

Smart Sustainable Cities with innovative financing approach

Gulnara Roll, Secretary to the
Committee on Urban Development,
Housing and Land Management,
Gulnara.Roll@un.org



UN Economic Commission for Europe



- UNECE promotes smart sustainable cities and smart technologies by providing a platform to its 56 member States, cities and stakeholders for collaboration and knowledge sharing and by developing international standards and guidelines to support their implementation.
- **Intergovernmental platforms** - intergovernmental committees and groups of experts on Energy, Environment, Innovation and PPPs, Land and Forests, Statistics, Transport, Urban Development.
- **UNECE experts:** representatives of academia, civil society in UNECE teams of specialists and Centres of Excellence.

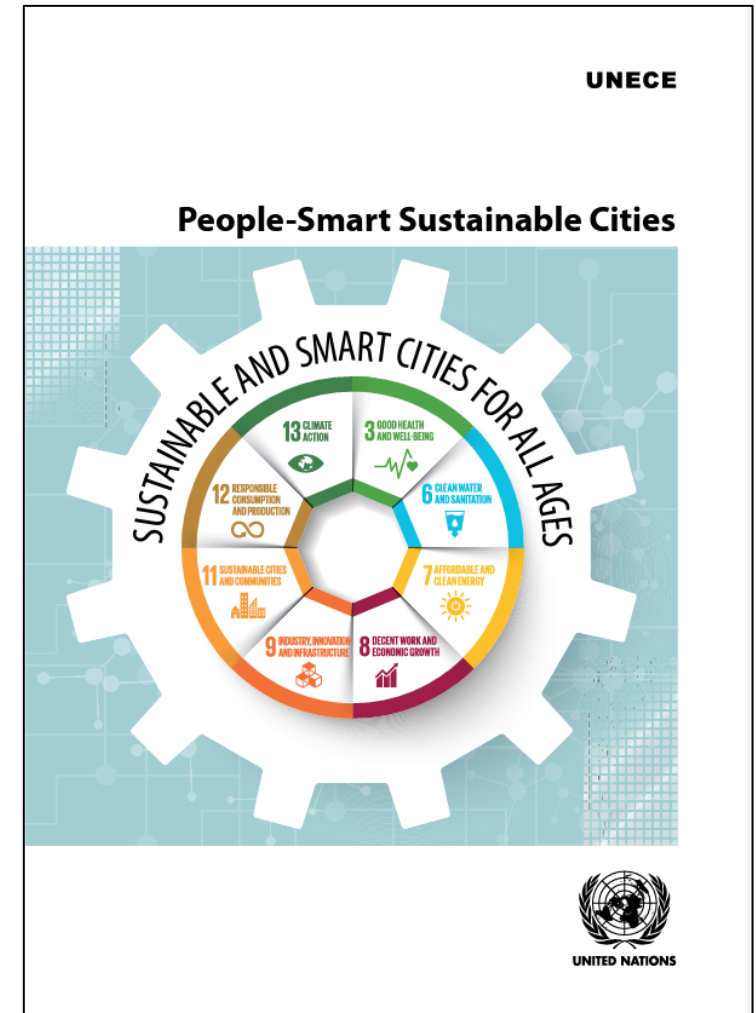


UNECE approach to People-Smart Sustainable Cities



The people-smart sustainable city concept advocates a broader understanding of smartness in city development as a set of capabilities-enhancing conditions directed at sustainability and focused on generating a harmonious society and improving quality of life. This means reducing gaps in capacity and efficiency, meeting social needs, and making cities more conducive to innovation.

