such mistakes occurring.



Coastal settlement and waste Weno, Chuuk. Photo: Greg Barbara



Adhoc coastal protection Nukunonu Atoll, Tokelau. Photo: Greg Barbara

6 MAKING DECISIONS/ADOPTION OF THE POLICY, PLAN OR PROGRAMME

The greatest value is derived from SEA when it is used to inform decision-making processes. If it is used during the PPP development process it will enable amendments and refinements to be made to the PPP before it is implemented, addressing significant risks and maximising opportunities. In a government setting, the decision to endorse an SEA rests with the government and the implementation, collection of data and monitoring of PPP is the task of responsible government sectors.

Providing the PPP development and SEA process are well aligned, the rationale for making decisions and amendments to the PPP can be documented in the SEA Report. This will provide greater transparency, giving stakeholders a better understanding of the outcomes of the PPP development and SEA processes. It will also show how their opinions/concerns/suggestions have been considered and incorporated.

However, if changes to the PPP occur following completion of the SEA Report and obtaining feedback from stakeholders, it may be preferable to prepare a separate statement in the PPP, which sets out the following:

- The key environmental and socio-economic issues raised in the SEA Report;
- Key issues raised in submissions on the SEA Report;
- How the PPP has been amended to take these into consideration;
- The alternatives that were considered, their potential impacts and the rationale for choosing the preferred option; and
- How the PPP will be monitored once it has been implemented.

SEA is also a useful tool when reviewing PPPs that have already been implemented. This can help decision-makers consider whether the PPP is achieving its objectives, if the environmental and socio-economic impacts are in line with expectations or there have been unforeseen consequences, and whether there are any adjustments that could be made to the PPP to improve its ability to meet its objectives.

STAKEHOLDER ENGAGEMENT

It is important to communicate to stakeholders how the SEA process has influenced the final PPP proposal, and how their opinions/concerns/suggestions have been considered and incorporated. This could be documented in the final SEA Report or in a separate statement in the PPP itself, which are then published or otherwise distributed for information purposes.

7 STRATEGIC ENVIRONMENTAL ASSESSMENT TOOLKIT

To help with the understanding and application of SEA in the Pacific the following tools have been developed:

Tool	Description	Appendix
Case studies	A Strategic Environmental Assessment of Fiji's Tourism Development Plan (2003)	1
	Strategic Environmental Assessment (SEA) Report: Neiafu Master Plan, Vava'u, Tonga (1996)	
	Strategic Environmental Assessment and Potential Future Shoreline Impacts of the Oil Spill from WWII Shipwreck <i>Hoyo Maru</i> Chuuk Lagoon, FSM (2001)	
	Response to an Oil Spill from a Sunken WWII Oil Tanker in Yap State, FSM (2003)	
	Integrated Strategic Environmental Assessment of the Northern Province of Sri Lanka (2014)	
	Strategic Environmental Assessment of the Hydropower Sector in Myanmar (2018)	
A screening checklist	To assist in determining if an SEA may be required	2
SEA Scoping Report template	A generic terms of reference (ToR) template that can be modified by practitioners in drafting up ToR for specific PPP	3
An SEA review checklist	To guide practitioners and reviewers in determining if the SEA report provides adequate information in order to draw its findings	4
Guidance on Stakeholder Engagement	Reemphasises the importance of stakeholder engagement throughout the SEA process	5



 ${\it Gold \ Ridge \ Mine \ tailings \ dam, \ Guadal \ canal, \ Solomon \ Islands. @ \ Stuart \ Chape}$



Guadalcanal, Highland housing, Solomon Islands. Photo: Greg Barbara

WHY UNDERTAKE A STRATEGIC ENVIRONMENTAL ASSESSMENT?

REASON 4

SEA can also play an important role in relation to government responses to major disasters, natural or human created. When large numbers of people have been affected, through loss of life and/or by losing shelter, livelihoods, etc., and immediate needs for health and safety are met there is pressure on governments to provide permanent solutions, quickly. Typically this will involve a number of major actions in parallel: restoring major infrastructure, providing housing, re-establishing services, and replacing economic assets to support employment, especially in resource based activities. With many proposed actions being considered at the same time, there may be little or no time to conduct EIA on each action and they could be considered as a group of actions instead. An SEA will also consider the possibility that cumulative effects of several activities in a disaster area could add to the pressures already on local people, communities and the government in a recovery. Also, in the rush to re-establish infrastructure and livelihoods, the government might be repeating problems of the past, such as settlements too close to the sea, rivers or other vulnerable localities. This issue will be particularly important with the increasing impacts of climate change on sea level rise, and extreme climatic events. The government might also miss the opportunity to address previous social, cultural, health or economic problems when restoring infrastructure and key facilities. In these cases, SEA can provide a "rapid appraisal" tool and framework to ensure post-disaster responses are developed in an coherent and informed manner, and make the most of the chance to improve future living conditions.

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APPENDIX 1 CASE STUDIES

A Strategic Environmental Assessment of Fiji's Tourism Development Plan, Fiji, 2003

World Wide Fund for Nature - South Pacific Program & Ministry of Tourism

Objective(s)

To inform the mid-term review of the Tourism Development Plan by assessing the environmental and sustainable development impacts of the current plan, and to test the usefulness of SEA as a tool for improving the sustainability of strategies and plans in the Asia-Pacific Region.

Findings/Recommendations

- There are areas in Fiji where tourist development is causing significant environmental degradation.
 Many pressures are close to levels at which irreversible damage could occur;
- Tourism is currently providing considerable economic benefits to Fiji. However, lost earnings from other sectors leaves Fiji's economy highly dependent on one sector;
- Fiji lacks the framework to ensure good practice is adopted across the tourist development industry;
- The growth advocated under the Tourism Development Plan is likely to compete with sustainability objectives, in particular it is likely to lead to tension between tourist developers, landowners and the local communities;
- A precautionary approach to tourism development is required. This would ensure the benefits to Fiji
 could be maximised whilst safeguarding the advantages Fiji has and avoid any action which could
 cause serious environmental harm or create further social tension.
- Full implementation of institutional and regulatory frameworks for environmental assessment and management, including capacity building and enforcement, is a prerequisite for tourism expansion.

- SEA provided a helpful structure for assessing the impacts of the Tourism Development Plan;
- The existence of studies carried out in the region and a large pool of local expertise was crucial in drawing robust conclusions – The SEA drew heavily on earlier research and reports;
- Where information is not available, assessors should make estimates or judgements based on best available information;
- It is essential to consider social and economic issues together with environmental issues;
- When conducting SEA, seek to understand the official legislative framework and what is happening in reality;
- Make recommendations that are within the capacity of the target organisation to implement;
- SEA is not necessarily a linear process. Tasks will overlap/run in parallel;
- Stakeholder engagement is pivotal to the success of SEA A consultation strategy was devised early in the process to facilitate meaningful stakeholder participation;
- Lack of participation by key decision makers can create risk that the outcomes of the SEA will not be accepted;
- There should always be a project champion who is a permanent member of staff in the local organisation, to ensure follow through once the SEA is complete WWF approached the Ministry of Tourism to collaborate on the project. MOU agreed that SEA will provide the environmental and social elements of the mid-term review and results are to be integrated into the Tourism Plan. WWF formed a project team comprising of external consultants and a specialist from the Ministry of Tourism.









