



EU's Perspective on Mitigation Potentials: Adequacy, Feasibility and Fairness as Cross-cutting Issues

get to grips with
**climate
change**



Mitigation potentials of policies, measures and technologies

AWG Roundtable on

14 May 2007, Bonn

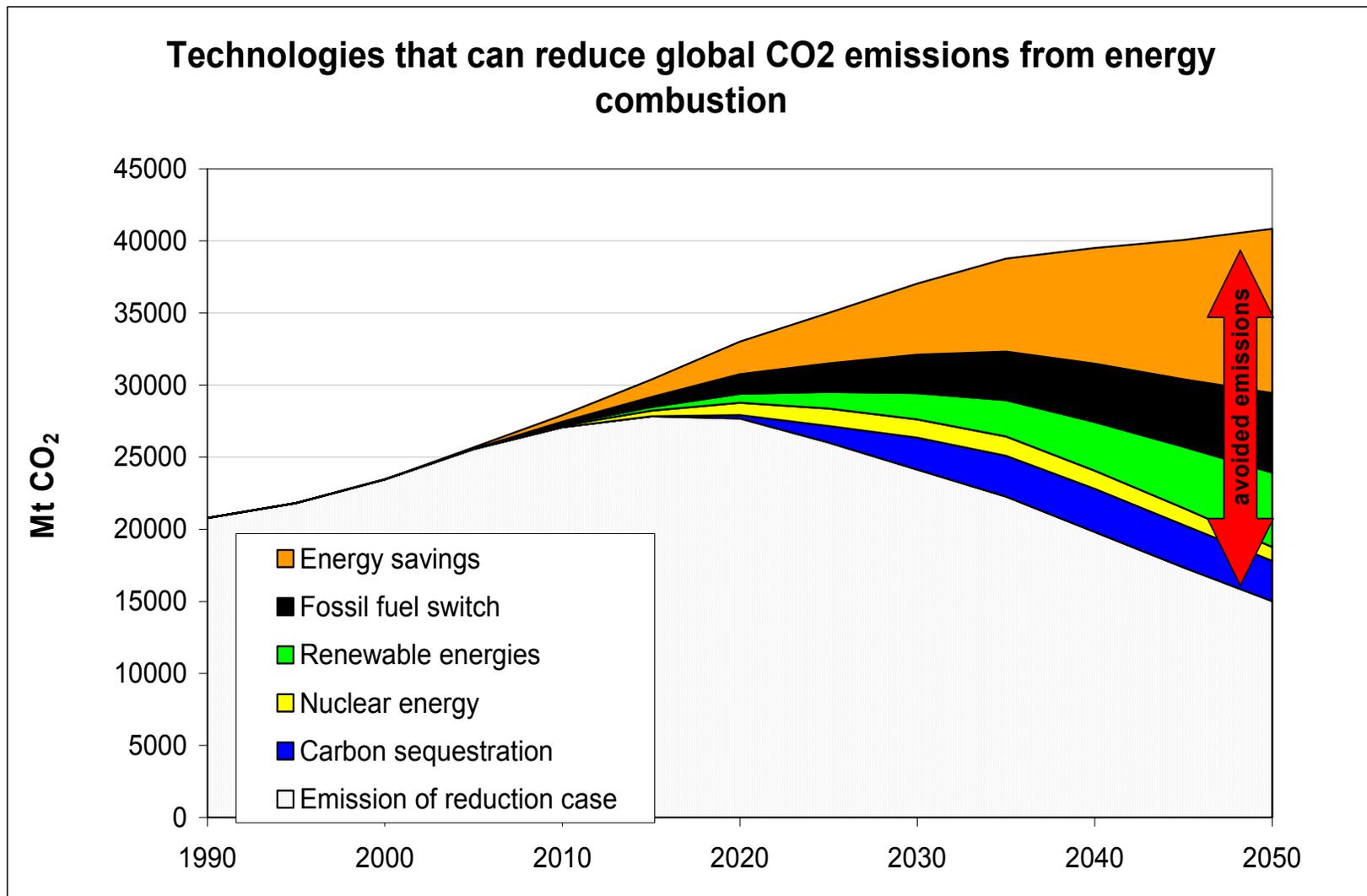
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The EU 2 degrees vision is technically feasible: e.g. the energy sector



