RECOMMENDED KEY GUIDELINES OF THE NATIONAL ENERGY STRATEGY OF LITHUANIA

CHAPTER I
GENERAL PROVISIONS

1. Structural reforms and strategic projects implemented in Lithuania in the process of pursuing the National Energy Independence Strategy have led to the diversification of the energy supply routes and sources, reduced the energy prices for customers, and opened new opportunities for the development of the country, using the established infrastructure for meeting the needs of both Lithuania and the Baltic Sea Region. The energy sector of Lithuania underwent a substantial reorganization aiming at reducing and finally terminating the energy dependence on Russia that had manifested itself in unreasonably high prices for energy resources and the use of energy as a political tool.

2. Having regard to the results of implementation of the National Energy Independence Strategy, the remaining tasks to be fulfilled, and the new trends that have emerged in the energy markets as well as considering the objectives of the European Union’s (EU) Energy Union and the Baltic Energy Market Interconnection Plan, proposals have been made to update the National Energy Independence Strategy according to the provisions of these Recommended Key Guidelines of the National Energy Strategy of Lithuania.

3. The Recommended Key Guidelines of the National Energy Strategy of Lithuania have been formulated based on the energy sector development scenarios analysis’ conclusions made by the Lithuanian Energy Institute and upon summarisation of discussions of the relevant issues and challenges held with the members of the public, representatives of research and business communities, state authorities and other stakeholders.

4. Having regard to the consensus of Lithuanian energy sector’s community and the approval of the public, the current policies and lines of action must be continued in the future, attractiveness of the national economy for investors must be enhanced, introduction of modern technologies and innovation in the energy sector must be promoted, and development of the energy system must be ensured.

CHAPTER II
STRATEGIC OBJECTIVES AND TASKS OF THE ENERGY SYSTEM

5. The main strategic objectives of the future energy system of Lithuania are as follows:
5.1. Energy security of the State;
5.2. Economic competitiveness of the State;
5.3. Energy efficiency and efficient use of the energy infrastructure;
5.4. Enhancing the image of the State;
5.5. Transparent and professional management of energy sector;
5.6. Use of the available potential of technology and scientific knowledge in the energy sector.

6. The main tasks of the future energy system of Lithuania are as follows:
6.1. Ensure synchronous operation of the Lithuanian power transmission system with the grids of Europe;
6.2. Make a due assessment of the threats posed by the construction of a nuclear power plant (NPP) in Ostrovets, Belarus, as well as its impact on fair competition in the electricity market, and implement measures to protect interests of both Lithuania and the EU;
6.3. Maintain local reliable and competitive generation of electricity that fully meets the needs of the State;
6.4. By 2050, increase the share of renewable energy sources (RES) in the final energy consumption to 70%;
6.5. By 2020, increase the share of heat generated from RES and/or local energy sources in the total heat consumption to 70%;
6.6. Use the potential of the Klaipėda liquefied natural gas (LNG) terminal to the maximum extent and purchase the LNG floating storage and regasification unit (Independence), in order to ensure stability and continuity of the LNG terminal;
6.7. Promote the development of energy markets and enhance the integration with the EU markets for electricity and gas;
6.8. Ensure that, by 2030, both primary and final energy intensity does not exceed the EU average and reduce it approx. 2.4 times by 2050 compared with the current situation;
6.9. Secure the interests of energy customers by expanding the range of services, improving the service quality and other service aspects relevant to customers, and simplifying procedures for the connection to networks.

CHAPTER III
ELECTRICITY SECTOR

7. Guidelines for the National Energy Strategy in the electricity sector are as follows:
7.1. Implement, by 2025, the project on the connection of the Lithuanian power transmission system (jointly with the Latvian and Estonian systems) to the grids of Europe for synchronous operation;
7.2. Make a due assessment of the threats posed by the construction of Ostrovets NPP in Belarus as well as its impact on fair competition in the electricity market, and, with the help of international institutions, take specific actions on a national, regional and international level to manage the relevant risks and to protect interests of both Lithuania and the EU;
7.3. By 2018, join the regional market of the Baltic States for electricity balancing, regulating and reserving, and by 2020 – the Baltic-Nordic market for electricity balancing, regulating and reserving;

