

Beyond the EIA Mindset: SEA Perspectives Across GCC Countries

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Abstract. Strategic Environmental Assessment (SEA) is increasingly recognised as a key tool for promoting long-term, integrated planning. In the Gulf Cooperation Council (GCC) region, interest in SEA is growing as countries strive to balance rapid development with sustainability goals and alignment with international best practices. This paper compares SEA frameworks of the six GCC countries (Kingdom of Bahrain, Kingdom of Saudi Arabia, Kuwait, Qatar, United Arab Emirates, and Sultanate of Oman) using a multi-criteria approach to support a structured assessment of legislative and institutional progress. The results indicate that current SEA approaches remain fragmented, shaped by differing legal frameworks, institutional capacities, and planning traditions. The ongoing confusion between SEA and Environmental Impact Assessment (EIA) reinforces a project-level interpretation of SEA, also limiting its potential to inform strategic decision-making. Among the GCC countries, Bahrain, Kuwait, Qatar, and Oman currently lack specific SEA legislation, while the United Arab Emirates – in particular the Emirate of Abu Dhabi – and the Kingdom of Saudi Arabia have established frameworks at different stages of maturity. The paper highlights the implications of these gaps and provides policy-oriented recommendations to clarify SEA's role and strengthen its contribution to sustainable development in the GCC.

Keywords: SEA; EIA; GCC; Environmental legislation; Policy integration; Governance & Planning

1. Introduction

Strategic Environmental Assessment (SEA) is increasingly recognised as a key tool for long-term, integrated planning that brings sustainability considerations in from the outset (Chaker et al., 2006). Unlike Environmental Impact Assessment (EIA), which focuses on project-level impacts, SEA addresses cumulative and indirect effects, long-term trends, strategic alternatives and policy coherence, integrating environmental considerations into policies, plans and programmes (PPPs) (Alshuwaikhat, 2005; Partidário 2021; Thérivel and González, 2021). Over three decades it has evolved from a procedural tool into a broader governance instrument linked to strategic planning, institutional learning and policy integration (Nitz and Brown 2001; Monteiro et al. 2018; Unalan and Cowell 2019). Its effectiveness depends not only on legal provisions but on institutional capacity, planning culture, governance arrangements and a clear understanding of its strategic purpose (Partidário 2005; Thérivel and González, 2021). In practice, however, SEA is often treated as an extension of EIA, replicating project-level approaches rather than informing strategic planning and reinforcing confusion between the two instruments (Acharibasam and Noble, 2014).

The GCC provides a relevant context for the implementation of SEA. Rapid urbanisation, large-scale infrastructure and ambitious national transformation agendas are reshaping planning systems while commitments to sustainable development grow (UNESCWA 2020; Chattha et al. 2025), and SEA could integrate these considerations at the earliest stages of decision-making (Alshuwaikhat, 2005; Rachid and El Fadel, 2012). Yet SEA development across the region has been limited: several countries have no formal framework, and where provisions exist, they are often embedded in broader legislation, lack procedural guidance, or are applied inconsistently (Rachid and El Fadel, 2012, 2013).

This paper presents a comparative, policy-oriented review of SEA legislation and governance across the six GCC countries. Rather than assessing implementation effectiveness, it focuses on the formal intent, scope and institutional characteristics of national frameworks, reviewed against a set of analytical dimensions and complemented by practitioner experience of how SEA is applied beyond formal provisions.

2. Methodology

This study applies a comparative, criteria-based framework to examine how SEA is formally positioned within the environmental and planning systems of the six GCC countries. The assessment adapts internationally recognised SEA principles, particularly the IAIA Performance Criteria (IAIA, 2002), together with strategy-based scholarship that treats SEA as a governance and decision-support instrument rather than a compliance mechanism (Partidário, 2008; Unalan and Cowell, 2019; de Carvalho, 2021).

