

European Energy Market 9

EU Emission Trade System

Studia niestacjonarne II stopnia
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Władysław Mielczarski

Instytut Elektroenergetyki, Politechnika Łódzka

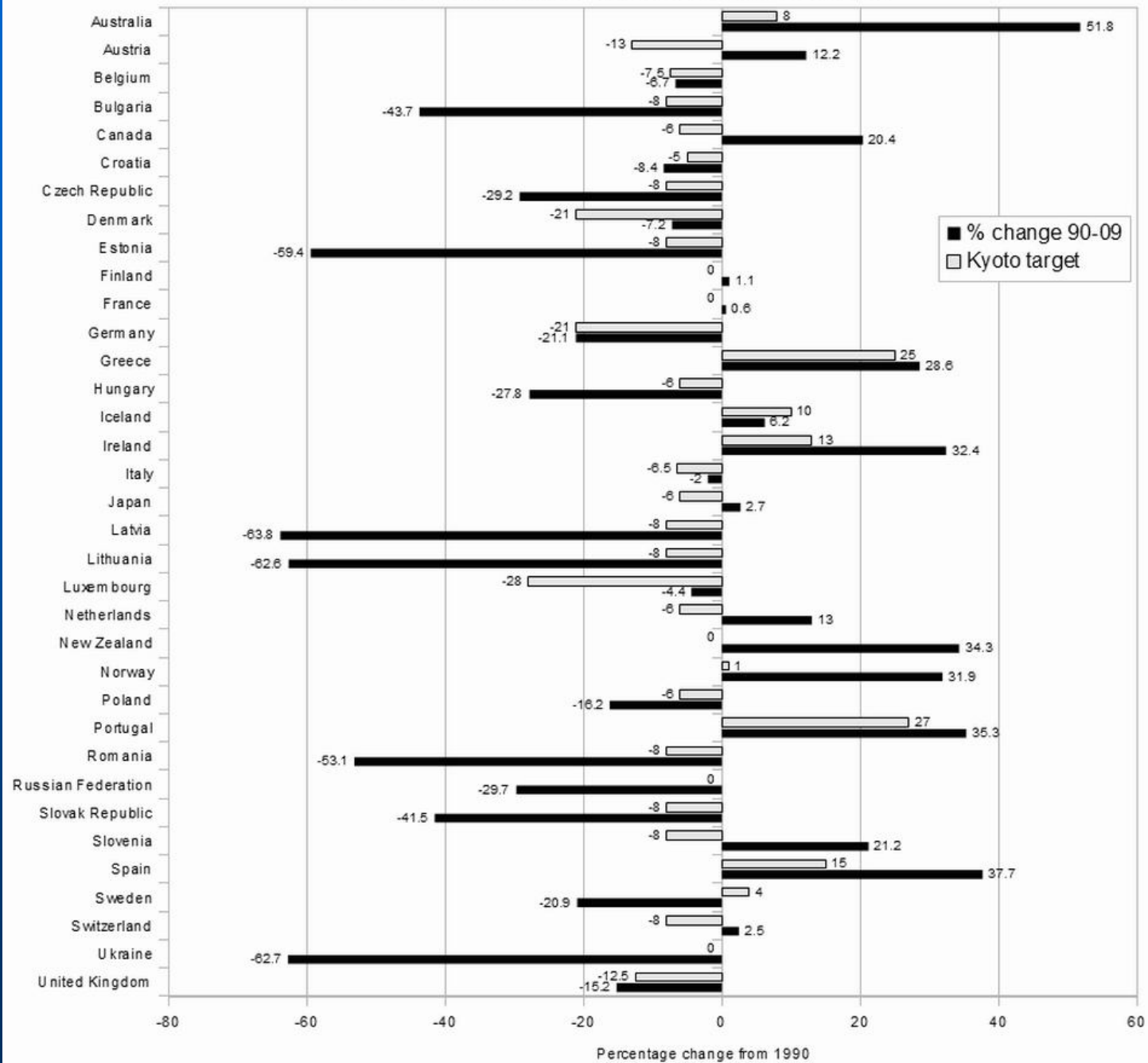
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Kyoto protocol

- The **Kyoto Protocol** sets binding obligations on the industrialised countries to reduce their emissions of greenhouse gases.
- The Protocol was initially adopted on 11 December 1997 in Kyoto, Japan, and entered into force on 16 February 2005. Totally 191 states entered the protocol.
- The only remaining signatory not to have ratified the protocol is the United States.
- Countries collectively agreed to reduce their greenhouse gas emissions by 5.2% on average for the period 2008-2012. The base was 1990.

