

Climate Finance and Sustainable Cities



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ABSTRACT

Climate Finance refers to the available funds, financing and system for financing that supports various projects and dynamisms aimed at assuage and adapting to climate change. It is a relevant aspect of global attempt to address the provocations posed by climate change such as high temperature, bad weather and deterioration of the environment. Climate finance plays an important role in assist and booster up for the development of sustainable societies. As the world population continue to having a lot of houses, offices, factories etc. Cities became a center for both the threat and explication related to climate change. Sustainable cities aim to reduce their ecological foot print, enhance persistence to climate impact and improve overall quality of life for inhabitant. Purpose of this paper is how to drive climate finance for development of sustainable societies. Funding from climate finance sources can support install of renewable sources such as solar cell panels and wind mill in urban areas. It can also be used to improve eco-friendly in buildings and transportation system, reducing atmosphere pollutants and promoting ecological.

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INTRODUCTION

The world is experiencing accelerated urbanization navigated by various factors such as social, economic and environmental changes. Currently 56% of the world population live in cities - 4.4 billion inhabitants live in cities. This trend is expected to continue, with the urban population more than doubling its current size by 2050, at which point nearly 7 to 10 people live in cities. Climate change also affects the living especially the people living in cities in economically developing nations, as it commits to increase in the price of food, water, energy. Financing Climate Futures, Rethinking Infrastructure. World Urbanization Prospects for infrastructure investment and sustainable development in cities remain, particularly in developing countries, such as:

1. Lack of financial autonomy (e.g., taxation policy managed by the national government, cities not permitted to take on debt);
2. Poor creditworthiness or lack of credit, resulting in limited access to the global financial market;
3. Regulations enacted by cities being bound by national priorities;
4. International sources of climate finance through bilateral and multilateral channels;
5. Innovative financial instruments that can help cities to collaborate more closely with financial institutions.

Climate finance plays a pivotal role in hold up sustainable cities by contributing funds for campaign and initiatives that promote climate persistence, eco-friendly and sustainable urban planning. Sustainable cities aim to reduce conservatory, enhance energy efficiency, improve urban transportation service, preserve green areas, and help in the wellbeing of residents while deal in climate change challenges. Climate finance supports cities in adjusting to the consequences to the climate change, such as rise in sea level, poor weather, and torridity. Investments may be allocated to repairing roads and bridges to upgrade power lines and water treatment facilities, flood management and urban planning that takes climate risks into account, making cities more buoyant to future protest city often prioritize environmentally friendly public transportation system. Climate finance investment can be used for develop electric vehicle, public transport, and promote for the use of active transportation and human powered transportation variants such as walking, bicycling, hand carts, push scooters, skateboards, and reducing exhalation from private transport.



RESEARCH OBJECTIVES

The objective of the study is to enrich the awareness in a way to speed up the the action of a country or its government and distribution of climate finance for the growth of sustainable cities.

REVIEW OF LITERATURE

This literature review was undertaken at the institution stage of the climate change .The focus of the review was to provide a support for evaluate climate change investment performance. There is a large volume of literature on climate change that can be accessed over the internet but it is possible to select a representative only. A schedule of events and capital do not permit a through research. Throughout 40 countries currently provide climate change assistance to developing countries. As this research review indentify the keytrends and common approaches that can help for the evaluation.

PLANNING AND INVESTMENT IN SUSTAINABLE CITIES

Planning and investing in sustainable cities are a pivotal aspect of urban planning in the 21st century. With the rapid exploitational growth of urbanization and the associated challenges such as climate change, resource exhaustion, and social disparity. It is important to create cities that are environmentally sustainable, socially, and economically. Here are some key concerns for planning and investment in sustainable cities.

Urbanistic

Developing sustainable cities starts with broad urban planning that considers the long term collision of development. This involves creating well designed, compressed, and multipurpose urban areas to minimize and bring down the need for long commutation. Effective urban planning and land use regulations can encourage sustainable architecture and construction designs.

Ecological infrastructure

Plough money in green structure is pivotal for sustainable cities. This includes a rain barrel up against a house, a row of trees along a major city street or greening an alleyway that helps improve atmospheric condition, air purity, air pollution, alleviate the urban heat island effect, promote ecosystem diversity and provide recreational opportunities for inhabitants.

