

Pricing Pollution for a Green Recovery

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Role of Fiscal Policies in a Green COVID-19 Recovery

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Mitigation Action is Extremely Urgent

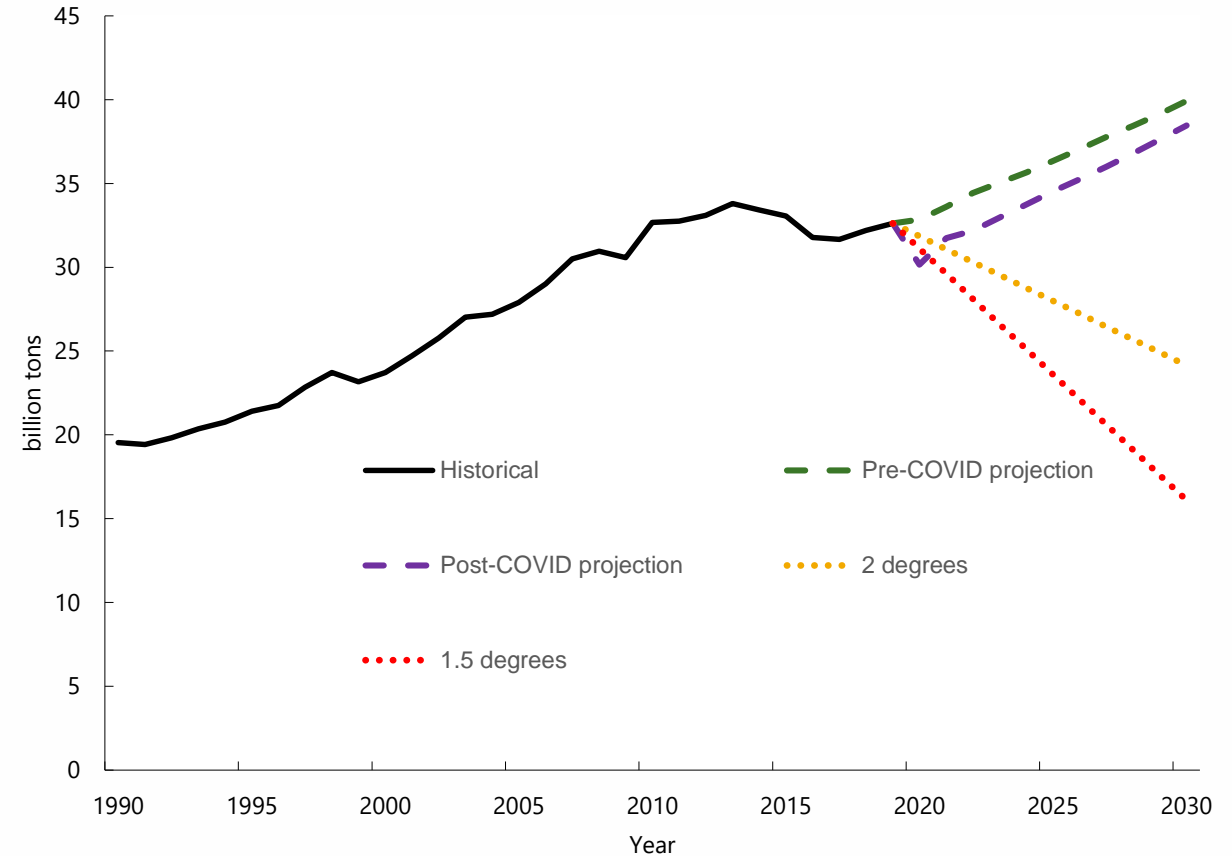
1.5-2°C requires cutting global emissions 25/50% below 2018 levels by 2030

- Current policies → 2030 emissions 20% higher

Crisis has increased urgency of action

- Pricing needed to allocate new investment to low carbon technologies
- And provides revenue

Global Fossil Fuel CO₂ Emissions Trends



Source: IEA (2020), IMF staff calculations, IPCC (2018).

Carbon Pricing

Central role in mitigation policy

- Across-the-board incentives, cost-effective, price signal for investment, raises revenue, domestic environmental co-benefits, administratively straightforward

