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## Economic Commission for Europe

### Committee on Urban Development, Housing and Land Management

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Item 4(a) of the provisional agenda

**Review of the implementation of the programmes of work 2018-2019 and 2020: sustainable smart cities  
Implementation of the United for Smart Sustainable Cities programme**

### **Guidelines on tools and mechanisms to finance Smart Sustainable Cities projects: Executive Summary and Summary of Recommendations**

#### **Note by the secretariat**

##### *Summary*

In 2016, the Economic Commission for Europe together with the International Telecommunication Union launched the global initiative United for Smart Sustainable Cities (U4SSC). One of the aims of the 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 and the New Urban Agenda.

In 2017, under the umbrella of the U4SSC, the secretariat of the Committee on Urban Development, Housing and Land Management decided to support the development of the “Guidelines on tools and mechanisms to finance Smart Sustainable Cities projects” (ECE/HBP/2017/2 paragraph 67). In 2018, the Committee approved the publication of the Guidelines (ECE/HBP/194 paragraph 29).

This document includes the Executive Summary and a Summary of Recommendations of the Guidelines. The full version is available in the Information Document ECE/HBP/2020/INF.3.

The Committee is invited to endorse the Guidelines.



## I. Introduction

1. In 2016, the Economic Commission for Europe (ECE) together with the International Telecommunication Union (ITU) launched the global initiative United for Smart Sustainable Cities (U4SSC). One of the aims of the U4SSC is to develop guidance and training materials for city leaders to facilitate the transition into smarter and more sustainable cities and to support the achievement of international agreements, such as the 2030 Agenda for Sustainable Development and the New Urban Agenda.
2. In 2017, under the umbrella of U4SSC, the secretariat of the Committee decided to support the development of the “Guidelines on tools and mechanisms to finance Smart Sustainable Cities” (ECE/HBP/2017/2, paragraph 67). In 2018, the Committee approved the publication of the Guidelines (ECE/HBP/194 paragraph 29).
3. This document includes the Executive Summary and Recommendations of the Guidelines. The full version is available in the Information Document ECE/HBP/2020/INF.3.

## II. Executive Summary

4. These Guidelines were developed as part of the United U4SSC.<sup>1</sup> The Guidelines provide practical recommendations for city governments on how to develop investable projects which support sustainable smart city development and are understandable and attractive to potential investors. The Guidelines explain what a sustainable smart city project is and provides with an overview of traditional and innovative financing tools that are available and can be used to finance city projects. They also explain what types of investors exist, and how to make a sustainable city development plan attractive to them. The Guidelines are based on the principles declared in the 2030 Agenda for Sustainable Development and the Addis Ababa Action Agenda of the Third International Conference on Financing for Development.
5. The objectives of the Guidelines are to:
  - (a) Define Smart Sustainable Cities (SSC) projects;
  - (b) Share the criteria that potential investors look at when making investment decisions;
  - (c) Explain what a list of investable projects for smart sustainable cities is and how to create one;
  - (d) Describe the different financing instruments that exist today;
  - (e) Provide an outlook on potential trends induced by the COVID-19 outbreak which might impact future investment in urban development.
6. The introduction explains why innovative financing is possibly more relevant than ever before in the contemporary world. It references major United Nations events and meetings which addressed the topic of financing the 2030 Agenda for Sustainable Development and the importance of working across sectors (public and private) and levels of governance (international, national and local) to achieve this. 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 resources needed for financing urban development projects are available through potential investors. However,

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<sup>1</sup> A series of thematic e-meetings on Financing for Smart Sustainable City projects was held beginning November 2017 and throughout 2018.

there is a need to build capacity of local authorities and stakeholders for them to be able to attract those investments. It stressed the importance of enhancing sustainable financing strategies and investments at country and regional levels.

