

Renewable Energy in Slovakia - Opportunities and Challenges of the Clean Energy Package

Bratislava, 10. apríla 2018

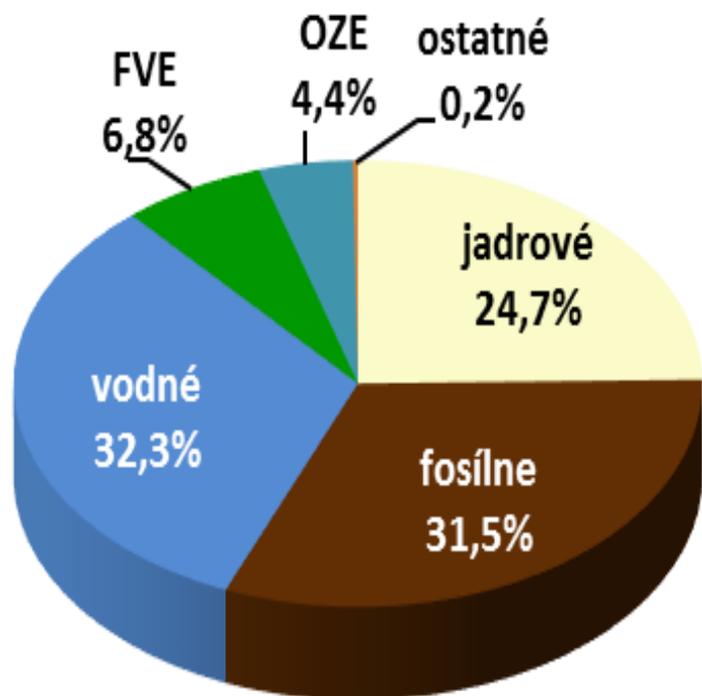
Update on the implementation of
renewable energy and energy
efficiency policies in Slovakia

Ján Petrovič

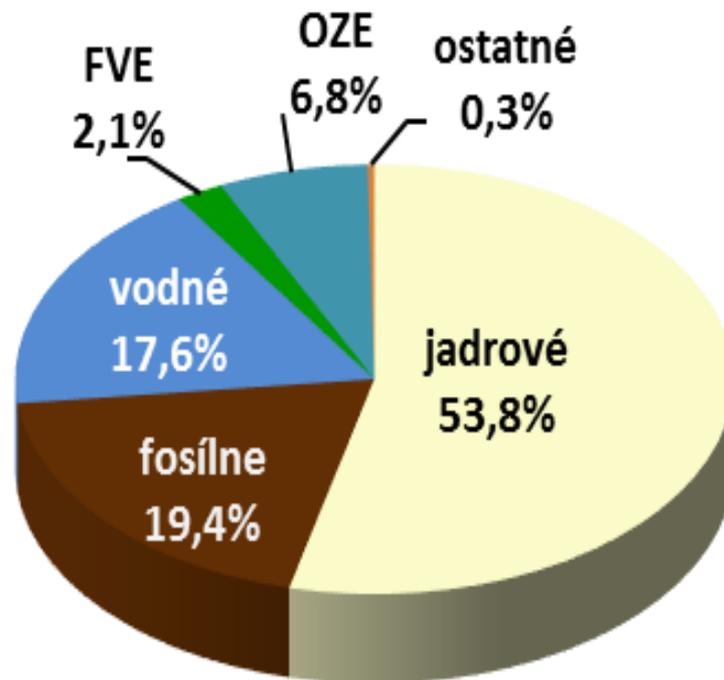
Director General Section of energy
Ministry of Economy of the Slovak republic

