

INSTITUTIONAL CAPACITY FOR STRATEGIC ENVIRONMENTAL ASSESSMENT IN PORTUGAL

Romão, Beatriz
Master in Environmental Engineering
IST, Lisbon, Portugal
beatriz.romao@ist.utl.pt

ABSTRACT - Strategic Environmental Assessment (SEA) is a strategic framework instrument that helps to create a development context towards sustainability, by integrating environment and sustainability issues in policy formulation and decision-making.

In order to successfully ensure this integration, it is vital to put a particular focus on the role of institutions while performing a SEA and to assess the needs and possibilities for institutional strengthening and change that enable their capacity building.

This study aims to evaluate and contribute to the improvement of the institutional capacity building in SEA in Portugal, through the characterization and discussion of the existing capacities.

A number of methods were selected to meet the above objectives, including literature review on SEA and the various subjects that integrate the theme of the study. Subsequently, technical opinions of SEA processes were analyzed and survey instruments were applied to gather primary information for the investigation, focusing on the thematic integration and existing communication between different entities at the time of issuing technical opinions.

The results suggest a gap in the institutional capacity and commitment to conduct SEA, justified by the lack of training, knowledge, incentives and willingness to act.

It can be concluded that it is necessary to develop initiatives to promote good practices and to bring SEA to the agenda, to survey the needs for capacity-building in institutions, to invest in the training of its staff, to promote mentalities change and to create a culture of strategic thinking.

KEYWORDS - Strategic Environmental Assessment, Capacity-building, Institutional Capacity, Governance

I. INTRODUCTION

Strategic Environmental Assessment (SEA) is recognized as an indispensable instrument for achieving sustainable objectives and, for that, a strategic approach is needed to increase the capacity to influence decisions and facilitate the integration of environmental and sustainability concerns in policy formulation and decision-making processes.

In order to ensure this integration, it is vital to put a particular focus on the role of institutions while performing an SEA and to assess the needs and possibilities for institutional strengthening and change. The possibilities for institutional

strengthening and change are closely related to capacity-building.

Institutional capacity encompasses, on the one hand, the functions that institutions should have the competence to perform, and, on the other hand, the resources and structures they need to that end (Bhagavan *et al.*, 2004). For ease of analysis, we subsume rules, values, behavior and relations within the concept of "structure".

In this sense, the relationship that institutions establish between them, and also with the public, matters a lot in capacity-building in SEA. By making the process as engaging and communicative as possible, we ensure, on the one hand, the sharing of knowledge and networking that allow

the creation of an integrated vision and participatory processes, appropriate to the problem and critical moments of decision, and on the other, informal cooperation and voluntary initiatives among institutions (Partidário, 2012).

However, most SEA effectiveness reviews are centered on procedural and normative dimensions (Aschemann *et al.*, 2015), that is, whether the process adopted reflects the institutional procedures and norms and meets the expectations of the agents (Pope *et al.*, 2018), and less attention has been paid to the pluralism and knowledge and learning dimensions.

Pluralism refers to the different value systems and perspectives held by different stakeholders and how these are managed and satisfied by the SEA process, and learning and knowledge refers to the recognition that SEA process facilitates instrumental and conceptual learning (Pope *et al.*, 2018).

This study focuses on pluralism and knowledge and learning dimensions, following the strategic thinking model developed by Partidário (2012).

This model is based on systems thinking, policy processes, multiplication of knowledge, networking of actors, inter-sectoral cooperation, dialogues and governance. Four components contribute to the SEA strategic thinking model: technical, process, institutional and communication and engagement.

Institutional and communication and engagement components play a key role in SEA institutional capacity. The institutional component is fundamental to understand the institutional context for decision-making. It relates to institutional analysis and change, as needed or simply as a result of policy dynamics, and the extent it influences decision capacity over time. The communication and engagement component is vital to ensure knowledge-brokerage, networking, stakeholder engagement and public participation (Partidário, 2012).

Public institutions, particularly the environmental authorities responsible for the SEA quality verification process, play a crucial role in contributing to the development, communication and completion of the SEA. Thus, it is

important to assess existing institutional capacity and the theoretical actor's perceptions about it.

