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Latvia's Energy Sector

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Latvia's energy policy is based on competitiveness and it is aimed at strengthening energetic independence, facilitating the use of renewable and local energy sources, diversification of its energy sources and enhancing environmental protection.

History.

Latvian scientists have taken part in the creation and development of energy as a scientific discipline. The year 1862 saw the establishment of Riga Technical University (at that time Riga Polytechnic), which encompassed 8 faculties. Soon after the most progressive form of energy – electricity – was discovered, the use of electricity for lightning was demonstrated in Riga (in 1879), and starting from 1883 electricity generators were assembled in several institutions of Riga. In 1927, already in independent Latvia, an electrification program, for the coming years up to the year 1950, was elaborated. In 1931, the study on "Fundamentals of Latvia's electrification" was published. The development of Latvia's electrification was seen to base on hydropower and other local renewable energy sources. In 1936, a Law was passed on the construction of Ķegums Hydropower Plant (HPP) on the river Daugava and in 1939 the first hydropower unit was put into operation. At that time it was biggest HPP in the Baltic States and the most modern in the Northern Europe. In 1946 the Academy of Sciences was founded in Latvia and the same year saw the establishment of the Institute of Physical Energetics, which has evolved into Latvia's leading research centre in the field of energy science. The Institute, in collaboration with the Riga Technical University and the University of Latvia, carries out relevant research in the frames of National research programs and is involved in many EU research projects.

A vision of our energy future.

In the long-term and medium-term, Latvia intends to further expand production of electrical energy in ecological (green) way. Viewed in a long-term perspective the use of nuclear energy will be necessary to help meet the energy needs. In short and medium term, however, the main energy sources will be hydropower, biofuel, wind energy and other renewable energy sources. As high reliability, 4th generation nuclear power is expected to become available by 2040, in the next 20 to 30 years fossil fuels will continue to play an important role. As regards non-renewable energy resources, it is pleasing that natural gas, the cleanest and the most nature-friendly of fossil fuels, remains the most available energy resource in Latvia. The vision of the development of Latvia's natural gas supply system towards the next 20 to 30 years, therefore seeks to implement our intention to become the largest natural gas storage centre in Europe. Latvia is located in a unique geological setting that makes it possible to develop more natural gas storage sites with the capacity of 50 billion cubic meters (BCM) in addition to the existing Inčukalns Underground Gas Storage Facility (capacity – 4,4 BCM). Apart from this international gas pipeline connections need to be constructed and reasonable efforts shall be made to build a liquefied gas terminal in one of Latvian ports.

As regards the renewable energy sources, our aspiration is to generate more energy from biofuels (wood) and to develop use of biomass gas. In this sense much success has been already achieved, namely 30% of the total energy consumption in Latvia lies on renewable energy sources. Using of biogas for small power generation in combined heat and power plants gives competitive advantages. The fertile agricultural lands of Latvia are usable for

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