

## CHAPTER 1

# BACKGROUND TO SEA

*SEA helps to warn decision-makers at an early stage about unsustainable development options. Ultimately, this saves time and money as problematic options are disregarded at a point in time when only few resources have been spent on their development<sup>1</sup>.*

SEA is globally recognized as one of the most useful processes to promote sustainable development . About 100 of the 193 UN countries have legislation making provision for the use of SEA. In the remaining countries, where SEA is applied, it is on a voluntarily basis. Legislation and associated regulations provide a formal national (and in some cases sub-national/regional) platform setting out the circumstances in which SEA must be undertaken, the policies, plans and programmes (PPPs) to which it must be applied, and the specific requirements for how the process should be conducted, including roles, responsibilities, required documentation, monitoring procedures, etc. Chapter 2 discussed these issues in detail. This guidance will be of utility to SEAs applied in both cases – by legal requirement or voluntarily.

### 1.1 What is SEA and how does it differ from Environmental Impact Assessment (EIA) and Cumulative Impact Assessment (CIA)

SEA is defined as a process for assessing the environmental and social risks and impacts of implementing policies, plans and programmes (PPPs) and providing information to decision-makers so that the implications of such impacts can be considered and responded to when formulating and implementing PPPs<sup>2</sup> (Box 1.1). But SEA can also be usefully applied in circumstances where no actual PPP has yet been prepared (e.g. to assess the impacts of options for renewable energy development). The basic steps in SEA are illustrated in Figure 1.1. These steps are elaborated in detail in Chapter 3.

Whilst the term SEA does not specifically incorporate the social dimension, this is nevertheless an integral focus of the process<sup>3</sup>. To indicate clearly that social considerations are fully included in SEA, some organisations (particularly multi-lateral development banks) prefer to use the synonymous term Strategic Environmental and Social Assessment (SESA). In this guidance, the term SEA is used as this is overwhelmingly used in individual countries in legislation and regulations.

#### Box 1.1: The purpose of SEA

In summary, the purpose of SEA is to ensure that environmental and social considerations (and their relationship with economic concerns and drivers) inform and are integrated into strategic decision-making in support of environmentally and socially sound and sustainable development. Thus, SEA identifies the relevant environmental and social effects/impacts (both positive and negative) on receptors<sup>4</sup> of implementing a PPP

In particular, the SEA process assists authorities responsible for PPPs, as well as decision-makers, to consider:

<sup>1</sup> UNDP/REC (1996).

<sup>2</sup> OECD-DAC (2006)

<sup>3</sup> In the past, some statutory bodies required that SEA should focus only on environmental issues.

<sup>4</sup> A receptor is a component of the environment or social fabric that could be adversely affected by the implementation of a PPP, e.g. habitats, biodiversity, land, soil, water, air and climate, material assets, cultural heritage and landscape, communities, human health, rights, etc..

- Key environmental and social trends, opportunities and constraints that may affect or may be affected by the PPP;
- Environmental and social objectives and indicators that are relevant to the PPP;
- Likely significant environmental and social effects of available options in the implementation of the PPP;
- Priority environmental and social receptors<sup>5</sup>;
- Measures to avoid, reduce or mitigate and manage adverse effects and to enhance positive effects;
- Views and information from relevant authorities, the public and — as and when relevant — in potentially affected states (e.g., where cross-border initiatives or impacts are involved).

In the context of applying SEA to PPPs concerned with the energy transition, a core aim of SEA is to support spatial planning by identifying areas where renewable energy development and associated infrastructure (e.g. transmission lines, access roads, electricity storage facilities, and ports, harbours and terminals) may pose a high risk, especially areas of high environmental and social sensitivity, and recommending how such risks can be mitigated and managed..

Figure 1.1.: Steps in SEA



The scope of application of SEA collectively encompasses policy, legislation, plans, programmes and development-related strategies across a range of sectors (such as, energy or transport), geographical areas (national, regional, or local) or issues (such as, climate change or biodiversity). But SEA is most commonly – although not exclusively – applied to development-related policies, plans and programmes (PPPs) with a particular focus on the energy, transport, waste and water sectors and spatial and land use zoning plans. Lead government agencies usually initiate the SEA process, but external financing organisations (e.g., multilateral development banks and bilateral donors) may also require an SEA to be undertaken to comply with their safeguard policies.

<sup>5</sup> Receptors are environmental or social components (e.g., habitats, wildlife, groundwater, communities, people, livelihoods) that could be affected or impacted by a causal factors (e.g. pollution, dust).

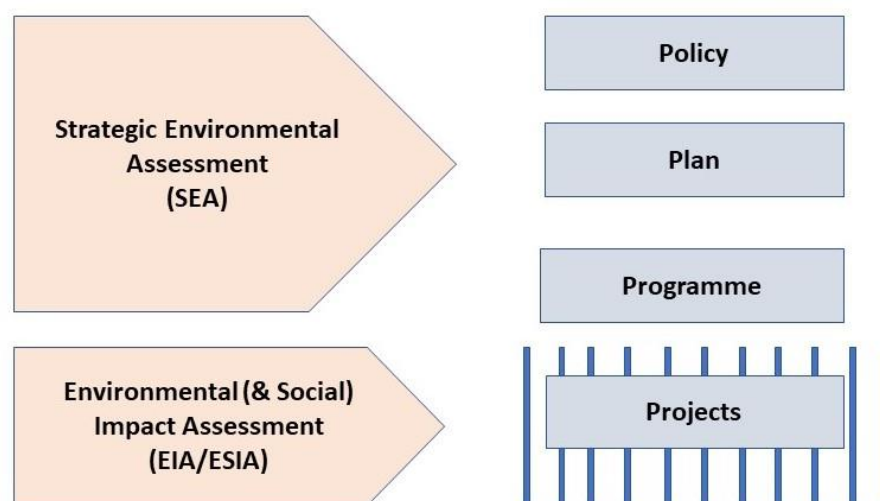
Generally, the application of SEA within a country depends on the types of PPPs being undertaken and the specific SEA provisions (laws and regulations) of that country.

The SEA process is based on key principles (see also Section 1.4) including:

- Early proactive consideration of the environmental and social effects of strategic actions;
- Broad institutional and public engagement;
- Analysis and integration of qualitative and quantitative information;
- Early warning of potential cumulative effects and large-scale changes, and
- Identification of best practicable options for implementing the PPP, including projects that may be undertaken as a result of their implementation.

As noted by the OECD/DAC guidance for SEA (2006), there is a hierarchy of levels in decision-making comprising policies, plans, programmes, and projects (Figure 1.2). Logically, policies shape the subsequent plans, programmes and projects that put those policies into practice. Policies are thus at the top of the decision-making hierarchy. Policies, plans, and programmes (PPPs) are more ‘strategic’ than projects as they determine the general direction or approach to be followed towards broad goals.

