

Fiscal Policy and the Environment

May 2013

This presentation represents the views of the author and should not be attributed to the IMF, its Executive Board, or its management.





Plan of Presentation

- **Why fiscal instruments (environmental taxes, ETS with allowances sold)?**
- **Energy subsidy reform: lessons and implications**

I. Why Fiscal Instruments?

Fiscal instruments 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:**
 - renewables mandate (misses some fuel switching opportunities in power sector)



Design issues in environmental taxation

- ***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)



II. Energy Subsidy Reform

Consequences of energy subsidies go well beyond fiscal costs

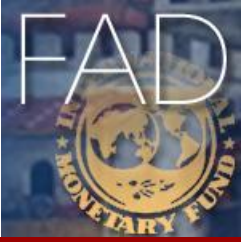


❑ Depress growth

- ❑ reduce investment in the energy sector
- ❑ crowd-out critical public spending
- ❑ over-allocate resources to energy intensive sectors

❑ Create negative externalities (for example, global warming)

❑ Reinforce Inequality



Measurement of energy subsidies

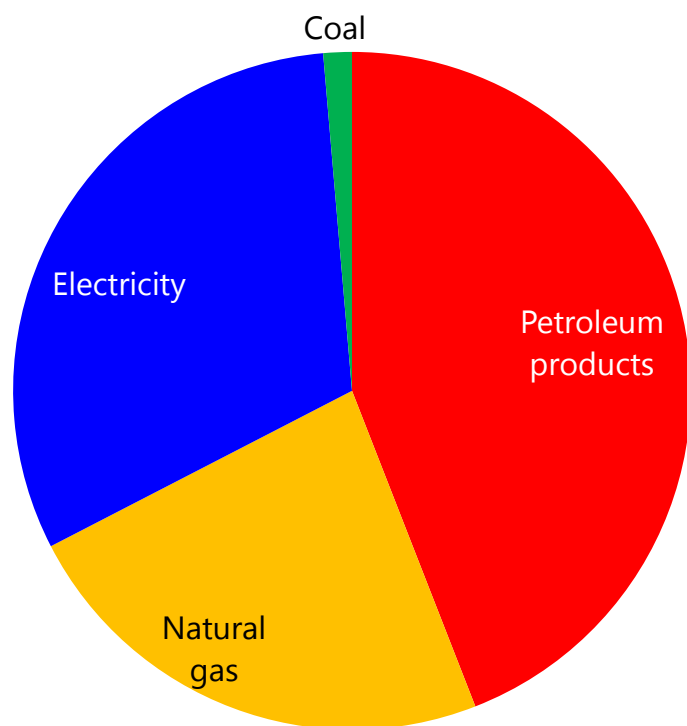
- ❑ Pre-tax subsidies exist when energy consumers pay a price below the supply cost of energy, including transportation and distribution costs**
- ❑ Tax subsidies arise if energy taxes are too low: energy should be taxed the same way as any other consumer product, plus additional taxes to account for the adverse effects of energy consumption**
- ❑ Post-tax subsidies equal pre-tax + tax subsidies**

Post-tax subsidies are large, with more than a quarter from coal



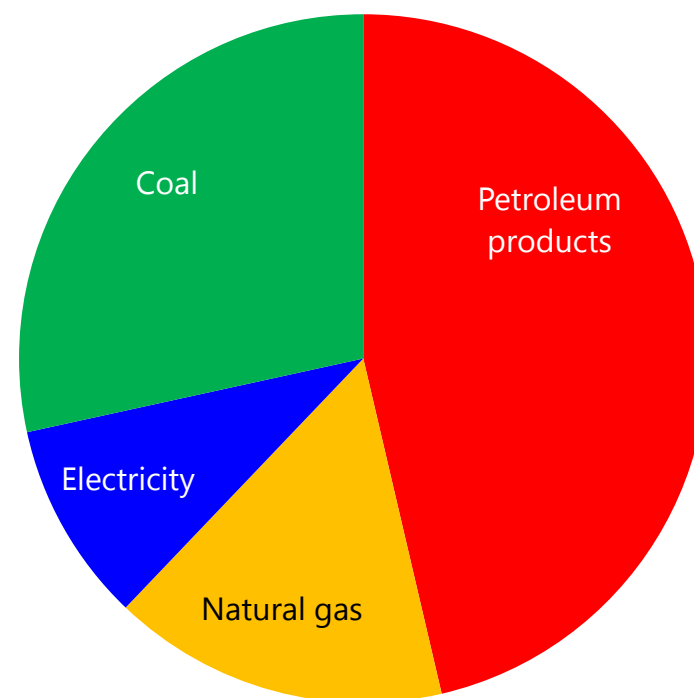
- Pre-tax

\$480 billion (0.7% GDP, 2.1% revenues)