ENERGY MIX

*Structure of electricity production 2016
(27,451 TWh)*



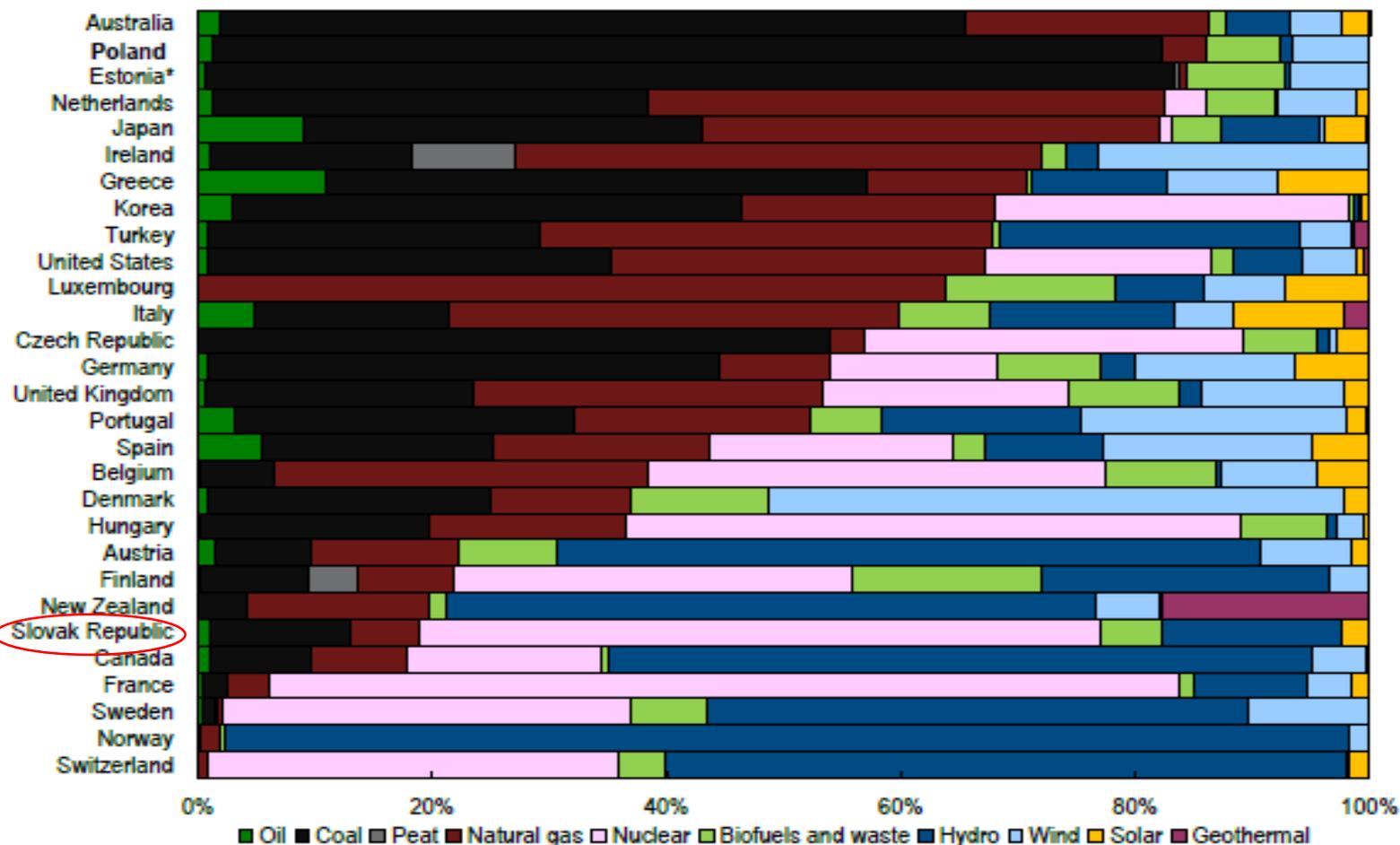
*Structure of installed capacity 2016
(7 848 MW)*



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

ENERGY MIX

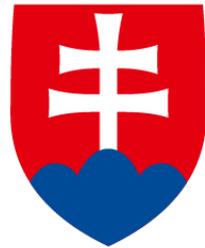
Figure 5.2 Electricity generation by source in IEA member countries, 2015



* Estonia's coal represents oil shale.

Note: Data are estimated.

Source: IEA (2016a), *Energy Balances of OECD Countries 2016*, www.iea.org/statistics/.