7. The definition of SSC project is provided in the first chapter of the Guidelines, elaborated with a broader outlook on the areas the projects may touch upon. This section also explains the importance of a baseline reference for the progress of the cities in becoming sustainable and smart to be able to set meaningful targets for further development. The Guidelines suggest that cities use the U4SSC Collection Methodology for Key Performance Indicators for Smart Sustainable Cities (2017)<sup>2</sup> to develop their city profiles and set the benchmarks for further development. The first section also describes the ECE approach “Sustainable Smart Cities with Innovative Financing”, which ECE applies in its work with cities, supporting them to move from an evaluation of their sustainability to a concrete action plan for development. Action plans include both legislative recommendations and a list of investable projects for the city’s sustainable development.

8. The second chapter of the Guidelines outlines who the potential investors for SSC projects are and what they are looking for. There are many potential investors of a different nature and with different objectives and approaches. All want to gain from their investment: financially or through environmental/social and governance (ESG) impacts or both. The chapter also outlines the ECE people-first public private partnership model (PPPP).

9. To attract investors, urban development projects need to be well defined from the beginning. Understanding the actual condition of the assets of the project<sup>3</sup> will allow the proper finance structure to be designed. Without it, no project can be developed. Once finance structure is in place, markets will provide opportunities for investors to get their financial return alongside achieving ESG impacts. Returns can be provided from service charges from the toll roads, or from a share of the savings generated by the project, revenue from a subscription payment, etc. Planning these returns is called “revenue modeling”. In these cases, ESG impact can act not as a deterrent of financial conditions but rather the opposite. They are instead a catalyst for a healthier, longer cash flow by developing the real assets as part of a healthier, better environment and society.

10. The third chapter offers ten practical recommendations on how to develop a list of investable projects for sustainable urban development.

11. A list or a “pipeline” of urban development projects should reflect a coherent strategy for achieving an objective for a given city or region. The recommendations invite stakeholders from all sectors (public, private, academia and civil society) to adopt a common development language based on the SDGs. City governments can then identify what changes are needed in a city to ensure it develops sustainably, how much money is required to implement these changes, and what proportion of the money required has yet to be generated. The process is complemented by a vision of the future of a sustainable city and a list of projects needed in order to achieve this vision.

12. Once the vision is developed, it is suggested to group projects under four sectors: Mobility, Utilities, Social Infrastructure and Real Estate, and to estimate the cash flow those

<sup>2</sup> Available at <https://www.unece.org/index.php?id=47031>.

<sup>3</sup> Project Assets comprise of all tangible and intangible assets relating to the Project Facility, as the case may be, excluding land but including and not limited to rights over the Site in the form of license, right-of-way or otherwise; tangible assets such as foundation, buildings, substructures and superstructures, pavements, over-bridges, works, subways, drainage facilities, sign boards, equipment, electrical works for lighting of and telephone and communication equipment; financial assets, such as receivables, cash and investments; rights under the Project Agreements and other agreements and insurance proceeds. (source: lawinsider.com)

projects will generate. Cash flow can be positive or negative. The Guidelines suggest balancing cash positive and negative projects in the vision of the city to ensure positive inflow of external investment.

13. It is recommended to take the traditional city “master plan” to the next level. While traditionally cities have a spatial master plan available, the social, economic and environmental dimensions are often overlooked. It is also suggested to develop a multi-layered master plan which will help generating positive economic, social, and environmental impacts for the city. How to create this plan is explained in detail.

14. Cities should examine existing operational frameworks to remove barriers for investors and lenders to enter the market. This can be done through ensuring that legislation is revised where necessary to enable new partners to collaborate on urban development projects. It also means that laws that exist are clear and their enforcement mechanisms are reliable. Urban Development Dialogue that will feed into this revision should be organized in a roundtable manner and involve decision-makers from multiple levels, multiple sectors and transdisciplinary teams. It is also recommended to translate urban development policies into investment programs and city projects (top-down flow of information) and to incorporate the feedback from the projects to enhance development policies (bottom-up flow of information).

15. The Guidelines suggest that by following this set of recommendations, a city will be able to start a virtuous urban development cycle, where commitment to SDGs leads to a pipeline of investable projects, that generate public and private investment, contributing to job creation and social cohesion, protecting the planet and generating sustainable economic growth while eradicating poverty. To implement this process, it is proposed to use a project management tool based on a gate system where a project is submitted to a “go/no go” decision process at each stage. This is designed to ensure that the viability of a given project is reconfirmed at each stage. It is also proposed to create a project book that provides a perspective on how different projects contribute to the city’s vision of long term sustainable urban development.

