

The benefits of eliminating consumer subsidies to fossil fuels: results of the OECD-IEA modelling exercise

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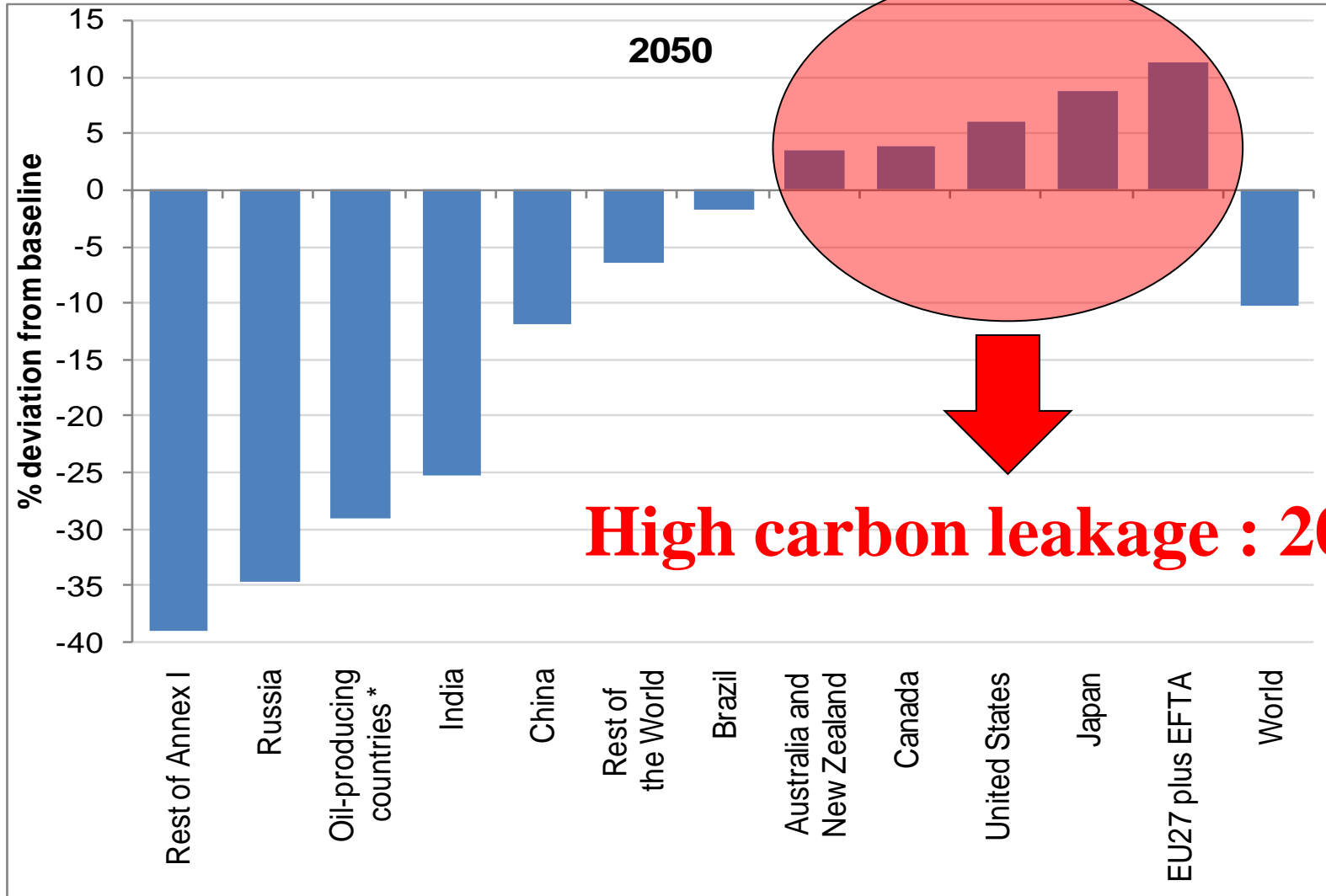
Motivation

- Existing environmentally-harmful energy subsidies amount to a negative carbon price
- Hence, an obvious initial step in pricing carbon worldwide is to remove these subsidies
- In addition, removing these subsidies would lower the overall economic costs of achieving a given mitigation target
- Price Gap approach in collaboration with the IEA: 20 non-OECD countries.
- Analysis based on a worldwide multi-sectoral, multi-regional General Equilibrium model : ENV-Linkages

