Energy Planning Frameworks for Mobilizing Finance for the Energy Transition

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Latin America and the Caribbean challenges

Energy Planning Frameworks

IDB collaboration

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The IDBG is structured in 3 different organization to address the needs of Latin America and the Caribbean

The IDB Energy Division fosters the region's energy transition and its sustainable development goals

Regional presence

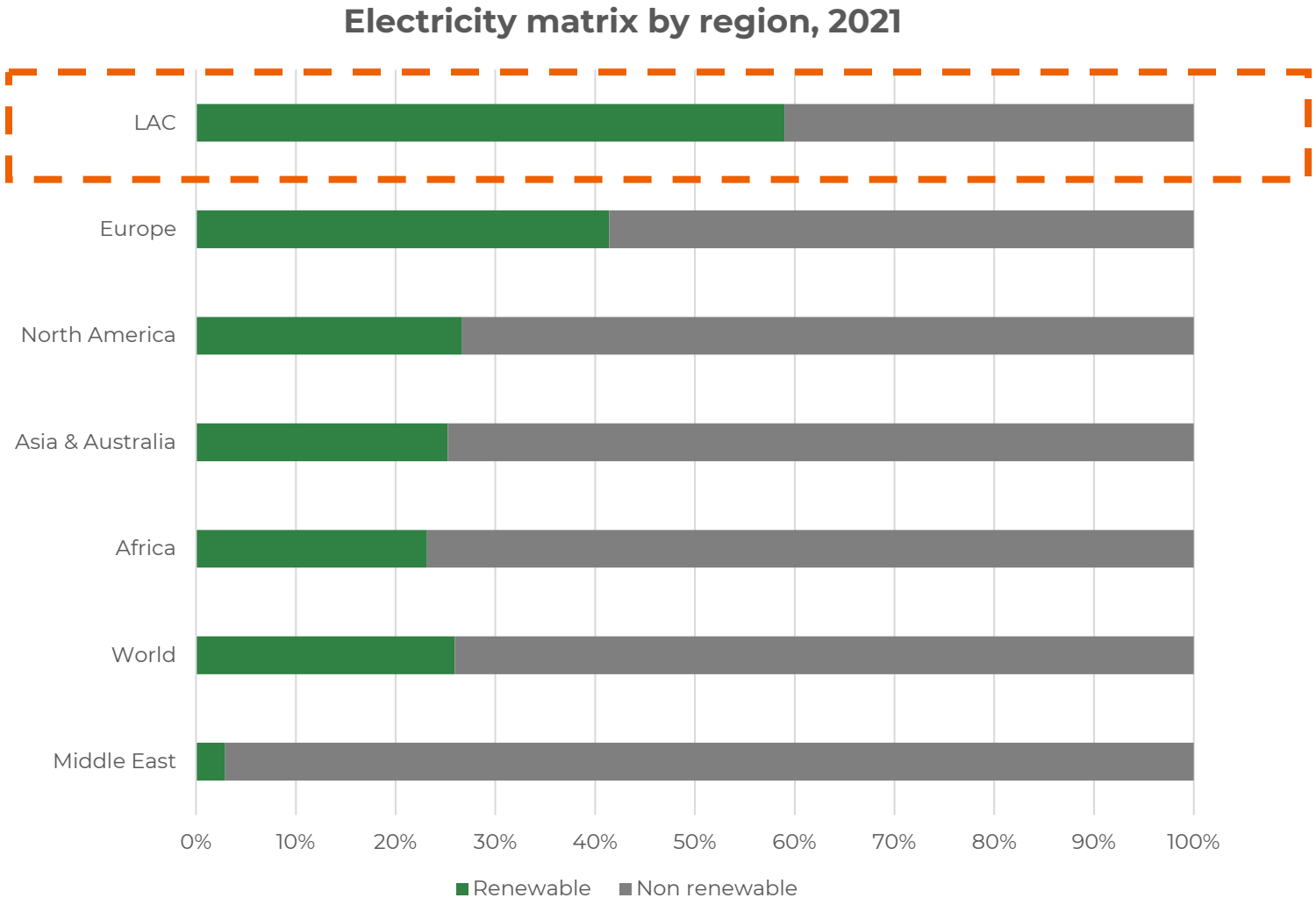
We support Latin America and the Caribbean achieve

a **resilient, low-carbon and inclusive energy transition**,

to enhance competitiveness and

improve the quality of life of its inhabitants

In Latin America and the Caribbean, ~60% of electricity generated comes from clean energy.



Source: Hub de Energía (2023), sieLAC-OLADE (2023), IEA (2023).

The region has important challenges to materialize a just, secure and affordable energy transition

Investment needs

Increase from 66 billion in 2022
to at least 150 billion a year by 2030*

Energy prices

Electricity prices 143 USD/MWh
vs. 106 USD/MWh (USA), 93 USD/MWh (China)

Energy access

16 million without access to electricity
81 million without access to clean cooking fuels

Electricity losses

17% on average
US$ 10-16 billion/year lost

(*) Required to meet the commitments of the Paris Agreement, according to IEA estimates.

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Planning is fundamental to identify investment needs

Challenges in current planning frameworks

- Higher levels of uncertainty (technological, climate, demand).
- Restrictions not fully considered in traditional planning efforts (permitting, tech).
- Power systems planning not fully aligned with long term energy planning (net zero).
- Multi-energy-carrier or economy wide planning not commonly used in the region.

Regulation must translate planning into investment

Planning	Regulation
 	 
Renewable energy expansion	Auctions, permitting, financing
Transmission expansion	Permitting, financing
Distribution and access	Distributed Energy Resources Rural electrification
Energy sector decarbonization	H2, Evs, Industry, Aviation, Shipping

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We support increasing policy ambition: Renewables in Latin America and the Caribbean initiative (RELAC)

RELAC

Most ambitious RE target for any group of countries:
16 LAC countries committing to at least
80% share of renewable energies
in their electricity mix by 2030

	Renewable share of installed capacity	Renewable share in electricity generated
Start 2019	58.0%	66.0%
As of 2022	62.0%	69.0%
Target 2030	**73.0%**	**80.0%**

RELAC Knowledge Transfer: Energy storage technical visit to the National Renewable Energy Lab of the US

IDB supports the integration of the continent

Interconnection initiatives

SIEPAC — Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica and Panamá

SINEA — Colombia, Ecuador, Peru, Bolivia and Chile

SIESUR — Brazil, Chile, Argentina, Uruguay and Paraguay

ARCONORTE — Brazil, Guyana, Suriname and French Guayana

IDB Support for Energy Planning Studies

Bolivia - National Energy Plan (2021-2050)

Brazil – Energy scenarios for an efficient energy transition (2024-2050)

Panamá - Cost-benefit analysis of the energy transition (2024-2050)

Dominican Republic - Planning studies, including BESS, Coal retirement, decarbonization