For that, main objectives of this study are:

- Identification of criteria that reveal the adoption of good practices regarding institutional engagement in SEA processes, in accordance with international guidelines, including the SEA Better Practice Guide, published by the Portuguese Environment Agency (APA) in 2012;
- Review and evaluation of technical opinions on the 11 sectorial and spatial planning plans considered;
- Analysis of questionnaires results on the characterization of the institutional capacity;
- Preparation of comments on the opportunities and constraints identified in the set of opinions and responses appreciated.

II. METHODOLOGY

A number of methods were selected to meet the above objectives, including literature review, technical opinions on SEA processes review and one questionnaire.

The literature review focused on the keywords of this study: SEA, capacity-building and institutional capacity. For SEA, were explored the definitions, concepts and approaches. For capacity-building and institutional capacity were analyzed the importance of strategic thinking, public participation and governance in SEA's practice.

The sample of technical opinions, corresponding to 11 sectoral and spatial planning plans, includes a set of plans and programs whose SEAs were developed by the SENSU research team, integrated in the Center for Management Studies of IST, University of Lisbon. The option of reviewing only SENSU cases is justified by three reasons:

- 1) ease of access to technical opinions;
- 2) elaboration of SEAs following the same methodological approach;

3) SEAs follow the strategic thinking model, which is the model adopted for the elaboration of this study, and has a great learning component, essential to the theme of institutional capacity. This model has as a result governance, policy learning and trust through institutional collaboration, shared responsibility and priority setting.

A total of 363 technical opinions were reviewed.

The evaluation criteria adopted for the analysis of the technical opinions were based on guidelines and performance criteria present in various normative and guidance documents (Partidário, 2012; IAIA, 2002), always in the perspective of the strategic thinking model.

Table 1 | Evaluation criteria for the review of technical opinions

Criteria	Description
Issue of opinion with pronunciation on the SEA	Analyzes the number of opinions that make reference to the environmental assessment and compares it with the total number of opinions issued regarding the plan
Positive participation	It assesses the opinions that distinguish the positive aspects instead of focusing only on the negative ones
Justification	It analyzes the justification for the opinion given, whether favorable or unfavorable
Acceptance or proposal to change the assessment framework	It analyzes which opinions propose modification to the assessment framework
Adequacy to the plan scale	It analyzes the comments made to the SEA considering the objectives and territorial scope of application
Constructive participation and	It assesses the specificity of the opinion in terms of

specific suggestion of changes	the suggestion of amendments, contrary to generally indicating what should be changed
Thematic integration	It evaluates the integration of opinions of different technicians/entities on biophysical, social, institutional and economic issues
Strategic dimension	It assesses the ability to maintain a vision over long-term objectives, to flexibly deal with complex systems, to accept uncertainty, to adapt to changing contexts and circumstances, and to focus on a broader context

Finally, the questionnaire aimed to collect primary information for the investigation, focusing on the thematic integration and existing communication between different entities at the time of issuing technical opinions in the SEA processes.

It was distributed by APA to about 50 technicians from the different authorities with relevant environmental responsibilities.

The questionnaire included 30 questions on the education and training for SEA, the thematic integration of technical opinions and communication between different entities and the institutional process for issuing technical opinions.

A total of 14 responses from different entities was obtained (a response rate of 28% of adherence). This is a low value compared to what was initially expected, justified by the low adherence and willingness to participate in the study. To try to increase the responses, the questionnaire was resubmitted and attempts were made to contact the technicians in person, but without success.

III. STRATEGIC ENVIRONMENTAL ASSESSMENT AND INSTITUTIONAL CAPACITY

A. Historical context and approaches

SEA was created under the theory of Environmental Impact Assessment (EIA), with the same objective: assess environmental impacts. Nevertheless, EIA was not able to meet the requirements for an effective integration of environmental concerns at a strategic level of decision. The incapacity to adapt EIA approaches to those decision levels is related to (Partidário, 2000):

1) the timing of decision - EIA doesn't fit strategic decisions, characterized by a sequence of small incremental decisions;

2) the nature of the decisions - policy making and planning nature are less concrete and more vague than EIA's pragmatic and technocratic tool;

3) the level of information - the level of uncertainty associated with policy and planning levels is incompatible with the need for knowledge in project EIA.

