



Contents lists available at ScienceDirect

Environmental Impact Assessment Review

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

Conceptualizing strategic environmental assessment: Principles, approaches and research directions

Bram Noble ^{a,*}, Kelechi Nwanekezie ^b

^a Department of Geography and Planning, and School of Environment and Sustainability, University of Saskatchewan, 117 Science Place, Saskatoon, Saskatchewan S7N 5A5, Canada

^b Department of Geography and Planning, University of Saskatchewan, 117 Science Place, Saskatoon, Saskatchewan S7N 5A5, Canada

ARTICLE INFO

Article history:

Received 28 November 2015

Received in revised form 8 February 2016

Accepted 7 March 2016

Available online xxxxx

Keywords:

Strategic environmental assessment

Strategic transitions

Multi-level perspective

Transition management

Policies, plans and programs

Strategic thinking

ABSTRACT

Increasing emphasis has been placed in recent years on transitioning strategic environmental assessment (SEA) away from its environmental impact assessment (EIA) roots. Scholars have argued the need to conceptualize SEA as a process designed to facilitate strategic thinking, thus enabling transitions toward sustainability. The practice of SEA, however, remains deeply rooted in the EIA tradition and scholars and practitioners often appear divided on the nature and purpose of SEA. This paper revisits the strategic principles of SEA and conceptualizes SEA as a multi-faceted and multi-dimensional assessment process. It is suggested that SEA can be conceptualized as series of approaches operating along a spectrum from *less* to *more* strategic – from impact assessment-based to strategy-based – with each approach to SEA differentiated by the specific objectives of SEA application and the extent to which strategic principles are reflected in its design and implementation. Advancing the effectiveness of SEA requires a continued research agenda focused on improving the traditional SEA approach, as a tool to assess the impacts of policies, plans and programs (PPPs). Realizing the full potential of SEA, however, requires a new research agenda – one focused on the development and testing of a deliberative governance approach to SEA that can facilitate strategic innovations in PPP formulation and drive transitions in short-term policy and initiatives based on longer-term thinking.

© 2016 Elsevier Inc. All rights reserved.

1. Introduction

Now in place in some 60 countries (Fundingsland Tetlow and Hanusch, 2012), strategic environmental assessment (SEA) is a familiar member of the impact assessment family. Conceptualized under the philosophy of environmental impact assessment (EIA) as an assessment process appropriate for policies, plans and programs (PPPs) (Wood and Djeddour, 1989), SEA is now viewed as an instrument that can also help shape the formulation and implementation of strategic initiatives, and even play a political role in decision making (Partidário, 2015; Jiliberto, 2011; Bina, 2007). Scholarly research and thinking about the nature and scope of SEA have evolved significantly over the past 25 years (Partidário, 2015; Bina, 2007; Noble, 2000; Bailey and Renton, 1997; Lee and Walsh, 1992). Fischer and Onyango (2012), for example, a comprehensive overview of SEA related research projects and publications, reporting some 500 English language publications in referred journals on the subject. The result has been the development of multiple SEA methodologies and a range of applications (Sizo et al., 2016; Gunn and Noble, 2009; Dalkmann et al., 2004; Noble and Storey, 2001; Théritel and Partidário, 1996), along with more substantive interpretations of the strategic role of SEA beyond that of appraising

PPPs or assessing their impacts (Partidário, 2015; Pang et al., 2014; White and Noble, 2013; Jiliberto, 2011; Sloodweg and Jones, 2011).

The realization that SEA can have multiple roles and benefits in different decision contexts has also led to diversity in understandings and expectations about SEA (Noble et al., 2013; Partidário, 2012; Bina, 2007). There is a general consensus that SEA is somehow different than project-based EIA; however “considerations as to what SEA really is, what it delivers and how it should perform are still far from a consolidated stage” (Vicente and Partidário, 2006: 697). Noble (2000) argued that scholars and practitioners have failed to explain why certain assessments are *strategic* and how they differ from those that are non-strategic. We suggest that notwithstanding the international growth of SEA, and numerous scholarly papers addressing SEA concept and practice, understandings of SEA still vary considerably. Bina (2007: 586), for example, observes that “scholars and practitioners appear divided on such fundamental matters as the concept of and approach to SEA”; whilst Noble et al. (2013) identify the diversity of understandings of what SEA is, and expectations about what it can and should deliver, as major barriers to its advancement.

