

CDM in the EU Climate Package – Internal vs. external effort

**Effort sharing under the Climate Package - assessing
the role of the Clean Development Mechanism
European Parliament
3 June, 2008**

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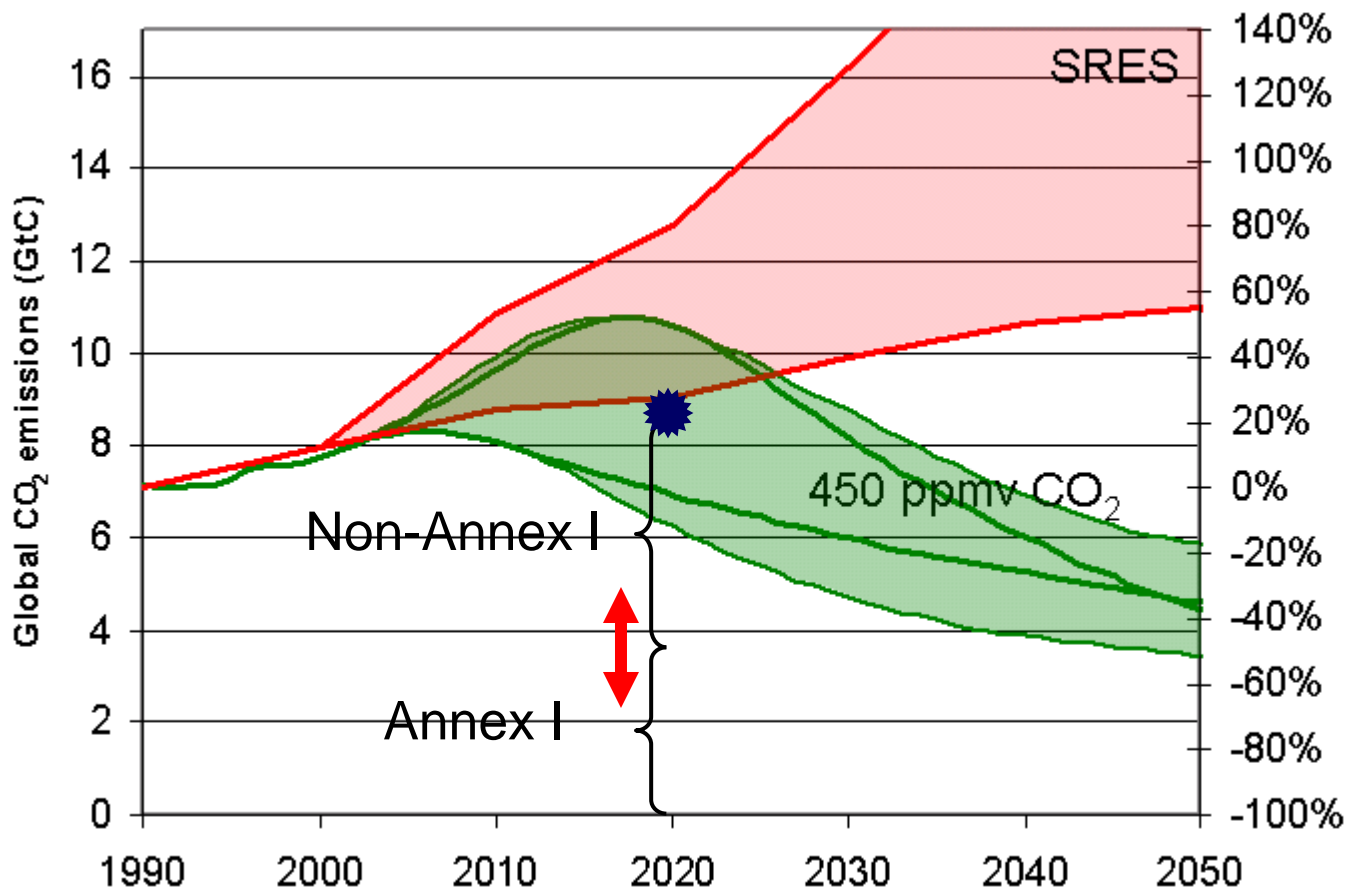
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Content

1. Necessary reductions for Annex I and Non-Annex I countries for keeping the 2°C limit
2. Necessary reductions by the EU within Annex I
3. Comparison to proposal of energy and climate package

Pathways towards stabilization

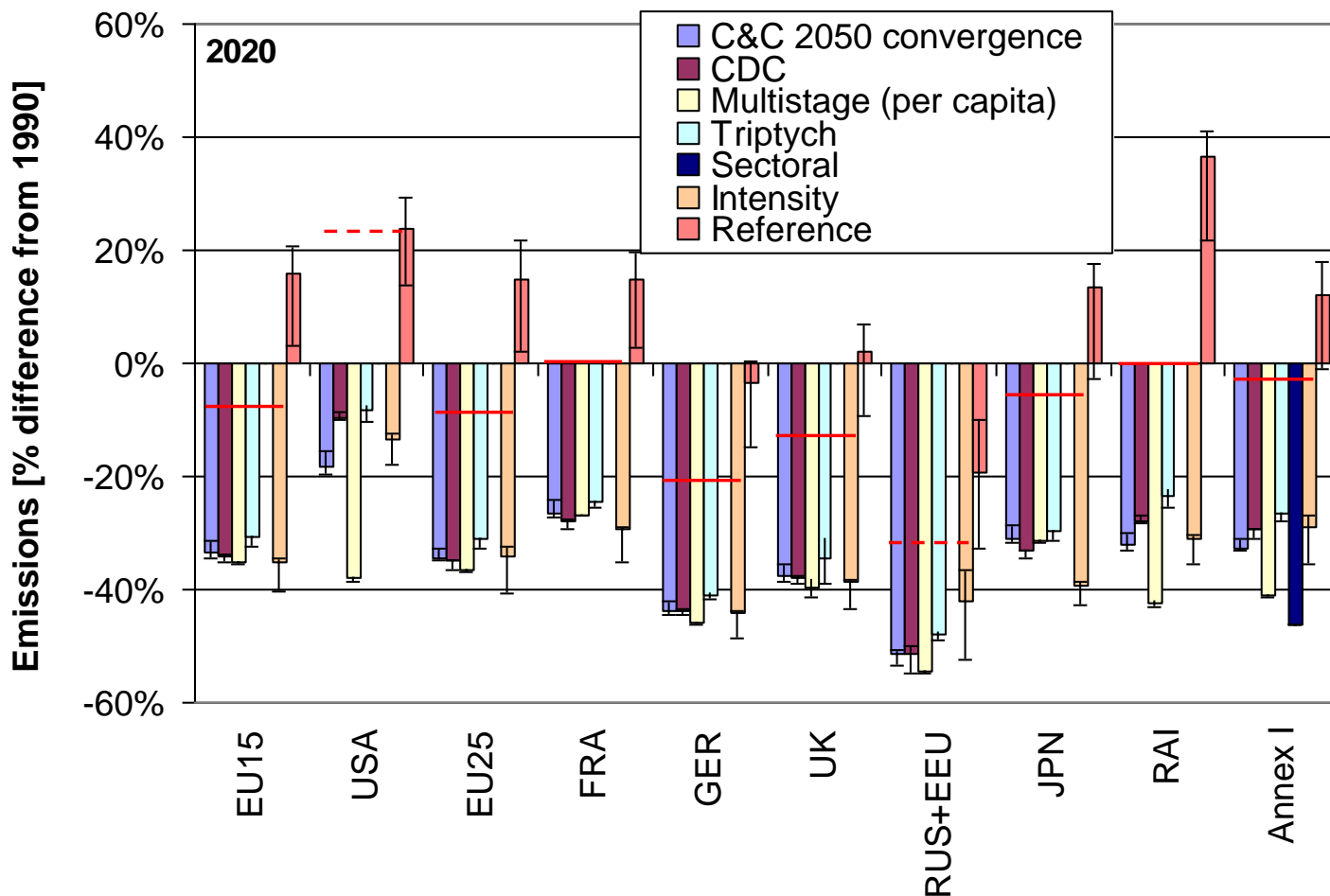


450 ppmCO₂eq
400 ppmCO₂
-> 2-2.4°C

550 ppmCO₂eq
450 ppmCO₂
-> 2.8-3.2°C

650 ppmCO₂eq
550 ppmCO₂
-> 3.2-4°C

Change in 2020 towards 450 ppmv CO₂eq.



Annex I
-25% to -40%

Countries
have different
range

EU reduction
below 1990 a
bit more than
Annex I
average

Source: Höhne, Phylipsen, Moltmann 2007: Factors underpinning future action – 2007 Update, Ecofys for UK Department for Environment Food and Rural Affairs (DEFRA), www.fiacc.net/data/fufa2.pdf

Necessary change in 2020

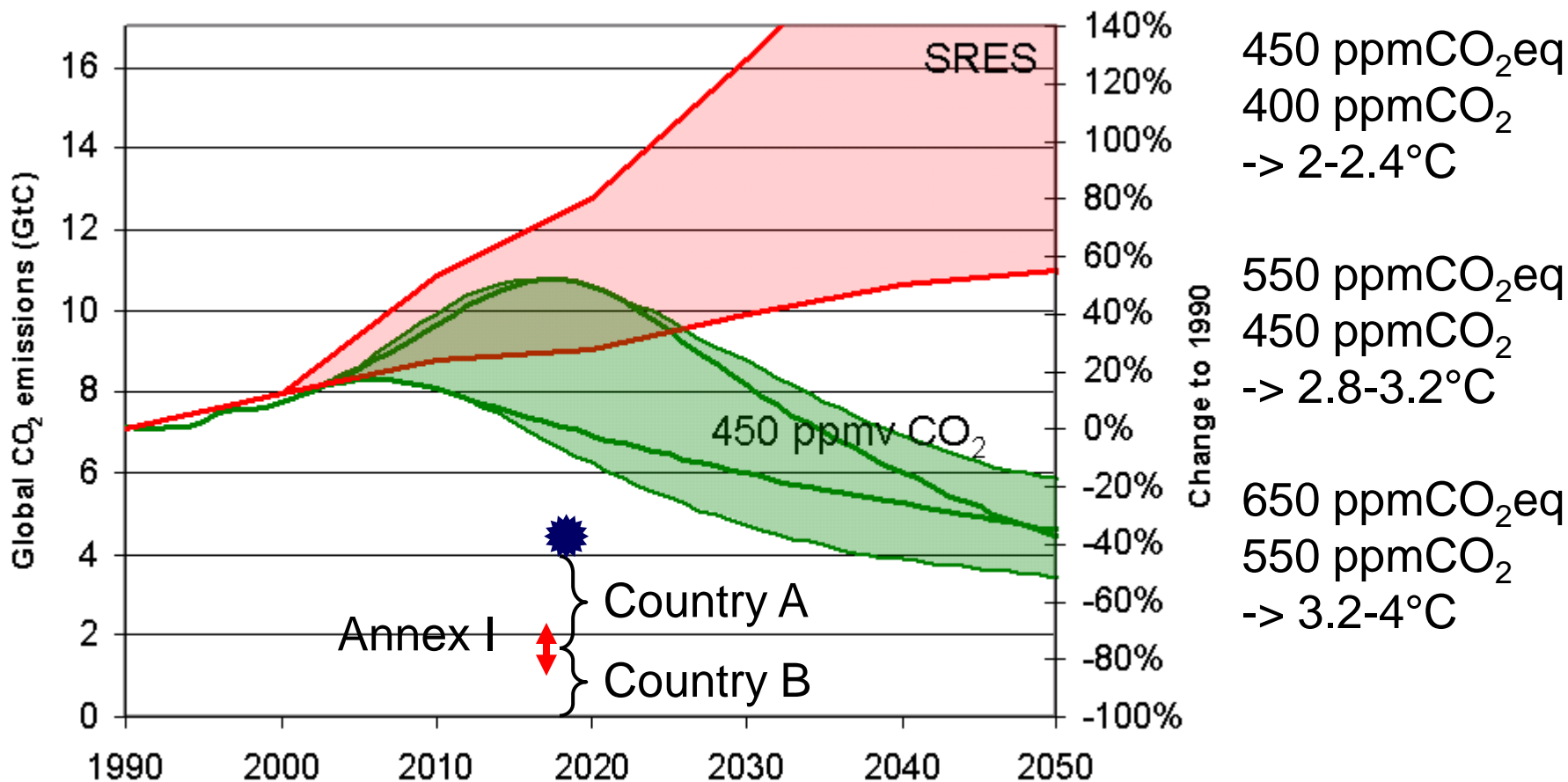
Scenario category	Annex I	Non-Annex I
A-450 ppm CO ₂ -eq	-25% to -40% below 1990	<ul style="list-style-type: none"> • Substantial deviation from baseline in Latin America, Middle East, East Asia and Centrally-Planned Asia • Non-Annex I: -15% to -30% below baseline
B-550 ppm CO ₂ -eq	-10% to -30% below 1990	<ul style="list-style-type: none"> • Deviation from baseline in Latin America and Middle East, East Asia • Non-Annex I: 0% to -20% below baseline
C-650 ppm CO ₂ -eq	0% to -25% below 1990	<ul style="list-style-type: none"> • Non-Annex I: 10% above to 10% below baseline

