REKK Regional Centre for Energy Policy Research

DANUBE REGION strategy Energy

Towards the European Energy Union

-Decarbonisation in the Danube Region -

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SZÉCHENYI 2020

HUNGARIAN GOVERNMENT

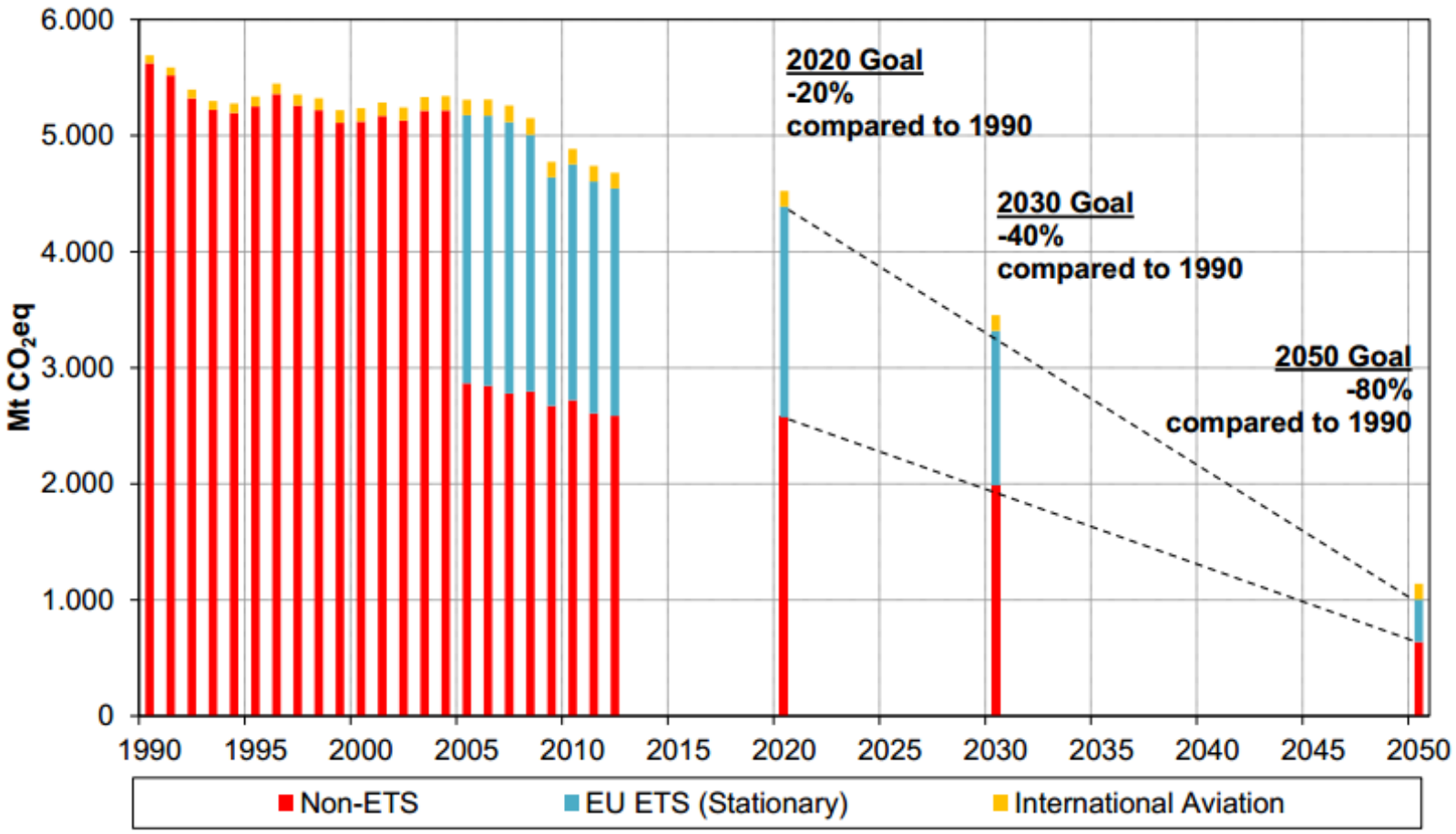
European Union
Cohesion Fund

INVESTING IN YOUR FUTURE

Outline

- Long term reduction needs until 2050 under a 80% reduction scenario
- 2020 GHG target setting and DR performance
- The 2030 climate policy framework
- Policy conclusions

