



# Mitigation potentials and ranges of reduction objectives for Annex I countries

## EU views

Artur Runge-Metzger, European Commission,  
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## Outline

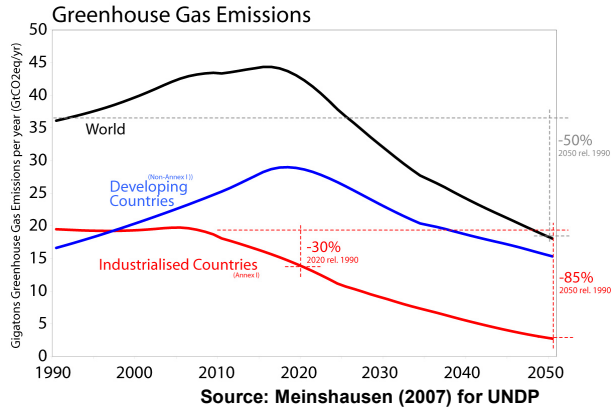
- Necessary scale of emission reduction objectives by Annex I countries as a contribution to achieving the ultimate objective of the Convention
- Insights from analysis of mitigation potentials in Annex I, including EU objectives and potentials
- Issues to be addressed when setting QELROs – LULUCF, possible surplus of banked AAUs, scope of flexible mechanisms, bunker fuels
- Comparability of further commitments: key principles

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## Shared vision and Annex I contribution

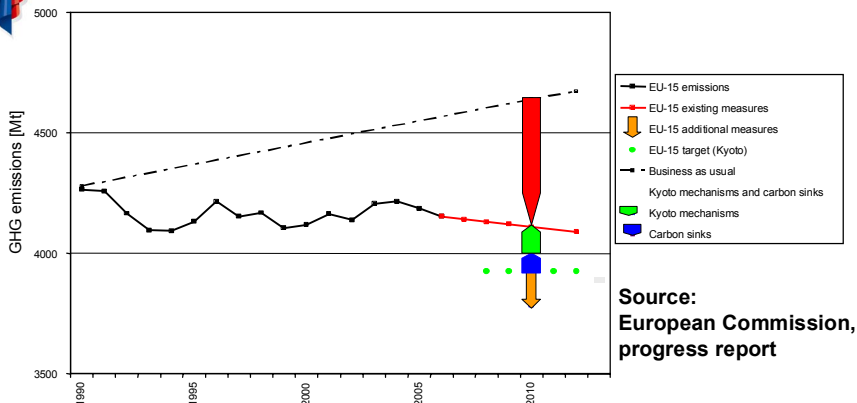
- **2 degree C pathway:**  
At least 50% reduction by 2050 vs. 1990
- **Peaking by 2020** necessary and **feasible** (IPCC: Cost of 450ppm CO<sub>2</sub>eq stabilisation less than 0.12%pts of GDP growth p.a.)
- **Leadership of developed countries:** ambitious mid-term targets - 30% reduction by 2020
- Developing countries need to contribute according to respective capabilities (Recent science: 15-30% deviation from BAU by 2020 as a group)



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## EU-15 progress towards its Kyoto target

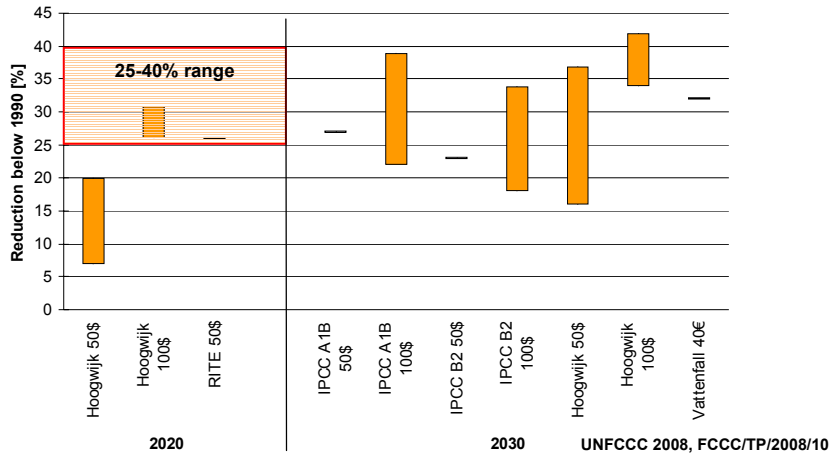


- 1990 to 2006, emissions 2.7% below base year (excl. LULUCF), GDP grew by almost 40%
- In 2005-2006, emissions decreases by 0.8%, GDP grew by 2.8%
- Estimated average of Kyoto Mechanisms: 3%

