

OECD-RIETI Special Session
Green Growth in Asia
アジアにおけるグリーン成長

Handout



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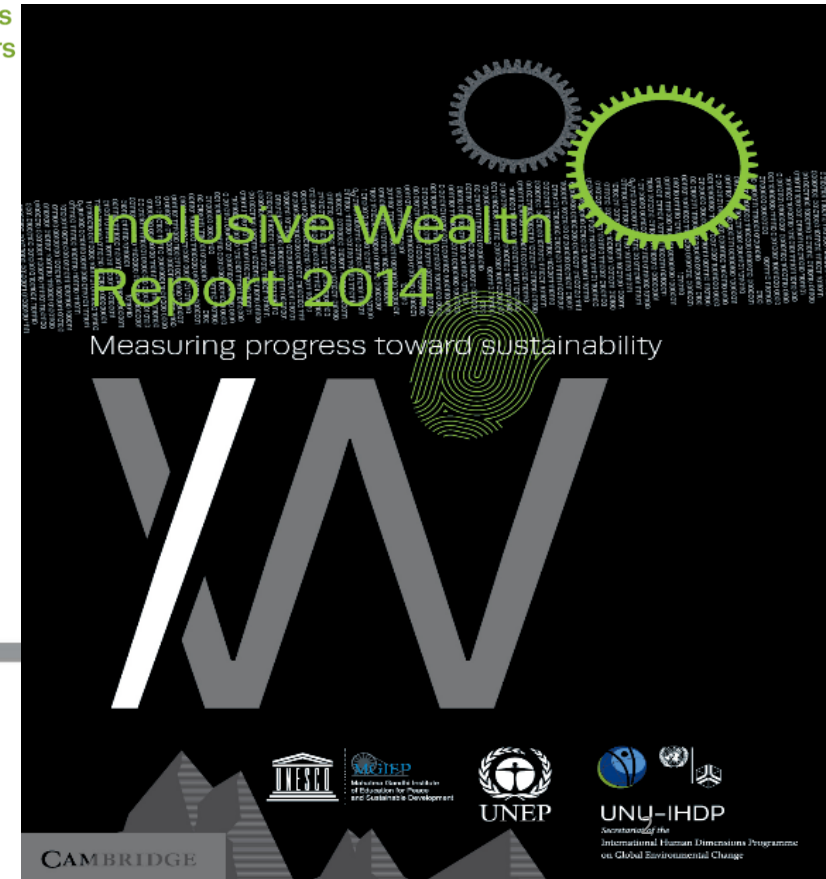
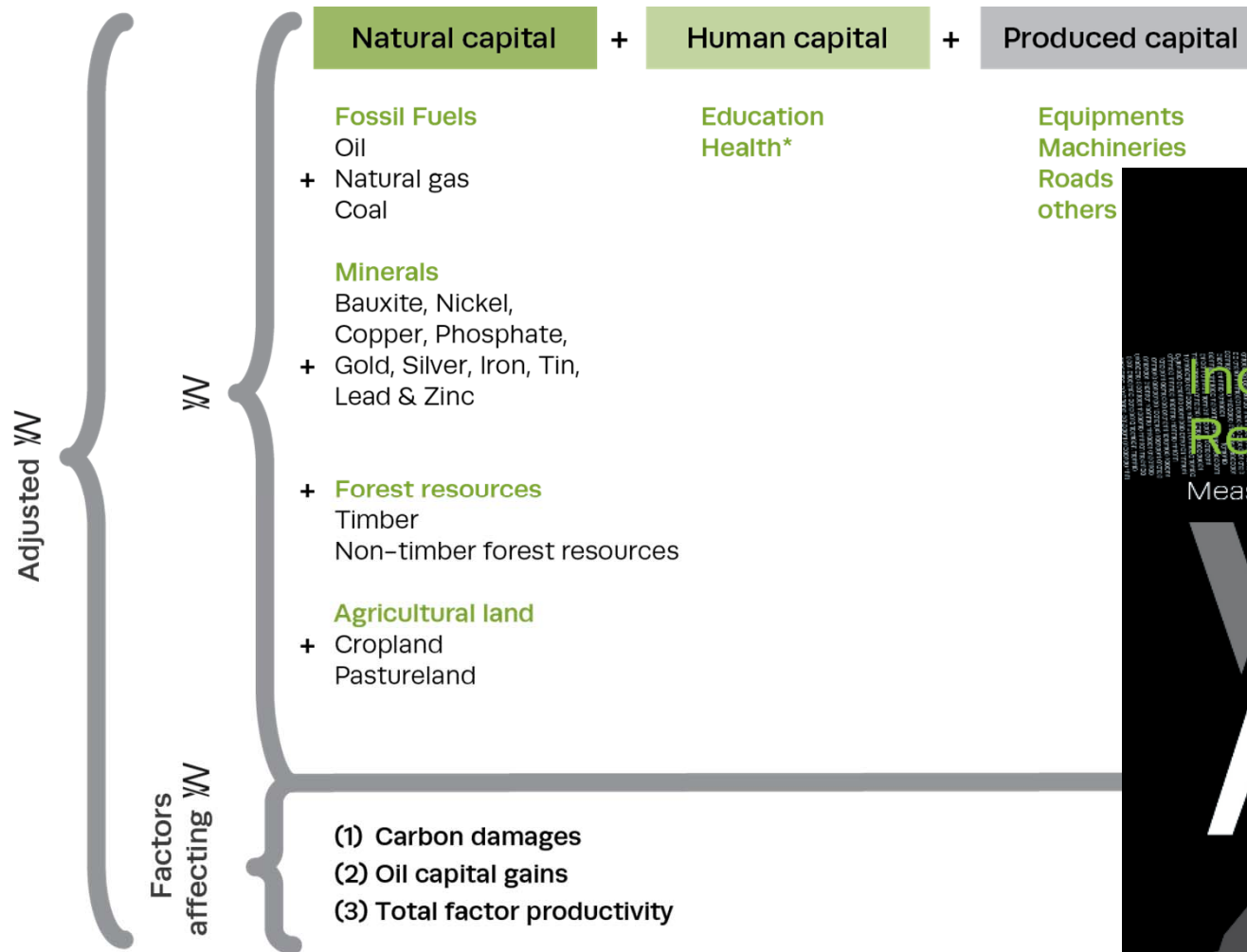