**Figure 1.2: SEA, EIA and the decision-making hierarchy**



SEA is applied to these “higher” strategic levels and deals with assessing broadly defined proposals with a wide range of options usually available for assessment. As one moves down the hierarchy from policies to projects, the nature of decision-making changes, as does the type of environmental assessment needed. Environmental Impact Assessment (EIA)<sup>6</sup> is used to assess the impact of projects that put PPPs into tangible effect. It is done at the project level and deals with assessing well-defined proposals where a limited range of alternatives are usually available to assess.

There is no one approach to SEA. Rather it embraces a family of approaches (on a continuum of increasing integration of environmental, social and economic considerations) and uses a variety of tools. This is in contrast to EIA which tends to follow a single, fixed, prescriptive approach. SEA extends the aims and principles of EIA further upstream in the decision-making process, beyond the project level, when major alternatives to a project are still possible. SEA fills a critical gap left by the relatively codified procedures and process of project-level EIA procedures and processes differ, in that SEA uses much

<sup>6</sup> As with SEA, EIA should address both the environmental and the social dimensions of projects. Some organisations prefer to use the term Environmental and Social Impact Assessment (ESIA) to emphasise this point. However, sometimes, stand-alone social impact assessment (SIA) are undertaken as well as other more focused (spin-off) forms of impact assessment such as biodiversity impact assessment and health impact assessment. Good practice EIA should cover all these aspects.

more flexible, adaptive, and diversified approaches to inform strategic decision-making at the PPP level. In other words, there is no single recipe for an SEA. Every SEA needs to be designed and undertaken in a manner that suits the specific context and needs.

SEA can complement and strengthen EIA at the project level by: (a) identifying prior information needs and potential impacts, providing the planning context and parameters for subsequent EIAs of projects designed to implement a PPP; and (b) making EIA and the project review process more streamlined and efficient by addressing many issues at a higher strategic level - including concerns that may relate to project justification so that EIAs can be designed to focus on local and site- or project-specific concerns.

Table 1.1 compares and contrasts SEA and EIA and summarises their roles in decision-making.

**Table 1.1: SEA and EIA compared**

| SEA  | EIA  |
|--|--|
| Applied to PPPs and sometimes legislation, with a broad and long-term strategic perspective.   | Applied to specific and relatively short-term (life-cycle) projects and their specifications.  |
| Ideally, takes place at an early stage in strategic planning.  | Takes place at early stage of project planning once parameters are set.  |
| Considers a broad range of alternatives to the PPP, or alternative scenarios for a PPP, taking into account environmental and socio-economic objectives                          | Considers limited range and types of alternatives - those for achieving the objectives of the individual project   |
| Conducted independently of any specific project proponent.   | Usually prepared and/or funded by the project proponent.   |
| Focus on decision on policy, plan and programme implications for future lower-level decisions.   | Focus on obtaining project approval, and rarely with feedback to policy, plan or programme consideration.  |
| Multi-stage, iterative process with feedback loops.  | Well-defined, linear process with clear beginning and end (e.g., from feasibility to project approval).  |
| May not require a SEA report in a formally prescribed format (as there is no single approach to SEA). Sometimes may require that a draft PPP include an environmental statement. | Preparation of an EIA document with prescribed format and contents is usually mandatory (EIA usually follows a standardised approach). This document provides a baseline reference for monitoring. |
| Emphasis on meeting sustainability objectives in policies, plans and programmes. Includes identifying macro-level development outcomes.  | Emphasis on mitigating environmental and social impacts of a specific project, but with identification of some project opportunities, off-sets, etc.   |
| Should incorporate consideration of cumulative impacts relating to implementation of PPPs.   | Considers cumulative impacts of a particular project in combination with all other projects and activities in a given time and space.  |

## 1.2 SEA AND CUMULATIVE IMPACT ASSESSMENT (CIA)

Cumulative impact assessment (CIA) is typically applied at the individual project level as part of the environmental impact assessment process (EIA). It is often used to assess how the specific (and possibly limited) impacts of an individual project (pressures/stressors), when combined with other related projects and activities (including for example in the same geographical area or acting on the same receptor), might combine to generate significant cumulative impacts on selected valued environmental and social components (VEC) (receptors) in a given time and space.

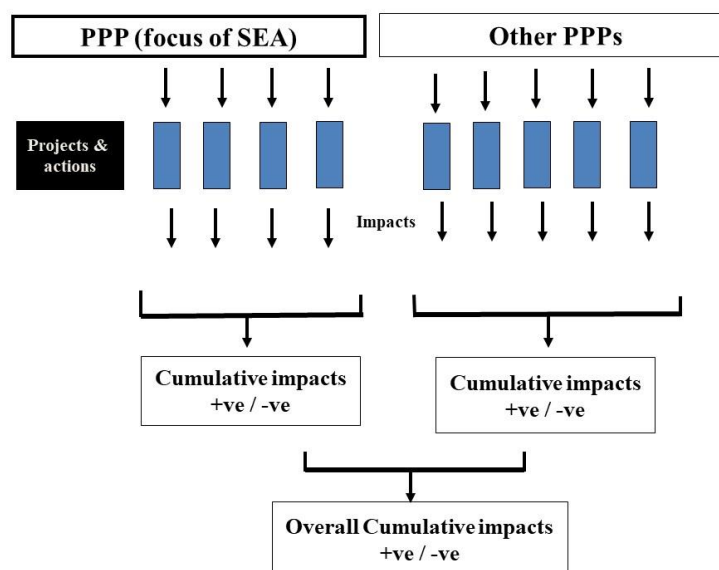
Sometimes, regional impact assessments are needed to identify the effects that various projects or actions can produce at a regional level beyond the areas of the individual projects. The identification, evaluation and management of such impacts is normally done under a SEA process.

Any pressures/stressors on a receptor will contribute to its state at the time of assessment. But when developing and implementing a PPP (through multiple projects), it is critical to have a perspective on how receptors will be affected in the future. This is why CIA is a core and fundamental component (a key principle) of SEA – by setting thresholds for future projects for environmental and social factors. These thresholds can then be used by project-level EIAs in a much more effective and robust way than can be achieved by 'traditional' project-level CIA.

Guidance is being prepared by The Biodiversity Consultancy<sup>7</sup> and IUCN plus a range of industry and NGO partners to address this gap in the context of the renewable energy transition. If CIA is done well at the strategic level, developers can integrate the identified thresholds directly into ESIA in a much more robust way than can be achieved via 'traditional' project-level CIA-in-ESIA.

