



ORGANISATION FOR ECONOMIC
CO-OPERATION AND DEVELOPMENT



The OECD Environmental Outlook to 2030

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The OECD Environmental Outlook to 2030

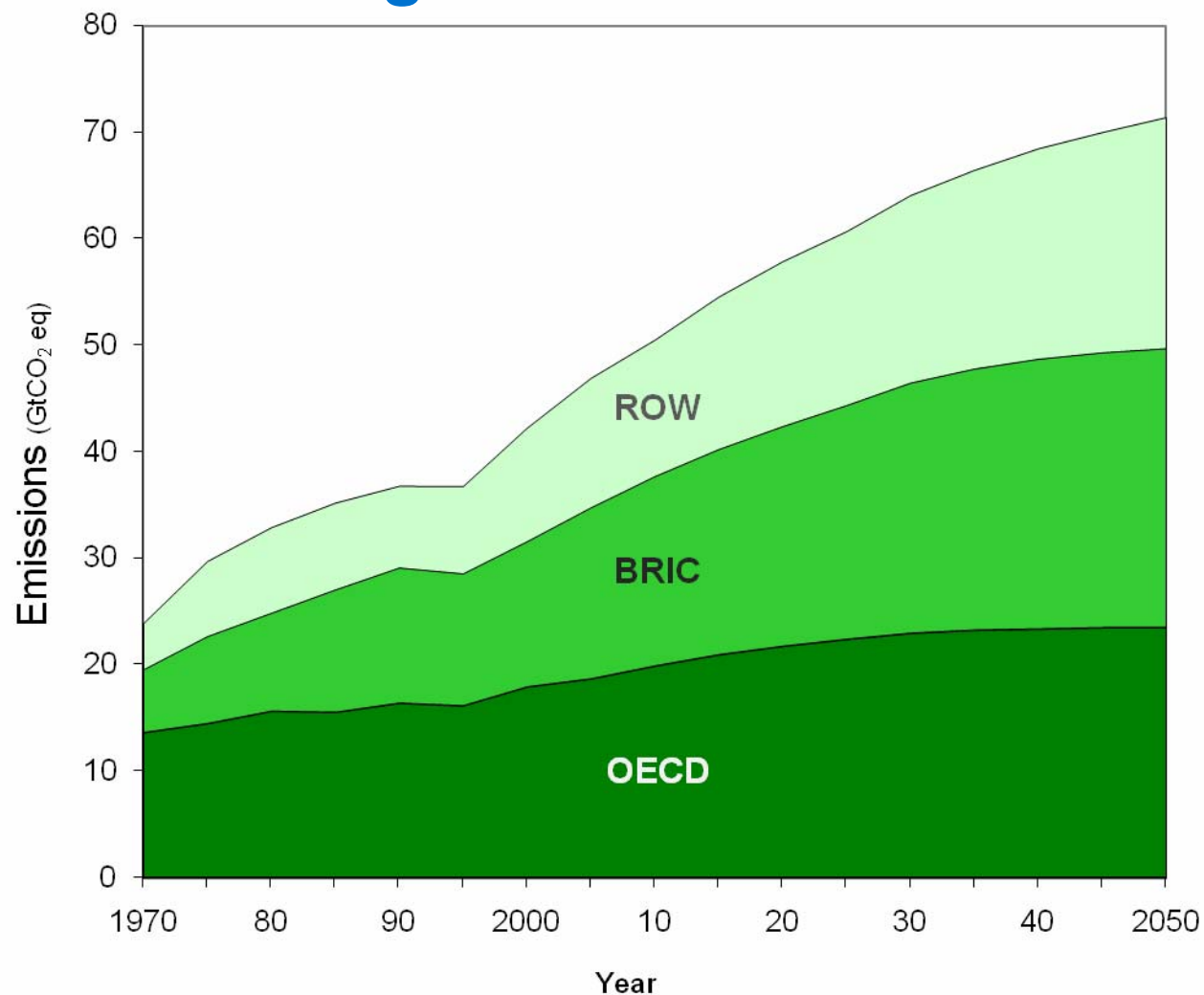
Key Message: The policy solutions to environmental challenges are achievable and affordable...