Carbon dioxide emissions from fuel combustion and Kyoto Protocol targets



Source:
IEA

Post-Kyoto protocol

80% reduction of CO2 before 2050

- Washington Declaration-2007
- UN General Assembly -2007
- Vienna Climate Talks - 2007
- UN High Level Event - 2007
- Climate Change Conference – Bali 2007
- Climate Change Conference – Poznań 2008
- Climate Conference – Copenhagen - 2009
- Climate conference – Cancun - 2010
- Climate Change Conference –Durban – 2011
- Earth Summit – Rio de Janeiro – VI - 2012

◀◀ previous

MEETINGS



Doha Climate Change Conference - November 2012

Parties and attitudes to CO2 cut

- **FOR:** European Union & the poorest countries being promised 100bln US\$ for CO2 reduction
- **AGAINST:** China, India, Brazil and recently Japan
- **FOR and moreover AGAINST** – the US and Russia
- **NOT interested in:** Canada

European Energy & Climate Policy

- Agreed and signed in December 2008.
- Established for 2008 - 2020.
- Policy 2x20 +10 means:
- (a) Energy Efficiency increase – 20%;
- (b) Share of Renewables in energy consumption – 20%;
- (c) Reduction of CO₂ emission – 20%
- Increase of biofuel use to 10%.

European Union Emission Trade System

- Aim: reduction of emission by the obligation to purchase allowances for CO₂ emission
- Three periods: (a) 2005 - 2007; (b) 2008 - 2012; (c) 2013 - 2020
- In periods (a) and (b) allowances were given free of charge
- In period (c) all power stations have to purchase all allowances for CO₂ emission