The comparative assessment proceeded in three stages. First, SEA-related legislation and policy documents published through official national channels – framework laws, executive regulations, decrees, ministerial decisions and statutory planning legislation – were reviewed, using the most recent official versions and cross-checking the Arabic version of the

documents, where necessary. Second, a set of analytical dimensions and assessment questions was developed to capture both the procedural and strategic characteristics of national frameworks (Table 1). Third, each question was scored on a three-point screening scale (0 = absent; 1 = partial or implicit; 2 = explicit). A simple additive scale was used to map results consistently across countries with different legal structures, avoiding the masking of structural differences by a composite index. Interpretation draws on literature that distinguishes compliance-oriented from strategy-oriented systems (Partidário, 2000; Cherp et al., 2007). A dimension on international and normative alignment captures institutional convergence or practical application even without a legal mandate. Given the limited public availability of SEA documentation in the GCC, the authors' professional experience provides supplementary evidence of SEA-like practice beyond formal requirements.

Table 1. Analytical dimensions and assessment questions used for the comparative evaluation.

Dimension	Assessment Question
1. Legal Basis	Is SEA explicitly required by law or formal regulation/guideline?
	Is SEA clearly differentiated from EIA in scope, purpose and outputs?
2. Institutional Mandate & Capacity	Is there a clearly defined authority responsible for SEA?
	Are the authorities' responsibilities clearly defined for SEA?
3. Strategic Orientation & Policy Coherence	Is SEA required to be applied to policies, plans, and programmes?
	Is SEA required to assess policy coherence or cross-sectoral alignment?
4. Integration in Decision-Making	Is SEA required at decision-making across sectors or governance tiers?
5. Monitoring & Follow-up	Are monitoring and follow-up mechanisms legally required for SEA?
	Are adaptive or iterative review processes envisaged?
6. Scope, Systems & Long-Term Framing	Does SEA include social, economic, and environmental dimensions?
	Are long-term trends, risks, or uncertainties explicitly required?
7. Participation & Transparency	Is early and meaningful stakeholder participation mandated?
	Is transparency required in how participation influences outcomes?
8. Knowledge Diversity & Methods	Are multiple knowledge systems or strategic tools explicitly encouraged or required?
9. International and Normative Alignment	To what extent does legislation align with internationally recognized SEA principles and broader environmental governance norms, including the strategic intent, scope, and expected outcomes of SEA?
	Does the legislation explicitly reference international agreements, directives, or best-practice strategic SEA principles?
10. SEA Practice Beyond Formal Legislation	Is SEA applied in practice or requested by authorities, investors, or planning bodies, even in the absence of a formal legal requirement?
	Is there evidence that SEA is understood and applied by authorities in a manner consistent with its strategic intent?

3. Overview of SEA Frameworks in the Six GCC Countries

Table 2 summarises the main characteristics of each national framework.

Table 2. SEA frameworks in the six GCC countries (adapted from Rachid and El Fadel 2012 and the Saudi SEA framework).

Country	Enabling law	SEA provision	Lead authority
Bahrain	Law No. 7/2022 on Environment	None	Supreme Council for Environment
KSA	Royal Decree M/165 (2020), Environmental Law	Formalised	Ministry of Environment and Water Resources (MEWA) + Independent Executive Committee
Kuwait	Environmental Protection Law 42/2014 (am. 99/2015)	None	Kuwait Environmental Protection Authority (KEPA)
Qatar	Decree-Law 30/2002	None	Ministry of Environment & Climate Change
Oman	Royal Decree 114/2001	None	Environment Authority
UAE	Federal Law 24/1999 (am. 2006)	Partial	Environmental Agency – Abu Dhabi (EAD)

4. Results and Discussion

The comparative scoring of the ten dimensions reveals a pronounced gradient in how SEA is embedded across the GCC. The results show that EIA is well established across the region, but specific SEA provisions are largely absent: only KSA recognises SEA in law, and the UAE provides for it at the emirate level (Abu Dhabi), while Bahrain, Kuwait, Qatar and Oman rely on project-level EIA, with SEA-like work occurring only on an ad hoc and often donor-driven basis.

KSA (30/36) is the only country where SEA is simultaneously required by law, assigned to a competent authority and review committee, applied to PPPs, monitored, open to participation and aligned with international principles – a trajectory closely linked to the Vision 2030 reforms (Hegazy, 2024).