Energy subsidies are high in some non-OECD countries (2007)

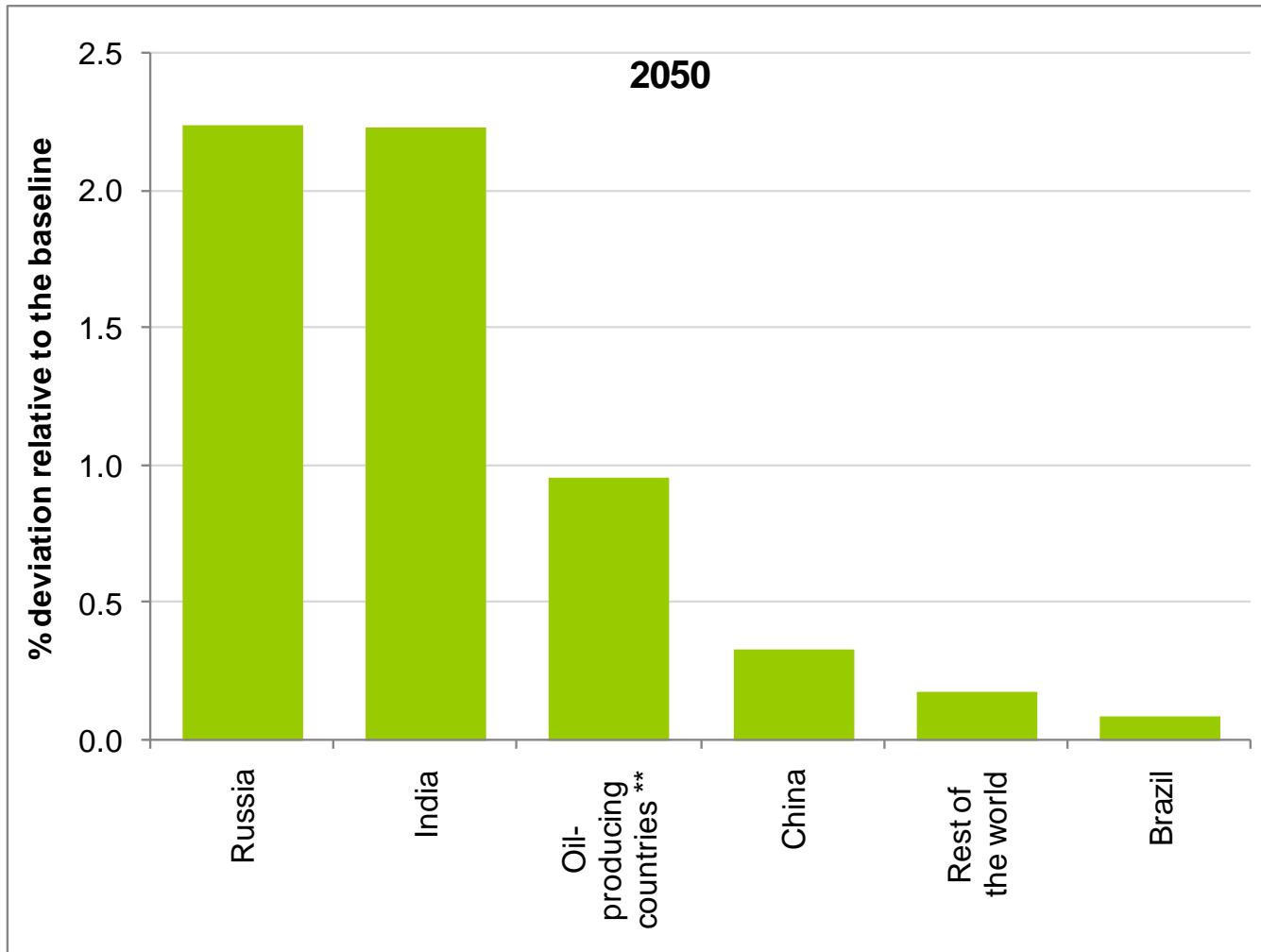
Country/region	Energy	% deviation relative to reference price (2007)
China	Coal	-18.1
	Gas	-27.0
	Refined oil	-7.1
	Electricity	-22.3
India	Coal	0.0
	Gas	-53.6
	Refined oil	-51.8
	Electricity	-19.6
Brazil	Coal	-40.4
	Gas	0.0
	Refined oil	-14.4
	Electricity	0.0
Russia	Coal	-51.6
	Gas	-84.7
	Refined oil	-23.6
	Electricity	-48.9
Oil producing countries	Coal	0.0
	Gas	-18.9
	Refined oil	-29.2
	Electricity	-21.9