Long term reduction needs until 2050 under a 80% reduction scenario



Source: Oko-Institute, 2014

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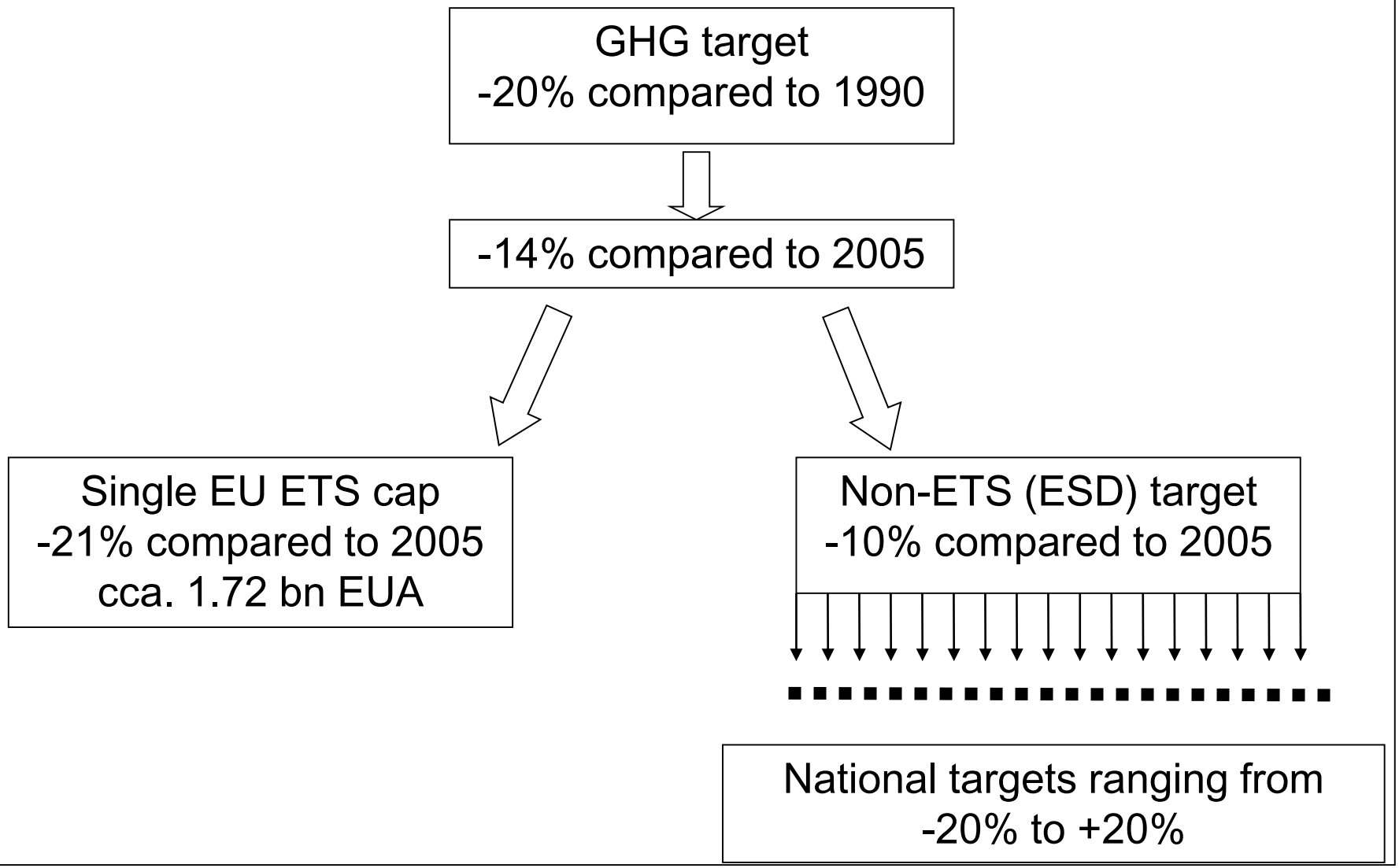
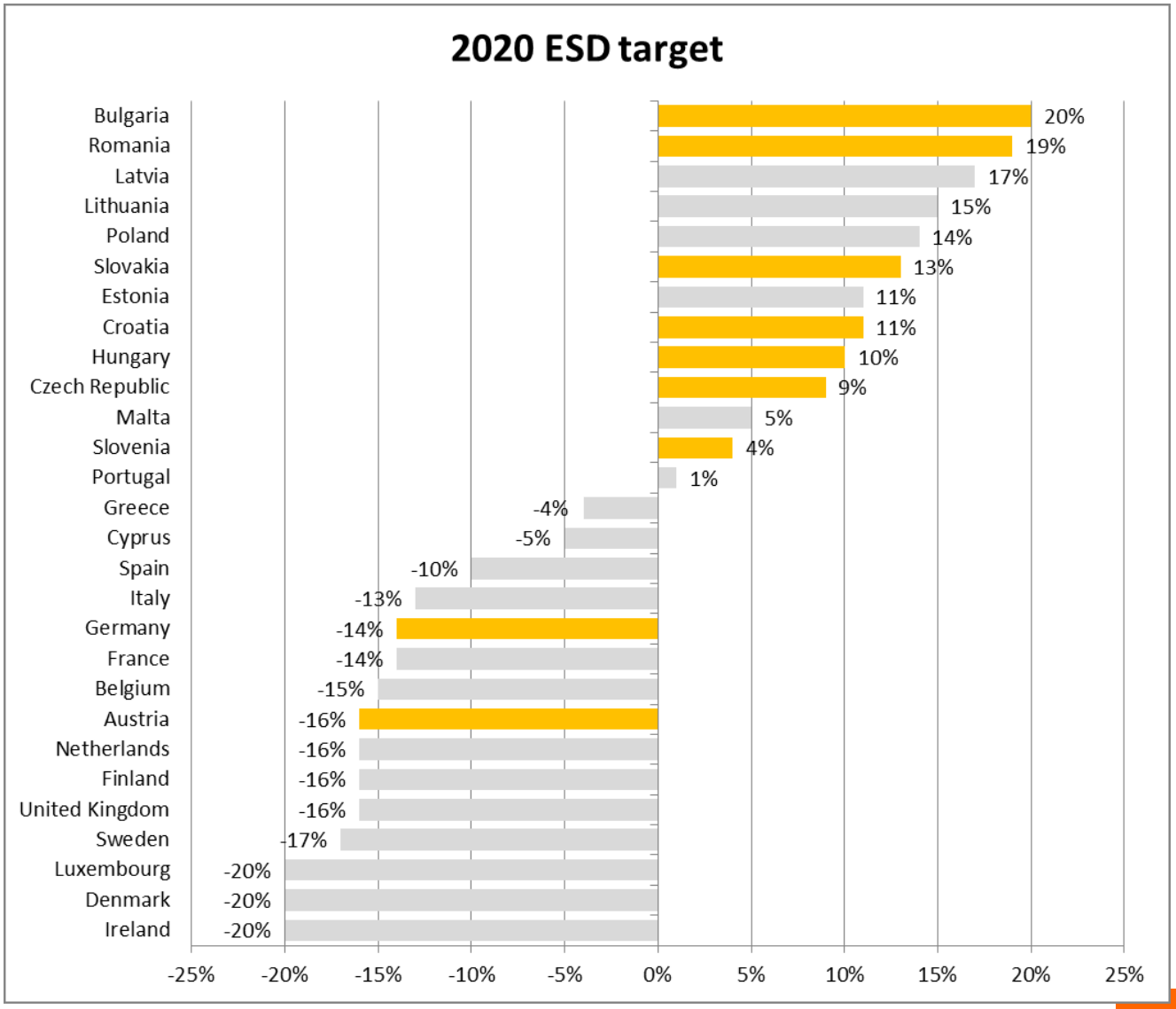
2020 GHG target setting



