



Economic Instruments to Achieve Sustainable Development

Simon Upton
OECD, Director for the Environment

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**Internalise
externalities?**

**Align policies
?**

**Boost
investment
?**

**Track
progress
?**

HOW TO

**Induce
competition
?**

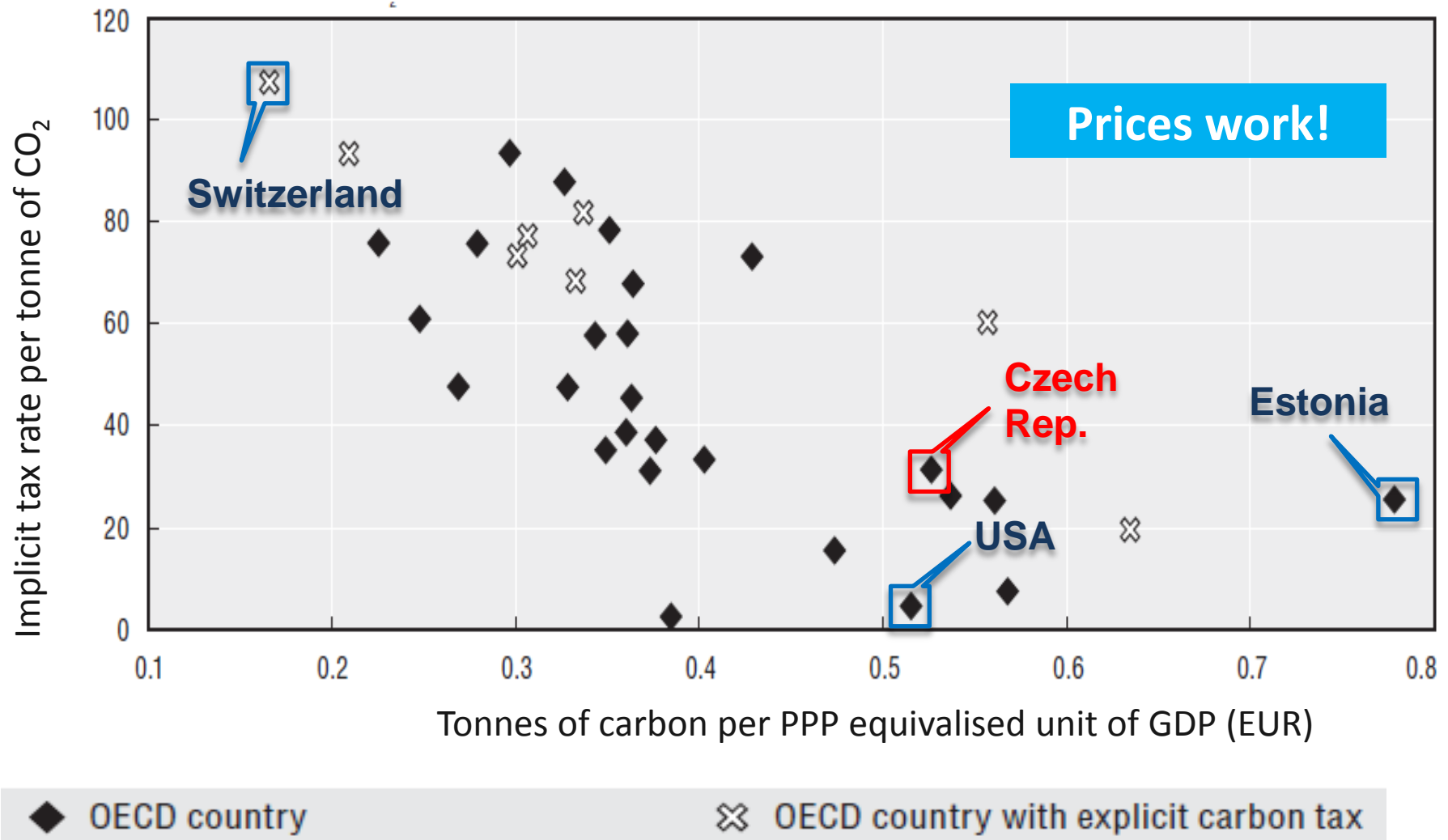
**Engage
people
?**

**Make use of new
technologies
?**

**Tackle social
aspects