Removing energy subsidies could reduce world GHG emissions by 10%

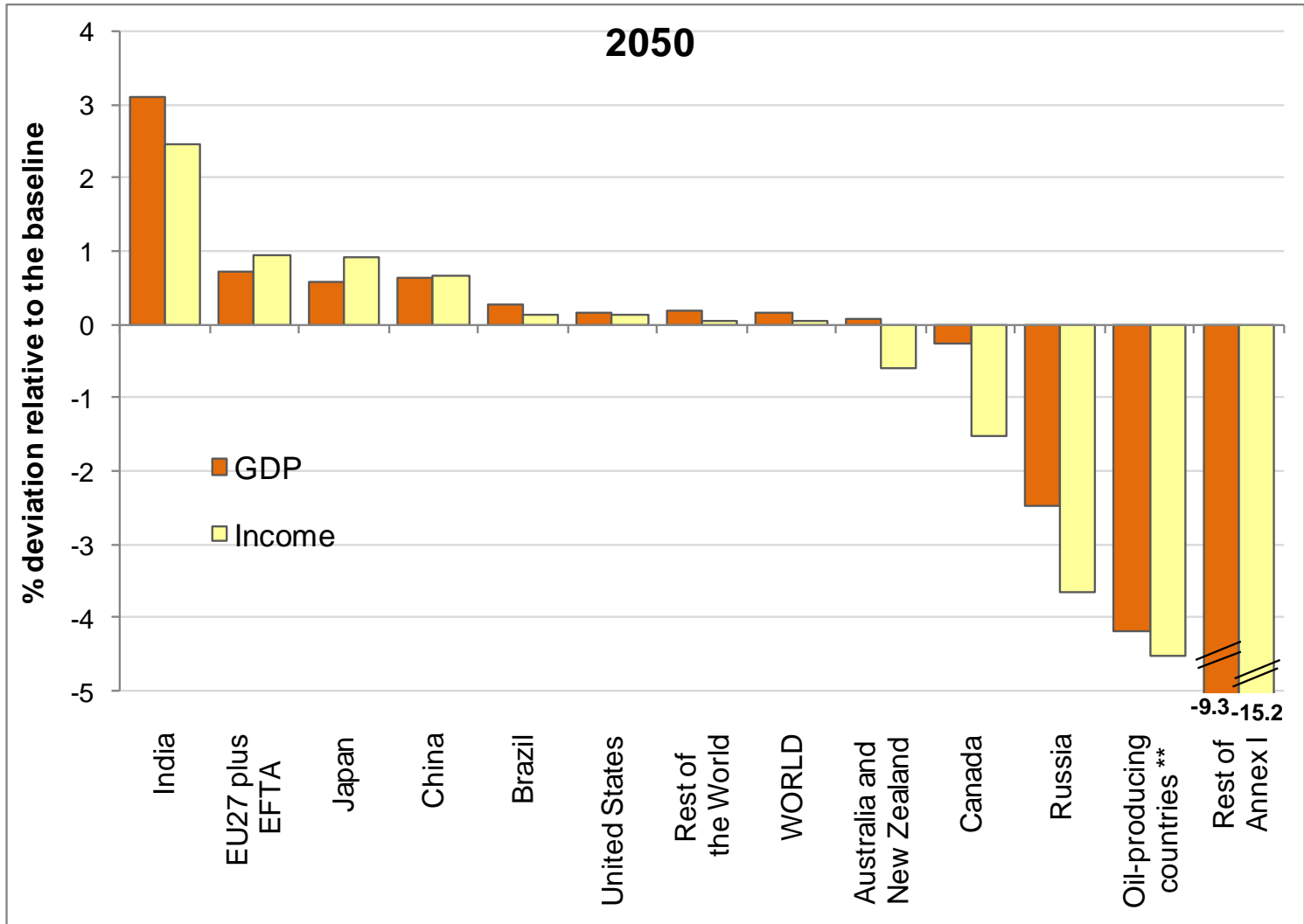


High carbon leakage : 20%

Unilateral removals of energy subsidies bring real income gains ...