The non-ETS (ESD) cap

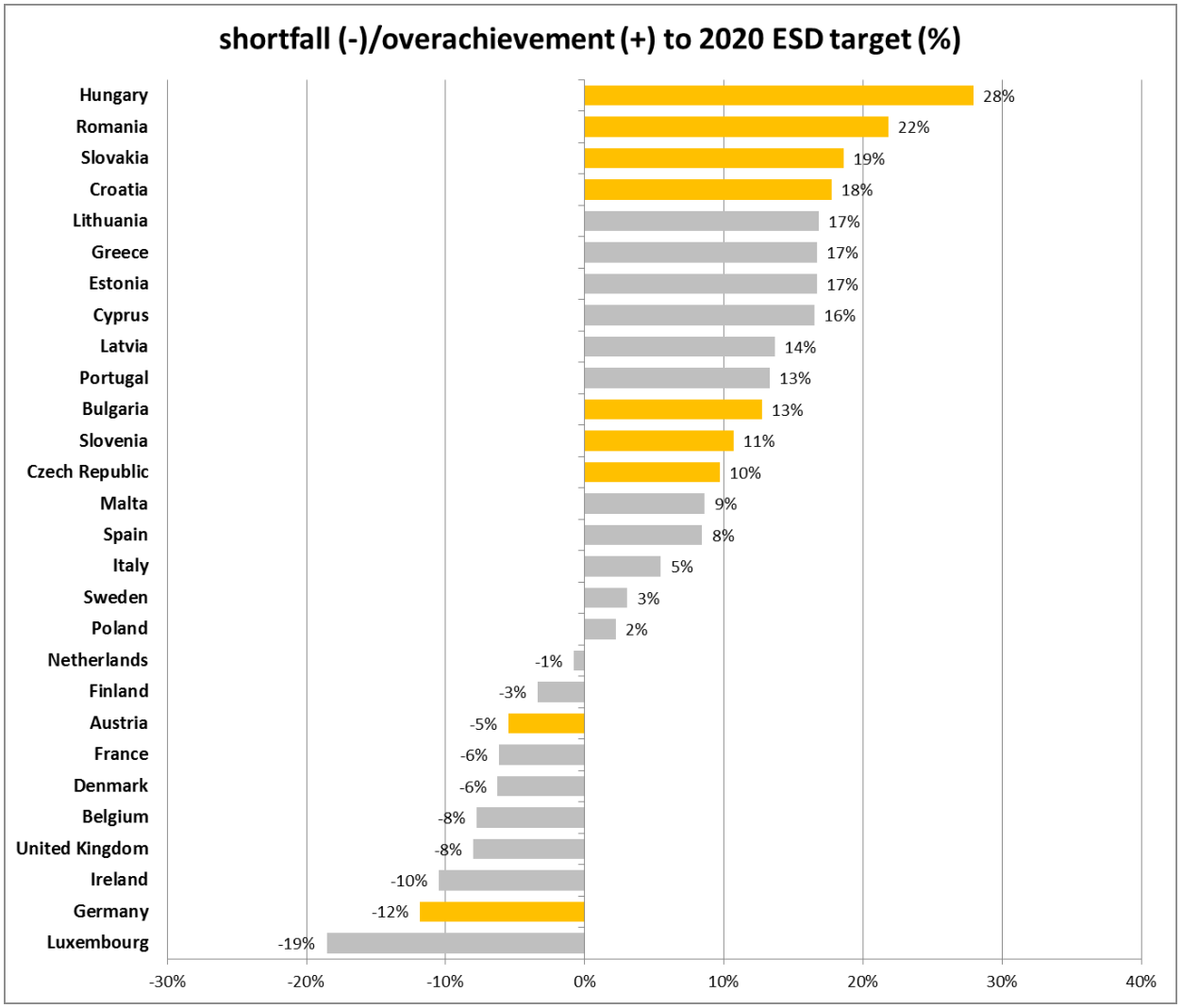
- The share of the two sectors in GHG emissions in 2005:
  - ESD: 60% - ETS: 40%
- The EU cap is allocated among the Member States based on „ability to pay”
- National targets are defined in relation to 2005 non-ETS emissions
- Poorer MSs are allocated positive target from +1% to +20% (can increase their emissions)
- Wealthier MSs are allocated negative target (reduction) from -4% to -20%
- ESD quotas are tradable between Member States to support the efficiency of mitigation at EU level

