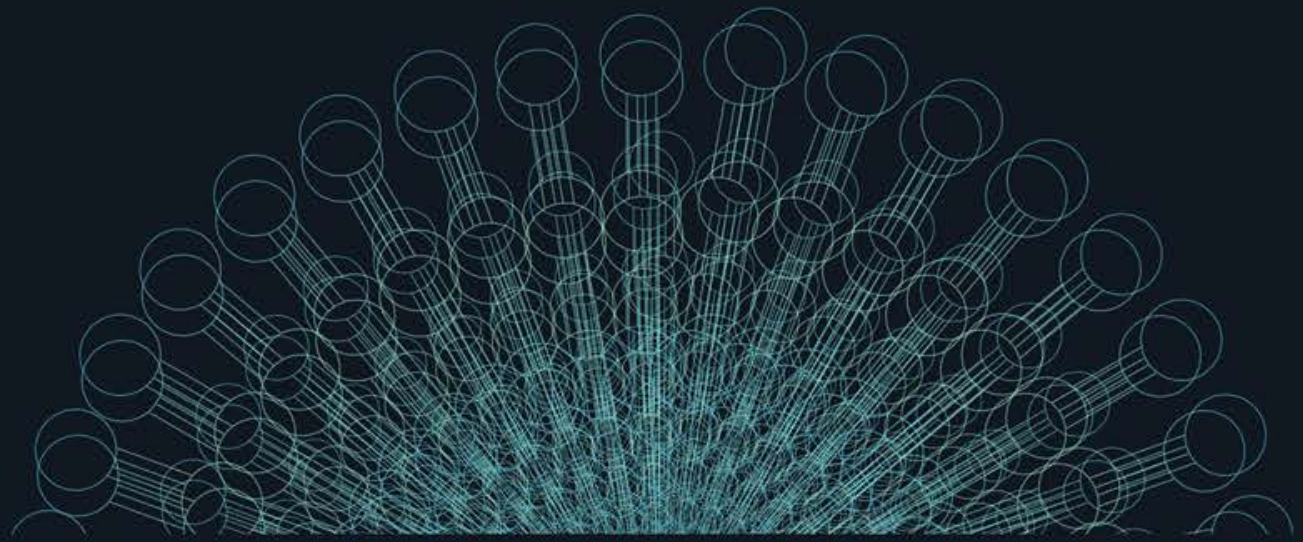
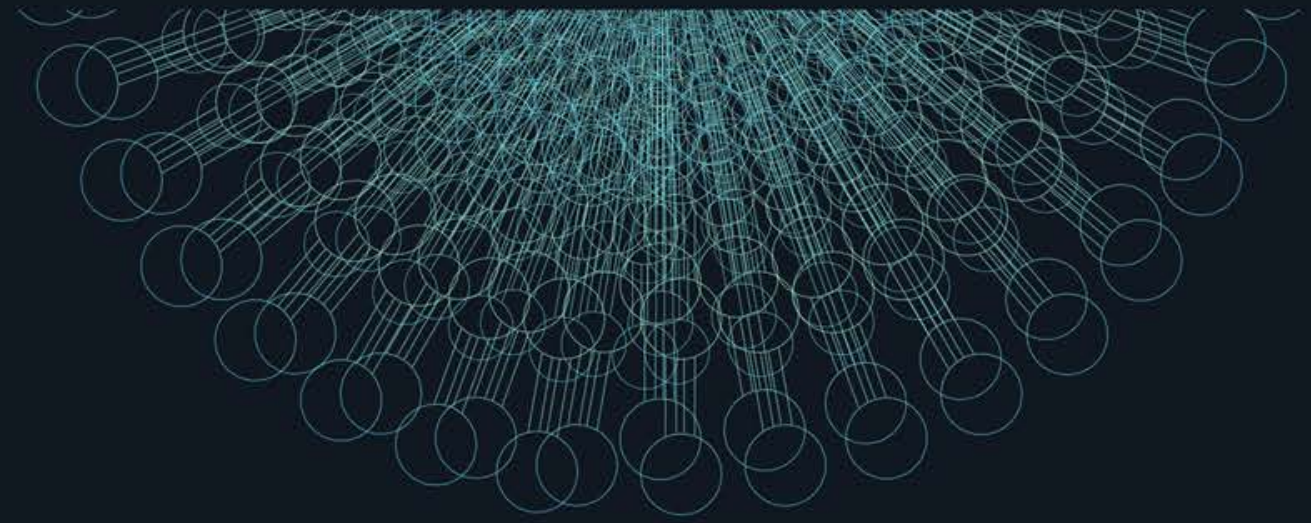