Strategic Environmental Assessment of Neiafu Master Plan, Tonga, 1996

Secretariat for the Pacific Regional Environment Programme

Objective(s)

This Strategic Environmental Assessment (SEA) was initiated by SPREP in order to consider the environmental and social impacts of the development projects proposed for the town of Neiafu on the island of Uts Vava'u, Tonga as part of the Vava'u Development Programme. These projects, collectively known as the Neiafu Master Plan, comprise a set of policies concerning land use and building standards, together with specific projects for upgrading infrastructure and enhancing the urban landscape in various ways.

Findings/Recommendations

- Tourism is given a high degree of prominence, perhaps to the detriment of other areas for development, such as improving the primary sector and basic living conditions for local people;
- Encouraging tourism will increase tourism impacts, over a wider pan of the region. The environmental implications of this have not been recognised in the Plan;
- There does not seem to have been any formal environmental assessment of development options during the early stages of the Programme. Nor has there been any study into carrying capacities, environmental constraints, etc.:
- There does not appear to have been a great deal of formal input into the Programme from local communities even though most of the adverse effects fell upon the local people and the marine environment;
- Local people are likely to benefit from the proposed projects i.e. better water supply and sanitation should lead to health improvements;
- The loss of historical and cultural aspects is unlikely to be acceptable to the community.
- The cumulative impacts of all of the proposed projects could be severe if constructed concurrently, therefore some thought needed to be given to programming works to mitigate noise, dust, traffic disruption and sediment loss to the marine environment.

- The assessment of impacts in SEA can be done in a simple way. Detailed analysis and prediction of effects is not always required. In this SEA a simple impact matrix was formulated to review the broad environmental implications of the plan. This allowed comparison of projects, consideration of cumulative impacts and distribution of effects;
- There are limitations to this approach. Due to its simplicity it can be difficult to deal with complex issues.
 It is therefore important to determine SEA objectives before deciding on the method of analysing risk;
- Many of the impacts of the proposals relate to social outcomes, which demonstrates the importance of considering socio-economic matters alongside the natural environment;
- The SEA team made its own value judgements, about potential impacts, but recognised the importance
 of consulting with the local community to find out how they viewed these impacts;
- In particular, the local community should be involved in the planning process and asked whether the
 perceived benefits of the plan outweigh the adverse impacts they will also experience;
- There is a great deal of benefit in carrying out integrated planning to ensure issues are addressed comprehensively. For instance, while the Neiafu Master Plan could achieve positive marine water quality outcomes i.e. through improved sanitation, it would not address pollution from other land uses;
- It would be beneficial to apply a higher level of scrutiny to some of the proposed projects i.e. through EIA.









Response to an Oil Spill from a Sunken WWII Oil Tanker, Yap State, Micronesia, 2003

Secretariat for the Pacific Regional Environment Programme

Objective(s)

To provide an independent study on the wreck and the environmental impacts of the recent oil spill from the USS Mississinewa in Ulithi lagoon. In particular:

- Had leaks ceased:
- Identify ecological resources at risk from oil;
- Assess extent of remaining oil on shorelines;
- Determine priorities and requirements for any shoreline cleanup or restoration;
- Document any ecological constraints on oil spill response or cleanup.

Findings/Recommendations

- It was estimated that 18,000-24,000 gallons of oil had been released into the lagoon over 2 months;
- From the surveys carried out it was apparent that no major foreshore oiling remained in Ulithi lagoon.
 Some oil had impacted the turtle island of Pau. The western beaches Falalop facing the lagoon were probably the most contaminated with oil;
- No signs of any abnormal crustacean or mollusc mortality were apparent and none of the turtles examined showed any sign of oil contamination. Bird population appeared to be diverse, healthy and very active with no signs of oil contamination, oil intoxication or behavioural changes. No apparent or significant damage was observed on wildlife by the oil spill on any island surveyed;
- A significant amount of oil remained on board the vessel; only 0.35-0.5% of the oil cargo had been released. The magnitude of the worse possible case scenario was 200-300 times the amount already spilled;
- It was estimated that 5,000,000 gallons of oil remaining on the USS Mississinewa represented a "grave and imminent danger" of a pollution hazard to Ulithi lagoon. It was highlighted that major doubt and uncertainty existed as to the structural integrity of the vessel in the long term;
- A release of the vessels' cargo, whether by chronic low level discharge, or by catastrophic failure during a storm or typhoon, could have severe impacts on the lagoons coral reefs, the foreshore environment, subsistence fishing, food supply and health of the Ulithi population;
- Any oil leak would pose a significant threat to one of the most important remaining sea turtle breeding colonies in the western pacific region.

- The livelihood, food supply and way of life for Pacific Islanders depends upon the ocean, its coastal environments and natural resources. These are vital for subsistence living, and very sensitive to marine pollution;
- The oil spills highlight the problems of oil spill response and cargo salvage in remote regions of the Pacific. The lack of infrastructure, support services, equipment and transport difficulties hampers effective and timely response;
- The USS Mississinewa also highlighted the problems of aging and slowly deteriorating WWII shipwrecks across the Pacific region;
- Coral reefs are the richest and most diverse of all of the ecosystems in the sea and very sensitive to marine pollution. During oil spills incidents coral reefs should receive a high protection priority since they are easily damaged if oiled.

Integrated Strategic Environmental Assessment of the Northern Province, Sri Lanka, 2014

Central Environmental Authority of the Ministry of Environment and Renewable Energy and Disaster Management Centre (DMC) of the Ministry of Disaster Management

Objective(s)

The purpose of the SEA was to provide a clear understanding of the probable environmental consequences arising from implementation of the envisaged fast-tracked development of the Northern Province. The need for this assessment arose because after many years of conflict and economic embargo, the Northern Province is entering into a rapid resettlement and development phase with increased investment in infrastructure, roads, railways, telecommunications, etc. while also restoring public administration to stimulate investment and growth.

Findings/Recommendations

- The boundaries of high priority conservation areas should be demarcated and gazetted as early as possible, including the proposed wildlife protected areas and archaeological sites;
- A minimum reservations or buffer zones should be decided and maintained to protect waterways;
- Untreated wastewater or sewage should not be discharged into any inland water body;
- Coastal sand dunes should be preserved as they perform a very important function by supporting the recharge of the ground water table and act as a barrier against coastal disasters including tsunami;
- Erosion prone areas to be taken into consideration along with climate change induced sea level changes in development and infrastructure work with adequate precautionary/ mitigation measures;
- Salt water intrusion into inland surface waters including rivers to be studied, on a continuing basis while
 monitoring ground water levels to keep track of the climate influences and excessive drawdown of
 ground water for industry including agriculture;
- Water quality to be monitored in water bodies to keep track of pollution;
- Resource maps should be further refined to identify minerals which could be extracted with minimum damage to the environment;
- Several sanitary landfill sites should be identified in suitable locations near urban centres in order to dispose of the non-compostable portion of municipal solid waste;
- A comprehensive Bio Diversity Assessment should be carried out for the entire Northern Province in order to identify valuable and unique ecosystems;
- The private timber farms/forest plantations with suitable timber species or homesteads should be promoted. High potential for social forestry to be explored including road side planting;
- Extensive awareness and capacity building on ecosystems, ecosystem services and their management is recommended for all agencies, nongovernmental agencies, communities and schools.