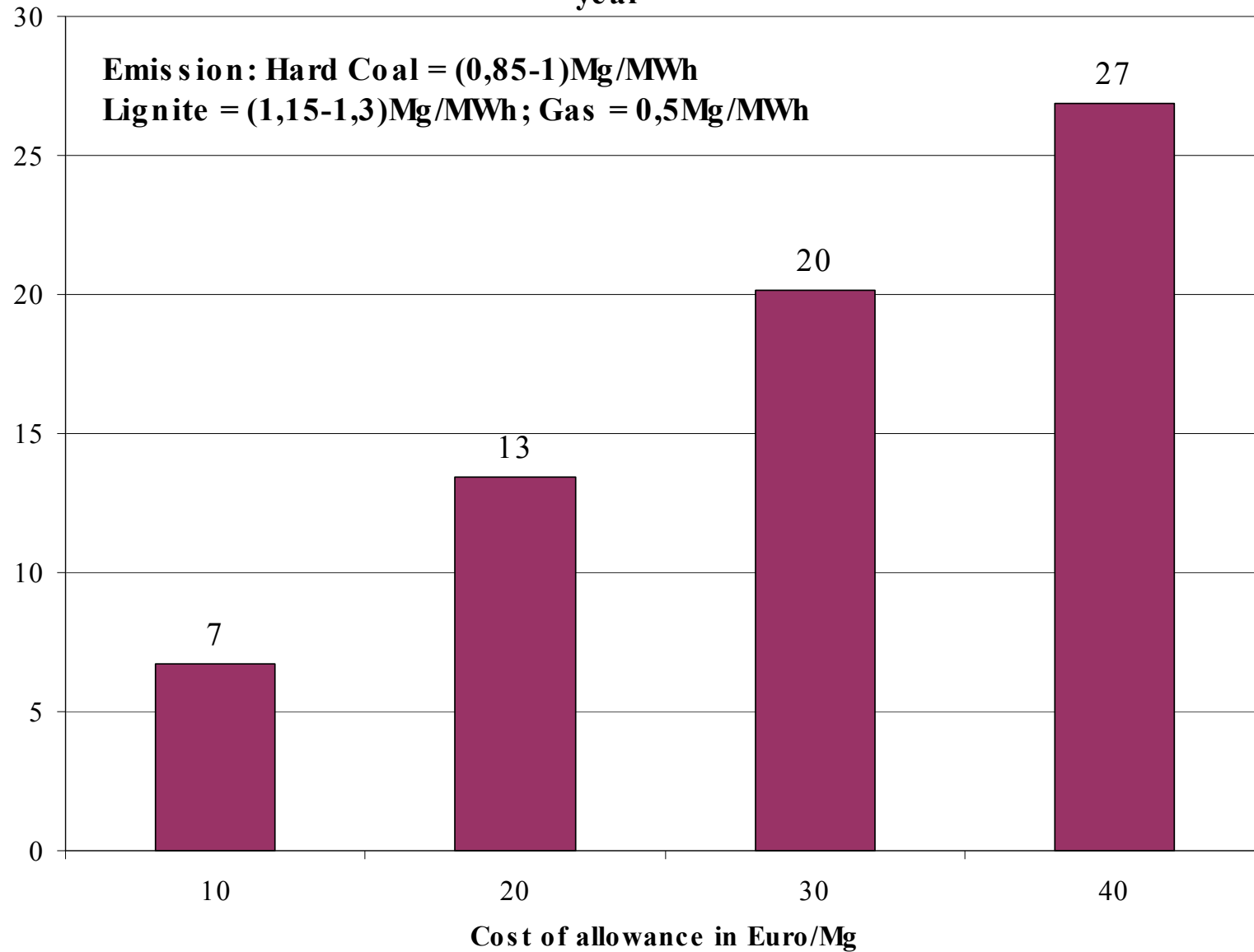
EU ETS and industry

- All power stations (including co-generation) are subject to ETS.
- Energy consuming industry will be give some free allowance to 2020.
- ETS embraces „High Emission” from high chimneys.
- Households and small industry are not included.
- **Fixed amount of allowances given for trade to 2020 was set up in 2008.**
- ETS was agreed to 2020. After 2020 ?

