

OECD analysis on the economics of climate change

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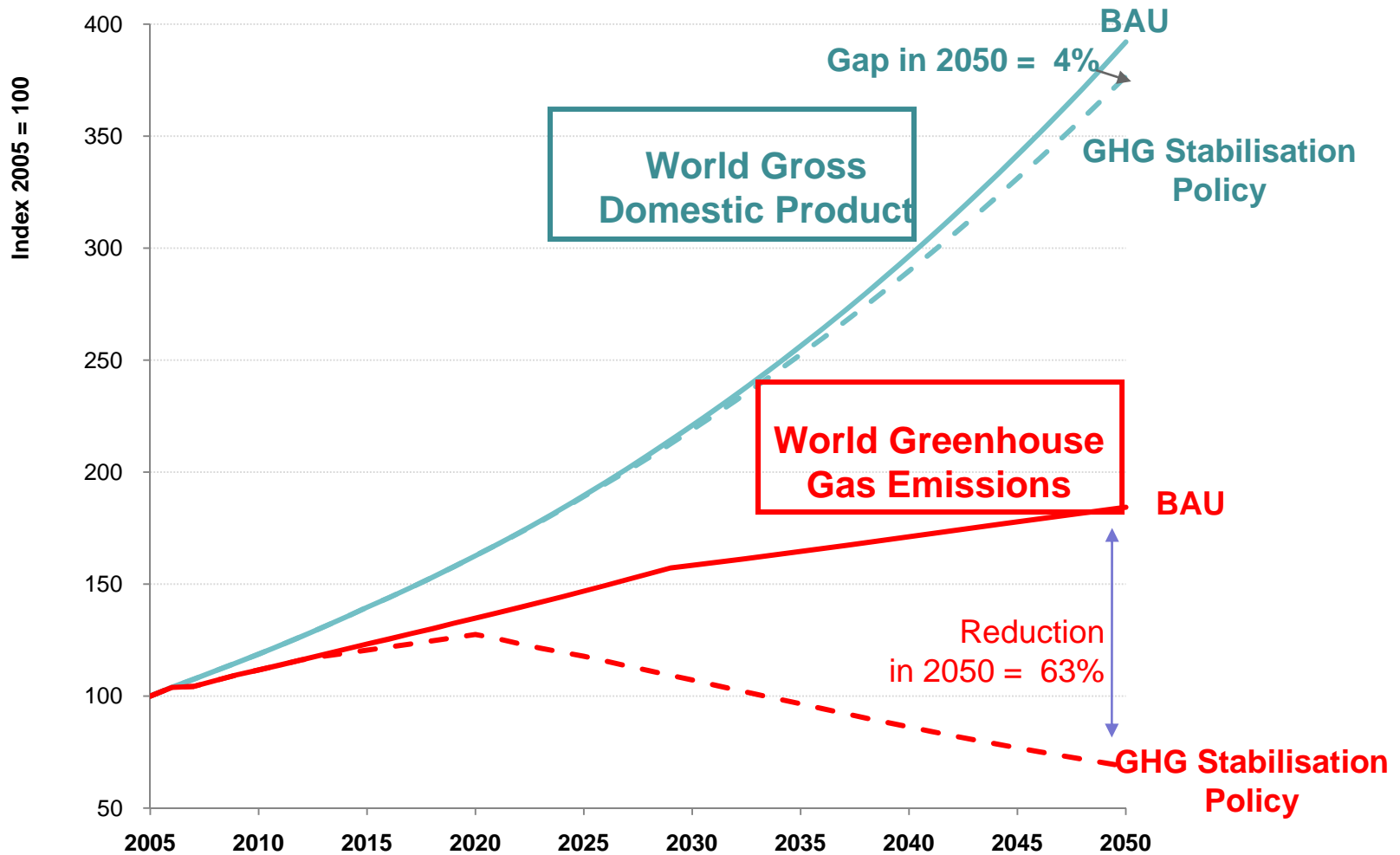
Key messages