Barbados - Integrated Resource and Resilience Plan – 2020 and 2023

Bahamas - Integrated Resource and Resilience Plan (IRRP) - 2023

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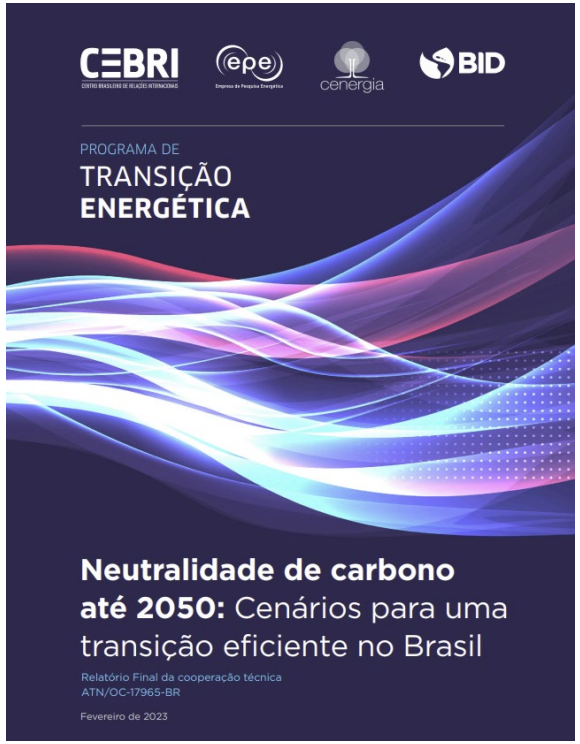
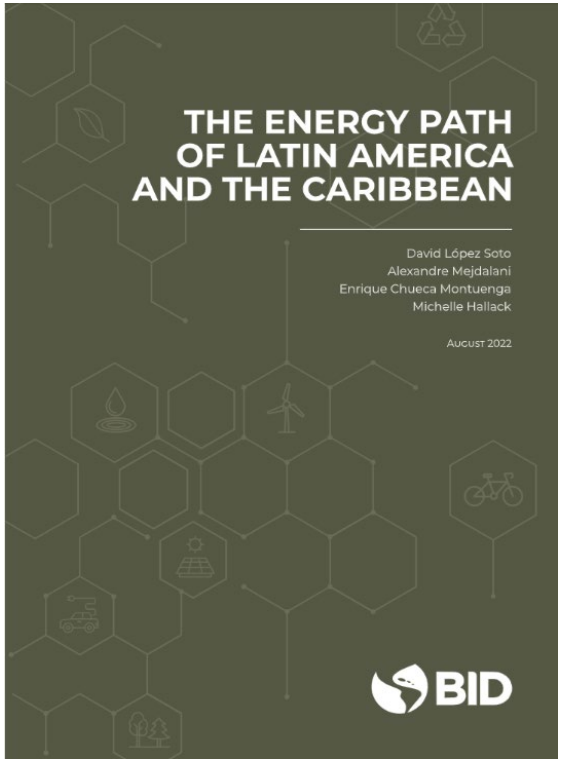
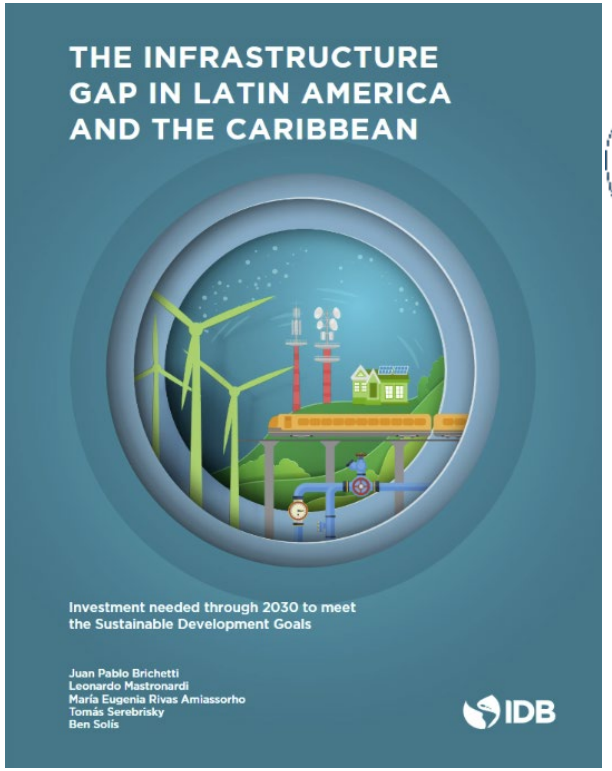
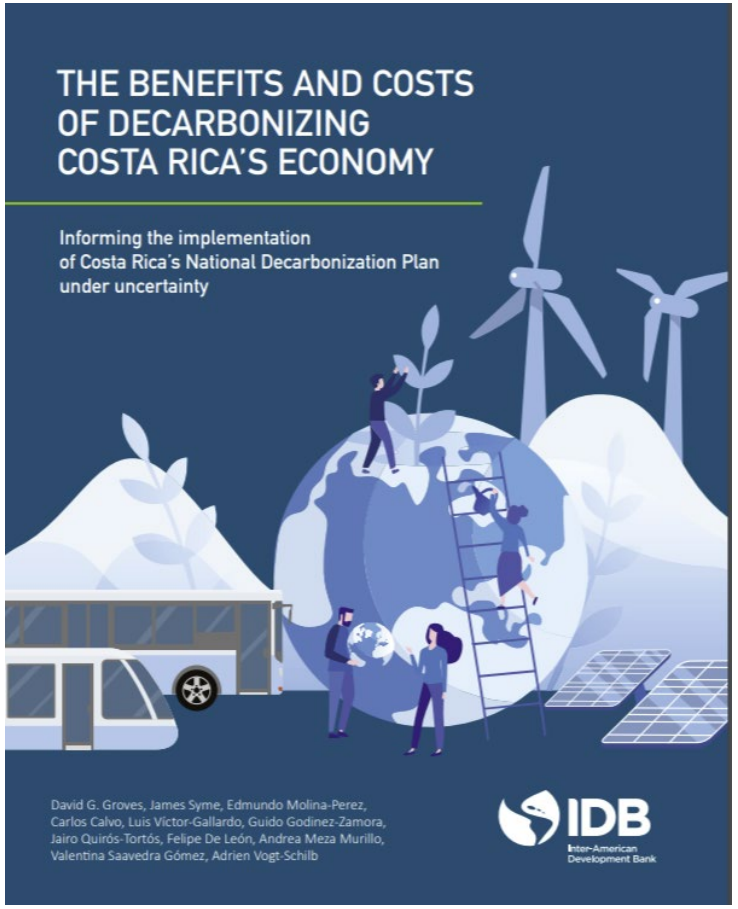