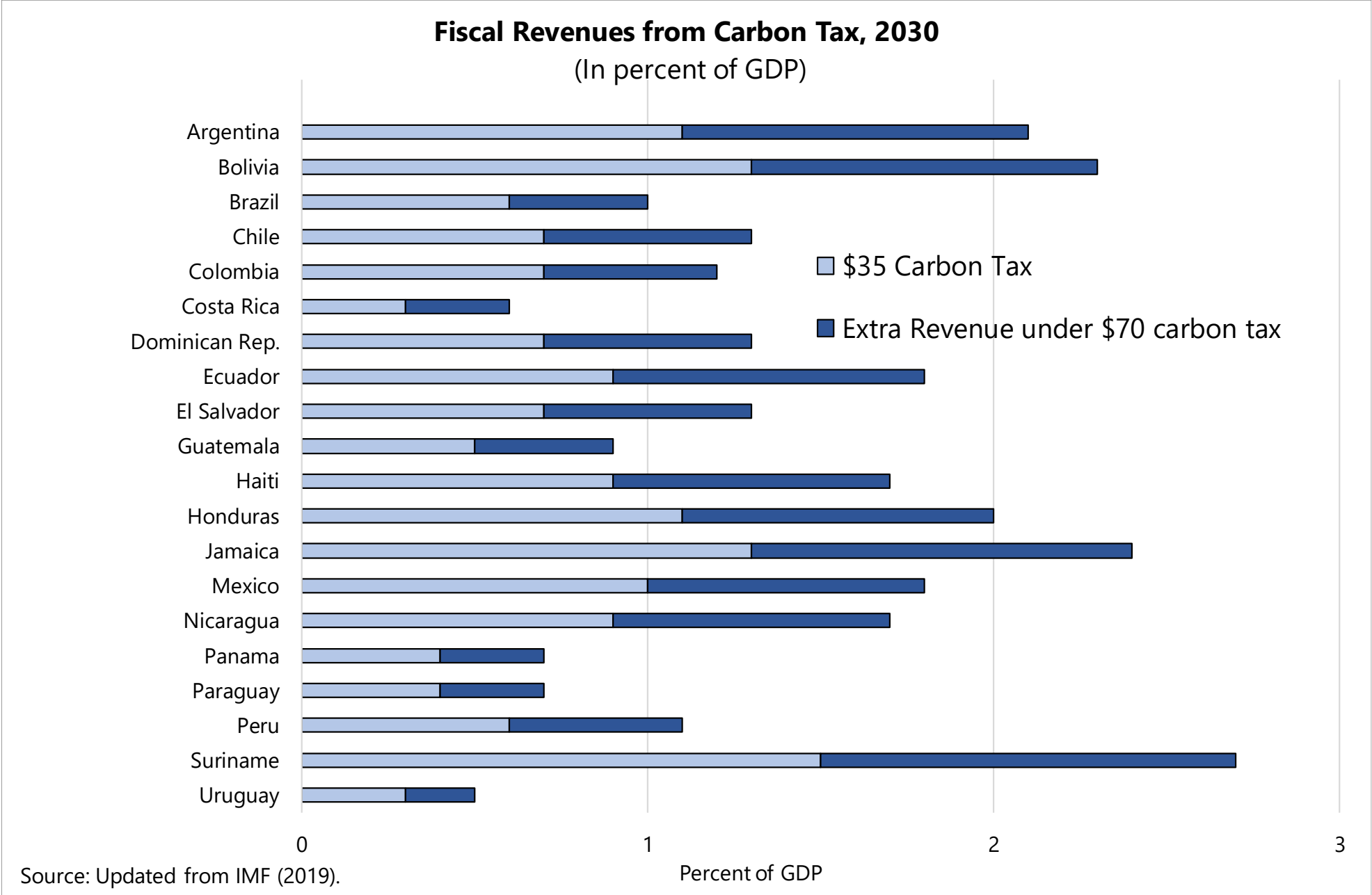
Basic design details are critical

- Cover power, industry, transport, buildings
- Predictable and rising price
- Use revenues productively