7.4. Meet 100% of the demand for the electricity generation capacities by using reliable local generation sources;

7.5. Meet 100% of the demand for system services by using the Baltic generation sources;

7.6. Having regard to the fact that inefficient electricity generation facilities are still in operation in Lithuania (such as the Vilnius thermal power station (TEC-3), Units 7 and 8 of the Lithuanian Power Plant), which will have to be replaced with new facilities in 2020-2023 in order to meet the demand for the electricity reserve and to ensure competitiveness in the market, capacity market has to be developed and implemented without delay in order to promote investments in the development of reliable generation (including the further development of RES with the greatest potential):

7.6.1. Develop, in 2017, and introduce, in 2018, transparent and non-discriminative capacity mechanisms;

7.6.2. By 2018, adopt decisions on the development of reliable local generation;

7.6.3. By 2018, create and introduce a model on the RES integration into the power systems including the system services required for sustainable integration;

7.7. Start making assessments of the adequacy of the electricity markets from 2017, in coordination with the neighbouring countries, in order to ensure competitiveness of the regional market for electricity;

7.8. By 2020, create, to an extent that is dependent on the energy system, the environment for investments that is most attractive in the Baltic Sea Region;

7.9. By 2022, implement the project of Unit 5 of Kruonis Pumped Storage Power Plant;

7.10. By 2025, implement NordBalt 2 and LitPol Link 2 projects;

7.11. Consistently promote highly efficient co-generation;

7.12. Consistently digitalise the energy sector, implement smart grids and smart metering systems, create and introduce innovation in the energy system;

7.13. Freeze the Visaginas Nuclear Power Plant (VNPP) project until the time when it becomes cost effective, regarding market conditions, or becomes necessary, having regard to the circumstances of security of energy supply. Meanwhile, make use of any other opportunities for cooperation with Hitachi, Ltd. (in the areas of energy technologies, efficiency, etc.) relying on the work accomplished and the existing cooperation potential.

CHAPTER IV
NATURAL GAS SECTOR

8. Guidelines for the National Energy Strategy in the natural gas sector are as follows:

8.1. Upon expiry of the long-term lease contract in 2024 (or earlier, depending on circumstances) purchase the Independence LNG floating storage and regasification unit. Keeping in mind the benefits created by Klaipėda LNG terminal for the Baltic Sea Region, seek
financial contribution of the EU and/or other beneficiaries – states of the region – for securing the supply of natural gas, diversification as well as competition in the region;

8.2. By 2019, create a regional natural gas market (comprising of Lithuania, Latvia and Estonia, with the possibility of including Finland and Poland as well) and use the opportunities for transporting natural gas to the neighbouring EU Member States, seeking the maximum benefit for Lithuania’s economy;

8.3. By 2021, implement the project on the gas interconnection Poland-Lithuania (GIPL);

8.4. Ensure an efficient use the natural gas transmission and distribution infrastructure and provide customers with natural gas in a technically secure and flexible manner at attractive prices;

8.5. Establish and develop a LNG centre of competence, which would ensure collaboration between science and industry, export of LNG products, technologies and knowledge, and added value for the national economy;

8.6. Ensure a secure transit of natural gas in the territory of Lithuania;

8.7. Create conditions for the assessment of the potential of non-conventional hydrocarbon resources (shale gas, etc.) in the territory of Lithuania and, subject to favourable economic conditions and provided that damage to the environment is avoided, use the extraction of such resources for promoting the economic development of Lithuania and creating benefits for its regions.

CHAPTER V
RENEWABLE ENERGY SOURCES SECTOR

9. Guidelines for the National Energy Strategy in the RES sector are as follows:

9.1. Achieve the following shares of RES in the total final consumption of energy:

9.1.1. 35% by 2030;

9.1.2. 70% by 2050;

9.2. By 2020, without raising electricity prices for customers, increase the total installed capacity of wind farms connected to electric grids by 250 MW;

9.3. By 2020, complete all the relevant investigations in the Baltic Sea and, upon deciding on the expedience and usefulness of the wind energy development in the Baltic Sea, launch wind energy projects in the Baltic Sea in 2020, without raising electricity prices for customers;

9.4. Promote the activities of minor biomass suppliers and maintain a significant share of such suppliers in the biomass market.