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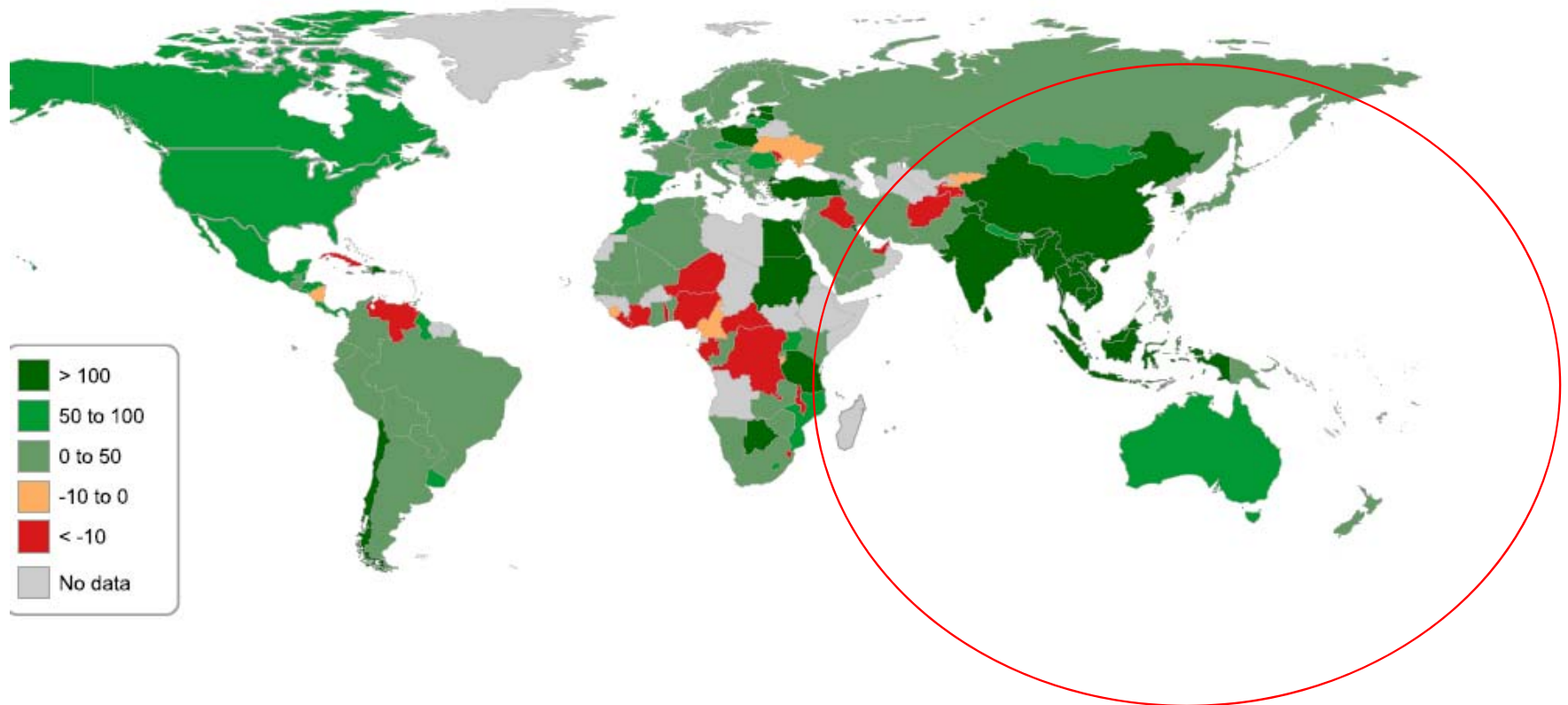
Green growth in Asia

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Inclusive Wealth Report (IWR) 2014

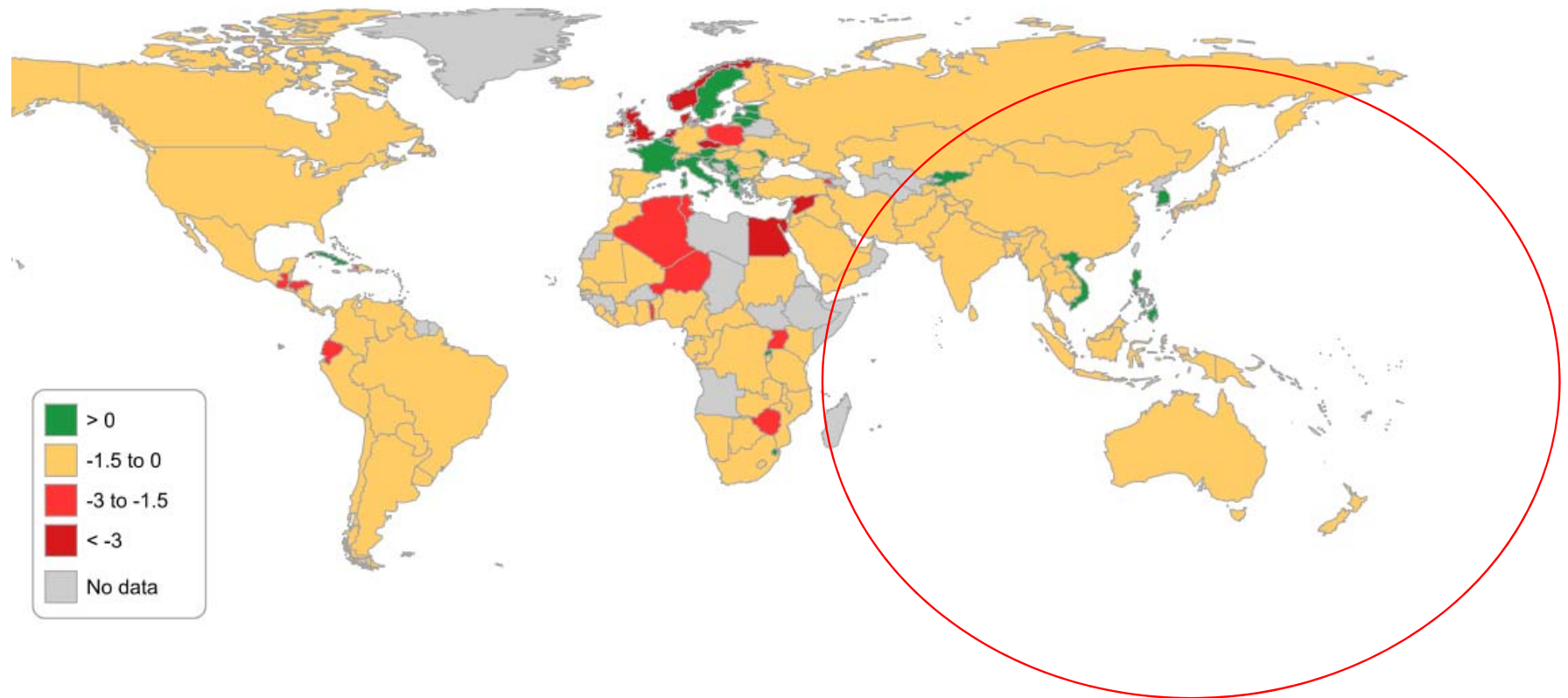


Changes in Produced Capital



Key message: Produced capital per capita increased in 116 of the 140 countries.