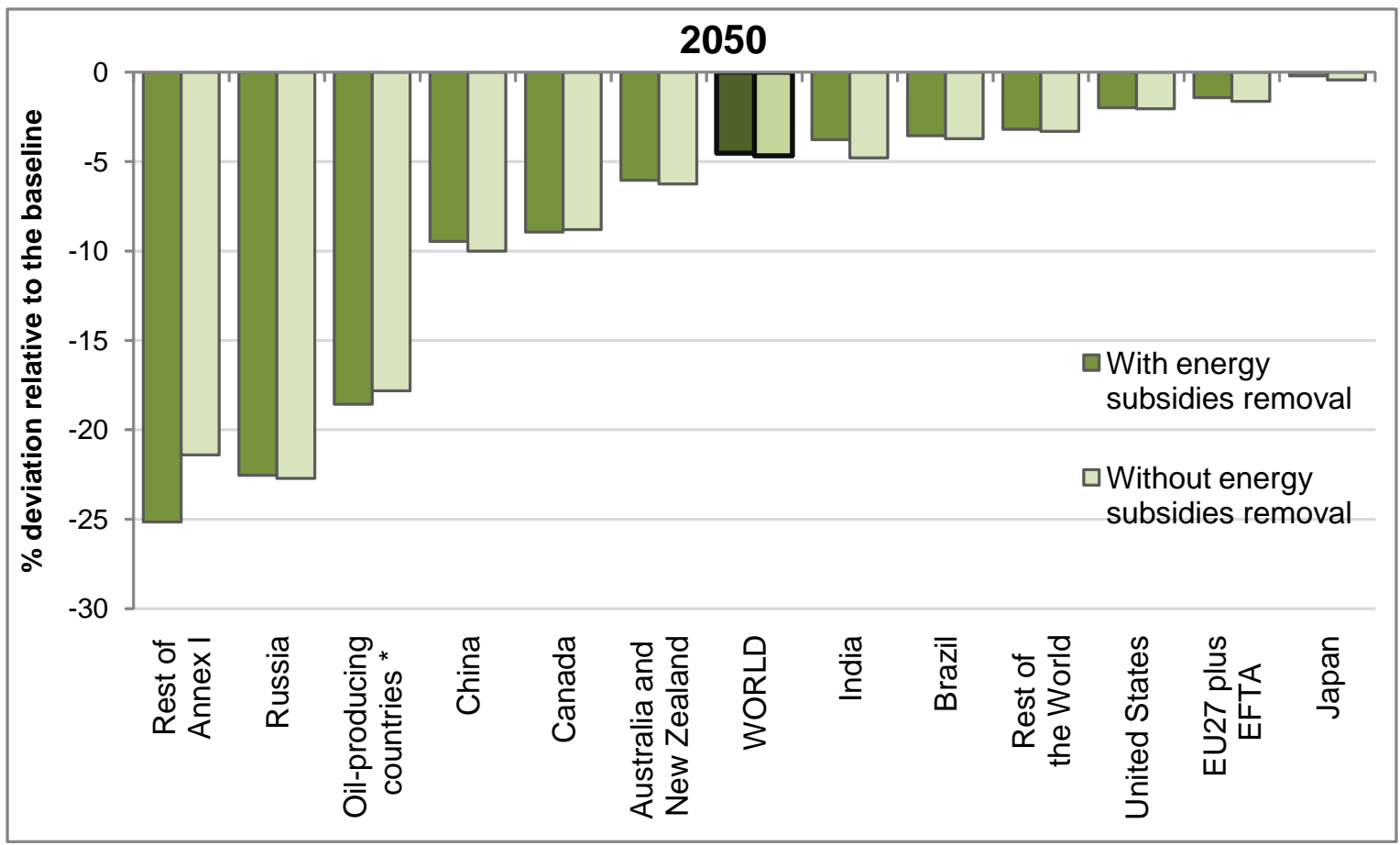


... but, in case of multilateral removals, not everybody will gain



Removing energy subsidies reduces mitigation costs but not for everybody

Figure. Impact of multilateral removal of energy subsidies on global income (550 ppm GHG concentration stabilisation scenario) ^{1, 2}



1. The pathway of emissions corresponds to a stabilisation concentration below 550ppm (all gases) identical to the "550 ppm-base" case described in Burniaux et al.(2008), Table 3.1.