SEA focuses on evaluating government policies, programs, and plans (PPP) rather than individual projects. It seeks to identify and recommend management measures for the impacts on selected VEC that are likely to arise from implementing PPPs or their alternatives. Figure 1.3 indicates how a particular PPP (being subjected to an SEA) will lead to a range of projects and development actions (to develop renewable energy and associated infrastructure), each of which may give rise to impacts (environmental and/or socio-economic, and positive or negative). Projects and actions resulting from implementing other renewable energy PPPs as well as PPPs for other non-energy sectors may also give rise to such impacts. The overall cumulative effective of all such impacts may be considerable.

**Figure 1.3: The cascade of cumulative impacts**



<sup>7</sup> [Home - The Biodiversity Consultancy](#)

Thus, as an example, if the effects of renewable energy development projects are assessed to have significant potential cumulative impacts in a particular geographical area or nationally (e.g. by destroying habitat for endangered wildlife species), these impacts may be even more significant (and may even threaten extinction of a species in an area or nationally) when the cumulative impacts arising from developments in other, non-energy sectors, are also taken into account. Thus, an SEA must look beyond the specific energy transition PPP it is concerned with and consider whether implementing other energy PPPs as well as non-energy PPPs may compound potential cumulative impacts.

Through addressing potential cumulative impacts, a SEA can recommend overall mitigation requirements including acceptable thresholds of impacts that should apply to individual projects. However, managing and mitigating impacts at the project level so that they remain below a threshold is the responsibility duty of the individual project developer (which should be monitored via the appropriate regulatory process). Managing cumulative impacts beyond the project level will require collaborative actions between multiple parties and will require coordination by a responsible agency or regulator to be successful.

### 1.3 BASIC OBJECTIVES AND PRINCIPLES FOR SEA

SEA aims to systematically integrate environmental and social considerations (and their relationship with economic concerns and drivers) into policymaking, planning, and decision-making processes to better ensure that a proposed PPP is compatible with sustainable environmental and social management. It aims to support time-efficient and cost-effective development planning by avoiding the need to reassess some issues and impacts at the project level at a time when changes to the overarching policy and planning framework is more difficult (e.g., when an issue or impact was effectively dealt with at a strategic level).

Early suggestions for SEA principles have been made<sup>8</sup> and performance criteria for SEA were developed by IAIA in 2002<sup>9</sup>. The latter concentrate primarily on procedural aspects of an effective or good quality SEA. Building on these, SEA Guidance developed by the OECD Development Assistance Committee provide a set of SEA principles which have broad support<sup>10</sup>. They recommend that, to be influential and help improve policymaking, planning and decision-taking, an SEA should:

- Establish clear goals;
- Be integrated with existing policy and planning structures. Ideally the SEA process/steps should be aligned closely with the planning process so that key information is provided at the critical stages of policy-making and planning, in the right (usable) manner and delivered to the appropriate decision-makers to support them in their roles/tasks (see Box 1.2);
- Be flexible, iterative and customised to context;
- Analyse the potential effects and risks of the proposed PPP, and its alternatives (including the do-nothing' option), against a framework of environmental and social quality (sustainability) objectives, principles and criteria, at an early stage when an agency has greater flexibility;
- Such analysis includes identifying environmental and socio-economic impacts (positive and negative; direct, indirect, and cumulative; trans-boundary and other unintended consequences) and proposing mitigation measures for negative potential impacts and to enhance environmental and social management. It should identify how to achieve the best environmental and/or social benefits whilst minimising damaging environmental and/or social risks and impacts;
- Identify environmental and socio-economic opportunities and constraints;

<sup>8</sup> Sadler and Verheem (1996); and Dalal-Clayton and Sadler (1998)

<sup>9</sup> Available at: <C:\IAIA\Pub\SP1.PDF>

<sup>10</sup> OECD DAC (2006)



- Address the linkages and trade-offs between environmental, social and economic considerations (and their relationship with economic concerns and drivers);
- Provide explicit justification for the selection of preferred options (alternatives) and for the acceptance of significant trade-offs (e.g. between different sectoral policy objectives);
- Involve key stakeholders and encourage public consultation;
- Include an effective, preferably independent, quality assurance system;
- Be transparent throughout the process, and clearly communicate the results;
- Be cost-effective; encourage synergies, and avoid duplication of efforts;
- Propose an effective, formal, independent, quality-assurance, review, and performance-evaluation mechanism for after SEA completion; and for monitoring of PPP outputs and environmental and social indicators, and
- Provide opportunities to build capacity to conduct SEA and to use the SEA results.

In designing effective SEA approaches, practitioners need to be aware of the following:

- Strategic planning is not linear, but a complex and iterative process influenced by interest groups often with often conflicting interests and different agendas; it is therefore important to look for 'windows of opportunity' to initiate SEA during cycles of the decision-making process and to influence and inform PPP development and decision-making. SEA needs to be flexible and responsive to these opportunities;
- Relationships between alternative options and environmental and social effects are often indirect; so, they need to be framed in terms relevant to all stakeholders (e.g. politicians, government agencies and interest groups). One way of doing this is by linking environmental and social effects to policy priorities;
- Strategic issues cannot be tackled by a one-off analysis; they need an adaptive and sustained approach as strategies and policymaking take shape and are implemented; and
- The value of SEA in strategic planning depends greatly on capacity within the responsible authorities to maintain the process and act on the results, and willingness to engage with the process; and
- The success of an SEA depends upon its effective implementation which will require preparation of a strategic environmental and social management plan (SESMP – see Chapter 3, section 3.5).

#### **Box 1.2: SEA integrated with land use planning in Namibia**

A **parallel but integrated SEA model** has been applied several times in Namibia over the past 10 years. In all cases, the SEA was commissioned to run in parallel with the development of an Integrated Rural Land Use Plan (IRLUP) for five different regions of the country. Whilst the SEA teams had their own terms of reference, they worked closely with the IRLUP teams. Combined meetings involving both teams (each comprising consultants) and the client (the Ministry of Lands and Resettlement) were held at the inception stage. These meetings enabled the teams to plan their respective activities and ensure appropriate coordination between them. Examples of combined activities included:

- Joint stakeholder consultations with rural communities (typically villages);

- Focus group meetings with government agencies and private sector interest groups;
- Baseline data gathering, data and sharing; and
- GIS outputs (mostly maps).

Draft IRLUP reports were shared with the SEA team, and SEA analysis was provided back to the IRLUP teams. The cross-fertilisation of evolving ideas, analyses and outcomes resulted in IRLUPs that generally incorporated sustainability thinking. It also meant that environmentally inappropriate development ideas could be 'red flagged' or, in some cases, scrapped altogether before the final IRLUP was compiled. Whilst this parallel SEA approach resulted in a stand-alone SEA report, another outcome could have been a "sustainability driven" IRLUP with no SEA report at all.