?**

Put a price on carbon

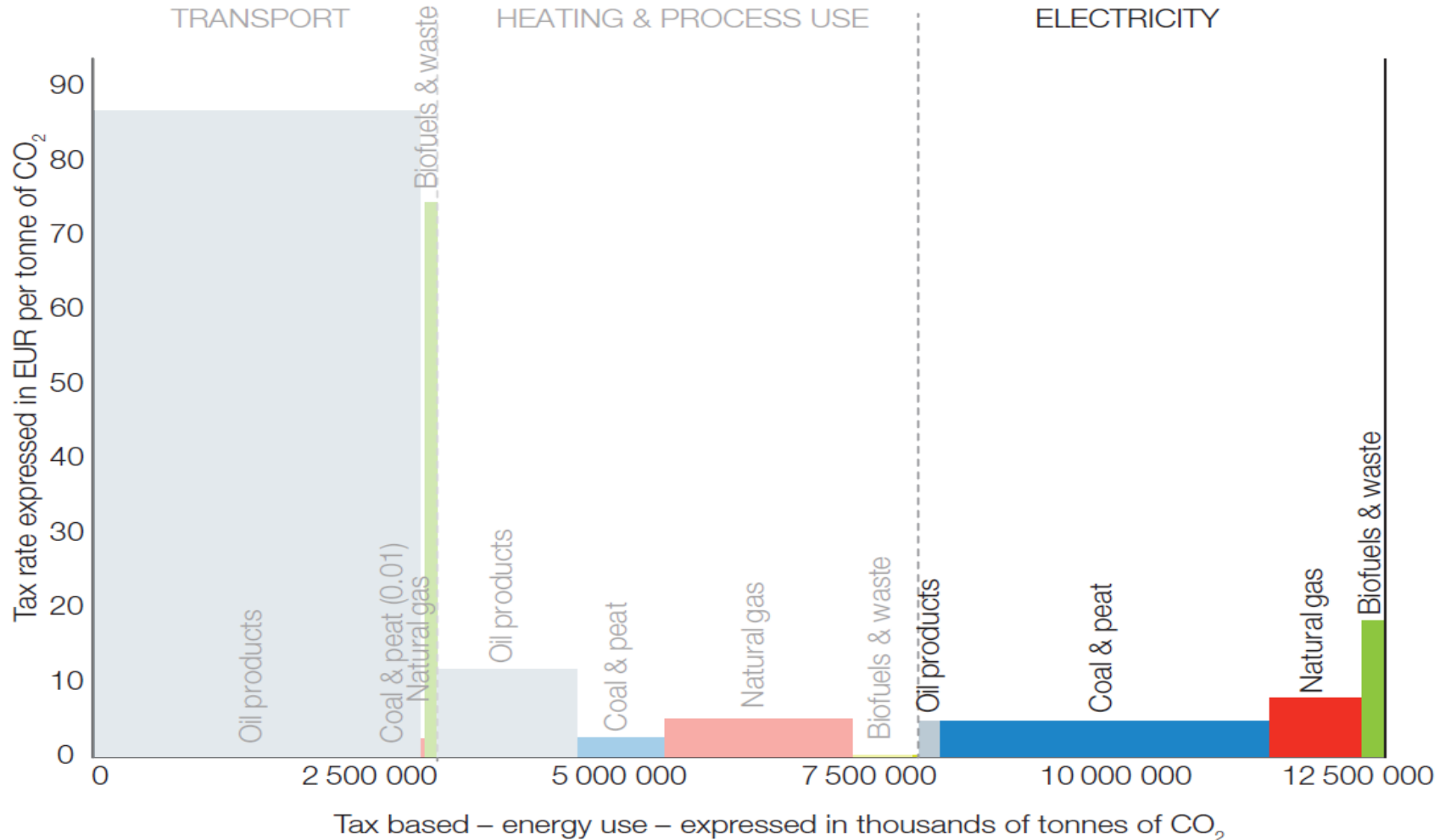
Higher implicit tax rates on carbon are associated with a lower-carbon economy



Source: OECD (2013), *Taxing Energy Use: A Graphical Analysis*.

Tax on a carbon basis

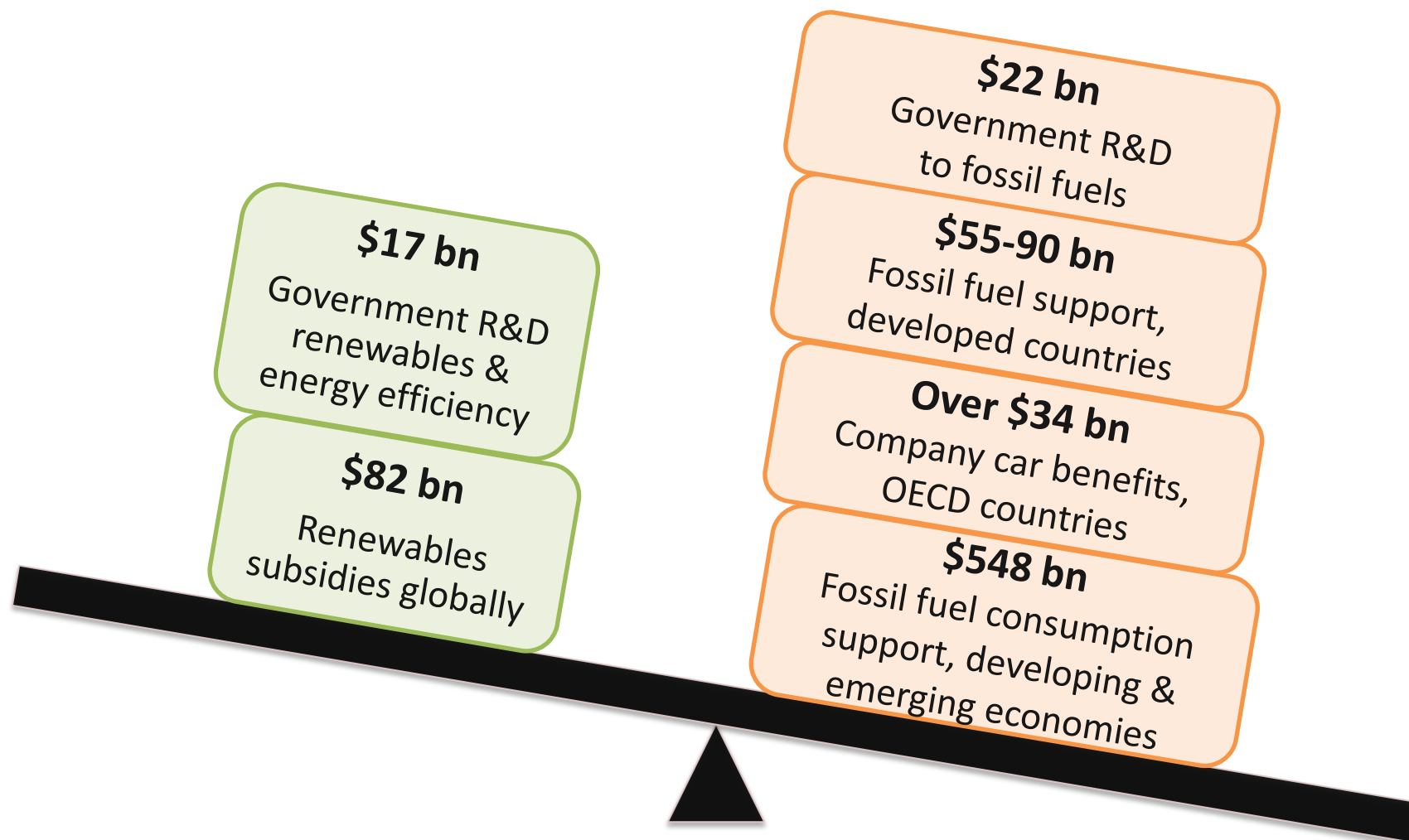
Taxation of energy in the OECD area based on carbon content



Source: OECD (2013), *Taxing Energy Use: A Graphical Analysis*.

