

History, Trend, and Drivers of SEA

by Maria Partidario

Ms. Maria Partidario is a university professor at the New University of Lisbon in Portugal and holds her Ph.D. on strategic environmental assessments. She has many years of training experience around the world in the context of the International Association for Impact Assessment on strategic environmental assessment.

The topic of this lecture is the history trends and drivers of strategic environmental assessment. We'll start by addressing the roots of strategic environmental assessment, SEA, as we will be calling it from now on.

Originally, it was originated together with environmental impact assessment. In fact, when environmental impact assessment was first conceived in 1969, with NEPA in the United States, the requirements for the application of environmental impact assessment to other levels above project level was already included in the same requirement. However, it did not evolve to the same extent that project EI has evolved. Experience developed throughout the 1970s and 1980s, particularly dedicated to the application of EI to the project level.

However, all this practice has created a different number of needs and motivations for strategic environmental assessment or, in fact, to a form of application of environmental impact assessment to the levels of policy, plans, and programs. And some of these reasons can be categorized in three main issues.

One was the timing of decisions. In fact, when project EI was being applied, it was rather late for a number of issues had already been decided before the actual time of application of project EI. So there was an issue about the timing of decisions that required another instrument to be used and to consider the environmental implications of certain activities.

The second category of issues includes the nature of decisions. Policies, plans, and programs which are normally considered at the strategic level of decisionmaking would imply a continuity in terms of process of decisionmaking which were essentially different from the project type of actions to which environmental impact assessment normally applied. So the nature of decisions that would engage different kinds of approach in terms of the environmental impact assessment at the level of policy, plans, and programs being different, having different characteristics, would require a different kind of instrument.

And the third reason for using strategic--or developing this concept of strategic environmental assessment was related to the level of information. When we're dealing with policies, with programs, or with plans, we do not have available the same detail of information that we have for projects. And, therefore, we required another instrument that would be able to work with information that was much more broad, much more vague, much more uncertain, also, than when we talk about EI and about its application to projects.

The initial calls for strategic environmental assessments I mentioned just a while ago came really with NEPA, the National Environmental Policy Act, in 1969. At that time, NEPA, as you can see in the slide that is being shown, required that all federal agencies prepared detailed statements by the responsible official for every recommendation or report on proposals for legislation and on the major federal action significantly affecting the quality of the human environment. This is written and stated in NEPA since 1969. So that means that even legislative proposals and other federal actions of a more strategic nature were identified in 1969 as requiring a kind of assessment, evaluation, that would precede decision for implementation.

The regulations that then helped to implement NEPA defined major federal actions inclusive of, for example, new agency programs or regulations, inclusive of broad actions relative to policy in agency planning and decisionmaking, and also proposals by more than one agency. So this describes in a way the kind of actions, the kind of initiatives that were also included within the requirements for NEPA implementation and which are not necessarily project specific. So there was a requirement, a legal requirement, since 1969 for the implementation of these kind of actions.

The initial forms of SEA that we can find in the literature also related to the experience in the United States, and particularly with the U.S. Housing and Urban Development Department that published in 1981 the area-wide impact assessment guidebook. This was following an interim guide that was published in 1974. This, in fact, purports to be one of the very initial forms of strategic environmental assessment that we saw around the world and which applied to urban development plans and programs. And one of the first examples was in 1983, the Housing Development Area-wide Study, which was an actual application of the U.S. Housing and Urban Development Guide.

Since then, programmatic environmental impact studies have developed in the United States since 1979, as identified in the U.S. Council for Environmental Quality regulations, and became one of the very first forms of strategic environmental assessment in the United States.

At the same time, this concept was developing in other parts of the world as well, and it's been evolving since then. Many other countries and regions have developed different forms of approaches to strategic environmental assessment. For example, some were departing from the experience with project EI practice as in a way happened in the United States. For example, in the Netherlands, in Hong Kong SAR, or in European Union with the recent adopted directive in 2001, all forms of strategic environmental assessment do relate and they're very much based on a kind of project EI model. So they do take advantage of the experience with project EI and extend the same kind of requirements and procedures into plan and program development.

Other countries have developed different forms of approaches, approaches that relate much more to planning practices and policy analysis. For example, in the United Kingdom, in Sweden, and in Australia, where the planning practice has got different roots, has got different relationship with the environmental considerations where, for example, in the United Kingdom very early on the environmental considerations were taken into account into the development of land-use plans, these countries have developed approaches to strategic environmental assessment which are very much founded on planning practices, planning methodologies, whether in part, meaning

that perhaps there were parallel processes, dual processes running the planning process, and the strategic environmental assessment process running at the same time, or like in New Zealand, in a very integrated fashion such that it is hard to distinguish where it is that the strategic environmental assessment starts happening, where is the planning process, thus its specific activities.