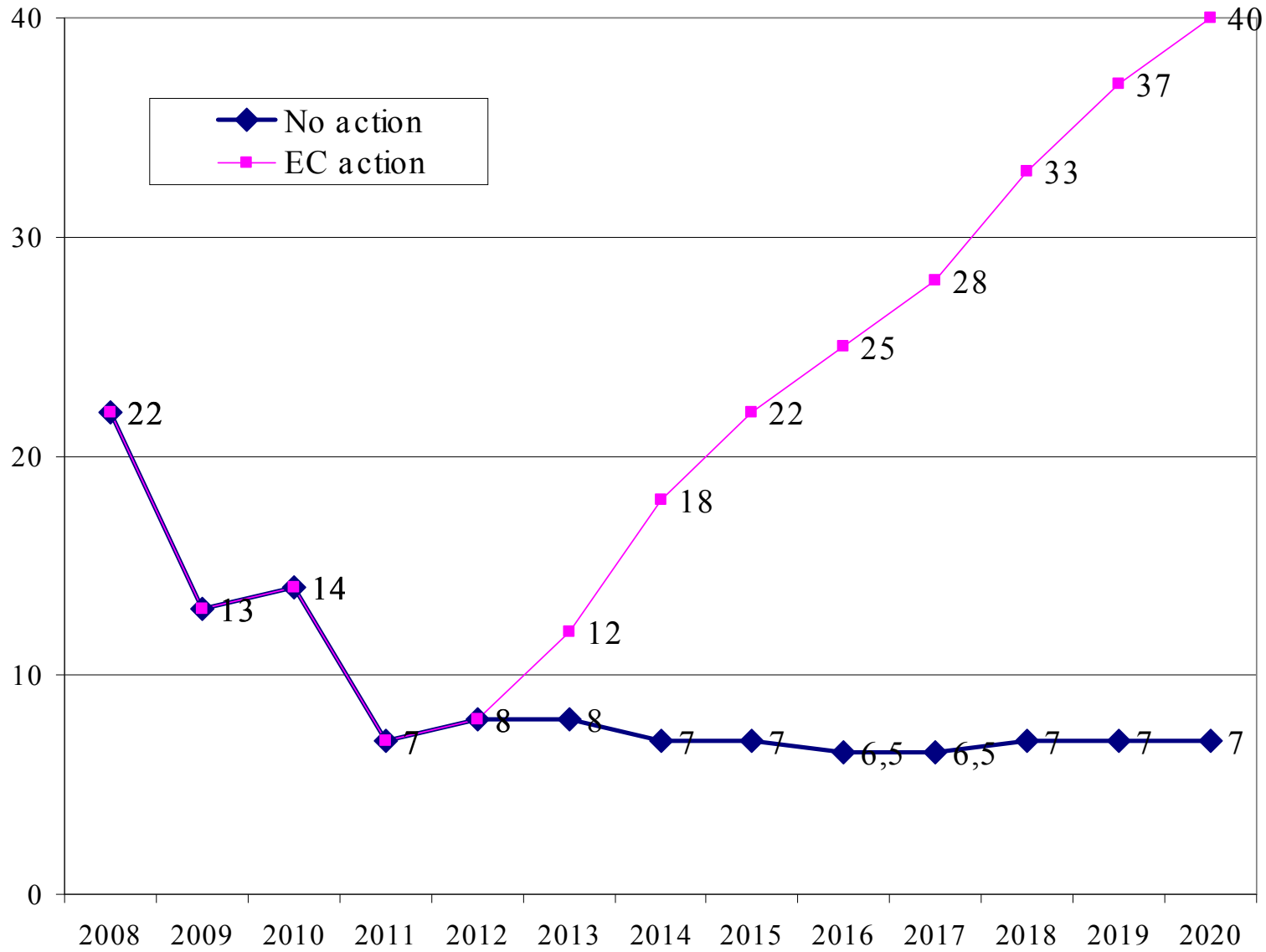
Poland and EU ETS

- Over 90% of electricity is generated from coal and lignite in Poland.
- Poland negotiated „free” allowances starting from 70% in 2013 and diminishing 10% per year to 0% in 2020.
- However; „small print” states that free allowance can be given if the power station invests at least the same value of money in CO2 reduction.
- Reimbursement of expenses after verification of CO2 reduction effect.
- **The cost of the EU climate policy for Poland is estimated to 1,5% of GDP.**

Cost of allowances for CO2 emission in bln PLN in Poland per year



Prices of allowances for CO2 emission in Euro/MWh



ETS is not working. Why?

- **Economic crisis reduced the demand for allowances.**
- **Promotion of Renewables and Energy efficiency also reduces demand for allowances.**
- **Foreign airlines have not joined ETS.**
- **Excess of allowances by over estimation of demand.**
- **Uncertainty after 2020?**

How to repair ETS?

- Two main ideas: (a) lowering cap; (b) set-aside and back-end loading.
- Lowering cap = cut amount of allowances available for trade
- Set-aside = withdrawing some amount of allowances from the market in 2013-2015 and load them back in 2018-2020 hoping that demand will increase in mean time.
- Both solutions require change of the emission directive and emission auction rules so the member states have to accept such changes.

Poland and climate policy

- Accession Treaty (art.175b) required the unanimous acceptance of all decisions relating to energy mix.
- Lisbon Treaty introduced the Qualified Majority.

France, Germany, Italy and the UK	29
Spain and Poland	27
Romania	14
The Netherlands	13
Belgium, Czech Rep, Greece, Hungary, Portugal	12
Austria, Bulgaria, Sweden.	10
Denmark, Ireland, Lithuania, Slovakia, Finland	7
Estonia, Cyprus, Latvia, Luxembourg, Slovenia	4
Malta	3
TOTAL votes	345

Source: Deutsche Bank from European Commission; * Based on their population and GDP.

Polish government attitude

- The ill-judged decision in December 2008 accepting the Climate Policy has negative impact on the economy.
- The current position of the Polish government is: **NO more obligation relating to CO2 reduction after 2020 without the world-wide acceptance of the post-Kyoto protocol.**
- Europe alone can do very little.