The UAE (11/36) scores entirely at the sub-national level, through Abu Dhabi's 2010 technical guidance and the EAD programme, with no federal mandate.

The remaining four countries only punctuate in D10 (2/36), reflecting only common divergent practice: SEA-like work occurs, but no formal element of an SEA system is in place. The literature is consistent that SEA effectiveness depends less on a statutory clause than on institutional capacity, planning culture, political context and clarity of purpose (Tetlow and Hanusch, 2012; Thérivel and González, 2021). KSA's score is therefore significant not merely because SEA is in the Environmental Law, but because it is backed by an authority, a review committee and monitoring duties – the scaffolding that lets a legal requirement function.

The strategic-intent criterion under D10 – whether authorities apply SEA consistent with its strategic purpose – scores zero in every country, including KSA, and the dimensions that most distinguish SEA from project assessment, long-term framing (within D6) and knowledge diversity (D8), are largely absent. Even where SEA has been adopted, it is still conducted through an EIA-like lens. This is a well-recognised risk: systems with strong procedural but weak strategic features tend to reproduce EIA-style practice and have little influence on higher-order decisions (Cherp et al., 2007), and treating SEA as an extension of EIA reduces its strategic value (Kealey and Alderman, 2025). The conflation becomes self-reinforcing in project-driven systems, especially where SEA is introduced without adapting institutional norms (Partidário, 2022). As a result, the upstream opportunities SEA exists to capture – comparing development pathways, identifying cumulative effects, shaping policy before choices are fixed – are missed even where a framework exists on paper. The prevailing paradigm treats SEA as a “high-level preliminary EIA”, anticipating permitting with insufficient strategic detail and limited value for decision-makers (Nitz and Brown, 2001; Partidário, 2022).

Why these dimensions remain comparatively weak becomes clearer when scores are considered in the broader governance context of the region. Participation and transparency (D7) and integration into decision-making (D4) may be influenced by broader institutional arrangements and planning traditions, which shape how stakeholder engagement and strategic decision-making processes are organised. SEA systems are not context-neutral; they are shaped by institutional cultures, power relations and decision-making traditions (Monteiro et al. 2018). This highlights an important distinction between formal compliance and practical implementation. High scores may reflect the presence of legal and procedural requirements, while the influence of these mechanisms on strategic decision-making depends on how they operate within the broader governance framework. The results also suggest that, where alignment exists (D9), SEA practice has been shaped primarily by European, OECD and EIA-derived models. While these frameworks provide valuable foundations, their effectiveness is likely to depend on the extent to which they are adapted to local institutional arrangements, policy cycles and decision-making processes. Otherwise, there is a risk that SEA adopts the procedural characteristics of these approaches without achieving their full strategic potential.

These gaps are particularly relevant in the context of the GCC, where long-term development visions, rapid economic transformation and emerging climate commitments are driving significant policy, planning and investment decisions. In such settings, SEA has the potential to contribute by integrating environmental considerations into strategic planning processes at an early stage, helping to inform the development of policies, plans and programmes before project-level decisions are made (Alshuwaikhat, 2005; Chaker et al., 2006). Yet the more forward-looking dimensions—long-term framing (D6) and monitoring and adaptive learning (D5)—remain comparatively weak. Without systematic monitoring and follow-up, the extent to which strategic decisions achieve their intended outcomes is difficult to assess. Similarly, while national visions and sustainability agendas provide important strategic direction, they serve a different purpose from SEA, which provides a structured framework for assessing alternatives, evaluating trade-offs and monitoring implementation.

These findings can be drawn together as a SWOT analysis (Table 3), in which each entry is tied to the dimensions that produce it.

Table 3. SWOT analysis of SEA in the GCC, anchored in the assessment dimensions (D1–D10).