- Ambitious action to tackle climate change is affordable
- We have the toolkit → it is achievable
- Don't let fears of competitiveness impacts stand in the way

Ambitious action is affordable

- **Ambitious action is economically rational**
 - Not cheap, but it is affordable compared with the cost of inaction.
 - An ambitious stabilisation scenario could cost about 1/10th of a percentage point of GDP growth each year to 2050.
- **The economic crisis is not an excuse to delay action**
 - Postpones the inevitable, requiring larger emission cuts later.
 - Crisis is an opportunity for structural reform, and for re-directing investment.
- **Climate policies: opportunities**
 - Using taxes or auctioned permits to achieve a 20% cut in emissions in industrialised countries by 2020 could raise revenues of about 2.5% of GDP.
 - Fiscal consolidation, other national priorities, international financing? If just 1/20th of the revenues dedicated to climate finance = US\$50 billion.

Ambitious action to reduce GHG emissions is affordable



Moving towards ambitious and comparable effort

	Emissions target (change in 2020 from 1990)	GDP in 2020 (change from baseline)	IPCC 4AR suggests...
Australia & NZ	-12%	-0.8%	
Canada	-1.5%	-0.4%	
EU27 & EFTA	-30%	-0.4%	
Japan	-25%	-0.2%	
Non-EU E Europe	-16%	-2.1%	
Russia	-25%	-2.8%	
US	-5.5%	-0.3%	
Annex I	-18% (-19% from baseline)	-0.4%	"-25% to -40%"
non Annex I	+38.5% from 2005 (-8% from baseline)	-0.3%	"substantial deviation from baseline"
World	+13% from 2005 (-12% from baseline)	-0.4%	

Source: OECD (2009), *Economics of Climate Change Mitigation: Policies and Options for Global Action beyond 2010*