Source: JRC-IPTS, POLES model



Global win-win solutions: 5-7 Gt CO₂eq. per year (≈ entire EU-25)

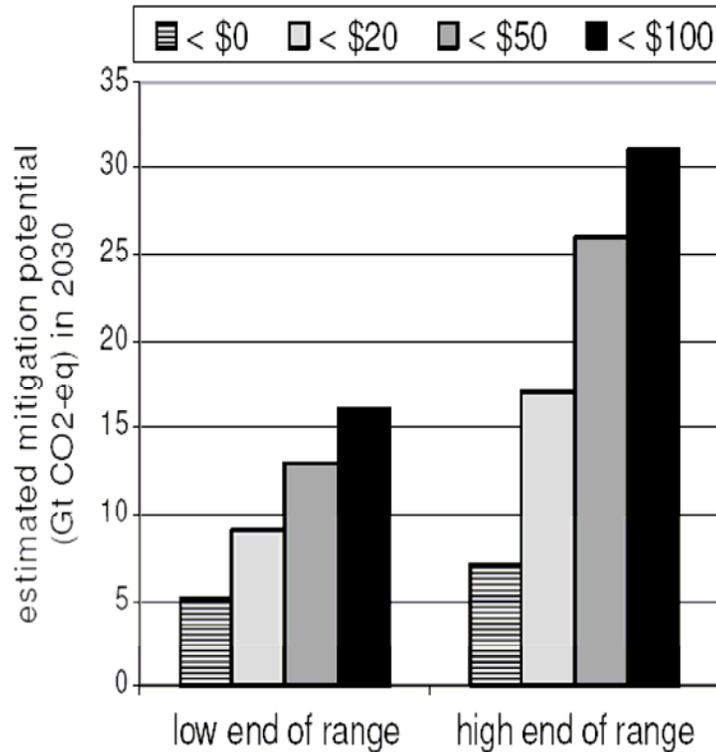


Figure SPM 5A:
Global economic potential in
2030 estimated from bottom-up studies
(data from Table SPM 1)

