Guidelines for the Development of Voluntary Local Reviews in the ECE Region
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Geneva, 2021
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I. Introduction

Following the adoption of the 2030 Agenda for Sustainable Development, national governments are developing Voluntary National Reviews (VNRs) to assess their progress in implementing the 2030 Agenda for Sustainable Development and related Sustainable Development Goals (SDGs). In the short-term, regions and cities urgently need to address the socioeconomic impact of the COVID-19 pandemic in communities and among the most vulnerable groups, but VNRs are tools to create long-term strategies for sustainable development. Increasingly, governments are employing diverse stakeholders in preparing VNRs, including local and regional governments. The latter’s growing role in implementation of the 2030 Agenda has led to increased global attention on localizing SDGs and preparing Voluntary Local Reviews (VLRs). These enable review of SDG implementation at a local level. VLRs complement VNRs, ensuring a more detailed and nuanced assessment of progress toward implementing the 2030 Agenda at a country level. It should be stressed that VLRs have the potential to substantially accelerate localization of SDGs.

II. VLRs globally and in the UNECE region

VLRs have been undertaken in all parts of the world, with different rates of progress. Progress is most noticeable in the ECE region, especially in Northern and Western Europe (Figure 1). By 2020, in the ECE region, over twenty VLRs were developed and published; a regularly updated list is available at the United Nations Department of Economic and Social Affairs (DESA) web page. VLRs were developed and published for the following cities and subregions in the ECE region: Barcelona, Spain (2019); Basque local government, Spain (2018); Besancon, France (2018); Niort, France (2020); Bonn, Germany (2020); Stuttgart, Germany (2019); Bristol, United Kingdom (2019); Canterbury, United Kingdom (2019); Gothenburg, Sweden (2019); Helsinki, Finland (2019); Turku, Finland (2020); Espoo, Finland (2020); Los Angeles, United States (2019); Malaga, Spain (2020); Mannheim, Germany (2019); New York, United States (2019); North Rhine-Westphalia, Germany (2016); Valencia county, Spain (2016); and Wallonia region, Belgium (2017) (UN-Habitat, 2021).

Figure 1
Voluntary Local Reviews prepared and published by local and regional governments globally in 2016-2020

Source: UN-Habitat World Cities Report 2020

4 This is not a complete list.
According to the Institute for Global Environmental Studies (2020), cities used different methods to develop their VLRs, so there is no one standard approach. Several global, regional and subregional guidance documents have been developed by international organizations and city networks. Annex 1 provides a list with short descriptions of key international guideline which have been, or are being, developed.

Most of the listed guidelines relevant to the ECE region were presented and discussed at the online webinar “Local Governments: The role of SDG Voluntary Local Reviews” on 11 March 2021. The webinar was organized by ECE, UN DESA and the International Telecommunication Union (ITU), with the support of the ECE Centre of Excellence in Norway on Smart Sustainable Cities and the City Government of Helsingborg in Sweden. It was a pre-meeting to the Regional Forum on Sustainable Development for the UNECE Region. Based on the discussions, participants considered it important to develop regional guidelines and formulated the following recommendations for the preparation of VLRs in the ECE region:

(a) **Focus VLRs on sustainable and inclusive “shared value” creation** for local communities. The concept of “shared value” focuses on identifying and expanding the connections between social and economic progress. This concept can be applied to any human settlement to emphasize the economic and social dimensions of sustainable development along with the need to engage different stakeholders. Key stakeholders include the private sector as well as local inhabitants. Understanding the needs of local communities is a first critical step for cities intending to develop their VLRs.

(b) **Ensure a participatory process for the development of VLRs.** The participatory approach for developing VLRs is particularly important. VLRs should be developed by engaging local communities and key stakeholders, including the private sector and academia, and by enabling cross-sectoral collaboration within local and regional governments. This includes partnerships between small, medium and large cities within countries to ensure the VLR process also engages small and medium-size cities and human settlements.

