Improving smartness and sustainability of cities in the UNECE region

Dr Agata Krause, UNECE

United for Smart Sustainable Cities annual meeting
09 October 2020

UNECE

Aim and structure

Aim of the presentation is to outlines selected activities of UNECE to improve smartness and sustainability of cities in the UNECE region.

Structure:

- UNECE activities on sustainable smart cities – overview
- Evaluation of the City Performance against the Key Performance Indicators for Smart Sustainable Cities (KPIs for SSC)
- Sustainable Smart Cities Profiles
- Guidelines on the use of the Key Performance Indicators for Smart Sustainable Cities.

UNECE activities on sustainable smart cities

UNECE has a long history of working on sustainable urban development, affordable housing and the energy efficiency of buildings and infrastructure.

- It carries out the evaluation of the city performance against the Key Performance Indicators for Smart Sustainable Cities; and develops Sustainable Smart City Profiles for 17 cities in Norway, Nur-Sultan and Almaty in Kazakhstan; Bishkek in Kyrgyzstan; Grodno in Belarus; Tbilisi in Georgia; Podgorica in Montenegro.

UNECE has developed a range of tools: guidelines, studies, city action plans and capacity building events, to improve smartness and sustainability of cities (e.g. the Guidelines on tools and mechanisms to finance Smart Sustainable Cities projects).

It organizes meetings and events to raise awareness and to disseminate “good practices” on improving smartness and sustainability of cities.

Evaluation using the KPIs for SSC (I)

Key Performance Indicators for Smart Sustainable Cities (KPIs for SSC) were developed by UNECE & ITU in 2015

- endorsed by the UNECE Committee on Housing and Land Management in 2016 (ECE/HBP/2016/4); brought under the United for Smart Sustainable Cities (U4SSC).

KPIs for SSC provide cities with a consistent and standardized method to collect data and measure performance and progress to:

- achieving the Sustainable Development Goals (SDGs)
- becoming a smarter city
- becoming a more sustainable city.

To date the evaluation was guided by the “Collection Methodology for the Key Performance Indicators for Smart Sustainable Cities” (2017).

Evaluation using the KPIs for SSC (II)

Protocol aims to improve the quality, efficiency and transparency of the evaluation of city performance against the KPIs for SSC.

- It introduces a clear and transparent **evaluation procedure**, outlines the roles and responsibilities of the key stakeholders involved in the process: the ECE secretariat, evaluator, and the government concerned; and provides guidelines on how to carry out the evaluation.
- It can be amended in the future, as appropriate.

Prepared by the Secretariat and reviewed by Smart Cities Task for to the Bureau to the Committee on Urban Development, Housing and Land Management; UNECE Nexus on Sustainable Smart Cities for All Ages; UNECE Nexus on Measuring and Monitoring of SDGs. ITU provided comments.

- Endorsed by UNECE CUDHLM at 81st session on 7 October 2020.
- Available at: https://www.unece.org/fileadmin/DAM/hlm/documents/2020/ECE_HBP_2020_5-E.pdf

Sustainable Smart City Profiles

The Profiles aim to:

- present the outcomes of the evaluation of the city against the KPIs for SSC;
- highlight “good practices” of the city in implementing the 2030 Agenda for Sustainable Development; and
- provide guidance for improving smartness and sustainability of cities; with a view to accelerate the city progress towards SDGs.

At 81st session the CUDHLM welcomed the development of the Sustainable Smart City Profiles for Trondheim, Nur-Sultan, Rana, Asker and Ålesund.

- Draft profiles are available at: https://www.unece.org/fr/housing/cudhlm81.html
- Examples of three city profiles: Rana, Asker and Ålesund.

Sustainable Smart City Profile for Ålesund

Context: the city is located in the Møre og Romsdal Country and is a harbour city with a rich history and a long tradition in fishing and shipbuilding. Ålesund is currently the centre for innovative maritime technologies and has mainstreamed the Sustainable Development Goals into local urban policies, projects and programmes.

Selected initiatives to accelerate progress towards SDGs:

- Establishing the Ålesund Future Lab, brings together academia, private sector, and public sector actors to develop and implement sustainable smart city solutions
- Digitizing the use of water in the region (implementation of smart water meters; underway)
- Developing action plan for increasing the quality and use of public transport infrastructure has been approved
- Developing programmes to increase the amount of solid waste that is recycled, reducing greenhouse gases from other forms of waste processing.

Sustainable Smart City Profile for Rana

Context: Located in the region of North-Helgeland, Rana is a rural municipality with a population of 26,000 inhabitants. Home to a diverse range of businesses in trade, service, leisure, finance, transport and tourism, the city is particularly noted for having one of the largest export ports in Norway and the Mo Industrial Park.

