

Climate Change Policy in the Czech Republic An Update

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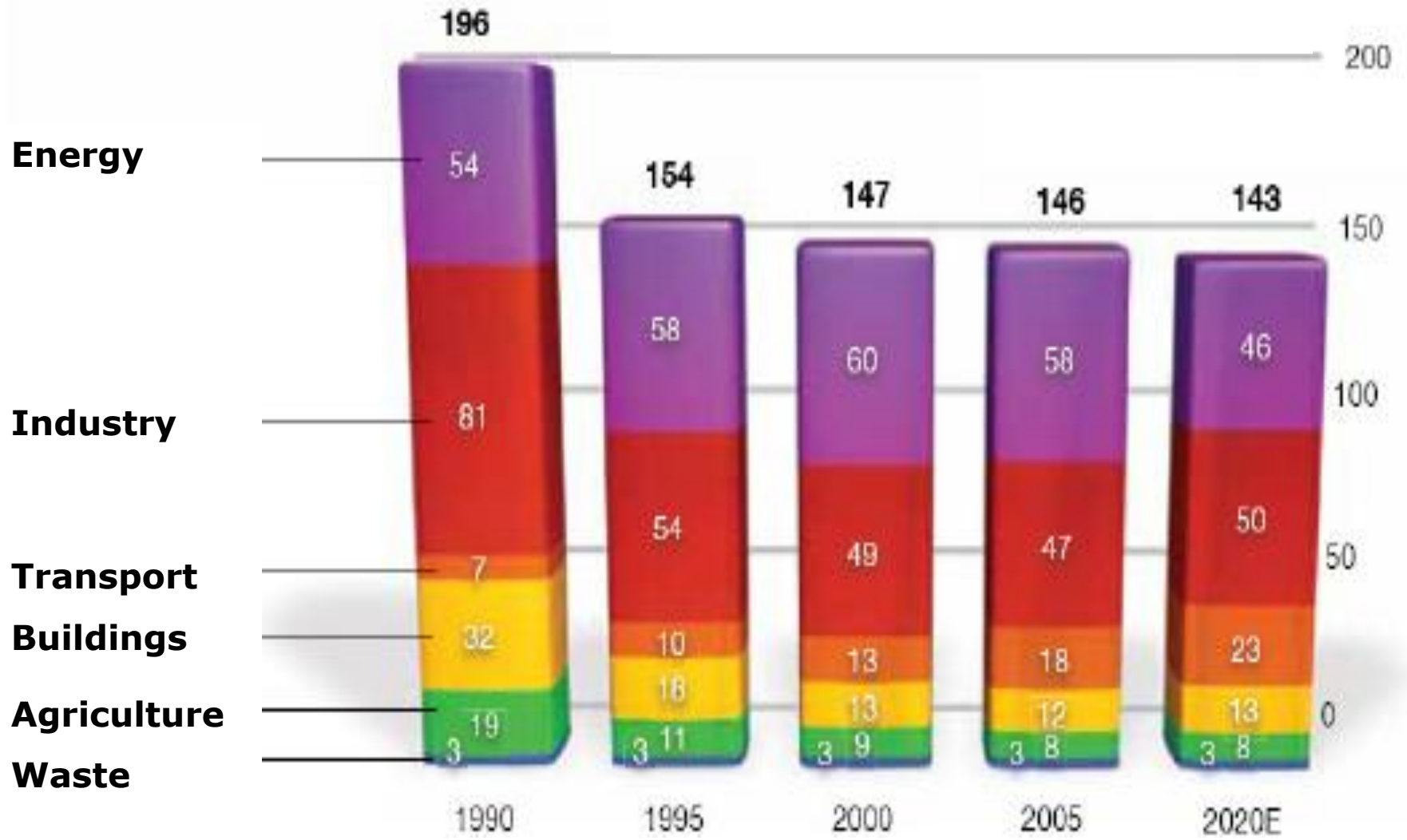


Content

- Climate Change policy – proposal
- EU ETS: deferment of auctioning

Current status

- Currently, the Czech Republic produces ca 14 tonnes per CO₂eqv. per capita
 - 35% higher than EU average
 - 2.5 as much as in China
- Total amount: 146 mil tonnes of CO₂eqv.
 - 40% in energy sector (because of energy mix)
 - 32% in industry
 - 12% transport, 8% buildings, 6% agriculture, 2% waste management



Climate Change Policy of the Czech Republic

- Published 22nd October 2009 by Ministry of the Environment
- Currently for public discussion, to be adopted by the end of 2009
- **Target:** decreasing GHG emissions by **20% by 2020** compared to 2005 (linkage to Climate-Energy Package, Copenhagen)
 - **28 mil tonnes of CO₂eqv.** (with nuclear: ca 36 mil tonnes)
- This is to be possible „through implementation of all the proposed policies, with **acceptable** economic costs and without building new nuclear power source“.
- Very small part devoted to adaptation measures

Which sectors?

