



KAZAKHSTAN UPGRADES ITS ENVIRONMENTAL ASSESSMENT SYSTEM

Pilot application of strategic environmental assessment to
**the Government of Kazakhstan's draft Strategy for
the Development of its Fuel and Energy System until 2030
(2017 – 2018)**



Strategic environmental assessment (SEA)

applies to proposed plans and programmes that set a framework for future development consent of projects requiring environmental impact assessment (EIA) (please see article 4 of UNECE's Protocol on SEA) in the following sectors:

- ✓ Agriculture
- ✓ Forestry
- ✓ Fisheries
- ✓ Energy
- ✓ Industry (including mining)
- ✓ Transport
- ✓ Regional development
- ✓ Waste management
- ✓ Water management
- ✓ Telecommunications
- ✓ Tourism
- ✓ Urban and rural planning
- ✓ Land use

SEA does not apply to plans and programmes whose sole purpose is to serve national security and defence, civil emergency situations, and/or financial and budgetary documents.

Strategic Environmental Assessment (SEA)

General Overview

Legal Framework



The Protocol on Strategic Environmental Assessment (Protocol on SEA) developed by the United Nations Economic Commission for Europe (UNECE) (Kiev, 2003) is in force since 2010. It provides legal obligations and framework for SEA.

In 2017-2018, legal amendments were drafted to the Environmental Code and relevant bylaws of Kazakhstan in line with the Protocol on SEA. This aimed to support the development of the national SEA system, including a transboundary SEA procedure. The proposed amendments were submitted to the national authorities for intergovernmental consultations and further adoption.

Definition



SEA is a strategic planning tool that ensures that the likely environmental, including health, effects of proposed national development strategies, plans, and programmes are taken into account (see article 2.6 of the Protocol on SEA).

Objective



SEA is intended to prevent or reduce the adverse environmental and health impacts of planned activities through the analysis of potential effects and identification of appropriate mitigation measures. SEA can propose sustainable development alternatives (see article 1 of the Protocol on SEA).

Scope



SEA applies to strategic planning documents developed at the municipal, regional, and national levels including those that are likely to cause transboundary effects (see articles 2.5 and 4 of the Protocol on SEA).

Actors involved



Public authorities in the various governmental sectors are primarily responsible for developing of plans/programmes (strategic documents) in consultation with the competent environmental and health authorities and the public (see articles 8 and 9 of the Protocol on SEA). Other involved actors may include consultants specialized in environment, public health, and economy. Those plans and programmes that are likely to have transboundary effects require consultation with the authorities and public of affected countries (see article 10 of the Protocol on SEA).

Cost



SEA is estimated to increase planning costs by 5-10%. However, these costs are largely offset, since SEA helps avoid irreversible losses and costly planning mistakes. Furthermore, costs associated with SEA are considered to be marginal compared with the overall cost of implementing a plan or programme. For example, the implementation of a transport policy in Kazakhstan could cost millions of US dollars.

Outcome



SEA integrates environmental, including health, considerations into strategic decision-making. As an outcome, SEA conclusions and recommendations, including in more sustainable alternatives for achieving the desired development objectives, are taken into consideration along with the public consultation results when a plan or programme is adopted (see article 10 of the Protocol on SEA).



Strategic Environmental Assessment

is about

- ✓ Balancing economic development and environmental sustainability priorities
- ✓ Supporting optimal decision making at the project level
- ✓ Enhancing good governance
- ✓ Producing long term financial savings
- ✓ Promoting effective international cooperation
- ✓ Avoiding costly mistakes

Pilot Strategic Environmental Assessment (SEA) Project in Kazakhstan

Project Overview

This pilot project was implemented to demonstrate the application of SEA and its efficiency as a planning tool in Kazakhstan. The pilot SEA project involved training national experts in SEA methodology and procedure as well as in stakeholder consultations.

The draft Strategy for the Development of the Fuel and Energy System of the Republic of Kazakhstan until 2030 (draft Energy Strategy) was selected as a target document for SEA. The SEA team included both national and international experts; it cooperated closely with the National Working Group on Amending the draft Energy Strategy.

Two expert meetings were convened as part of the project to discuss the practical aspects of the SEA application (in November 2017 and March 2018). During these meetings, the participants discussed methodological approaches, stages in the SEA process, and methods and tools employed in the analysis of impact and consultations. The national and international experts worked together on the SEA process for the *draft Energy Strategy* and discussed key challenges encountered during this process.

Consultations with the relevant authorities and the public were conducted at each stage in the SEA process as required by the Protocol on SEA.

- ✓ **Document Subject to SEA**
Republic of Kazakhstan Fuel and Energy Sector Development Concept Until 2030
- ✓ **Lead / beneficiary agency**
Ministry of Energy of the Republic of Kazakhstan
- ✓ **Location**
Kazakhstan
- ✓ **Implementation timeframe**
November 2017 – November 2018
- ✓ **Project Team**
A group of experts in the field of environmental protection, biodiversity, public health, energy, and strategic analysis, led by UNECE international experts and the National SEA Project Manager in Kazakhstan.
- ✓ **Stakeholders Consulted**
Ministry of Energy (including the Environmental Regulation and Control Committee), Ministry of Justice, Ministry of National Economy, Ministry of Public Health of the Republic of Kazakhstan, and the public.



Pilot SEA Stages and Components

The SEA process comprised several stages including scoping and the preparation of the Environmental Report.

