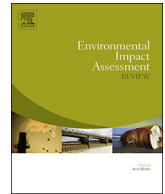




ELSEVIER

Contents lists available at ScienceDirect

Environmental Impact Assessment Review

journal homepage: www.elsevier.com/locate/eiar

Strategic environmental assessment in Swedish municipal planning. Trends and challenges

Balfors B.^{a,*}, Wallström J.^b, Lundberg K.^c, Söderqvist T.^b, Hörnberg C.^d, Högström J.^a^a KTH Royal Institute of Technology, Dept. of Sustainable Development, Environmental Science and Technology, 100 44 Stockholm, Sweden^b Anthesis Envenco AB, Barnhusgatan 4, 111 23 Stockholm, Sweden^c Ecoloop AB, Katarinavägen 7, 116 46 Stockholm, Sweden^d Environmental Law and Development SWE AB, Birger Jarlsgatan 2, 114 34 Stockholm, Sweden

ARTICLE INFO

Keywords:

Strategic environmental assessment
Municipal comprehensive plans
SEA practice
Alternatives
Sweden

ABSTRACT

More than a decade after the implementation of the EU Directive on Strategic Environmental Assessment (SEA) into Swedish legislation, a comprehensive study has been conducted to analyze the development of SEA practice in municipal planning. The analysis was based on a nationwide mapping of SEA in Swedish municipal comprehensive plans and municipal sector plans, such as energy plans and waste plans, which were adopted in the period 2004–2014. The mapping was used for obtaining evidence of, and explanations for, the extent to which SEAs have been carried out and to enable an identification of the presence of alternatives and specified purposes of the plan. In this paper, the result of the analysis of the development of SEA practice is presented, which shows that municipal comprehensive plans had an SEA to an increasingly greater extent, up to on average 90% for the period 2010–2014. For waste plans and energy plans, corresponding figures for the same period were significantly lower. In addition, the result shows a decreasing trend between 2006 and 2014 regarding the proportion of SEAs that included more than one plan alternative. The use of a zero alternative, however, increased from 2006 to 2014. A regression analysis was conducted to identify determinants that explain the variation in the degree to which screening and SEAs were conducted. The findings of the study show that a systematic mapping of SEA practice provides empirical basis for the development of policy measures to enhance the use of SEAs in municipal planning. Furthermore, it is argued that strengthening the link between alternatives and the purposes of the plan may foster a more strategic thinking when identifying reasonable alternatives on how to promote sustainable development within the planning. Moreover, it is argued that mandatory SEA should be considered in municipal comprehensive and sector planning.

1. Introduction

The Strategic Environmental Assessment (SEA) Directive (European Commission, 2001) was introduced to enhance the effective consideration of environmental targets and environmental effects by planners and decision-makers, in particular through the assessment of alternatives (Commission of the European Communities, 1996). According to European Commission (2009, 2017), SEA practice has progressively led to a higher quality of plans and a greater environmental emphasis. However, problems exist with the selection of reasonable and relevant alternatives to a plan or program (European Commission, 2009) which depends on the lack of a common approach for defining the type and number of alternatives to be included (European Commission, 2017). As a consequence, alternatives cannot fully play its role as the intended means for addressing environmental impacts in

planning and decision-making. To fulfill the potential of SEA, all Member States should pursue their implementation efforts to ensure compliance with the SEA Directive (European Commission, 2017).

The EU reports provide a broad overview of SEA practice in the 28 Member States, but they need to be complemented with empirical analyses of SEA in different national contexts in order to gain a deeper understanding of how SEA practice is developing. Numerous national studies and research projects have been conducted in which SEA performance in different countries was analyzed (e.g. Fischer, 2010; Stoeglehner, 2010; Weiland, 2010). These studies provide insights into SEA practice from individual countries and contribute to the accumulated transnational knowledge on the role of SEAs in planning. Other studies have reported on elements in the SEA process such as alternatives (e.g. Geneletti, 2014) and screening (e.g. Bidstrup, 2017), meaning the process of determining whether plans and programs are

* Corresponding author.

E-mail address: balfors@kth.se (B. Balfors).

<https://doi.org/10.1016/j.eiar.2018.07.003>

Received 4 February 2018; Received in revised form 11 July 2018; Accepted 11 July 2018

0195-9255/ © 2018 Elsevier Inc. All rights reserved.

likely to have significant environmental effects and thus require an SEA (Glasson et al., 2005). Pope et al. (2013) and González et al. (2015) state that alternatives are often not properly handled, while others discuss poor routines for screening due to, for example, the lack of understanding of legal requirements (Faith-Ell et al., 2015) or because the SEA is one step behind the planning process (Stoeglehner, 2010). Empirical studies like these nourish a learning process that gradually improves the application of SEA in planning and decision making. Hence, a systematic analysis of SEA practice to identify trends and challenges will help Member States to meet the Commission's call for additional efforts to ensure compliance with the SEA Directive.

In Sweden, the need for a further consolidation of environmental assessment as a tool for catalyzing sustainable development was discussed in the latest evaluation of the Swedish environmental quality objectives (Swedish Environmental Protection Agency, 2015a:6662). The evaluation report highlighted the important role of spatial planning in meeting environmental quality objectives and stated that environmental assessment could be an effective tool for targeting these objectives (Swedish Environmental Protection Agency, 2015a:6662). However, due to a lack of compliance with national legislation, e.g. concerning the inclusion of alternatives, SEA is not able to fully fulfill its purpose (Swedish Environmental Protection Agency, 2015b:6664).