- The process was an excellent example of harnessing the technical capacity in government institutions and Universities while tapping into international expertise to add value. It also demonstrated synergistic agency cooperation for integrated development planning;
- The SEA contributed towards changing or adjusting agency plans and strategies on land uses. It highlighted the areas to conserve where biodiversity, archaeological value and potential for green jobs such as ecotourism is high.

Strategic Environmental Assessment of the Hydropower Sector in Myanmar, 2018

Ministry of Electricity and Energy and Ministry of Natural Resources and Environmental Conservation with support from the Australian Government and International Finance Corporation

Objective(s)

The primary purpose of the SEA is to provide a "sustainable development framework" (SDF) for hydropower in each of Myanmar's major river basins to ensure both basin health and hydropower generation.

Findings/Recommendations

The SEA focuses on significant environmental and socio-economic issues directly related to major Hydroelectric Power Plants to reduce negative impacts during project siting and design. Hydropower development can create environmental and social impacts at basin, sub-basin, and site levels. The major potential impacts of medium-to-large-scale hydropower are:

- **Environmental**: Changes in river hydrology and geomorphology; Coastline and delta erosion/ degradation; Deterioration of water quality; Loss of aquatic biodiversity; Loss of terrestrial biodiversity;
- Social and Economic: Land acquisition and resettlement; Loss of or reduction in communal natural resources supporting livelihoods or cultural/religious practices; Loss of important natural/cultural heritage/religious sites; Community safety; Impacts on indigenous peoples;
- Cumulative Impacts: cumulative sub-basin and basin impacts;
- It was recommended that environmental and social planning of proposed occur at three integrated levels to ensure that each project is sited, designed, constructed, and operated in accordance with environmental and social sustainability requirements. This consisted of: (i) Site screening against the SDF; (ii) Cumulative Impact Assessment; and (iii) EIA for projects;
- **Environmental governance**, including the lack of local voices and public participation in decision-making, was highlighted as a major concern;
- Stakeholders reported a lack of transparency and limited public participation in EIAs for projects in the past. Reports were often not disclosed to the public and environmental management plans were not enforced or monitored. Recommendations on strengthening the EIA process included:
- Consulting with local communities before project siting and design to select projects with the least environmental and social impacts;
- Incorporate local knowledge and livelihoods and community concerns into decision making, assess impacts and develop mitigation plans and livelihood-restoration programs in consultation with communities affected;
- Conduct social baseline research, covering health, education, gender, ethnic minority groups, and social welfare;
- Develop communication mechanisms between government, developers, and local communities.

- Promote public participation and include stakeholder views;
- A key aim of the SEA included enhancing decision makers' understanding of the range of stakeholder's environmental and social values that should be considered in formulating the SDF, improving the dialogue among stakeholders, and obtaining the best available information;
- Ongoing consultations were important in identifying environmental and social issues;
- Respect ethnic cultures and traditions and protect the livelihoods of local people.



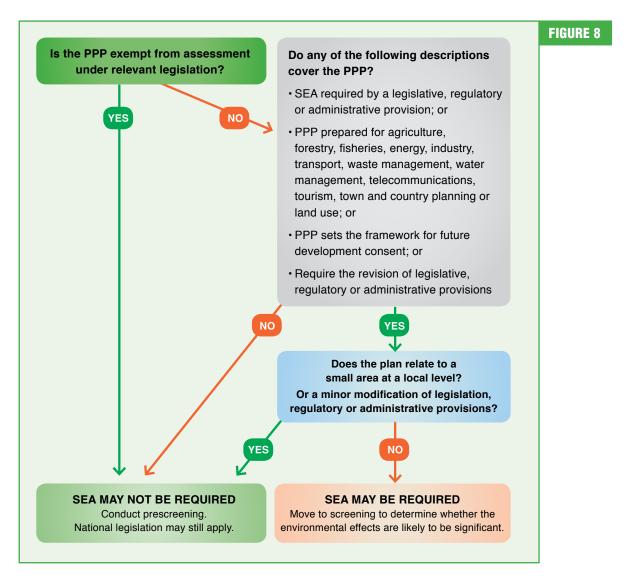
APPENDIX 2 SCREENING CHECKLIST

The objective of screening is to determine whether or not the PPP requires an SEA and is likely to have significant environmental effects. Determination for undertaking an SEA will depend on each nation's legislation. The following is intended as a guide to assist practitioners to establish whether a plan falls under any relevant legislations that may trigger an SEA or be exempt from an SEA.

For example in some jurisdictions there are plans that are automatically exempt from SEA:

- national defence or civil emergency plans;
- financial or budgetary plans; and
- plans relating to individual schools.
- Whereas plans that fit the following criteria, are likely to be subject to SEA:
- PPP prepared and/or adopted at the national, regional or local level;
- PPP that relate to matters of public character (this can be a public sector body or a private sector or voluntary body undertaking work of a public character).

Plans and programmes which are prepared for agriculture, forestry, fisheries, coastal management, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, conservation, town and country planning or land use would benefit from an SEA. Therefore it is first important to determine if an SEA is required as shown below. If an SEA is deemed required then detailed scoping of potential impacts can be carried out.



Once it has been decided an SEA may be required the following checklist may assist in determining likely significant impacts and can also be referred to during later stages of the SEA process to help inform further actions and decision-making, e.g. it can provide a foundation for the scoping process.

Answers to checklist questions will be primarily based on information supplied by the PPP proponent. Sometimes it may be necessary to seek additional information in order to complete the checklist. Alternatively, the proponent could be asked to work through the checklist as a form of preplanning for the strategic environmental assessment,.

Many of the checklist questions can be answered with yes, no, or not applicable (N.A.), however, some may require a short descriptive answer. There is a degree of overlap between some of the questions, but this helps to ensure that all important issues will be adequately considered.

Upon completion of the checklist a SEA practitioner should be able to reach an informed decision and deliver a recommendation about whether a SEA is required. In situations where there are many potential impacts; where management of impacts is likely to be difficult or is unclear; or where there are unknown and uncertain impacts; the proponent should undertake a full SEA.



