Finance Ministers Coalition for Climate Action

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Session 1: Moving towards a positive price on carbon

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Climate change is an obstacle and an opportunity for economic development

Climate change has major negative impacts

- Rising average temperatures are slowing global growth and inhibiting progress on poverty reduction and on the Sustainable Development Goals.
  - 500 + billion as annual damages from magnified natural disasters;
  - 100 million additional people pushed into poverty by 2030;
  - 140 million people forced into internal migration by 2050;

But it is also an opportunity

- to deliver new jobs, economic growth, and improved wellbeing for people worldwide

Combatting climate change is now indistinguishable from the broader development and growth agenda

Why pricing carbon matters

- Burning fossil fuels generates large amounts of carbon dioxide. This is the main source of greenhouse gas (GHG) emissions, which cause climate change.
- Because firms and consumers base their decisions on private costs, which exclude the social costs of carbon, production and consumption of fossil fuels generate socially inefficient amounts of GHG.
- Aligning the private costs of GHG emissions with their social costs requires adopting mechanisms to price carbon at both the national and international levels.

What does ‘putting a price on carbon’ mean?

- A **carbon price** is a monetary value put on the emission of carbon dioxide into the atmosphere from anthropogenic activities, such as the use of fossil fuels.
- The idea of pricing carbon can be traced back to ‘the Economics of Welfare’ published by Pigou in 1920. He introduced the concept of externality and the idea that it can be corrected by the imposition of a charge.
- Putting a price on carbon means to include in the price of fossil fuels the costs of the damage they produce (pollution, environmental degradation, climate disruption).

How to price carbon

Price-based interventions

- Taxing emissions or emissions-producing activities
  - A carbon tax is imposed on the carbon content of fossil fuels
- Emissions Trading Systems
  - ETS set a cap on total GHG emissions and require emitters to hold a permit for each ton of CO_2 that they emit. Permits are allocated through (i) auctioning; (ii) free allocation based on historical emission levels or (iii) emissions per unit of output
- Combinations of taxes or ETS with carbon offsets
  - Mechanisms allowing individuals and organizations to substitute their tax or ETS obligations when they purchase “offsets” by funding activities that abate greenhouse gases elsewhere.
- Reducing or eliminating fossil fuel subsidies

Non-price instruments

- Regulatory restrictions, performance and technology standards, certification systems, voluntary agreements, information (e.g. mandatory energy efficiency labels on white goods); quantitative restrictions/targets
- Tax incentives and subsidies for clean energy and R&D, and investment measures. Incentives are susceptible to political lobbying; and not easy to internationalise market for emissions abatement

Economists' Statement on Carbon Dividends, 16 January 2019

*A carbon tax offers the **most cost-effective lever** to reduce carbon emissions at the scale and speed that is necessary. By correcting a well-known market failure, **a carbon tax will send a powerful price signal that harnesses the invisible hand of the marketplace to steer economic actors towards a low-carbon future**."*

–

signed by **27** Nobel Prize in Economics laureates, all 4 living former US Federal Chairs, and 15 former US Chairs of the Council of Economic Advisers,

Taxing environmentally damaging activities yields benefits that extend well beyond emissions reduction

Environmental taxes have long been recognized as a means to:

- Increase market efficiency, as prices are adjusted to reflect the environmental costs of production
- Improve the efficiency of the tax system, as upstream taxes on energy and fuels are especially effective at covering the informal sector, entail relatively low administration and compliance costs, and can supplant more distortive forms of taxation
- Broaden the tax base and increase domestic resource mobilization
- Reduce GHG emissions, other forms of pollution, and traffic congestion

Benefits of Environmental Tax Reforms (ETR)

ETR combines taxes on:

- pollutants – CO2 (carbon tax), NOx, SO2, solid waste; energy – coal, electricity, petroleum, diesel; transportation – road, shipping & air duties, congestion

With measures to allocate the revenues:

- To lower other, more distortive taxes (e.g., labor taxes)
- Spending in infrastructure, human development, or climate-change adaptation;
- Measures to compensate producers, consumers, and communities that are adversely affected by environmental taxes

Benefits of ETR

- Increased output and employment, if revenues are used to lower distortive taxes on the formal sector
- Welfare gains, if revenues are spent on education, health, and other public goods; greater economic resilience, if revenues are spent on adaptation
- Development Co-Benefits (non-economic, non-emissions benefits):
  - Better air quality – and improvements in human health (reduced morbidity and mortality)
  - Fewer road accidents – fuel taxes can help cut costly road accidents
  - Less congestion – fuel taxes can reduce costly congestion

Many ways to reach a positive price on carbon

- **Explicitly**: putting a price directly on carbon emissions (carbon taxes or ETS)
- **Implicitly**: by using (i) policies or instruments that effectively price carbon, such as gasoline taxes; (ii) regulations, command and control measures
- **Reducing or eliminating negative pricing** (i.e. subsidies, tax expenditures and other support for fossil fuel production or use).