Source: Peter Tarr, SAIEA, Namibia

## 1.4 IMPACTS-LED VERSUS OBJECTIVES-LED SEA

Most of the world's SEA systems are **'impacts-led'**. Like EIA, they start from an existing baseline of environmental and social conditions and make predictions about how a proposed or revised PPP will change this baseline over time. They have a strong focus on assessing impacts and recommending mitigating measures to remedy the negative impacts. Impact-led SEAs are dominant in lower- and middle-income countries.

Some SEA systems, in addition or instead of, are **'objectives-led'**: they predict whether the PPP will help or hinder achieving a range of Environmental and Social Quality Objectives (ESQOs) (discussed in section 3.3.4). Although the ESQOs may overlap with the PPP's objectives, they essentially act as an independent sustainability/environmental/socio-economic benchmark against which implementation of the PPP can be tested. In situations where critical baseline data may be lacking, inadequate, outdated, or unreliable, and/or where environmental aspects are less tangible 'on the ground' for spatial mapping purposes (e.g. greenhouse gas emissions), an objectives-led approach to the SEA is preferable. An objectives-led approach may also be more suitable for those PPPs that specify desired outcomes or endpoints. For such PPPs, the SEA can help evaluate whether these PPP outcomes will be impeded or aided by pursuing the ESQOs.

Impact-led SEA is more re-active and less influential, whilst objectives-led SEA is more proactive and more influential.

A key consideration in deciding if a baseline led approach is possible and therefore if an objective led is necessary, will be the nature of the PPP including the level of detail and specificity. A high-level policy is likely to require an objective led approach as it will be impossible to assess change in the baseline and attribute impacts to the PPP. Whereas for a more geographically specific programme of potential projects it is more likely that a baseline / impact approach will be possible / appropriate.

## 1.5 THE RELATIONSHIP BETWEEN SEA AND THE PPP PROCESS

PPPs include a range of instruments, e.g., national, and sectoral policies, spatial development frameworks, environmental and social management frameworks, integrated development plans, master plans and land use plans. Frequently, SEA is formally required for such PPPs (see Chapter 2). But it can also be applied where multiple similar projects are concentrated in time and space and for very large developments or 'mega projects' (e.g., transnational pipelines) which can give rise to extensive and cumulative impacts (direct and indirect) over large geographical areas. In this guidance, the latter are included under the umbrella of PPPs. In many ways such SEAs are like regional assessments.

A critical question is when should SEA be carried out? There are two options: *ex ante* and *ex-post*.

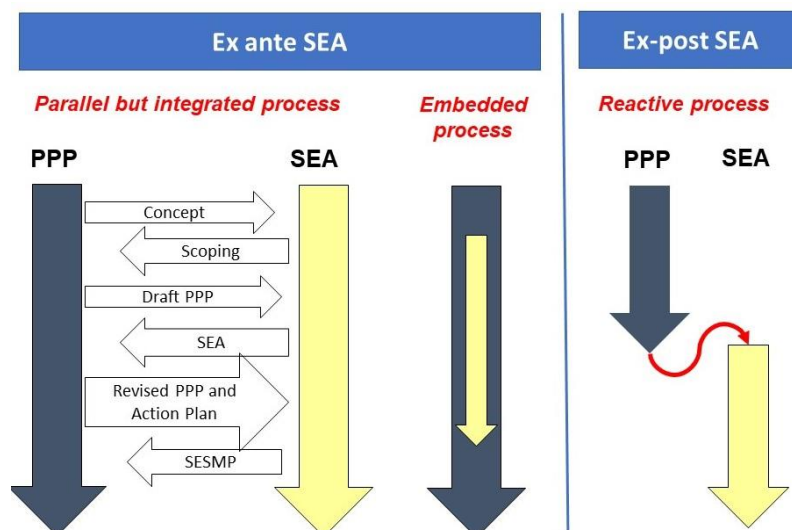


- **Ex-ante SEA:** Ideally, a SEA is most beneficial when undertaken prior to or during the preparation of a PPP. The processes of developing a PPP and undertaking a SEA should be mutually reinforcing to promote more sustainable development. The environmental and socio-economic information and analysis provided by the SEA can optimally inform the preparation of the PPP, can help focus decisions on the most sustainable options (alternatives) to be the focus of the PPP, and can assist in clarifying (restructuring, rewording) PPP drafts to promote effective implementation. The SEA can identify new opportunities – particularly to maximise benefits and minimise, avoid, or mitigate negative impacts and promote positive outcomes, and can highlight where there may be potential risks and conflicts or inconsistency between PPPs. This can prevent costs of rectifying mistakes.
- **Ex-post SEA:** An SEA can also be undertaken on a PPP that has already been drafted or on an existing PPP that is already being implemented. This is a reactive process (Figure 1.2). Such SEAs are less influential on a PPP than those carried out in parallel to PPP development. A reactive SEA sometimes results in less potential for the uptake of their recommendations; however, it can still be beneficial to identify environmental and social problems that have arisen and identify where modification of the PPP may be required. This will be particularly useful where revision of a PPP is being considered.

No matter which “model” of SEA is followed, the desired outcome is a better PPP, rather than production of a SEA report, as well as better environmental and socio-economic outcomes.

As Figure 1.4 shows, it is common for an *ex ante* SEA to be organised in parallel with the PPP process. In these circumstances, the SEA should be planned so that it is integrated with the PPP process as fully as possible, with the steps in the two processes fully synchronised. Thus, the emerging outputs of the SEA process can feed directly into the PPP preparation process at the most opportune stages. Usually, a government ministry/department/agency) that is developing or revising a PPP will be responsible for undertaking a SEA - if one is specified as required by national laws/regulations (i.e., because the PPP is expected to result in significant environmental and/or social impacts).

**Figure 1.4: How SEA can relate to the PPP process**



In practice, governments will usually need to commission experts to carry out the SEA process. The teams involved in both the PPP and SEA processes should work together, as closely as possible, be fully aware of what each other is doing, and seek opportunities to organise common events, e.g., stakeholder meetings and workshops to achieve the best possible PPP and SEA outcomes. However, in many situations, SEAs are still undertaken in isolation from the process of developing the PPP to which they relate, thus reducing their utility and influence. Undertaking an SEA in isolation from the PPP process should be avoided.