Strengths • Legal basis (D1): SEA explicitly required and differentiated from EIA in KSA (4/4); partial in Abu Dhabi (2/4). • Institutional mandate (D2): KSA has a designated authority (MEWA) and review committee (4/4); partial in Qatar and Abu Dhabi. • Strategic orientation & integration (D3, D4): in KSA SEA applies to PPPs and links to planning and budgeting; partial in UAE-Abu Dhabi. • Monitoring & participation (D5, D7): both required in KSA, with iterative review and mandated transparency. • International alignment (D9): explicit reference to international principles in KSA (4/4) and UAE - Abu Dhabi (2/4). • Practice beyond legislation (D10): SEA-like assessment requested or applied in all six countries – a practical foothold.	Weaknesses • Legal basis (D1): no SEA requirement and no differentiation from EIA in Bahrain, Kuwait, Qatar or Oman. • Long-term framing (D6): long-term trends/risks/uncertainties criterion scores zero for every country. • Knowledge diversity (D8): zero across all six – no framework encourages multiple knowledge systems. • Monitoring, participation, integration (D5, D7, D4): zero everywhere except KSA and partly UAE-Abu Dhabi. • Strategic intent (D10): zero for all six – SEA is practised but not applied in line with its strategic intent. • Institutional definition (D2): only KSA has total score on D2, other countries score one (Qatar and UAE) or zero.
Opportunities • Legal basis (D1): formalise SEA in legislation, distinct from EIA, with clear scope and procedures. • Institutional mandates (D2): competent authorities, defined responsibilities and review mechanisms. • Strategic orientation & integration (D3, D4): apply SEA to PPPs early in the planning cycle. • Monitoring (D5): introduce follow-up, iterative review and learning. • Region-wide blind spots (D6, D8): build long-term framing and knowledge diversity. • Participation (D7): digital consultation platforms to widen and document engagement. • Alignment (D9): adapt international best practice to national governance. Cross-cutting: capacity-building and GCC standardisation.	Threats • The pace and scale of development can outstrip the institutional capacity (D2) needed to raise the other scores. • Centralised, hierarchical governance can cap progress on participation (D7) and SEA's influence in decision-making (D4). • The uniform zero on strategic intent (D10) reflects a risk that SEA stays procedural and reproduces EIA. • Limited public disclosure constrains transparency (D7) and shared learning (D5). • Reliance on European/OECD, EIA-oriented models threatens authentic alignment (D9) and legal design (D1). • Evolving regulations and terminology differences make the scores a moving target.

5. Conclusions and Recommendations

Several actionable recommendations emerge to strengthen SEA as a strategic planning tool and enhance its contribution to sustainable development:

- **Establish clear national SEA legislation** that defines SEA's objectives, scope and procedures, distinct from EIA.
- **Integrate SEA early** in the planning cycle, running in parallel with plan-making and aligned to key decision gateways.
- **Mandate strategic alternatives and scenarios**, comparing different pathways and shifting from forecasting toward backcasting from desired outcomes (e.g. climate targets, resource efficiency, spatial resilience).
- **Build institutional capacity**, designating competent authorities with clear responsibilities and adequate resources.
- **Promote pilot SEAs** to demonstrate value and build confidence among authorities, planners and stakeholders.
- **Ensure centralised, up-to-date environmental and socio-economic data** to support reliable, adaptive SEAs.
- **Develop national capacity-building** and training in SEA methodologies, bridging legislation and practice.
- **Enhance participation and transparency** through digital consultation platforms.
- **Promote GCC-level cooperation and standardisation** of SEA principles, methods and capacity-building.

The findings confirm a clear gap between how SEA is understood in the literature – a strategic, forward-looking instrument that shapes policies, plans and programmes before key choices are fixed – and how it is framed and applied across the GCC, where it remains largely procedural and project-oriented: absent from legislation, embedded in EIA-style systems, or applied without the institutional clarity, long-term framing, monitoring and knowledge diversity that strategic decision-making requires. This gap is also the region's main opportunity: to move beyond SEA as a high-level extension of EIA and reposition it as a strategic tool capable of supporting more integrated and forward-looking planning processes.

6. Final Remark

Given the number of words limitations, please contact the team for a full version of the proceeding.

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