Palm oil plantation, Guadalcanal, Solomon Islands. © Stuart Chape

SEA SCREENING CHECKLIST

Section 1 – PPP details				
PPP reference no.				
PPP name				
PPP proponent (developer)				
Proponent's email address				
Proponent's phone number				
PPP location (including coordinates, if available)				
Type and purpose of PPP (brief description)				
Section 2 – Size and scale of the proposed PPP				
	Yes/ no/N.A./brief description	Is this likely to result in a significant environmental impact – yes/no? Negative or positive? Long-term, short-term or irreversible?	Does the potential impact need to be further investigated? Will it require management?	
2.1 What area of land and/or sea will be affected? (indicate size of area, in m² or km²)				
2.2 Is the PPP area of influence larger than previous PPP of this type?				
2.3 Will a large amount of energy, water or other natural resources be affected by this PPP?				
2.4 Will the PPP affect a large number of people? Will it affect disadvantaged or minority groups?				
2.5 What is the expected timeframe for the PPP? (including creation, implementation closure and decommissioning – if appropriate)				
Section 3 – Character of the proposed PPP				
3.1 What type of activities will be undertaken by the PPP?				
3.2 Are the PPP activities novel (new) or have they been undertaken before on the island, or in the Pacific region?				
Section 4 – PPP location				
4.1 Will the PPP area of influence be within or adjacent to a vulnerable area (e.g. low-lying coastal area, floodplain, wetland, threatened species, sloping lands)?				
4.2 Will the PPP area of influence be within or adjacent to a sensitive site or facility (e.g. historical or archaeological site, conservation reserve, school, hospital/medical facility)?				
4.3 Is the PPP likely to impact on existing land or sea uses/activities/livelihoods?				
4.4 Is the proposed PPP suitable for the location (e.g. appropriate technologies and capacity in place, not in contradiction to existing PPP)?				
4.5 Is the proposed PPP going to impact on use of customary land? Are all customary land/resource owners aware of the PPP proposal?				
4.6 Are there special land zoning considerations that need to be taken into account (e.g. will the PPP impact on conservation reserve, rural, urban or industrial area land use)?				

Section 5 – Environmental impacts					
Aspect of the environment	Is the PPP likely to result in	Yes/ no/N.A./brief description	Is this likely to result in a significant environmental impact – yes/no? Negative or positive? Long-term, short-term or irreversible?	Does the potential environmental impact need to be further investigated? Will it require management?	
5.1 Topography,	5.1.1 Destruction, covering or modification of any unique geological or biophysical feature?				
geology and soils	5.1.2 Soil contamination or disturbance of previously contaminated soils?				
	5.1.3 Disturbance of soils that are fragile, or susceptible to erosion or compaction?				
	5.1.4 Creation of steep slopes or other unstable land conditions?				
	5.1.5 Changes in the channel of a stream, or the bed of the ocean or lagoon?				
5.2 Water	5.2.1 Drawdown of ground, surface or tank water resources, or reduction in the amount of water available for the public water supply?				
	5.2.2 Pollution of ground, surface, coastal or sea water, via direct or indirect discharges or seepages; or through interception of an aquifer by drilling, cuts or excavations?				
	5.2.3 Changes in currents, or the course or direction of marine or fresh water movement?				
	5.2.4 Changes in runoff, drainage patterns or absorption rates?				
	5.2.5 Coastal, stream or river flooding?				
5.3 Air	5.3.1 Release of hazardous, toxic or noxious emissions to air?				
	5.3.2 A significant increase or decrease in local or regional greenhouse gas emissions?				
5.4 Noise	5.4.1 A significant increase in existing (baseline) noise levels that will adversely affect people or animals?				
5.5 Plant life	5.5.1 Damage to or clearing of vegetation communities (e.g. upland or mangrove forest)?				
	5.5.2 Damage to or destruction of important plant communities (e.g. seagrass beds; plants with medicinal, cultural or commercial value; unique, threatened or endangered plant species)?				
	5.5.3 Interference with normal plant replenishment or reforestation rates?				
	5.5.4 A reduction in agricultural crop production?				
	5.5.5 The introduction and harvest of an exotic plant species?				
	5.5.6 The spread or introduction of an invasive plant species?				

Aspect of the environment	Is the PPP likely to result in	Yes/ no/N.A./brief description	Is this likely to result in a significant environmental impact – yes/no? Negative or positive? Long-term, short-term or irreversible?	Does the potential environmental impact need to be further investigated? Will it require management?
5.6	5.6.1 Damage to or destruction of coral reef areas?			
Animal life	5.6.2 Reductions in the numbers of unique, rare or endangered animal species?			
	5.6.3 Reductions in animal populations harvested regularly for human consumption (e.g. fisheries)?			
	5.6.4 Damage to or destruction of habitat for animal communities on land, in rivers or in the ocean?			
	5.6.5 Barriers to the migration or movement of animals?			
	5.6.6 The introduction and harvest of an exotic animal species?			
	5.6.7 The spread or introduction of an invasive animal species?			
5.7 Natural	5.7.1 The extraction, harvest or consumption of natural resources (e.g. timber, minerals, water)?			
resources	5.7.2 A noticeable increase in the rate of use of any natural resource?			
	5.7.3 Substantial depletion of non-renewable resources?			
5.8 Human	5.8.1 The relocation or resettlement of existing village/ human settlements or gardens?			
communities	5.8.2 Altered density or growth rate of the local human population?			
	5.8.3 Demand for additional housing?			
	5.8.4 Increased traffic or increased use of roads and the existing transport system?			
	5.8.5 Increased demand for government or private services? (e.g. water and energy supply, communications, sewage and waste disposal, fire protection, police, schools, medical care)			
	5.8.6 A reduction in community aesthetics or obstruction of scenic vistas?			
	5.8.7 Disruption to traditional village lifestyles or communities?			
	5.8.8 A change in local culture or customs?			
	5.8.9 Changes in access to or the quality of recreational opportunities (e.g. sites used for nature-based tourism)?			
	5.8.10 Public opposition, resistance or controversy?			
5.9 Local and	5.9.1 Creation or elimination of jobs/livelihood opportunities for locals?			
national economy	5.9.2 Training or educational opportunities for locals?			
	5.9.3 Local or national tax revenue?			
	5.9.4 Industry development opportunities?			
	5.9.5 Economic benefits for locals and/or benefits for outsiders (e.g. investors, businesses and workers from overseas)?			

	Vo	no/N.A./	significan	ely to result in a	Does the potential impact on the project
Is the proposed project likely to result in			project – yes/no? Negative or positive? Long-term, short-term or irreversible?		investigated? Will it
6.1 Increased risk of an explosion or release of hazardous substances, especially in the event of an accident or a disruption to normal conditions?					
6.2 Increased health and safety hazards or risks for people (N.B. this could involve the use, storage, transport, handling or production of potentially harmful substances)?					
6.3 Exposure of people or property to water-related hazards (e.g. flooding, tidal waves)?					
6.4 Exposure of people or property to geological hazards (e.g. landslides, ground failure)? Or will the project itself potentially be exposed to geological hazards (e.g. earthquakes, tsunami)?					
Section 7 – Environmental change					
Will the PPP be affected by					
7.1 Loss of land from shoreline change or coastal erosion, especially associated with extreme weather events?					
7.2 The effects of sea-level rise?					
7.3 Flooding from high tides, large swells, extreme rainfall or storm-related events?					
7.4 Other impacts related to climate change or climate variability?					
Section 8 – Uncertainty surrounding potential impacts and risks					
		Yes/no/N.A./ brief description		Is further investigation required?	
8.1 Are potential short, medium and long-term impacts and risks easily identified well-understood?					
8.2 Have similar PP been well-studied and managed elsewhere? This may include internationally where lessons learnt could be applied.					
8.3 Is there potential for cumulative impacts resulting from this PPP, other existing planned PPP, and from climate change/disasters?					
Section 9 – Broader policy and planning context					
9.1 Are there particular goals, targets or obligations under government policies, pl or legislation that are likely to be affected or conflicted by this PPP?	ans				
9.2 Is the project relevant to any MEA commitments or obligations? (e.g. UNCLOS, UNECE)					
9.3 Are there any areas within or around the PPP area of influence that are protecte under international, national or local laws?					