Reform fossil fuel subsidies

Send the right signal!

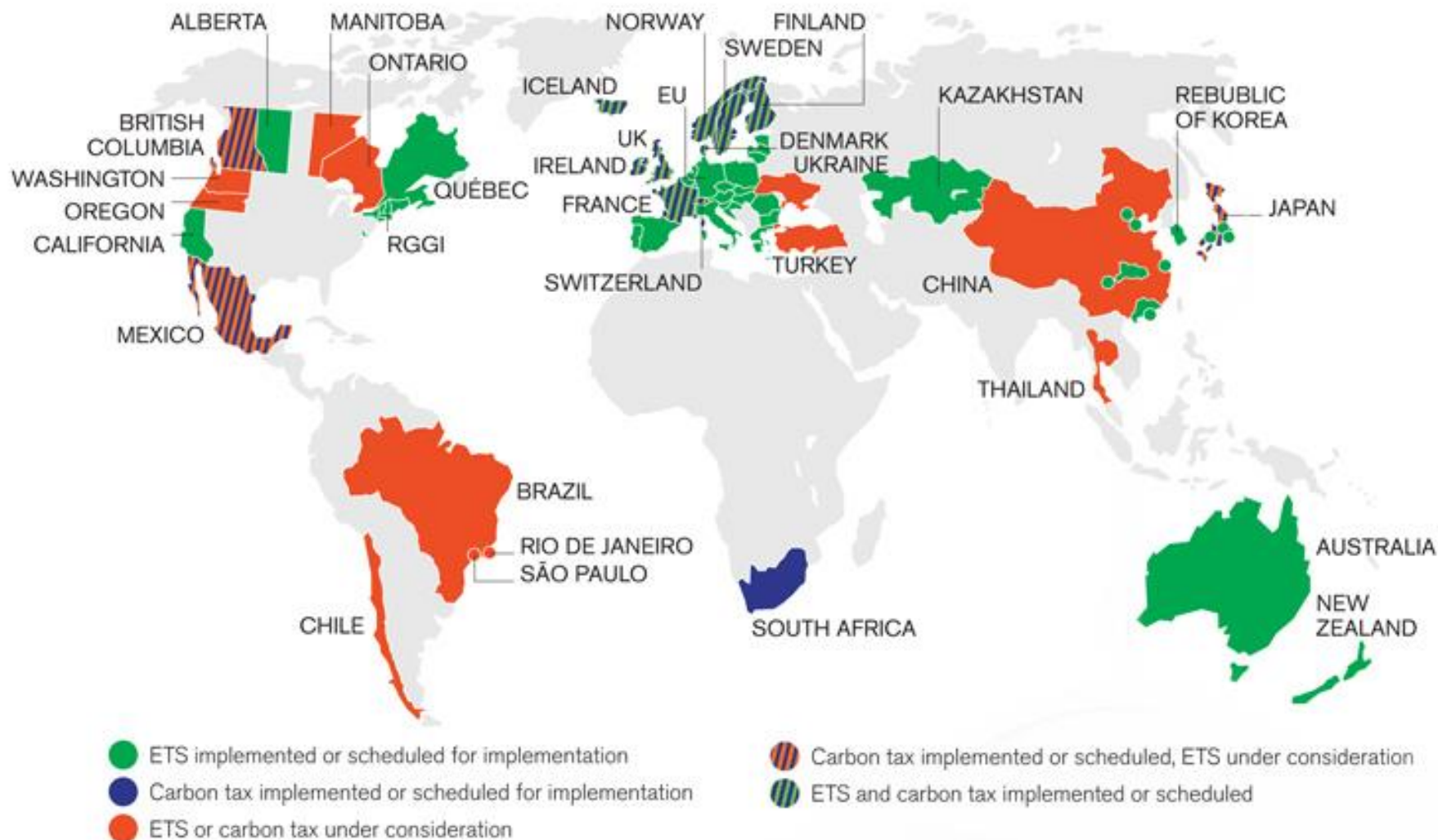


Sources: OECD (2013), Inventory of Estimated Budgetary Support and Tax Expenditures for Fossil Fuels; IEA (2014), World Energy Outlook; IEA (2013), Tracking Clean Energy Progress Report; OECD (2013), Effective Carbon Prices.

