













The role of SEA in renewable energy development

Concept Note, 7th International Forum on Energy for Sustainable Development

What is SEA is and why we need it

Strategic Environmental Assessment (SEA) is an efficient procedural tool to integrate environmental and health considerations into plans, programmes as well as to policies and legislation alongside the economic and social considerations. More specifically, SEA is an instrument to:

- (a) ensure and structure wide government and public consultations in the preparation of plans, programmes and policies, including, as needed, in a transboundary context;
- (b) inform the decision-making through robust assessment of the environmental and health consequences, and of their relationship with the (economic and social) objectives of the plan/programme; identified development alternatives; and outcomes of the consultations.

The UNECE Protocol on SEA to the Convention on Environmental Impact Assessment (EIA) in a Transboundary Context is an international treaty that provides requirements for an SEA procedure, including determination of the scope of an environmental report and its preparation, the carrying out of public participation and consultations at the national and transboundary level, and the taking into account of the environmental report and the results of the public participation and consultations in a plan or programme. ¹

As a result, SEA increases quality of planning, ensures transparency of the decision-making processes and facilitates better acceptance of key strategic decisions and efficient implementation of the assessed strategic documents.

SEA in renewable energy sector

Renewable energy development contributes to sustainable development – it can limit pressures on important ecosystems, it is an important driving force in reducing GHG emissions, as well as it increases energy security. On the other hand, exploitation of renewable energy resources may lead to certain environmental problems or risks regarding human health – excessive hydropower development represents a threat for aquatic ecosystems, wind turbines can be a source of noise and vibration disturbance for communities living nearby.

Proper application of SEA – in line with the provisions of the UNECE Protocol on SEA – can help to maximise environmental and social benefits resulting from renewable energy development, while avoiding or

_

¹ Article.2.6, Protocol on SEA.

minimizing potential adverse effects. The application of SEA to development of the renewable energy sector at the various planning stages can provide the following benefits:

- SEA can ensure that renewable energy development is in line with environmental and health objectives and commitments a given country has adopted.
- At the strategic/policy level, SEA can **facilitate the discussion on scenarios for renewable energy development**. Thus it can contribute to selection of the most appropriate energy mix, which considers environmental and health risks as well as benefits of all reasonable alternatives, and thus enables objective comparison.
- SEA applied at the strategic/policy level can **support proper consideration of renewable energy development in sub-sequent planning schemes** (e.g. spatial or land-use planning) by providing recommendations on priority renewable energy resources to be further developed and/or locations to be primarily further explored.
- SEA can streamline development of specific projects and relevant project-level assessment (EIA), for instance by identifying locations where major environmental or health risks can be excluded or mitigated. Therefore, development and approval of specific projects including EIA can be carried out without main problems.

The SEA is most effective and beneficial when:

- it is applied early in planning and decision-making process when all options and alternatives are still open. This approach also minimizes time needed to complete the SEA process.
- the communication between the team of experts carrying out SEA and the experts dealing with renewable energy planning is properly ensured. This is an important precondition for integrating SEA inputs and recommendations in the plan or programme during its preparation, and thus increasing the chances for 'smooth' decision-making process.
- SEA focuses on the key environmental and health issues. There is no need to analyse all environmental and health aspects in each SEA case, but only those which may be possibly affected by renewable energy development proposed by a given policy, plan or programme. Therefore the emphasis has to be given to scoping stage, when the key environmental and health issues to be addressed in further SEA steps are to be determined.
- during the SEA procedure all relevant stakeholders including environmental; and health authorities
 as well as public are involved. Only then it can be ensured that all opinions are properly taken into
 account in SEA and/or in planning process.

References:

Sadler, B. and R. Verheem (1996) Strategic Environmental Assessment: Status, Challenges and Future Directions, Report no. 53, Ministry of Housing, Spatial Planning and the Environment, The Hague, The Netherlands.

United National Economic Commission for Europe (2003): Protocol on Strategic Environmental Assessment (http://www.unece.org/env/eia/sea_protocol.html)

UNDP and Regional Environmental Center for Central and Eastern Europe (2003): Benefits of a Strategic Environmental Assessment.

(http://archive.rec.org/REC/Programs/EnvironmentalAssessment/pdf/BenefitsofSEAeng.pdf)