Report of the High-Level Commission on Carbon Prices



Joseph Stiglitz and Nicholas Stern
Co-chairs of the Commission

May 29, Berlin, Germany

BACKGROUND ON COMMISSION

- “Identify indicative corridors of carbon prices which can be used to guide the design of carbon pricing instruments and other policies, regulations, and measures to incentivize bold climate action and stimulate learning and innovation to deliver on the ambition of the Paris Agreement”

- The purpose of this Commission is to explore explicit carbon pricing options and levels that would induce the change in behaviors, including investment in infrastructure, technology, plant and equipment, needed to deliver on the temperature objective of the Paris Agreement of “well-below 2ºC,” in a way that fosters economic growth and development as expressed in the Sustainable Development Goals.

INTRODUCTION

- Motivated by concerns over the immense potential scale of **economic, social and ecological damages** that could result from the failure to manage climate change.
- Current climate action is **insufficient to induce a cost-effective transition** at the **pace and on the scale** required to deliver on the Paris Agreement.
- A successful low-carbon transition implies **structural change, learning, experimentation, and technological changes, and involve large uncertainties.**
- Climate policies, if done well, are **consistent with growth, development and poverty reduction.**
- Potentially a **powerful, attractive and sustainable growth story** with more livable cities, productive and resilient agriculture, and stronger ecosystems.

CARBON PRICING

- A **well-designed carbon price** is an indispensable part of a strategy for reducing emissions in an efficient way.
- GHG emissions can be priced explicitly with a **carbon tax** or **cap-and-trade systems**.
- Carbon pricing can also be operated through notional prices, embedded in, for example, **financial instruments** or **feed-in tariffs**.
- **Reducing fossil fuel subsidies** is an essential step toward carbon pricing.
- Explicit carbon pricing can be usefully complemented by **shadow pricing in public-sector activity** and **internal pricing in firms**.

CLIMATE POLICY PACKAGES

- **Achieving the Paris objectives will require all countries to implement climate policy packages.** These policy packages include complementary policies to carbon pricing to tackle other market failures beyond the GHG externality that take into account: knowledge spillovers (and R&D), network effects, imperfect capital markets and unpriced co-benefits such as reduced pollution.
- **The design of country policies must take into account specific national and local circumstances.** Lower-income countries may choose lower carbon prices as complementary resources may be cheaper and distributional issues less easy to handle.
- **International cooperation to promote and provide support for consistency of action** across countries can help to lower costs, prevent distortions in trade and capital flows, and facilitate the efficient reduction of emissions.

EXPLORING LINES OF EVIDENCE

TECHNOLOGICAL ROADMAPS:

These sectoral targets and milestones inform the carbon price required by looking at the “switching prices” for various technologies and in different countries.

NATIONAL MITIGATION AND DEVELOPMENT PATHWAYS:

National-scale studies and modeling exercises incorporate combinations of macroeconomic, technology and land use models to provide estimates of carbon prices that can foster necessary change in a given economy.

GLOBAL MODELS:

Integrated Assessment Models (IAMs) produce global scenarios of future socio-economic and technological development that are consistent with different global temperature targets.

CARBON PRICING

- Efficient carbon-price trajectories begin with a **strong price signal** now and **credible commitment** to maintain long-term prices high enough to deliver the required change.
- Policies should be designed to **induce learning** and **respond to new information**.
- Carbon price efficiency can be enhanced by an **enabling environment**, strong technical and institutional capacity, and an appropriate regulatory framework.
- Countries should begin **immediately** the implementation of carbon pricing.

REVENUES

Explicit carbon-pricing instruments can raise revenues efficiently as they overcome a key market failure.

Revenues can be used to foster growth in an equitable way, including through:

- Reduction in other (distortive) taxes
- Redistribution to protect poor and vulnerable people
- Investing in infrastructure and basic service delivery (water, sanitation, energy, etc.)
- Smoothening the transition toward decarbonization
- Promotion of investment and economic growth
- Fostering R&D in low-carbon technologies

COMPLEMENTARY POLICIES

Carbon pricing alone is not likely to be sufficient to induce change at the pace and scale required for the Paris temperature target—or be the most efficient/ equitable way to do so.

Adopting other cost-effective policies—with strong emphasis on related market failures and the dynamics of change—can mean that a given emissions reduction could be induced with lower carbon prices.