RECOMMENDATION

SEA	req	uired	ı.

SEA not required. No conditions recommended for PPP approval.

SEA not required. It is recommended the following be considered for the PPP.

Reasons for recommendation:

Date of decision:

Decision authority:

APPENDIX 3 SEA Scoping Template

A general description of what to include in a scoping report is included in Section 5 of these guidelines. The following generic template is intended to allow practitioners to modify the scoping of the Terms of Reference (ToR) for different PPP. The purpose of scoping the ToR is to come up with a list of issues that need to be addressed during the SEA.

The following definitions are important for the ToR template:

- 'environment' includes environmental (natural and physical environment), social (people, culture, health, heritage, aesthetics, amenity) and economic aspects, as well as the relationships between these different aspects;
- 'impacts' include impacts of the PPP on the environment, and impacts of the environment on the PPP due to environmental hazards and environmental change processes;
- 'environmental hazards' include hazards that are natural (e.g. cyclone, flood, earthquake), human-induced (e.g. oil spill) or technological (e.g. infrastructure failure);
- 'environmental change processes' include climate change; and
- 'mitigation/management measures' include climate change adaptation measures.

SECTION 1 – Executive Summary

Present a concise, non-technical outline of the PPP and each chapter of the SEA report. Include the results of impact and risk assessments, the proposed environmental management, mitigation measures and monitoring plan, and the conclusions reached.

This section should be written in non-technical language and translated into the relevant local language(s) to support community interest and participation in the SEA

SECTION 2 – Table of Contents

SECTION 3 - Glossary, List of Acronyms/Abbreviations

SECTION 4 – Introduction

Provide an overview of the PPP, including information such as:

- A brief description of the PPP and of the background of the rationale for the SEA
- PPP purpose and objectives (including environmental performance objectives) and if appropriate the process for its development.
- PPP justification (including why it is needed)
- Profile of the proponent/lead agency developing the PPP
- Contact details for the proponent/project manager of the PPP and SEA report if the Scoping Report
 is going to be released as part of the stakeholder engagement strategy, the document should include
 contact details so that anyone with queries or feedback has a point of contact
- Brief summary of the Key Stakeholders and the engagement plan

SECTION 5 – Policy and Legal Framework

Outline relevant policies, guidelines and laws that apply to the PPP and the approvals that need to be obtained from different government agencies, for instance:

- national, regional, provincial or customary laws and regulations
- Multilateral Environmental Agreements
- Industry sector plans, policies or codes of practice
- Health, safety, hazard and risk management standards
- Current agreements between government and the proponent of the PPP
- Environmental policies of any financing/funding organisations involved in the PPP
- The proponent's environmental management and compliance record

SECTION 6 – Ppp Description and Justification

Present a detailed description of the PPP and provide its justification, covering:

- Issues to be addressed summary of the key environmental and socio-economic issues that are to be considered in the SEA;
- **SEA objectives** statement of the objectives, indicators and targets that are going to be used to assess the PPP and its alternatives;

PPP details

- Area of influence (i.e. location, size and layout), including a description of the geographic area overwhich the PPP will be applied
- Description of any existing PPP that this PPP is to update, replace, or interact with
- Maps of the project footprint and surrounding area of influence, illustrating its proximity to environmental features (e.g. topography, existing land/sea use, watercourses, resource deposits, towns/villages/ settlements, transport infrastructure, natural/cultural/ecological assets)
- PPP activities, components, infrastructure and design, including technology and equipment likely to be used
- Predicted resource and public infrastructure requirements, including rates of extraction or demand (e.g. energy, water, transport, minerals, hazardous materials), and any competition for resources or infrastructure that may occur with other projects or the local community
- Predicted type and quantity of waste outputs (e.g. liquid and solid wastes, gas/air emissions)
- Implementation schedule, with key steps and tasks (e.g. timeline for construction, operation, decommissioning, rehabilitation, closure), and expected PPP lifespan
- PPP cost estimates and funding sources, including any uncertainties or assumptions underlying the estimates

Analysis of alternatives

- Alternative PPP, designs, technologies, timelines; including alternatives that address environmental hazards and environmental change processes
- Advantages and disadvantages of alternatives (e.g. cost, availability of technology) see below a cost benefit analysis could be used as part of the assessment of alternatives
- Rationale for selection of preferred options

PPP benefits

- Benefits accruing to the local area, island, country, region (e.g. new or upgraded physical infrastructure, improved environmental conditions, increased resource availability, employment/livelihood/training opportunities, tax revenue, royalties, better health or educational facilities, community development programmes)
- Project relevance in the light of existing local or national development and/or future development plans
- Cost-benefit analysis (dependent on the scale of the PPP this may be determined necessary)
- Identification, valuation and comparison of the costs (disadvantages) and benefits (advantages) of the PPP, from a whole-of-society perspective (i.e. including the perspectives of the proponent, government and stakeholders)

SECTION 7 – Stakeholder Engagement and Consultation Plan

Include details of engagement and consultation activities such as:

- 7.1 Dates, types and methods of engagement and consultation, and outcomes to date
- 7.2 Stakeholder mapping and identification of key stakeholders
- 7.3 Key findings from engagement and consultation, including a summary of issues and concerns raised by various stakeholder groups (directly affected persons; government agencies, businesses; NGOs; civil society, women's, leaders and church groups) and how these will be addressed or have been incorporated into the PPP and mitigation measures
- 7.4 Inclusion of a Grievance Mechanism reporting log for recording and tracking mitigation actions for resolving grievances
- 7.5 Future engagement and consultation activities planned to ensure stakeholders remain informed about the project
- 7.6 Information on negotiation and agreements with directly affected persons and land/resource owners Refer to Section 3.4 and Appendix 5 of these guidelines for further guidance

SECTION 8 – Description of the Baseline Environment

Provide a detailed description of baseline (i.e. current or existing) health, socio-economic and environmental conditions relevant to the PPP and its area of influence, to develop awareness and understanding of important features, patterns and trends; to support identification of potential impacts of the PPP on the environment (including health and socio-economic) and potential impacts of the environment on the PPP (section 9 below); and to assist with the formulation of impact mitigation measures (in section 11 below). The level of examination and effort that is required to adequately describe different aspects of the environment will depend on the type of PPP, its goals and interactions with existing legislation, its area of influence ie how far reaching are the objectives of the PPP.

In detailing the baseline environment it is important to state what is known or unknown, what assumptions have been made, what methods have been used for data collection and how reliable the data/information is. studies or surveys undertaken by the proponent, their consultant, or third party researchers, should be adequately detailed and referenced (see section 14 below).