The purpose of this paper is to revisit the strategic nature of SEA, and to conceptualize SEA as a multi-faceted and multi-dimensional assessment process. Our objective is to help clarify specifically how SEA, as a flexible and multi-purpose assessment tool, relates to the policy and planning processes it is intended to inform. We do so in response to

* Corresponding author.

E-mail address: b.noble@usask.ca (B. Noble).

recent scholarly arguments suggesting the need to rethink the strategic nature and role(s) of SEA (Partidário, 2015; Partidário, 2012; Pope et al., 2013; Bina, 2007), and in light of the diversity of SEA expectations and understandings that exist amongst SEA scholars and practitioner communities (Silva et al., 2014; Fidler and Noble, 2013; Noble et al., 2013; Fischer and Onyango, 2012; Wallington et al., 2007). In the sections that follow we first briefly explore the evolution of SEA, and strategic thinking in SEA, followed by the fundamental principles that, based on the scholarly literature and evidence from practice, characterize strategic environmental assessment. We then conceptualize SEA as an approach to impact assessment that reflects multiple purposes, from appraising existing PPPs to assessing the institutional environments needed to enable the development and implementation of successful strategic initiatives. The paper concludes by suggesting directions in research to advance SEA understanding and influence.

2. Evolution of strategic thinking about SEA

Fundingsland Tetlow and Hanusch (2012) provide a comprehensive overview of the evolution of SEA. Our intent here is not to revisit this history; we focus instead on how strategic thinking about SEA has evolved. The basic concept of assessing the impacts of PPPs is rooted in the 1969 US National Environmental Policy Act, requiring the environmental assessments of proposed federal actions. Fischer and Onyango (2012) report that the concept of strategic assessment had started to gain much traction by the late 1970s, but it was not until the late 1980s, by way of a research report to the European Commission (Wood and Djeddour, 1989), that the term 'strategic environmental assessment' was formally introduced and popularized. At the time, SEA was described as environmental assessment appropriate to PPPs and of a more strategic nature than assessments applicable to individual development projects – setting the context for the most commonly cited definition of SEA – the environmental assessment of PPPs. The rationale for SEA at the time, and often still very much so today, was the need to address some of the limitations of project EIA, including the need to more proactively consider potential environmental impacts at earlier stages of decision making (Cherp et al., 2011; Partidário, 2000; Sadler and Verheem, 1996), to resolve longstanding concerns about how EIA approached cumulative environmental effects (Bidstrup et al., 2016; Therivel and Ross, 2007; CCME, 2009), and to set better direction for project-level approval processes (Johnson et al., 2011; Fischer, 2007; Hildén et al., 2004; Fischer, 1999).

In Canada, commitments to assessing the environmental implications of policies were in place in 1984, under the Environmental Assessment and Review Process Guidelines Order, which defined a *proposal* as including any initiative, undertaking or activity for which the Government of Canada has a decision-making responsibility (Noble, 2002). SEA was formally established in Canada in the early 1990s, by way of a federal directive on the environmental assessment of PPPs, and as a separate process from project EIA, thus "making it the first of the new generation of SEA systems that evolved in the 1990s" (Dalal-Clayton and Sadler, 2005: 61). By the early 2000s, Sadler (2001) reports less than 20 countries internationally with formal provisions for SEA. But the adoption of SEA would expand significantly in the years that followed, due in large part to the World Bank and similar agencies promoting SEA in international development cooperation, and the adoption of the European SEA Directive (White and Noble, 2013a; Fundingsland Tetlow and Hanusch, 2012).

