Energy efficiency policy and Czech Republic

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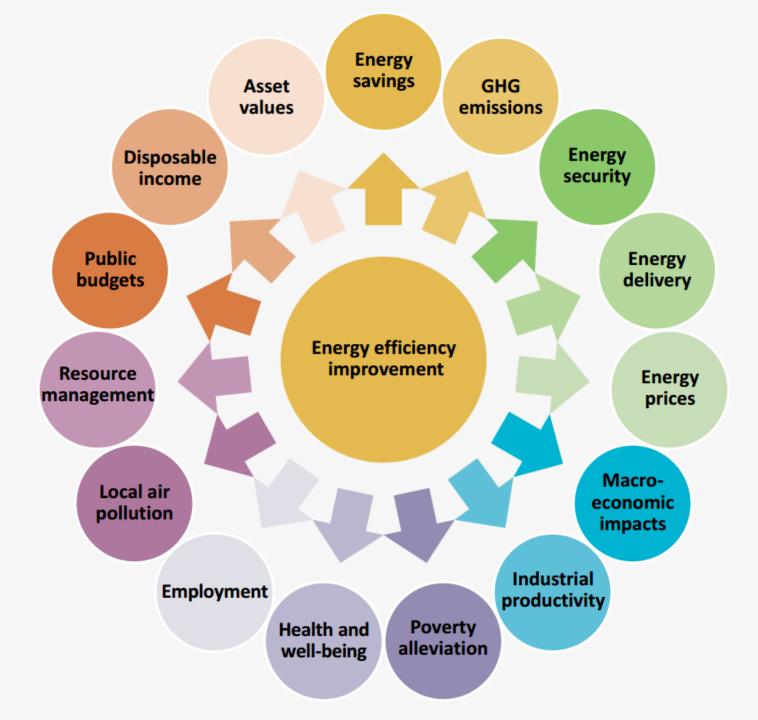
Introductory notes



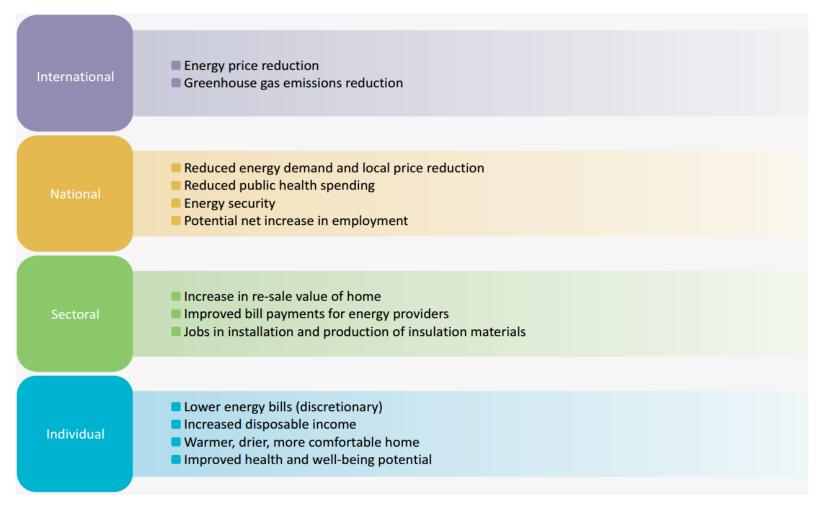
About us

- Independent research platform
 - Core at the Faculty of Social Studies, Masaryk University
- Research interest
 - Liberalization of energy markets
 - Energy policy-making and its enforcement
 - EU energy policy
 - Energy developments in CEE region
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Multiple impacts of EE