Read at <https://unece.org/info/Housing-and-Land-Management/pub/350033>



Examples of UNECE instruments for smart sustainable cities



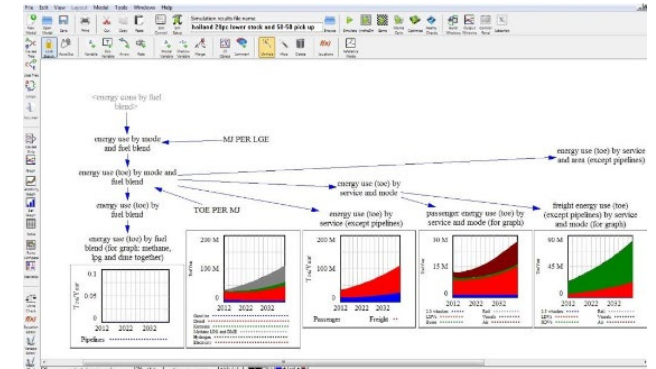
Transport: Instruments promoting Intelligent Transport Systems.

ForFITS Model – an online tool to support informed decisions about measures available for the reduction of CO₂ emissions in the transport sector

Energy: Energy efficiency approaches in transport, industry, building.

Population: Policy briefs on smart sustainable cities for all ages.

Land management: Data for land administration. See as an example a report on “Digital transformation and land administration – Sustainable practices from the UNECE region and beyond” under the [link](#)



Measuring smartness and sustainability of cities using KPIs for SSCs



- Are developed in the framework of **the United for Smart Sustainable Cities** (U4SSC), a global UN initiative coordinated by ITU, UNECE and UN-Habitat, and supported by CBD, ECLAC, FAO, UNDESA, UNDP, UNECA, UNESCO, UNEP, UNEP-FI, UNFCCC, UNIDO, UNOP, UNU-EGOV, UN-Women, UNWTO and WMO. U4SSC provides an international platform for information exchange and partnership building to guide cities and communities in achieving the SDGs.



KPIs for SSC methodology is at <https://www.itu.int/en/publications/Pages/publications.aspx?lang=en&media=electronic&parent=T-TUT-SMARTCITY-2017-9>

Approach to developing smart sustainable cities profiles



- Prepared on a request by cities. Based on official data provided by governments
- Conducted by an UNECE independent expert in cooperation with the local government
- The process is fully open; results are publicly available
- Engage local communities through surveys, events, media
- Develop recommendations -> proposals for projects ->
- Support with the development of possible financing mechanisms and partnerships
- Building capacity for longer term urban resilience and sustainability.

