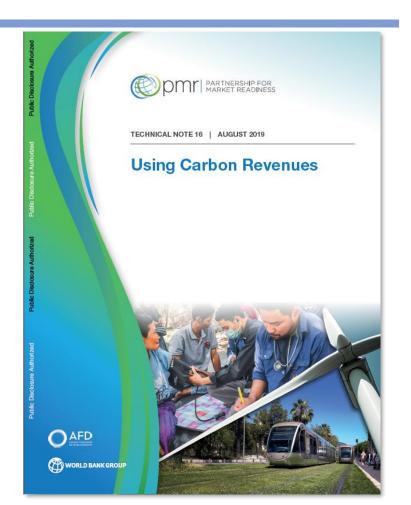
# Using carbon revenues

Hari Gadde Carbon Markets & Innovation World Bank Group





#### **Scene setting**

- *Paris Agreement* commitments for all countries
- *Net zero targets* all policies, all resources
- *Energy transition* just and fair
- *International climate policy* trade and competitiveness
- *Fiscal deficits* high debt, strain on govt resources
- *Tax inefficiencies* competing objectives, informal sector, tax evasiveness

## Carbon pricing can be a good way of raising revenue

- Carbon taxes
  - Less distortionary than most existing taxes (e.g., labour and profits)
  - Levied on a small number of large businesses and can piggyback off existing systems (e.g., excise systems)
    - low administration
    - relatively easy to collect
    - hard to evade
- Emission Trading Systems
  - Auctioning of emission allowances/permits

### Revenue use can be crucial to acceptability of carbon pricing

- Revenues can be spent on things that are important to people
- Revenues can help smooth the transition for businesses and households
- A well-designed (and well-communicated) carbon revenues use framework can foster public acceptance/support:
  - Public acceptability goes beyond equity and efficiency of the scheme. Good communication on social, environmental and economic benefits associated with using carbon revenues is key to avoid risk of unpopularity

## **Earmarking or hypothecation**



Governments can allocate revenue to the **general budget** or commit it to a specific purpose

Legal earmarking

Hypothecation

Allocating to the general budget provides **flexibility** 

Committing to a specific purpose provide a **clear link** with the carbon price and greater **certainty of funding** 

# Options for using carbon revenues



**Tax reform**, to target higher economic growth alongside lower pollution e.g., part of broader environmental tax reform (e.g. reduce labor taxes).



**Climate mitigation**, by financing additional policies or programs aimed at reducing emissions;



**Development**: Pursuit of other development objectives, such as in education and health;



Address negatives: carbon leakage prevention, to achieve carbon pricing's environmental and economic objectives;



Address negatives: assist individuals, households, or businesses affected by carbon costs, through transfers or programs;

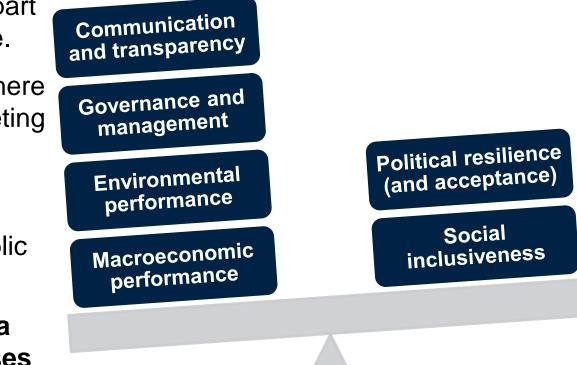


**Debt reduction**, to lessen the debt burden on future generations.

# Options for using carbon revenues: Trade-offs

- Carbon pricing operates as part of a broader fiscal landscape.
- As with all fiscal decisions, there are complexities, and competing priorities.
- Trade-offs need to be made.
- Also need to account for public opinion.
- But in practice implement a combination of revenue uses





#### Sweden

- Tax reform focused
- Gradual carbon tax increase combined with cuts in income and labor taxes to prevent overall tax increase, encourage job growth & address negative distributional effects

#### Japan

- Mitigation focused
- Incentivize mitigation in sectors not covered by a carbon price
- Japan's carbon tax funds renewable energy and energy efficiency programs through green subsidies and R&D support.

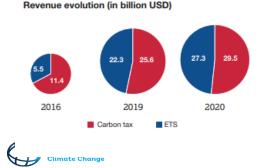


- Address competitiveness concerns
- South Africa's carbon tax includes various measures to protect competitiveness, ease the transition to the tax & encourage broad participation

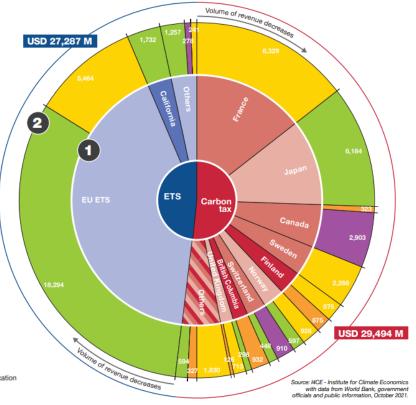


## **Carbon revenues in 2020**

- In FY 2020-21, carbon pricing generated around \$57 billion of domestic public revenues throughout the world.
- More than 50% of carbon revenues come from carbon taxes
- Carbon revenues are mostly directed to the general budget or earmarked for specific environmental or broader development projects



