

*Strategic Environmental Assessment for
the National Development Programme of
the Energy Sector up to 2020*

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Lubov Gornaya, expert

The Legal Basis for the Process of the Strategic Environmental Assessment in Estonia

- The Law on the Environmental Impact Assessment and Environmental Management System
- The Law on Administrative Proceedings (which in particular regulates open proceedings that establish a framework for public discussion and the presentation of documents for familiarization)
- The Law on Planning
- The Law on the Organization of Local Self-Governance
- Resolution of the Government of Estonia “Types of Strategic Development Programmes as well as Order of their Development, Amendments, Implementation, Evaluation and Reporting on Them”

The Law on the Environmental Impact Assessment and Environmental Management System

The Goals of the Strategic Environmental Assessment are to:

- 1) take into account environmental considerations when developing and approving strategic planning documents;
- 2) ensure a high level of environmental protection;
- 3) support sustainable development.

General information

- “Economic Activity in the Energy Sector” means any economic activity related to the exploration, extraction, refining, production, storage, land transport, transmission, distribution, trade, marketing, or sale of Energy Materials and Products.... or concerning the distribution of heat to multiple premises”. (Energy Charter Treaty, Article 1 (5))
- The National Development Programme of the Energy Sector up to 2020 is focused on:
 - electricity generation
 - the production of heat energy
 - usage of biofuel by transport.

A Chronology of the Development of the Strategic Environmental Assessment for the National Development Programme of the Energy Sector up to 2020 (NDPES 20) and the Strategic Environmental Assessment

- **December 21st, 2007** the Ministry of Economic Affairs and Communications (MEAC) and the Stockholm Environment University - Tallinn Centre (Estonian Institute for Sustainable Development) signed a contract on the State Order (procurement) for “Strategic Environmental Assessment for the NDPES 20”.
- **January 18th, 2008** the Government of Estonia initiated development of the NDPES 20.
- **March 4th, 2008** draft programme of the SEO for the NDPES 20 was ready, and forwarded for publication

A Chronology of the Development of the NDPES 20 and SEA

- **March 5th, 2008** the MEAC initiated the SEA process for the NDPES (by order of the Ministry) with simultaneous publication of the official statement on initiation of the SEA for the NDPES 20 and publication of the corresponding draft programme

The statement specified the main goals of the NDPES and SEA, as well as main participants/parties to be involved in the development of the NDPES and SEA with information on contact persons, emails and telephone numbers:

- the developer of the NDPES 20 - the MEAC;
- the expert - the Estonian Institute for Sustainable Development;
- the supervisory body for the SEA organization - the Ministry of the Environment (ME);
- the state body, which has to approve the NDPES 20 - the Government of the Republic of Estonia;
- the state body, which has to adopt the NDPES 20 - the Parliament of the Republic of Estonia.

A Chronology of the Development of the NDPES 20 and SEA

- **March 12th, 2008** Energy Forum “What Energy System Do We Want?” initiated by the MEAC was conducted in Tallinn. The Forum discussed issues associated with the development of the NDPES 20.
- **April 11th , 2008** Draft Programme on SEA amended after public discussion was ready and presented to the MEAC for approval.
- **May 7th, 2008** - the Programme on SEA approved by the MEAC was ready.
- **September, 2008** – the 7th working draft of the NDPES 20 was ready.
- **October 7th, 2008** - the MEAC published the draft report on SEA on its home page.
- **October 31st, 2008** - public discussion of the Report on SEA was held.

A Chronology of the Development of the NDPES 20 and SEA

- **November 21st, 2008** draft Report on SEA amended after publication and public discussion was ready.
- **December 10th, 2008** draft NDPES 20 was ready.
- **February 9th, 2009** amended draft Report on SEA was ready and forwarded to the MEAC for approval.
- **February 26th, 2009** the MEAC approved the Report on SEA for the NDPES 20.
- **In March 2009** - the draft NDPES 20 was presented to the Government and Parliament of the Republic.
- **March 6th, 2009** the Parliament finished the first readings of the NDPES20 and sent it for second readings.
- **June 15th, 2009** the Parliament adopted the NDPES 20.
- **June 22nd, 2009** the NDPES 20 was published in the official gazette.

Key milestones of the Strategic Environmental Assessment for the NDPES 20

- The Expert Group on SEA made a qualitative assessment of the compliance of the goals set out in the NDPES 20 with national and international environmental goals.
 - Goals set in the NDPES 20 consider obligations under international treaties, EU directives and other strategic planning documents of Estonia.
- The Expert Group on SEA made a qualitative assessment of the effect of 9 scenarios of the development of the energy sector according to 27 impact criteria.
 - 6 scenarios were included into the NDPEs by the developer and 3 scenarios were added by the Expert Group on SEA.
 - 27 impact criteria included 9 criteria assessing environmental impacts, 6 criteria - social impacts and 12 criteria - economic impacts.