Finally, other kinds of experiences have evolved in other countries, such as Denmark and Canada, much more based on policy analysis practices whereby strategic environmental assessment is influenced by the methodologies, by the kind of approaches, issues concerning timing that are involved in policy analysis.

At the same time, not only the way the strategic environmental assessment was influenced by the decisionmaking, policy planning, or project practice, but also the scope of issues being considered in the assessment has also been different. Some of the approaches in some countries, they do focus very strongly on the environmental issues in a rather restricted sense, issues that relate more to physical and ecological aspects. Other countries do undertake a wider approach in terms of what the environmental concept is, particularly to include not only physical and ecological issues, but also social and cultural issues within the concept of environment.

Other countries prefer to adopt a wider sustainability scope which includes all together environmental, social, and economic issues, and so undertake a broader approach within the development of strategic environmental assessment.

So this shows that to here what has been so far the evolution around the world in different countries, both in terms of processes or approaches to the policy, plan, and program development processes, but also in terms of the scope of issues that have been addressed to this point.

In terms of methodological approaches to SEA, we can then summarize the approaches SEA in two main schools of influence to the development of SEA. These are as shown in the diagram: the policy and planning school, on the one hand, in which the whole methodology, techniques, et cetera, have been influencing the design and conceptualization of strategic environmental assessment; on the other hand, we see the project impact assessment school influencing very strongly the approaches that have been seen, for example, as we saw before in the United States or in the Netherlands in terms of using specific techniques, specific methodologies as being used for project EI. They extend to be used also for plans and programs.

Interestingly, there hasn't been many applications of project impact assessment approaches to the policy level because exactly the nature of the policy decisions is tremendously different from project EI, and it's very difficult to rationalize the policy development in the same way that project development can be rationalized, can be streamlined, while in plans and programs that rationalization is perhaps more possible if that is the way the decisionmaking system is characterized in its particular region.

These two schools, as we've mentioned--the policy planning school, on the one hand, and the project impact assessment school, on the other hand--have indeed influenced strongly different models and methodological approaches to SEA, for example, the EI base model, which is the

same used for project EI; the integrated model in which the environmental assessment becomes a part of the policymaking and planning process; and also the decision-centered model, which is evolving more recently, and which takes into account the fact that the decisionmaking process involved in policymaking or in planning or even in program development becomes the central core that should drive the integration, the influence, and the use of the strategic environmental assessment, meaning that this decision-centered model, in fact, recognizes that strategic environmental assessment is a process that has been developed as an impact assessment approach to strategic decisionmaking and tries to assist the decisionmaking process by incorporating the necessary elements and the necessary activities into the decisionmaking process per se.

Therefore, the decisionmaking model or decision-centered model is exactly based on the concept that the decisionmaking process that is being assessed and evaluated by SEA becomes the central core of all the methodological process.

If we look at the evolution of SEA over the 1980s and 1990s, we realize that there are a number of characteristics of the development of SEA throughout this period. For example, from the initial start-off of SEA based more strongly on the practice with project EI, as we've seen in the United States and which existed still in 1979, we see that EI is, in fact, expanded to apply to programs, plans, and policies. And initial stages, initial phases of strategic environmental assessment, in fact, are known as the environmental impact assessment of PPP, which is P for policy, P for plan, P for program.

So the first time that we move upwards the scale of decisionmaking, we're still using the acronym environmental impact assessment to apply to other levels of decisionmaking.

In the interim, the planning practice calls on the substantive analysis and assessment responsibilities to incorporate the principles and practice of EI in the planning practice per se and, therefore, contributing to increasingly integrated approaches of SEA into the decisionmaking process.

And, finally, the sustainability paradigm is calling for wider perspectives and integrative approaches within the strategic impact assessment process, meaning that there is a much wider scope, a much wider call for the application of strategic environmental assessment to address sustainability issues, principles, and concerns beyond the specific, more restricted environmental issues.

