

Climate Change and Development Series

DECARBONIZING DEVELOPMENT

Three Steps
to a
Zero-Carbon
Future

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My two cents

1. **Mind the political economy**
2. Mind the end goal

The political economy is key

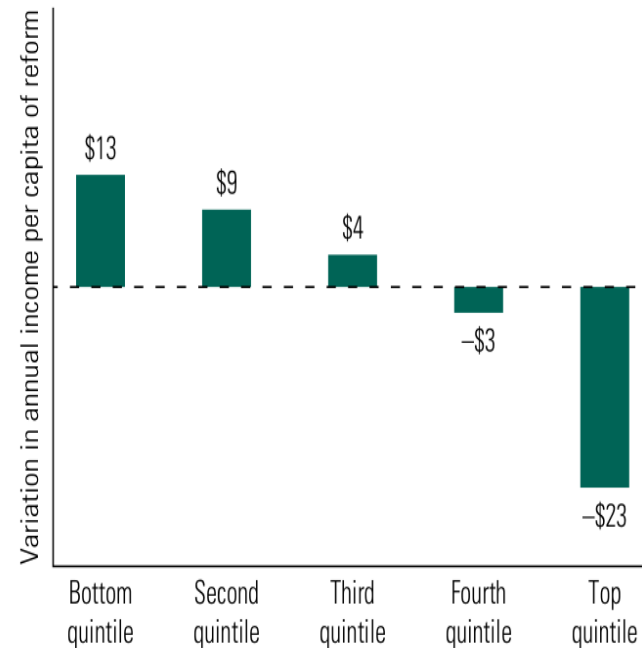


Carbon prices can contribute to poverty reduction

- Climate policies can be designed such that poor people benefit
- Revenue-raising policies makes it possible to invest in development and poverty reduction

FIGURE 0.5 Using Fossil Fuel Subsidy Resources for Universal Cash Transfers Benefits Poor People

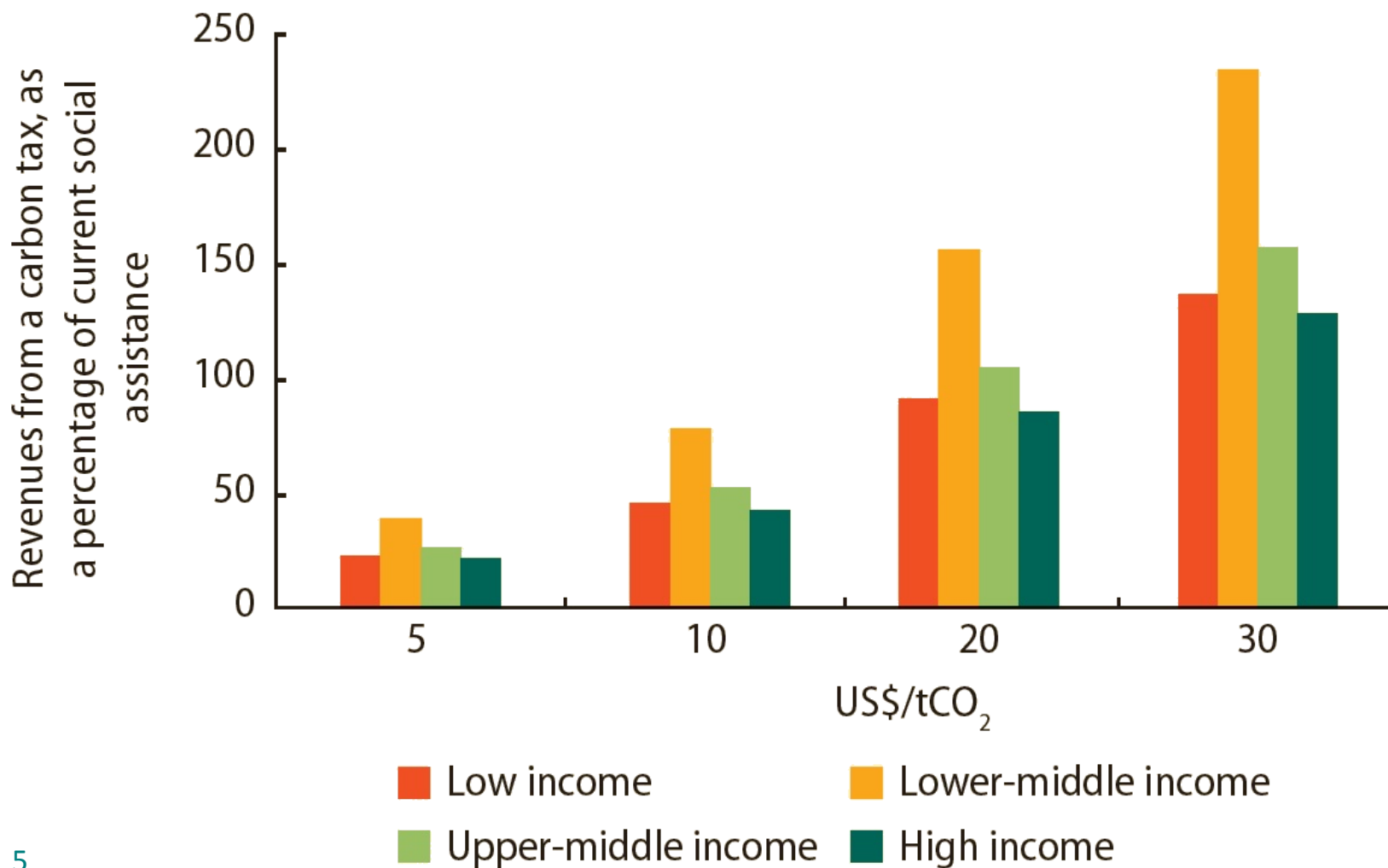
(Impact of recycling \$100 from a fossil fuel subsidy to a universal cash transfer)