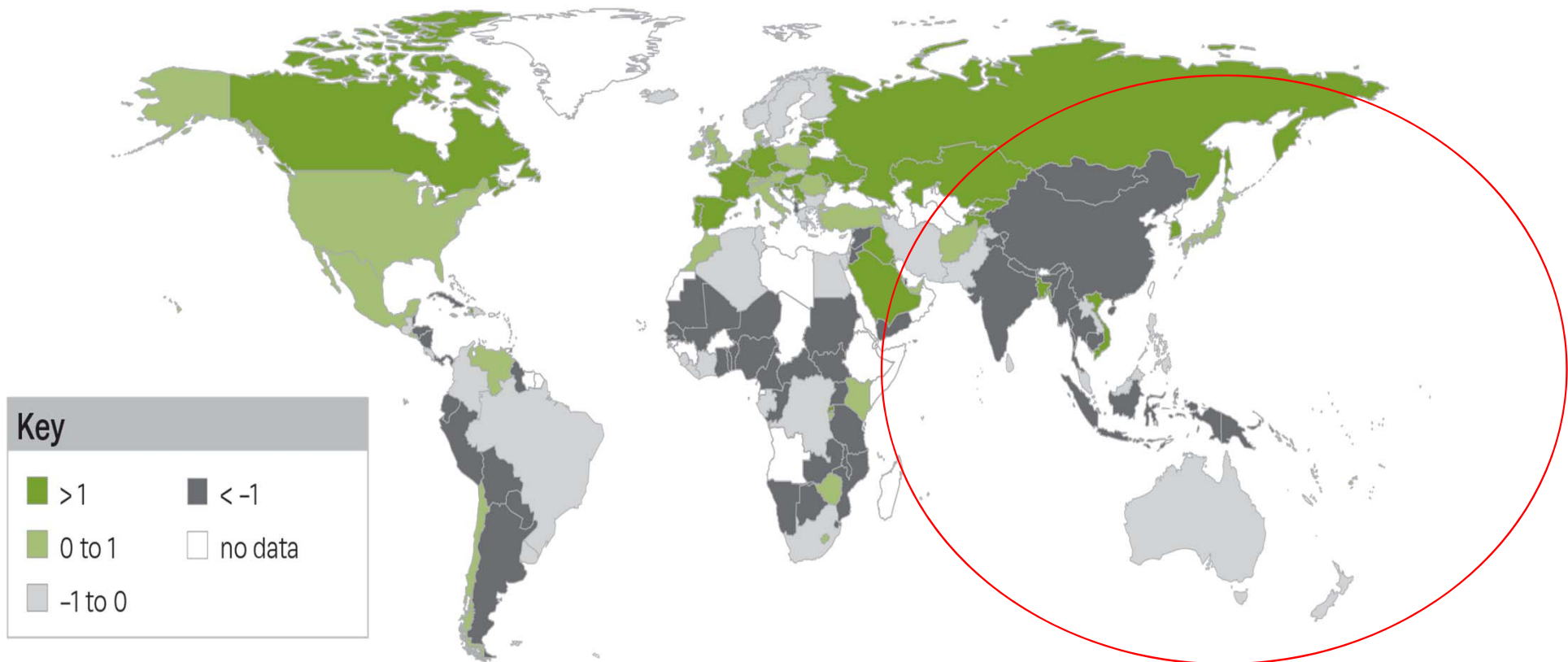
Changes in Natural Capital



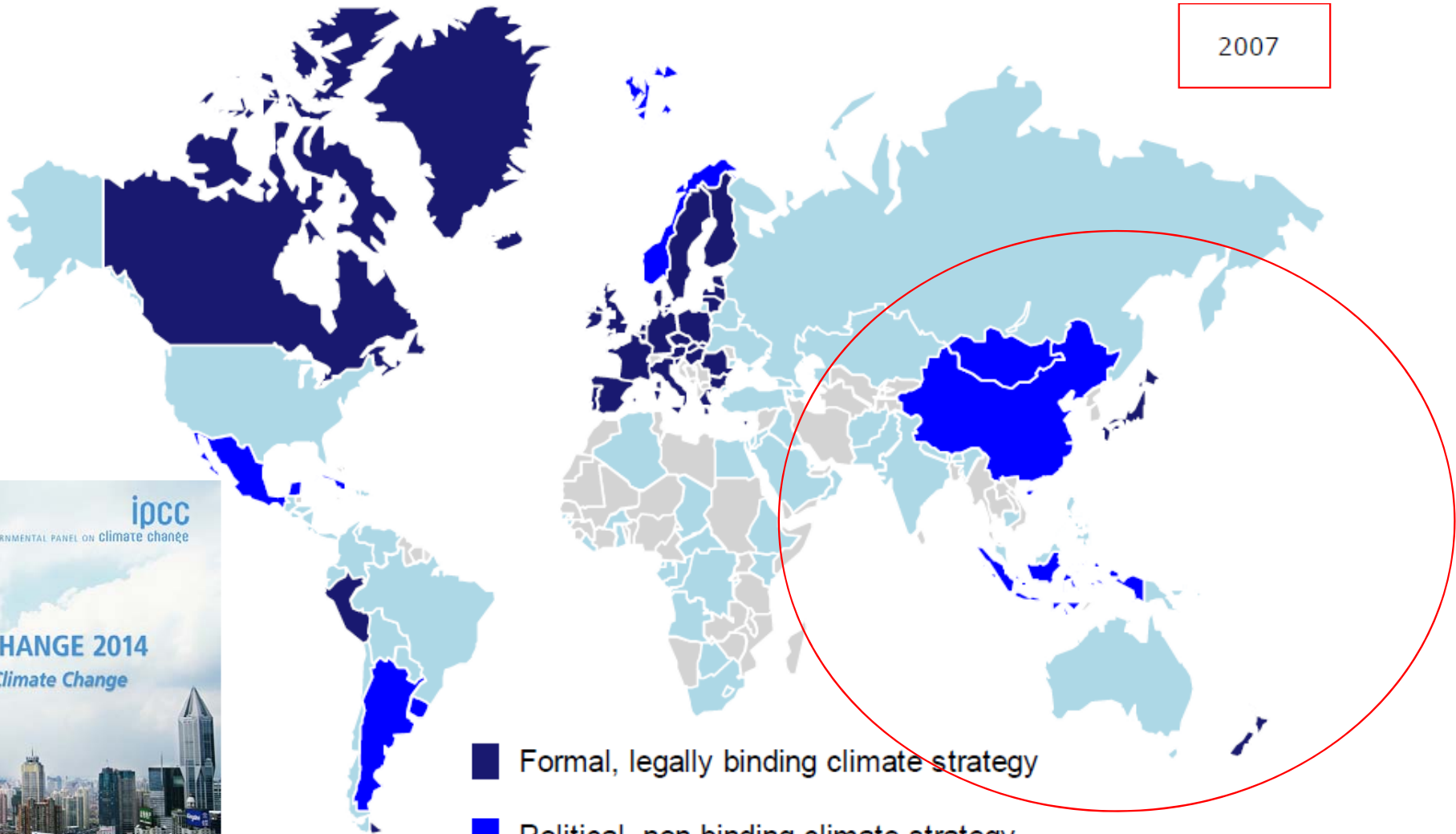
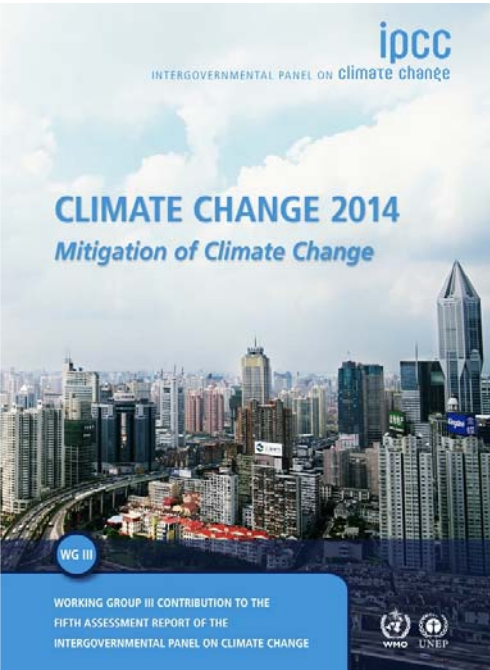
Key message: Natural capital per capita increased in only 13 of the 140 countries.

