U4SSC deliverables

Guidelines on tools and mechanisms to finance smart sustainable cities projects

Compendium of practices on innovative financing for smart sustainable cities projects

Presented by: Gulnara ROLL, UNECE 7 December 2021

















































Approach used for the Compendium

- The UNECE PPPP model that can be used to attract investors from the private sector who are looking for "impact investing" opportunities. PPPPs are a type of public-private partnership (PPP) designed to implement the SDGs. The "people-first" approach to PPPs helps to overcome weaknesses in the way the traditional PPP model is often implemented, particularly the lack of an explicit focus on generating public value, when privatesector partners prioritize profit.



Different sources of funding and financing

Funding sources

Property taxes Business taxes Municipal income tax Tolls and user charges "Pay-for-performance" Asset sales and lease **Government grants**

Financing sources Commercial banks Development banks Municipal or project bonds Green bonds Tax increment financing Leasing and vendor finance **Credit guarantees**



Compendium of Practices on Innovative Financing for Smart Sustainable Cities Projects

- 15 cases that **demonstrate financing** mechanisms to implement sustainable and smart city projects.
- The cases were selected from initially received 40 submissions from 23 countries received between 10.2020-01.2021



Economic Commission for Europe

Committee on Urban Development, Housing and Land Management

Eighty-second session Geneva, 6-8 October 2021 Item 7(a) of the provisional agenda Review of the implementation of the programmes of work 2020 and 2021 Implementation of the United for Smart Sustainable Cities Initiative

Compendium of Practices on Innovative Financing

Note by the Secretariat

Summarv

The United Nations Economic Commission for Europe (UNECE) is one of the 16 United Nations agencies who are members of the United for Smart Sustainable Cities (U4SSC), an initiative coordinated by the International Telecommunication Union (ITU), UNECE, and the United Nations Human Settlement Programme (UN-Habitat), to achieve Sustainable Development Goal (SDG) 11. UNECE activities within the U4SSC initiative are implemented as part of the Committee on Urban Development, Housing and Land Management programme of work.

In 2020-2021, the Committee secretariat was leading the U4SSC thematic group on Innovative Financing which compiled the "Compendium of Practices on Innovative Financing". This document contains the Compendium.

The Committee is invited to take note of the Compendium.

Example: Health

Elaziğ Fethi Sekin City Hospital Elaziğ, Turkey

Financial Aspect

Project Cost - USD 400 million

Financed through **green and social bonds** for an infrastructure project raised by private consortium

Status : On-going - maintenance







Example: Health

- hospital improves the quality and inclusiveness of healthcare services to the region with a total population of approximately 3.4 million people
- Use of smart technology to provide services
- uses trigeneration units to reduce GHG emissions and the project has a zero-waste certificate from the Ministry of Environment







Examples: Energy

First Solar Energy Cooperative in the Rio Favela Informal Settlements, Rio de Janeiro, Brazil

Financial Aspect

Public partner: City of Rio de Janeiro (technical

cooperation to create studies and policies for replicating the model)

Private partners: Grants and donations of materials from LONGI Solar, Local Power, Goodwe, Solarize & Canal Solar, International Cooperatives Alliance, Open Society **Foundations**

Status : On-going - maintenance





Example: Energy

- reduce energy costs for the population using renewable source
- community-based and sustainable energy model, aligned with the traditions of collective action and self-management of these favelas
- also includes solar installations, professional training to residents as electricians and solar installers, and workshops for children on sustainability



36 families





Example: Housing

Rehabilitation of Plaza Redonda Valencia, Spain

Financial Aspect

Public partner: EUR 10 million from the city
Private partners: EUR 4.5 million private
homeowners to the rehabilitate the interior of the
plaza

Status : Implemented







Example: Housing

- improve living conditions of homeowners and increase economic activities in the commercial spaces
- improve essential services such as access to water, sanitation and electricity
- conservation and preservation of a historical building
- renovation of the inner city was a positive factor for business and tourism







Example: Transportation

TOSA Electric Bus Fleet Geneva, Switzerland

Financial Aspect USD 38 million (USD 33 million – cost of the project + USD 5 million – cost of the prototype) Public partner: TPG, Canton of Geneva, SIG, Government of Switzerland Private partners: ABB

Status : Implemented







Example: Transportation

- reduces three types of pollution: air pollution (no particle emissions), noise pollution (50 per cent quieter than a diesel bus) and visual pollution (no overhead lines)
- longer service life (20 years instead of the normal 15 years for a diesel bus)
- more comfortable experience for passengers and drivers
- generate new employment opportunities







Conclusion

- This compendium enables us to understand the different financial mechanisms- from PPPPs to blended finance- to implement projects
- Highlights the importance of effective and transparent legal and institutional frameworks to attract reliable investment partners
- Private sector and the business community are important partners in achieving SDGs, particularly in building smart sustainable cities





For more information, please contact:

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Thank you!