Selected initiatives to accelerate progress towards SDGs :

- Rana's Master Plan (2017-2027) lays out the path towards becoming Norway's green industry capital, under the four categories of attractiveness and growth, green shift, quality of life, and future-oriented infrastructure.
- The city hosts the Mo Industrial Park (MIP) - a global leader on green industry. The sustainability focus areas of MIP involve improving energy efficiency and recovery; circular economy and recycling; and emissions into air and water.
- Constructing energy-friendly primary schools out of solid wood, with fossil fuel-free and climate-friendly construction sites and developing initiatives to reduce water supply loss.

Sustainable Smart City Profile for Asker

Context: On January 1st 2020, three municipalities merged to become Asker. Situated approx. 20 kilometres south-west of the capital Oslo, Asker has the eighth largest population out of the Nowegian municipalities, and has placed the 17 Sustainable Development Goals at the heart of its strategic direction and development.

Selected initiatives to accelerate progress towards SDGs :

- Installation of smart water meters in all households by the end of 2020, and offers free energy efficiency advice to its citizens
- Introduction of the “Employee Mobility Strategy” aims to reduce fossil fuel-based transportation and encourages bicycling, walking and public transport
- By 2025, all municipal building and construction sites in Asker must be free of fossil fuels and emissions
- Reduction of greenhouse gas emissions by 50% from the use of energy, materials and transport relative to today’s levels, as part of the “FutureBuilt” programme.

Sustainable Smart City Profiles

Based on the evaluation of the city performance against the Key Performance Indicators for Smart Sustainable Cities, a review of documentary sources, and the information submitted by the cities through a survey, the following **recommendations (for Asker, Ålesund, Rana)** have been proposed.

In relation to:

- Water and sanitation: to increase smart water meter implementation, to reduce water supply loss, and to reduce water consumption levels
- Transport: to increase traffic monitoring, and to reduce the amount of journeys taken by private vehicles while increasing those taken by public transport and cycling
- Solid waste management: to increase the amount of solid waste recycled, while reducing the amount incinerating
- Energy: to reduce the energy consumption of public buildings.

Guidelines for the development of the VLRs (I)

The 2030 Agenda encourages countries to “conduct regular and inclusive reviews of progress at the national and sub-national levels, which are country-led and country-driven”, through the development of the Voluntary National Reviews (VNR). However,

- VNRs often focus on the achievements of a country as a whole.
- Only 42% of VNRs are based on consultation with regional and local governments. VNRs rarely include data disaggregated per location (UCLG, 2019).

Cities play important role in the implementation of the 2030 Agenda for Sustainable Development and they are interested in documenting their progress towards SDGs.

- Cities in the UNECE region develop the Voluntary Local Reviews (e.g. Barcelona, Bristol, Helsinki).

Guidelines for the development of the VLRs (II)

Voluntary Local Reviews (VLRs):

- Allow cities to take part in a global dialogue on the Agenda vis a vis their national counterparts and international organizations.
- Provide a nuanced view on the progress towards SDG by highlighting differences in the levels of development across locations;
- Increase the ownership of SDGs at the local level, to review local development goals and targets, to mobilize stakeholder support towards a collaborative implementation of the goals, and to better align the management of local finances towards SDGs;
- Improve the engagement of local governments in the preparation of the VNRs and other national processes of the implementation of the 2030 Agenda for Sustainable Development.

Guidelines for the development of the VLRs (III)

Local governments develop and measure their progress towards SDGs using various tools, most notably Key Performance Indicators for Smart Sustainable Cities (KPIs for SSC).

The KPIs for SSC provide cities with a consistent and standardized method to collect data and measure performance and progress to:

- achieving the Sustainable Development Goals (SDGs)
- becoming a smarter city
- becoming a more sustainable city.

Guidelines for the development of the VLRs (IV)

Existing resources that support development of the VLR include guidelines developed by e.g. the European Union, UN-Habitat, UN ESCAP.

It is important to provide cities with guidance for reviewing the implementation of the 2030 Agenda at the local level that is based on solid a framework for measuring SDGs at the local level.

Guidelines will be developed to **provide cities with a standardized approach to the review of the implementation of the 2030 Agenda for Sustainable Development, based on the KPIs for SSC.**

Guidelines will be developed by the UNECE Secretariat, the municipalities in Norway and the Geneva UN Charter Centre of Excellence on Sustainable Development Goals City Transitions in Trondheim, which works in collaboration with the Norwegian University of Technology (NTNU), and other relevant stakeholders.

Thank you!

Contact:
Dr Agata Krause
UNECE
agata.krause@un.org
09 I 10 I 2020

UNECE