SEA emerged under the theory of EIA, and "sharing the same common objective – to assess environmental impacts – but addressing different objects – policies, plans and programs, instead of projects" (Vicente and Partidário, 2006: 69). As a result, the practice of SEA that developed throughout the 1990s and early 2000s, including guidance for its implementation under directive-based systems, was deeply entrenched in traditional project-based EIA principles and methodology (Fundingsland Tetlow and Hanusch, 2012; Gachechiladze and Fischer,

2012; Glasson et al., 2005). This traditional, EIA-based, rationalist approach to SEA was challenged by many scholars as SEA continued to expand and take shape (e.g., Dalal-Clayton and Sadler, 2005; Dalkmann et al., 2004; Owens et al., 2004; Nilsson and Dalkmann, 2001; Brown and Théritel, 2000; Partidário, 1996), with several arguing that such an approach to SEA aligns with neither the complexities nor the realities of policy and planning processes – the very processes and instruments that SEA was intended to address (Elling, 2009; Bina, 2007; Runhaar and Driessen, 2007).

Whilst the expectation of SEA is often that it will influence strategic decision-making, several scholars have suggested that both the practice and the institutionalization of SEA has simplified the complexity of strategic decision making processes, and even the interplay of power and politics in PPP decisions (Jiliberto, 2007; Bina, 2007; Nilsson and Dalkmann, 2001). Nitz and Brown (2001: 329), for example, argued that "SEA must learn how policy making works", suggesting that SEA researchers have focused on the content and assessment process of SEA, but have given limited attention to whether and how SEA actually fits into policy making and other strategic decision making processes. Challenges to the conceptualization of SEA as an impact assessment tool for PPPs were reinforced by several empirical studies that questioned the influence and added value of SEA to both PPPs and decision outcomes (Noble, 2009). This led many scholars, including Jiliberto (2007: 212), to suggest that SEA needs to "distance itself from the concepts and models of EIA of projects, in order to be able to address the challenges of environmentally improving strategic decisions such as policies, plans and programs."

The evolution of scholarly research on SEA "has shifted in its views of the SEA process as a formal process...to a much more flexible and adaptable approach" (Retief, 2007: 85) and one with a more strategic focus, beyond PPP impact assessment (see Fischer and Onyango, 2012). This evolution is reflected, in part, in how SEA has been defined over the years (Table 1), from an EIA-like tool for PPPs, to a process to facilitate strategic decisions toward sustainability. Indeed, several scholars are now advocating for a shift in thinking about SEA, and for an advancement in current SEA practice toward a policy, institutional, integrated, and strategic-oriented approach – one that provides for a better understanding of the complex institutional arena and governance conditions of strategic decision processes; ensues the creation and implementation of strategic actions that lead to more informed, and influential PPPs and development decisions; and facilitates strategic transitions toward more sustainable futures (Partidário, 2015; White

Table 1
Definitions of strategic environmental assessment – past and present.

The systematic and comprehensive process of evaluating at the earliest possible stage the environmental effects of a policy, plan or program and its alternatives (Théritel and Partidário, 1996).

The proactive assessment of alternatives to proposed or existing PPPs, in the context of a broader vision, set of goals, or objectives to assess the likely outcomes of various means to select the best alternative(s) to reach desired ends (Noble, 2000).

A decision support tool, designed to integrate environmental and social issues into higher-order PPP decision making processes, bringing together different aspects of problems, different perspectives, and providing possible solutions in an accessible form to the decision maker (Sheate et al., 2003).

A process designed to systematically assess the potential environmental effects, including cumulative effects, of alternative strategic initiatives for a particular region...and in doing so inform the development of policies, plans or programs (CCME, 2009)

A strategic framework instrument that helps to create a development context toward sustainability, by integrating environment and sustainability issues in decision-making, assessing strategic development options and issuing guidelines to assist implementation (Partidário, 2012)

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات