

Fiscal Policy to Mitigate Climate Change

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Closing the Carbon Price Gap: Public Finance and Climate Policy, Berlin, May 22-23, 2014

Disclaimer: The views expressed herein are those of the author and should not be attributed to the IMF, its Executive Board, or its management.

Plan of talk



- IMF climate activities
- Energy subsidies
- Ancillary benefits from carbon pricing

IMF Perspective on Climate Mitigation



- Fiscal instruments must be center stage
 - effective (if right base)
 - cost effective (if revenue used productively)
 - balance benefits/costs (if equal envir. damage)

- Engaging MOFs given their potential role in
 - administration
 - re-calibrating tax system towards energy

TA and Outreach on Environmental Taxes

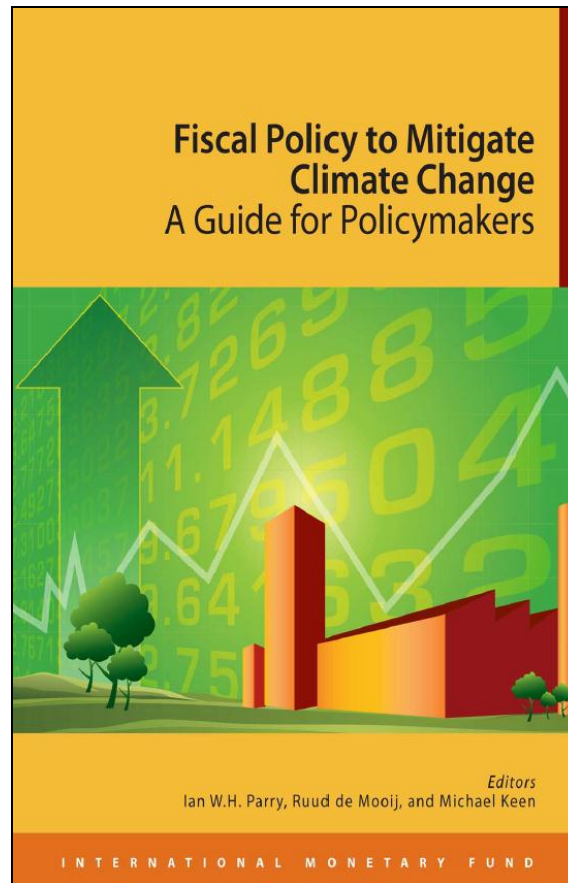


- Upcoming missions
 - China, Costa Rica

- Conferences
 - UNEP (Geneva 2012, Nairobi 2014)
 - OECD (Paris 2013, Paris 2015)
 - EC, CESifo, PBL (November 2014)
 - Green Growth Knowledge Platform (Venice 2015)
 - South Africa (Fall 2014)
 - AEI, Brookings, RFF (November 2012)