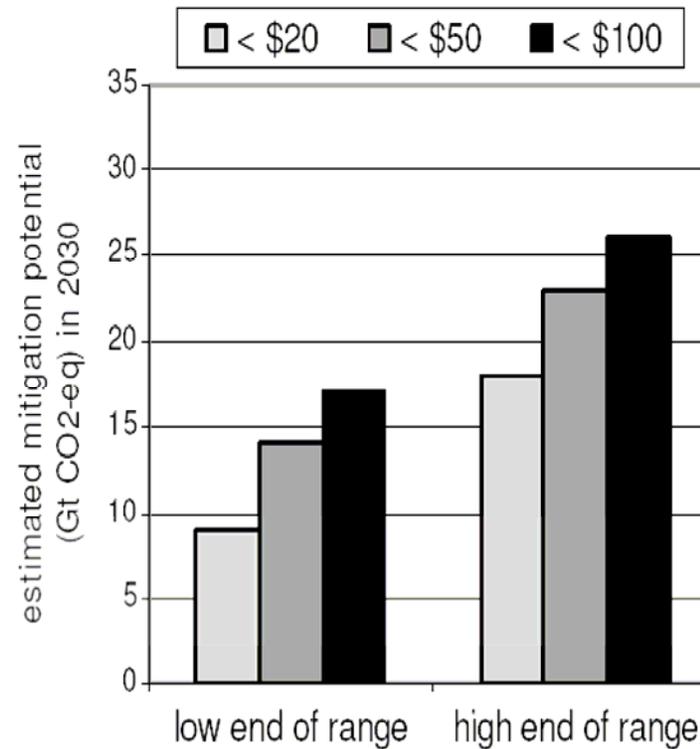
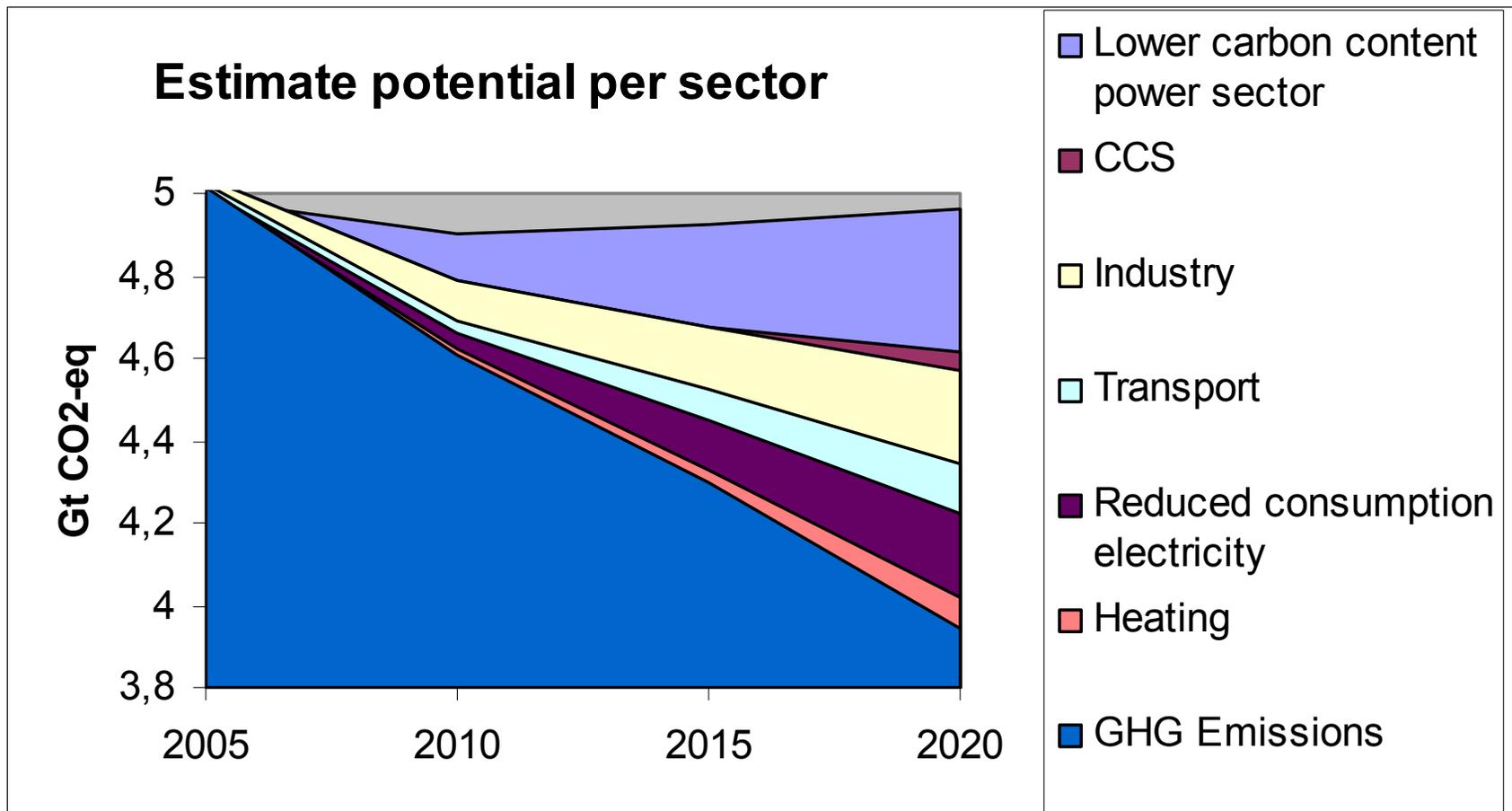


Figure SPM 5B:
Global economic potential in
2030 estimated from top-down studies
(data from Table SPM 2)