Comply with ETS

Existing, emerging and potential ETS's

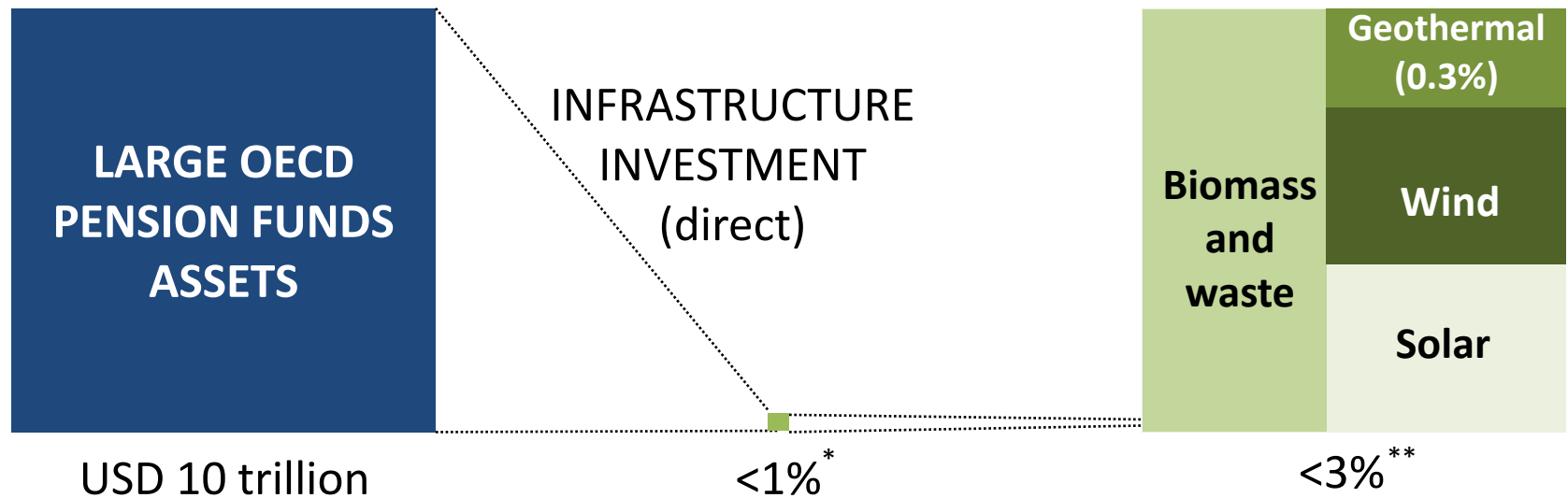
39 national and 23 sub-national





Unlock investment barriers

**1% of large OECD pension fund assets
invested directly in infrastructure**



* based on large OECD pension funds, covering \$10+tn

* * BNEF estimates



Boost productivity growth

OECD research: Stricter environmental policies do not harm productivity growth

... and when looking at causal links, then **market-based** environmental policy instruments **support more** productivity growth

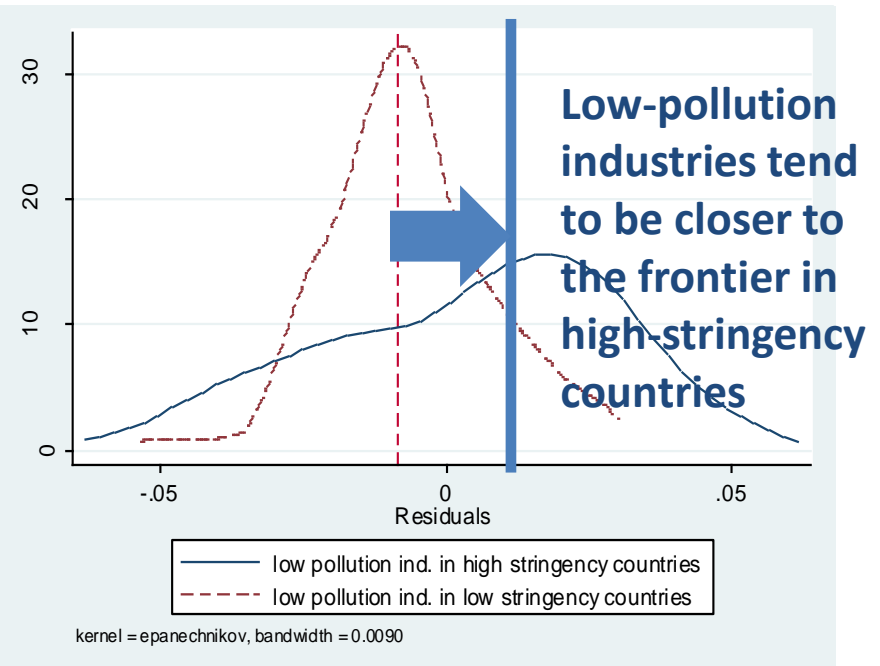
Multifactor productivity growth

No evident link

But:

In countries with high policy stringency, low-polluting firms outperform high-polluting ones (and reverse)