Development of the PPP normally enables public authorities to analyse development trends, opportunities, and threats and to propose development interventions and implementation arrangements. The SEA process should ideally examine individual outputs of the PPP-making process and it may propose necessary amendments to maximize their environmental and social benefits and to minimize their negative environmental and social impacts and risks. As such, the development of PPPs and the SEA process follow a very similar logic, and this is the basis for the approach recommended in this guidance.

The lead process is the elaboration of the PPP, and the SEA should fit into the logic and steps of this PPP-making process. In this respect, it is important to treat the SEA as a flexible process which needs to be tailored to the needs of the different types of PPP.

Planning procedures tend to be well codified with a linear sequence of steps as suggested by the arrows in Figure 1.2. Each of these steps provides a 'window of opportunity' for the outputs of a SEA to influence the focus and content of the PPP. Ideally, to have maximum utility, an SEA process should be fully embedded within the PPP process so that its outcomes immediately and directly can influence PPP development without having to seek opportunities to do so. In effect, they would be a single intertwined process. But there are few, if any, examples where this is yet the case. Thus, as indicated above, SEA is currently better carried out in parallel with PPP development, with their steps aligned and integrated.

Policies are often general and directional and rarely include specified activities. So, from a procedural perspective, an SEA at the policy level will have little in common with the simple, linear, technical nature of a project level EIA. It will require a greater focus on understanding the policy formulation process and identifying windows of opportunity for influencing decision-making on the policy. It is also argued that SEA at the policy-level also requires a particularly strong focus on institutional factors and facilitating constituency building and strengthening of stakeholders in the policy process<sup>11</sup>.

There may be situations where multiple development activities in a particular sector or across a particular geographical area are reported to be giving rise to environmental and social impacts, but are not currently being addressed, controlled, or regulated because a PPP has not yet been developed or is not yet proposed. In these circumstances, an SEA can be very helpful to assess and establish the nature and extent of environmental and social issues arising and to provide recommendations on policy/planning measures that could be taken to address such concerns. It can also set the stage for the project level environmental and social impact assessments that may follow.

## 1.6 COSTS OF SEA

Undertaking SEA usually involves the costs for the following inputs and steps:

- Fees and operational costs (e.g., travel/accommodation, workshops/meeting costs and administration) for the practitioners engaged to undertake the SEA.
- Designing the approach and methodology and testing tools - usually during the initial stages of SEA application. Costs may be reduced by using previously tested methods;
- Gathering basic data sets and analysing the baseline. In many SEAs, field work is often limited to ground-truthing visits, especially where there is good available information. Where there is limited basic data, field work may be necessary, and this can add significant costs (and time). However, most of this work occurs during the first SEAs undertaken in a particular region/sector. Subsequent SEAs (e.g., when a PPP is revised) can build upon the data gathered by previous SEAs and the additional costs will be limited to obtaining specific new data that may be required;
- Carrying out analyses and providing inputs to support the elaboration of the PPP concerned (always needed);
- Implementation and monitoring frameworks for SESA recommendations;
- Training in circumstances where capacity and understanding of SEA is low, and
- Consulting stakeholders and managing the entire SEA process (always needed).

<sup>11</sup> OECD/DAC (2006); World Bank (2011)

There is very limited information on the actual costs of SEAs – it tends to be a confidential matter. But the cost will vary due to the length of the process and the complexity of the chosen design: from as little as US\$ 20,000 - \$50,000 (e.g., for a rapid, desk-based SEA) to US\$1 - 2 million (for a full SEA of a complex PPP over say an entire year or longer). Comprehensive SEAs typically average US\$ 500,000 to US\$ 700,000. Contingency reserves are very important as SEAs often require additional or unforeseen tasks to be undertaken. They should be budgeted for – at least 10-15% of overall SEA budget. Additional costs may be foreseen for any follow-up activity to the SEA to evaluate the effectiveness of its implementation. It is particularly important to ensure that costs for a fully inclusive and transparent stakeholder consultation process are included.

A study for the European Commission on the costs and benefits of EIA indicated that introducing SEA to regional and local land-use planning usually increased planning costs by 5 to 10%<sup>12</sup>. and these costs are marginal in comparison with the costs of the implementation of plans or programmes (i.e., financing all activities and projects proposed by the planning document). It also found examples of good SEAs that increased planning costs by less than 5%, but the costs depend on the amount and detail of alternatives elaborated and the extent of their assessment.

A study by Therivel and Walsh (2005) on the first year of application of the European SEA Directive in the United Kingdom surveyed 201 authorities that had conducted SEAs. It concluded that most SEAs required approximately 70–80 person days to complete (roughly half for scoping and half for the environmental report). According to the Netherlands Commission for Environmental Assessment, experience shows that small municipal SEAs can be carried out in as little as 30 working days; medium-scale SEAs require 50 - 100 working days; while more complex large-scale SEAs require between 150 - 300 working days depending on the amount of information to be processed<sup>13</sup>.

The costs of SEA can be regarded as marginal compared with the overall costs of implementation of PPPs, the costs of dealing with unintended negative impacts and consequences (e.g., environmental reparation, social compensation, or health costs as a result of increased air pollution due to increased industrial output), and other costs such as delays in subsequent projects - SEAs may address issues in advance to avoid this.

## 1.7 SCALE AND TIME REQUIRED FOR AN SEA

There is no one-size-fits-all approach to SEA. In all circumstances an SEA will need to be carefully thought through and designed according to a range of possible background factors:

- *The particular focus of the SEA*, e.g., whether a PPP or other instrument such as a strategy, or a spatially extensive development such as a large regional infrastructure initiative, or a cross-border initiative such as a proposed railway, pipeline or trans-national protected area. In some circumstances, there may be a complex, larger scale environmental challenge that does not fit into existing/proposed PPPs – a common situation in lower- and middle-income countries that lack a strong tradition of strategic planning. In such cases, an SEA may be commissioned to feed into a decision-making framework developed on a case-by-case basis.
- *The PPP preparation and decision making process* (key steps, who involved, timescales etc) as this will dictate the SEA design.
- *Key factors influencing the SEA* like a) geographic and/or jurisdictional scope, b) existing data, c) timeframe for rolling out renewable energy to meet a country's climate targets;
- *The context*, including geographical factors that may limit access (e.g., in particular seasons), or requirements to gather new data including seasonal or multi-year data;
- *The availability of existing information* and any gaps which may require additional time and cost to address;

<sup>12</sup> EC (2006)

<sup>13</sup> NCEA 2020

- *The capacity of the requesting institution* – sometimes this can prolong the process until internal consensus of the requirements of the SEA is met;
- *Available time and budget* (it is important to understand that time and budget constraints imposed on an SEA will limit what can be done and its utility), and
- *Political and security considerations.*

Thus, a complex SEA, especially one covering multiple sectors, may take over a year to undertake, sometimes much longer, and require a large team of experts (Section 1.6). A longer pre-SEA period may be necessary to collect data that may be required, particularly when time series information or data covering several seasons is deemed necessary. At the other end of the spectrum, in some circumstances, it is possible to conduct SEA as a rapid exercise. For an example a rapid, desk-based SEA of Namibia's Fourth National Development Plan was undertaken over a month. It was led by two SEA experts working with invited subject-expert focus groups (Dalal-Clayton and Tarr 2015). Table 1.2 compares Full SEA with rapid SEA.