In this sense, the need to shape EIA at policy and planning levels in order to integrate sustainability considerations and strategic decisions led to the development of SEA. The expression "Strategic Environmental Assessment" was first used in 1989, by Wood and Djeddour (1989), in an Environmental Commission draft: "The environmental assessments appropriate to policies, plans and programmes are of a more strategic nature than those applicable to individual projects (...) We have adopted the term 'strategic environmental assessment' to describe this type of assessment".

In line with the above, an understanding of SEA has been argued over the last decade which takes SEA as an environmental assessment instrument with a strategic nature, conceived as a flexible framework of key elements, acting strategically in a decision process to enable a facilitating role, ensuring an added-value to decision-making (Partidário, 1999 and 2000).

More recently, Partidário (2012) defines SEA as a strategic framework instrument that helps to create a

development context towards sustainability, by integrating environment and sustainability issues in decision-making, assessing strategic development options and issuing guidelines to assist implementation.

SEA relates to highly complex issues, at multiple spatial and temporal scales, engaging a variety of stakeholders and consequently, multiple perspectives and expectations. In this way, the approach defended by Partidário (2012) responds better to these questions since it follows the strategic thinking model which is understood as having a vision over long-term objectives, flexibility to work with complex systems, adapting to changing contexts and being strongly focused on what really matters in a broader context (in terms of time, space, and perspectives).

B. SEA benefits and constraints

Applying SEA has benefits for both decision-making procedures and development outcomes. It helps to understand the environmental and sustainability contexts to support more informed decision making, and to identify new opportunities by encouraging a systematic and thorough examination of development options.

SEA helps to ensure that the prudent management of natural resources and the environment provide the foundations for sustainable economic growth which, in turn, support political stability.

SEA can also assist in building stakeholder engagement for improved governance, facilitate transboundary cooperation around shared environmental resources, and contribute to conflict prevention.

SEA is a continuous, iterative and adaptive process focused on strengthening institutions and governance. It is not a separate system, nor a simple linear, technical approach. Instead, it adds value to existing systems and reinforces its effectiveness by assessing and building capacity for institutions and environmental management systems.

In summary, there are several reasons why SEA is important:

1) Promotes and helps to understand sustainability challenges, incorporating an integrated perspective earlier in policy-making and planning processes;

2) Supports strategic decision-making, setting enabling development conditions;

3) Facilitates identification and discussion of development options and provides guidelines to help development to follow sustainability trajectories;

4) Informs planners, decision makers and affected public on the sustainability of strategic decisions, ensuring a democratic decision making process, enhancing the credibility of decisions;

5) Encourages political willingness, stimulates changes to mentalities and create a culture of strategic decision-making.

However, SEA has some constraints. In addition to being seen as an extension of the EIA to facilitate strategic decisions at the level of plans and programs (Monteiro, 2011), to being time, money and other resources consuming, delaying the decision process development (Dalal-Clayton and Sadler, 2004), there is also a concern to be an obstacle to the decision-making process, leading to a cultivation of a legal obligation to the instrument, characterized by a lack of strategic thinking and poor assessment of problems.

C. SEA in Portugal

SEA has been implemented in Portugal for 11 years and has an approach to the national legal system based on principles of flexibility, procedural transparency, accountability of entities promoting plans and programs, and lack of a regulatory body.

Periodically, APA prepares reports that assess the quality of the SEA through the assessment of the compliance of the Environmental Reports (ER).

In the most recent report (Cabral, 2017), APA notes that the key strengths in terms of compliance criteria and guidance are:

- Definition of critical decision factors;
- Assessment of risks and opportunities;

- Definition of the Strategic Reference Framework.

The main weaknesses pointed out in the report are:

- Description of PPP alternatives;

- Designation of authorities to be consulted.