EPS indicator of environmental stringency



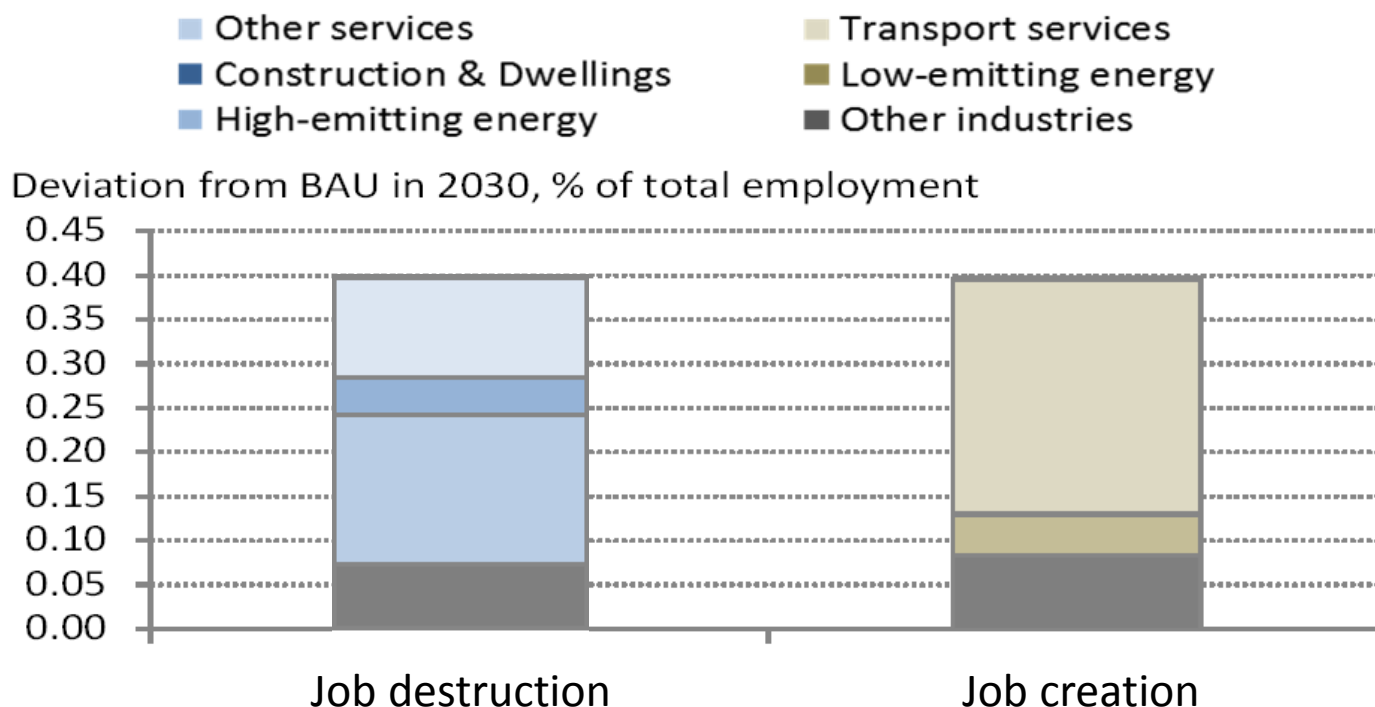
* Pooled across 1990-2012 for 25 OECD countries

Source: OECD (2014) Working Paper by Albrizio, Botta, Kozluk, Zipperer: "Do Environmental Policies Matter for Productivity Growth?"





OECD simulation results: Sectoral composition of job creation and destruction

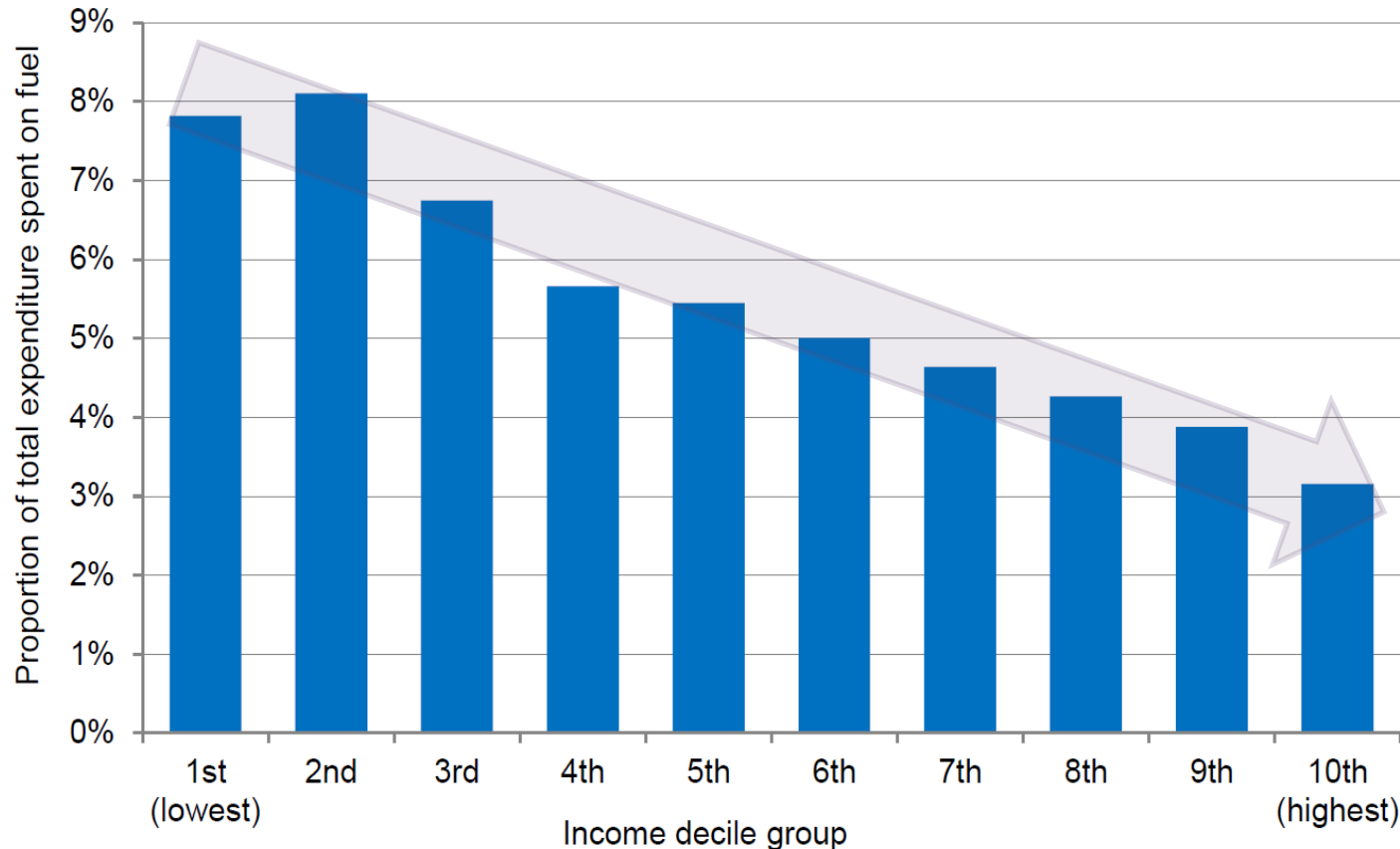


Job churning – destruction, creation and reallocation

Source: ENV Linkages Model; Chateau, J., A. Saint-Martin and T. Manfredi (2011), "Employment Impacts of Climate Change Mitigation Policies in OECD: A General-Equilibrium Perspective", *OECD Environment Working Papers*, No. 32, OECD Publishing.