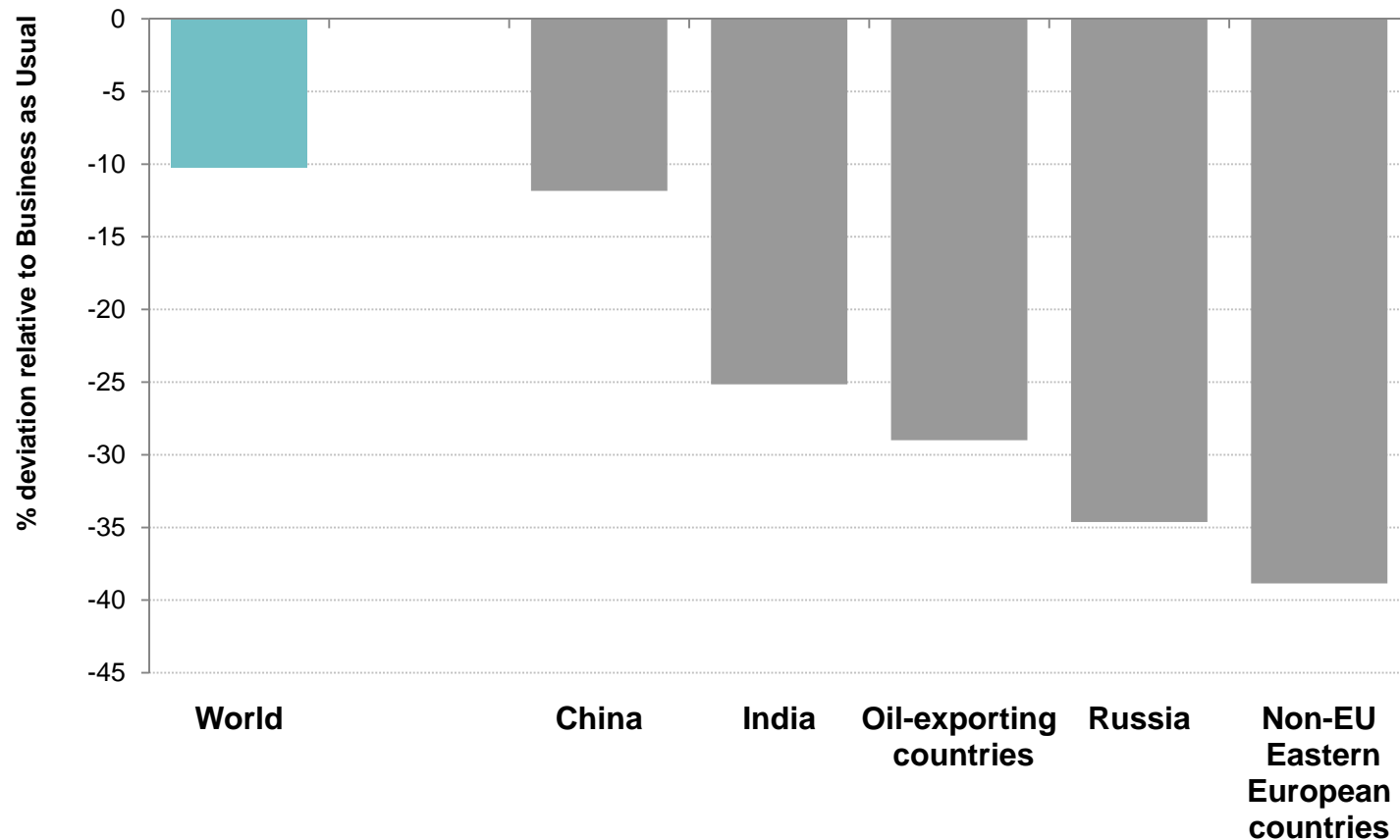
We have the toolkit – it is achievable

- Need a broad policy mix, but with a strong focus on building up a global carbon market.
 - Cap-and-trade schemes & linking the schemes together
 - Carbon taxes
 - Removal of fossil fuels subsidies
 - Reformed CDM and possible sectoral crediting mechanisms
- Carbon pricing is an incentive for innovation → a price to achieve a moderate stabilisation scenario could lead to a 4-fold increase in R&D spending.
- But market failures → also need government investment in R&D; regulations & standards; information-based instruments.