SEA is not only about assessing the environmental impacts of proposed plans, policies and programmes (PPP) but it is also about evaluating alternative visions and development intentions incorporated in policy, planning or programme initiatives, ensuring full integration of relevant biophysical, economic, social and political considerations (Partidário, 1999) and adopting a decision-centered approach that gives more attention to the institutional context (Nilsson and Dalkmann, 2001). Thus, with regard to the last weakness identified by APA, this seems to suggest the existence of a gap in the establishment of institutional responsibilities which, in turn, interferes with institutional cooperation and the engagement of agents that are two components that integrate institutional capacity-building.

Globally, APA identifies that there is a concern to comply with legal requirements on SEA, not always resorting to good practices. Many SEA procedures continue to follow a traditional EIA approach rather than following a strategic vision (Cabral, 2017).

More recently, on September 7, 2018, APA organized a debate on The "Effectiveness of SEA in Portugal" in order to understand the influence of SEA on development processes and their value to environmental authorities and other actors. It concluded that:

- There remains a mandatory position vis-à-vis the SEA instrument which prevents all its advantages and added value from being recognized and strengthened;

- It is necessary to change the current practice of SEA, cultivating good practices and a spirit of initiative, creativity, encouragement, learning, improvement, positive and constructive;

- Public participation is very low, which can be due to a lack of

participatory culture and also to the feeling that participation has little influence on the outcome of planning processes;

- Training potentials, both at the level of public and institutional consultation techniques and at planning level, are not being fully exploited since the potential of the SEA itself is not being addressed;
- The success factors for the effectiveness of SEA are innovation, creativity, dialogue, open-mindedness, cultural change, capacity-building and strategic thinking. It is recognized that the learning process is very important for the change of culture and mentalities and that it is necessary to replicate cases of good practices and to invest more in activities that bring SEA to the agenda.

D. Institutional capacity and governance

Integrating the environment into strategic planning and decision-making implies that key environmental issues are taken into account in policy formulation and, to that end, it is vital to focus on the role of institutions in developing an SEA. But what are institutions? One of the most famous definition is presented by Douglas North (1994), who says that *"Institutions are the humanly designed constraints that structure human interaction. They are made up of formal constraints (e.g., rules, laws, constitutions), informal constraints (e.g., norms of behavior, conventions, self-imposed codes of conduct), and their enforcement characteristics"*.

In order for institutions to perform their functions, it is necessary to understand the institutional context, which implies not only an institutional analysis but also institutional change, as needed or simply as a result of policy dynamics. However, there seems to be some difficulties in changing institutions, partly explained by the slow changing nature of norms as well as their importance in the enforcement of formal rules. Although formal rules may be changed overnight,

informal norms usually change only gradually (North, 1994).

In this way, cultivating the change of mentalities at the institutional level, working mainly on changing the formal constraints, such as shared values, norms and traditions, becomes essential so that institutions can become more capable and more adapted to the contexts of uncertainty and strategy underlying the process of strategic environmental assessment.

It is equally important to discuss the concept of capacity. In this study, we define SEA capacity as the ability of the SEA system to create value to decision making (Partidário, 2000), being shaped by the dominant system of values so as to perform and achieve its intended purpose of putting broad sustainability values at the center of decision-making.

Reviewing the European Commission reports on the implementation of the SEA Directive, the 2009 report (COWI, 2009) states that "It has not been possible to conclude anything with regard to effectiveness of institutional and legal arrangements as experiences so far are too limited to provide reliable evidence". However, the 2016 report (Milieu, 2016) indicates that "SEA practitioners (...) agreed that ER are often overly comprehensive and not sufficiently tailored to the assessment needs (...). They mainly attribute this weakness to (...) a tendency on the part of the authorities to follow the requirements (...) very conservatively".

More recently, Monteiro *et al.* (2018) conducted a study on how different governance contexts may influence SEA and Portugal was one of the case studies. The results indicate that despite the innovative national guidance that promotes a strategic thinking based SEA methodology, the use of an EIA-based SEA approach still prevails and, although the new terminology for SEA set in the guidance is extensively used because of authorities demand, the spirit followed in practice and the assessment philosophy has not changed in practice.