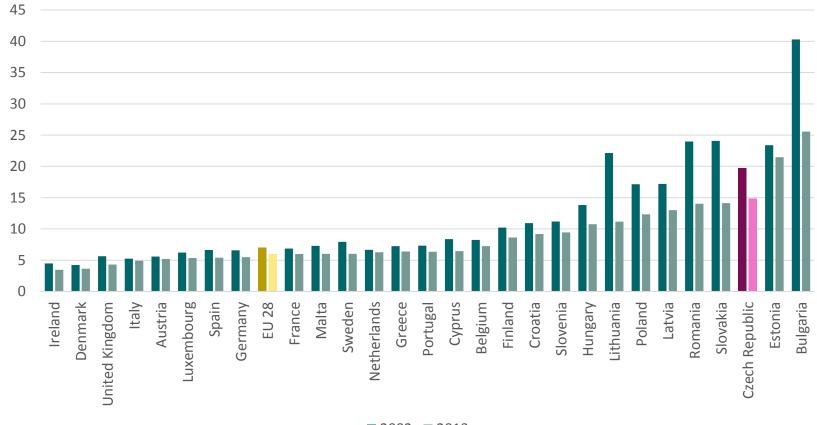




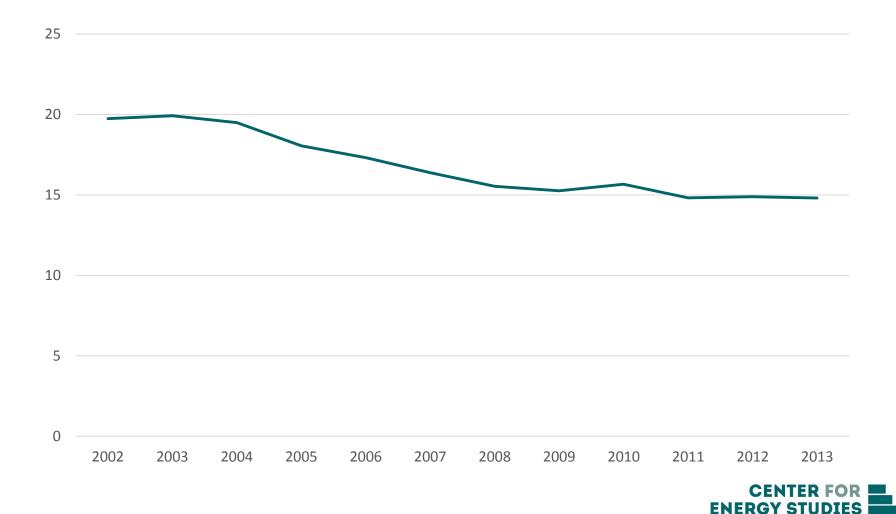
Development of energy intensity of Czech Republic