In addition, the National Board of Housing, Building and Planning (2013:16) stated that SEAs in municipal comprehensive plans are not being used as the strategic process tool they are meant to be. Several reasons have been mentioned for the limited application of SEAs in planning practice, e.g. the uneven distribution of knowledge among practitioners on SEA processes and SEA regulations (Faith-Ell et al., 2015). Moreover, a lack of municipal resources might restrict the application of SEAs, especially in smaller municipalities (Swedish Environmental Protection Agency, 2015c:6666; Emmelin and Lerman, 2005). Furthermore, the Swedish Environmental Protection Agency (2015b:6664) concludes that several authorities in Sweden have difficulties in determining whether the impacts on the environment are considered to be significant, which results in an uncertainty about when to carry out an SEA.

In order to generate knowledge on how to strengthen spatial planning as a tool to meet environmental objectives, the Swedish Environmental Protection Agency and the Swedish Agency for Marine and Water Management set up a research program (Swedish Environmental Protection Agency, 2012a,b). Within this program, a three-year research project, Sustainable Planning and Environmental Assessment Knowledge (SPEAK) was initiated in 2014 which included a comprehensive scientific study of SEA practice in municipal planning. This study encompassed a combination of qualitative and quantitative methods with the purpose to analyze trends and challenges in Swedish SEA practice and identify possible determinants that strengthen or weaken SEA as a tool to enhance sustainable development through municipal planning. More specifically, the study addressed three research questions:

1. How has the application of SEA for municipal comprehensive and sector planning developed from their introduction in 2004?
2. To what extent does Swedish SEA practice comply with legal requirements concerning the identification and assessment of alternatives to fulfill the purpose of the plan?
3. Which determinants affect the likelihood that an SEA is conducted?

This paper addresses the development of SEA practice in Swedish municipal planning since the implementation of EU's SEA Directive in 2004. On basis of empirical analysis, trends regarding the use of SEA in municipal planning are explored and challenges related to the inclusion of key components such as screening, plan alternatives and the purpose of the plan are discussed. In addition, possible determinants for using or not using screening and SEA in municipal planning are examined to identify potential impediments for the application of SEA and

consideration of environmental targets in municipal planning. To remedy deficiencies in SEA practice, measures are discussed to ensure the environmental assessment of municipal plans and counteract possible underlying causes for the possible lack of compliance with regulations such as the EU SEA Directive and the Swedish Environmental Code. While these measures are based on a study of Swedish experiences, they address issues regarding e.g. the use of screening and alternatives that apply to SEA practice beyond the Swedish context.

2. Description of the Swedish context

2.1. Planning in Sweden

The Swedish planning system can be described as strongly decentralized in an international perspective (Hedström and Lundström, 2013). Unlike many other countries, the relation between different governmental levels is not hierarchical. Instead, Swedish planning can be described as an interaction between municipal land use planning and sector planning on a local, regional, and national level. The so-called municipal planning monopoly means that the State can only act against municipal decisions that contravene certain national interests (Blücher, 2013). Hence, municipal land use planning becomes the focal point for action towards sustainable development in Sweden, where national and regional policies are integrated and implemented in the local spatial context.

Municipal land use planning is carried out through the various planning instruments provided for by the Planning and Building Act (2010:900), among others the municipal comprehensive plan (MCP). Each municipality is required to prepare an MCP, which is the central planning instrument of the Swedish planning system (Fredriksson, 2013). Even though the MCP is not legally binding, it provides guidance for other municipal decisions that affect land and water use and how the built environment is used, developed, and preserved (Hedström and Lundström, 2013), e.g. through the detailed development plan that is used to regulate land use in line with the goals of the MCP. The MCP must be considered by the municipal council at least once during each term of office (4 years) in order to assess the up-to-dateness of the plan (Plan and Building Act, 2010). Besides MCPs, municipalities can develop a detailed comprehensive plan (DCP) in order to achieve more in-depth planning in relation to a limited development area. Moreover, the municipalities can decide to draw up a supplement to the MCP, a so-called thematic comprehensive plan (TCP) in which questions that are not (fully) addressed in the MCP are elaborated. Framing a TCP is a way of keeping the current MCP updated pending a revision. The DCP and TCP are optional plans, in contrast to the MCP. The TCPs have in recent years frequently been used for the assessment of the location of wind parks within the municipalities.

In addition to the land use plans, municipalities are also responsible for a number of sector plans e.g. municipal energy plans (EPs) (Act on Municipal Energy Planning, 1977:439) and municipal waste plans (WPs) (Environmental Code, 1998: Chapter 15 Section 41 and the Ordinance on Waste, 2011:927). Both municipal EPs and WPs are important strategic instruments and provide a basis for the municipality's efforts to contribute to achieving national energy and waste-related environmental quality objectives. It is up to each municipality to design the work on the WP and the EP. However, collaboration between municipalities is encouraged in order to strengthen the work on sustainability issues (Swedish Environmental Protection Agency, 2012a: 6525). According to the Waste Ordinance (2011: 927), the data in the WP must be reviewed at least every four years, and according to the Act on Municipal Energy Planning (1977: 439), each municipality must have an up-to-date plan for the supply, distribution, and use of energy.

2.2. Application of SEAs in Swedish planning

The Swedish SEA legislation is based on the EU Directive 2001/42/

Download English Version:

<https://daneshyari.com/en/article/11005260>

Download Persian Version:

<https://daneshyari.com/article/11005260>

[Daneshyari.com](https://daneshyari.com)