**Mobilizing
Climate Finance**
G20 Report, 2011

World Bank, IMF



**Carbon Taxes
and Fiscal
Reform: Key
Issues Facing
US Policy
Makers**
forthcoming

IMF, Brookings,
RFF

Energy Subsidy Reform

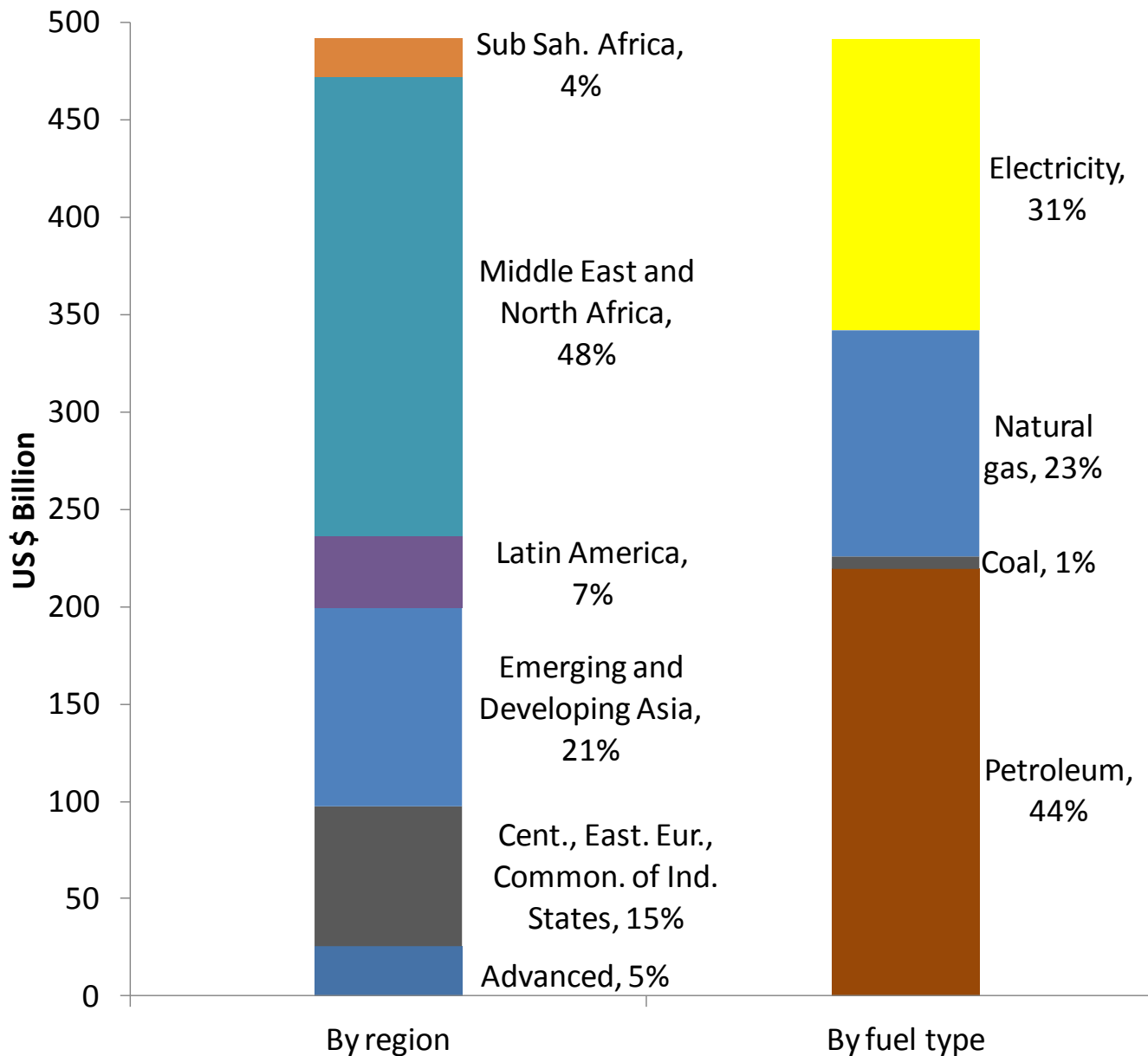
Lessons and Implications



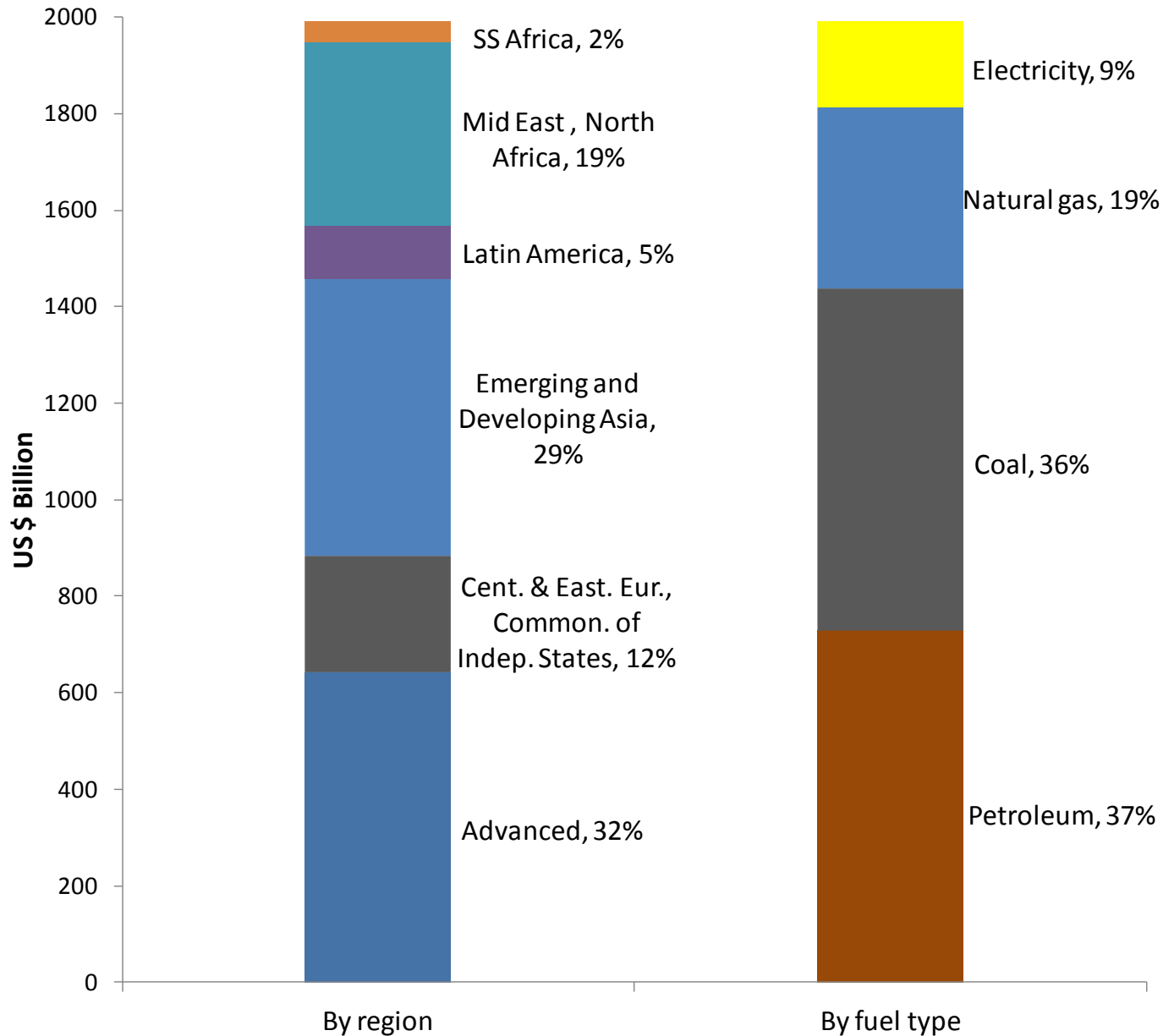
EDITORS

Benedict Clements, David Coady, Stefania Fabrizio,
Sanjeev Gupta, Trevor Alleyne, and Carlo Sdravovich

Pre-Tax Energy Subsidies, 2011



Post-Tax Energy Subsidies, 2011





**Getting Energy
Prices Right:
From Principle
to Practice,
July 2014**

IMF

Example: Air Pollution Damages from Coal



- Pollution exposure (power plant location → number of people in proximity)
- Exposure → mortality risk (WHO)
- Monetize health effects (income elasticity of VSL)
- Damage per unit (country-specific emissions factors)