(c) **Enhance VLRs as a forward-looking instrument (in lieu of a mere reporting mechanism on past work) by linking them to national plans, including VNRs.** It is important to improve coherence between VLRs and VNRs, including by establishing links with national level planning and cooperation with key national players.

(d) **Connect VLRs with concrete projects centred on the achievement of SDGs and enhancing urban resilience while mobilizing financing.** Financing is vital to implementing VLR recommendations. Therefore, cities need to explore innovative financing mechanisms to expand their budgets, and scale up or replicate successful projects and programmes.

(e) **Promote the use of indicators and metrics to measure progress in achieving SDGs and foster intersectoral cooperation.** Cities often lack the metrics and tools required to measure their progress in achieving SDGs. Anchoring VLRs to internationally-recognized metrics provides an opportunity for an inclusive and cooperative impact. Meticulous data collection and analysis further helps connect projects with national and international sources of finance. Wherever possible, VLR development should be accompanied by digital tools and open-source data.

(f) **Utilize VLRs as a tool to support economic and social recovery from the COVID-19 pandemic.** The COVID-19 pandemic was an impetus for world governments at all levels to rethink approaches to management...
and planning of human settlements. Cities and local governments have been at the forefront of addressing the challenges. VLRs should therefore reflect changes in the global context and integrate COVID-19 recovery strategies into their plans for long-term resilience. This would help cities “recover better” and guide sustainable economic development and shared value creation for all local communities. It would also allow a particular focus on vulnerable groups, leaving no one behind.

A. About these Guidelines

These Guidelines were developed at the request of the ECE Committee on Urban Development, Housing and Land Management at its eighty-first session in October 2020 (ECE/HBP/206 10, para. 36). They were based on discussions at the online webinar “Local Governments: The role of SDG Voluntary Local Reviews” on 11 March 2021. At its eighty-second session, the Committee endorsed these Guidelines (ECE/HBP/208).

These Guidelines aim to support local and regional governments in the ECE region in promoting shared value creation for cities and other human settlements.

The Guidelines support the implementation of the Geneva Declaration of Mayors agreed at the first United Nations Forum of Mayors in October 2020. The Mayors who attended the Forum committed themselves to overcoming the crisis caused by the COVID-19 pandemic. In the Declaration, the Mayors of the ECE region stressed that they wish to use current momentum “to rebuild the cities into places where all of us can thrive. Quality of life is the guiding principle, nature and biodiversity are an integral part of urban planning, sustainable economies generate wealth for all, solidarity among city-dwellers prevails, and inequalities are actively narrowed”.

B. Applying evidence-based approach to the development of VLRs

These VLR Guidelines further build on the ECE/UN-Habitat Guidelines on evidence-based policies and decision-making for sustainable housing and urban development (2020). These aim to assist cities in implementing evidence-based approaches at a local level.

Box 1
UNECE/UN-Habitat Guidelines on evidence-based policies and decision-making for sustainable housing and urban development11

<table>
<thead>
<tr>
<th>The ECE/UN-Habitat Guidelines on evidence-based policies and decision-making for sustainable housing and urban development aim to support governments in the ECE region to improve evidence-based policymaking for sustainable urban development and housing. In recognition of the growing importance of data in policymaking, and to improve the review and implementation of the 2030 Agenda in the ECE region, the Guidelines document:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Outlines selected challenges and opportunities for evidence-based policymaking in the ECE region.</td>
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<tr>
<td>(ii) Provides examples of ongoing activities to inform the review and implementation of the 2030 Agenda in the ECE region.</td>
</tr>
<tr>
<td>(iii) Demonstrates the benefits of applying these approaches to evidence-based policymaking.</td>
</tr>
</tbody>
</table>