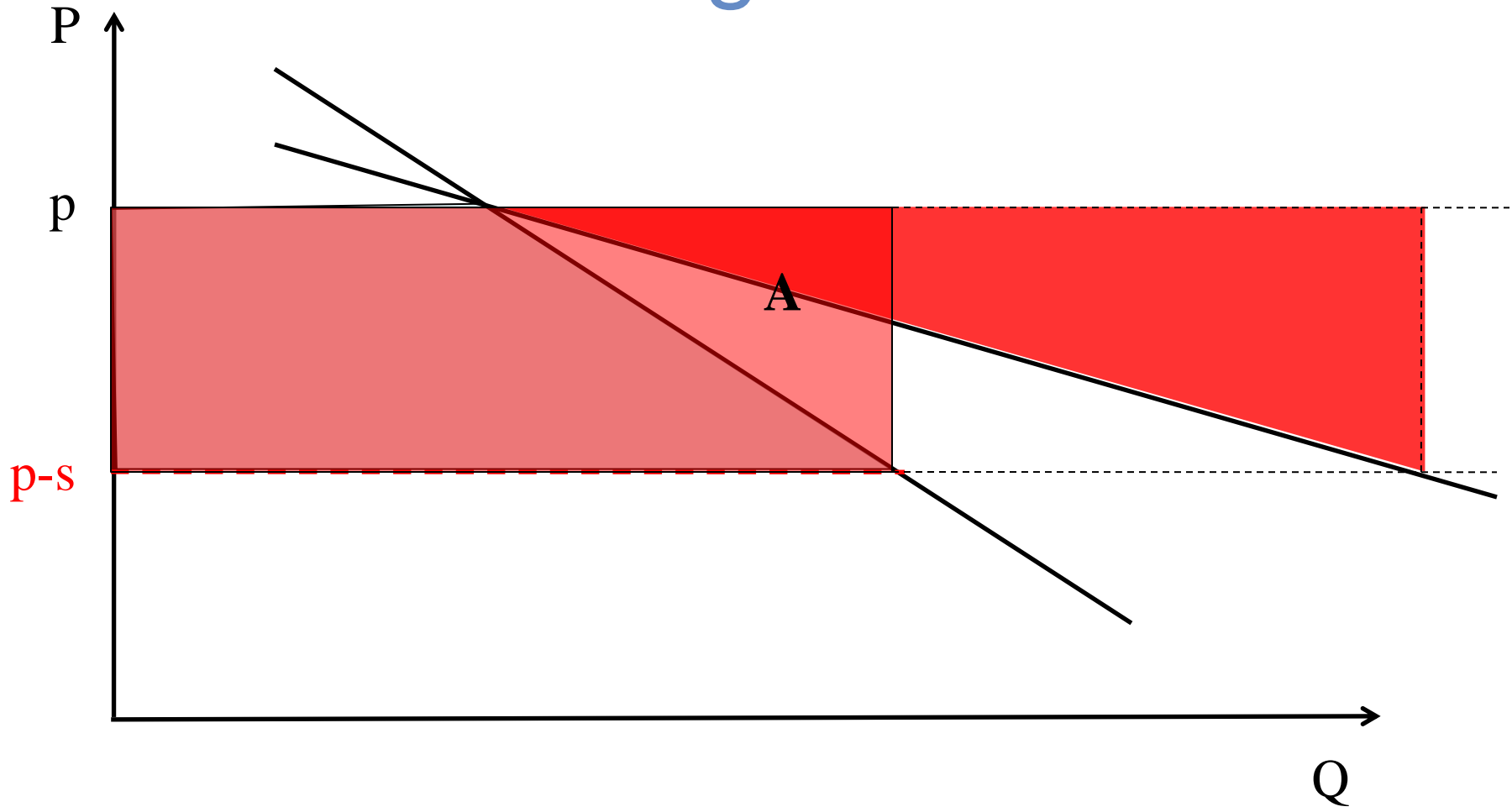
Main conclusions

- Removing energy subsidies will reduce GHG emissions
...
... although binding caps in OECD countries are needed to get the full environmental benefit.
- Removing energy subsidies as part of a global mitigation effort will reduce the economic costs
... although not by a large extent,
... and not for every country/region.
- One obvious extension: quantify the impact of removing agricultural subsidies.

Thank You !

For further information : see www.oecd.org/env/cc

Subsidies generate deadweight losses



Mitigation action on top of existing subsidies generates second-best gains