RENEWABLE ENERGY SOURCES

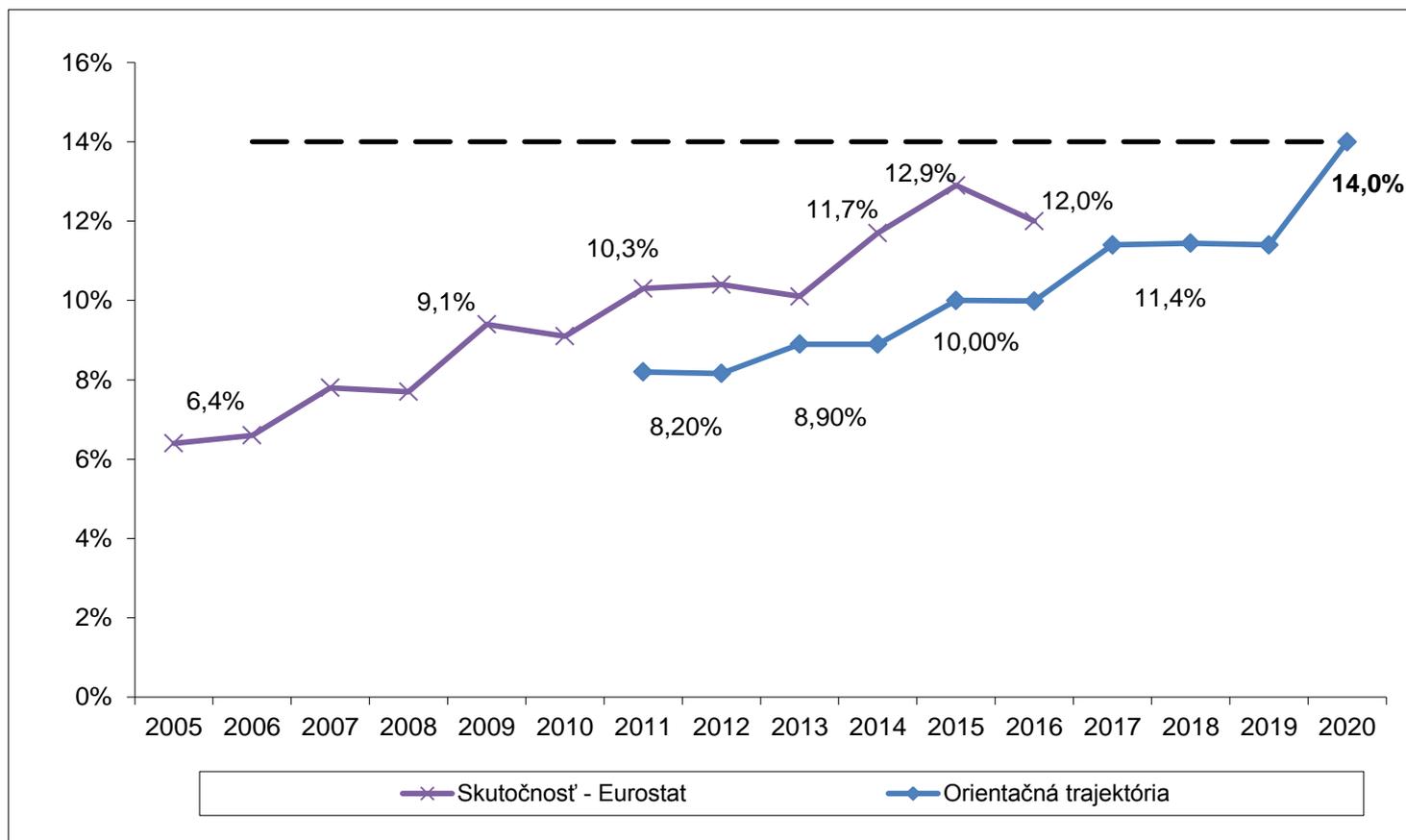
EU level:

- 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

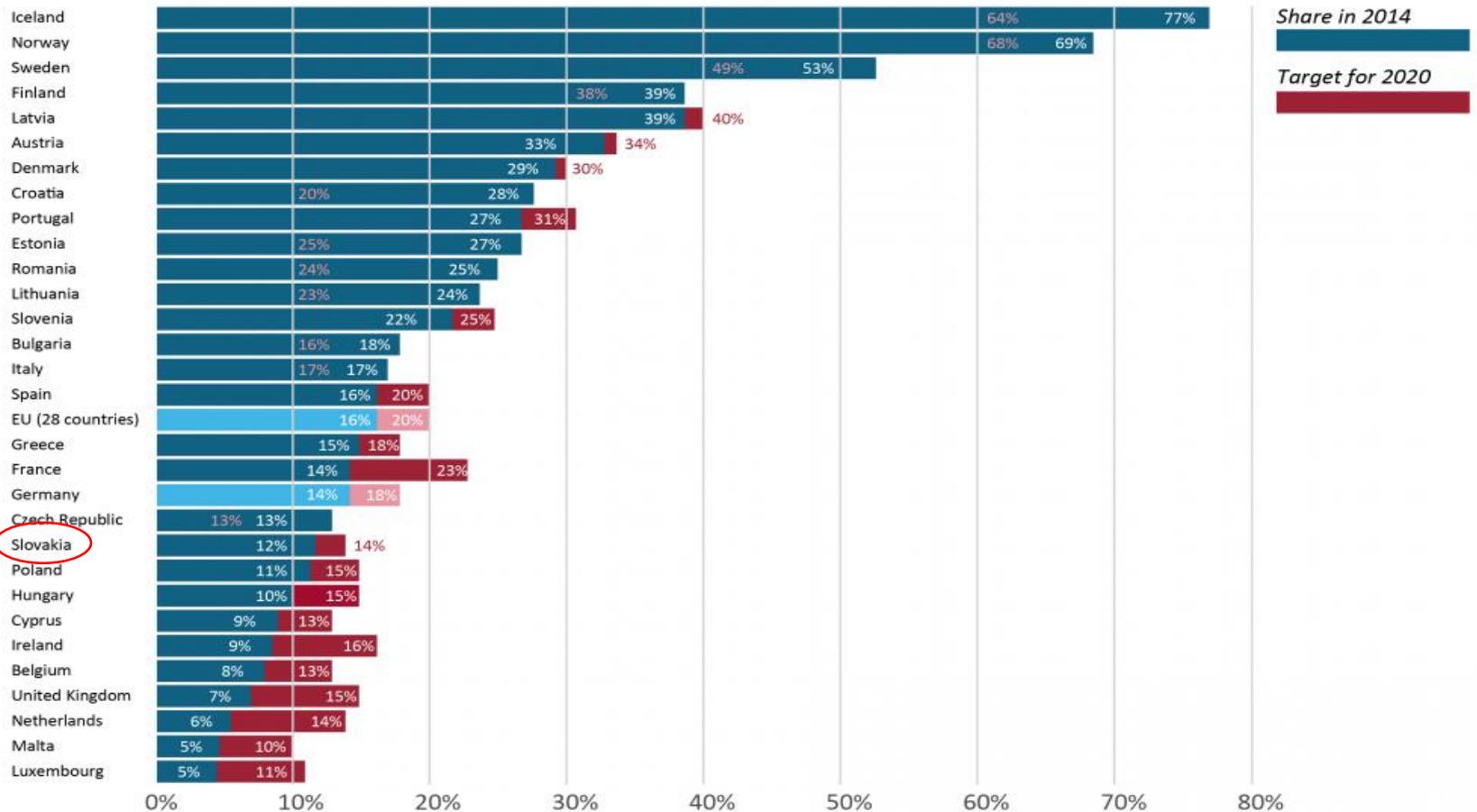
RES TARGET FULLFILLMENT



RES TARGET FULLFILLMENT

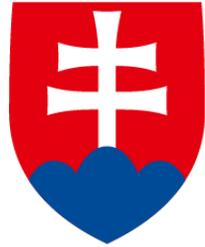
Share of renewables in gross final energy consumption in Europe 2014 and country target share for 2020.

Data: Eurostat 2016.



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.