In accordance with the 2030 Agenda and the Geneva UN Charter on Sustainable Housing, policymakers need to ensure that evidence gathered takes accurate stock of urban and housing dynamics, particularly the challenges faced by disadvantaged groups. The process includes the disaggregation of data with the aim of “leaving no one behind”.12 It is the role of policymakers at all levels of governance to develop and use the statistical tools and standards needed to carry out data disaggregation effectively. The requirements for data disaggregation are produced by the United

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These VLR Guidelines build on knowledge gained in applying the UNECE/ITU Key Performance Indicators (KPIs) for Smart Sustainable Cities (SSC) to the analysis of sustainability and smartness of cities and the preparation of Smart Sustainable Cities Profiles (SSC Profiles). Information about the definition of the KPIs for SSC can be found in the Collection Methodology for the Key Performance Indicators for Smart Sustainable Cities. In 2019, over 50 cities worldwide were using the KPIs. The smart sustainable cities profiles were developed by UNECE using KPIs for SSC during 2019-2021 for the cities of Grodno (Belarus), Tbilisi (Georgia), Nur-Sultan (Kazakhstan), Bishkek (Kyrgyzstan), Podgorica (Montenegro) and five cities in Norway: Aalesund, Asker, Baerum, Rana, and Trondheim. These Guidelines also incorporate lessons learned from the three pilot projects in Bishkek (Kyrgyzstan), Kharkiv (Ukraine) and Tirana (Albania), where UNECE supports economic and social recovery from the COVID-19 pandemic.

III. Guidelines

A. General principles

Local and regional authorities should ensure that VLRs:

(a) **Develop practical action-oriented planning documents well-integrated with local or regional government planning and financing systems.** This would further support local and regional authorities in aligning their programmes and budgets with SDGs, “recovering better” from the pandemic and promoting urban resilience.

(b) **Include both long-term strategies and short-term plans for cities and regions to address key challenges in achieving SDGs and promoting urban resilience.**

(c) **Are well-coordinated with national plans, including VNRs and concrete, actionable projects.** It is important to improve coherence between VLRs and VNRs, including by establishing links at the national level and by cooperation with key national players.

(d) **Promote sustainable development at the local level through the creation of shared value.** VLRs should reiterate the importance of value creation for local communities, especially the most vulnerable groups.

(e) **Promote a participatory approach.** VLRs should be open, inclusive, participatory and transparent for everyone, and support reporting by all relevant stakeholders.

(f) **Ensure no one is left behind.** The VLRs will be people-centred, gender-sensitive, respect human rights and have a particular focus on the poorest, most vulnerable and those most in need of assistance.

(g) **Remain evidence-based.** The process of developing VLRs should focus on evidence-based approaches, including the use of quantifiable indicators which allow progress review in achieving SDGs and building urban resilience. The UNECE/ITU Key Performance Indicators for Smart Sustainable Cities (KPIs for SSC) are recommended for analysis of sustainability and smartness of cities and, based on this analysis, for the preparation of VLRs.

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13 Available at: https://unstats.un.org/sdgs/iageg-sdgs/disaggregation/
14 Available at: https://unstats.un.org/sdgs/iageg-sdgs/files/Overview%20of%20Standards%20for%20Data%20Disaggregation.pdf
18 UNECE, Norwegian Project. Available at https://unece.org/housing/norwegian-project.
20 The KPIs for SSC were developed by ITU and UNECE in 2015 and are used by partners of the United for Smart Sustainable Cities (U4SSC) Initiative. They were endorsed by the UNECE Committee on Urban Development, Housing and Land Management in 2016, and were further amended taking into account the SDGs in 2017 (ECE/HBP/188). Available at https://unece.org/DAM/hlm/documents/2016/ECE_HBP_188.en.pdf.
of VLR reports. Use of the KPIs for SSC can be further complemented by additional indicators. This ensures that all important aspects of city or regional development, like urban resilience, are assessed in depth and provide information for local/regional governments to make good decisions. These guidelines are based on evidence-based methodology as part of the UNDA Rapid Response project “Building Urban Economic Resilience during and after COVID-19.”