Energy intensity EU

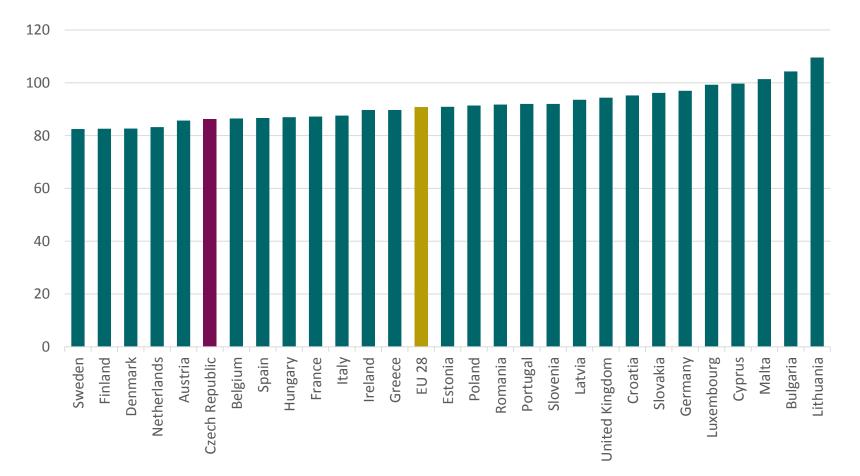


Energy intensity CZ



Source: Eurostat

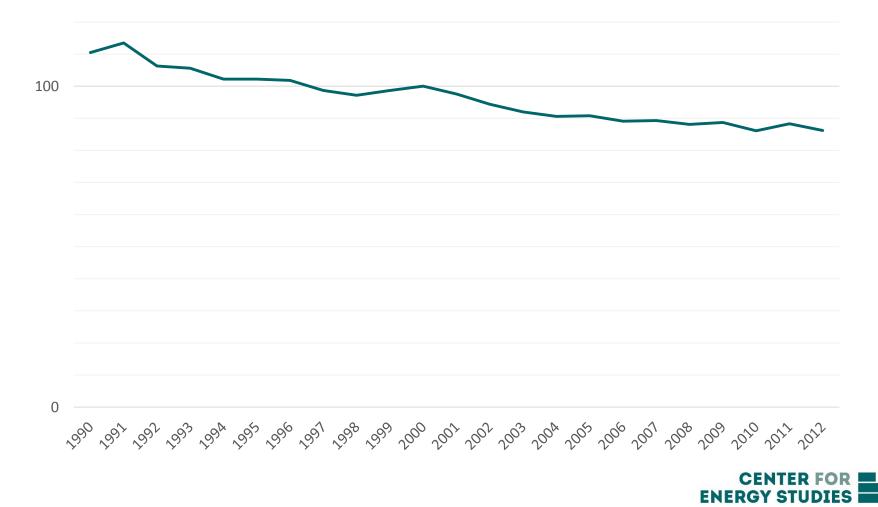
GHG Intensity of Energy Consumption





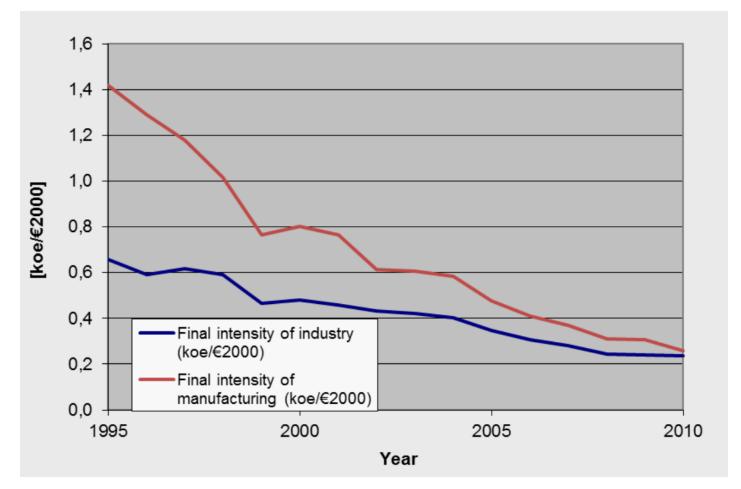
Source: Eurostat

CZ GHG Intensity of Energy Consumption



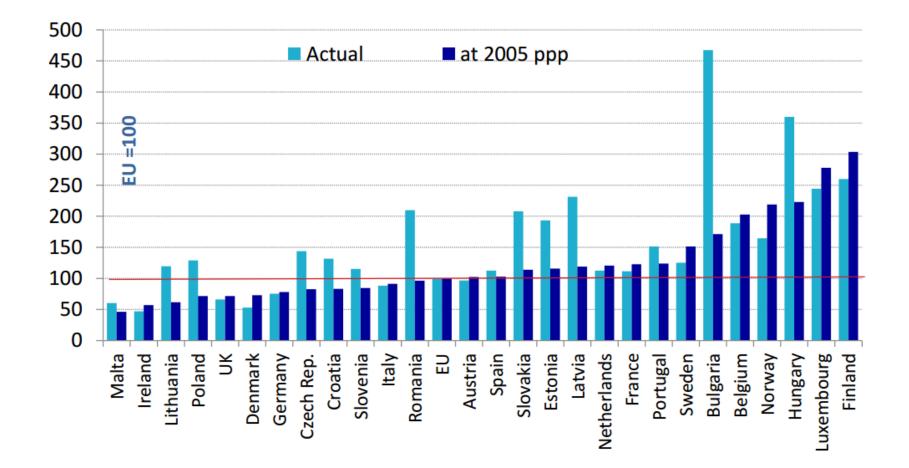
Source: Eurostat

Energy intensity in industry



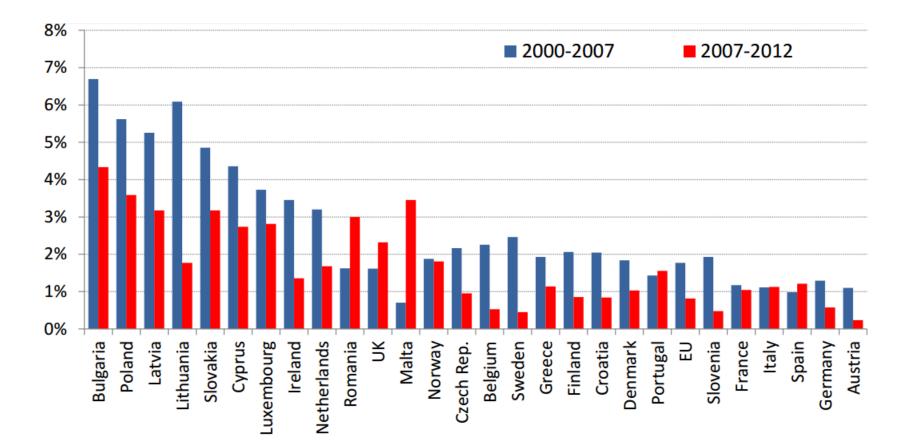


Energy intensities in manufacturing

