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CURRENT DEVELOPMENT IN THE LATVIAN ENERGY SECTOR

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OVERVIEW

This paper gives a short overview of energy conditions in Latvia, analyses the current situation and provides overview of the latest developments in the Latvian energy sector. Main challenges of the current energy targets are described. Legislative analysis of energy-related development in the energy sector is carried out in the paper.

RESULTS

The research on the current situation in the energy sector in Latvia has shown that the main challenges in the energy sector concerning the priorities of EU strategies are:

- to increase security of energy supply,
- to promote sustainability,
- to promote effective competition,
- to finalize the development of the internal market,
- to promote energy efficiency measures,
- to ensure larger use of renewable energy sources taking into account technical and economical issues,
- environmental protection issues in producing, transmitting and distributing of different energy resources.

Main challenge of the Latvian energy sector is the great influence of the import of primary energy resources (see Table 1).

Table 1. Import of primary energy resources in Latvia (2008) [1]

Type of energy resource	Country/countries of import	Percentage
Oil products	Commonwealth of Independent States	15
	Other countries in the world	20.1
Coal	Commonwealth of Independent States	2.1
	Other countries in the world	0.1
Natural gas	Russia	28.5
Electric energy	Russia	3.1
	Estonia and Lithuania	1.5

The table indicates that the self-sufficiency of primary energy resources in Latvia was 29.6% in 2008. The statistical data confirm that the issue of self-sufficiency should be emphasized as one of the national energy challenges of crucial importance.

During the last couple of years Latvia has adopted new legislative acts with regard to the energy sector in Latvia. One of the latest important legislative acts adopted by the Parliament and entered into force from 03.03.2010 is the Law on the Efficiency of Final Energy Consumption [2]. The aim of the law is to promote efficiency of final energy consumption and to provide energy efficiency services, including the development of energy services market. The law lays foundations for elaboration and implementation of energy efficiency action plan.

Directive 2009/28/EC has set the Latvian national overall target for the share of energy from renewable sources in gross final consumption of energy in 2020 40% [3]. In order to achieve

this ambitious target that is second highest in the EU-27 after Sweden (49%), Latvia has begun active work to prepare the Law on Renewable Energy Sources.
Guidelines for Development of Energy Sector for 2007-2016 emphasizes that self-sufficiency of electricity should achieve 80% by 2012 and 100% by 2016 in Latvia. Annual report of the Transmission System Operator (TSO) [4] has analysed three different scenarios of energy sector development. According to all three scenarios the self-sufficiency of electricity for 2012 will be 76% that could challenge the objectives defined by the government.
One of the current challenges in the energy sector of Latvia is to ensure electricity generating capacity and supply for the final customers in Latvia. The development of generating capacity, capacity of transmission and distribution networks to meet demand of consumers and the possibility to import electricity will shape the development of energy sector in Latvia.
TSO has expressed concern over the electricity generation capacity that is insufficient to cover demand [4]. Daugava hydro electric power plants depend on the amount of water in Daugava River. Energy supply in Latvia depends on the power plants located in Latvia and neighbouring countries. Current state of energy system in Latvia experiences shortage of base load. The situation in the Baltic region is made worse by the closing of Ignalina nuclear power plant. Additional capacity from neighbouring countries that would be available for the consumers in Latvia until 2020 could not exceed 200 MW [4, 5].

CONCLUSIONS

1. Energy sufficiency in the country is an issue of economical development, quality of life and state security. The aim of the energy sector in Latvia is to ensure balanced, secure and sustainable supply of energy for national economy and population.
2. There are several measures that should be implemented to increase the security of energy supply:
   - Reconstruction of Riga TEC-2,
   - Building of a new base load power plant that would diversify the fuel,
   - Development of transmission networks and new connections with the TSOs of neighbouring countries,
   - Use of renewable energy sources,
   - Rational use of Inčukalns Underground Gas Storage Facility and development of gas connections in the Baltic States,
   - Increasing the import of oil products from suppliers in different countries in the world.

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