(h) **Remain flexible and adaptable in response to COVID-19 emergency recovery plans at regional and local levels.** VLRs must consider COVID-19-related challenges when working towards achieving SDGs. They should also take into account actions and public policies to help cities towards realization of SDGs as well as key elements of sustainable development such as energy, mobility, construction, infrastructure and food.

(i) **Maintain a strong focus on mobilizing financial resources for the implementation of VLR recommendations**, including the use of innovative financing instruments. VLRs should align local budgets with SDGs and develop projects aimed at mobilizing financing for projects and programmes. Local and regional governments should explore innovative financing mechanisms to expand their budgets and scale up or replicate successful projects and programmes.

**B. Proposed structure of VLRs**

There is no one standard structure for VLR documents.\(^2\) The following represents a proposed structure for VLRs, with a detailed structure contained in Annex III.\(^2\)

- **Part I. City vision and goal statement.** The first part of the VLR should examine the city’s long-term goals and present the connections between these and the SDGs. This section should be based on goals established by the city council in consultation with the city’s inhabitants and key stakeholders.

- **Part II. Economic and social situation in the city. Legal, financial and institutional framework for city development.** Part 2 of the VLR should include a short presentation of the city’s social and economic situation, showing the most important data on city development. It should further provide a description of the institutional structure for managing city development and list key legal documents regulating it. This section should also assess municipal financial management systems to understand existing practices, revenue and expenditure trends and patterns, relevance to SDGs, fiscal space, and fiscal accountability. It should also show the city’s technical capacity to align its budget cycles with the 2030 Agenda.

- **Part III. Assessment of city performance using KPIs for SSC, including progress towards achieving SDGs at the city level.** The assessment should provide evidence on city performance based on collection of data and its analysis against the Key Performance Indicators for Smart and Sustainable Cities. The U4SSC KPIs can be complemented by additional indicators using a “plug-and-play” approach, such as when a city needs to analyse a particular aspect of urban development like urban resilience.

- **Part IV. Recommendations from the assessment for achieving SDGs at the city level** and proposals for programmes and projects to be developed and implemented to further progress towards SDGs and make cities smart and sustainable.

- **Part V. Financial framework for supporting city efforts to achieve the SDGs** and implement proposed programmes and projects, including SDG budgeting.

- **Part VI. Conclusions and proposals for next steps.**

**IV. Steps in the development of VLRs**

This section provides guidance for the step-by-step development of VLRs (see Figure 2). The proposed development of VLRs comprises four phases.

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Figure 2

The four phases of VLR development

- Phase 1: Collection of information and data
  - UNECE/ITU KPIs for SSCs
- Phase 2: Assessment of the data and review of achieving the SDGs through participatory approaches
- Phase 3: Formulating proposals for sustainable solutions based on recommendations of the city performance assessment
- Phase 4: Local actions and projects, innovative financing

(a) Phase 1. Collection of information and data

Countries and cities in the ECE region face diverse urban development challenges: uncontrolled urbanization, urban sprawl, informal development, homelessness, climate change and environmental pollution. A further challenge is provision of access to urban infrastructure and services, most notably adequate and affordable housing for everyone. The situation becomes particularly challenging in emergency situations, such as earthquakes, floods and, most recently, the spread of the COVID-19 virus. There is therefore a need to collect evidence on these diverse urban challenges. These Guidelines aim to support governments' efforts to improve evidence-based policymaking on sustainable urban development and housing.

After the adoption of the 2030 Agenda in 2015, the United Nations Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) developed a formal quantitative system of global indicators to review national progress towards SDGs.23 The framework includes 232 statistical indicators. By July 2020, data collected at national levels was presented as supplementary information in the Secretary-General's Report: “Progress towards the Sustainable Development Goals” (E/2020/57)24. The SDG global indicator framework was developed for use at the national level only; there is no single system of indicators of achieving SDGs at the local level.