IV. RESULTS

A. Questionnaire

Table 2 | Most relevant results from the questionnaire

Key question	Answer	%
How familiar are you with DL 232/2007?	Completely	64
	Quite a bit	29
	A little	7
	Nothing	0
In how many technical opinions in SEA processes were you involved?	None	0
	1 to 3	0
	4 to 10	29
	11 to 20	0
	More than 20	71
Are you aware of any normative and technical guidance documents on the implementation of SEA?	Yes	86
	No	14
Does the entity have a good understanding on what SEA is?	Yes	86
	No	0
	DK/DA	14
Is there any training policy in the area of environment/sustainability in your entity?	Yes	57
	No	36
	DK/DA	7
Is the training policy appropriate to the field of SEA?	Yes	22
	No	67
	DK/DA	11
Do you have training in SEA?	Yes	14
	No	79
	DK/DA	7
How do you rate the opinions issued by the entity regarding its thematic integration?	Very integrated	14
	Moderately integrated	57
	Poorly integrated	0
	No integration	0
Do you consider that there is thematic integration between the opinions issued by the different entities?	Yes	28
	No	43
	DK/DA	29
Do you consider there is availability for communication and collaboration in the issue of opinions within the entity?	Yes	57
	No	14
	DK/DA	29
What is the percentage of joint working time within the entity on the issue of opinions?	0-25%	71
	25-50%	0
	50-75%	0
	75-100%	0
	DK/DA	29
Do you consider the existing media to be adequate and sufficient within the entity?	Yes	64
	No	7
	DK/DA	29
Do you consider there is availability for communication and collaboration in the issue of opinions between entities?	Yes	50
	No	21
	DK/DA	29
What is the percentage of joint working time between entities on the issue of opinions?	0-25%	71
	25-50%	0
	50-75%	0
	75-100%	0
	DK/DA	29
Do you consider the existing media to be adequate and sufficient between entities?	Yes	71
	No	0
	DK/DA	29
What are the contributions of institutional consultation in SEA processes?	Legal requirements	30
	Technical contributions	30
	Aggregation of information	9
	Aggregation of value	9
	DK/DA	22
How do you assess the way in which SEA teams consider technical advice?	Very good	7
	Good	21
	Regular	36
	Poor	0
	Very poor	0
	DK/DA	36
The public recognition of technical opinions in institutional consultation is:	Very good	0
	Good	14
	Regular	43
	Poor	7
	Very poor	0
	DK/DA	36

B. Review of technical opinions

Table 3 | Results from the review of technical opinions

Entity	%	Label
Issue of opinion		
92	25	Opinions with pronouncement on the SEA
271	75	Opinions without pronouncement on the SEA
Total	363	100
Positive participation		
21	23	There is positive participation
71	77	There is not positive participation
Total	92	100
Justification		
71	77	Opinion is justified
21	23	Opinion is not justified
Total	92	100
Acceptance or proposal to change the assessment framework		
42	59	Propose changes
29	41	Does not propose changes
Total	71	100
Adequacy to the plan scale		
43	61	Opinion is adequate to the plan scale
28	39	Opinion is not adequate to the plan scale
Total	71	100
Constructive participation and specific suggestion of changes		
53	75	There is specific and constructive participati
18	25	There is not specific and constructive partici
Total	71	100
Thematic integration		
21	30	Opinions are thematically integrated
50	70	Opinions are not thematically integrated
Total	71	100
Strategic dimension		
10	14	Opinions have strategic dimension
61	86	Opinions do not have strategic dimension
Total	71	100

V. DISCUSSION

Beginning the discussion of the results by the questionnaire addressed to the entities, at the level of education and training for SEA, respondents consider, in general, that:

- they are very familiar with DL 232/2007;
- they were already involved in the elaboration of several technical opinions in SEA processes;
- they are knowledgeable and often rely on normative and technical guidance documents (mostly the SEA Best Practices Guide that follows the strategic thinking model);
- in the institutions they work for there is a good understanding of what SEA is.

