

IWRM TOOL - C1.07 Strategic Environmental Assessment

Strategic Environmental Assessment (SEA) evaluates environmental implications of a proposed policy, plan, or programme. It also equips the government with means to look at such implications and address them at the earliest stage. This Tool explains the main differences between SEA and environmental impact assessment, lay out the SEA process and assessment criteria, and discusses the importance of engaging the public in conducting SEAs.

What are Strategic Environmental Assessments?

Strategic Environmental Assessment (SEA) represents a comprehensive process of evaluating environmental effects of a policy, plan, or programme and its alternatives. The findings are typically elaborated in a final written report and taken into account within a publicly accountable decision-making or policy-making process. The ultimate goals of undertaking SEA are to minimise the potential negative impact of a particular programme and to ensure that any negative impact which cannot be avoided is offset for the implementation period of said programme (<u>OECD, 2006</u>). The SEA can be carried out at any stage and level of decision-making, since it is a preventive approach that can be used iteratively before decisions are made and when other alternatives become available.

With the development of international environmental law, the procedural obligations to conduct an assessment of direct and indirect effects of policy, plan and programme proposals on the environment were codified in:

- The EU Directive on SEA: does not provide for definitive scope of application but sets out the characteristics which plans and programmes must be covered by it. The Directive also introduces non-exhaustive lists of the plans and programmes that always require SEA or only require SEA screening (<u>EU Parliament and the Council,</u> <u>Directive 2001/42/EC, 2001</u>).
- 2. The Kyiv Protocol on SEA to the 2003 UNECE Convention on Environmental Impact Assessment (EIA) in Transboundary Context (Espoo Convention): The SEA Protocol to Espoo Convention encourages the Parties to evaluate the environmental consequences of their official draft plans and programmes and has a wider scope of application than SEA Directive, also including policies and legislation and encouraging application of SEA in these areas. Unlike the Directive, Kyiv Protocol SEA procedure applies to a definitive scope of plans and programmes, but remains a non-binding provision for the parties (although there is mandatory reporting by signatories) (UNECE, 2003).

Difference between SEA and EIA

SEA procedure has been developed from the environmental impact assessment (EIA) and acts as a decision-making support mechanism, assisting the formulation of sustainable sectoral policy, plan or programme (Tool C1.06). While the EIA applies at a single project level, SEA reviews the policies and plans at an earlier stage of decision-making as policy appraisal, describing potential strengths and weaknesses to achieve sustainability objectives and assessing cumulative sustainability impact at sectoral or cross-sectoral levels. The SEA facilitates preparation for carrying out EIA at a later stage but does not satisfy the need for an EIA. Depending on the nature of decision-making process or setup of stakeholder consultations, the SEA may apply either to existing or draft policy, plan or programme. In addition, SEA differs from an integrated policy, plan or programme making processes, which account for environmental issues but omit formal assessment stages such as analysis of available alternatives based on set environmental objectives and criteria. Figure 1 captures the relationship between SEA and EIA within the understanding of SEA Directive:

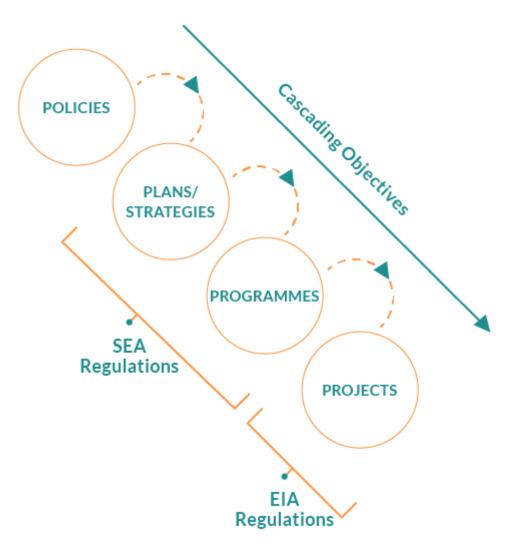


Figure 1. Relation between the SEA and EIA processes (Adapted from <u>Rodrigo-Ilarri, J. et</u> <u>al., 2020</u>)

In order to be effective, the SEA must be a formal stage of the decision-making process, undertaken by all policy makers, planners, and sectoral actors and focused on the quality of the final decision. SEA enables the operationalisation of sustainability principles, which need to be maintained during the development of policy, plan, or programme to ensure sustainability. Despite numerous benefits highlighted above, the implementation of SEA remains a practical challenge, especially with evaluation of sound alternatives, as there are diverse approaches to selecting alternatives across sectors.