- compared to expected economic growth in the coming decades
- compared to the cost of inaction
- if least-cost policy solutions are chosen
- if we start today

...a positive and optimistic message

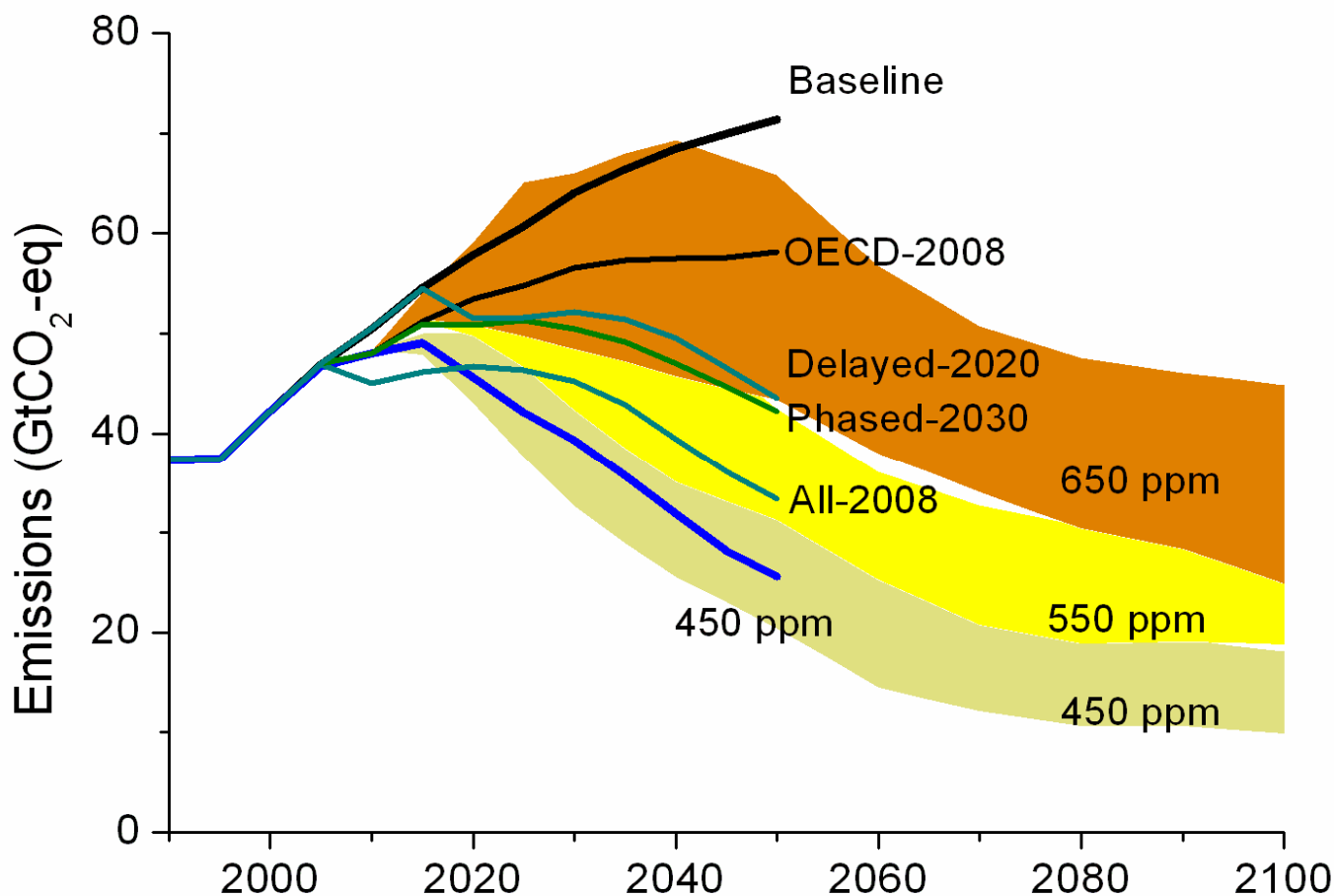
The OECD Environmental Outlook to 2030

Climate Change: Baseline GHG emissions



OECD Environmental Outlook modelling suite, final output from IMAGE cluster

Climate Policy Simulations: GHG emissions under Baseline and mitigation cases to 2050, compared to 2100 stabilisation pathways



Source: OECD (2008), *OECD Environmental Outlook to 2030*; including data from Van Vuuren (2007) *OECD Environmental Outlook modelling suite, final output from IMAGE cluster*