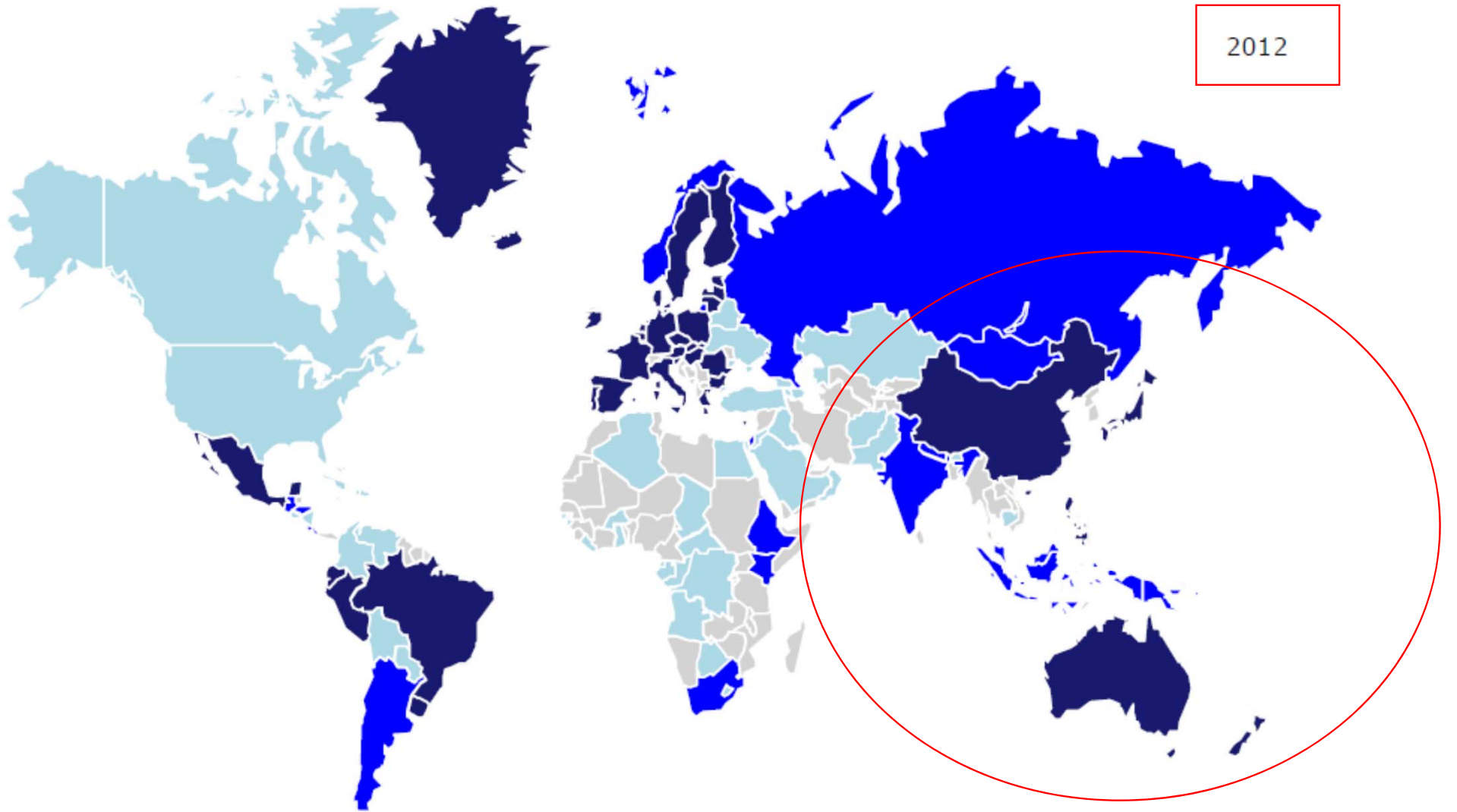
Growth in Productivity Adjusted **Inclusive Wealth**

*When TFP, climate change and increases in oil prices are factored in
Only 58 of 140 countries experienced a positive growth in Wealth*