Source: IPCC Fourth Assessment Report, Working Group III, Box 13.7 and Den Elzen, Höhne: "Reductions of greenhouse gas emissions in Annex I and non-Annex I countries for meeting concentration stabilisation targets", forthcoming

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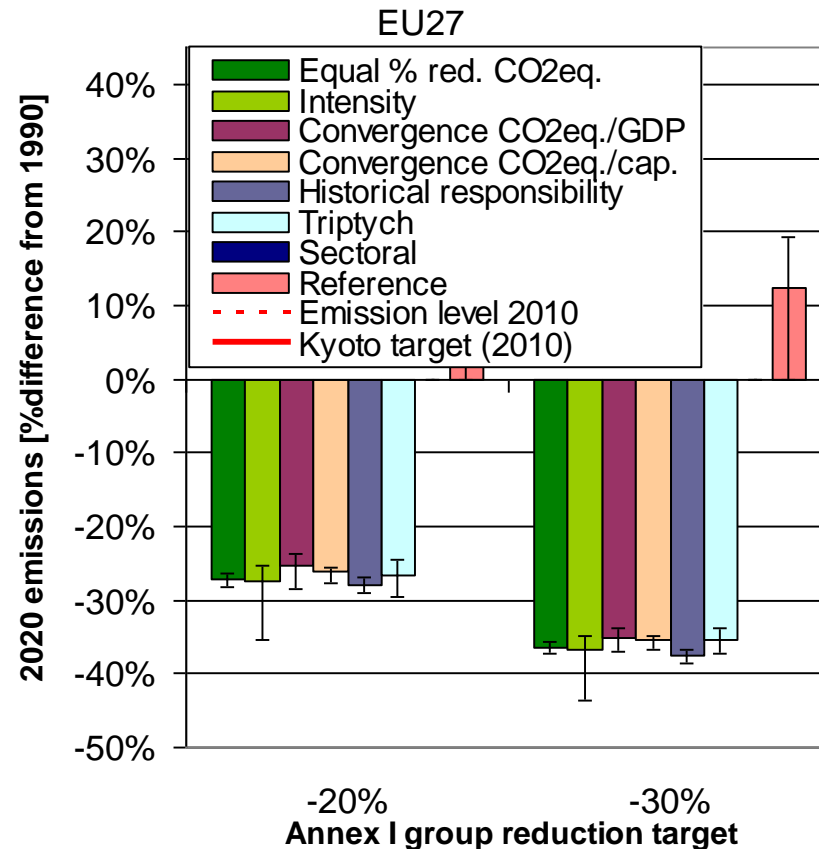
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Change in 2020

	1990-2004
USA	16%
Australia	25%
Canada	27%
Japan	7%
EITs	-37%
EU	-10%



Source: Höhne, Phylipsen, Moltmann 2007: Factors underpinning future action – 2007 Update, Ecofys for UK Department for Environment Food and Rural Affairs (DEFRA), www.fiacc.net/data/fufa2.pdf