Key milestones of the Strategic Environmental Assessment for the NDPES 20

- Long-term forecasts on the effects of the 9 scenarios up to 2030 were made including the dynamics of production, consumption and impact on the environment.
- A quantitative (monetary) assessment of the effect of electricity production on the environment was made based on ExternE methodology using EcoSenceWeb 1.3. software.

Key milestones of the Strategic Environmental Assessment for the NDPES 20

- In the course of the SEA, the Expert Group made suggestions to the developers of the Programme on adjustment of goals set and proposed measures to reduce negative environmental, including social and public health effects. Essential proposals of the Expert Group were considered when finalizing the NDPES 20.
- 8 written comments that contained over sixty questions or points of view were received when the Report on SEA was published. In addition many related issues were considered in the course of public discussion of the Report on SEA.

Qualitative criteria used to assess the effect of the energy sector development scenarios (an explanation of the criterion and possible evaluation of its change is provided in brackets) (1)

- **I – Uninterrupted power supply:**
 - 1 - provision of raw materials of energy carriers under a normal situation (raw materials of energy carriers: oil shale, natural gas, nuclear fuel, wind, biogas, shale gas, peat);
 - 2 – provision with raw materials of energy carriers under an emergency situation;
 - 3 - The balancing/compensation of peak energy loads.
- **II - More sustainable supply and production of energy:**
 - 4 - level of CO₂ emissions (increasing or decreasing);
 - 5 - level of emissions for SO₂ and other atmospheric pollutants (increasing or decreasing);
 - 6 - damage to land resources (need in space, change of designated use of land);
 - 7 - need of water resources (water consumption, volume);

Qualitative criteria used to assess the effect of the energy sector development scenarios (an explanation of the criterion and possible evaluation of its change is provided in brackets)(2)

- **II - More sustainable supply and production of energy:**
 - 8 - damage to water quality (change of the environmental and chemical state);
 - 9 - waste disposal including recycling and storage (volume and type of waste - ordinary waste, hazardous waste; need in a landfill and its capacity; need in a landfill to store hazardous waste);
 - 10 - quality of life of local population (need to relocate; change of fertility of agricultural lands; change of social infrastructure - school, kindergarten, etc.);
 - 11 - risks for public health and the environment (sickness rate of the upper airways in dynamics; rate of diseases associated with radiation in dynamics; change of air quality, water and light regimes);
 - 12 - relationship with territories, included into Natura 2000 (change of physical state and functioning of territories; change of favourable state of habitats);

Qualitative criteria used to assess the effect of the energy sector development scenarios (an explanation of the criterion and possible evaluation of its change is provided in brackets) (3)

- **II - More sustainable supply and production of energy:**
 - 13 - restrictions on regional development (drinking water quality; air quality, risks for health, availability of labour and other aspects that affect spatial development);
 - 14 - energy intensity of goods and services (increasing or decreasing);
 - 15 - transboundary environmental effects;
 - 16 - risks associated with transportation (impact on the environment related to raw material transport (dust, noise, radiation) and health risks).
- **III - Provision of power to consumers at reasonable prices:**
 - 17 - prime cost compared to 2007 (increasing or decreasing);
 - 18 - external costs (increasing or decreasing);
 - 19 - energy prices for consumers (increasing or decreasing);

Qualitative criteria used to assess the effect of the energy sector development scenarios (an explanation of the criterion and possible evaluation of its change is provided in brackets) (4)

- **Provision of power to consumers at reasonable prices:**
 - 20 - food prices (increasing or decreasing);
 - 21 - dependency on the price for imported energy (increasing or decreasing);
 - 22 - predictability of prices for energy (demonstrates how Estonia/EU can impact price levels using regulation measures/political decisions) (increasing or decreasing);
 - 23 - price stability (increasing or decreasing);
 - 24 - competitiveness of the national economy (increasing or decreasing);
- **IV - Energy efficiency and energy saving:**
 - 25 - technical efficiency (increasing or decreasing);
 - 26 - energy efficiency in construction (increasing or decreasing);
 - 27 -energy consumption (increasing or decreasing);

Assessment of change for each criterion

The following scale was used in the assessment:

- +3 - significant positive effect;
- +2 - moderate positive effect;
- +1 - insignificant positive effect;
- 0 - no effect;
- -1 - insignificant negative effect;
- -2 - moderate negative effect;
- -3 - significant negative effect;
- ? - effect not clear.

Link between the NDPES 20 and other strategic development documents

The National Development Programme of the Energy Sector up to 2020 became the basis for the following development and target programmes:

- The Development Programme for Energy Production and Distribution Sector up to 2018;
- The State Programme for the Use of Shale Oil for 2008 – 2015;
- The Programme Stimulating the Usage of Biomass and Bioenergy for 2007 - 2013;
- Targeted Programme on Energy Saving.