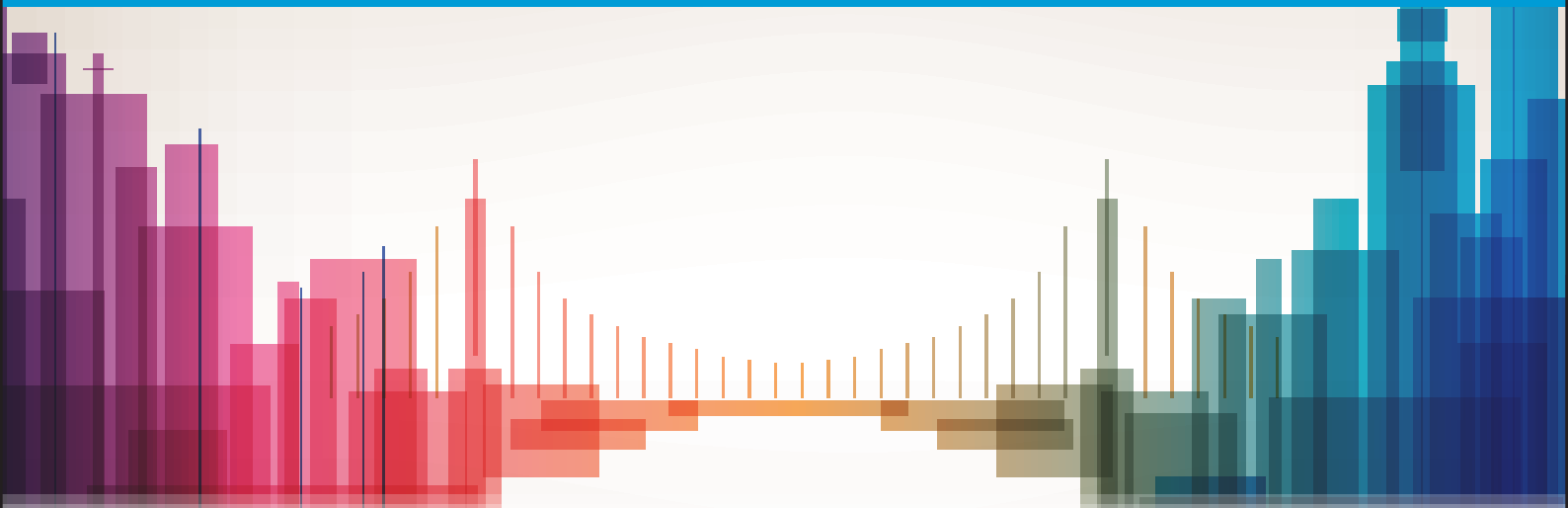


Guidelines on tools and mechanisms to finance Smart Sustainable Cities projects

A U4SSC deliverable



Empowered lives.
Resilient nations.



United Nations
Framework Convention on
Climate Change





Guidelines on tools and mechanisms to finance Smart Sustainable Cities projects

A U4SSC deliverable

Foreword

This publication was developed within the framework of the United for Smart Sustainable Cities (U4SSC) initiative.

Acknowledgements

In 2016, the United Nations Economic Commission for Europe (UNECE), together with the International Telecommunication Union (ITU), launched the global initiative United for Smart Sustainable Cities (U4SSC). One of the aims of U4SSC is to develop guidance and training materials for city leaders to make their cities smarter and more sustainable and to support the achievement of international agreements, such as the 2030 Agenda for Sustainable Development (2030 Agenda) and the New Urban Agenda.

In 2017, under the umbrella of U4SSC, the secretariat of the Committee started developing the “Guidelines on tools and mechanisms to finance smart sustainable cities”.

UNECE would like to extend its sincere gratitude to all co-authors including Raul Garcia Rodriguez (Deloitte Advisory Director for Sustainability Services CZ&SK, and Sustainable Real Estate Leader), Pedro Neves (Member of the UNECE Business Advisory Board and SDG Task Force Leader for PPP Unit at the UNECE) and Nadiia Olarean (Yeremenko) (UNECE Consultant).

UNECE would also like to thank Max Goodall and Jean-Marie McAdams (UNECE Consultants) for their inputs to the discussion along with relevant feedback and/or review.

The UNECE wish to thank the U4SSC management team: Nasser Al Marzouqi (U4SSC Chair), H.E. Ms Katrina Naut, Abdurahman M. Al Hassan, Paolo Gemma, Tania Marcos and Giampiero Bambagioni (U4SSC Vice-Chair) for their assistance and contributions.