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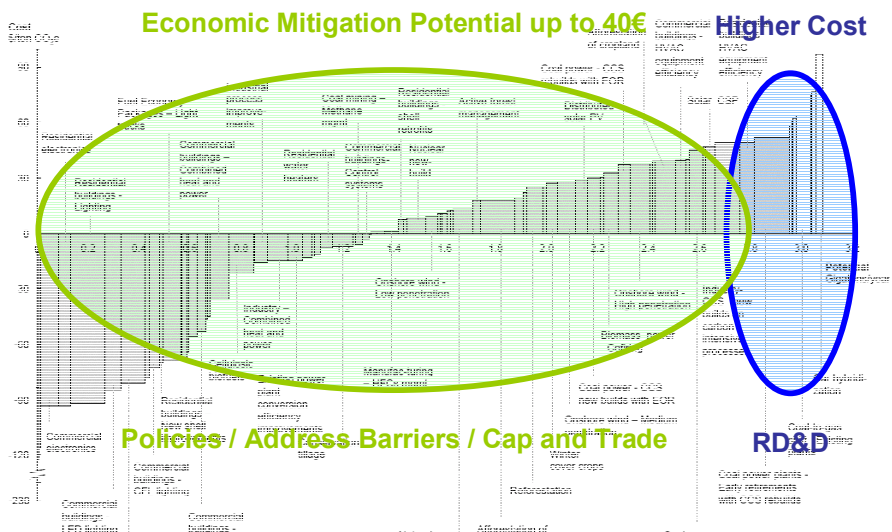
# Significant domestic mitigation potential exists in Annex I



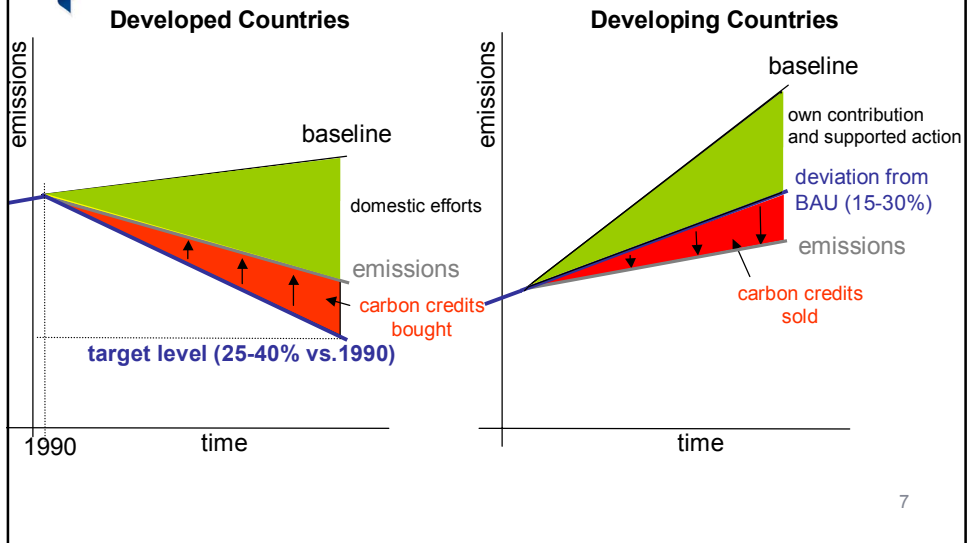
- Mitigation options up to \$100/tCO<sub>2</sub> may be needed if 25-40% range was to be reached purely domestically by Annex I
- Flexible mechanisms can help to keep cost less than \$50/tCO<sub>2</sub>



# Broad portfolio of options are needed



# Reaching emission reduction objectives in 2020



# Cost assessment of EU objectives

	Broad global participation Scenario analysis with full trade in international credits/units	Unilateral EU action Scenario analysis without trade in international credits/units
<b>EU-27 emission target (2020/1990)</b>	<b>- 30%</b>	<b>- 20%</b>
GDP impact (annualised)	- 2.8% (- 0.19%)	- 1.4% (- 0.09%)
Carbon price [€]	31	44
Global emissions (compared to BAU)	- 24%	- 3.5%