Source: Based on Arze del Granado, Coady, and Gillingham (2012).

Note: The figure shows the impact of reducing the fossil-fuel subsidy budget by \$100 and distributing the savings as a universal cash transfer.

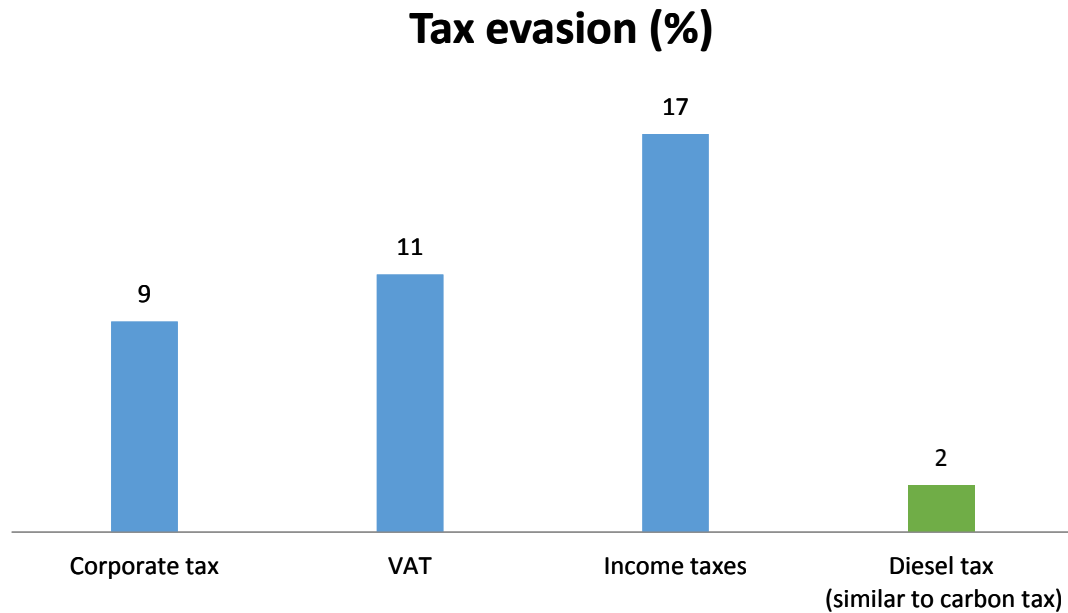
Carbon prices can help boost social safety nets