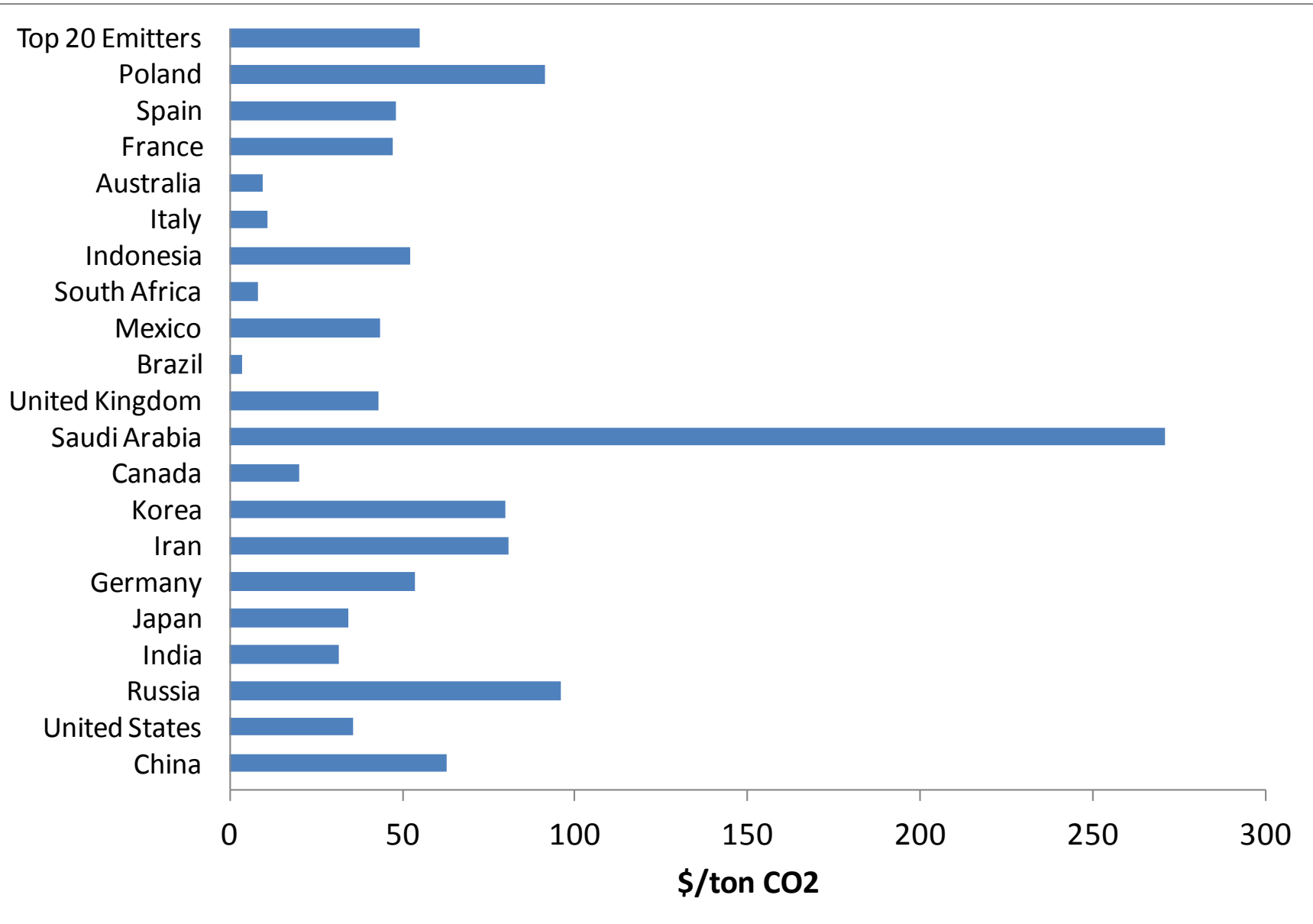
Ancillary Benefits of Carbon Pricing



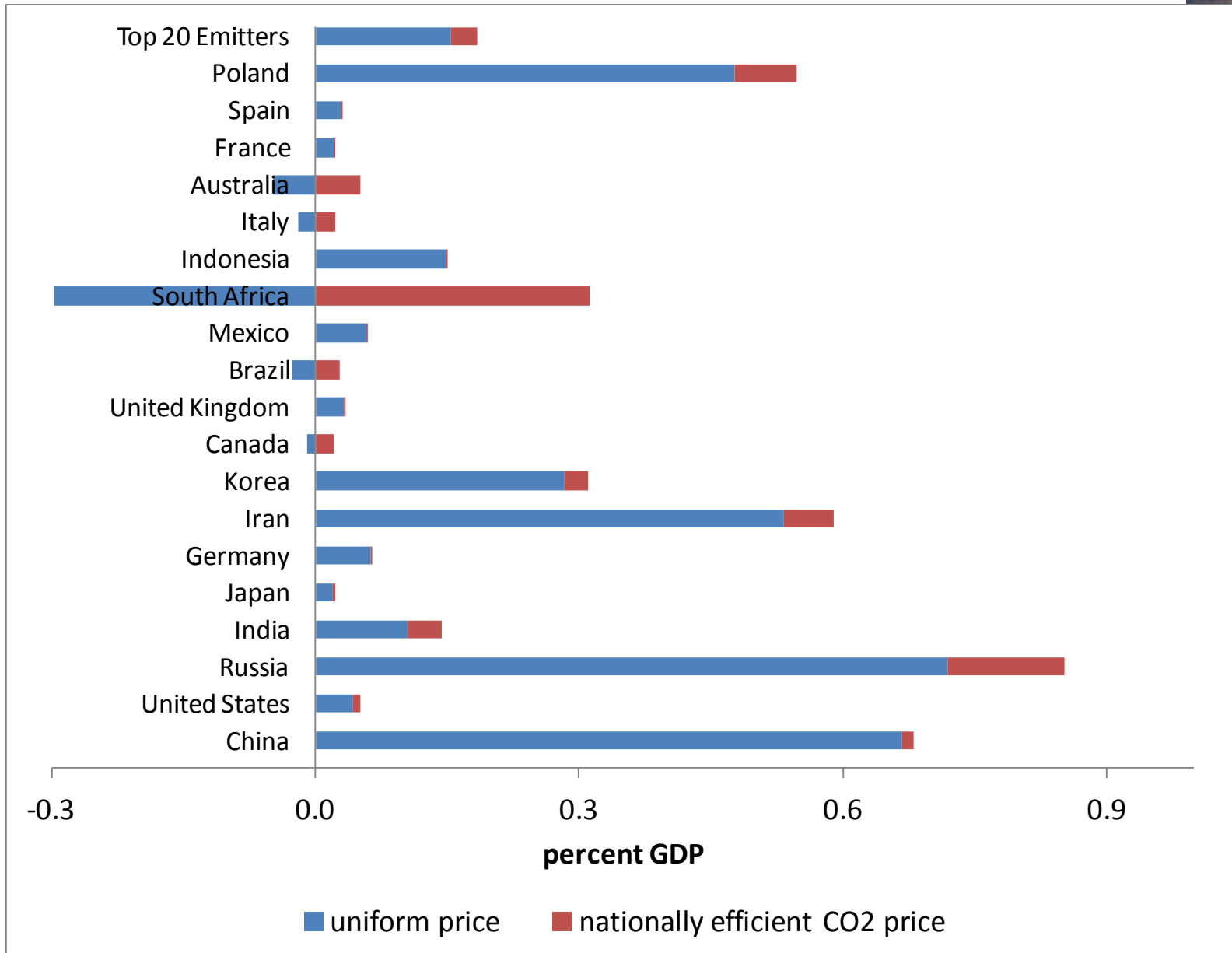
- Estimate nationally efficient CO₂ prices
 - domestic externality benefit/ton of CO₂ reduced (net of fuel taxes/subsidies), *excluding carbon benefits*

- Other policies needed (air pollution, congestion charges) but until comprehensively implemented
 - ancillary benefits should be subtracted from welfare costs of carbon pricing