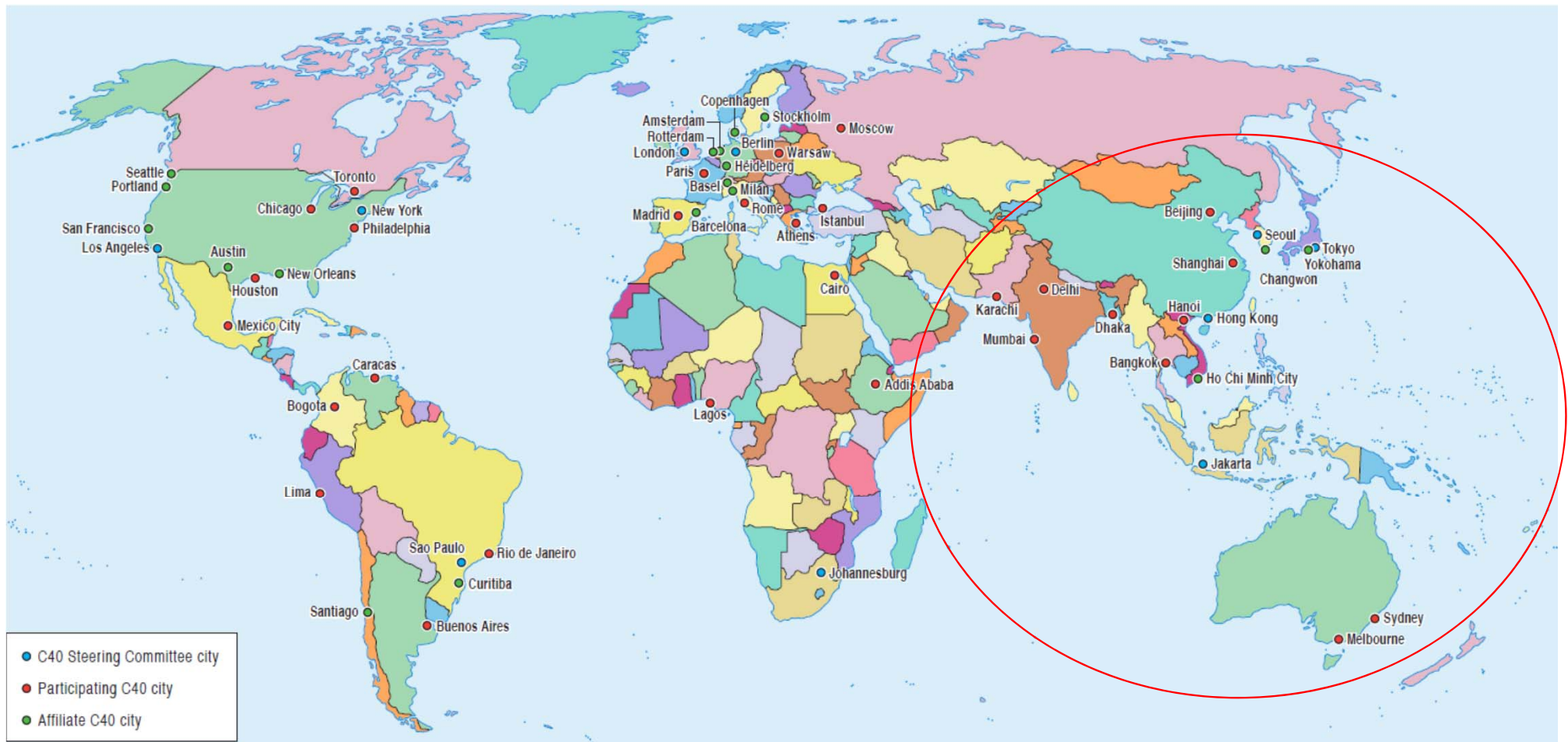


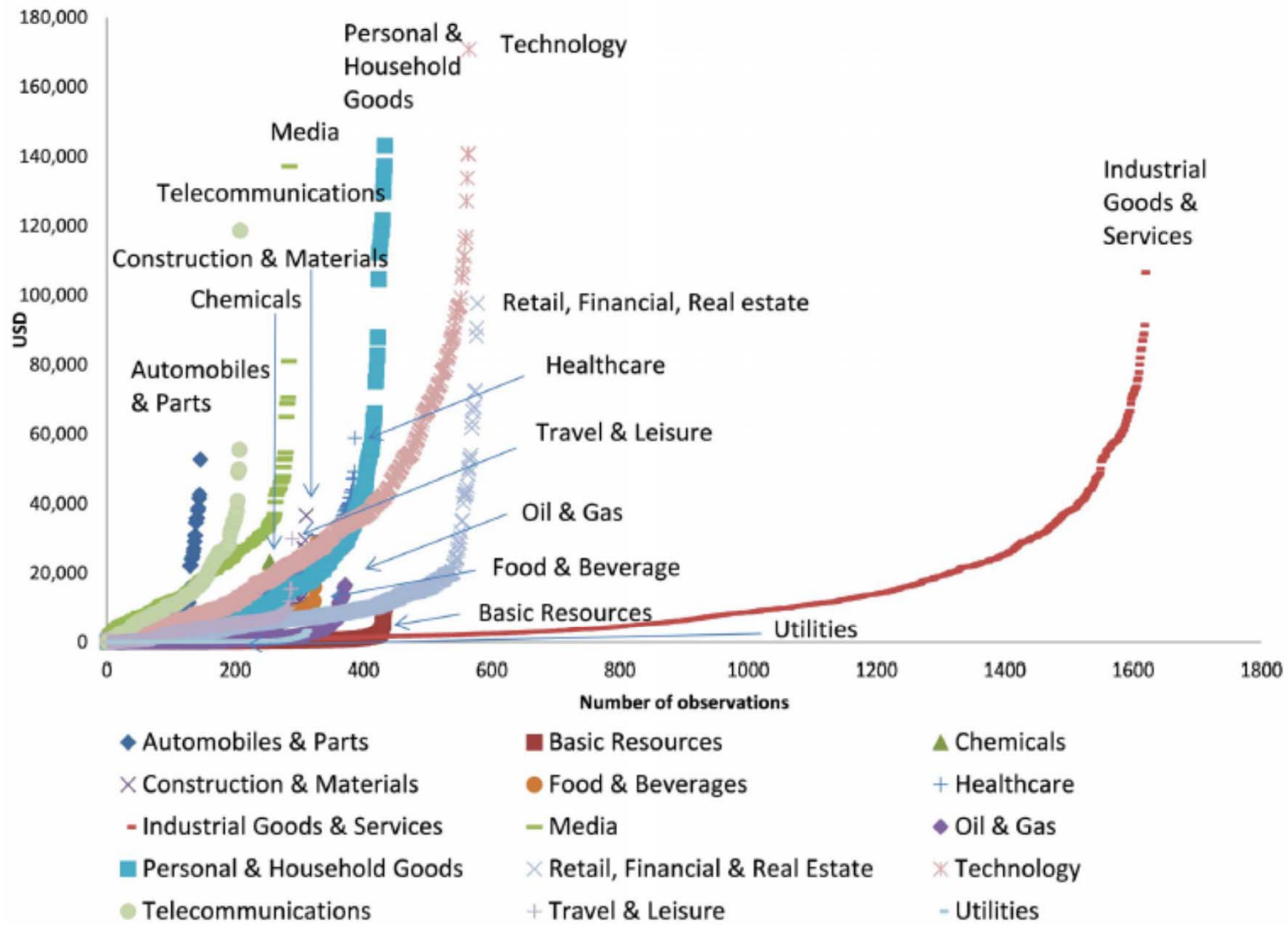
2007





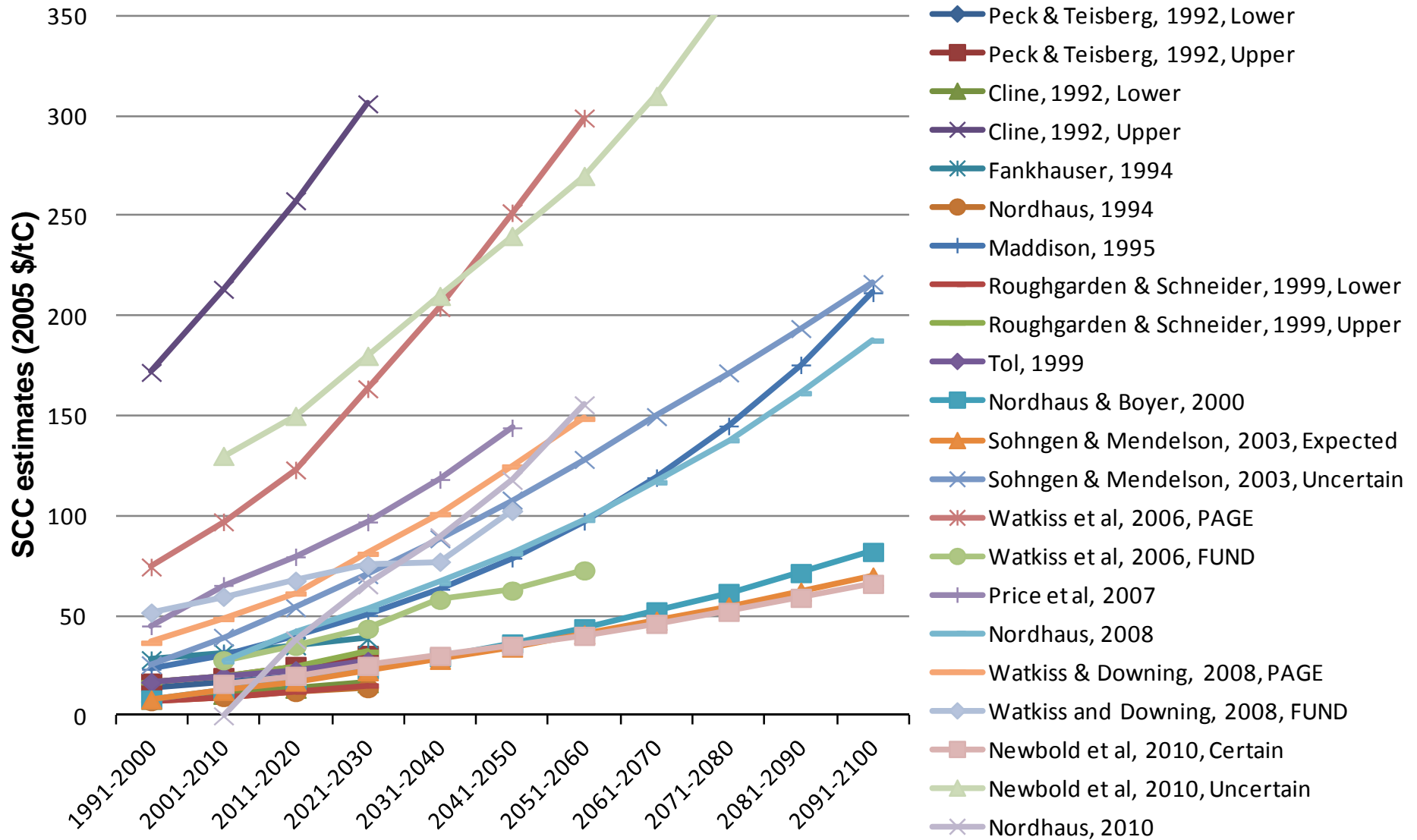
The C40 Cities Climate Leadership Group (C40)





Source: Our study, 2013.