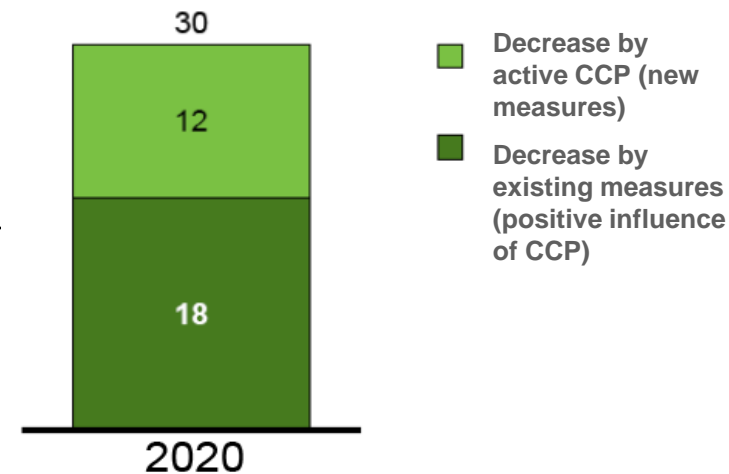
Decrease by

- 40 % in EU ETS
- 11 % non-EU ETS

Sectors – potential by 2020

- Energy sector: 21 mil tonnes
- End-use (hh and tertiary): 6 mil tonnes
- Industry: 4 mil tonnes
- Transport: 2 mil tonnes
- Agriculture: 3 mil tonnes

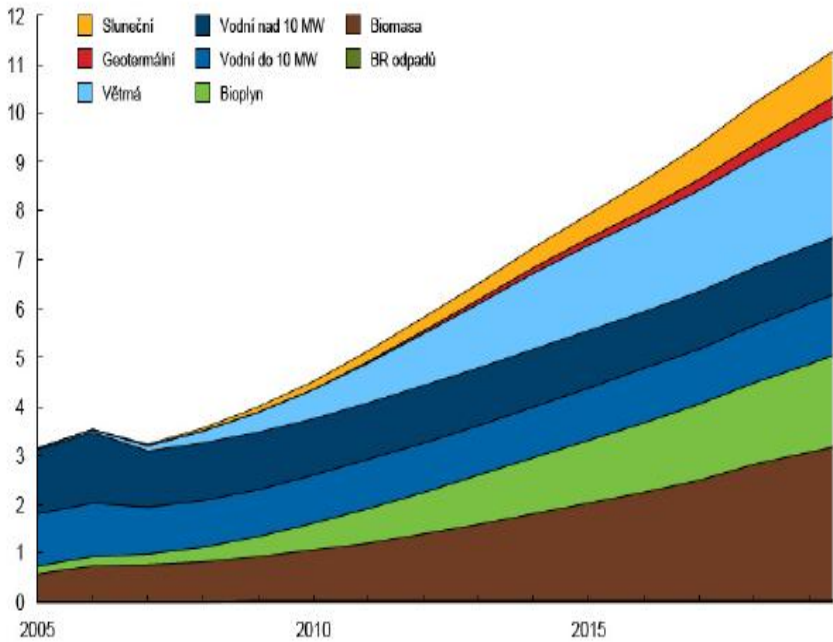
Mitigation measures – apart from agriculture – all related to energy production or consumption.