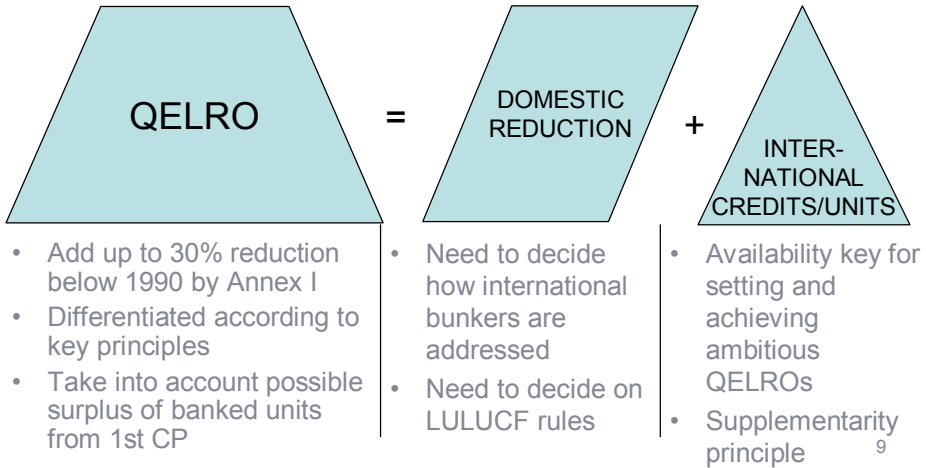
Note: This is an analysis based on assumptions that do not in all necessarily reflect all details of ongoing policy discussions.

Source: European Commission Impact Assessment 2007

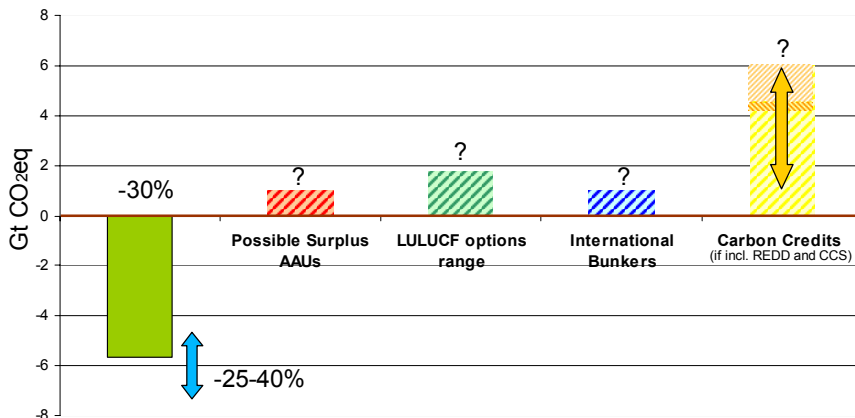


# Setting and achieving QELROs

Both domestic and international efforts are needed:



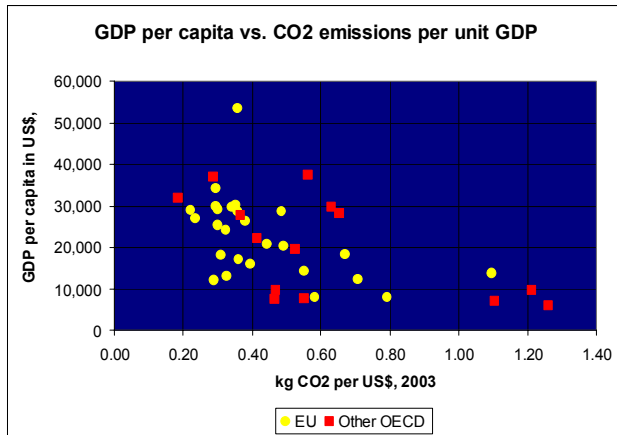
# Means and Rules matter





## Principles for comparable efforts

- **Capability**  
Consider ability to pay for mitigation, Countries with higher GDP/cap may be required to do more
- **Potential**  
High emission intensity may point to mitigation potential
- **Responsibility**  
Take into account past efforts and achievements
- **National circumstances**  
e.g. population growth is key driver for emissions



Source: World Development Report 2007

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## Conclusions

- QELROs in the order of 30% are **necessary** for developed countries as a contribution to a global mitigation effort
- These reductions are **feasible** at a reasonable cost and with sustained economic growth – look at the EU experience and analysis
- Target setting and achievement needs to include **domestic and international** opportunities
- Clarity on **means and rules** is needed to ensure environmental effectiveness and integrity of QELROs, e.g. LULUCF, possible surplus of banked AAUs, arrangements for bunkers and complementarity (e.g. REDD)
- Comparable efforts are needed building on **principles** such as capability, mitigation potential, responsibility and national circumstances

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Further information

# YOU CONTROL CLIMATE CHANGE.



- [http://ec.europa.eu/environment/climat/climate\\_action.htm](http://ec.europa.eu/environment/climat/climate_action.htm)
- [http://ec.europa.eu/environment/climat/future\\_action.htm](http://ec.europa.eu/environment/climat/future_action.htm)
- [http://ec.europa.eu/environment/climat/gge\\_progress.htm](http://ec.europa.eu/environment/climat/gge_progress.htm)

TURN DOWN. SWITCH OFF. RECYCLE. WALK. **CHANGE**