Where relevant, the following aspects of the environment should be described:

- Climate (e.g. including temperature, rainfall/evaporation, flooding, drought, winds, extreme weather events, climate change projections and climate change elements likely to affect the PPP)
- **Human communities** (e.g. population and local demographics; access to education, literacy level and educational attainment; housing; energy and water resource access and use; land use, gardens and

subsistence dependency; natural resource use; cultural traditions; community structure and governance systems; marginalised groups; community health status)

- Existing social infrastructure e.g. towns/villages/settlements, hospitals, schools, airstrips, roads, bridges, marine or other transport systems, correctional facilities etc)
- **Human services** e.g. health care, education, recreation; landscape and visual amenity; vulnerability to environmental hazards and environmental change)
- Sectors including where appropriate education, health services, transport, correctional services, tourism, forestry, mining, agriculture, fisheries, manufacturing and other sectors likely to be affected by the PPP, ie operating within the area of influence.
- Local and national economy (e.g. skills, livelihoods and formal/informal employment; economic and business conditions; distribution of income; major sectors and industries)
- Social/cultural resources and heritage (e.g. objects or sites of social/cultural significance, cultural and archaeological assets)
- Topography, geology and soils (e.g. significant landscape features and characteristics; landscape gradient or slope; land capability and availability; seismic characteristics and earthquake and volcanic potential; areas vulnerable to landslides, rock fall, erosion)
- Land tenure, zoning and use within the area of influence (e.g. community food gardens, agriculture, national parks, sensitive habitat, community or public reserves, village settlements, cemeteries, manufacturing industry)
- Water (e.g. surface and groundwater quantity and quality; site hydrology; local catchment area; upstream and downstream water uses/users; areas vulnerable to flooding, inundation or storm surges)
- Marine (e.g. coastal hydrology, tides, waves, currents, storm surge, salinity, water temperature, suspended load, bathymetry)
- Flora (e.g. plant species and communities within the area of influence and surrounding area; native, endemic, threatened, invasive or culturally significant species; areas subject to previous habitat clearing or disturbance; species, plant communities or habitat vulnerable to environmental hazards and environmental change)
- Animal life (e.g. animal species communities and habitat within the area of influence and surrounding area; native, endemic, threatened, migratory, invasive or culturally-significant species; and adjacent habitat suitable for species of conservation significance; species, animal communities or habitat vulnerable to environmental hazards and environmental change)
- Air (e.g. existing sources of air emissions; ambient air quality parameters such as nitrogen dioxide, sulphur dioxide, carbon monoxide, lead, PM10 particles; location of nearest sensitive receptors)
- Noise (e.g. baseline noise levels and noise pollution; location of nearest sensitive receptors)

SECTION 9 – Impact Assessment

- **9.1** Assess and describe potential impacts of the PPP on the environment. The impact assessment should detail negative and positive; immediate, short-term and long-term; unavoidable, irreversible and reversible impacts. In conducting the impact assessment give consideration to:
- All relevant aspects of the environment (section 8, description of the baseline environment) and how they are likely to be changed or affected by the project, either directly or indirectly. This should include assessment of how the project may exacerbate environmental hazards and environmental change processes
- The nature of changes or affects, including negative consequences and/or expected benefits

- Over what area, or on what scale, changes or affects are likely to take place
- Changes or affects that will arise at different stages of the PPP (e.g. during implementation, decommissioning, closure)

After specifying the nature of likely or possible changes to the environment, it will be necessary to decide how significant those changes might be.

- **9.2** Assess and describe potential impacts of the environment on the PPP. The SEA Report should detail negative and positive; immediate, short-term and long-term; unavoidable, irreversible and reversible impacts. In conducting the SEA give consideration to:
- All relevant environmental hazards, and how they are likely to change or affect the PPP, either directly
 or indirectly (e.g. weather-related hazards such as heavy rain, cyclones; water-related hazards such as
 flooding, tidal waves; geological hazards such as landslides, ground failure, earthquakes, tsunami)
- Environmental change processes, and how they are likely to change or affect the PPP, either directly
 or indirectly (e.g. climate change and associated processes such as sea level rise, increased cyclone
 intensity; loss of land from coastal erosion and shoreline change)
- Impacts on human settlement, business areas/sectors, cultural heritage, community etc.
- The nature of changes or affects, including negative consequences and/or expected benefits
- Over what area, or on what scale, changes or affects are likely to take place
- Explain the methods used for the assessment, such as modelling studies, site or field-based surveys, or review of existing similar situations or previous studies.
- In detailing impacts it is important to acknowledge what is known or unknown, what assumptions have been made, how reliable the data and analyses are, and whether any information deficiencies or uncertainties have influenced the conclusions reached.

SECTION 10 – Cumulative Impacts

Examine the PPP in the context of previous, existing and known future PPP. This will help to ensure that the PPP's potential impacts are not considered in isolation and that cumulative impacts have been adequately considered in the development of the SEA report and EMP. This is a key component of the SEA in considering flow on effects.

Cumulative impact assessment can include an evaluation of changes in:

- 10.1 Land and seascape processes and functions (e.g. landscape hydrology, coastal stability)
- 10.2 Natural resource quality and availability (e.g. water, energy, critical habitat for important flora and fauna)
- 10.3 Social and community dynamics (e.g. population growth, traffic volumes, in-migration)
- 10.4 Economic conditions (e.g. industry development, job opportunities, cost of living)

For identified cumulative impacts, assess if they will be permanent. If they are not likely to be permanent, specify what steps will be taken to minimise long-term negative effects.

SECTION 11 – Environmental Management

Provide a draft environmental* management plan (EMP), including a detailed discussion of the mitigation measures that can be feasibly undertaken, and explain how these mitigation measures will address the identified negative and positive impacts. Where *environment refers to all aspects of risk and impact identified in the SEA.

Also identify any best practices or industry standards the PPP intends to commit to, as well as any optimisation measures to be taken to strengthen or enhance positive impacts.

The draft EMP should cover all phases of the PPP, from creation through to implementation, and decommissioning, closure and post-closure (where relevant). It should be further developed and refined following the conclusion of the SEA process. Provision should also be made for periodic review of the EMP once the PPP becomes operational.

Recommended topics to be included in the EMP document:

- 11.1 Environmental performance objectives for the PPP
- 11.2 The environmental management framework, i.e. who will have responsibility for overseeing the EMP, the implementation of different mitigation measures, incident response, environmental monitoring and reporting
- 11.3 Specialised management plans with a high level of operational detail for sensitive or high-risk aspects of the PPP (e.g. health hazard management, equitable access to resource management plan, a waste management plan, a water management plan, an erosion and sediment control plan, a disaster management plan, social impact management plan which may include a benefit sharing agreement, resettlement plan, in-migration management plan, climate change adaptation plan)
- 11.4 Evidence that mitigation measures and specialised management plans are likely to be effective when implemented
- 11.5 A detailed monitoring plan, including performance criteria for measuring the extent of environmental impacts, and/or the success of mitigation measures; and for ensuring early detection of impacts.