1 The 70% target is applicable in the case if the VNPP project is not implemented by that time for economic or other market-related reasons. If the VNPP project is implemented by that time, the target should be reassessed and updated.
CHAPTER VI
INCREASING ENERGY EFFICIENCY

10. Guidelines for the National Energy Strategy in the area of increasing energy efficiency are as follows:

10.1. Promote an integrated renovation of multi-apartment buildings and public buildings (giving the priority to renovation by blocks) and complete renovation of 25% of all multi-apartment buildings and achieve energy savings of 2.6-3.0 TWh by 2020 and complete renovation of 50% of all multi-apartment buildings and achieve energy savings of 5.0-6.0 TWh by 2030;

10.2. Increase the rate of development of low-energy industries and implement state-of-the-art and environmentally-friendly technologies, achieving a 620 GWh energy savings by 2025; by 2050, reduce the energy intensity of industry 2.4 times compared with the present situation;

10.3. Increase energy efficiency in the transport sector by modernising the vehicle fleet, effecting a transition to modern and efficient public transport, and optimising the transport infrastructure by electrification; by 2050, reduce the energy intensity of the transport sector 2.4 times compared with the present situation.

CHAPTER VII
HEATING SECTOR

11. Guidelines for the National Energy Strategy in the heating sector are as follows:

11.1. In order to reduce pollution in the cities, promote the development of centralized heat supply and the security of such supply, by modernising the existing heat transmission systems and building new ones;

11.2. By 2020, increase the share of heat generated from RES and/or local energy resources and supplied centrally up to 70%;

11.3. Ensure an efficient state regulation of natural monopolies in order to minimise heating costs for residents in the long term;

11.4. Ensure that operations of independent heat producers in the heating sector are efficient and market opportunities are fully utilised;

11.5. Promote the use of solar energy, heat pumps and other clean heat generation technologies in the heating sector;

11.6. Increase, with the EU assistance, efficiency of decentralized heating facilities by 30% by replacing obsolete boilers operating on solid fuel with new boilers using RES, or other clean heat generation technologies;

11.7. Promote development of co-generation in centralized heat supply systems.

CHAPTER VIII
TRANSPORT SECTOR
12. Guidelines for the National Energy Strategy in the transport sector are as follows:
   12.1. Modernize the vehicle fleet and perform a transition to modern and environmentally-friendly public transport;
   12.2. Promote the use of alternative fuels in transport (use of LNG in heavy transport and maritime sectors; use of natural gas and biogas in public transport; electrification of railways, etc.); in coordination with the relevant EU policy, establish a network of fuelling stations for vehicles operating on LNG and ensure an efficient development of this infrastructure;
   12.3. Promote the use of electromobility in the transport sector, establish a network of electric cars charging points, and ensure an efficient development of this infrastructure;
   12.4. Promote research and innovation as well as the introduction of clean technologies in the transport sector.

CHAPTER IX
OIL SECTOR

13. Guidelines for the National Energy Strategy in the oil sector are as follows:
   13.1. Ensure and promote placement of oil and petroleum products on the market seeking an efficient competition in the market;
   13.2. Promote the use and development of alternative fuels;
   13.3. Create conditions for the search of new oil resources, both conventional and non-conventional (shale), and, subject to favourable economic conditions and provided that damage to the environment is avoided, use the extraction of such resources for promoting the economic development of Lithuania and creating benefits for its regions.

CHAPTER X
CLOSURE OF THE IGNALINA NUCLEAR POWER PLANT

14. Secure sufficient funding by EU and/or from other sources for the closure of Ignalina NPP after 2020.

CHAPTER XI
MANAGEMENT OF STATE-OWNED UNDERTAKINGS AND THE ENERGY SECTOR

15. To attain the objectives identified for the energy sector, the highest degree of transparency of management and activities of the energy sector undertakings as well as efficiency and professionalism of operations must be ensured. Therefore, the focus shall be on the following main principles of management:
   15.1. Zero tolerance for corruption;
   15.2. Transparency of activities;
   15.3. Professionalism;
15.4. Building capacities and powers of the market regulator and other state authorities;
15.5. Development of competences and knowledge and training of requisite specialists.