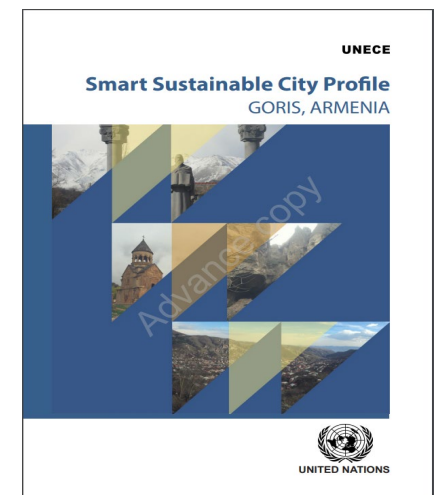
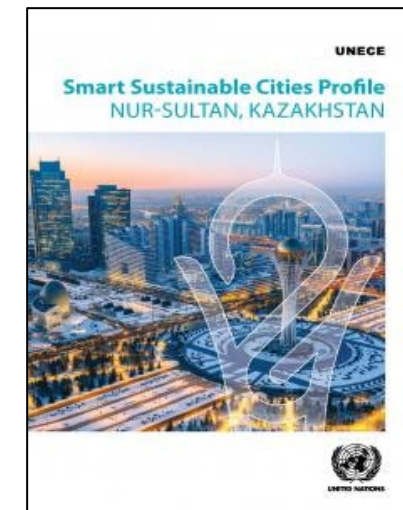
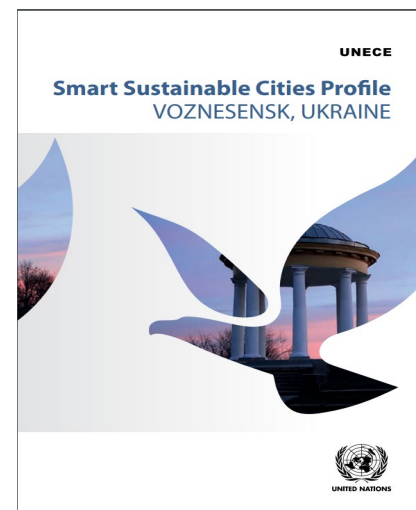
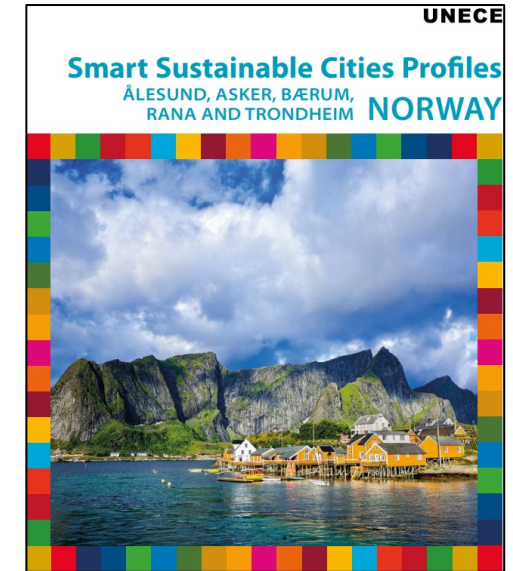
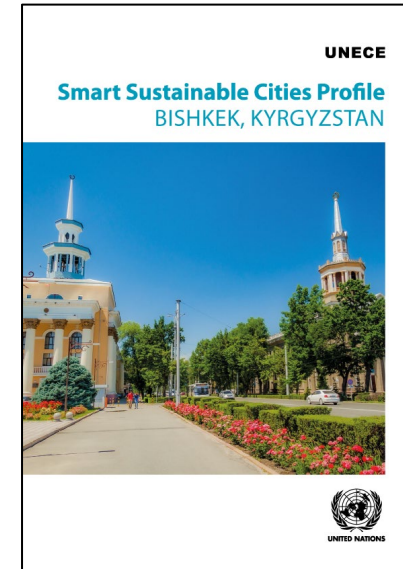
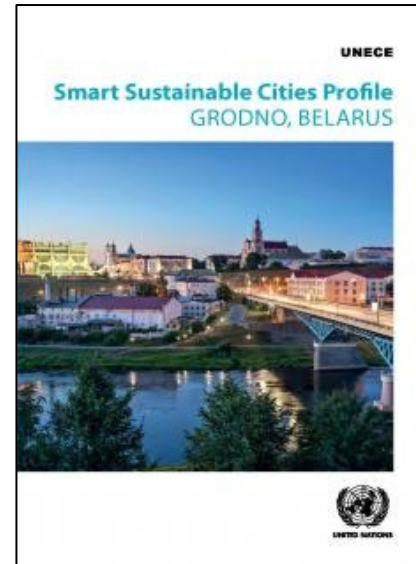


Smart sustainable cities profiles by UNECE

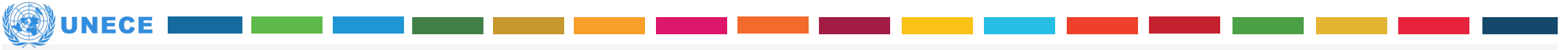


UNECE

- **Almaty, Kazakhstan**
- **Astana (Nur Sultan), Kazakhstan**
- **Aalesund, Asker, Boerum, Rana and Trondheim; Norway**
- **Bishkek, Kyrgyzstan**
- **Goris, Armenia**
- **Grodno, Belarus**
- **Podgorica, Montenegro**
- **Tbilisi, Georgia**
- **Voznesensk, Ukraine**



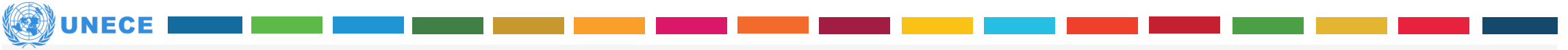
What does «innovative financing» mean?