2020 ESD targets



- DR countries are in two clusters
- Low GDP countries have generous targets while DE, AT face stringent targets

2013 GHG emissions and the 2020 ESD target



- HU and SK have the highest reduction between 2005-2013
- Partly due to recession and to energy efficiency improvements

Source: EEA

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The 2030 climate policy framework

- Overall target: 40% (1990 baseline)
- Indicative modelled target sharing between the ETS and non-ETS sectors:
  - ETS: 43%(2005 baseline)
  - Non-ETS: 30% (2005 baseline)
- Alternative target setting methods:
  - relative GDP per capita (similar to 2009 effort sharing decision)
  - Cost-efficient
  - approach balancing both cost-effectiveness and relative GDP per capita

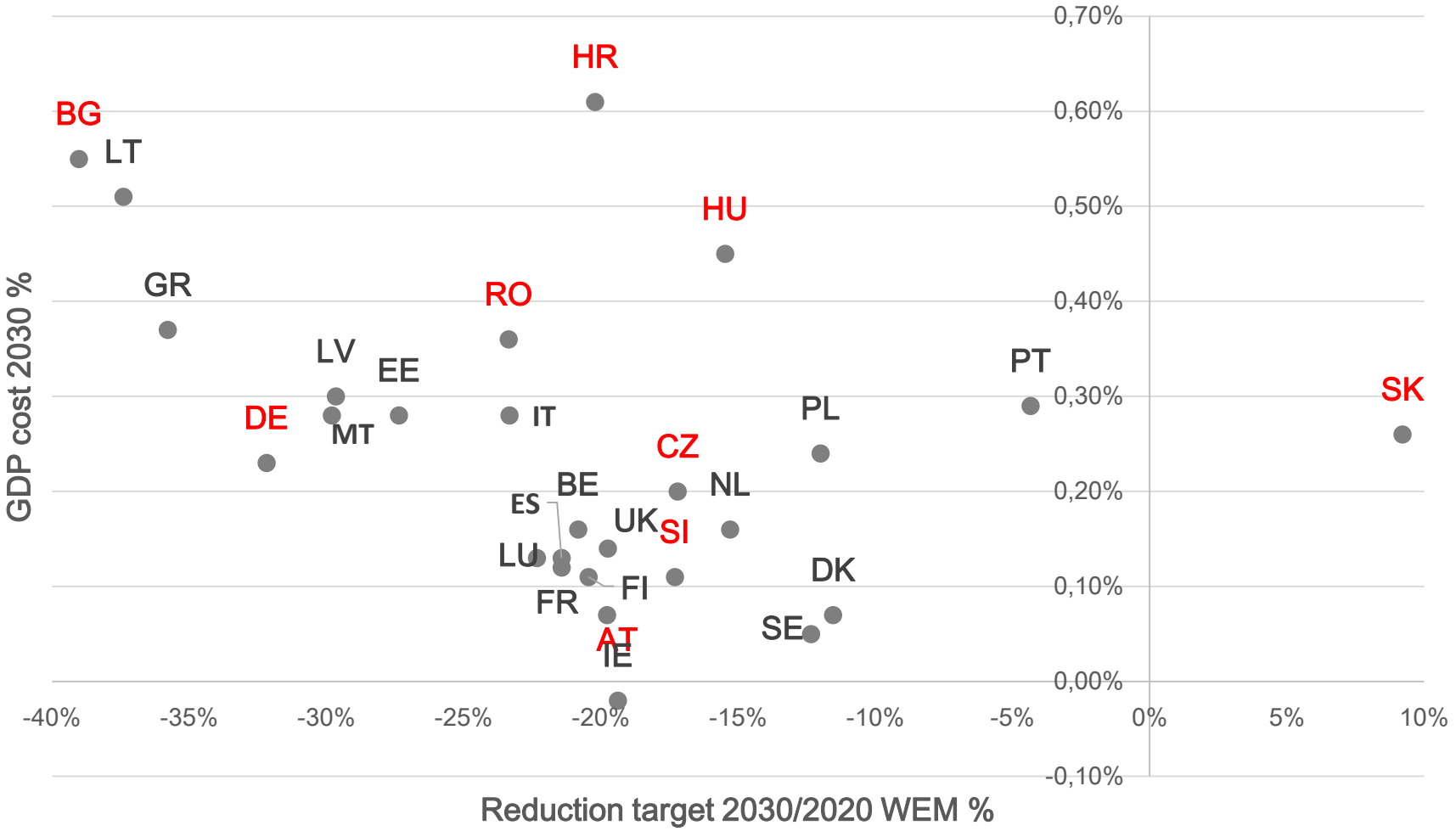
GHG emissions target scenarios for 2030 - Impact Assessment of the European Commission