16. *The fourth chapter of the Guidelines* outlines how potential investors assess the financial attractiveness of urban development projects. Investors have different levels of risk tolerance. This is crucial for them when deciding to “enter” or “get out” of a project. Section four summarizes what attracts investors from the operational, financial and reputational perspectives.

17. The final chapter of the Guidelines provides an outlook on how the recent COVID-19 pandemic might change the behaviour of investors around financing urban development projects. The three priorities for every city and Government will now be to respond, to recover and to rebuild. The section also elaborates on some trends that might emerge as a result and how these may influence investment in projects related to large infrastructure, industry and logistics, commercial real estate, hospitality and restauration, geriatric and nursing homes, offices, residential real estate, and public urban facilities.

18. Additional tools and insights for attracting capital to city projects are provided in the annexes of the full publication.

### **III. Summary of Recommendations**

19. In order to develop a long-term investment strategy aimed at sustainable and smart city development, it is vital to establish reliable, evidence-based city policy benchmarks. The Guidelines suggest using the U4SSC Collection Methodology for Key Performance Indicators (KPIs) for Smart Sustainable Cities for this purpose. This methodology is an

internationally recognized tool developed by 16 United Nations agencies and provides a comprehensive set of indicators that are simple to use.

20. To be able to achieve sustainable and smart city development, a comprehensible “city action plan” should be developed which relies on a baseline assessment of city’s sustainability using the U4SSC KPIs Collection Methodology. It is recommended for a city action plan to be comprehensive and to cover both proposed actions for the development of the legal and institutional framework to promote sustainable and smart urban development as well as urban development projects supporting the implementation of the framework.

21. It is vital to include all key stakeholders in the process of developing a city strategy. It is equally important that a common framework for strategy development is used and accepted by all the stakeholders involved. This common framework should be based on the “five Ps” of the 2030 Agenda for Sustainable Development: people, planet, prosperity, peace and strong institutions, and partnerships.

22. Often laws and regulations prevent investors from investing into urban development projects. There could be legislative barriers when existing legislation does not allow private capital to participate in public sector projects; or indirectly i.e. when laws are difficult to enforce and therefore investors do not wish to risk their capital. The Guidelines also suggest reviewing and, when needed, revising the existing institutional and legal frameworks to enable private sector investments to engage in urban development projects with their capital. Effective and transparent legal and institutional frameworks are critical to attract reliable investment partners.

23. Project documentation by the sponsoring institutions prior to mobilizing resources should be “investor minded”. This is important for the investors, developers, constructors, and any potential stakeholders who evaluate their potential involvement in a project in construction and/or in the utilization of the built infrastructure phases. This facilitates the sharing of knowledge about current conditions of the city and city projects. This also allows achieving a proper, fair risk management responsibility split among all the parties involved.

24. In the development of investment projects all the stages should be treated with equal importance and it is recommended to complete all of them, as suggested below:

(a) Understanding of the project. It is recommended to collect all the information about the project: What is the project objective? In which timeframe it will be implemented? What are the responsibilities of people and organizations involved? Which tools and instruments will be used to implement the project?

(b) Evaluating the project. It is suggested to establish a system of evaluation of the project, including its effectiveness, efficiency and impact;

(c) Defining it. It is proposed to use clear definitions and terminology which are understood the same way by all parties involved;

(d) Implementing the project. This stage refers to the process of building urban infrastructure and putting it into operation;

(e) Measuring the impact of the project results;

(f) Establishing communication. The Guidelines suggest preparing reports as required and organizing effective communication using appropriate communication tools. It is proposed to share best practices to support their replication in other projects, as appropriate.

25. To develop a successful investment project, it is important to gain clear understanding of what the expectations of the users from the project and to reflect those expectations in the project design.

26. Finally, realistic expectations about time, quantity and quality of the project and its expected outcomes will prevent conflicts and reduce use of resources.
27. The Committee is invited to endorse the Guidelines.

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