EU potentials by sectors





The EU 2 degrees vision is economically affordable

World GDP
relative to 2005

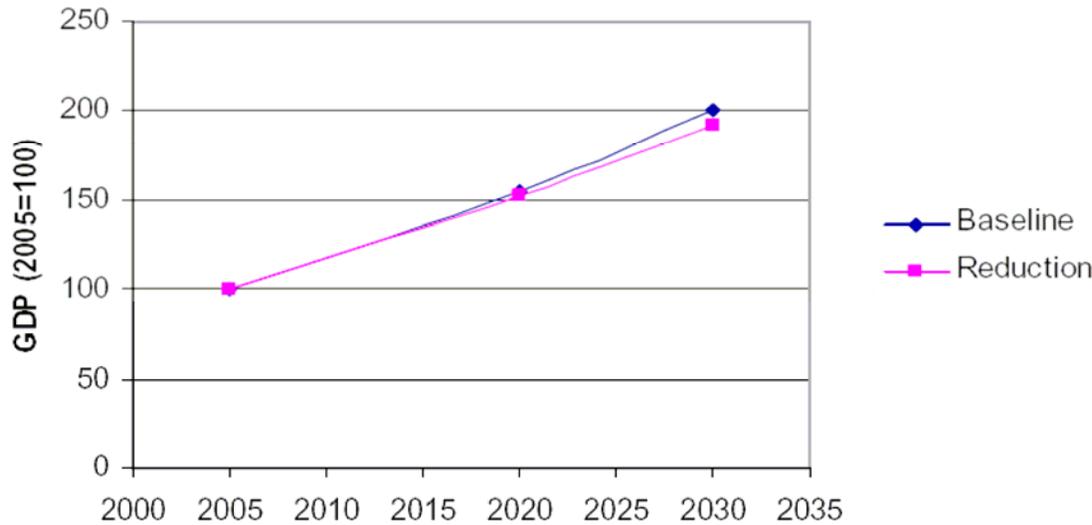


Table SPM.4: Estimated global macro-economic costs in 2030¹⁶ for least-cost trajectories towards different long-term stabilization levels.^{17, 18}

Stabilization levels (ppm CO ₂ -eq)	Median GDP reduction ¹⁹ (%)	Range of GDP reduction ^{19, 20} (%)	Reduction of average annual GDP growth rates (percentage points) ^{19, 21}
590-710	0.2	-0.6 – 1.2	< 0.06
535-590	0.6	0.2 – 2.5	<0.1
445-535 ²²	Not available	< 3	< 0.12



EU climate action up to 2020: mitigating climate change

- **EU independent commitment: Reduce EU GHG emissions by at least 20% in 2020 compared to 1990**

- Energy Package:

- Energy efficiency: 20% improvement by 2020
- Renewable energy: 20% mandatory objective by 2020
 - differentiation of targets between countries
 - flexibility in target setting within a country between sectors
- Biofuels target of 10% by 2020
- Sustainable power generation from fossil fuels: 12 large scale CCS demonstration plants by 2015; aiming at near-zero emissions by 2020
- Strategic energy technology plan
- Internal market-options unbundling & regulatory powers:
 - Important for functioning EU ETS
 - Overcome hurdles for renewables
- Nuclear: member states' choice

**At least -
20 %
CO₂**

**(≈ -15%
of GHG)**

- Climate Strategy:

- Strengthen EU ETS (Review, Non-CO₂, Aviation)
- Other policies (e.g. fuel quality)
- Global carbon market (incl. CDM)

**Up to - 5% of GHG
emissions**



Conclusions

- A broad range of mitigation potentials is available in various sectors and at moderate cost to embark on a pathway towards significantly reducing global emissions by 2050
- International cooperation will maximise synergies in realising mitigation potentials and allow for addressing climate change most cost effectively
- EU is determined to turn the climate change challenge into an opportunity for EU energy security, innovation, its international competitiveness and the renaissance of its industry and economy.



More information on how to...

get to grips with
climate change



http://europa.eu.int/comm/environment/climat/home_en.htm

http://ec.europa.eu/environment/climat/future_action.htm

http://ec.europa.eu/energy/energy_policy/index_en.htm