- Within this approach, "Innovative financing" is understood by UNECE as establishing public-private partnerships to attract additional financing for urban development and infrastructure projects.
- Key principles of these projects:
 - People-first
 - Aimed at further development of the cities as «sustainable and smart»
- What can this be:
 - Bank loans
 - Crowdfunding
 - Venture capital for the city development
 - Urban real estate finance
(pooled finance development fund schemes)
 - Social impact bonds
 - etc.



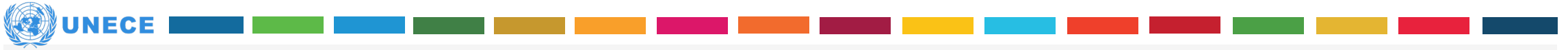
What happens next?



Following the assessment of city's "sustainability" against 91 key performance indicators, UNECE provides a list of recommendations on what could be done in the city to further develop it as a sustainable and smart one.



What happens next?



- The city government chooses the directions in which the city will develop on the basis of the presented recommendations



- UNECE and partners facilitate the formulation of a city action plan, including
 - i. the list of specific actions on policy improvement
 - ii. the list of specific projects in order to attract external investment
(in addition to those available on the government side or entirely external)



- UNECE and partners help to organize a national workshop with investors to present project ideas to investors

Three steps in financing innovation



Understanding project and value

- Understand business model: funding gap, risk profile and transfer potential; revenue streams
- Understand value generated: direct value, indirect value, asset recycling



Funding options

- Own Source Revenue
- Intergovernmental fiscal transfers
- Capital markets
- Grants



Procurement and delivery method

- Land value capture mechanisms
- PPP
- Debt equity financing
- Environmental externality financing (i.e congestion charging)

LEADING ORGANISATION:

UNECE

State/City

Jointly

Optional

Indicative timing for project implementation in 1 city: 18 months



Indicative timing* for project implementation in one city

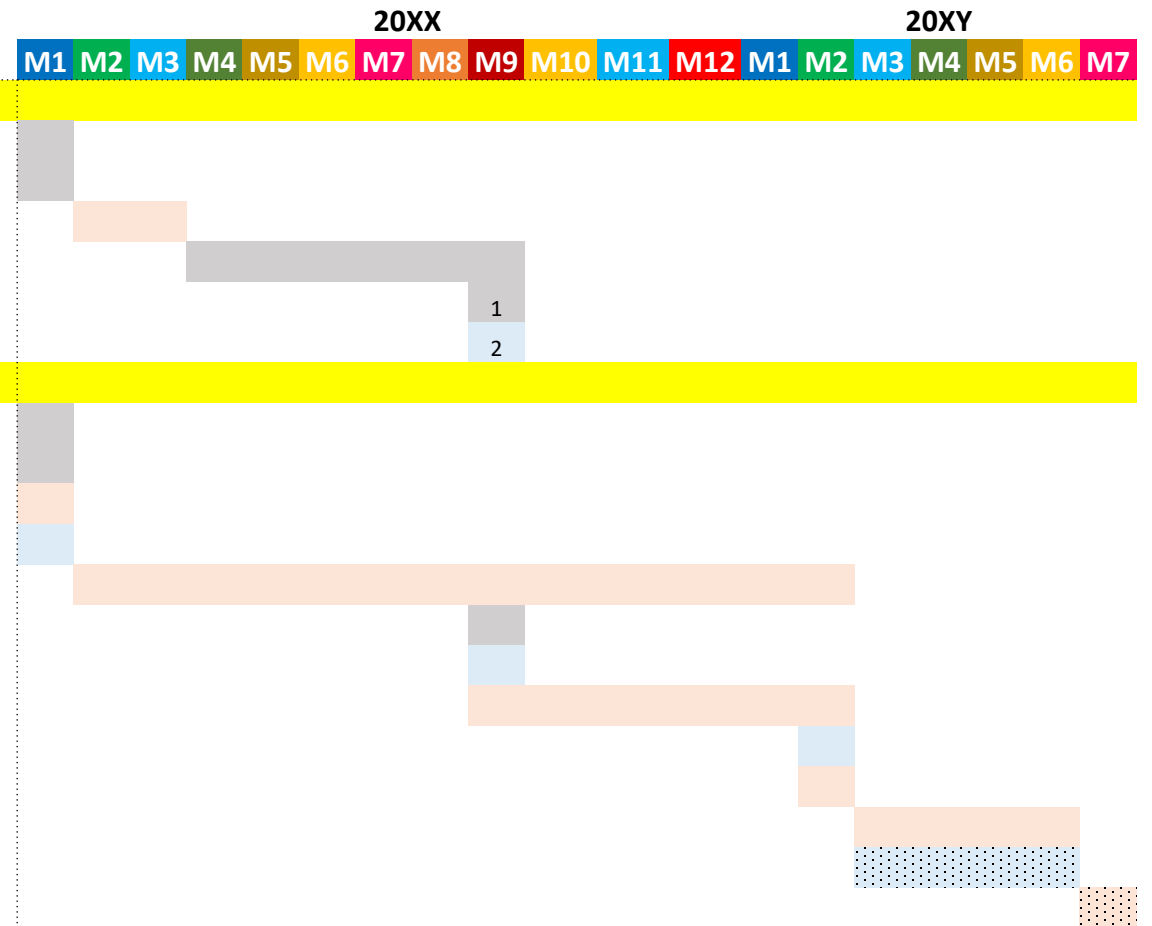
**subject to the speed of data provision for evaluation and the workload of UNECE experts*

Development of Sustainable Smart City Profile

- Explaining KPI Methodology
- Bi-lateral Meetings on data collection
- Collection and sharing the data for Sustainable Smart City evaluation
- Development of Smart Sustainable City Profile
- Sharing first results and recommendations
- Workshop in the City to present evaluation findings and recommendation