Economic evaluations of decarbonization



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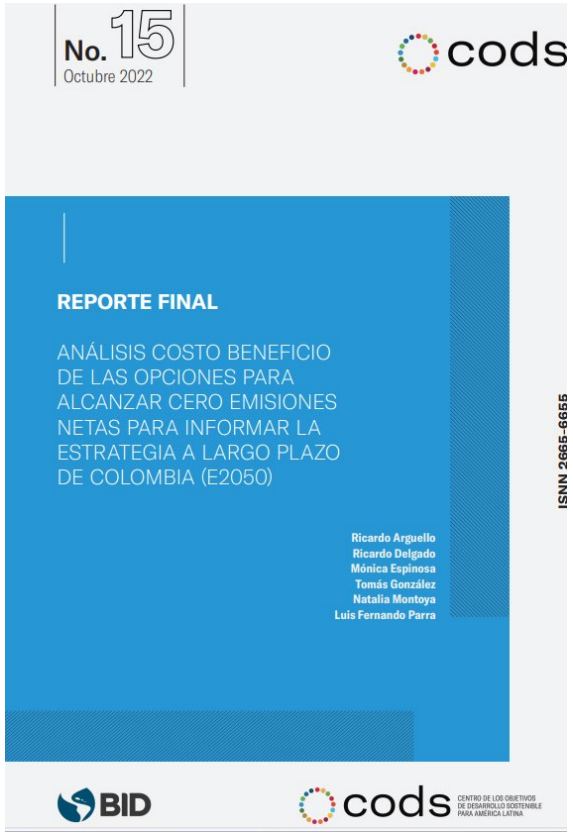