Carbon prices can contribute to development objectives



Carbon prices are a good fiscal policy





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Climate policies will be more likely to succeed if they transform potential losers into winners

- Make industries and regions benefit from the change
 - Automakers and electric cars
 - Fossil fuel industry and carbon capture and sequestration
 - Green pilot projects in negatively affected areas
 - Worker retraining – examples from trade agreements



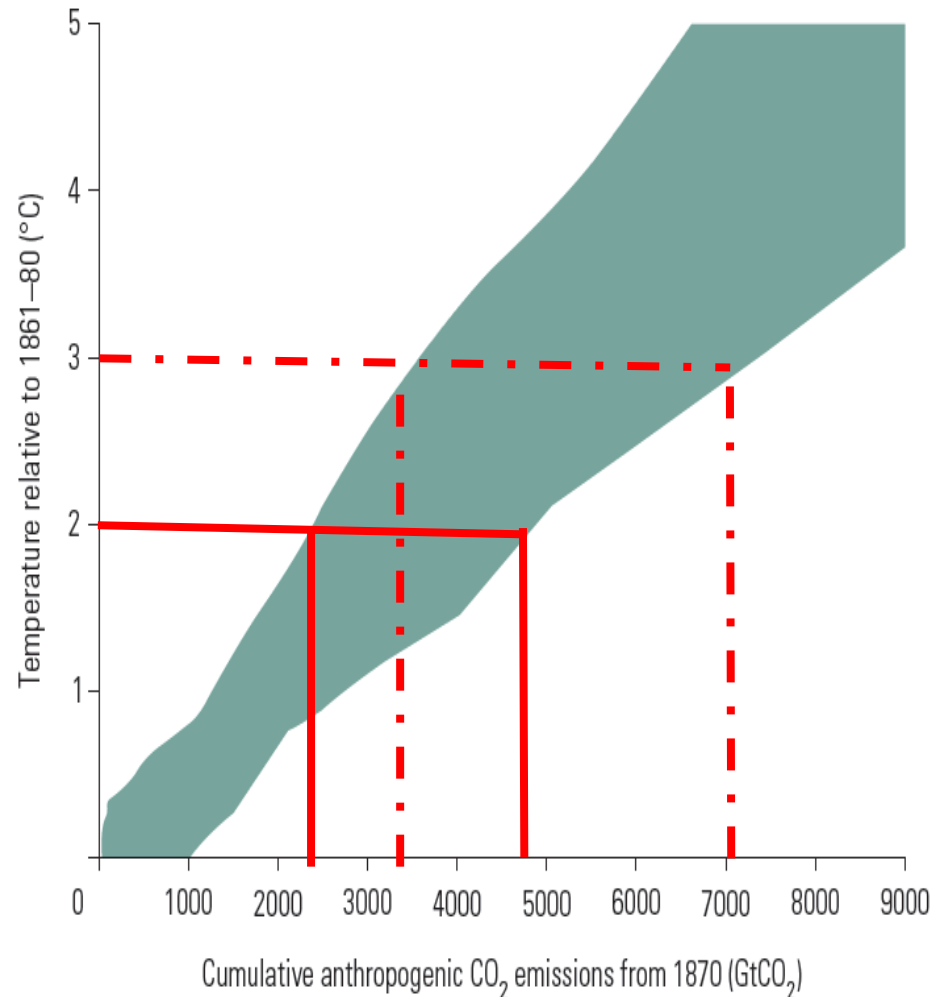
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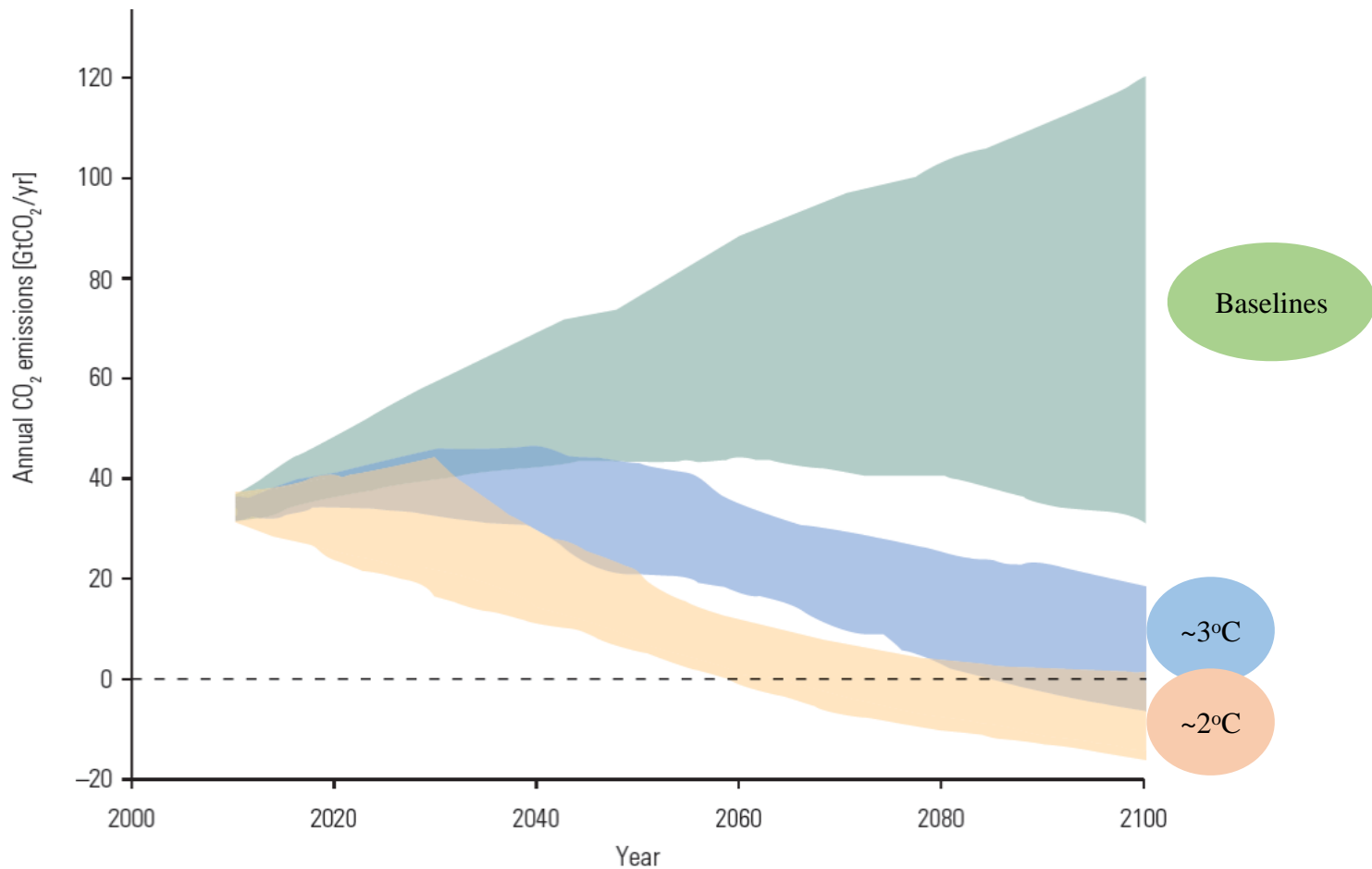
Temperature targets imply a carbon budget

- For any temperature limit, there is a maximum CO₂ budget

Rising Cumulative Emissions of CO₂ Mean Rising Temperatures



We need zero CO₂ emissions to stabilize climate change, the question is when and how to reduce emissions