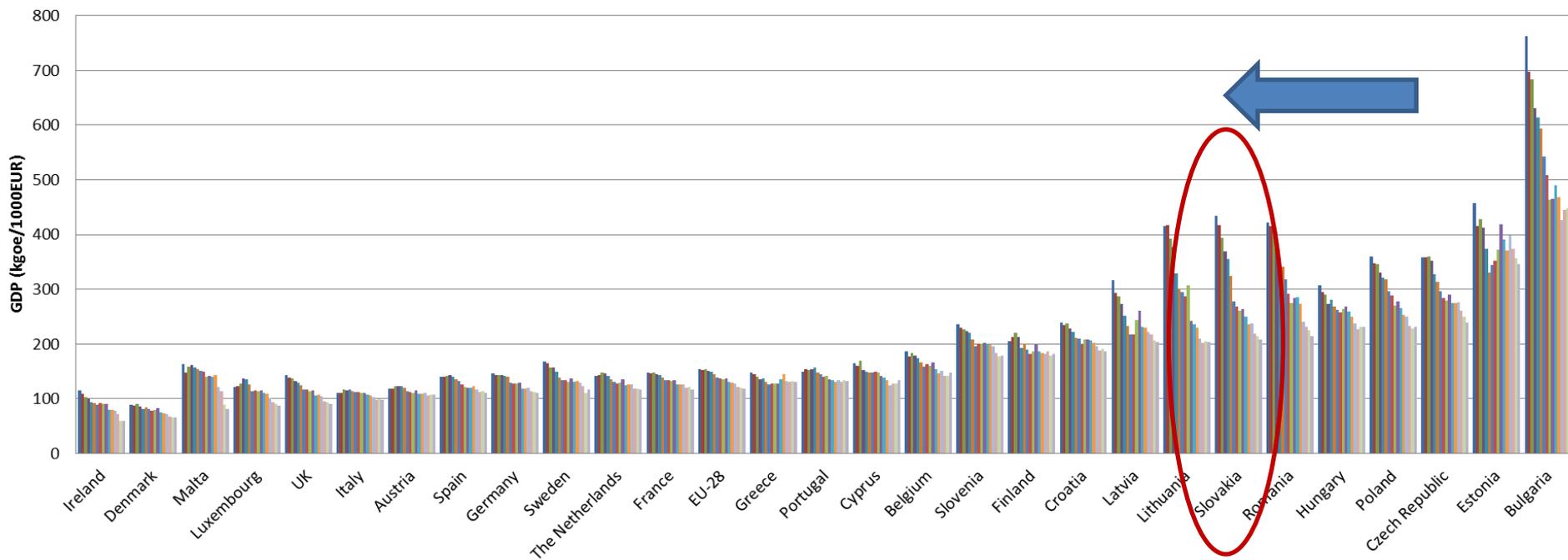


ENERGY
EFFICIENCY

ENERGY INTENSITY

- 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)

Energy intensity EU-28 in 2001-2016



Source: Eurostat

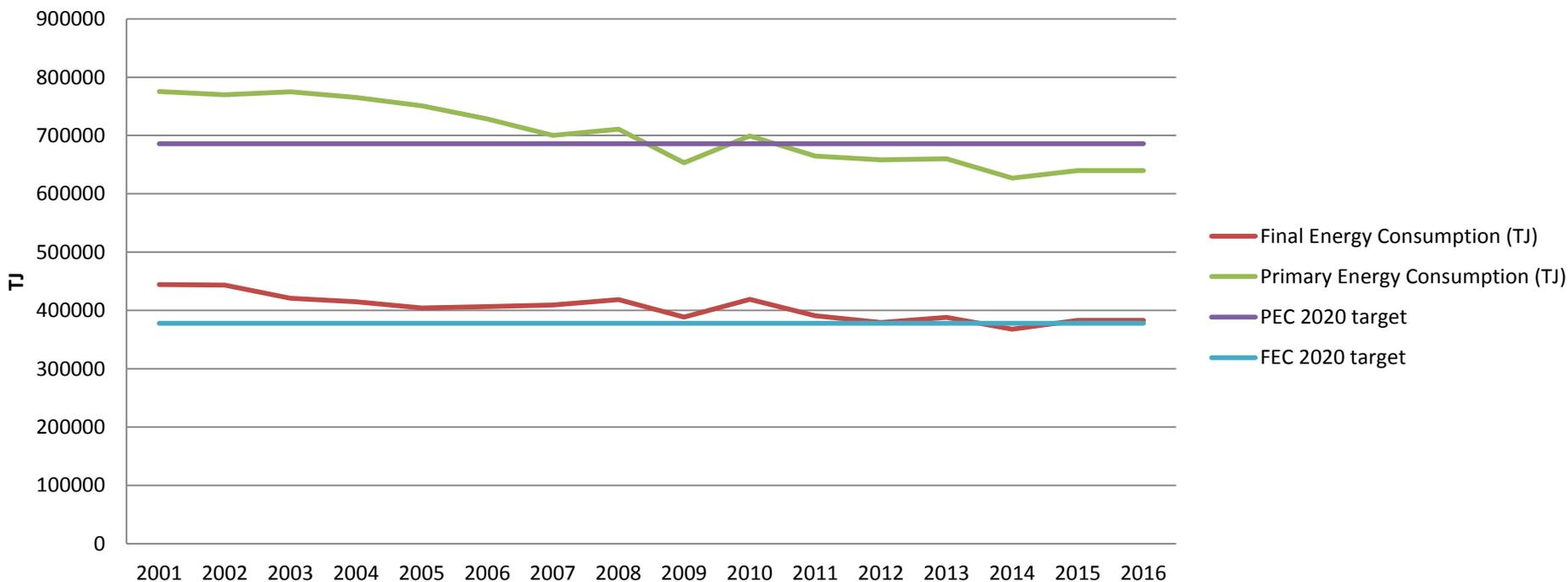
ENERGY EFFICIENCY TARGETS BY 2020

- Energy efficiency targets – according Energy Efficiency Directive 2012/27/EU
- 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