Currently, we are observe multiple forms of strategic environmental assessment. We see sometimes the same tag of strategic environmental assessment being used to describe different outcomes. We also see different tags such as, for example, sustainability appraisal or integrative assessment to describe similar outcomes. This happens because there are methodological influences in designing the SEA, and we have seen already some of them referring to the policy planning experience and practice influencing SEA or the project impact assessment, methodological influences in designing the SEA; but also, perhaps even more important, the cultural differences in decisionmaking systems which call themselves for different forms of SEA to satisfy their needs in terms of the decisionmaking processes that require SEA to assist them.

Recent developments in SEA show that there has been limited development of SEA as a strategic approach, meaning that there has been a much stronger focus on the actual technique of impact assessment as we have seen applied in project EI.

We see an unresolved debate with respect to limits of environmental scope versus sustainability. We see debate between SEA as a dual-track EI or as integrated approaches to impact assessment. We see a debate between SEA as a technical assessment or as a facilitator of decisionmaking.

These points are sufficiently significant and important for us to detail them a little bit. Let's see each of these points one at a time.

The first point that we mentioned was why limited development as a strategic approach. Well, evidence shows that many SEA are following the path of EI, looking backwards rather than forward. In fact, there's a number of people that criticize SEA for not being sufficiently provocative exactly because it's really more revising decisions that have been made and making sure that the impacts are minimum with its development.

And, therefore, these approaches, they do show limitations in getting a broader scale and the long-term perspective, which are key ingredients in any strategic approach. So the strategic scope within SEA has been an issue which is limiting, in fact, its effectiveness.

The second aspect we have identified in the recent developments in SEA is that why unresolved debate with respect to the limits of environmental scope versus sustainability. Well, the reasons here that can be identified include the environmental concept is difficult to define because of the perspective that matters, meaning that some countries do really care to have a very strong focus on environment as physical and ecological issues, while others which rather look at a more broad perspective inclusive of sustainability issues, because of the institutional structure of decisionmaking systems which may, or not, facilitate communications within the institutional structure and, therefore, collaboration between different departments and maybe even responsibilities that are given to each different department in one agency or institution as such that they fell themselves limited in getting into, for example, social or financial or economic issues which belong to different departments within the same institution; and also another reason, which is a different understanding of the role of SEA with respect to the assessment of impact at strategic level. Is SEA looking only at technical, more operational issues that can be translated into ecological or physical impact? Or is SEA having an effect and having a role to play in improving decisionmaking at strategic levels?

One other aspect, a further aspect, is wider debate between SEA as dual-track EI or as integrated approach to impact assessment. Here, one aspect that is very important is that there are very strong reasons related to social/political nature of decision systems, which means that in some decision systems it is possible to bring together the various issues in an integrated platform. In other systems, that is not possible at all, and the two different processes need to run together in a parallel fashion, meaning the SEA process and the decisionmaking process.

The issues that are underlying the capacity to make this integration policy are very much related to the social/political characteristics of decisionmaking, to the fact that decisionmakers,

policymakers, they do need to accept, to incorporate the capacity to look at SEA as having the role of a framework, a role that will influence their institutional attitude, the culture of decisionmaking within an institution, rather than looking only at technical aspects.

A fourth point, and final, in this recent development of SEA is wider debate between SEA as a technical assessment or a facilitator of decisionmaking. Well, it takes time indeed to change the way decisions are made. And SEA has been unable to show effectively what is the added value that it can bring to decisionmaking. So we have an important issue here, which is to show that SEA can help decisionmaking, to shape in a different fashion, and to start changing the way decisions are made because the critical thing about strategic impacts is really more related to forms of decisionmaking than to actual physical or geographical impacts.

To look now at the drivers of SEA, after having seen what has been the history, what have been the main phases, the main stages, the main aspects that have influenced the evolution of SEA, we can now look at how the SEA may eventually evolve in the future. And the evolution of SEA in the future is really driven by certain key aspects, of which I have selected four for you. One is a sustainability agenda. The second one is the environmental policy, including biodiversity issues. The third is integrated decisionmaking, and the fourth, quality assurance. Let's look at each one at a time.

Sustainability in SEA can be a benchmark against which objectives and criteria in SEA can be measured. In any assessment, we need to have some kind of referential that will tell us whether there is an impact or not. Sustainability can help us to establish benchmarks that will give us that referential for impact assessment at the strategic level.

At the same time, sustainability will provide us with a strong policy that, in fact, helps to shape new forms of decisionmaking in support of sustainable development. Again, if we want to move into a certain direction, we need to have some guides. We need to have some aspects that we grab to in order to design our paths, our future paths, and move towards desired targets. Sustainability to be able to be those targets and to help us, enable us to use SEA towards sustainability needs to define the framework within which strategic environmental assessment will be operating.