How to move towards a positive price of carbon

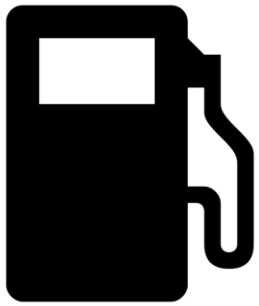
Common commitments, consistent with different levels of ambition			
Commitment	Ambition levels		
	Basic	Good	Advanced
Each Finance Minister commits to take actions to get to a positive price on carbon.	No negative carbon prices. Phase-out of pre-tax fossil fuel subsidies.	Previous practice plus: actions to reach a carbon price consistent with the emission reduction targets set in the country's NDC.	Previous practice plus: actions to reach a carbon price consistent with limit the average global surface temperature increase to the Paris goal of well-below 2°C.

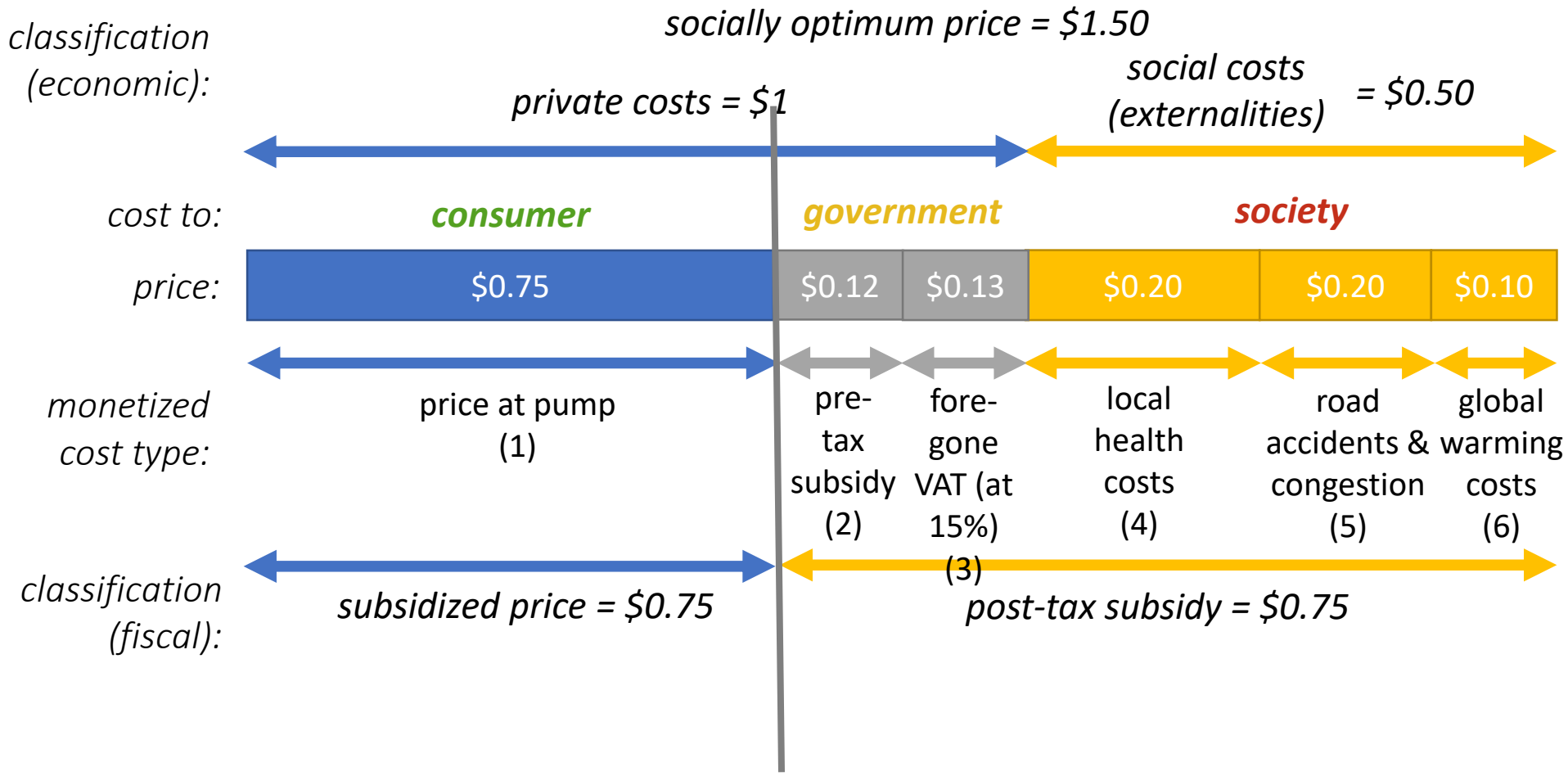
Discussion

- What are the key issues we need to keep in mind in order to ‘move towards a positive price of carbon’?
- How do we frame a principle on this topic so (i) it embraces ambition; and (ii) it allows entry points for countries at different starting points and with different implementation capacities?
- Do we want to include a specific target date for action?