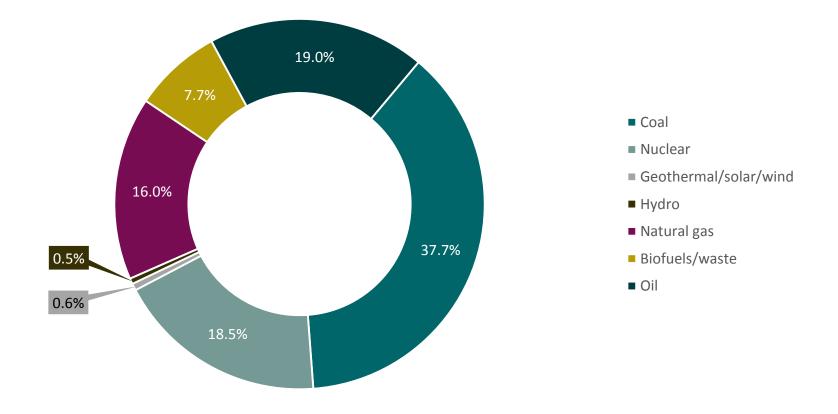




Efficiency trends in manufacturing

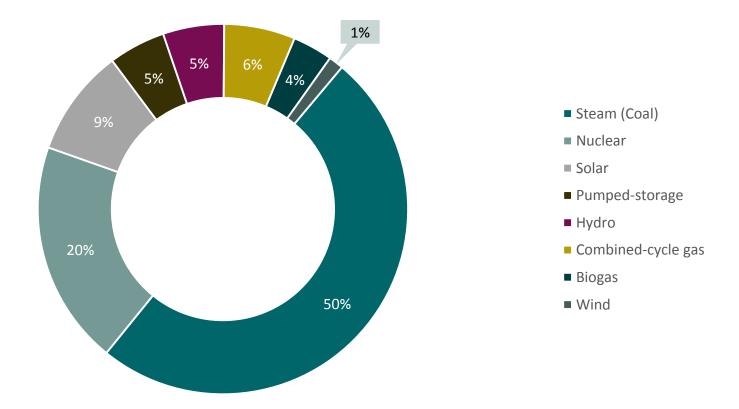


Total Primary Energy Supply





Electricity gen. – installed capacity





EU regulation in EE

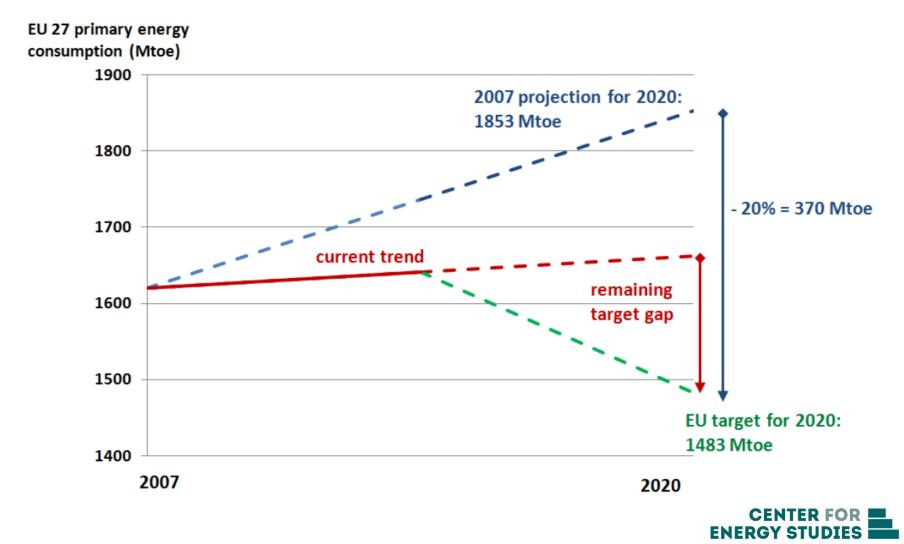


European goals

- Transition to the low carbon emission economy
- Climate and energy goals
 - 20% lower GHG emmissions
 - 20% lower energy consumption
 - 20% energy produced by renewables