Which measures? (quantified)

- Energy industry
 - Higher efficiency of existing power plants (is included in the reference scenario)
 - One new block of nuclear power plant (replacing 8.4TWh from coal)
 - If calculated in, then highest contributor
 - New gas power plants, combined heat and power
 - Second highest contributor
 - Gas consumption to be compensated by EE in end-use
 - Focus on RES – for heat and electricity, co-firing of biomass

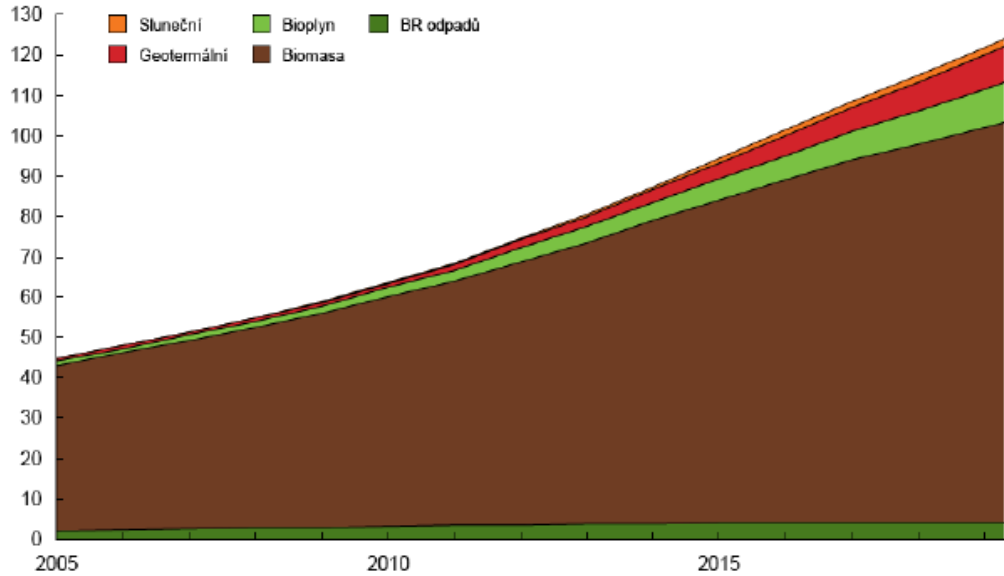
Graf: Předpoklad vývoje výroby elektřiny z obnovitelných zdrojů (v TWh); Zdroj: POK



Target of 13% by 2020, currently ca 5%

Highest potential seen in biomass for heat (33% from RES)

Graf: Předpoklad vývoje výroby tepla z obnovitelných zdrojů (v PJ); Zdroj: POK



Which measures? Cont.

○ End-use

- EE in buildings (70% insulation and 30% heating and hot water preparation)
- EE of appliances (1/4 of potential compared to buildings) and efficient lighting
- Energy management (audits, focused on public sector – regional levels)
- Using more wood in building industry (from 2% to 15%), thus replacing more energy intensive materials (e.g. cement)

Which measures? (last part)

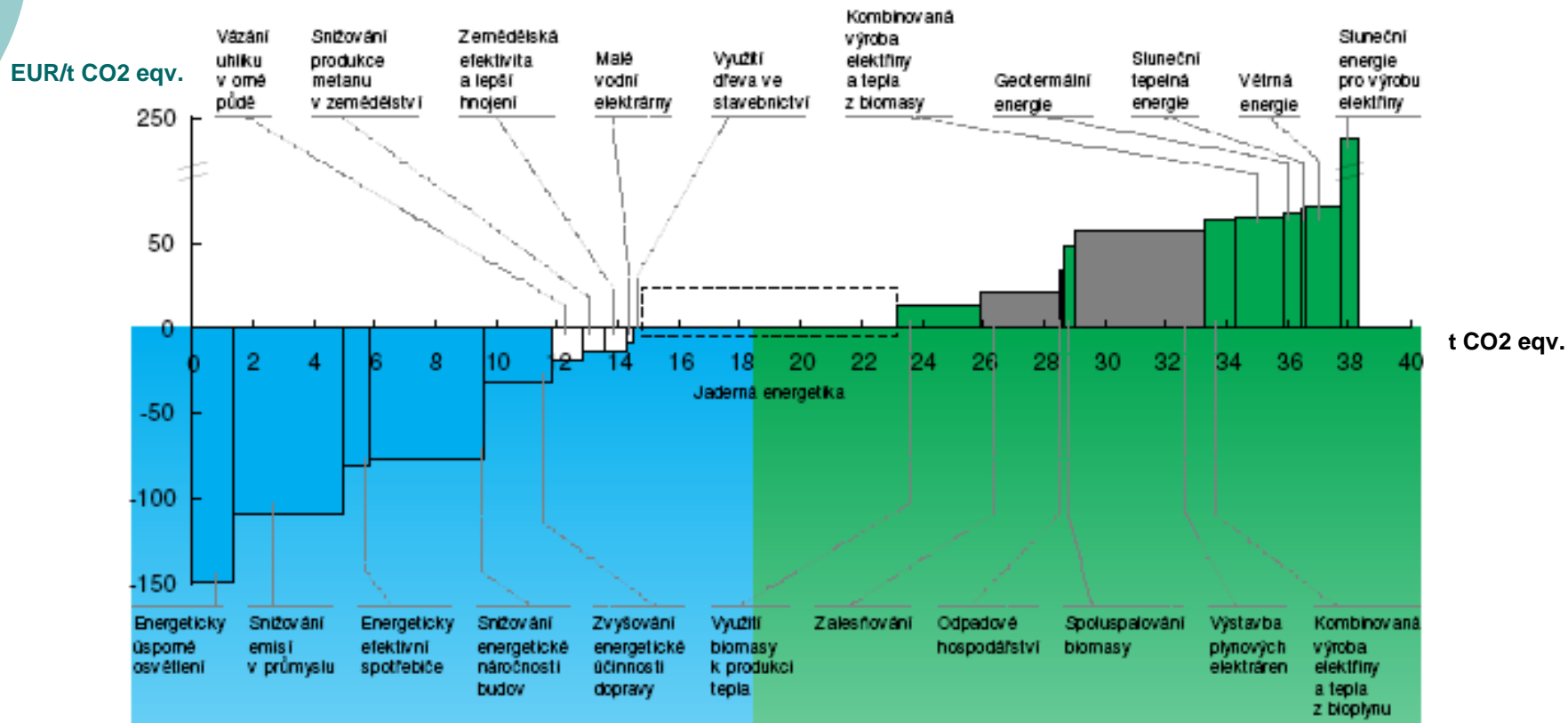
- Transport
 - 11% penetration of hybrids
 - In 2015 all new cars 120 g CO₂/km, by 2020 95 g CO₂/km (expected car labelling)
 - 10% of biofuels: included in reference scenario
- Agriculture
 - Reforestation
 - Keeping CO₂ in soil (Less intensive and deep tillage), less methane production.
- Waste management
 - Improved capture of leaking methane and its re-use