Removing fossil fuel subsidies is good for the economy & the environment

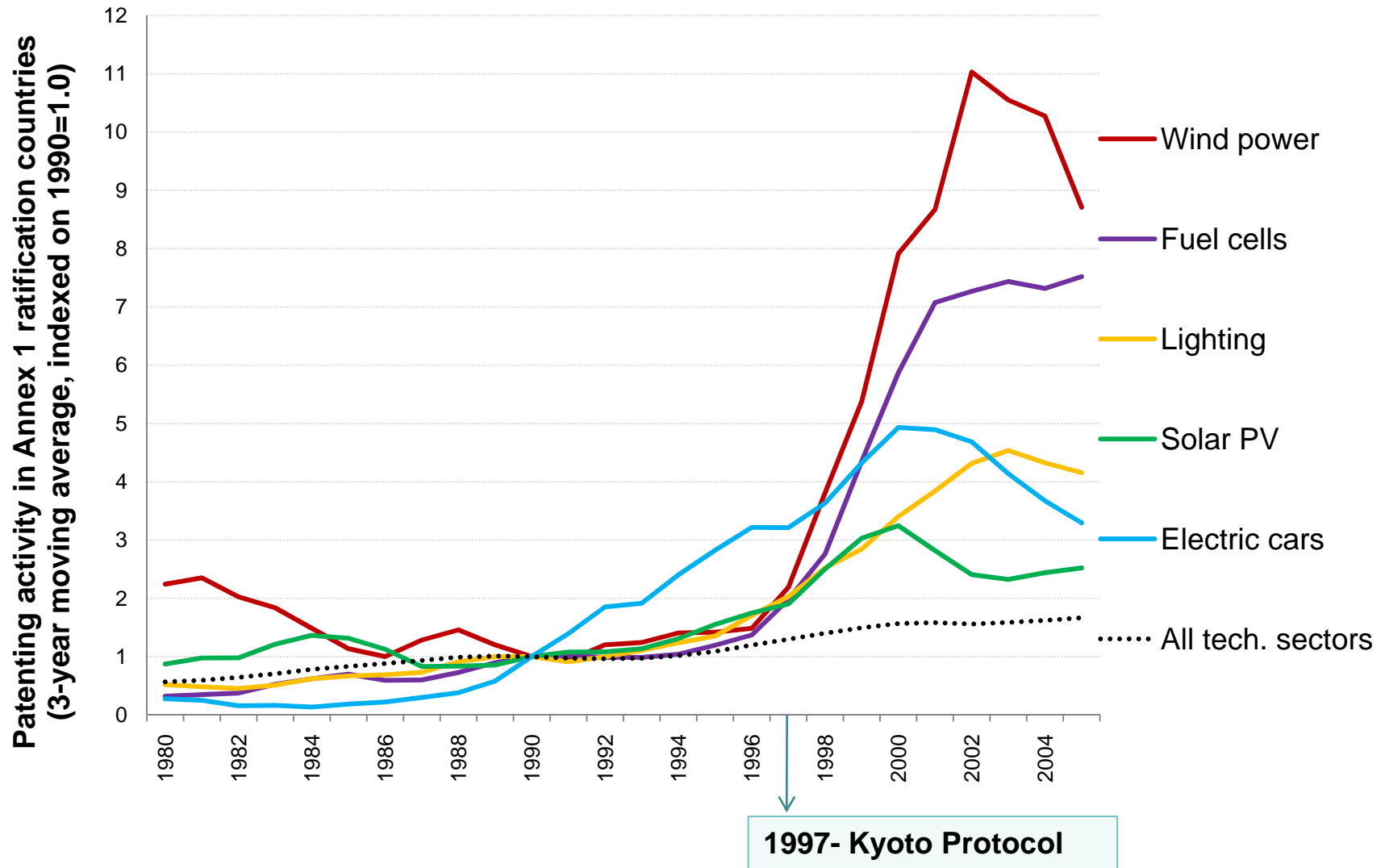
→ *G20 Leaders Summit*

Impact of energy subsidy removal on GHG emissions in 2050



Source: joint OECD-IEA analysis, cited in OECD (2009), *Economics of Climate Change Mitigation: Policies and Options for Global Action beyond 2010*, based on IEA data on subsidies