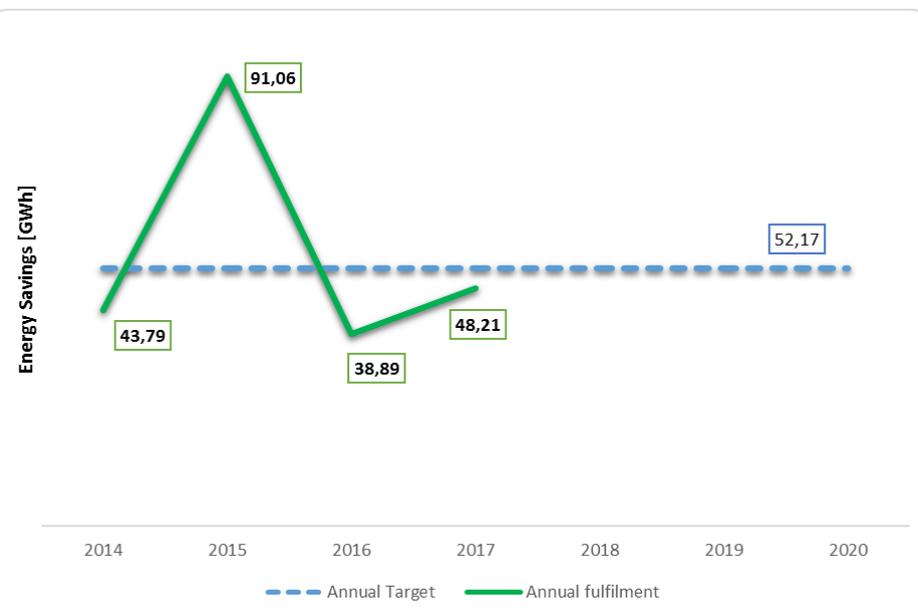
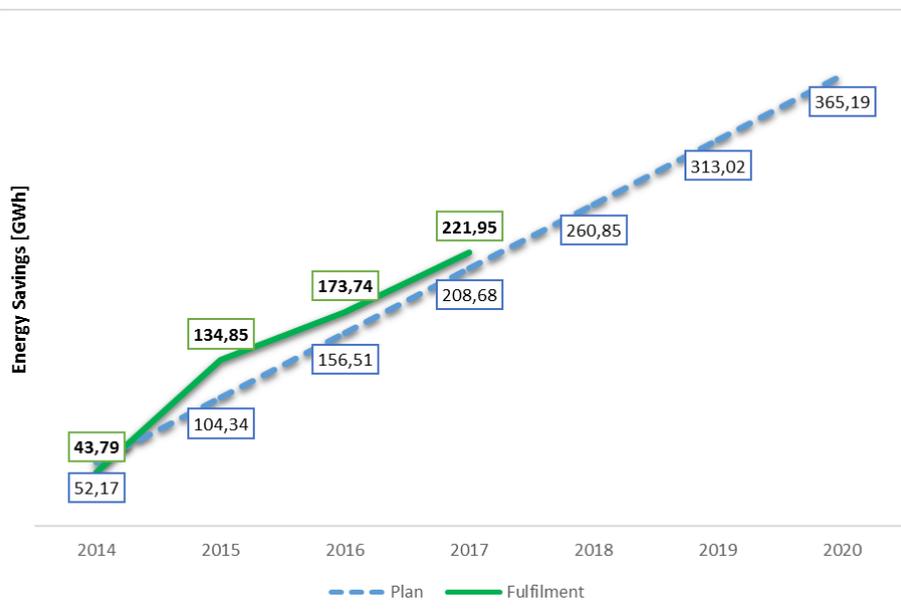
- Fulfilment of national indicative target according to Article 3 EED
- SK in 2017 is aimed to **fulfil the national indicative target**
- PEC 638 PJ (107%), FEC 383 PJ (99%)