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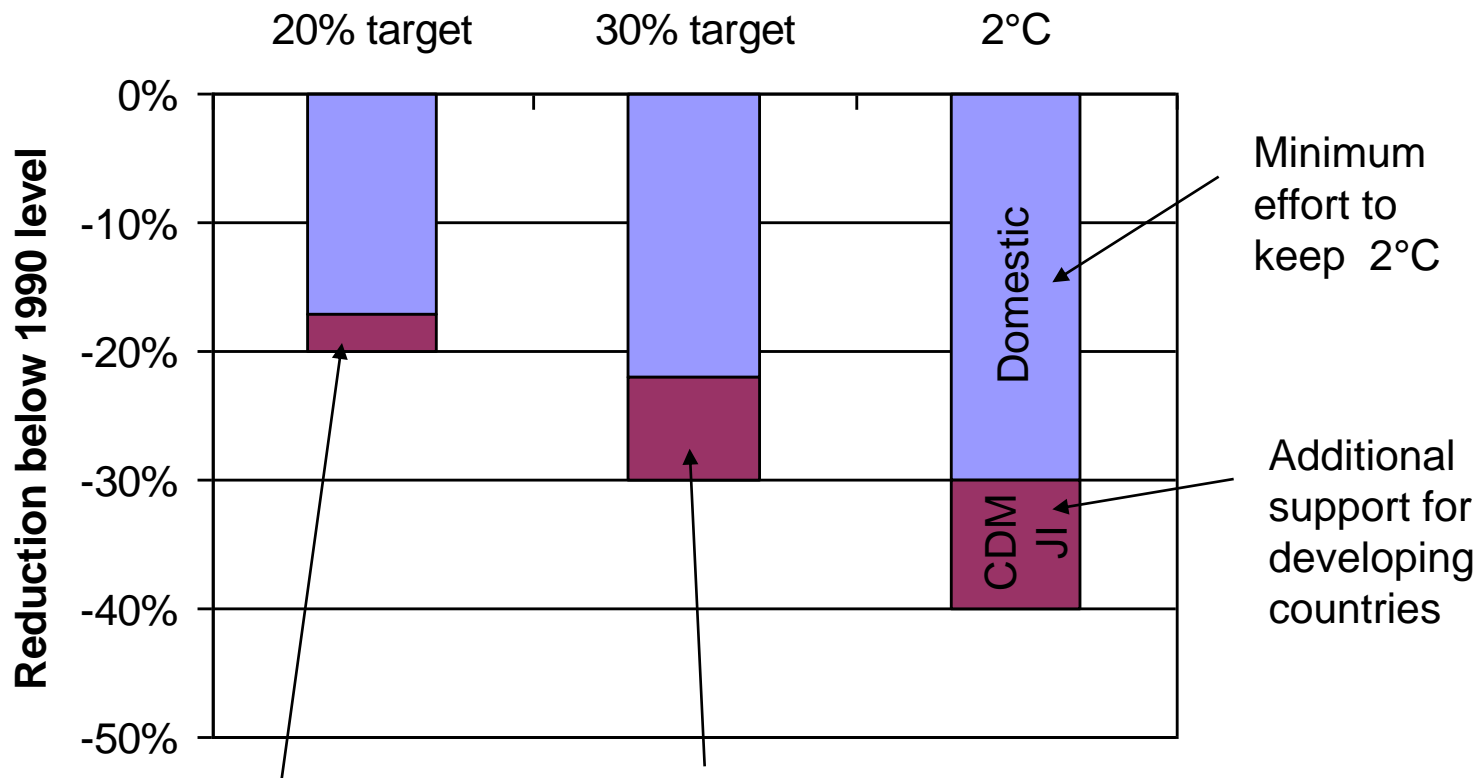
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EU reductions in 2020



- ETS: carry over of unused CDM/JI from 2008-2012
- Non-ETS: CDM/JI up to 3% of 2005 emissions

Plus half of the additional effort (1/2 of 10%)

For necessary developing country support see also: Höhne, Michelsen, Moltmann, Ott, Sterk, Thomas, Watanabe 2008: "Proposals for contributions of emerging economies to the climate regime under the UNFCCC post 2012", Ecofys and Wuppertal Institut for German Environmental Agency, forthcoming

Conclusions

- 2°C requires
 - Annex I: -25% to -40% below 1990 AND
 - Non-Annex I: -15% to -30% below baseline, of which roughly 10% can be “no-regret options”
- Compatible EU target would be at least -30% below 1990 domestically plus some 10%-points support for developing countries through CDM or other carbon mechanism