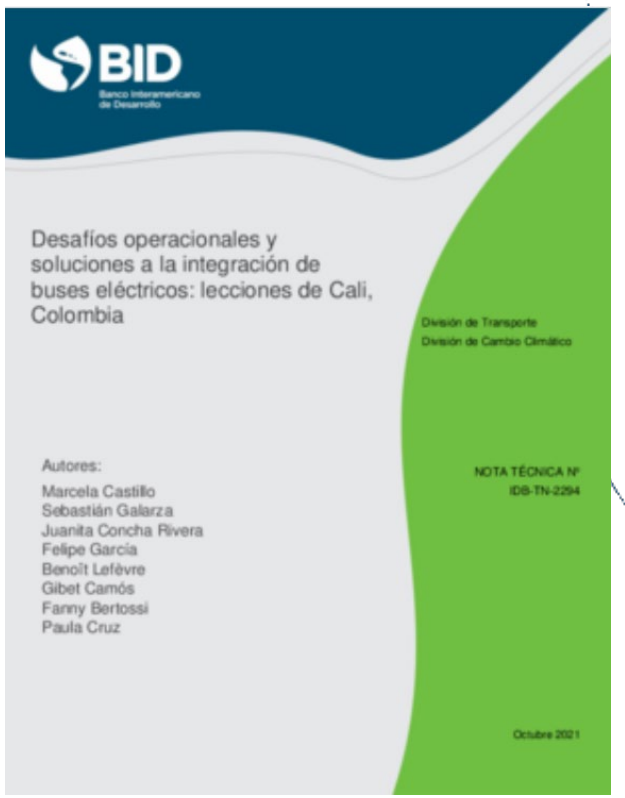
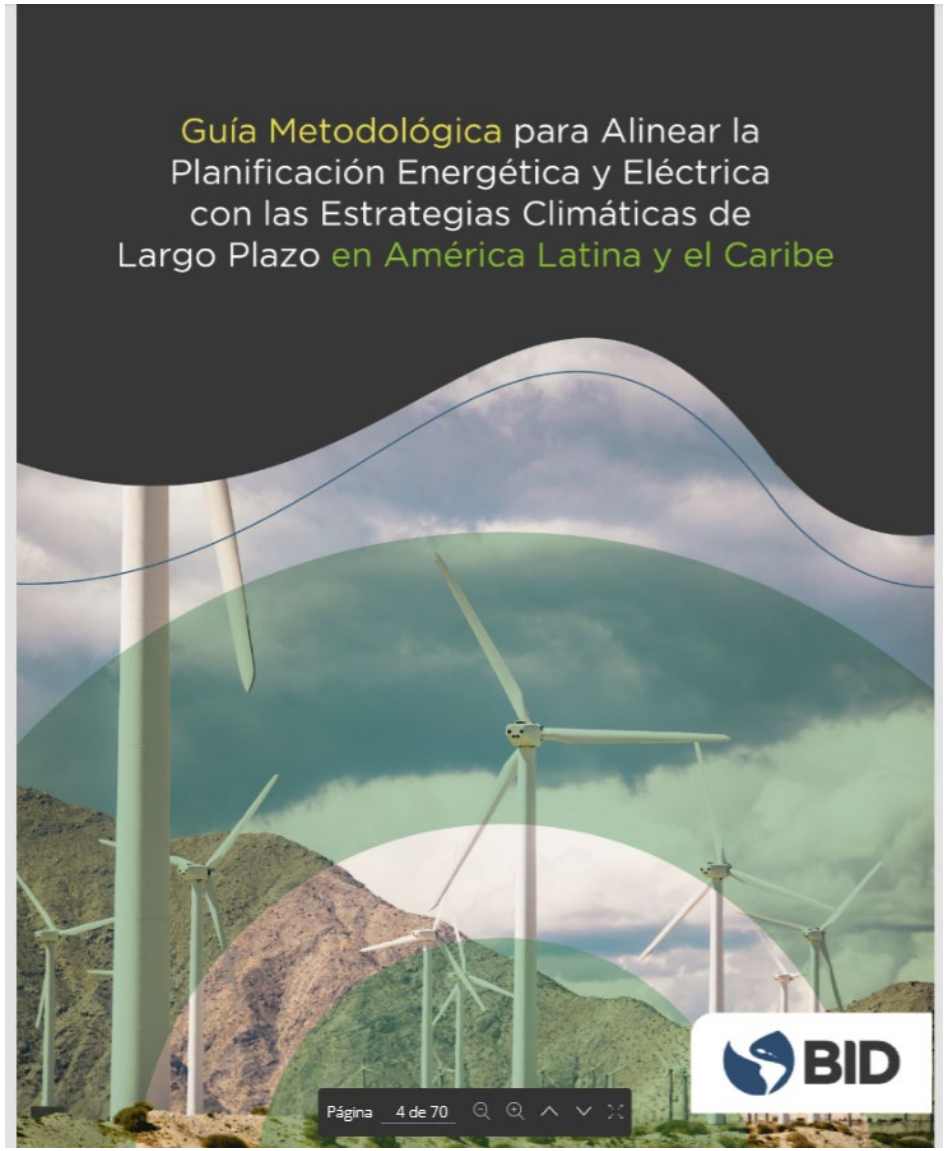




Methodological guide



Thank you

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