Renewable Energy in Slovakia - Opportunities and Challenges of the Clean Energy Package
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Update on the implementation of renewable energy and energy efficiency policies in Slovakia

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Energy Mix

Structure of electricity production 2016 (27,451 TWh)

- Vodné: 32.3%
- FVE: 6.8%
- OZE: 4.4%
- Ostatné: 0.2%
- Jadrové: 24.7%
- Fossilne: 31.5%

Structure of installed capacity 2016 (7,848 MW)

- Vodné: 17.6%
- OZE: 6.8%
- Ostatné: 0.3%
- Jadrové: 53.8%
- Fossilne: 19.4%

Low – carbon electricity production: approx. 80% in 2016

Source: SEPS, a.s.; MoE SR
Figure 5.2 Electricity generation by source in IEA member countries, 2015

- Australia
- Poland
- Estonia*
- Netherlands
- Japan
- Ireland
- Greece
- Korea
- Turkey
- United States
- Luxembourg
- Italy
- Czech Republic
- Germany
- United Kingdom
- Portugal
- Spain
- Belgium
- Denmark
- Hungary
- Austria
- Finland
- New Zealand
- Slovak Republic
- Canada
- France
- Sweden
- Norway
- Switzerland

* Estonia’s coal represents oil shale.

Note: Data are estimated.

LEGAL FRAMEWORK

EU level:
- Directive 2009/28/EC on the promotion of the use of energy from renewable sources
- Binding targets 2020 for Slovakia:
  - 14% energy from renewables in gross final consumption (6.7% in 2005)
  - 10% energy from renewables in transport

Slovakia:
- National renewable energy action plan (2010), which sets following non-binding targets till 2020:
  - 24.0% electricity from RES
  - 14.6% heat from RES
  - 10.0% RES in transport
RES TARGET FULLFILLMENT

Source: MoE SR

Skutočnosť - Eurostat  Orientačná trajektória
Energetická náročnosť SR je síce stále nad priemerom EÚ, ale pokles po roku 2000 bol jeden z najvyšších v EÚ.
PRIORITIES OF RES USE

• Principle of minimizing costs while applying an integrated approach to utilising RES and decreasing greenhouse gas emissions
  
  ➢ combination of RES and low-carbon technologies will decrease consumption of fossil fuels and therefore greenhouse gas emissions

• Priority is using technologies whose investment costs could be to a large extent covered by market
  
  ➢ reasonable final energy price
  ➢ SK will in the near term focus on support for RES in heating sector, support for electricity will be gradually restricted.
Energy intensity EU-28 in 2001-2016

- Historically hard starting position of SK – Energy intensive industry
- Significant progress in decreasing energy intensity:
  - 2006 – 2012, decreasing energy intensity by more than 27%, the highest decrease in EU and OECD
  - SR has decreased energy intensity by 51.9% in 2001 – 2016
  - SR is still above the EU average (the 7th highest)

Source: Eurostat
ENERGY EFFICIENCY TARGETS BY 2020


- Indicative energy efficiency target 2020 according to Article 3 EED
  - Primary energy consumption (PEC): 686 PJ
  - Final energy consumption (FEC): 378 PJ

- Binding energy efficiency target according to Article 5 EED:
  - Annually refurbish 3% of the total floor area of more than 250m2 of central government buildings
  - SK set alternative approach – energy savings of the refurbishment of public buildings - 52,17 GWh/annually

- Binding energy efficiency target according to Article 7 EED:
  - 1,5% of annual energy sales from distributors or energy suppliers
  - 948,75 GWh/annually, 26565 GWh cumulative by 2020
FULFILMENT OF ENERGY EFFICIENCY TARGETS BY 2020

- Fulfilment of national indicative target according to Article 3 EED
- SK in 2017 is aimed to fulfill the national indicative target
- PEC 638 PJ (107%), FEC 383 PJ (99%)

SK Energy Efficiency Targets 2001-2016

Source: MoE SR
FULFILMENT OF ENERGY EFFICIENCY TARGETS BY 2020

- Fulfilment of mandatory energy efficiency target according to Article 5 EED
- SK in 2017 is aiming to fulfil the mandatory cumulative target
- Intermediate fulfilment of the target in 2017 - 6.36% over the target
- Annual assessment
  - years 2014, 2016, 2017 – not enough – structural funds
  - year 2015 – striking overlap with the reason of finalising the structural funds projects

Source: MoE SR
Fulfilment of mandatory energy efficiency target according to Article 7 EED
SK in 2017 is aiming to fulfil the mandatory cumulative target
Intermediate fulfilment of the target in 2017 - 4.78% over the target

Source: MoE SR
FULFILMENT OF ENERGY EFFICIENCY TARGETS BY 2020

• Grounds of positive trends in energy efficiency in Slovakia in comparison to the previous years assessment:
  • Application of new approaches in Energy efficiency monitoring system (SIEA)
  • Better quality of data processing from buildings energy certificates from INFOREG (MDV SR)
  • Voluntary agreements with industry in 2017 and 2018, 21 at present (MH SR)
  • Development of industry with high added value (MH SR)
  • Acceleration of EU funds implementation
THANK YOU FOR YOUR ATTENTION

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