

Strengthening Monitoring Systems to Promote Urban Sustainability in Municipal Planning

Written by Ana Maria Pacetti, Tomás B. Ramos, Sara Moreno Pires, Alexandra Polido

Synopsis

This policy brief highlights the critical role of Strategic Environmental Assessment (SEA) follow-up of Municipal Planning to enhance the effectiveness of SEAs processes and the need to integrate *ex-post* monitoring, management and reporting instruments into urban planning. Strengthening follow-up systems can improve decision-making to address better city climate change impacts, air pollution, and resource management while promoting sustainable development.

Problem

The Strategic Environmental Assessments (SEAs) follow-up stage in Urban Planning remains underdeveloped across various contexts, lacking consistent monitoring practices. This issue stems from factors such as:

- insufficient human and financial resources allocated to monitoring tasks;
- Unrealistic indicators that are difficult or costly to collect and evaluate, along with frequent cases of irrelevant or redundant indicators;
- lack of collaboration between SEA professionals and planners;
- lack of participation and involvement of civil society stakeholders;
- challenges in assessing causal relationships between urban planning and their sustainability impacts, including environmental, socio-economic, cultural and institutional aspects.

These obstacles impede the ability to evaluate whether urban plans meet their objectives or whether the anticipated environmental impacts align with actual outcomes. As a result, SEAs fail to ensure that plans meet sustainability objectives. Without robust monitoring, management and reporting in the *ex-post* stage, learning from past actions, informing current and future decisions, and ultimately addressing the most significant impacts and achieving sustainable development goals becomes more difficult.

Policy brief #4

21 March 2025



About the study

This study looks at how Municipal Master Plans (MMPs) and their Strategic Environmental Assessments (SEAs) are monitored in Portugal, focusing on how the follow-up mechanisms work, including monitoring, and influence decisions. The main goal is to understand how monitoring can better support urban plans and their environmental management actions, while also identifying ways to connect SEA monitoring with other tools.

To address this, the research analyzed SEA monitoring reports and Reports on the State of Spatial Planning (RSSPs) from 12 Portuguese municipalities. A practical framework was used to guide the analysis, focusing on key aspects such as governance, indicators' selection, and monitoring in practice. The findings aim to support local governments to improve their monitoring efforts and create more effective urban plans.

Context

In Portugal, Municipal Master Plans (MMPs) must include a Strategic Environmental Assessment (SEA) with annual monitoring of significant environmental effects. However, SEA monitoring is rarely conducted in practice, limiting its potential to guide sustainable urban development.

At the same time, local governments must prepare a Report on the State of Spatial Planning (RSSP) when revising MMPs. Despite lacking clear methodological guidelines, these reports often incorporate indicators that monitor local environmental and social changes. This overlap highlights the opportunity to integrate SEA monitoring and RSSPs, creating more effective tools for advancing urban sustainability.

*”Recommendations to address ongoing challenges [in monitoring] include ‘a more explicit link between the **SEA requirements of an individual plan or programme and existing monitoring activities, in order to avoid unnecessary duplication of these actions.**”*

(González, 2022, p. 170)

Results

In the 12 selected cities, the analysis of the RSSPs and the monitoring reports of the existing SEAs based on the framework adapted from Waylen et al. (2019) reveals some important insights:

Monitoring frequency is low

Out of 12 cases analyzed, six have monitoring reports (in most cases, the RSSP). Only one case has a specific SEA monitoring report;

SEA influences RSSPs

Three reports directly reference the SEA, partially adapting its indicators and 'Critical Decision Factors' ((Partidário, 2007) within the RSSPs. The other cases, while not explicitly citing the SEA's monitoring program, incorporate indicators on topics that align with those the SEA addresses;

Monitoring faces several challenges

Outdated databases, restricted access to information, limited stakeholder collaboration, and minimal public participation hinder effective monitoring. Additionally, persistent difficulties obtaining data cited in many reports can lead to a limited understanding of spatial realities, ultimately compromising the effectiveness of strategic decisions;

Policy recommendations

It is critical to enhance monitoring systems to increase the efficiency and effectiveness of SEAs and improve the impacts of MMPs for sustainable cities. The policy recommendations to improve the SEA follow-up, including monitoring, management, and reporting, within decision-making processes, are structured around five key pillars:

1 Leverage synergies between SEA monitoring and RSSPs

Promote integration between SEA monitoring processes and RSSPs to optimize efforts and enhance the effectiveness of monitoring frameworks. Overlapping the indicators and objectives of these instruments creates opportunities for alignment, reduces redundancies and improves resource allocation. Establishing clear guidelines for combining data and aligning methodologies can ensure that SEA findings directly inform the preparation and revision of RSSPs, fostering a more cohesive approach to sustainable urban planning.