All social values are different



Sector-specific policies

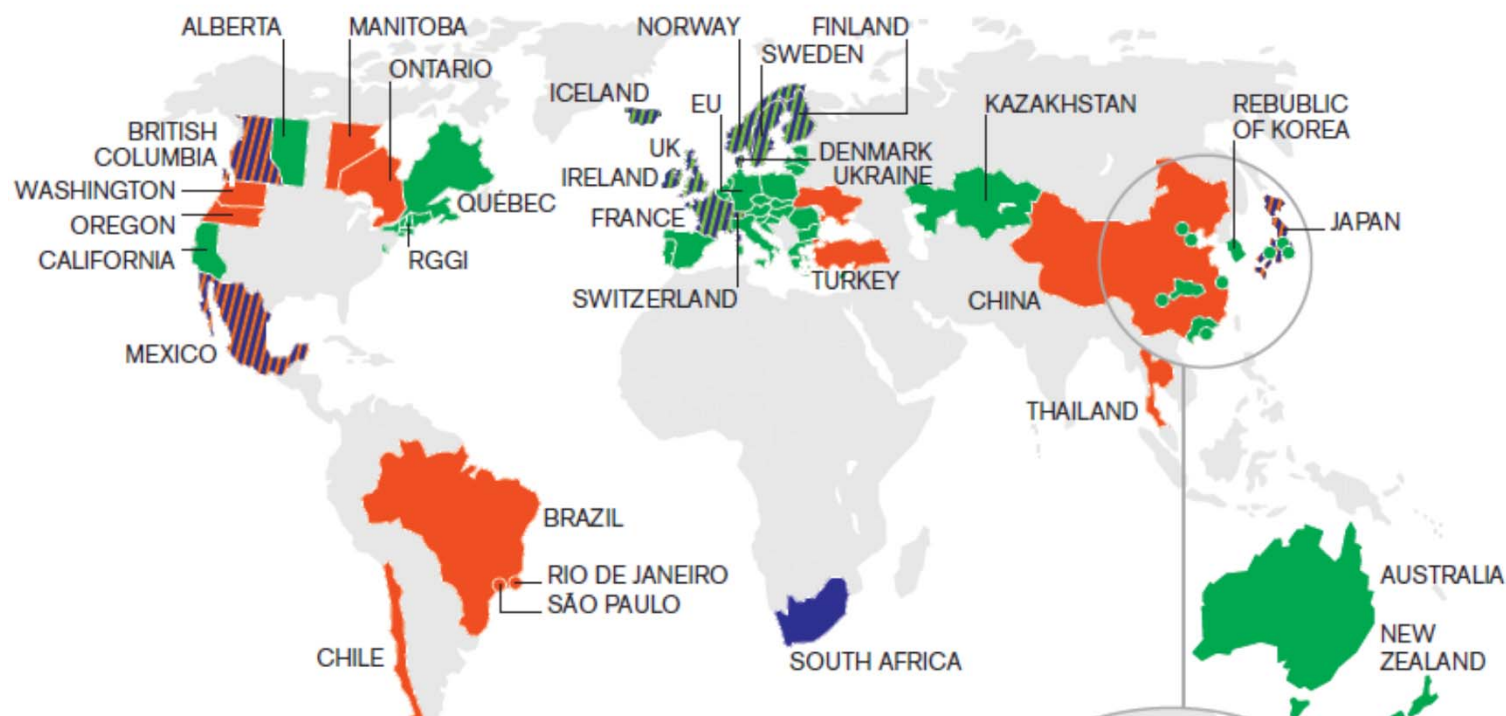
- more widely used than economy-wide policy instruments
- e.g., packages of complementary policies in transport
- Fuel taxes: 10% higher fuel prices correlate with 7% reduction in fuel use and emissions in the long run.

Regulatory approaches and information measures

- often environmentally effective.

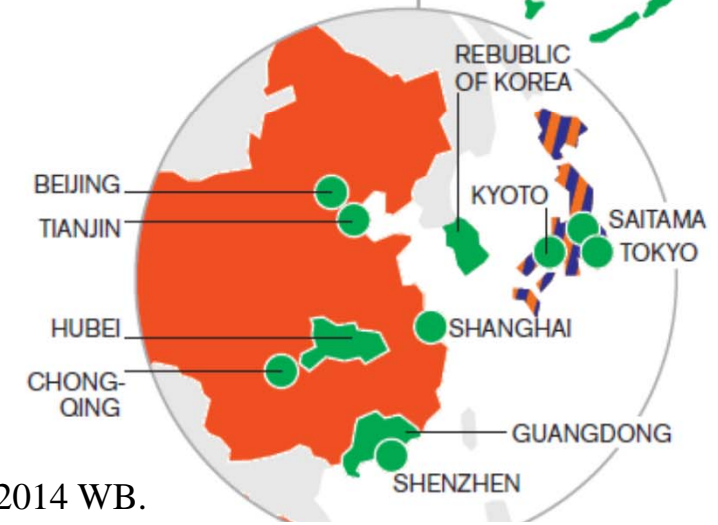
Reduction of subsidies to fossil energy

- can result in significant emission reductions at negative social cost
- many countries have reformed their tax and budget systems to reduce fuel subsidies