Such policies include:

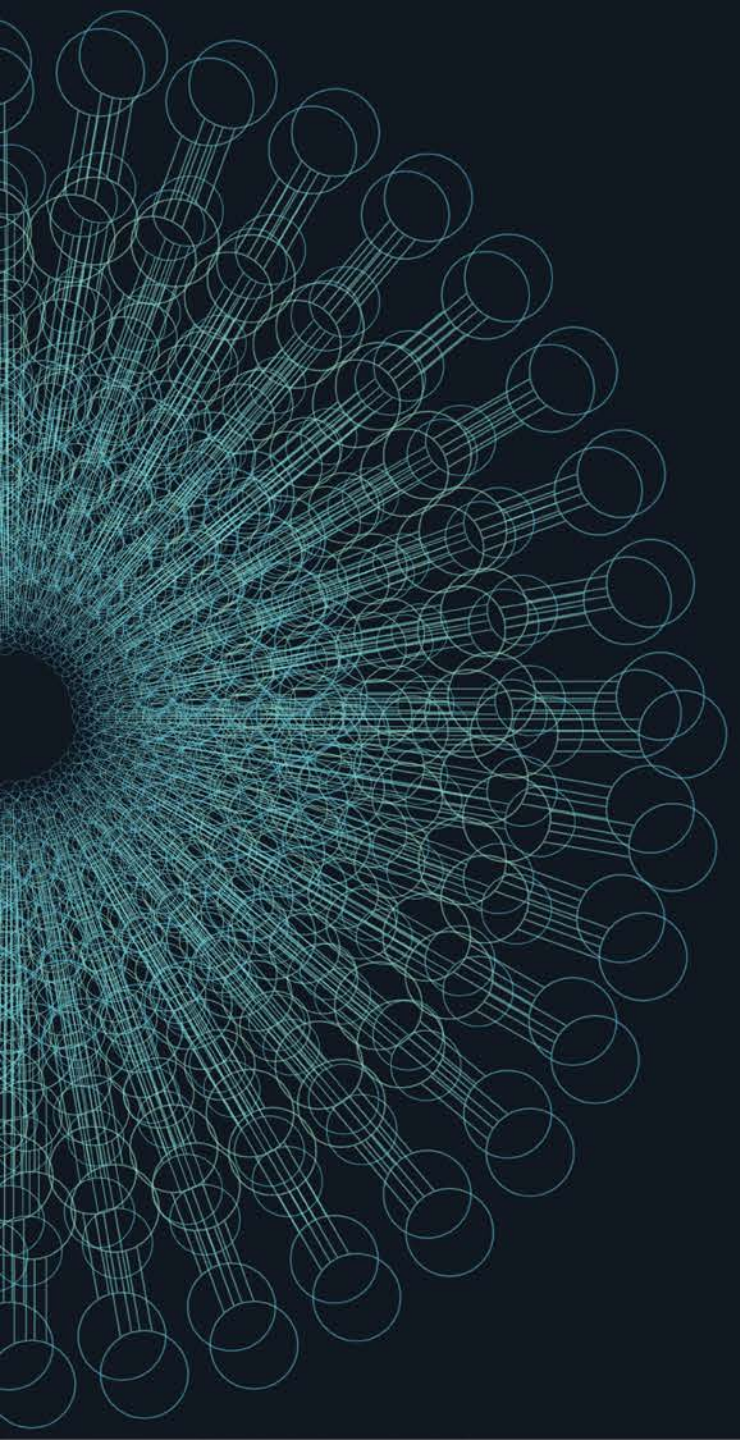
- investment in low-carbon infrastructure,
- efficiency standards, urban planning,
- groundwork for renewable-based power generation,
- land and forest management,
- fostering R&D investment,
- financial instruments

CONCLUSIONS

The explicit carbon-price levels consistent with the Paris temperature target are at least US$40–80/tCO$_2$ by 2020 and US$50–100/tCO$_2$ by 2030.

- These price ranges assume that the pricing policy is **complemented with well-designed policies and actions**—such as efficiency standards, research and development, city design, networks, etc.—and a **supportive investment climate**, including finance. In the absence of these elements, the carbon-price range required is likely to be higher.
- Appropriate carbon prices will **vary across countries**, and low-income countries may start with prices lower than this range.
- Carbon prices will need to be **adjusted over time**, particularly upward if existing prices fail to bring about the required changes, but based on criteria that are transparent and sound.
- Implementation of carbon pricing should take into account **non-climate benefits**, particularly reduced pollution, local context, and political economy.

Current levels of carbon pricing are insufficient to achieve the Paris temperature target, and future prices need to be higher.



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