Climate Change

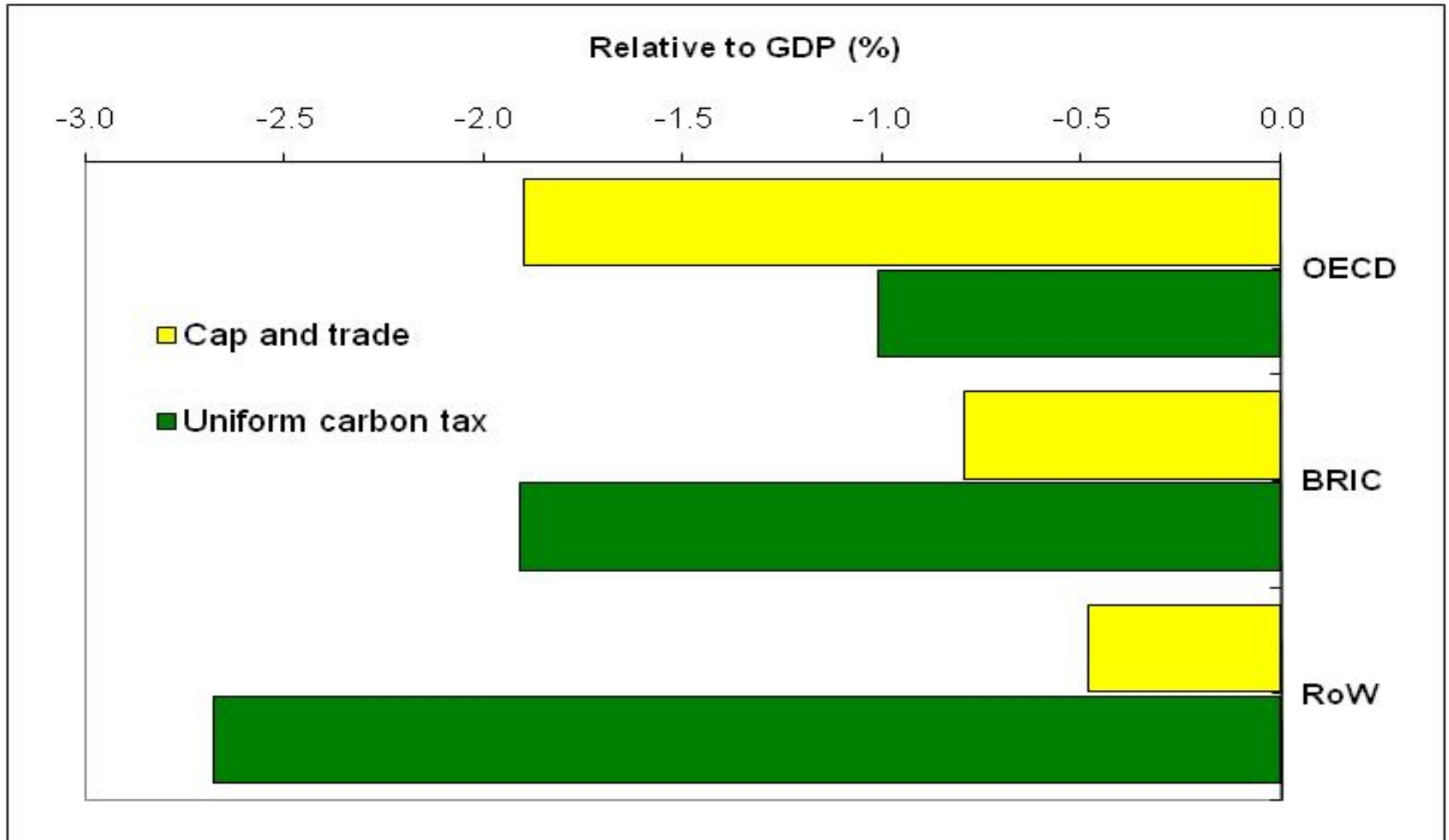
Policy solutions

- achievable and affordable
 - World GDP projected to grow by nearly 100% to 2030, and to more than triple in size to 2050.
 - Implementing an ambitious action (the 450ppm case) would cost only 0.5% of that growth in 2030, and 2.5% of the growth in 2050.
 - Working with all major emitters.

Policy instruments

- putting a price on GHG emissions, e.g. carbon tax, emissions trading
- promoting eco-innovation and R&D
- voluntary and sectoral approaches
- support to developing countries, burden-sharing