 The monitoring plan should also include a schedule for reporting on PPP outcomes and monitoring results to regulatory authorities; and it should list the regulatory authorities that will be reported to
- 11.6 Environmental management expectations and stakeholder consultation requirements to be placed on implementing agents of the PPP –this includes a suitable Grievance Mechanism for recording and tracking mitigation actions for resolving grievances
- 11.7 Provisions for independent auditing (especially in the case of high-risk PPP)
- 11.8 Staffing and equipment requirements, allocated budget, and any training programmes or capacity development necessary to ensure successful EMP implementation
- 11.9 A process for responding to accidents, unanticipated or emergency incidents
- 11.10 A process for managing and responding to stakeholder concerns or complaints

It is advisable to cross-reference different elements of the EMP to relevant text in the SEA report.

SECTION 12 – Conclusions and Recommendations

Present the main findings of the SEA report and suggested recommendations for progressing the PPP, including key environmental management and mitigation measures that should be undertaken.

SECTION 13 – Disclosure of Consultants

state the names, qualifications and contact details of all consultants responsible for preparing the EIA report, and the services or work they completed.

SECTION 14 – References

Appropriately reference all information sources that have been used or consulted during SEA report preparation (e.g. using the Harvard referencing system). Information sources may include studies or surveys undertaken by the proponent, their consultant, or third party researchers.

SECTION 15 – Appendices

Include appendices that support the main text and that do not contain unnecessary information. Appendices may present:

- Relevant environmental studies and reports
- Detailed technical information
- Draft management plans
- A table listing how the ToR have been addressed, cross-referenced to relevant sections of the SEA report
- A table listing environmental mitigation/management commitments
- Evidence of PPP support from stakeholders

General Advice for SEA Report Preparation

The SEA report should be based on a level of analysis and detail that reflects the significance of the PPP's potential environmental impacts, and that allows government and interested stakeholders to clearly understand the PPP's likely environmental consequences

- Information provided in the report should be objective, clear and easily understood by the general reader
- Different sections of the ToR may be combined or re-ordered, if this helps to present information in a clear and logical manner
- Maps, plans and diagrams should be prepared using an appropriate scale, resolution and clarity
- Technical jargon should be avoided or accompanied by a clear, understandable explanation
- Cross-referencing should be used to avoid unnecessary duplication of text
- Key PPP impacts should be explained in a culturally-appropriate format, using graphics and illustrations to assist with interpretation, where relevant
- Spatial data presented in the report should be provided to government as importable Geographic Information system shape files













APPENDIX 4 SEA REVIEW CHECKLIST

This tool has been designed to guide the SEA practitioner or independent SEA audit reviewer and to help them determine if the SEA report contains sufficient information and detail, and meets an acceptable standard; what key issues and impacts the SEA report highlights for the PPP; and what recommendations or recommended conditions should be provided to the approval agency.

It is important to remember that an SEA is a strategic pre planning tool as such not all information is going to be available or able to be collected and educated predictions will need to have been made based on careful consideration. Therefore in order to assess the validity of findings all assumptions and methods for determining predictions need to be presented and explained.

The order in which the review questions are presented in the template may not follow the order in which information is presented in the SEA report. Sometimes a reviewer will need to move back and forth between the template questions during the review process.

If a question is irrelevant to a PPP it is appropriate to write 'N.A.' (not applicable) in the checklist i.e. in the second column (for Section 2 below). The relevance of questions may depend on the nature, scale and area of influence of a PPP, and potential impacts associated with the PPP.

The key to conducting a good review is to examine the SEA report side-by-side with the TOR and any other guidance documents related to the PPP including the stakeholder engagement plan to:

- identify issues and ask questions about the nature of the PPP and its impacts;
- take notes and record comments, especially regarding any issues and questions that arise; and
- carefully consider significant issues and impacts that will have a bearing on PPP approval.



Honiara port, Solomon Islands. © Stuart Chape

TEMPLATE - SEA REPORT REVIEW

Section 1 – Project details			
PPP reference no. (should match the ToR reference)			
PPP name			
Project proponent			
Proponent's email address			
Proponent's phone number			
PPP location (including coordinates, if available)			
Type and purpose of PPP (brief description)			
Section 2 – General questions:	assessing the comprehensiveness and adequ	acy of the SEA	report
		Yes/no/ N.A./brief description	Is follow-up required with the proponent (Y/N)? If so, briefly explain the follow-up required
2.1 Is the executive summary clear and findings, and has it been transimportant for ensuring the local co			
2.2 Is a copy of the TOR provided adequately address the TOR?	with the SEA report? Does the SEA report		
	logically presented and able to be understood by ? (Important to check if the text is clearly written quality)		
	d sufficient for the purpose of decision- PPP approval? (This question is important for be accepted)		
_	ea of influence clear and accurate? (An incorrect and/or inaccurate conclusions in the SEA report)		
2.6 Are the purpose(s) and object understand what the PPP is about	ives of the PPP explained so the reader can easily and what it hopes to achieve?		
components, infrastructure and so in enough detail so the reader can how and over what timeframe it w	on of the PPP's scale/size, design, activities, chedule/timeframe? (The PPP should be described understand how the PPP will be implemented, ill come into effect, and what goods/services uld include diagrams, plans, maps, activity		
2.8 Has adequate consultation beer resource owners and all other releving stakeholder engagement plan? (The and how they were consulted, and issues raised during consultation)			
2.9 Is the expected rate of waste particularly important for PPP link plans) (e.g. liquid and solid waste:			