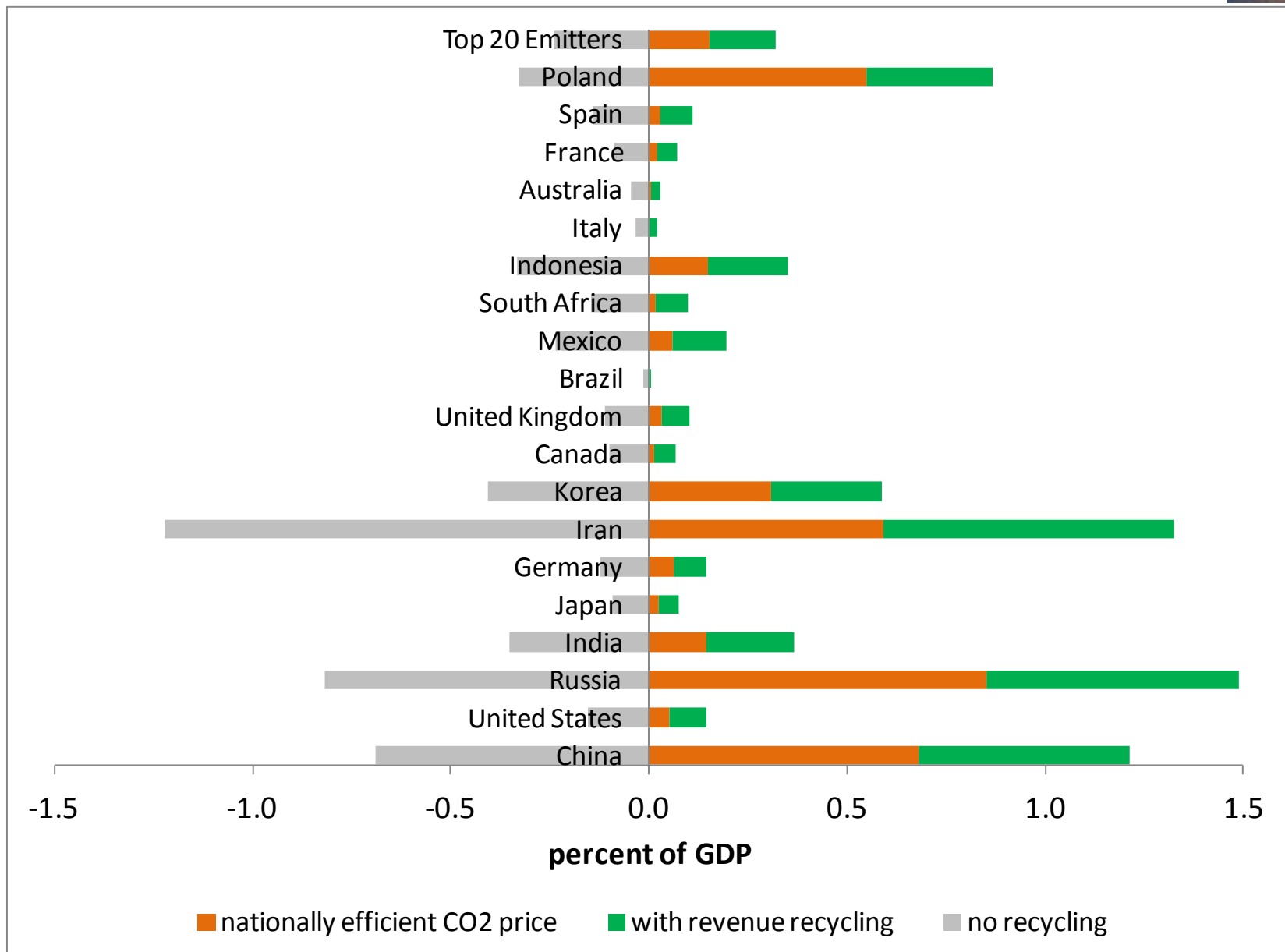
Pricing CO₂ for Ancillary Benefits, 2010



Net Benefits: Differentiated vs. Uniform Prices



Net Benefits with and Without Recycling



Concluding



- Carbon pricing in countries own interests but
 - fiscal dividend must be exploited
 - differentiated pricing may be better than uniform