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Case Studies and Best Practice Examples October 2020

Case studies on the Benefits of Energy Retrofitting of Buildings in Latin America

Buildings and Construction

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Featured Region(s): **Latin America**

Featured Cities: **San Salvador, Buenos Aires, Curitiba, Lima, Santiago de Chile, Ciudad de México, Rio de Janeiro, Guadalajara**

This guide showcases examples of energy retrofitting projects and policies targeting municipal buildings and private buildings in Latin American cities, providing a reference to inform and inspire other cities in the region. It introduces what each of these projects as policies has achieved, and the benefits they have brought. The guide is also available in Spanish and Portuguese.

Examples include:

- **Rio de Janeiro's energy retrofits in schools:** A pilot project switched to LED lighting and improved the efficiency of air conditioners in five schools with the best potential for improvements, and developed effective business models. The investments will reduce energy consumption by 12% (saving US $6,200 per school), with a return period of eight years. It has since been expanded to other schools, financed with help from the savings of existing projects.

- **Santiago's retrofit of the Governor's office:** The Governor's office is one of the 100+ historical buildings in Santiago under the control of the government of the Santiago Metropolitan Region, built in 1916. Energy efficiency measures were implemented as part of a restoration project, focusing on passive measures that reduce energy consumption and improve thermal comfort without making changes to the design of the building.

- **Mexico City's Efficient Buildings Challenge:** The Existing Buildings Challenge supports the owners of private buildings to implement energy efficiency improvements, to reduce energy

consumption, through training and free technical advice. It also encourages the development of renewable energy technologies, aligned with the government's Solar City strategy, and aims to support new green markets and sources of employment.

The guide also briefly explains the benefits of retrofits, including for health and wellbeing, energy security and energy savings. The toolkit introduced in this report to calculate the social, economic and environmental benefits to help make the case for retrofit projects has been replaced by the Healthy and Efficient Retrofitted Buildings (HERB) tool.