However, the other reality presented by the results is that again most of the respondents admits that the training policy in the institutions where they work, when it exists, is not adequate to SEA and that the respondents themselves do not have complementary training in the area.

These two realities are somewhat contradictory since, despite the acknowledged experience of drawing up opinions on SEA procedures, there does not appear to be a sufficiently consolidated background training to make it consistent to say that both institutions and their representatives have a good understanding of what SEA is. Thus, these results seem to suggest that the technical capacity existing in the institutions for the practice of preparing technical opinions for SEA processes is low.

Regarding the thematic integration and communication component present in the questionnaire, the results indicate that the respondents consider that the opinions issued by the entities in which they work are mostly moderately integrated but consider that there is no thematic integration between the opinions issued by the different entities. As a complement to this question, the communication within and between entities was evaluated. In both cases, only about half of the respondents stated that there is openness and willingness to communicate and collaborate in the issue of opinions, but in both cases the majority admit that this collaboration takes place in the range of 0-25% of the times. Nevertheless, most respondents agree that the existing means of communication are adequate and sufficient. These results seem to suggest that the low value corresponding to the development of joint work within and between entities, which consequently translates to a reduced thematic integration of opinions, is not dependent on the existing communication tools.

Consistent with the above are the results concerning the review of technical opinions with regard to thematic integration. These show that the vast majority of opinions do not integrate the different themes and, to a lesser extent, these are issued jointly between entities. There seems to be a gap between the involvement and collaboration that theoretically must exist during an SEA process and the one that actually exists. This lack of participatory and collaborative spirit may want to reveal a culture of

mentality that is not open to collaborative dialogue, which is a tool to support learning and knowledge construction that indirectly translates into improved institutional capacity building.

The remaining results obtained through the review of technical opinions are in line with the previous one, since they demonstrate that the voluntary issuance of opinions with regard to SEA is significantly low and that, when it exists, it is characterized by a lack of strategic thinking, adequacy to the plan scale and a positive and constructive posture. Nevertheless, the review shows that, in the vast majority of cases, the opinions include a specific suggestion of amendments to the SEA. This result may wish to reflect a commitment of the institutions to contribute to the planning process, but may also be the reflection of what each entity wants to see expressed in the plan, regardless of whether it is adequate to the plan scale or integrated with the remaining opinions.

The weak apparent investment of the institutions in the process of issuing opinions may also be related to the recognition of the value of the SEA and the institutional consultation process. In this way, the last part of the questionnaire was intended to study these issues. The results show that most respondents consider that the contributions of the institutional consultation are mainly legal requirements and technical contributions to the planning process, with very little recognition of the consultation process as a means to aggregate information and value. Regarding the recognition of the institutional consultation process, respondents consider themselves satisfied with the way in which the opinions issued are considered by the SEA teams, but when asked about the public recognition of the opinions in the institutional consultation, the answers reveal less satisfaction.

These responses seem to reflect, on the one hand, a mandatory attitude towards the environmental assessment instrument and, on the other hand, a sense of disincentive caused by the poor

recognition of the consultation process in the eyes of the public.

The above results generally suggest that there is an institutional concern to comply with the legal requirements but that often best SEA practices are not applied. A traditional EIA approach is still followed in detriment of the strategic thinking approach developed in the national guidance guide.

These conclusions seem to indicate a gap in institutional capacity building and in the commitment to conduct a strategic SEA, justified by lack of training, incentives and willingness to act.

With regard to the application of the strategic approach supported by Partidário (2012), it is seen that the current practice suggests the absence of a survey of capacity-building needs in institutions, which in turn prevents appropriate institutional changes from being recognized and achieved. These factors result in lower levels of competence to perform SEA and a lower capacity to respond to changes in institutional settings. In addition, the absence of a culture of involvement, integration and communication distorts the learning, knowledge sharing and networking component associated with capacity-building.

VI. CONCLUSIONS

In theory, there is a realization that SEA provides the potential for capacity-building. Despite this, the discourses on the current state of institutional capacity building are not positive. There is a realization that capacity-building potentials are not being fully exploited since the potential of SEA itself is not being realized, and that the existing institutional capacity is low. There is also the realization that SEA is conducted with a traditional approach (which differs little from the EIA for projects), that there is still a mandatory stance vis-à-vis the SEA instrument and that the spirit and the assessment philosophy have not changed. In practice, the results expressed in this study prove it.