Steps and Assessment Criteria for Carrying Out SEA

Acknowledging the growing need to assess sustainability of strategic decisions, the International Association of Impact Assessment has compiled the SEA performance criteria (IAIA, 2002). According to those, a high-quality SEA process must be integrated, sustainability-led, focused, accountable, participative and iterative.

Along the development of SEA procedures on national level, several techniques, such as life cycle analysis (LCA), cost-benefit analysis (CBA) (<u>Tool D1.01</u>) and multi-criteria analysis (MCA) technique emerged to ensure all environmental, social and economic aspects are considered during policy planning (<u>Fischer, 2003; OECD, 2006; Garfi et al., 2011</u>). As the most widespread technique, the MCA facilitates narrowing down the alternatives to a set number of options based on a set of evaluation criteria, successfully used in water management, IWRM policy planning, energy sector, and urban infrastructure planning.

SEA usually takes place in several phases, such as (EU Commission, 2017):

- 1. **SEA Screening**: Taking a decision to undertake SEA with respect to a policy, plan or programme that is likely to cause adverse environmental impact. This phase is crucial to address potential adverse impacts since it also identifies opportunities to improve sectoral performance in sustainability indicators.
- 2. **SEA Scoping:** Establishing SEA context by setting objectives and identifying stakeholders. This phase plays a key role for SEA effectiveness, highly dependent on the public participation and assessment capacities (<u>Polido & Ramos, 2015</u>).
- 3. **SEA Study:** In-depth analysis of identified issues, such as compiling a baseline, idenfying potential adverse impacts and institutional capacity to address identified challenges. The analytical phase is followed by informing the decision-makers of conclusions and monitoring the impact of the policy, plan or programme in question.

As means of influencing decision-making, the SEA aims to develop and consider other reasonable ways to meet the objectives of policy, plan, or programmes. SEA should therefore also help to identify sound alternatives before providing a conclusion. Alternatives are assessed qualitatively using expert judgment and various modelling approaches (<u>Tool</u> <u>C2.04</u>). In case the policy, plan, or programme in question turns out to be not the most environmentally suitable option, the SEA report must provide full reasoning and several alternatives.

Public Participation in SEA

The process of assessing environmental performance of plans and programmes should undoubtedly involve gathering feedback from relevant stakeholders (<u>Tool C1.04</u>). As a particular important aspect of SEA, great public participation has been directly linked to

more transparent decision-making and higher acceptance of newly adopted policies by target population (<u>Rega & Baldizzone, 2015</u>). However, effective public engagement requires strong political support and clear technical guidance on how to engage in the process. As opposed to EIA project consultations, SEA envisages public participation of multiple stakeholders through an open dialogue, similar to negotiating a win-win solution (<u>World Bank, 2012</u>).

Key guidance provisions for public participation in SEA have been laid down by the SEA Protocol and the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), requiring participation to be effective as well as to early and timely opportunities for it, binding the Parties to provide "early, timely and effective" notification (Art.8, SEA Protocol), as well as entitling the public to assistance from the authorities (Art.3, Aarhus Convention). Public participation appears especially relevant for transboundary context, hence the SEA Protocol (Art.10) also directs the parties to engage in transboundary consultations where an implementation of a plan or programme would likely produce great transboundary effects (<u>UNECE, 2016</u>).

Featured Image



Thematic Tagging Ecosystems/Nature-based solutions Source URL: https://beta.toolbox.venthic.com/learn/iwrm-tools/strategic-environmental-assessment