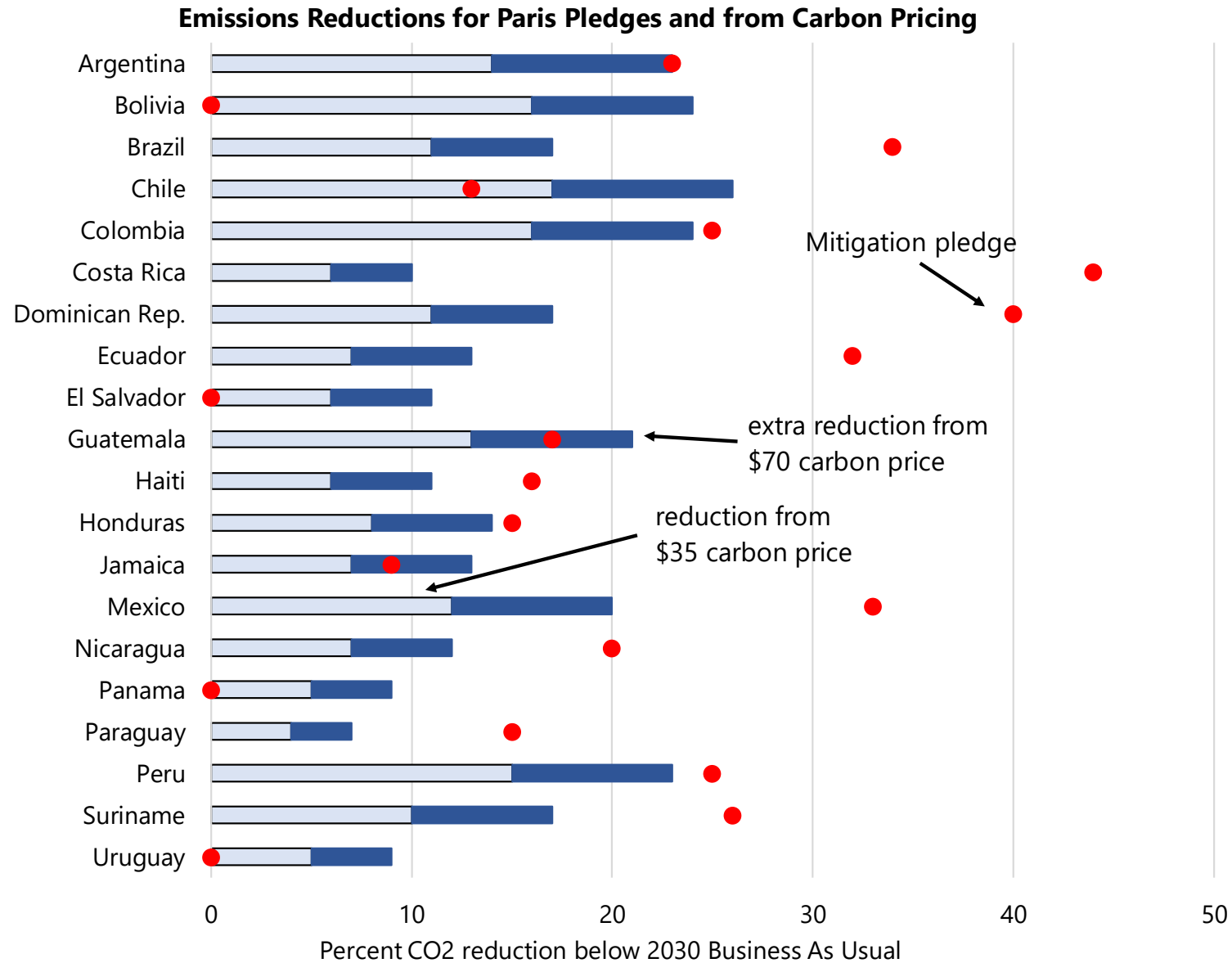
Carbon taxes are a natural carbon pricing instrument

- Price certainty, revenues to the government, build off fuel tax collection
- Trading systems similar benefits if they include price floors, allowance auctions
 - Often confined to power/industry, not always practical (e.g., limited capacity)

Carbon Pricing has Significant Fiscal Benefits



But Pricing Alone May not Meet Mitigation Pledges



Source: Updated from IMF (2019).

Acceptability Constraints → Need Reinforcing Instruments

To reduce emissions per unit without first-order tax burden on households/firms

- Less efficient than pricing because no demand response

Regulatory approach (environmental ministries)

- But inflexible and difficult to coordinate across sectors

Feebates (finance ministries)

- Vehicles: $\text{fee} = \text{CO}_2 \text{ price} \times (\text{CO}_2/\text{km} - \text{fleet average CO}_2/\text{km}) \times \text{lifetime km}$
- Industrial firms: $\text{fee} = \text{CO}_2 \text{ price} \times (\text{CO}_2/\text{output} - \text{industry average CO}_2/\text{output}) \times \text{output}$
- Other applications: power, appliances, forestry, agriculture

Attractions of feebates

- Avoids tension between fiscal/environmental objectives (unlike clean vehicle subsidies)
- Often build off existing capacity (e.g., integrate into vehicle registration fees)

Enhancing Acceptability Requires a Comprehensive Strategy

Balance of carbon pricing/sectoral measures (progressively introduced)

Supporting investment to enhance effectiveness/credibility

- Infrastructure for renewables, electric vehicles

Carbon pricing revenues

- Boost the economy in an equitable way (e.g., broad tax cuts, investments for Sustainable Development Goals)

Assistance measures for vulnerable groups

- Low-income (e.g., enhanced social safety nets), workers, regions
- Energy-intensive firms (e.g., feebate)

Stakeholder consultation and communications program

International/Regional Carbon Price Floors

Rationale

- Complement to Paris Accord
- Addresses competitiveness/leakage
- Equitable (e.g., stricter floor for wealthier countries, transfers)
- Flexible (could be met by tax, trading, feebates/regulations)
- Effective

Key participants in agreements

- Global: China, EU, India, US
- Regional: countries with pricing (e.g., Argentina, Chile, Colombia, Mexico)