The UNECE is also grateful to the contributing organizations and representative: Oliver Hillel from the Convention on Biological Diversity (CBD), Lucy Winchester and Vera Kiss from the Economic Commission for Latin America and the Caribbean (ECLAC), Simone Borelli from the Food and Agriculture Organization (FAO), Cristina Buetti and Mythili Menon (ITU), Iryna Usava from the United Nations Development Programme (UNDP), James Murombedzi from the United Nations Economic Commission for Africa (UNECA), Guilherme Canela from the Regional Bureau for Sciences in Latin America and the Caribbean of the United Nations Educational, Scientific and Cultural Organization (UNESCO), Martina Otto and Sharon Gil from United Nations Environment Programme (UNEP), Matthew Ulterioro from the United Nations Environment Programme Finance Initiative (UNEP-FI), Motsomi Maletjane from the United Nations Framework Convention for Climate Change (UNFCCC), Andre Dzikus, Tania Lim, Jean Yves and Robert Lewis-Lettington from the United Nations Human Settlements Programme (UN-Habitat), Mark Draeck, Katarina Barunica Spoljaric and Nicholas Dehod from the United Nations Industrial Development Organization (UNIDO), William Kennedy

from the United Nations Office for Partnerships (UNOP), Soumaya Ben Dhaou and Judy Backhouse from the United Nations University – Operating Unit on Policy-Driven Electronic Governance (UNU-EGOV), Sylvia Hordosch from the United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women) and Alexander Baklanov from the World Meteorological Organization (WMO).

Disclaimer

The opinions expressed in this publication are those of the authors and do not necessarily represent the views of their respective organizations or U4SSC members. The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the secretariat of the United Nations concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries regarding its economic system or degree of development. Excerpts may be reproduced without authorisation, on condition that the source is indicated. The mention of any firm, product, service, or licensed process does not imply endorsement or criticism by the United Nations. The study conducted in this report is based on extensive literature review, interviews and voluntary written contributions from stakeholders.

ISBN: 978-92-61-34461-0

© CBD, ECLAC, FAO, ITU, UNDP, UNECA, UNECE, UNESCO, UNEP, UNEP-FI, UNFCCC, UN-Habitat, UNIDO, UNOP, UNU-EGOV, UN-Women and WMO.

Abbreviations

CAPEX	capital expenditures
CO2	carbon dioxide
COVID-19	coronavirus disease of 2019
DUP	detailed urban plan
ESG	environmental, social and corporate governance
ESG	environmental, social and governance
GIS	geographic information system
GUP	general urban plan
HII	hybrid investment instruments
ICTs	information and communication technologies
IFC	International Finance Corporation
IGO	inter-governmental organization
IRR	internal rate of return
IoT	Internet of Things
ITU	International Telecommunication Union
KPIs	key performance indicators
NGO	non-governmental organization
NPV	net present value
OPEX	operating expense
PACE	property-assessed clean-energy
PPP	public-private partnership
PPPP	people-first public private partnership
RDP	regional development plan
S&P	Standard & Poor's
SDGs	Sustainable Development Goals
SPV	special purpose vehicle
SSC	smart sustainable city
U4SSC	United for Smart Sustainable Cities Initiative
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
USD	United States Dollar

Contents

Foreword.....	ii
Acknowledgements	ii
Disclaimer	iii
Abbreviations	iv
Executive Summary	vi
Summary of recommendations	ix
Introduction	xi
Why is the topic relevant?	xi
Chapter I: Definition of Sustainable Smart City Projects.....	1
The three dimensions of SSCs	2
What are SSC projects?	3
Chapter II: Who are investors and what are they looking for?.....	7
Types of investors in urban development	9
Institutional and non-institutional investors	11
What are investors looking for?	15
Stimulating urban investments	15
Four important financing tools	16
Chapter III: Creating a list of investable projects for sustainable development.....	21
Chapter IV: How to attract investors to enter into SSC projects	37
Checklist for investors: the preliminary “go/no-go” decision	37
Risk: why the “no-go” decision	39
Overall: what attracts investors?	43
Chapter V: How will the COVID-19 pandemic affect investment in urban development projects?	47
Conclusion.....	51
Annex I: 10 Principles of People-First PPPs.....	52
Annex II: Types of financing	53
Annex III: Pre-development study checklist.....	55
Annex IV: Sources on COVID-19 and its implications on real estate, construction and related activities.....	60
Bibliography.....	61

Executive Summary

These Guidelines elaborated on within this report have been developed as part of the United for Smart Sustainable Cities Initiative (U4SSC). They provide practical recommendations for city governments on how to develop investment-grade projects in support of sustainable smart urban development. The Guidelines explain what a sustainable smart city project is and provide an overview of traditional and innovative financing tools that are available and can be used to finance city projects. They also outline what types of potential investors exist and how to make a sustainable city development plan attractive to them. The Guidelines promote implementation of the *2030 Agenda for Sustainable Development* and the *Addis Ababa Action Agenda of the Third International Conference on Financing for Development*.

The objectives of the Guidelines are to:

- (a) define sustainable smart city (SSC) projects;
- (b) share the criteria potential investors consider when making investment decisions;
- (c) explain what a list of investment-grade projects for sustainable cities is and how to create one;
- (d) describe the different financing instruments that exist today; and
- (e) provide an outlook on potential trends induced by the COVID-19 outbreak which might impact future investment in urban development.

The introduction explains why innovative financing is more relevant than ever before. It references major United Nations events and meetings that addressed the topic of financing the *2030 Agenda* and the importance of working across sectors (public and private) and levels of governance (international, national and local). It also explains why financing urban development projects at a local level is critical to achieving the Sustainable Development Goals (SDGs) globally. The introduction suggests that the financial resources needed for urban development projects are available through private investment. However, there is a need to build up the capacity of local authorities and stakeholders for them to be able to attract those investments. It stresses the importance of enhancing sustainable financing strategies and investments at country and regional

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_422