- Post-tax

\$1.90 trillion (2.7% GDP, 8.1% revenues)



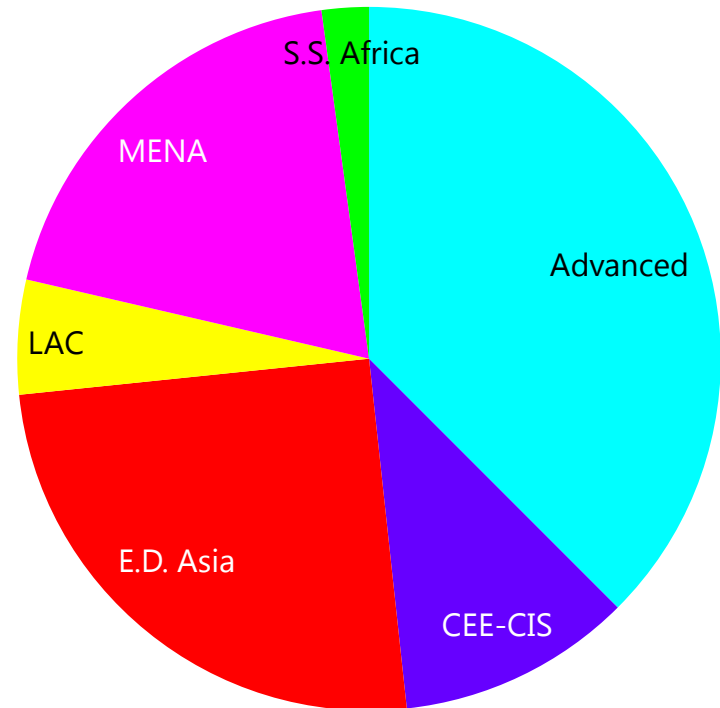
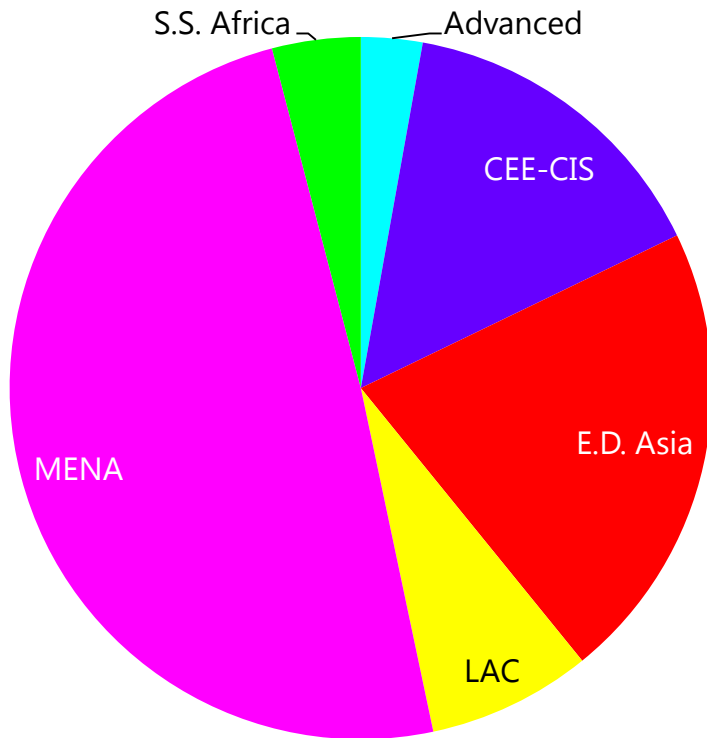
Advanced economies account for 40 percent of post-tax subsidies