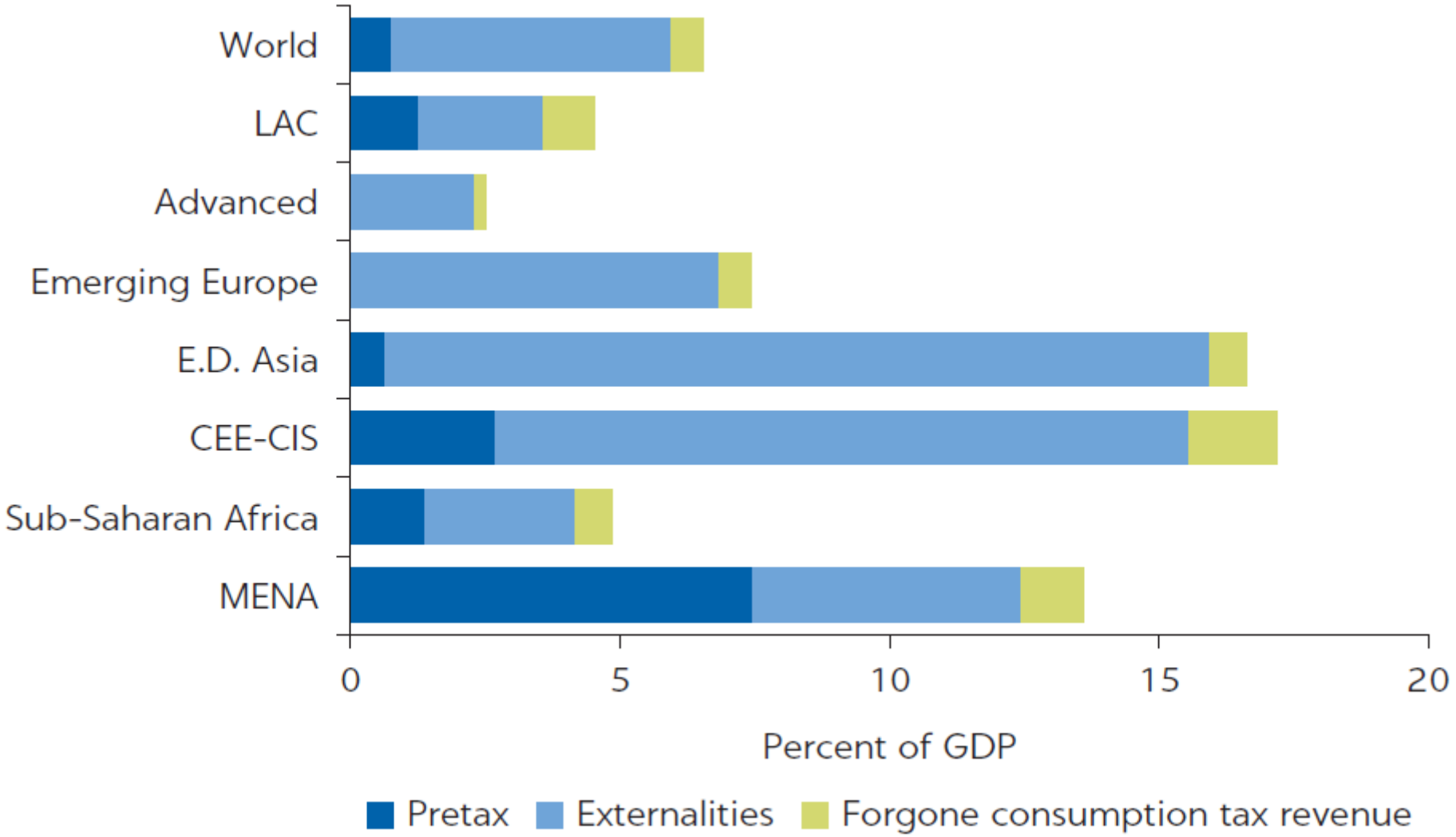
Annex

Private and social costs of fossil fuels: an example





Big gaps between efficient prices and market prices persist



Source: IMF 2017.

Thank You