Main instruments (selection)

- Financial instruments
 - Operational programmes (cohesion policy)
 - SME, industry, public sector (what after 2013?)
 - GIS scheme: Green Light to Savings
 - Households (entitlement to the subsidy)
 - FIT and GB
 - Revenues from auctioning under ETS
- Regulation
 - EU legislation (EU ETS, carbon tax, ESD, EPBD,...)
 - National legislation (audits, building codes, municipal budgets...)
- Soft measures (benchmarking, certification)
- Voluntary measures
 - E.g. ISO in industry
 - Covenant of Mayors
- **Mostly already existing measures (compliance) and/or related to EU legislation**

Net costs of measures

Reference scenario counting with a decrease to 143 mil CO2 in 2020



CCP vs. State energy policy

- Same reference scenario („Paces committee” report)
- On purpose released in the same time
- But unlike SEP
 - Against higher usage of coal – aiming at halving coal use
 - Higher share of RES
 - Cogeneration using biomass and natural gas
- Emphasis to lower import dependency
- Plans to build two blocks of CCGT (large part of CO₂eqv. savings)
- Not totally against nuclear (but needs to be replacing fossil fuels, and not replacing EE efforts)
- **Committee to be established to work on harmonisation of both documents**

Act No 292/2009

- Based on the revised Directive 2003/87/EC on EU ETS from 2009
- Act amending excise tax act
 - but with a post-it amending Act **695/2004** on emission trading
- Making use of the possibility to get free allowances from 2013 to 2020
 - concerns electricity producers
 - basically in exchange for having to put some money into upgrading power production
- The amendment states: „to make use of the maximum allowed free allowances“ (70%)
- The CCP actually presumes implementation of the Directive by new act, not amendment of the existing act

Thank you for your attention.

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All figures from The Climate Change Policy for the Czech Republic,
http://www.mzp.cz/cz/news_tz091022pok (in Czech)

Supplementary slide

- Specific costs of financing schemes
 - Green Light to savings: 1 billion EUR resulting in 1,1 mil t CO₂eqv/year
 - 1000 EUR/1 tCO₂eqv/year
 - OP Eco-energy (priority energy savings): 15 mil EUR resulting in savings 52 000 t CO₂eqv/year
 - 288 EUR/t CO₂ eqv/year
 - OP Environment (priority sustainable use of energy): 160 mil EUR resulting in savings of 60 000 t CO₂eqv/year
 - 2666 EUR/t CO₂ eqv./year