**Table 1.2: Full and rapid SEA compared**

| Stage/component             | Full SEA   | Rapid SEA  |
|-----------------------------|--|--|
| Overall nature and aim      | <ul style="list-style-type: none"> <li>• A comprehensive assessment following international principles/standards of good practice.</li> <li>• Usually undertaken when required by law/regulation or by safeguard policies/framework of funding agencies</li> </ul>                                       | <ul style="list-style-type: none"> <li>• Light dive aiming to provide critical information on key issues and the main likely impacts</li> <li>• Particularly useful where there are budget or time limitations-</li> <li>• May point to the need for a subsequent full SEA.</li> </ul> |
| Timeframe and budget        | <ul style="list-style-type: none"> <li>• Generally 6-12 months (sometime longer depending on complexity)</li> <li>• Considerably more for a rapid SEA. Varies according to the length of the process and the complexity. Comprehensive SEAs typically average US\$ 500,000 to US\$ 700,000</li> </ul>    | <ul style="list-style-type: none"> <li>• 1-2 months, depending on complexity</li> <li>• Usually a small budget (US\$40-60K)– to cover professional fees and venue hire</li> </ul>  |
| Steering/Advisory committee | Very useful to have in the case of a complex and large SEA that spans many sectors and government agencies, and possibly also representation from the private sector and NGOs  | Not needed   |
| Baseline studies            | Required.- maybe a combination of existing and new studies   | Not required, primarily desktop review   |
| Specialist studies/research | Additional specialist studies may be required, especially where critical data is lacking or out of date, or where seasonal issues require to be addressed.   | Not required   |
| Stakeholder consultation    | <ul style="list-style-type: none"> <li>• Required. They are a basic principle of SEA and should be extensive: at least two rounds during the SEA process - once during scoping to help identify key issue and enable stakeholders to present their perspectives; and again towards the end to</li> </ul> | <ul style="list-style-type: none"> <li>• Generally not required – except if there are directly affected parties and the impacts on them are likely to be significant</li> <li>• Focus group meeting(s) of key involved players</li> </ul>  |

| Stage/component             | Full SEA   | Rapid SEA   |
|-----------------------------|--|---|
|                             | present/discuss the findings and recommendations.  |   |
| Team and resources required | Usually a much larger multidisciplinary team, with a senior team leader and other members clustered thematically<br>Budget triple or more than for a rapid SEA.  | Usually a small team of experts from key disciplines will suffice..   |
| Process                     | <ul style="list-style-type: none"> <li>Starts with initial literature review, baseline study/report if literature readily available. May require specialist studies (see above)</li> <li>Stakeholder engagement (see above), and carefully-planned focus group meetings</li> <li>Review of the legal and regulatory framework and institutional roles and capacities,</li> <li>interactive brainstorming/ workshoping within the team and including key stakeholders.</li> <li>Can be impacts-led or objectives-led, or both.</li> <li>For objectives led SEA. development of Environmental and Socio-economic Quality Objectives (ESQOs) as basis for assessment</li> <li>Consideration of alternatives and scenarios.</li> <li>Use of linkage diagrams to indicate impact flows and routes to cumulative impacts.</li> <li>Impact identification and assessment of likely impacts and significance (scoring) etc. of alternatives/scenarios, possibly with deeper drive for preferred alternative/scenario</li> <li>Preparation of environmental and social management plan (SESMP)</li> </ul> | <ul style="list-style-type: none"> <li>Usually some initial literature review,</li> <li>Interactive brainstorming/ workshoping within the team and possibly including a few “outside” subject experts to add information and value. Identification of key environmental and socio-economic issues</li> <li>Development of linkage diagrams to indicate impact flows and routes to cumulative impacts.</li> <li>Assessment of likely impacts and significance (scoring) etc. enable the team to quickly identify key issues, alternatives, assessment likely impacts and measures for mitigation/impact management</li> <li>Generalized management actions and road map of key actions and next steps</li> </ul> |
| Report                      | <ul style="list-style-type: none"> <li>Usually a substantial and well illustrated report and SESMP with many appendices – depending on the subject and context.</li> <li>In some cases, the key outcome is the revised PPP, rather than a comprehensive SEA report.</li> </ul>   | <ul style="list-style-type: none"> <li>Usually a very brief report (10-30 pages, plus annexes)</li> <li>Should include narrative and tables</li> <li>Unlikely for there to be a detailed Strategic Environmental and Socio-Economic Management Plan (SESMP) but a road map of key management actions could be prepared.</li> </ul>  |
| Formal review and approval  | <ul style="list-style-type: none"> <li>Depends on the jurisdiction.</li> <li>In only a few countries is a formal technical review of an SEA required (e.g. Bhutan), prior to an approval.</li> <li>In some countries it is required to provide the final draft to stakeholders for review. In any</li> </ul>   | <ul style="list-style-type: none"> <li>Depends on the jurisdiction, but unlikely to be required.</li> <li>Usually a rapid SEA would serve the purpose of an “advisory memorandum” that is similar to an executive summary.</li> </ul>   |

| Stage/component | Full SEA  | Rapid SEA |
|-----------------|---|-----------|
|                 | <p>case, it is good practice to make this available on a SEA website.</p> <ul style="list-style-type: none"> <li>• Often the SESMP requires some monitoring and evaluation – possibly for decades into the future.</li> </ul> |           |

## 1.8 WHO SHOULD CARRY OUT SEA?

The SEA process needs to be owned by the authority responsible for the PPP concerned. This will help to avoid the SEA report being ignored and shelved. Such ‘ownership’ means that the authority concerned should ‘lead’ the process (provide strategic direction, coordinate with other government agencies, undertake necessary formalities, assist with access to information, etc.). However, in most situations, the responsible authorities lack SEA experience and skills, and a team of knowledgeable and experienced experts needs to be engaged to conduct the SEA. This team needs to coach the responsible authority on the role, benefits, and modalities of SEA to help increase its awareness and capacity regarding SEA. Such coaching will, in turn, enhance the authority’s ability to lead and guide the team of SEA consultants on aspects of the SEA.