Public Transit System

Well-organised and available car decency, blockage, and greenhouse gas emissions, Investments in mass transit such as taxi, buses, commuter trains , monorails and tramways are essential for sustainable urban motility.



Capacity development and permissive environments

These are the essential components to organize and ransom climate finance for cities. As cities play a vital role in alleviate and adapting to climate change, they require reserves to implement sustainable projects. some of the capacity development and permissive environments that provide climate finance for cities.

Capacity development

To increase the capacity of city administrators, legislator, and relevant contributors is pivotal for effective climate finance management. Capacity development initiatives can be provided by knowledge- sharing opportunities, technical assistance, training in order to build expertise in climate related projects.

Knowledge management:

Reliable information is essential for assessing climate amenability, identifying cities development priority projects, and attracting climate finance. Developing sound data collection and integrated system can help cities access climate finance by providing objectives for funding.

Institutional Capacity

Building strong and accountable institutions is important for efficient climate finance delivery. streamlining departmental processes, improving corporate principles, and structuring clear roles and responsibilities among relevant city departments.

SOURCES OF CLIMATE FINANCE FOR CITIES

There is no sole source of finance that can meet all needs of cities. The sources of finance used for urban projects are determined by number of factors, such as transmission risk, political risk etc., and the various sources of climate finance includes international aid, government budgets, private investments, multilateral development banks, climate funds, private investments etc., these are various sources aim to pool funds and the address the global challenge of climate change. Green bonds are generally issued by the governments or private companies in order to raise capital such as for various types of projects, sustainable infrastructure. Investors in green bonds are attracted to the social impact or the environmental projects funded by these bonds. Although local tax is a potential option for mobilizing financial resources, in many countries taxation policy is managed at the national level and even local taxes require state authorization, so mayors have a limited capacity to mobilize a meaningful amount of resources.

RESEARCH FINDINGS



Although cities play a crucial role to a low-discharge and climate volatile future, a lack of finance and access to finance is a major hurdle preventing cities, particularly in developing countries, from perceive their sustainability purpose. Even existing development finance institutions and multilateral development banks are often constrained by their mandates. Long complex application procedures of international climate funds in order to access finance

SUGGESTIONS

1. Cities can use climate bonds to raise funds for financing sustainable architecture projects. These bonds are designed to support eco-friendly initiatives.
2. Allocating the climate finance in the eco-friendly and efficient public transportation system such as bicycle, walking, electric cars, electric/hybrid vehicles, tram, car pooling, bus. This help in decreasing the emission of harmful green house gases and can make air cleaner, improve health.
3. Investing in green infrastructure such as infiltration planters, trees, tree boxes, permeable pavements, rain gardens. So that they can promote urban liveability and add to communities
4. Offer training and capacity development programs for mayors and collaborator to effectively access and manage climate finance opportunities.
5. Allocate climate finance into waste management system and recycling initiatives to reduce pollution , conserve resources, and prevent damage to ecosystems.

REFERENCES

1. Giglio, S.; Kelly, B.; Stroebe, J. Climate finance. *Annu. Rev. Financ. Econ.* 2021, *13*, 15–36.
2. Choi, D.; Gao, Z.; Jiang, W. Attention to global warming. *Rev. Financ. Stud.* 2020, *33*, 1112–1145.
3. Heinkel, R.; Kraus, A.; Zechner, J. The effect of green investment on corporate behavior. *J. Financ. Quant. Anal.* 2001, *36*, 431–449.
4. Reboredo, J.C.; Ugolini, A. Price connectedness between green bond and financial markets. *Econ. Model.* 2020, *88*, 25–38.
5. Pew Research Center. In Response to Climate Change, Citizens in Advanced Economies Are Willing To Alter How They Live and Work. 2021. Available online: <https://www.pewresearch.org/global/2021/09/14/in-response-to-climate-change-citizens-in-advanced-economies-are-willing-to-alter-how-they-live-and-work> (accessed on 2 January 2023).
6. UNFCCC. Decision 1/CP.21: Adoption of the Paris Agreement, UNFCCC Secretariat, Bonn. 2015. Available online: <https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf> (accessed on 2 January 2023).
7. OECD. *Aggregate Trends of Climate Finance Provided and Mobilised by Developed Countries in 2013–2020*; OECD Publishing: Paris, France, 2022.