2.10 Is there sufficient description of the resources and public infrastructure to be affected by the PPP? (This description should include what resources from outside of the area of influence and how they will be transported to within the area of influence and how they will be transported to within the area of influence and how they will be transported to within the area of influence and how they will be transported to within the area of influence and one of the property o		
described, and is the information relevant to the PPP and surrounding area? (Important aspects may include areas or features of particular biological, ecological, social, cultural or economic significance; and climate change scenarios and projections) 2.12 Are reliable information sources used to describe the baseline environment? (e.g. well-designed field surveys conducted by the proponent or consultant; existing data; reliable studies conducted by their presearchers; maps of the PPP area, including environmental hazard maps) 2.13 Have any transboundary and cumulative impacts been identified and description of those from the PPP and on the PPP been provided? 2.14 Is there adequate identification and description of all potential impacts the PPP will have on the environment? (This description should cover all likely, significant impacts arising from the PPP, including negative and positive; immediate, short-term and long-term impacts. The magnitude of the impacts should be estimated, where possible) 2.15 Is there adequate identification and description of all potential impacts arising from the environment mill have on the PPP, due to environmental hazards and environmental change processes? (This description should cover all likely, significant impacts arising from the environment, including negative and positive; immediate, short-term and long-term impacts. The magnitude of the impacts should be estimated, where possible) 2.16 Has a draft environmental management plan (EMP) been developed that describes suitable mitigation measures for addressing all significant negative impacts? (This should include impacts of the environment, and impacts of the environment on the PPP and the environment, and impacts of the environment on the PPP. Impacts that cannot be addressed through mitigation measures should be identified and compensation measures for mitigating cumulative and or transboundary impacts and means for monitoring plan for measures for enhancing significant positive impacts? (This should include impacts	affected by the PPP? (This description should include what resources/infrastructure will be affected, if they are diverting resources from other areas and if sourced from outside of the area of influence and how they will be transported to within the area of influence, if they are being sourced off-site) The allocation of resources can have significant flow on effects to the economy, cultural and community groups and the	
(e.g. well-designed field surveys conducted by the proponent or consultant; existing data; reliable studies conducted by other researchers; maps of the PPP area, including environmental hazard maps) 2.13 Have any transboundary and cumulative impacts been identified and description of those from the PPP and on the PPP been provided? 2.14 Is there adequate identification and description of all potential impacts the PPP will have on the environment? (This description should cover all likely, significant impacts arising from the PPP, including negative and positive; immediate, short-term and long-term impacts. The magnitude of the impacts should be estimated, where possible) 2.15 Is there adequate identification and description of all potential impacts the environment will have on the PPP, due to environmental hazards and environmental change processes? (This description should cover all likely, significant impacts arising from the environment, including negative and positive; immediate, short-term and long-term impacts. The magnitude of the impacts should be estimated, where possible) 2.16 Has a draft environmental management plan (EMP) been developed that describes suitable mitigation measures for addressing all significant negative impacts? (This should include impacts of the PPP on the environment and impacts of the environment on the PPP Impacts that cannot be addressed through mitigation measures should be identified, and compensation measures should be proposed, where appropriate. Implementation steps should be clearly outlined for all mitigation measures. 2.17 Does the EMP include measures for mitigating cumulative and or transboundary impacts and means for monitoring them? 2.18 Does the EMP include a monitoring plan for measuring the extent of impacts of the environment on the PPP) 2.19 Does the EMP include a monitoring plan for measuring the extent of impacts and the success of mitigation measures? 2.20 Has a full assessment been conducted to assess the relative significance of different impacts,	described, and is the information relevant to the PPP and surrounding area? (Important aspects may include areas or features of particular biological, ecological, social,	
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Section 3 – Identification of specific issues (the issues can relate to impacts of the PPP on the environment and impacts of the environment on the PPP)							
Section & page no.	Identified issue(s)	Comment(s)/ question(s) relating to the issue(s)	Is/are the issue(s) dealt with in the environmental management section or another part of the SEA report? If so, does this address your comments and questions (Y/N)?	Is follow-up required with the proponent on the identified issue(s) (Y/N)? If so, briefly explain the follow-up required	Should the issue(s) be considered as part of the PPP and/or the approval conditions (Y/N)? If so, briefly explain why		
Section 4 –	Other comments						
RECOMMENDATION SEA report accepted. The following recommendations and conditions should be considered by the approval agency:							
SEA report not accepted. The following issues need to be addressed in the revision of the SEA report:							
Reasons for	Reasons for recommendation:						
Name(s) of	Name(s) of reviewing officer(s): Signature(s): Date:						
Job title(s):		Minis	try/Department:				
Approving N	linisters:						

APPENDIX 5 GUIDANCE ON STAKEHOLDER ENGAGEMENT

It is important practitioners themselves appreciate the benefits of SEA before trying to 'sell' the assessment process to decision makers. Some of the benefits of undertaking a SEA are outlined in Section 2.4 'What are the benefits of an SEA?'

To sell the benefits of SEA it is important to ensure that the assessment process will add value to a plan's preparation. Practitioners need to work closely with plan-makers to identify ways of avoiding significant adverse environmental effects where possible. Positive working relationships are essential element to the effective delivery of SEA. It is therefore important that practitioners learn how to sell the benefits of the assessment process, to the relevant stakeholders, at each stage of the process.

The benefits of SEA are as follows:

SEA improves the information base for PPP preparation, providing clear information on the possible impact on the environment and influencing the preparation of the PPP, while building in better environmental protection and outcomes.

SEA provides a rigorous system for including environmental factors in decision making, thus supporting a sustainable development approach.

SEA facilitates an improved consultation process, including the rigorous assessment of reasonable alternatives.

SEA also facilitates transparency, by requiring that an analysis of public comments is undertaken and made publicly available.

SEA facilitates the consideration of cumulative effects and provides a means to prevent, reduce and, as fully as possible, offset any potentially adverse environmental effects.

It can be beneficial, at the outset, to discuss some of the perceptions and misconceptions about SEA. This can provide an opportunity to anticipate concerns and actively seek to strengthen working relationships and establish good communication.

Practitioners should aim to ensure that plan-makers are aware that there are a wide variety of approaches to undertaking an assessment, which can be adaptive and proportionate, and offer practical environmental information in a variety of situations. Providing some examples of Environmental Reports for similar type assessments, from other Responsible Authorities if necessary, may help to demonstrate what can be achieved and alleviate any potential concerns.

As awareness of SEA is still growing within interested groups and communities, where resources allow it can be helpful to provide some form of support for the public, to help them to access and understand the assessment findings and recognise their role in the consultation process. This can add value to the engagement process and sell to plan-makers the concept that SEA outputs can aid the consultation process and promote important values within the plan. To aid this, practitioners should remember to make their findings accessible and easy to understand for a wide audience.

The assessment process, as early as scoping, can help shape the content of a plan and encourage plan-makers to start considering reasonable alternatives. There are a number of simple practical steps a practitioner can take to facilitate integration of SEA into plan preparation and start to sell the concept that a SEA is not an unnecessary burden on plan making.

These are outlined in the table on the next page.

Practical Steps	Benefits
Build consensus about the role of SEA with plan-makers, senior managers and/or elected	Plan-makers and decision takers are more likely to be open to the views and ideas of practitioners, if they understand the role of a SEA.
members, from the start.	Effective communication lies at the heart of a good SEA. The findings of an assessment are just as important to those preparing a plan as those likely to be affected by it or with an interest.
Ensure the assessment findings are addressed at plan preparation meetings.	Practitioners have to ensure the findings of an assessment are viewed as part of the plan's preparation process, thereby ensuring the two preparation processes are properly combined and supportive of each other.
A practitioner should provide factual environmental information to colleagues preparing a plan, offering solutions, where available, rather than viewing the assessment as a 'critique' of the policies.	Working with and supporting plan-makers, rather than offering unhelpful opposition to proposals, can help to create a meaningful and cooperative working relationship, which can benefit both parties.
Use formal and informal communication as appropriate and aim to keep things simple.	Plan-makers have a lot to consider when preparing a plan, and finding opportunities to discuss the findings from an assessment can be challenging. Informal discussions can be used to seek clarification, offer feedback, raise awareness or to seek amendments minimising delays.
Gain the support of the Consultation Authorities*	The support of the Consultation Authorities can help to ensure that the plan-maker recognises the importance of environmental advice.

^{*}Examples of Consultation Authorities can include but not be limited to the environmental regulatory agency, planning approval agency, cultural heritage agency, health ministry and Cabinet Ministers.

The role of the statutory Consultation Authorities within SEA is to bring their individual environmental expertise to the assessment process. This can help to ensure that the future consultation process undertaken by a Responsible Authority is more robust. This in turn means that the public can gain a better understanding of the likely effect of a plan on the environment and meaningfully contribute to the plan's preparation process by offering an informed view.



Yasur volcano, Tanna Island, Vanuatu. © Stuart Chape

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