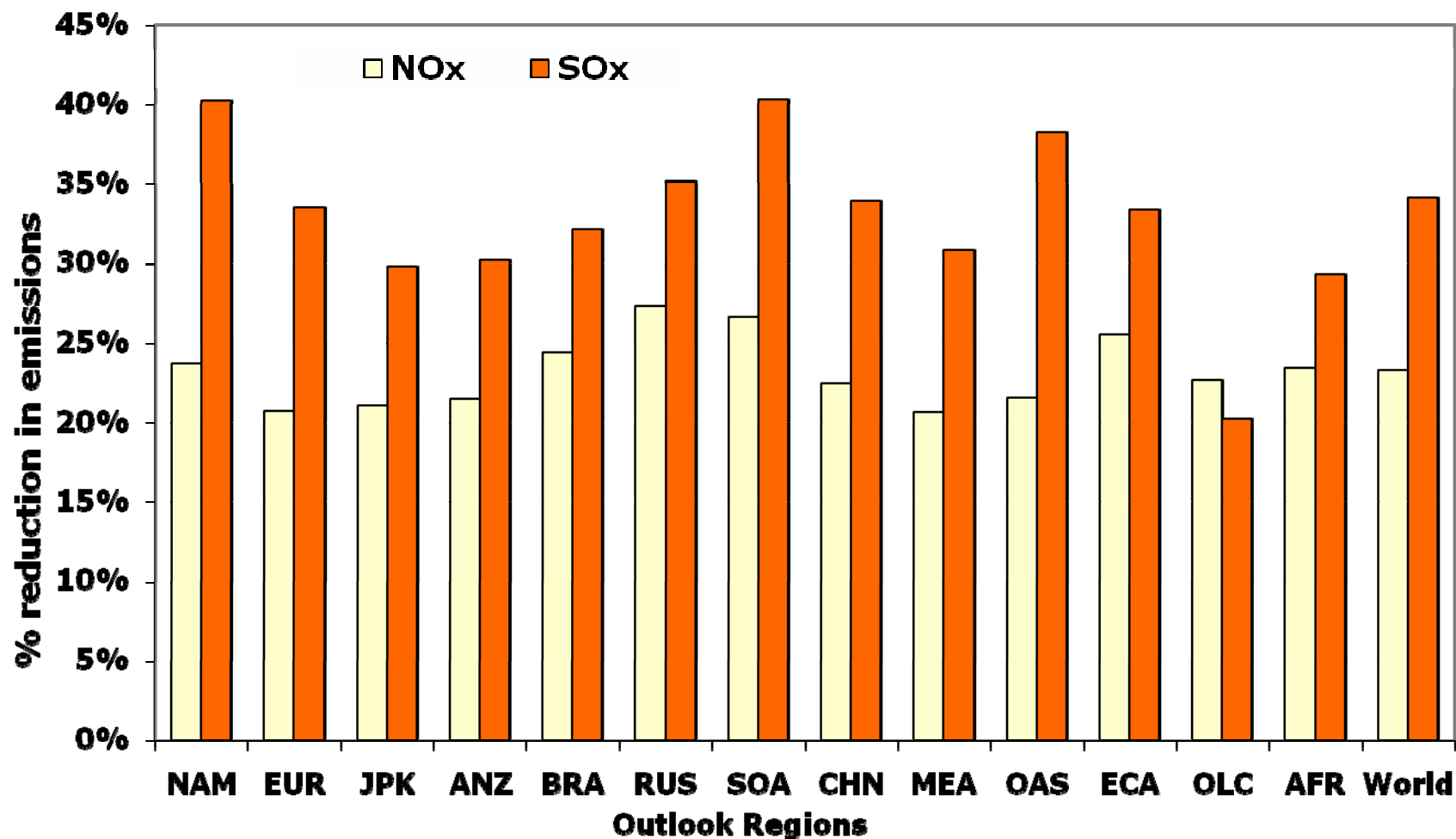
**Burden-sharing: 450ppm case under cap & trade scheme,
regional direct cost of GHG abatement, 2050**





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Air pollution co-benefits of GHG mitigation: reduction in NO_x and SO_x emissions; 450ppm case and Baseline, 2030



Source: OECD (2008), *OECD Environmental Outlook to 2030*
OECD Environmental Outlook modelling suite, final output from IMAGE cluster

Key Message: Timing is critical

- Huge investment opportunities in the coming decades in rapidly growing economies
- Important to avoid “lock-in” of dirty fuel choices and buildings with poor energy efficiency.
- Avoid irreversible damage to the climate system.

...there is a “window of opportunity”



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Key Message: Environment Ministries need others

Finance and Economy Ministries

- Financial backing for policy reforms
- To guide structural shifts in economy
- For green tax reforms

Sectoral Ministries (Energy, Agriculture, Transport, Industry etc.)

- Sectoral policy reforms needed to change production and consumption patterns – need policy integration

Stakeholder partners – business, trade unions, environmental NGOs



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A suite of models:

- ENV-linkages macroeconomic recursive general equilibrium model (OECD)
- IMAGE framework (MNP, Netherlands)
 - LEITAP: agricultural production and trade (LEI Agricultural Economics Institute)
 - TIMER: energy demand and supply
 - IMAGE climate, terrestrial environment and nutrient cycles
 - GLOBIO biodiversity
 - FAIR climate policy options and burden sharing
 - GUAM Global Urban Air quality Model
 - WaterGAP: water use and demand (University of Kassel)
- Based on in-house expertise (IEA for energy, economics, agriculture, etc.)



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OECD work on the Economics of Climate Change

- Economy-wide analyses (e.g. including agriculture, forestry, industry, energy, transport...)
- Co-benefits (e.g. local air pollution, biodiversity)

OECD work on the road from Bali to Copenhagen

- Analysis to support a solid economic footing for the post-2012 climate architecture.
- Political economy of reform: helping countries implement necessary policy reforms.



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For more information

www.oecd.org/environment/outlookto2030