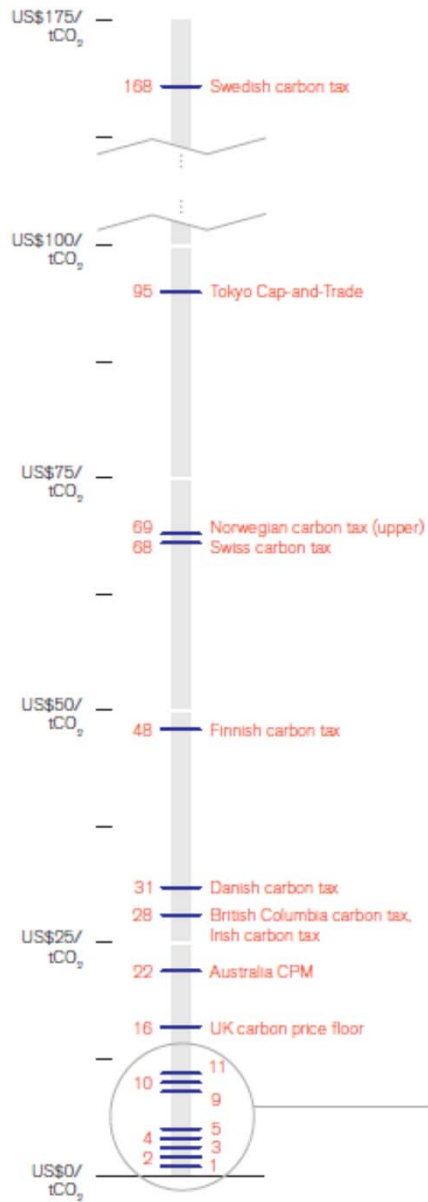


Cap and trade systems

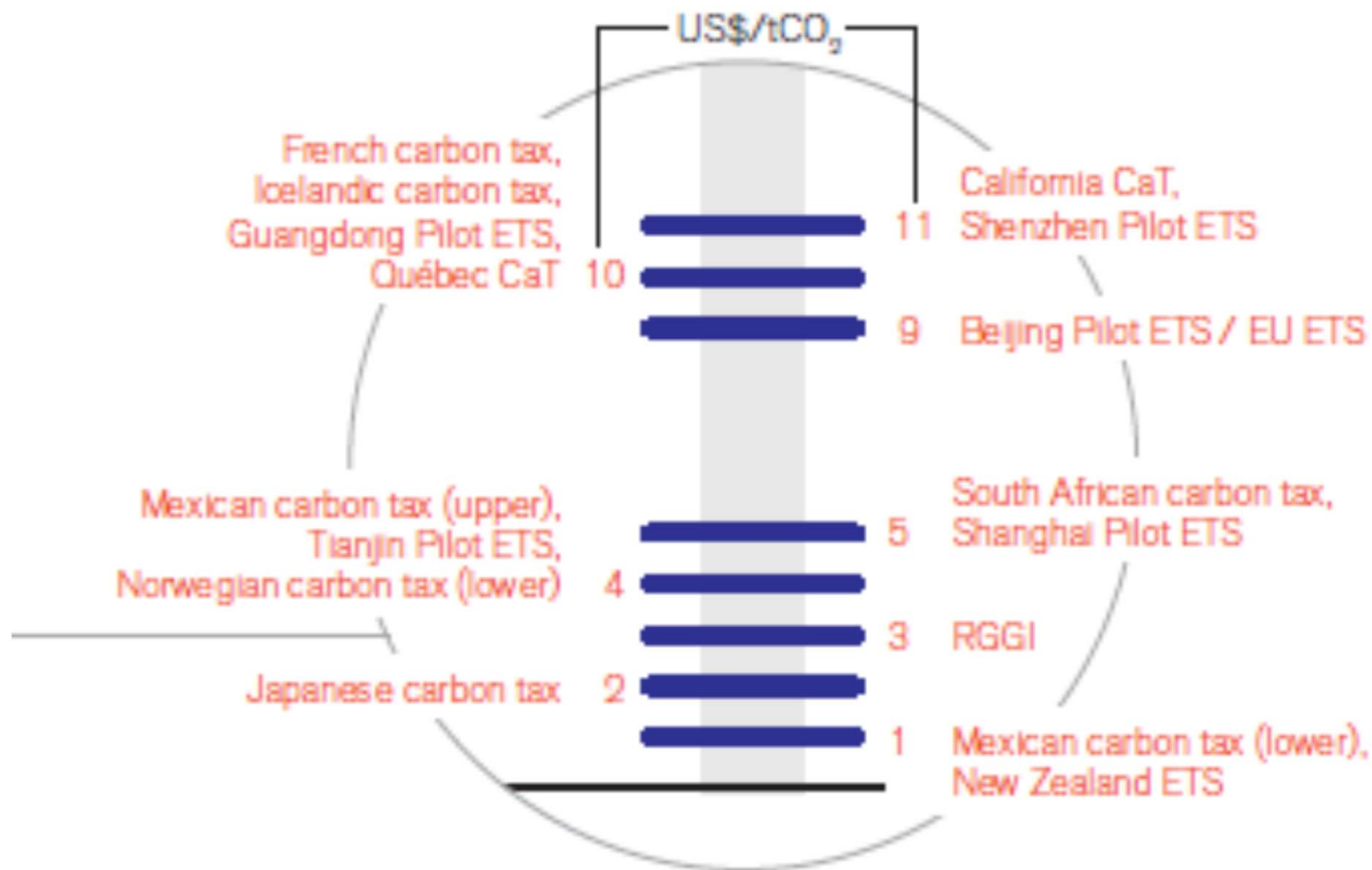
- ETS implemented or scheduled for implementation
- Carbon tax implemented or scheduled for implementation
- ETS or carbon tax under consideration
- Carbon tax implemented or scheduled, ETS under consideration
- ETS and carbon tax implemented or scheduled



Source: State and Price of Carbon Trading 2014 WB.



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Cap and trade systems

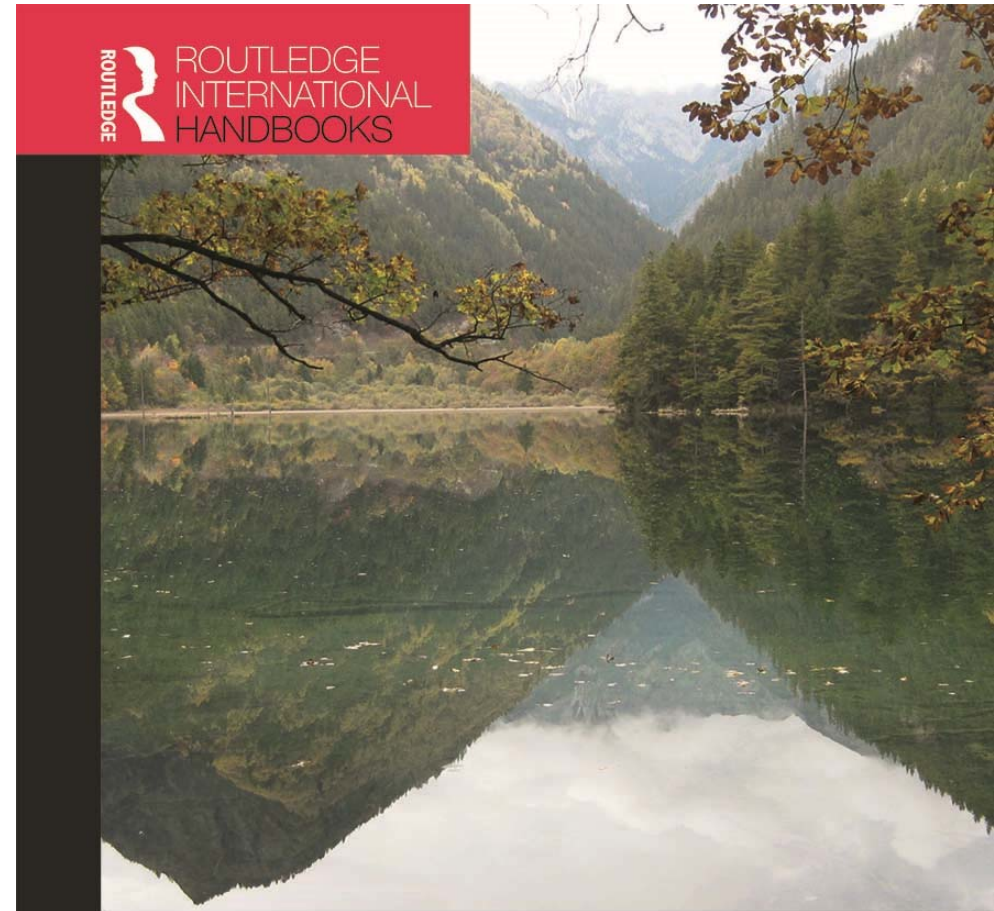
- Their environmental effect has so far been limited because caps have either been loose or have not yet been binding.
- There appears to have been a trade-off between the political feasibility and environmental effectiveness of these programs, as well as between political feasibility and distributional equity in the allocation of permits.
- Greater environmental effectiveness through a tighter cap may be combined with a price ceiling that makes for political feasibility.
- Encouraged technological change

- Importance of Asia

Energy intensities decrease.

More policies over time.