Access to reliable data on cities and human settlements is one of the most critical challenges to developing VLRs. To support cities in their efforts to collect data and develop evidence-based policies, UNECE and ITU elaborated KPIs for SSC as a public-access, free-of-charge standard in 2015. The KPIs are used by partners of the United for Smart Sustainable Cities Initiative (U4SSC)25 to measure smartness and sustainability of cities. The KPIs were endorsed by the UNECE Committee on Urban Development, Housing and Land Management in 2016, and were further amended to take into account SDGs in 2017 (ECE/HBP/18826). The KPIs for SSC are relevant to SDGs and consist of 91 indicators from the interface between the three dimensions of sustainability (economy, environment, society and culture) and support using information and communication technologies. The

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23 On 6 March 2015, at its forty-sixth session, the United Nations Statistical Commission created the IAEG-SDGs, composed of Member States and including regional and international agencies as observers. The IAEG-SDGs was tasked with developing and implementing the global indicator framework for the goals and targets of the 2030 Agenda. The framework was subsequently adopted by the General Assembly on 6 July 2017 and is contained in the Resolution adopted by the General Assembly on Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development (A/RES/71/313), available at https://undocs.org/A/RES/71/313.


implementation of KPIs for SSC is based on the Collection Methodology for Key Performance Indicators for Smart Sustainable Cities"\textsuperscript{27} and the “ECE Protocol on Evaluating City Performance against the Key Performance Indicators for Smart Sustainable Cities”. These indicators are recommended for use in data collection and analysis. Box 2 (below) outlines the development and implementation of KPIs for SSC in the ECE region.

Box 2

**United for Smart Sustainable Cities, Key Performance Indicators for Smart Sustainable Cities**

| United for Smart Sustainable Cities (U4SSC) is a United Nations initiative coordinated by ITU, UNECE and UN-Habitat. The initiative is centred on SDG 11: “Make cities and human settlements inclusive, safe, resilient and sustainable”. U4SSC serves as the global platform to explore the use of ICTs to facilitate transition to smart sustainable cities. U4SSC has developed a set of key performance indicators for smart sustainable cities. These can be used as criteria to evaluate the contribution of ICTs to making cities smarter and more sustainable while providing them with means for self-assessment in their progress in achieving SDGs. Over 100 cities worldwide are currently implementing KPIs. The U4SSC Implementation programme (U4SSC-IP) supports these projects and builds partnerships for smarter and more sustainable cities worldwide. |

Collecting data on the 91 indicators of the KPIs for SSC is at the heart of the evaluation and critically affects the evaluation process viability. Information about the definition of the KPIs for SSC can be found in the Collection Methodology for the Key Performance Indicators for Smart Sustainable Cities\textsuperscript{28}. The KPIs for SSC are as follows:

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<table>
<thead>
<tr>
<th>Key Performance Indicators for Smart Sustainable Cities (ECE/HBP/2020/5)</th>
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<tbody>
<tr>
<td>1. Household Internet Access</td>
</tr>
<tr>
<td>2. Fixed Broadband Subscriptions</td>
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<tr>
<td>3. Wireless Broadband Subscriptions</td>
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<tr>
<td>4. Wireless Broadband Coverage</td>
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<tr>
<td>5. Availability of WIFI in Public Areas</td>
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<tr>
<td>6. Smart Water Meters</td>
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<tr>
<td>7. Water Supply ICT Monitoring</td>
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<tr>
<td>8. Drainage/Storm Water System ICT Monitoring</td>
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<tr>
<td>9. Smart Electricity Meters</td>
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<tr>
<td>10. Electricity Supply ICT Monitoring</td>
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<tr>
<td>11. Demand Response Penetration</td>
</tr>
<tr>
<td>12. Dynamic Public Transport Information</td>
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<td>13. Traffic Monitoring</td>
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<tr>
<td>14. Intersection Control</td>
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<tr>
<td>15. Open Data</td>
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<tr>
<td>16. E-Governance</td>
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<tr>
<td>17. Public Sector e-Procurement</td>
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<tr>
<td>18. R&amp;D Expenditure</td>
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<tr>
<td>19. Patents</td>
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<tr>
<td>20. Small and Medium-Sized Enterprises</td>
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<tr>
<td>21. Unemployment</td>
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<tr>
<td>22. Youth Unemployment Rate</td>
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<tr>
<td>23. Tourism Industry Employment</td>
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<td>24. ICT Sector Employment</td>
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<tr>
<td>25. Basic Water Supply</td>
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<tr>
<td>26. Potable Water Supply</td>
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<td>27. Water Supply Loss</td>
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<td>28. Wastewater Collection</td>
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<tr>
<td>29. Household Sanitation</td>
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<tr>
<td>30. Solid Waste Collection</td>
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<tr>
<td>31. Electricity System Outage Frequency</td>
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<tr>
<td>32. Electricity System Outage Time</td>
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<tr>
<td>33. Access to Electricity</td>
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<tr>
<td>34. Public Transport Network</td>
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<td>35. Public Transport Network Convenience</td>
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<td>36. Bicycle Network</td>
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<td>37. Transportation Mode Share</td>
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<tr>
<td>38. Travel Time Index</td>
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<tr>
<td>39. Shared Bicycles</td>
</tr>
<tr>
<td>39. Bicycle Network</td>
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<tr>
<td>40. Public Building Sustainability</td>
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<tr>
<td>41. Low-Carbon Emission Passenger Vehicles</td>
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<tr>
<td>42. Public Building Sustainability</td>
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<td>43. Integrated Building Management System in Public Buildings</td>
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<td>44. Pedestrian infrastructure</td>
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<td>45. Urban Development and Spatial Planning</td>
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<td>46. Air Pollution</td>
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<td>47. GHG Emissions</td>
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<td>48. Drinking Water Quality</td>
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<td>49. Water Consumption</td>
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<td>50. Freshwater Consumption</td>
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<td>51. Wastewater Treatment</td>
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<td>52. Solid Waste Treatment</td>
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<td>53. EMF Exposure</td>
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<td>54. Noise Exposure</td>
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<td>55. Green Areas</td>
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<td>56. Green Area Accessibility</td>
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<td>57. Protected Natural Areas</td>
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<tr>
<td>58. Recreational Facilities</td>
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<tr>
<td>59. Renewable Energy Consumption</td>
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<td>59. Electricity Consumption</td>
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<tr>
<td>60. Public Building Energy Consumption</td>
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<tr>
<td>61. Residential Thermal Energy Consumption</td>
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<td>62. School Enrolment</td>
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<tr>
<td>62. Public Building Energy Consumption</td>
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<tr>
<td>63. Student ICT Access</td>
</tr>
<tr>
<td>64. Student ICT Access</td>
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<tr>
<td>65. Higher Education Degrees</td>
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<tr>
<td>66. Adult Literacy</td>
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</table>

The KPIs for SSC are well-coordinated with SDGs and their target indicators; however, some aspects of city life require additional analysis. Therefore, additional indicators can be used using the “plug and play” approach whenever necessary. The methodology for data collection according to the KPIs for SSC provides cities with a consistent and standardized method for collecting data. This means that they can progress towards achieving the SDGs and the 2030 Agenda, becoming a smarter city and becoming more sustainable. The KPIs have been tested and implemented by the UNECE secretariat in several projects. The experience of implementing Key Performance Indicators shows KPIs are not only useful for urban planning but may also be a useful tool for municipal investors in sustainable development. Below is an example of the data collection process for the development of the smart sustainable cities profile for the City of Nur-Sultan, capital of Kazakhstan (Box 3).
Box 3
Smart Sustainable Cities Profile: the case of Nur-Sultan, Kazakhstan\textsuperscript{31}

The Nur-Sultan City Profile compares the city evaluation outcomes with the Key Performance Indicators for Smart Sustainable Cities. The City Profile proposes actions for the city to make progress towards achieving SDGs. In this way it provides guidance for the development, review and implementation of urban policies, programmes, projects and building partnerships to reinforce the implementation of the 2030 Agenda for Sustainable Development and SDG 11 in Kazakhstan and the ECE region.