1. Scoping

The SEA scoping stage lasted from November 2017 through March 2018 and involved the preliminary analysis of the *draft Energy Strategy* and the determination of the SEA scope. The SEA scoping stage was launched at the inception meeting held to discuss the SEA methodology and logistics. The first stage of the SEA process involved the following activities:

- ✓ The analysis of the current state of the environment and its trends in the Republic of Kazakhstan;
- ✓ The preliminary analysis of the *draft Energy Strategy*, its objectives, structure, and priorities;
- ✓ The review of the strategic context and identification of those strategic documents that have linkages to or influence upon the *draft Energy Strategy*;
- ✓ The preliminary analysis of development alternatives for the fuel and energy sector and recommendations for the Ministry regarding the finalization of the alternative options included in the *draft Energy Strategy*;
- ✓ The definition of the environmental objectives for the objective-led analysis;
- ✓ The identification and ranking of key environmental impacts associated with existing and planned activities in the fuel and energy sector that require further analysis;
- ✓ The selection of the assessment techniques to be employed and the planning of further studies.

This stage also involved the identification of the governmental authorities to be consulted with, as well as non-governmental organizations and stakeholder groups interested in discussing the *draft Energy Strategy*. Based on this, the plan for consultation activities was prepared.

The main outcome of the scoping stage was the preparation and publication of the SEA Scoping Report and the organization of stakeholder consultations to discuss scoping findings (March 2018).

Based on the SEA scoping recommendations, the Working Group on amending the *draft Energy Strategy* formulated the following four development scenarios (alternatives) for the fuel and energy sector until 2030:

- ✓ **Base scenario:** assuming the status quo with coal continuing to dominate the country's energy consumption.
- ✓ **Gas-based scenario** assuming a shift towards natural gas, reduced coal consumption, and governmental support for renewable energy projects.
- ✓ **Combined scenario** assuming that all measures planned under the gas-based scenario are implemented and renewable energy projects receive more active support.
- ✓ **Optimistic scenario** geared toward achieving the objectives identified in the Republic of Kazakhstan Development Strategy until 2050 and assuming the most active support for renewable energy projects.

2. Environmental Report

The second stage (March - November 2018) began with the expert meeting convened in March 2018 to discuss the details of the strategic analysis and environmental assessment approaches and methods used in the SEA process. The main outcomes of the Stage 2 were as follows:

- ✓ The objective-based analysis of the *draft Energy Strategy* and formulation of recommendations on updating/clarifying the *draft Energy Strategy* objectives and priorities;
- ✓ The development of maps showing the location of existing and planned fuel and energy facilities relative to sensitive and/or stressed environmental areas (based on air quality, biodiversity, and public health). These maps can be used as a tool to ensure that environmental considerations are taken into account in the fuel and energy system development plans at the strategic and project levels;
- ✓ The assessment of alternative options;
- ✓ The assessment of the likely environmental and health effects of the *draft Energy Strategy* and development of preventive and mitigation strategies;
- ✓ The development of the monitoring plan designed to monitor the *draft Energy Strategy* implementation, including the identification of potential effects.

3. Consultations

Consultations with the relevant authorities and the public constitute a key element of SEA that are recommended at the scoping stage and required during the preparation of the Environmental report. The pilot SEA process in Kazakhstan included 5 events attended by over 200 participants. Key consultation events are described below:

- ✓ Meetings held on 5-6 March 2018 in Astana: Presentation of the SEA Scoping Report and consultation with the governmental authorities and the public to discuss scoping findings;
- ✓ Meetings held from 6 April through 15 May 2018 in Pavlodar, Karaganda, and Astana: Consultations with regional environmental authorities, major organizations, and companies;
- ✓ Meeting held on 14 November 2018 in Astana: Final consultations and discussion of SEA outcomes with representatives from the Ministry of Energy, Ministry of Public Health, and the public.

4. SEA Recommendations

A series of recommendations for various planning levels was developed and discussed with stakeholders as part of the pilot SEA including:

- ✓ Recommendations concerning the formulation of the fuel and energy system development scenarios, finalization of the *draft Energy Strategy*, and a list of the further steps required were developed and provided to the Ministry of Energy;
- ✓ Based on the environmental assessment of the fuel and energy system development scenarios, two scenarios (i.e. the 'Combined' and 'Optimistic' scenarios) were recommended for further elaboration at the strategic planning level in specific plans and programmes, to be subject to SEA and aligned with the full lifecycle approach.

The following strategic documents (and related SEAs) are recommended to be developed to ensure the effective implementation of the *draft Energy Strategy*:

- ✓ Consolidated Coal Mining Sector and Coal Fired Power Generation Capacity Development Programme;
- ✓ Renewable Energy Development Programme;

- ✓ Oil and Gas Sector Development Programme (with the Programme's SEA to be complemented by the Regional Environmental Assessment (REA) for the Western Kazakhstan Region).

5. Next Steps

The following steps are recommended to be taken after the completion of the SEA process and submission of the Environmental Report to the Republic of Kazakhstan Ministry of Energy:

- ✓ Take account of the SEA recommendations when finalizing the *draft Energy Strategy* before its adoption;
- ✓ Ensure the monitoring of the *draft Energy Strategy* implementation (including related plans and programmes) and associated environmental and health effects;
- ✓ Conduct an annual performance review of the *Energy Strategy* and on its basis amend the strategy, and related plans and programmes, as necessary.





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Additional information:

UNECE Secretariat to the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and its Protocol on Strategic Environmental Assessment

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