- Pre-tax

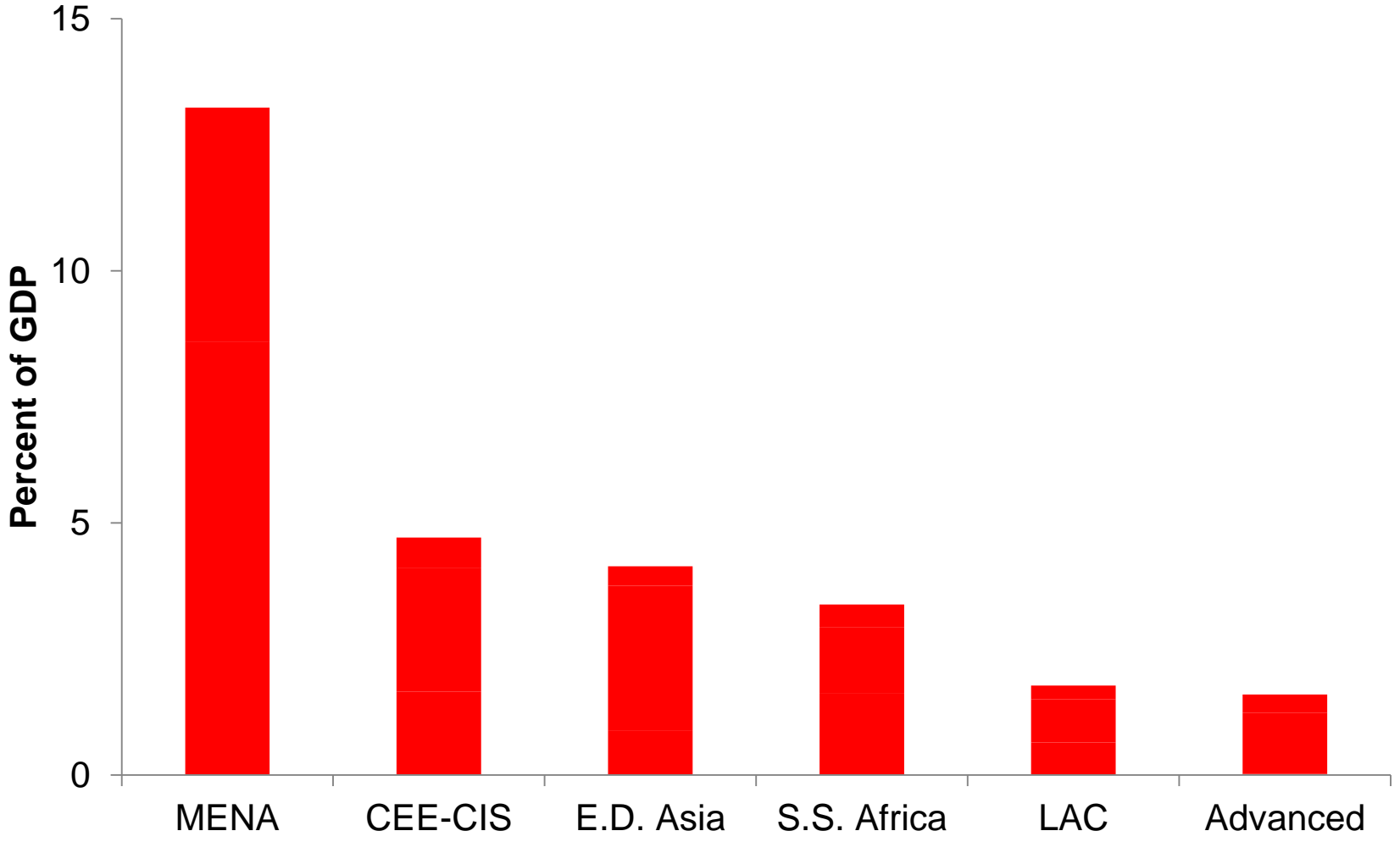
\$480 billion (0.7% GDP, 2.1% revenues)

- Post-tax

\$1.90 trillion (2.7% GDP, 8.1% revenues)



As a share of GDP, post-tax subsidies are high in MENA and low in advanced economies



Sources: IEA *World Energy Outlook 2012*; OECD; World Bank; and IMF staff estimates.

Six key reform ingredients of subsidy reform



(i) A comprehensive reform plan

- clear long-term objectives
- assessment of the impact of reforms
- consultation with stakeholders

(ii) A far-reaching communications strategy

- inform the public of the size of subsidies and benefits of reform
- strengthen transparency in reporting subsidies

Six key reform ingredients

(iii) Appropriately phased and sequenced price increases

- permit households and enterprises time to adjust and governments to build social safety nets
- sequence increases differently across products

(iv) Improvements in the efficiency of state-owned enterprises (SOEs) to reduce their fiscal burden

- improve information on their costs, set performance targets and incentives, and introduce competition where appropriate
- improve collection of energy bills

Six key reform ingredients

(v) Targeted mitigating measures to protect the poor

- targeted cash transfers are preferred
- when cash transfers are not feasible, other programs can be expanded as administrative capacity is developed
- SOE restructuring may also require targeted measures (e.g., job training)

(vi) Depoliticize price setting

- implement automatic price mechanism (with price smoothing)
- establish an autonomous body to oversee price setting



- **Additional details can be found at <http://www.imf.org/external/np/fad/subsidies/index.htm>**

Thanks!