Impact of a clear policy & price signal on innovation



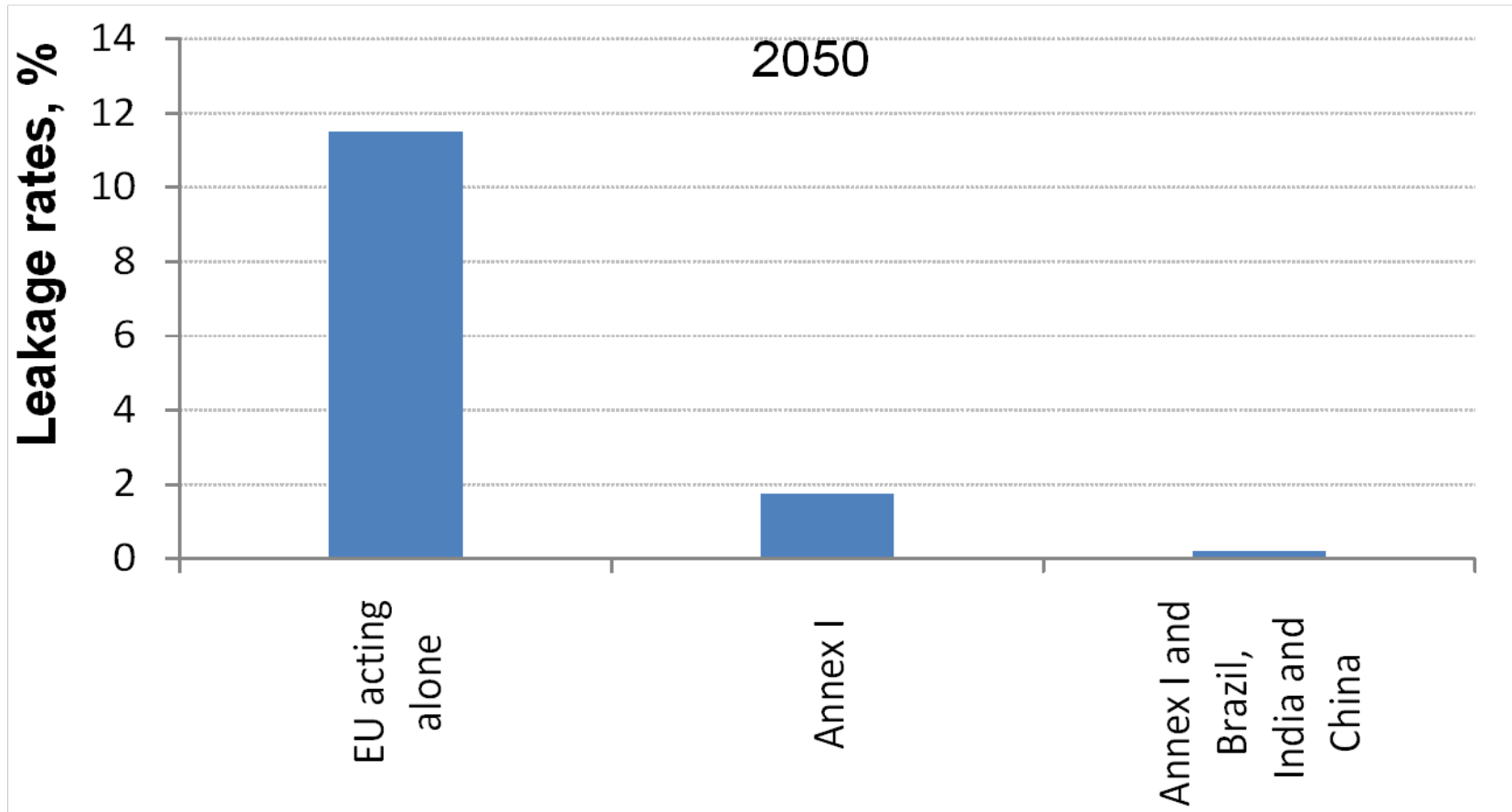
What about competitiveness?

Fears of carbon leakage & competitiveness effects

- Often exaggerated.
- Rapidly decreases as the number of participating countries & sectors increases. Linking cap-and-trade schemes can reduce competitiveness problems & costs of action.
- Don't exempt energy intensive industries → increases cost of achieving a moderate stabilisation scenario by 50%!
- Border tariffs/ border tax adjustment → can reduce leakage, but they are expensive, don't address competitiveness concerns, administratively burdensome.

Carbon leakage decreases with greater country coverage

The size of the cut is equivalent to a 50% cut in EU emissions in 2050 relative to 2005 levels



Source: OECD (2009), *Economics of Climate Change Mitigation: Policies and Options for Global Action beyond 2010*

Border Tax Adjustments: a last resort

Effect of countervailing import tariffs in the case of a 50% reduction in EU countries by 2050

	without countervailing tariffs	with countervailing tariffs
Leakage rates (%)	11.5	2.9
Output of EITs (% deviation from BAU)		
EU	-4.0	-4.6
World	-0.4	-0.6
GDP effect (% deviation from BAU)		
EU	-1.5	-1.8
Rest of the World	0.0	-0.1

Key messages

- Ambitious action to tackle climate change is affordable, compared with the costs of inaction
- The necessary financing (public and private) can be raised
- We have the toolkit → it is achievable

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