	REF	35% GHG + EE	37% GHG	40% GHG REF		40% GHG + EE	40% GHG + 30% RES + EE	45% GHG + 35% RES + EE
GHG emissions reduction compared to 1990	-32.4%	-35.4%	-0.37	-40.4%		-40.3%	-40.7%	-45.1%
RES share	24.4%	25.5%	24.7%	25.5%		26.4%	30.3%	35.4%
Energy savings	-21.0%	-24.4%	-22.9%	-24.4%		-29.3%	-30.1%	-33.7%
GHG emissions reduction in the ETS sector compared to 2005	-36%	-37%	-38%	-42%		-38%	-41%	-49%
GHG emissions reductio in the non-ETS (ESD) sector compared to 2005	-20%	-26%	-28%	-31%		-35%	-33%	-34%
EUA price (€/t)	35	27	35	58		22	11	14

Source: SWD(2014) p16

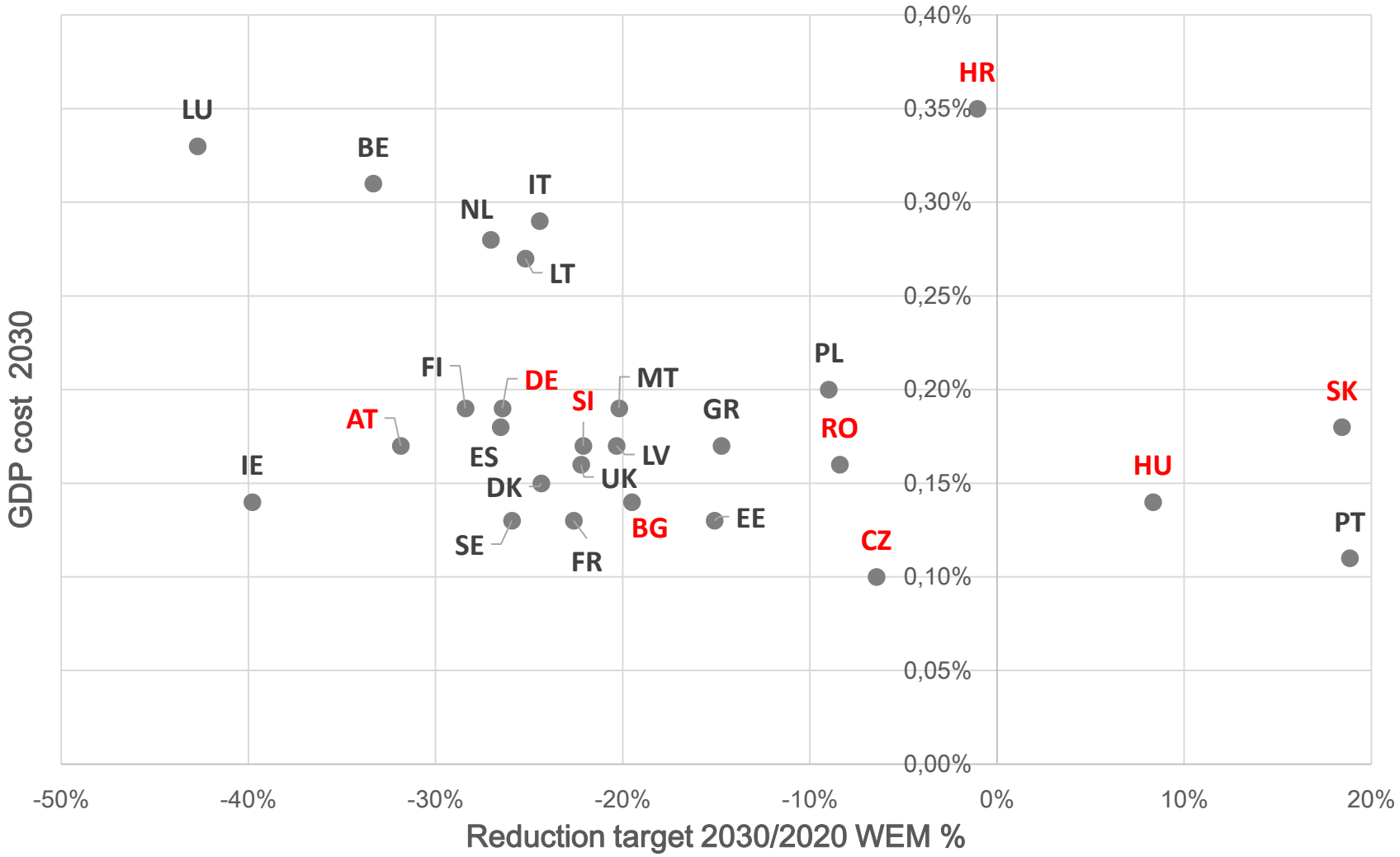
Impact of proposed share of ETS/ESD reductions on DR?