Share of state revenue Carbon tax - Less than 1% Carbon tax - 1% to 2% Carbon tax - More than 2% ETS - Less than 1% ETS - 1% to 2% ETS - More than 2% Revenue usages
 General budget allocation
 Tax exemptions
 Direct transfers
 Earmarking



Source: I4CE; https://www.i4ce.org/wp-core/wp-content/uploads/2021/10/Globalcarbon-accounts-2021-EN.pdf

# **Carbon Pricing in LAC**

- LAC gradually developed a number of initiatives on carbon pricing, mostly through the form of carbon taxes applied to fossil fuels
- There are 4 federal carbon taxes, 3 subnational carbon taxes and one national ETS
- A carbon tax was introduced in the region so far as part of broader structural (tax) reforms
- While in Argentina the tax substituted previous taxes on fuels, in others intended to increase government revenues





Source: IETA-ICAP-IDB

# **Use of Carbon Pricing Revenue in LAC**

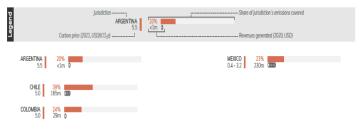
- Colombia and in Argentina: revenues are earmarked.
  - Colombia: "Sustainable Colombia Fund" (Ley 1819 de 2016, 2016), which is an initiative by the government to support sustainable practices and projects in areas affected by the violent conflict (Colombia Sostenible).
  - Argentina: revenues go to the social security system, as well as transport infrastructure investments, the national housing fund, and to provinces
- Chile: Not earmarked; for education and health initiatives
- Mexico: part of a strategy to raise revenues in the context of decreasing oil revenues and to compatible with energy sector liberalization plans



Country	Carbon Tax Goals
Argentina	Revenue neutral
Chile	<ul> <li>Finance educational reform</li> <li>Establish framework for other green taxes</li> </ul>
Colombia	<ul><li>Discourage the use of fossil fuels</li><li>Induce technological innovation</li></ul>
Mexico	<ul><li>Reduce GHG emissions</li><li>Increase government revenues</li></ul>

Notes: Chile also has a local pollutants tax levied on new, light and medium duty vehicles

Carbon price, coverage and revenues generated by carbon taxes



## A Case for Carbon Pricing Revenue Recycling in LAC

- A carbon tax consistent with the Paris Agreement goals could generate more than US\$100 billion revenue per year in the region, enough to close the water, sanitation or electricity access gap
- Existing cash transfer programs can be used to mitigate the negative impact of carbon taxes on poor and vulnerable households

	Median	Argentina	Bolivia	Brazil	Chile	Colombia	Costa Rica	Ecuador	El Salvador	Guatemala	Honduras	Mexico	Nicaragua	Panama	Paraguay	Peru	Uruguay
Perfect compensation	16	20	19	14	16	15	14	17	17	15	11	16	15	13	20	18	18
Poverty- targeted rebate	25	40	40	24	30	22	21	25	22	24	36	24	27	23	64	22	36
Expanded- enrolees rebate	27	50	50	28	38	23	22	26	22	27	77	25	32	27	133	23	41
Current- enrolees rebate	27	50	50	28	38	23	22	26	22	27	76	25	32	27	129	23	38
Universal rebate	39	49	48	34	39	38	36	42	42	37	28	39	37	32	51	45	46

Table 2 | Percentage of carbon revenue required to make the bottom 40% break even using different policy packages, per country

- Depending on the objectives of the policy, governments in the LAC can adopt different recycling options
  - Universal rebate
  - Improving the coverage of the existing cash transfer schemes
  - Combination of cash transfers, in-kind transfers and tax rebates



Source: Cash Transfers for pro-poor carbon taxes in LAC; https://www-naturecom.libproxy-wb.imf.org/articles/s41893-019-0385-0#Sec7

# Key messages

- 1. There is a growing set of experiences and awareness on using carbon revenues throughout the world as a new attractive source of domestic public finance.
- 2. Designing a use of domestic carbon revenues right can bring **environmental**, **social**, **economic and fiscal benefits** by encouraging **the redirection of financial flows** to be consistent with the national pathway towards a low-carbon and climate resilient economy and potentially support just transition.
- 3. There is no silver bullet for revenue use: governments must define their own mix according to their policy objectives and national circumstances
- 4. Carbon pricing revenues can also be used to reduce the economic disincentives inherent in tax-benefit systems. This can in principle give rise to a 'double dividend' which can be weighed against the deadweight losses from carbon pricing itself.
- 5. Setting a carbon revenues use framework right can foster public acceptance and avoid the risk of unpopularity : a good communication on social, environmental and economic benefits associated with carbon revenues is key. Visible use of carbon revenues is often key, noting trade-offs across various uses.
- 6. There is a need of a more integrated governance approach of carbon revenues management : carbon revenues are a meeting point for Finance and Environment approaches to low-carbon development.



# **Further information**

Using Carbon Revenues: https://openknowledge.worldbank.org/handle/10986/ 32247



www.pmiclimate.org www.carbonpricingleadership.org



# Carbon Pricing in LAC