2 Foster collaboration between SEA and MMP professionals

Encourage greater cooperation between the professionals responsible for SEA implementation and those developing MMPs, including when preparing RSSPs. Improved communication and collaboration can help bridge the gaps between these processes, ensuring monitoring efforts are more consistent and aligned with planning goals. This can be achieved by promoting joint training sessions, interdisciplinary workshops, and shared platforms for data exchange, creating synergies that enhance the overall effectiveness of both instruments.

3 Strengthen national monitoring systems for data collection and access

Develop a national, harmonized and centralized system to organize, share and consolidate data across various municipal divisions. This approach would streamline access, reduce delays and redundancy, and ensure consistency and continuous monitoring. Additionally, creating clear data-sharing agreements with external entities like the National Institute for Statistics (INE) or the General Directorate of (DGT) can streamline access to crucial raw data and information. A centralized approach would improve the availability and quality of data, supporting more informed decision-making and effective urban planning.

4 Involve diverse actors in monitoring and decision-making

To enhance data access and transparency, engage stakeholders, including civil society organizations, the private sector, local communities, and entities like the INE. Public consultations and data-sharing agreements can enrich monitoring frameworks and ensure broader participation.

5 Link monitoring efforts to decision-making processes

Establish mechanisms to ensure that monitoring findings are directly linked to decision-making processes. Require that monitoring reports include actionable recommendations and feedback loops for adapting policies and plans. Developing standardized templates and guidelines for integrating monitoring results into planning cycles can bridge the gap and enhance the strategic impact of monitoring.

Policy brief #4

21 March 2025



Limitations

While this study yielded important insights, a limitation was its reliance on documentary analysis alone, which does not provide a means to identify potential causes for the challenges observed. Therefore, we suggest that empirical studies be conducted to complement and deepen the findings obtained here. Also, covering more cities would enable to better understand how transversal to the national reality are the findings for these 12 selected cities.

Acknowledgements

This work was funded by Portuguese national funds through FCT - Fundação para a Ciência e a Tecnologia, I.P., under the project PTDC/GES-URB/0804/2020 (doi.org/10.54499/PTDC/GES-URB/0804/2020). GOVCOPP is funded by Portuguese national funds through FCT (UIDB/04058/2020)+(UIDP/04058/2020). CENSE is funded by Portuguese national funds through FCT (strategic project UIDB/04085/2020). Alexandra Polido is funded by Portuguese national funds through FCT (Ref. CEECINST/00013/2021/CP2779/CT0021; doi: 10.54499/CEECINST/00013/2021/CP2779/CT0021).

More information can be found on our website: <http://envision.web.ua.pt/>

References/more information

Partidário, M. do R. (2007). Strategic Environmental Assessment Good Practices Guide Methodological Guidance.

González, A. (2022). Strategic environmental assessment monitoring: the enduring forgotten sibling. *Impact Assessment and Project Appraisal*, 40(2), 168–176. <https://doi.org/10.1080/14615517.2022.2031552>

Waylen, K. A., Blackstock, K. L., van Hulst, F. J., Damian, C., Horváth, F., Johnson, R. K., Kanka, R., Külvik, M., Macleod, C. J. A., Meissner, K., Oprina-Pavelescu, M. M., Pino, J., Primmer, E., Rîşnoveanu, G., Šatalová, B., Silander, J., Špuleroová, J., Suškevičs, M., & Van Uytvanck, J. (2019). Policy-driven monitoring and evaluation: Does it support adaptive management of socio-ecological systems? *Science of the Total Environment*, 662, 373–384. <https://doi.org/10.1016/j.scitotenv.2018.12.462>