SK Energy Efficiency Targets 2001-2016



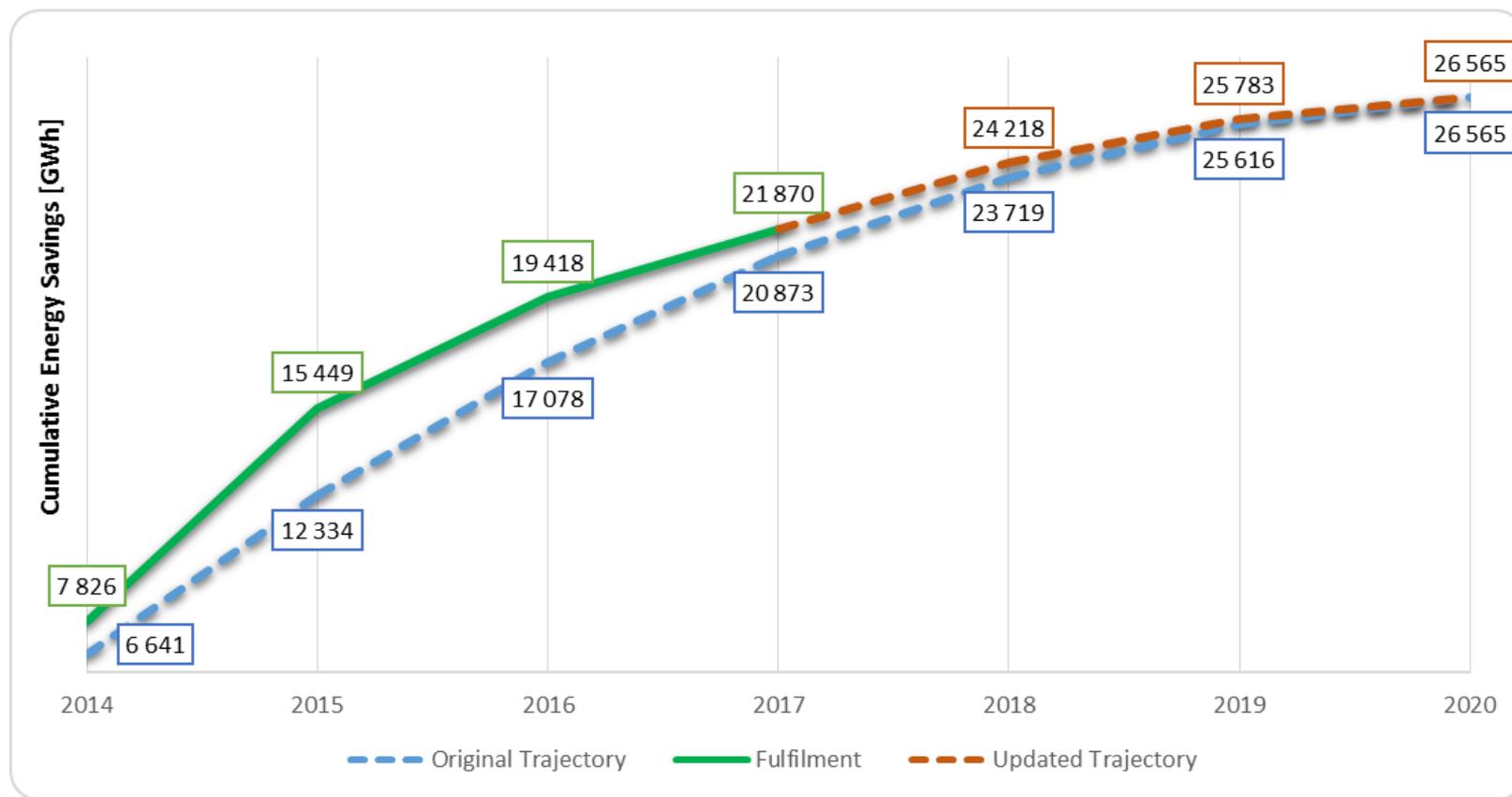
FULFILMENT OF ENERGY EFFICIENCY TARGETS BY 2020

- 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



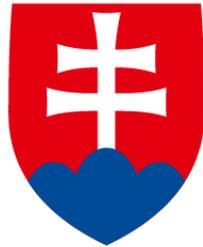
FULFILMENT OF ENERGY EFFICIENCY TARGETS BY 2020

- 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



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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