

An aerial night view of a densely populated city, likely São Paulo, Brazil, showing a vast expanse of illuminated buildings and streets. The sky is a mix of deep blue and purple, suggesting dusk or dawn. A large white rectangular frame is superimposed over the center of the image, containing the title text.

Finding Answers in Land



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Local Solutions: Financing Climate Action through Land Value Capture

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Overview

- Why land value capture?
- Impact of subnational climate action on land values
- Applicable LVC instruments for climate action
- Examples
- Considerations for Implementation

Key Messages

- Many public actions on climate mitigation and adaptation have a positive impact on land values
- Public action should generate public benefit. LVC provides the mechanism to recover this benefit to advance multiple goals (climate, equity, fiscal health, etc.)
- As an own-source revenue, LVC provides more autonomy over the management of finances at the local level than other revenue streams and can be leveraged to access other financing sources
- Opportunity for a ‘virtuous cycle’: Climate investments can create new opportunities for urban development, which can then be used to incorporate additional climate-positive elements

Subnational climate action impacts land values

- **Green infrastructure:**
 - Urban trees
 - Parks and green space
 - Stormwater management/flood controls
- **Hard infrastructure:**
 - Sea walls/Levees/Coastal armoring
- **Low/no-carbon mobility options**
- **Energy-efficient buildings**
- **Regulatory actions: Land-use and zoning designations**
 - Resilience Zoning
 - Transit Oriented Development (TOD)



Public Action on Climate Change and Land Values

Three generalized categories:

- 1. Publicly Protected:** Public intervention to protect areas from the extreme impacts of climate change, such as coastal flood protection, will prevent a loss of property values, and depending on market forces, increase property values.
- 2. Co-benefited by Resilience:** Low carbon, climate resilient development – in the form of people-oriented urban form, high-quality greenspace, public transportation, and energy efficient buildings – brings additional amenities that are reflected in higher land values.
- 3. Climate Advantaged:** Climate change will make some land more valuable due natural advantages, such as geography and topography, that make human settlements and other uses more favorable. Local governments may choose to allow for greater density in areas less vulnerable to the impacts of climate change in order to accommodate people displaced from more vulnerable areas

LVC is the mechanism to recover public investments

Land value capture is a policy approach that enables communities to recover and reinvest land value increases that result from public investment and government actions.

Value Capture Process



Climate Action and Land Value Uplift



Urban trees & tree cover

Portland: +\$12k within 30m

Cali: +\$8 million cumulative impact

Florida: +\$9,000 for areas with higher tree cover index



Green infra. & open space

St. Louis: +1% for every 1,000 ft. closer to park

Buenos Aires: +30% for daylighting streams

Cali: +5.4% for proximity to green stormwater infra.



Urban form

USA: +\$3,000 for 1 point increase in walkability score



Public transportation

Beijing: +20% for proximity to rail

Washington, DC: +19% for proximity to METRO

For more information, see Lincoln Institute Working Papers, including:

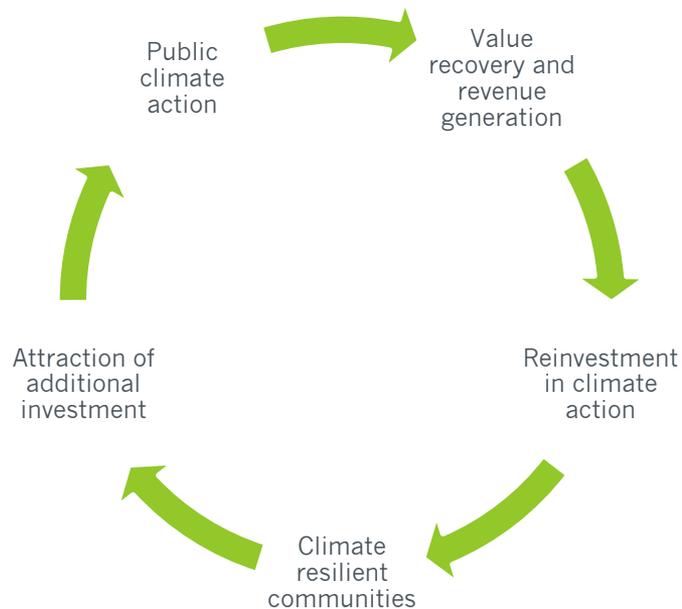
- Kiel (2021): [Climate Change Adaptation and Property Values: A Survey of the Literature](#)
- Maldonado, et al. (2020): [Políticas de Suelo, Derecho Urbanístico y Cambio Climático](#)
- Vergel-Tovar & Welch (2019): [Are Land Use and Development Changes Associated with Value Capture a Result of Bus Rapid Transit \(BRT\) Investments?](#)
- Grafakos, et al. (2019): [Exploring the Use of Land Value Capture Instruments for Green Resilient Infrastructure Benefits: A Framework Applied in Cali, Colombia](#)
- Van der Krabben, et. Al (2019): [Financing Transit Oriented Development by Value Capture](#)

Value Capture Tools for Climate Action

- Special Assessments
- Charges on Building Rights
- Impact fees
- Transfer of Development Rights
- Land Readjustment
- Property Tax



A Virtuous Cycle of Value Utilization



Once land value increases resulting from public action on climate change have been generated, identified, and recovered, they can be reinvested in yet more equitable, climate resilient actions.

Examples of LVC for Climate Action

Boston
Developer contributions for flood protection



Boston.com

Curitiba
Transfer of development rights for flood protection and resiliency



Likealocalguide.com



Yahoo News

Quito
Incentives for TOD and energy/water efficiency



Getty Images

Tokyo
Land readjustment for light rail extensions and TOD

Considerations for Implementation

- Successful LVC approaches require an enabling environment that consists of complementary policies, institutional capacity, and political will.
- The success of LVC approaches depends on the degree to which they are understood and accepted by the public.
- Governments should view LVC as one of multiple own-source revenue streams available, which should be utilized to the greatest extent possible.
- *It should be done, it can be done, it has been done, and it may be done better...* More research is needed to better understand the relationship between climate action and property values.

Additional Resources

- [Video: Land Value Capture Explained.](#)
- [Land-based Climate Finance Webpage](#)
- [Land Value Return: Tools to Finance Our Urban Future](#)
- [Implementing Value Capture in Latin America: Policies and Tools for Urban Development](#)
- [Exploring the Use of Land Value Capture Instruments for Green Resilient Infrastructure Benefits: A Framework Applied in Cali, Colombia](#)
- Forthcoming [OECD-Lincoln Institute Global Compendium of Land Value Capture](#)

Thank you!

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