State of the play of climate related investment needs and financing in the Czech Republic

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Revised Directive 2012/27/EU on Energy Efficiency

- Clean Energy for All Europeans Energy Efficiency First Principle
- Final approval and publication by the end of 2018

- EU energy efficiency target at 32,5 %
- Real rate of energy savings at 0,8 % of final energy consumption
 - no exemptions

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Obligation to prepare National Plans

- Within the framework of the winter energy package Regulation on the Administration of the Energy Union
- Regulation implies the obligation to elaborate the so-called National Climatic and Energy Plans
- Deadline for submitting the National Plan proposal is the end of 2018 (the final version is 2019)
- First National Plans should cover the period 2021-2030
- National plans should include a contribution to meeting the climate-energy targets for 2030
- After the drafting of the draft National Plan, the so-called iterative process will take place, in which the EC will assess the sufficiency of the European target
- National plans should include the current status, objectives and policies to achieve these goals

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Dimension of the Energy Union	More detailed information		
De-carbonisation (including increasing the share of energy from RES)	 activities are carried out in cooperation with the Ministry of the Environment objectives of the regulations in the EU ETS and non-EU ETS (Czech Republic is also based on the objectives of the Climate Protection Policy) part of this dimension is the development of RES 		
Energy Efficiency	 requirement to quantify the absolute evolution of energy consumption (Article 3) for the Czech Republic very important and problematic fulfillment of so-called Article 7 it is closely linked to the Energy Efficiency Directive 		
Security of energy supply	 policies and measures under the state energy conception have been used number of measures are standardized at EU level closely linked to EU legislation requirements 		
Internal energy market	 relatively detailed coverage covered within network codes and other documents 		
Research, Innovation and Competitiveness	 there is no clearly identified sector research in the Czech Republic, which is problematic in the energy program THETA (Technological agency of the CR) 		
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Renewable Energy Sources in NECP

- Czech Republic did not agree to increase the European ambition by more than 30%
- Czech Republic is already fulfilling its 2020 target of 13% => proposed contribution of the Czech Republic for 2030 corresponds to 20-21% (sufficient to meet EU targets x costs)
- Number of sub-targets
 - mandatory RES share in transport: 14% (+ 3.5% advanced biofuel target)
 - indicative heating and cooling target at 1.1% yearly growth
- In order to fulfill the plan, the Ministry of Industry and Trade prepared an amendment to the law on the supported RES (currently following the comment procedure)

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Energy Efficiency in NECP (1)

National energy efficiency contribution until 2030 (Art. 3)

- maximum level of energy consumption
- set on the basis of the real potential to reduce energy consumption (energy efficiency target at 32,5 %)
- Energy savings obligation 2021-2030 (Art. 7)
 - cumulative end-use energy savings
 - annual energy savings of 8,4 PJ total of 462 PJ cumulative energy savings until 2030

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Energy Efficiency in NECP (2)

- Further tightening of mandatory annual savings => 204 PJ (2014-2020) versus 462 PJ (2021-2030)
- Relatively high ambition to increase the negotiation of the EED

Commitment of mandatory savings for 2021-2030 (Art. 7)



2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

→ Main reason why the Czech Republic voted against the adoption of the EED:

Implementation of Article 7 is binding at Member State level (compared with Article 3, which is "only" indicative)

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Real energy savings potential for 2021-2030

- Based on the realistic estimates of energy consumption trends and the potential to implement energy savings measures in the individual sectors in 2021-2030
- There is insufficient potential in the individual sectors to fulfil the 84 PJ target on the basis of the current alternative approach
 - Iow rate of additional and material energy savings (6 % in households, 30 % in industry)



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Cost to meet the energy savings obligation

- Estimated cost to reach the energy savings obligation for 2021-2030 with the current alternative scheme is more than 600 billion CZK (23 billion EUR)
- Combination of approaches and eligible energy efficiency policy measures can lead to a reduction of the total cost



Estimated cost 2021-2030 (billion CZK)

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Available financial resources

- Key factor to determine the approach are available financial resources in the state budget
- Based on the current estimates of the main sources of financing (ESIF and emission trading) the available financial resources at 87 – 143 billion CZK
- Estimated resources will be insufficient to cover the cost of the obligation scheme based on the alternative approach (BAU)

BAU Scenario – comparison of costs and available financial resources (billion CZK)



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Energy Efficiency Obligation after 2020

Key factors

- real energy savings potential
- rate of additional and material savings
- estimated costs
- available financial resources
- experience from the current period

Revision of the energy efficiency policy framework for the next period is necessary

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Possible scenarios

- alternative scheme
- obligation scheme
- combined scheme

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Combined scheme after 2020

- Estimated cost of the implementation of the combined scheme is the lowest
- Part of the obligation implemented by the obligated parties distributors or retail energy companies
- Suitable combination of investment, legislative and soft measures



Scheme	BAU (S 0)	Alternative (S 1)	Obligation (S 2.2)	Combined (S 3.2)
Amount of the commitment (PJ)	84			
Savings on the side of the state (PJ)	84	84	0	30
Savings on the part of obligated parties (PJ)	0	0	84	54
Grant rate	30 %	30 %	26 %	30 %
Total costs (billion CZK)	636	475	555	406
Costs on the side of the state (billion CZK)	192	143	87	87
Total costs on the consumer side (billion CZK)	444	332	468	319
Projection into energy prices (billion CZK)	0	0	222	103
Direct investment on the part of the consumer (billion CZK)	444	332	246	216
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Additional energy efficiency tools

- introducing a broad and functional range of financial instruments combined with grant programs
- introducing functional technical assistance for the preparation of high-quality energy-saving projects (especially in the field of housing, small and medium-sized enterprises and municipal and regional projects)
- introduction of a system of voluntary agreements with selected entities
- system of broad promotion of ways to reduce energy consumption aimed at achieving a change in energy saving awareness

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Thank you for your attention

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