High-income households spend more than twice as much as low-income ones

Proportion of total expenditure spent on fuel in the UK, 2012
(by gross income decile group)

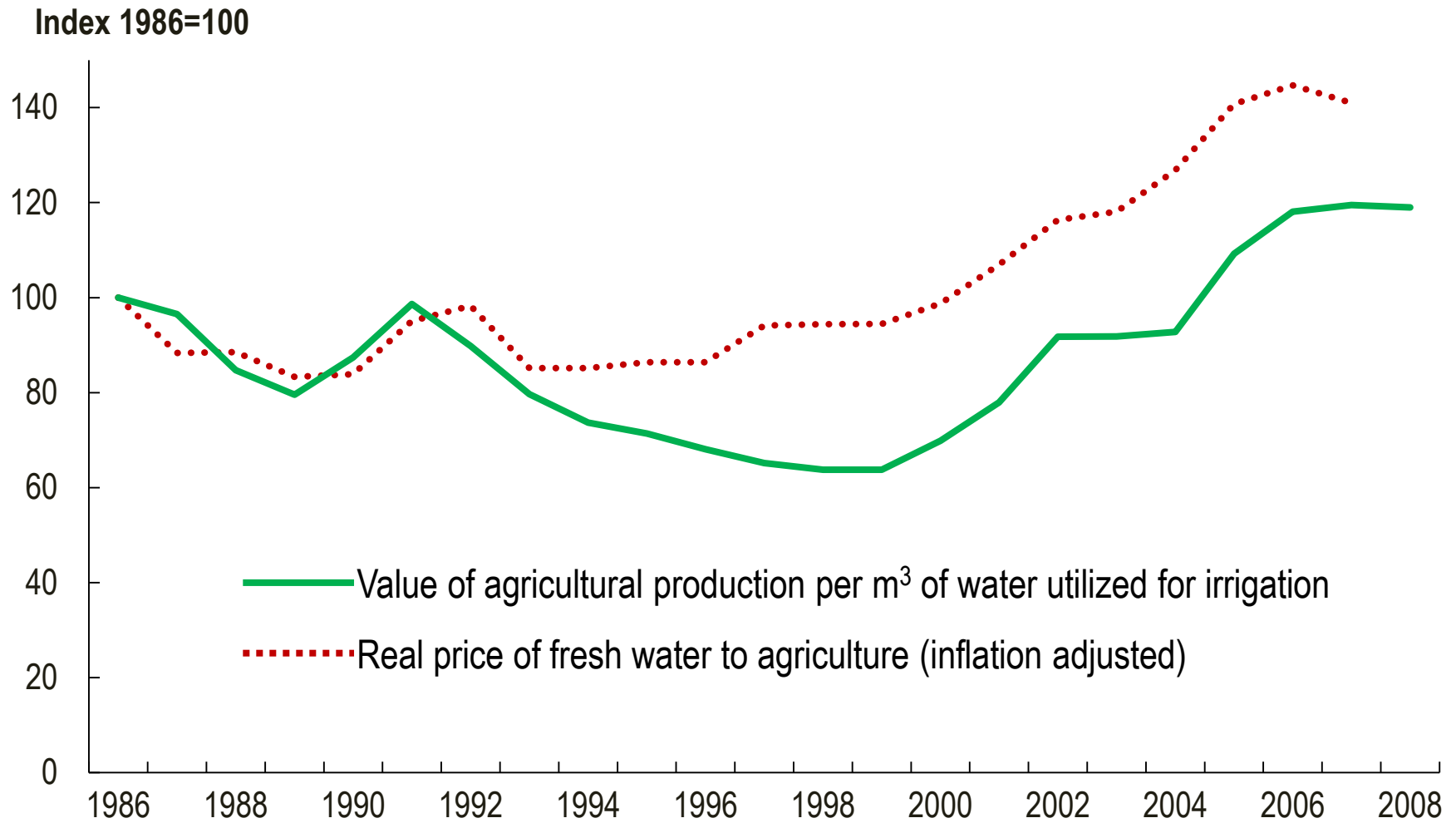


Source: Living Costs and Food Survey 2014, UK ONS



Create incentives ...