A team of knowledgeable and experienced experts should comprise core experts with environmental and social knowledge and skills, and experience of conducting SEAs. One of these should take the role of Team Leader with responsibility for overall coordination, liaison with the SEA proponent, team management, quality control, etc. A range of other subject specialists may be required to make shorter specific inputs/studies on required subjects.<sup>14</sup> Ideally, the team should comprise national experts with the relevant range of environmental and social expertise. In circumstances where national experience and skills in undertaking SEA is limited, it will be advisable to engage a few experienced international consultants to work with the national team members (at least lead environmental and social experts, one of whom should be the team leader to guide the process). The team should ensure that they have capacity in the local language.

The SEA team should be integrally linked to the team developing the PPP and they should be invited to all planning meetings and other relevant activities and have full access to all relevant documents or other sources of information produced or referred to within the PPP process.

The SEA team should have the right to express any view in the SEA Report. While the PPP team should make the decisions on what to present in the final PPP, the latter should provide reference to the findings of the SEA, and it should explain how the results of the SEA were used in the development of the PPP and explain / justify why recommendations from the SEA are not accepted/incorporated - emphasizing the importance of transparency.

Wherever possible, the SEA team must be responsible for leading out and coordinating consultation efforts related to the SEA (see section 1.10). This will ensure that stakeholders fully understand who is conducting the SEA, on whose behalf and the purpose it to fully gain stakeholder support and buy-in to the SEA process (see below).

In some circumstances the SEA proponent may elect to establish a broad-based, multi-stakeholder Steering Committee for the SEA to provide oversight, advice, support, and guidance (see Chapter 12). This is a form of collaborative governance that is crucial to tackle multi-sector challenges and to ensure inclusive stakeholder engagement throughout the SEA process. It also helps to ensure that the process and outcome are more influential.

<sup>14</sup> Examples of expertise that may be required include (note that this is not a comprehensive list): energy technologies, coal-fired power plants and coal-mining, health and safety, biodiversity, transport, tourism, protected areas, planning, urban issues, archaeology and cultural heritage, GIS, public consultation, governance, institutional and legal issues.

## 1.9 ENGAGING WITH STAKEHOLDERS

For SEA to be successful and meaningful, and support progress towards sustainable development, it will need to engage with a wide range of stakeholders. These should include all those with a legitimate interest and who may be affected by PPP outcomes and those involved in decision-making at all levels (from national to local), and from government, civil society, and the private sector, as well as with funding and aid agencies that may be funding the SEA or supporting the implementation of the PPP. Many of these actors will have roles to play in developing and/or implementing the PPP or will be likely to be affected by its implementation.

PPPs concerned with the energy transition are likely to affect all inhabitants in a country. But in many low- and middle-income countries where public consultation is a rather new concept/practice, it is almost impossible to give all inhabitants the opportunity to be engaged in the process. Therefore, the option that CSOs represent the voice of the people is a reasonable and acceptable approach. However, this decision will not be simple and will require engagement with a range of stakeholders to ensure that this representation of interests will be acceptable to all.

For the PPP to be well constructed and to address the most important issues and be successfully implemented, it will be necessary for stakeholders (including representatives of local communities and the public) to understand the process, to be able to engage meaningfully with it, and to influence its outcomes. In other words, stakeholder 'buy-in' to the SEA process is vital.

### 1.9.1 Roles and responsibilities of key stakeholders

Table 1.3 sets out the roles and responsibilities of stakeholders, including government agencies, communities and individuals, private organizations, non-governmental organizations, and others having an interest or stake in the SEA process and outcomes of the PPP.

### 1.9.2 Methods to engage with stakeholders

Stakeholder participation should be a continuing process that runs throughout all stages of the SEA (as described in detail in section 3.3.6).

The SEA process should be ideally conducted in conjunction with consultation organized for the preparation of the PPP itself. Also, existing communication channels can offer efficient means for conducting consultations for the SEA. However, at times, additional methods will be required. Participation processes should be used that provide the best means to ensure that stakeholders can engage effectively, and that their viewpoints are given proper consideration.

The method of engagement should be to a large extent dictated by the purpose - i.e. information giving, information gathering, consultation, participation, collaboration or delegated authority. Different methods lend themselves to these different purposes. Annex 1 describes various approaches that can be used to engage with stakeholders, including:

- Printed material inviting comments;
- Displays and exhibits;
- Information hotline/ staffed telephone lines;
- Internet/web-based consultations;
- Questionnaires and response sheets;
- Surveys;
- Public hearings;
- Workshops and focus group sessions;
- Advisory committees;
- Social media, and
- A dedicated and interactive website.



**Table 1.3: Roles and responsibilities of key stakeholders**

| Stakeholder  | Role and responsibilities  |
|--|--|
| Lead agencies  | <p>PPPs are mainly developed by sector ministries and implemented by their respective line agencies. The responsibility for instigating a SEA of a PPP, therefore, should lie with the relevant sector ministry. The lead agency is responsible to undertake the SEA, usually through the commissioning of a team of expert consultants to undertake the technical process. Where SEA is formalized by legislation and a government agency is designated to be responsible for the system, the lead agency will usually also be required to submit a SEA report (and accompanying strategic environmental and social management plan) to that designated body to be reviewed and approved. The lead agency will likely be involved in implementing the SESA recommendations together with other responsible agencies and institutions.</p> <p>Increasingly, influential SEAs are the responsibility of an inter-agency steering committee where sharing of responsibility and decision-making is a starting point.</p> <p>Where international organisations (e.g., multilateral development banks or bilateral donors) are involved in supporting the SEA or in funding PPP implementation, the lead agency will be usually be required to submit the SEA report to such organisations for review and approval (particularly where such organisations are required to satisfy their own environmental and social safeguard requirements) and to meet funding requirements.</p> |
| Statutory bodies with designated responsibility regarding SEA            | Legislation covering SEA usually will assign formal responsibility for overseeing the national SEA system, developing regulations, providing guidance, and reviewing SEA reports to a particular government agency (often the Ministry/Department of Environment or Environmental Protection Agency).  |
| Civil society (including communities, individuals, marginalized groups,) | All those members of civil society (either individually or through representative bodies) who have an interest in or might be affected by a PPP should be provided with opportunities to be informed about the PPP. They should be able to engage in the SEA process (expressing their concerns and perspectives on issues and proposals), commenting on draft SEA reports, and being informed of its results, etc. To foster engagement, information should be available and communicated in ways that different stakeholders (e.g. indigenous people) can access and understand (e.g. summarised in local language). Legislation and/or the environmental and social safeguards policies of financing organisations may expect or require indigenous communities to give their prior and informed consent to certain projects and activities arising when implementing a PPP.  |
| Indigenous peoples   | Sometimes indigenous peoples' organisations are erroneously lumped into civil society organisations (CSOs). But Indigenous Peoples (IPs) form distinct societies, with their own laws, languages, epistemologies, ontologies, and methodologies, including in the area of Renewable Energy. They can often be adversely affected by renewable energy developments. Strong efforts are required to ensure that indigenous peoples are engaged in an SEA, fully informed, enabled to present their perspectives and concerns.  |
| Environmental assessment practitioners, academics, and researchers       | Lead agencies will usually depend on environmental assessment practitioners (national and international) to undertake an SEA. There may a need for specialized research or case studies to provide key data for an SEA which would usually be undertaken by national experts, academics, and researchers.  |
| Development finance organizations and donors                             | It is common practice for international development finance organizations (e.g. MDBs) or donors to require SEA for sectoral support and large development programmes. They may provide funding for individual SEAs. They will usually be required to approve the terms of reference (TOR) for the SEA and to review SEA reports. National finance organizations, including banks and trust funds, may also require SEA if they are funding part of PPP implementation.   |
| Private sector   | The private sector is likely to be involved in implementing many aspects of PPPs (particularly in the energy sector) by investing in the business opportunities that they create. It is important that their views on the PPP are considered   |