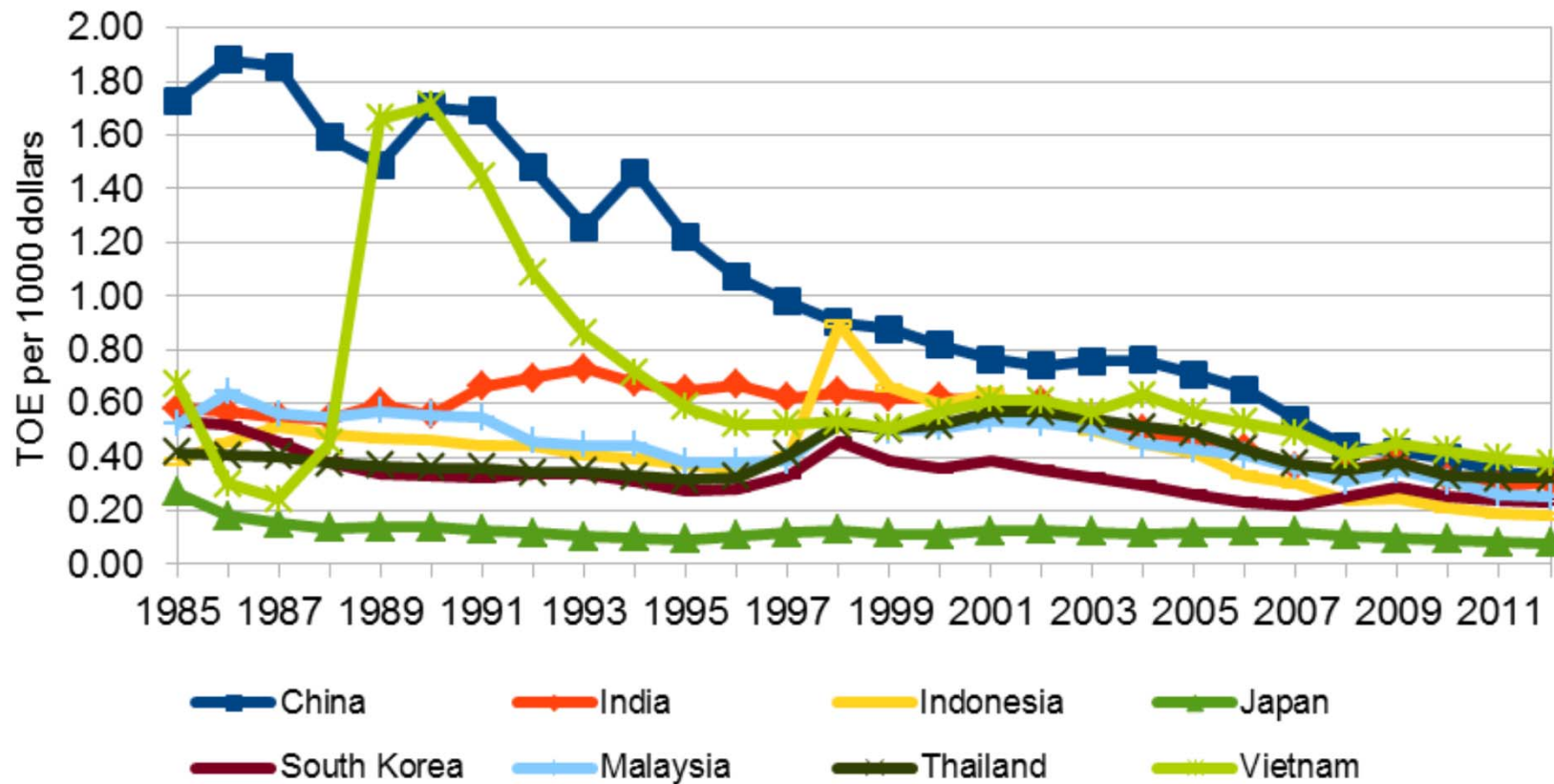
Green productivity
improvements sometimes.



The Routledge Handbook
of Environmental Economics
in Asia

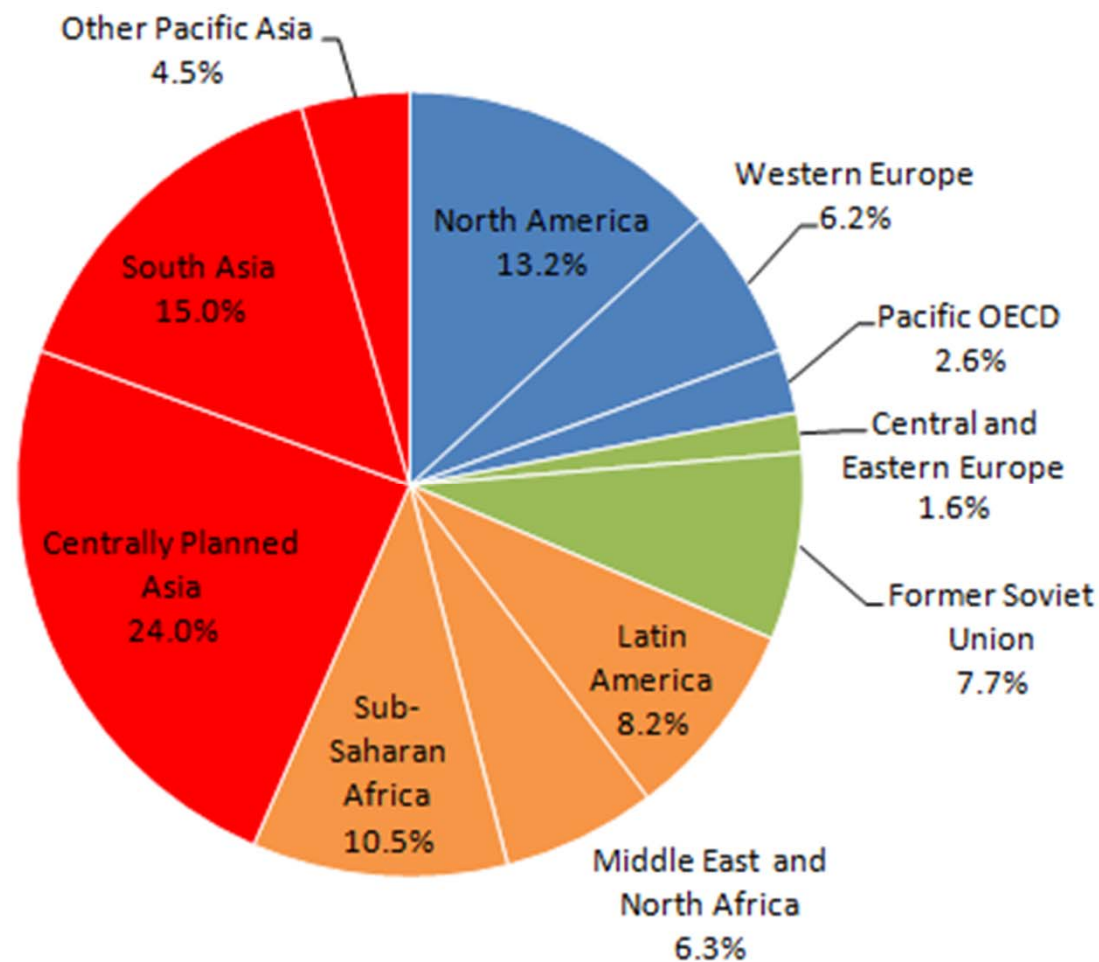
Edited by Shunsuke Managi

Energy Intensity of GDP



Source: Chang and Li in Managi S. (eds) Handbook

Reduction in cumulative GHG emissions over 2010-2100



Source: Takeshita, T. in Managi S. (eds) Handbook

Policy mix

- Tax/cap&trade
- R&D
- Subsidy
- Information
- Industry agreement with gov