Cost efficient method: 2030 target / 2020 projected emissions



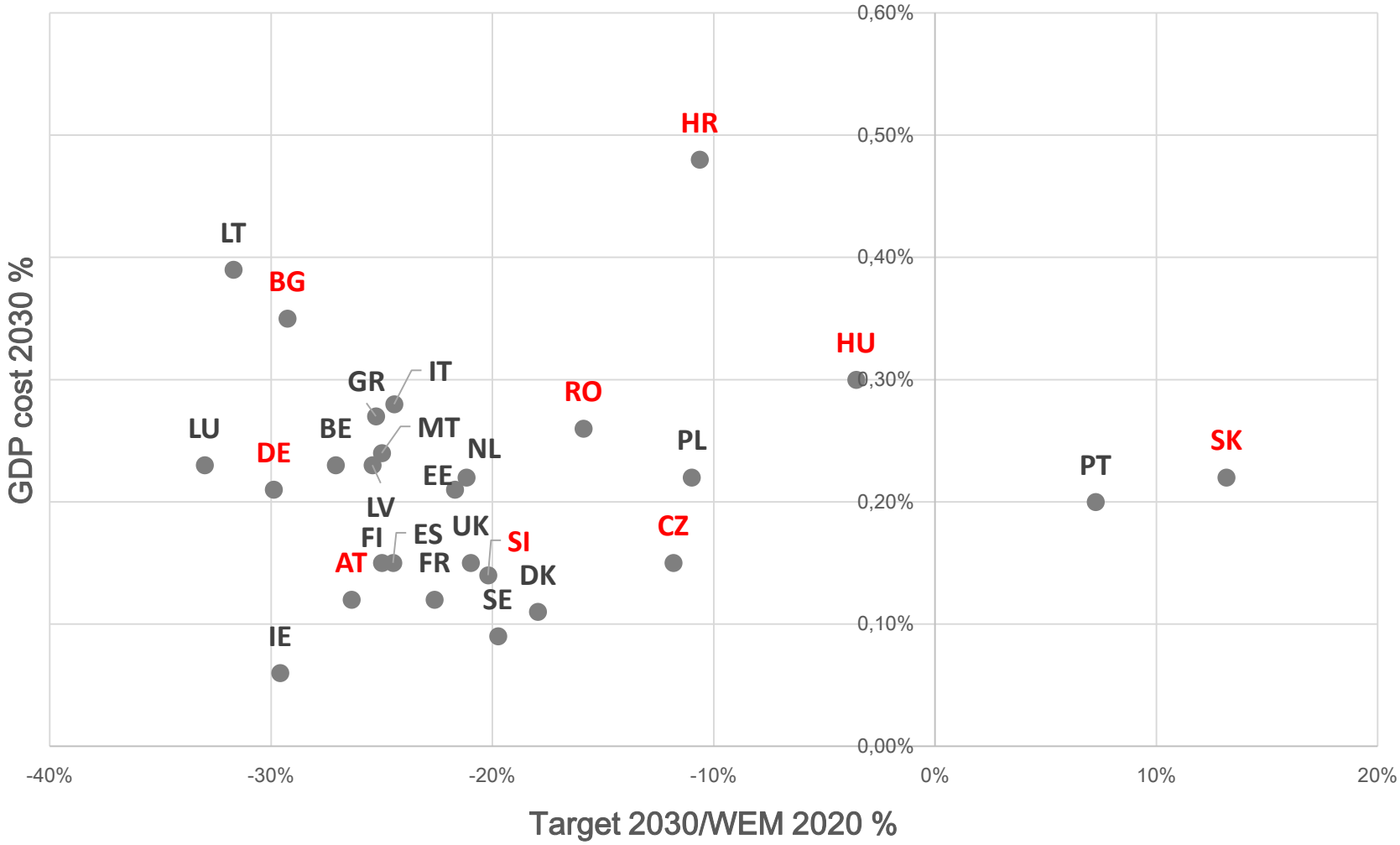
Based on: UK NON-PAPER, 2014

GDP/Capita method: 2030 target / 2020 projected emissions



Based on: UK NON-PAPER, 2014

Balanced scenario:
2030 target / 2020 projected emissions



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Policy conclusions

- Acknowledgement of early action is a key issue for the Danube Region countries
- Implication of the various alternative methods on the DR countries:
  - For DR the GDP/Capita target setting method is the most advantageous, having the lowest GDP cost of compliance.
  - In case of the cost efficient target setting GDP impacts are the highest for DR countries. Many DR countries (with lower per capita GDP) faces the highest GDP impact.
- Single obligatory climate target (CO_2) supports flexibility for DR to meet climate objectives (nuclear, efficiency)
- General RES target (27%) is feasible; political importance of RES-heat versus RES electricity in DR…
- …therefore strong support for Actions 9 (2), 10 (2) and 13.