EE 2020 goal



Old EU directives

- 2006/32/EU Energy Services Directive
 - Commitments not on track
 - No way how to achieve desired savings
- 2004/8/EU Cogeneration directive



Current EU legislation

- 2010/31/EU Energy Performance of Buildings Directive
- 2010/30/EU Energy Labelling Directive
- 2009/125/EU Ecodesign Directive

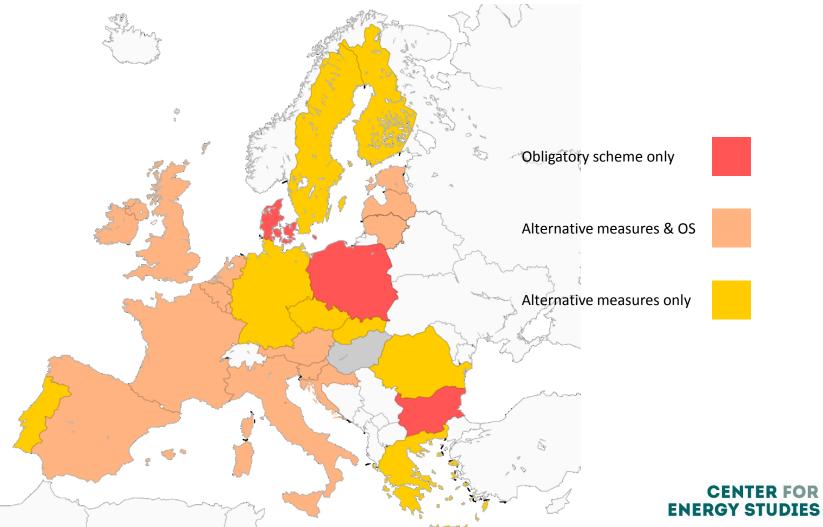


Current EU legislation

- 2012/27/EU Energy Efficiency Directive
 - Public sector-driven energy savings
 - Obligatory vs. Alternative scheme
 - Energy audits for large enterprises
 - Replaces ESD and Cogeneration Directive



Obligatory vs. alternative schemes



Source: Author, Enspol – Energy Saving Policies and Energy Efficiency Obligation Scheme

Czech implementation of 2012/27/EU EED



Czech implementation of EED

- Article 7
 - Alternative scheme
 - End-user price impact
 - Existing programmes
 - Financing schemes and options
 - State oversight
 - Political coordination to achieve goals
 - If savings equal, countries allowed to use alternative schemes or combine



Czech implementation of EED

- Article 3
 - Set national estimates of energy savings
- Article 4
 - Building refurbishment
 - Great potential savings
- Article 5
 - Exemplary role of buildings of public institutions
 - 3% of overall floor area to be refurbished or Alternative scheme
- Article 18
 - Energy services

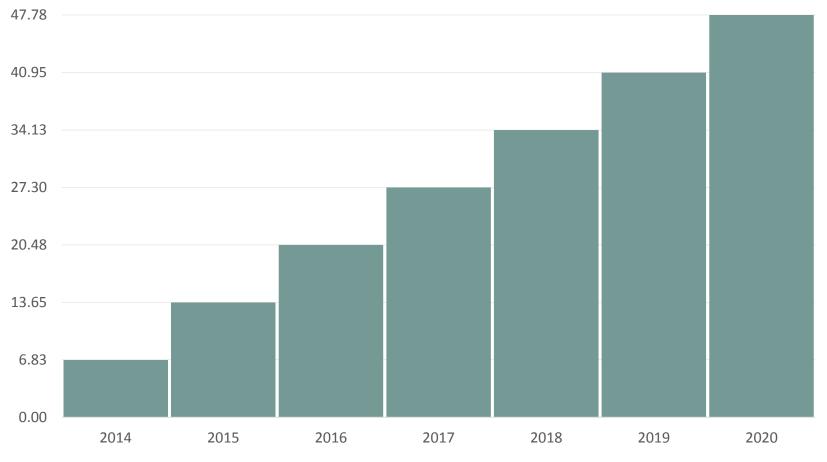


National action plan on EE 2014

- Adopted based on State Energy Policy Update 2012
- Goals based on Article 3 of ESD
 - 47,78 PJ (13,29 TWh) of energy savings in 2020
 - Cummulative savings of 191,10 PJ
 - Goal of 1660 PJ primary energy consumption (1020 PJ without non-energetic use)
- Energy savings included in various government documents
- Revision in 2017