Strategic environmental assessment, on the other hand, can facilitate sustainability by establishing a broad perspective and addressing strategic options, by articulating sectoral policies in the institutional context in a policy framework, by contributing to create a strategic culture in decisionmaking, by ensuring good communication mechanisms and wide involvement of different perspectives, and by monitoring decisions to determine actual outcomes. All of these five points are key contributions that strategic environmental assessment can bring into the sustainability trend. And, in fact, they do relate to all the aspects that we have been addressing before: the need for broad perspective and the need to focus on strategic options, the need to articulate sectoral policies, bring them together, look at them as a common set, and look at the conflicts and opportunities that sectoral policies, when looked at together, can bring, contributing to create a strategic culture that's most important in decisionmaking. There's no way we can use a strategic tool if we don't think strategically when we're taking our decisions. Ensuring communication is very important to enable good communication between different stakeholders,

different agents, different people that are trying to achieve a common sense and have different perspectives, and, finally, the monitoring of the strategies. It's very difficult to define, to design a monitoring system for strategies. It's certainly much more complex, much more vague, and much more uncertain than defining a monitoring system for project development.

The other aspect is environmental policy. The sustainability focus can only be successful if the environmental policy drives the political and international agenda. The Biodiversity Convention, for example, calls for an integrated approach at the planning and program levels as a key driver for strategic environmental assessment. Strategic environmental assessment must, therefore, become strategic and instrumental as a facilitator of high-level policymaking.

The integration of decisionmaking is another key driver for strategic environmental assessment. Chapter 8 of Agenda 21 is addressing exactly the integration of environmental development in decisionmaking at policy, planning, and management level. The nature of SEA as facilitating decisionmaking can, therefore, help to ensure this broad perspective on how different parts may come together as a determinant role to play. SEA can, therefore, act as a facilitator, not as something that needs to be accomplished per se to satisfy a certain stage in the assessment process, SEA can become much more effective if it focused on the decisionmaking and on the broad perspective that decisionmakers need to have to ensure that their decision is broad and takes into account the sustainability issues, the environmental issues, the social issues that really matter in each case.

And, finally, quality assurance is again another driver for strategic environmental assessment. And why is that? Well, because an early beginning gets better chances to get it right in the end. So we've been proclaiming that we have to start earlier. We've been saying that ever since we mentioned that project EI should precede the decision on projects. We have realized that we still need to start even earlier when we are addressing policies, when we're addressing plans, when we're addressing programs, and particularly when we're addressing the strategies in each of these decisionmaking levels.

The future trends for SEA, therefore, can be summarized as:

The sustainability agenda is a key driver in strategic environmental assessment. We've seen it and it provides a framework, provides benchmarks for strategic environmental assessment. It enables us to define what can be an impact at the strategic--in strategic decisionmaking.

Another aspect in terms of the possible future trends is that SEA is probably more to become a framework that will facilitate social processes and political side in decisionmaking. This means that we need to recognize that within strategic decisionmaking there are social and political decisions, there are social processes that do really underline the need for decisions that will drive the priorities, will define the priorities, and strategic environmental assessment probably needs to engage into that reality and help to facilitate decisionmaking.

Another aspect or another trend of strategic environmental assessment in the future is that we probably will be abandoning EI base models and be replacing these EI base models by integrated decision-centered approaches. This is related to the recognition that SEA has to be applied to

decisionmaking, has to be centered in decisionmaking to become more effective in terms of its actual role.

And, finally, another aspect that can become quite significant in the future is that SEA is really expanding in multiple forms. More countries in the developed and developing world will be adopting SEA in different ways, exactly to fit their purpose of decisionmaking, SEA being adapted to the cultural, economic realities of those countries, rather than trying to impose a model of SEA that does not necessarily fit within the realities of the decisionmaking process.

So, to summarize the key aspects, the key messages that we've been addressing in this lecture, SEA shares EI roots, so SEA came always way after its common birth with EI as applied to projects. However, two main schools have influenced SEA methodologically: one, the policy planning school; the other, the environmental impact assessment school. SEA has and will evolve differently in the future depending on the decisionmaking systems and culture, which means that SEA will need to be much more dedicated to understanding what are the needs of decisionmaking and make itself adaptable to that decisionmaking reality. And, finally, sustainability as a major paradigm of the current EI is on the mainstream of future SEA development, and SEA can indeed identify and find in sustainability a key motivation to follow on.