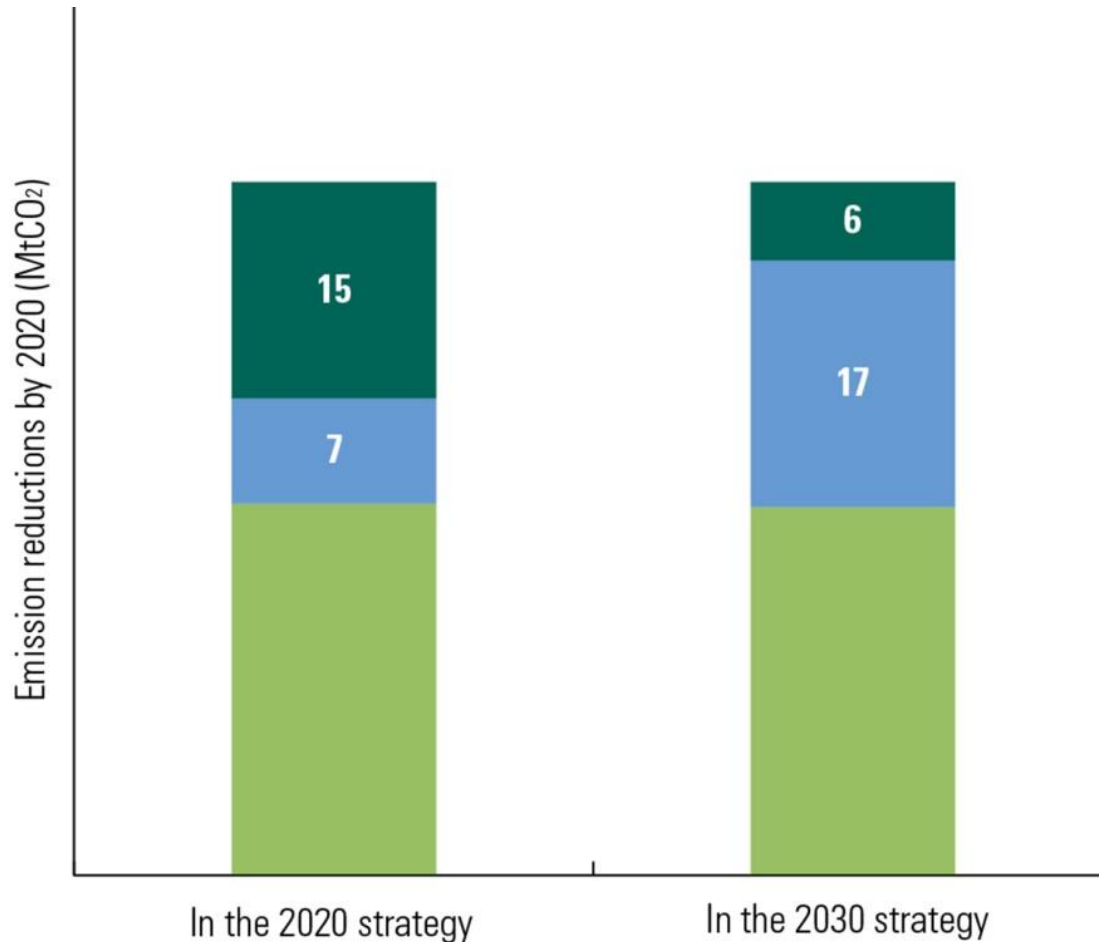


Emission
reduction

-90%

The objective for the strategy up to 2020 is to build the foundation for a deep decarbonization (not just to achieve a given level of reduction)

Short term emission reductions should be consistent with long-term decarbonization : the Brazilian example



Sectoral policies should complement carbon prices to ensure short-term reductions are a **first step towards long-term targets**:

- Renewable portfolio mandates
- Public transportation
- Smart cities

Ensuring **short-term reductions** are compatible with **long-term decarbonization**

Carbon tax



Coal power plant



Carbon tax +
complementary policies

Thank you for your attention

1. Mind the **political economy**: transform potential losers into winners
2. Mind the **end goal**: complementary policies to make short-term reductions compatible **with zero emissions** in the long term

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