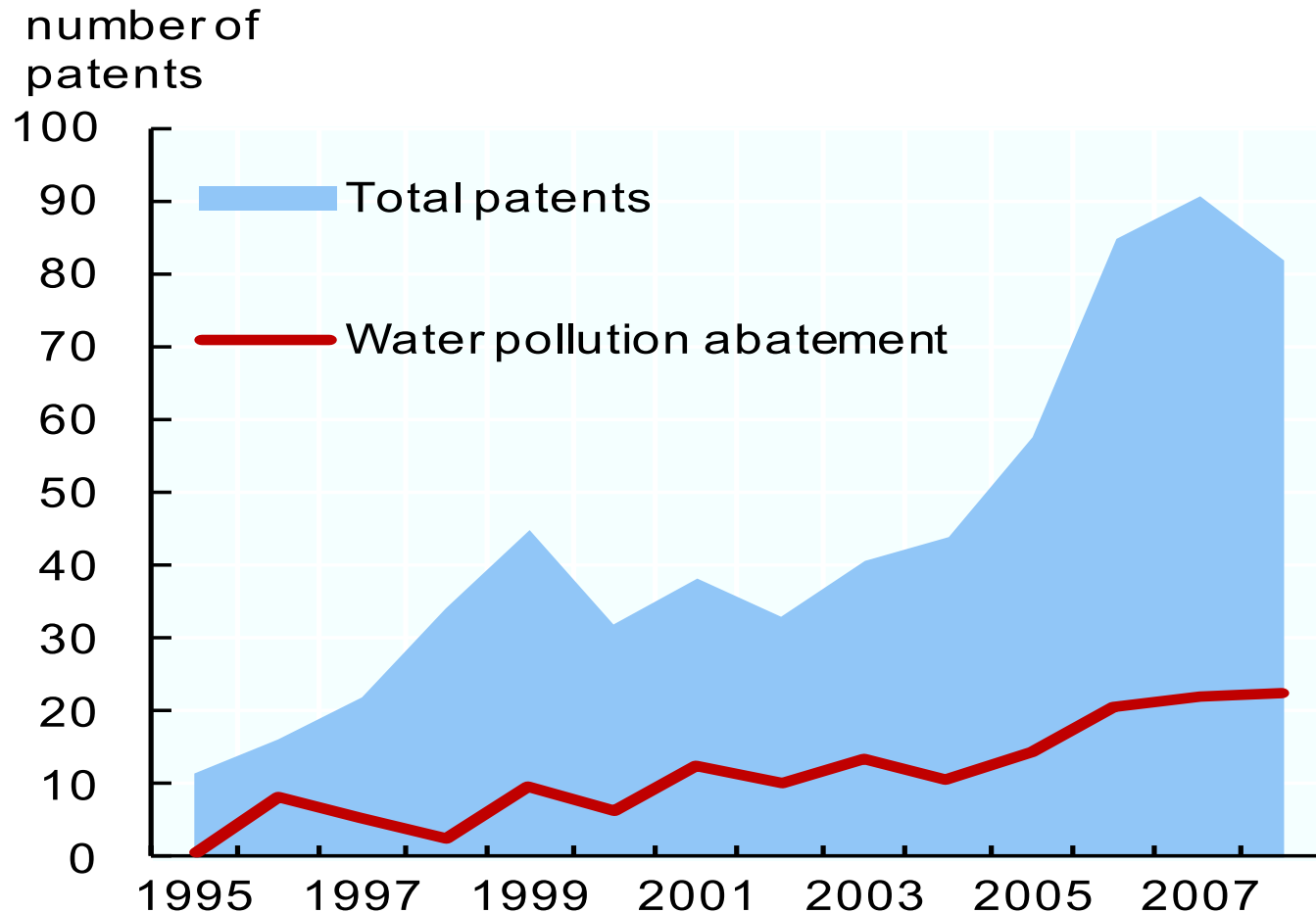
Israeli economic efficiency of agricultural water use, 1986-2008



Source: OECD (2010), OECD Review of Agricultural Policies: Israel, 2010 .