It is concluded that the institutions involved in SEA processes in Portugal

need a greater capacity to apply SEA as a decision support tool.

It is necessary to develop initiatives to promote good practices and to bring SEA to the agenda, to survey the needs for capacity building in institutions, to invest in the training of its staff, and to cultivate cultural and mentalities change, fostering a positive and constructive spirit of initiative, creativity, encouragement, learning and improvement.

It is also recognized that the learning process is very important for the change of culture and mentalities. A growing concern with research and capacity building will lead to the creation of favorable conditions for learning. This involves the establishment of mechanisms that ensure not only that learning occurs and that knowledge is generated, but also that the institutional capacity to absorb such knowledge exists.

Excellence in SEA research and practice involves learning from and through practice in order to improve performance.

VII. REFERENCES

- Aschemann, R., Baldizzone, G., and Rega, C. (2015) 'Public and stakeholder engagement in SEA', in Sadler, B., and Dusík, J. *European and International Experiences of Strategic Environmental Assessment*. Londres: Routledge.
- Cabral, S. (2017) *A Avaliação Ambiental Estratégica em Portugal nos últimos 10 anos*. Lisboa: Agência Portuguesa do Ambiente. Acesso em: https://www.apambiente.pt/_zdata/Apresentacoes/2018/ConferenciaComemorativa-10anos-AAE/1Sara%20Cabral_APA.pdf
- COWI. (2009) *Study concerning the report on the application and effectiveness of the SEA Directive (2001/42/EC)*. Final report to the European Commission. Acesso em: <http://ec.europa.eu/environment/eia/pdf/study0309.pdf>

- Dalal-Clayton, B., and Sadler, B. (2004). 'Strategic Environmental Assessment: An International Review'. International Institute for Environment and Development.
- IAIA. (2002) 'Strategic Environmental Assessment Performance Criteria'.
- Milieu (2016) Study concerning the preparation of the report on the application and effectiveness of the SEA Directive (2001/42/EC). Final study to the European Commission.
- Monteiro, M. (2011) *Percepções sobre a Contribuição da AAE nos Processos de Planeamento*. Dissertação de Mestrado em Engenharia do Ambiente. Instituto Superior Técnico – Universidade Técnica de Lisboa, Lisboa. 55 pp.
- Monteiro, M., Partidário, M. R., and Meuleman, L. (2018) 'A comparative analysis on how different governance contexts may influence Strategic Environmental Assessment'. *Environmental Impact Assessment Review*, 72, 79-87.
- Nilsson, M., and Dalkmann, H. (2001). 'Decision Making and Strategic Environmental Assessment'. *Journal of Environmental Assessment Policy and Management*, 3, 305-327.
- North, D. C. (1994). 'Economic Performance through Time', *The American Economic Review*, 84, 359-368.
- Partidário, M. R. (1999) 'Strategic Environmental Assessment – principles and potential' in Petts, J. (Ed) *Handbook of Environmental Impact Assessment*. Londres: Blackwell.
- Partidario, M. R. (2000) 'Elements of an SEA framework: improving the added-value of SEA', *Environmental Impact Assessment Review*, 20, 647-663.
- Partidário, M. R., (2012) *Guia de melhores práticas para Avaliação Ambiental Estratégica – orientações metodológicas para um pensamento estratégico em AAE*. Lisboa: Agência Portuguesa do Ambiente.
- Pope, J., Bond, A., Cameron, C., Retief, F., Morrison-Saunders, A. (2018) 'Are current effectiveness criteria fit for purpose? Using a controversial strategic assessment as a test case'. *Environmental Impact Assessment Review*, 70, 34-44.
- Slunge, D., Nooteboom, S., Ekbom, A., Dijkstra, G., Verheem, R. (2009) *Conceptual Analysis and Evaluation Framework for Institution-Centered Strategic Environmental Assessment*; Final Draft