Innovative Financing and city action plan

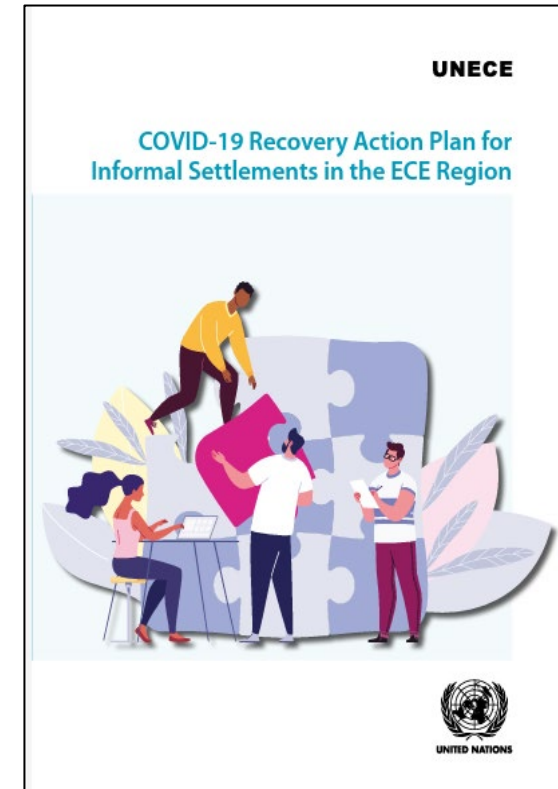
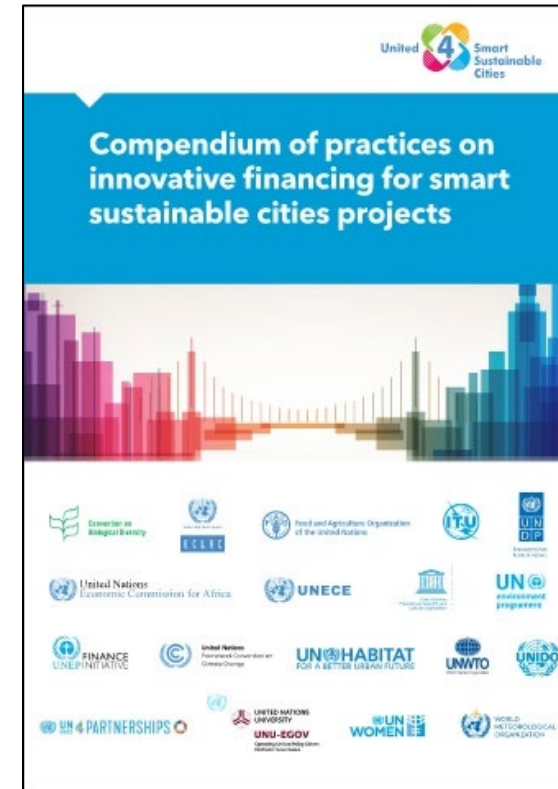
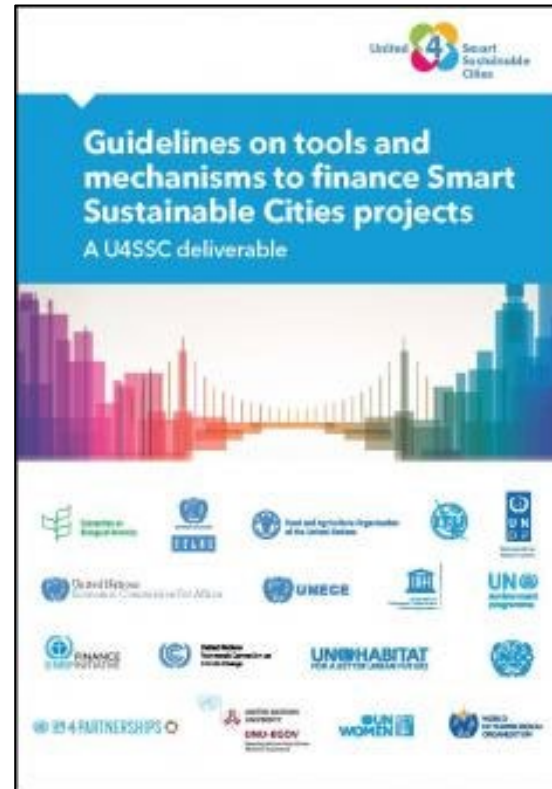
- Present existing innovative methods of financing
- Explain Project Book template
- Get feedback on local investing landscape
- Mapping potential investors
- Formulating the pipeline of projects for financing in the Project Book
- Explaining Methodology for Preparing Sustainable Smart City action plan
- Workshop to map action plan for Sustainable Smart Development of the City
- Developing of the Detailed Sustainable Smart City action plan for the City
- Seminar with investors
- Defining 1-2 projects for financing
- Develop detailed project documentation
- Preparation of examples for a regional seminar (optional)
- Presentation of city project(s) and "lessons learned" at a regional seminar (optional)



Guidelines for innovative financing instruments to support implementation of recommendations



- Guidelines on tools and mechanisms to finance Smart Sustainable Cities projects
- Compendium of practices on innovative financing for smart sustainable cities projects
- COVID-19 Recovery Action Plan for Informal Settlements in the ECE Region



Thank you!

Follow us on our social media channels



www.facebook.com/UNECE.Housing



www.linkedin.com/showcase/unece-housing-and-land-management-unit



<https://twitter.com/UNECEHLM>



<https://www.instagram.com/unechlm>

More at: <https://unece.org/housing>



UNECE