... to innovate

Israeli patents in selected env. & climate-related technologies

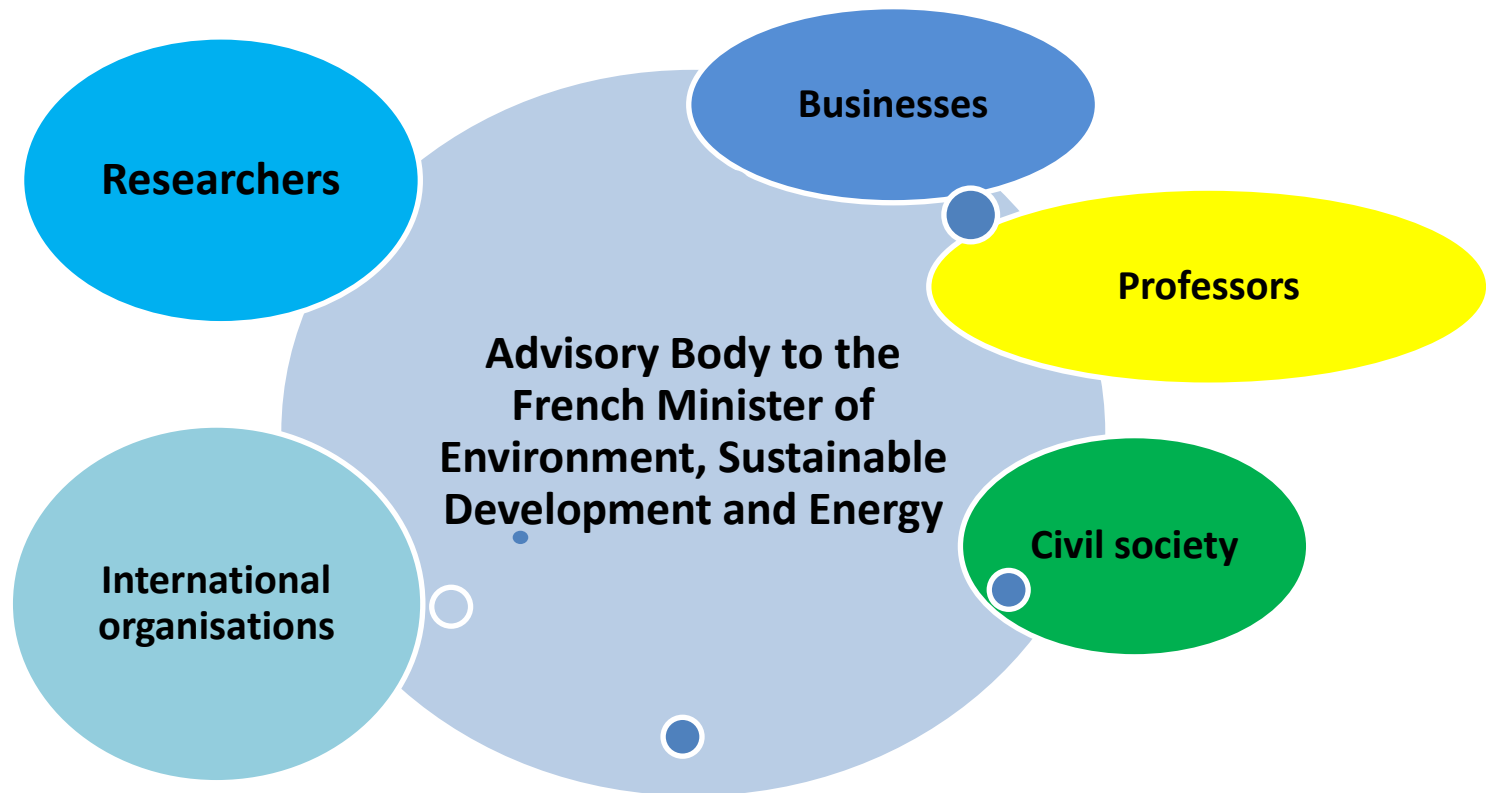


Patent counts are based on the priority date, the inventor's country of residence and use fractional counts on PCT filings at international phase (EPO designations).

Source: OECD (2011), OECD Patent Statistics Database; OECD, Environment Directorate



Work together



Source: Conseil Economique pour le Développement Durable (CEDD):
<http://www.developpement-durable.gouv.fr/Rapports,13175.html>.



Measure and communicate

Applications of green growth indicators



OECD

Latin America and Caribbean

Asia

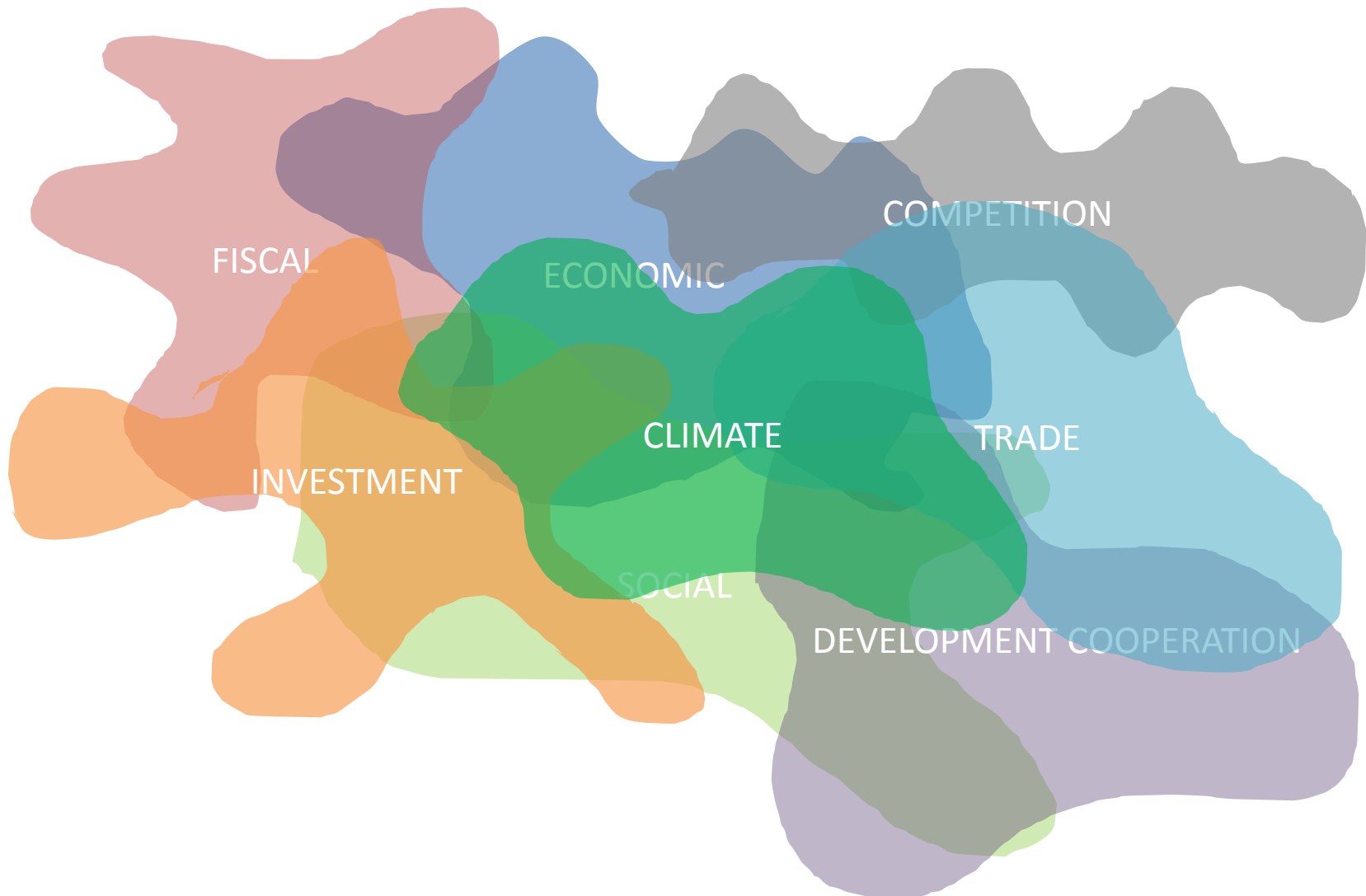
Eastern Europe, Caucasus and Central Asia





Align policies

**Climate policy comes on top of existing
policy frameworks and goals**





Thank you for your attention!



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