

Fiscal Affairs Department

Fiscal Policy and Green Growth




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Plan of talk



- Why fiscal instruments (environmental taxes or ETS with allowances sold)?
- Design issues

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Why fiscal instruments?

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They are environmentally effective



- They exploit all—and strike right balance between—emissions mitigation opportunities:
- E.g., a carbon tax
 - promotes fuel switching in power generation
 - reduces demand for electricity, transportation fuels, heating fuels
- Regulatory policies are much less effective:
 - e.g., fuel economy standard (misses ~ 50% of reduction opportunities in transport)
 - renewables mandate (misses some fuel switching opportunities in power sector)

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Fiscal instruments raise significant revenue



- A \$25/tonne CO₂ charge would raise:
 - \$130 billion p.a. in US (0.8% of GDP)
 - \$210 bn p.a. in China (1.6% of GDP)

- If revenues used productively, costs of fiscal instruments are modest.

- Some OECD countries already raise about 6 percent of revenue from environmental taxes
 - issue here is to re-focus them more directly on emissions

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Design Issues

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Design issues (1)



- *Base*. Target source of emissions:
 - fuel use rather than vehicle ownership
 - emissions rather than electricity consumption

- *Administration*
 - *upstream* (e.g., refinery gate) with rebates for downstream emissions capture (e.g., SO₂ scrubbers, CCS)
 - *downstream* (e.g., on power plant emissions), though admin. costs higher and may lack full coverage

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Design issues (2)



- *Level of charges*
 - charges should reflect environmental damages from carbon and local pollution
 - motor fuel taxes should also reflect congestion, accident, and road damage (with long-term transition to mileage-based taxes)

- *Promoting clean technology development/deployment*
 - fiscal instruments provide across-the-board incentives
 - but other policies may be needed (prizes, adoption subsidies)

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Energy price reform burdens households



- Holding down energy prices is inefficient way to help low-income households
- Compensate (with modest fiscal cost) through targeted measures, e.g.,
 - scaling back pre-existing energy taxes
 - adjusting broader tax system
 - transfers, health, education, housing
 - subsidize clean technology alternative

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Concluding



- How can international organizations help progress energy price reform?
 - providing practical guidance on 'getting the prices right' by measuring environmental damages—IMF is working on this.
 - monitoring effective taxes/subsidies on fuels/energy—fossil fuel subsidies worldwide were \$480 billion in 2011.

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