| Stakeholder  | Role and responsibilities  |
|--|--|
|  | The private sector can also be responsible for a SEA of a PPP where a sector has been privatised (as in some countries, e.g. the rail sector in the UK).   |
| NGOs/CSOs and other independent organizations (e.g. trade unions, religious organisations) | NGOs and independent organization should be involved as stakeholders in SEA, where appropriate. Often, they hold important information and can make expert contributions to the assessment process and analyses. |

It is important to note that public hearings or questionnaires which are often used for consulting the public during EIA processes may not deliver the most effective consultations within the SEA process. Instead, problem-solving workshops, roundtables, an advisory panel, focus groups or structured interviews with key informants, and online exchanges may provide more efficient and user-friendly means for obtaining inputs from the relevant stakeholders during the SEA. It will be important to organize targeted meetings/sessions with women (facilitated by a woman) in communities or with women's or other vulnerable groups as, in many societies, they are often reluctant (or even restricted) to express their views in mixed gender events.

Usually, the following analyses benefit from stakeholder input (particularly as a consequence of their local knowledge):

- Determination of key environmental and socio-economic issues related to the PPP;
- Analysis of environmental and socio-economic trends without the PPP and under different development scenarios, and assessment of alternatives;
- Assessment of future environmental and social trends as influenced by the actions proposed in the PPP;
- Identification of appropriate mitigation and enhancement measures, and
- Suggestions for monitoring and follow-up for SEA implementation.

Stakeholder input in each of these stages can be facilitated by formulating clear questions to help them in submitting or making their comments.

A grievance mechanism should be established to enable stakeholders to complain if they feel that their opinions have not been sufficiently addressed nor responded to.

## 1.10 INSTITUTIONAL ARRANGEMENTS FOR SEA

As indicated in Table 1.2, the government ministry developing or revising the PPP will usually be the **lead agency** responsible for instigating an SEA. For renewable energy PPPs, this will normally be the ministry with a mandate for energy, or a sub-directorate specifically responsible. The lead agency will be responsible for conducting the SEA (usually through hiring consultants to undertake the technical work). However, increasingly, inter-agency steering committees are being established for SEAs to share responsibility and decision-making and to foster buy-in to the process - with the lead agency as the chair/convenor. In some situations, it has been found useful to establish an advisory committee in which representatives of the key authorities (executive staff), other authorities and NGOs are represented.

Where there is a formal SEA system, usually prescribed by legislation and regulations (or their equivalent), a government agency will normally be designated as the '**competent authority**' for SEA (usually a department within the ministry responsible for environmental affairs, or a specialist environmental protection agency) and will have responsibility to develop guidelines and, in some countries, to review and approve SEA reports. Depending on the particularities of the legislation/regulations, such competent authorities may also be designated to issue approvals or authorisations (normally in writing and possibly notified in the government gazette (or equivalent)). To ensure close integration of social, labour and health issues, multiple ministries may require to be consulted and coordinated early in the SEA process.

For an renewable energy sector PPP, the SEA Steering Committee should be convened and chaired by the lead agency (ministry responsible for energy) and include members from all key sector ministries, financing organisations (e.g. MDBs, donors), renewable energy associations, private sector companies (or the representative body) involved in investing in renewable energy facilities, national NGOs, civil society organisations, indigenous peoples and others (as appropriate, e.g. women's organizations and vulnerable groups, special interest groups and labour unions). Its role will be to provide overall support and guidance for the SEA process, to facilitate access to critical information, to review reports, to build ownership of the SEA process amongst key actors, to disseminate information about the SEA process and its results and to advocate for the uptake of its recommendations, and to review the latter.

Having a Steering Committee in place helps to provide transparency for the SEA process and provide a mechanism for holding the government to account over how it addresses the recommendations put forward in the SEA. It also helps to build credibility, trust and transparency and provides an additional senior-level platform for all stakeholders to channel their views into the SEA process.

The **Strategic Environmental and Social Management Plan** (SESMP) produced alongside the SEA report will set out the proposed institutional arrangements, roles and responsibilities for its implementation, and grievance mechanisms. These will aim to ensure maximum efficacy to deliver environmental and social safeguards and required mitigation and management actions to minimize environmental and social risks and impacts and maximize opportunities for benefits. A SESMP often acts as an action and investment plan. See also Chapter 12 for more on SEA and institutions.

#### **Tips for practice**

- *The lead process is the elaboration of the PPP, and the SEA should fit into the logic and steps of this PPP-making process. In this respect, it is important to treat the SEA as a flexible process which needs to be tailored to the needs of the different types of PPP.*
- *Focus on the key stakeholders that may be interested or significantly affected by the proposed PPP.*
- *Complete a stakeholder mapping exercise very early on in the SEA process to identify all interests, including those that may not be reached.*
- *Remember that the primary purpose of consultation is to obtain additional data and inputs for improving analyses and for developing alternative options with improved environmental and social performance.*
- *Do stakeholder mapping to ensure that all affected parties are included in consultation.*
- *Target the consultations on the most important analyses performed within the SEA process.*
- *Try to use established consultation channels where possible.*
- *Discuss the stakeholder identification and engagement strategy with the team developing the PPP. Consultations within the SEA should be ideally carried out together with those during the PPP process.*
- *Ensure there is a stakeholder feedback mechanism to make consultees aware of how their views have been taken account of in the SEA/PPP throughout its preparation and implementation and that the results of the SEA are fully communicated to them.*