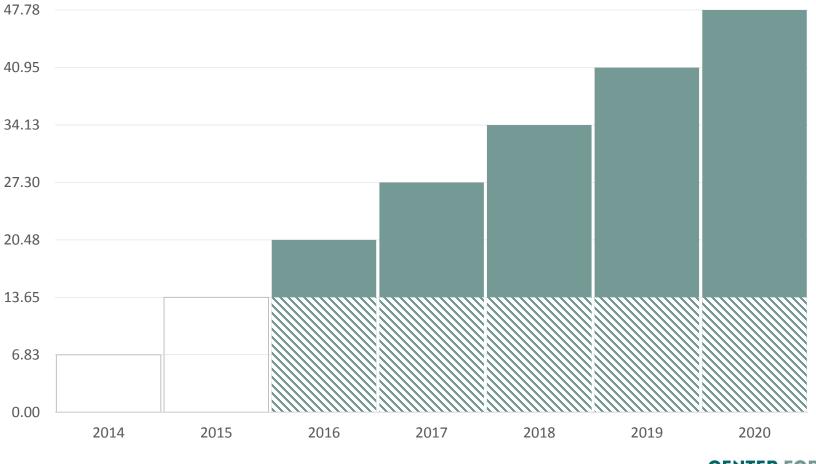
Czech target in savings





Source: National Action Plan on Energy Efficiency

Czech target not on track





Particular goals

Programme	Savings (PJ)	Savings (%)
Ministry of Trade and Industry	20	41.32
Ministry of Environment	5	10.33
Ministry of Regional Development	9	18.6
Green Savings	14,3	29.55
Other programmes	0.1	0.21



State Energy Policy Update 2015

- Up to 2040
- EE one of 4 priority goals
- 2 basic assumptions
 - Decrease of availability of domestic primary sources of energy
 - Industry persists as economic pillar
- EE low-hanging fruit collected by 2020, more complicated thereafter
- Cross-domain goals in EE
 - Implement NAPEE targets
 - Maximize subsidy utilization at cost-efficient manner

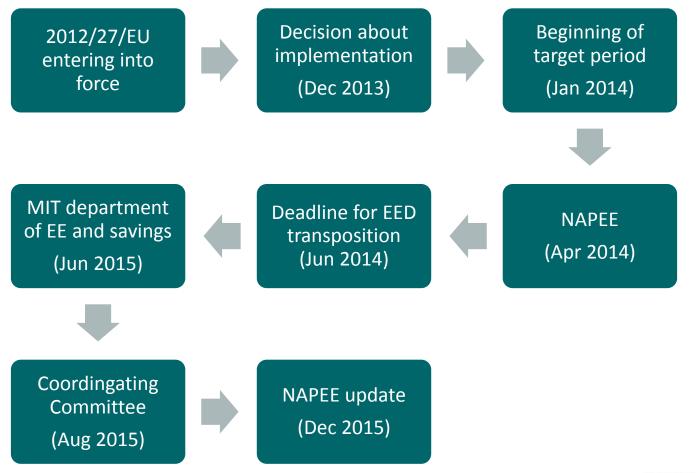


Risks of alternative scheme

- Savings targets ambitious
- Risks
 - Whole amount of finances (expected 90 billion CZK 3.32 billion EUR) will not be available or will run out without achieving savings
 - Question of additionality in subsidized investments and taken measures
 - Insufficient motivation of applicants to participate in programmes
 - Programmes and subsidy schemes not open on time



EED transposition timeline





Who's in charge?



Main actors

- Ministry of Industry and Trade (MIT)
 - Department of Energy Efficiency and Savings
- Ministry of Environment
- Ministry of Finance
- Ministry of Regional Development
- Ministry of Transport
- Reigonal administrations
- Many other



Coordination effort

- Coordination necessary in order to prevent conflicts among various measures
 - Complementarity
 - Synergic effects
- Ministry of Industry and Trade responsible
- Department of EE at MIT established only mid-2015



Coordination committee

- Multiple actors
 - MIT; MinEnv; MinRegDev; MinFin
 - Respective funds
 - Office of the Government
 - Czech Statistical Office
 - Prague
 - 8 organizations representing various professions
- MIT responsible for methodology of the measurement of savings