The City Profile was developed taking into account documentary data sources. These include the U4SSC Verification Report – Nur-Sultan, Kazakhstan (see Figure 3), the Country Profile on the Housing Sector: Republic of Kazakhstan (2018), and a survey sent to the city administration on development priorities and policies of the city and programmes and projects relevant to the areas covered by the KPIs for SSC. Throughout the evaluation process, KPI values are independently verified to ensure data is accurate. The city of Nur-Sultan provides the data verification process in the U4SSC Verification Report – Nur-Sultan, Kazakhstan. The KPI evaluation of Nur-Sultan suggested a range of development priorities, including improving the solid waste management system and public building sustainability through the employment of certification measures and ICTs. Additional development priorities include the implementation of smart water meters, smart electricity meters and smart air conditioning systems, urban and spatial planning, access to decent-quality, affordable housing for all and improved access to good-quality urban data. Figure 3 (below) provides a visual representation of the performance of Nur-Sultan across various dimensions according to the Key Performance Indicators for Smart Sustainable Cities.

Figure 3
Performance of Nur-Sultan against the Key Performance Indicators for Smart Sustainable Cities

Source: UNECE Smart Sustainable Cities Profile: Nur-Sultan, Kazakhstan

\textsuperscript{31} Smart Sustainable City Profile: Nur-Sultan, Kazakhstan. Available at: https://unece.org/sites/default/files/2021-01/Nur-Sultan\%20City\%20Profile\_compressed_E.pdf.
While collecting the data about city performance, the following questions (Checklist 1) need to be asked to ensure the data collection process was organized effectively (Figure 2). The checklist for collecting data assesses how well local and regional programmes cover all urban indicator outcomes to identify areas where sustainable development needs to be improved.

Figure 4

Checklist 1. | Phase 1. Collection of information and data

- Sources of KPI data and information used in the VLR assessment are identified and documented; information is made accessible to the public, communities and key stakeholders.
- Potential biases and gaps in KPIs, data sources of information and expert opinions are identified and addressed.
- Limitations of the KPIs, lack of data used in VLRs and COVID-19 recovery plans have been identified and documented.
- The process for collecting, storing and updating KPIs and data on local SDGs and COVID-19 recovery plans has been implemented in the VLR assessment.
- The government has kept track of KPIs and the COVID-19 pandemic impacts.

(b) Phase 2. Assessment of data and review of progress towards achieving SDGs through participatory approaches.

Participation and inclusion are not only relevant for reviewing data, but also to create qualitative data, raising awareness, ownership of SDGs, strengthening the social contract, and bringing minorities and vulnerable groups into the decision-making process. Phase 2 therefore consists of a structured assessment of the data collected in Phase 1 on how SDGs are to use the data to formulate recommendations for sustainable development. VLRs are instrumental in encouraging policymakers to make relevant decisions and implement new or updated frameworks to promote sustainable development in cities and regions. SDGs should be assessed based on local and community challenges, likelihood of achievement, and impact. They should do this via a well-directed process, using relevant data at the sub-national level (KPIs) (see Box 4). VLR assessment of achieving SDGs should form the foundation of COVID-19 recovery plans. Assessment of COVID-19 recovery portfolio projects should be integrated into wider-reaching financial and economic strategies. Assessment should further consider financial vulnerabilities for individuals, businesses and sub-national governments in light of their risk-bearing capacities. Multilevel governance and the multi-stakeholder approach form final crucial aspects in making accurate and contextualized decisions to develop VLRs.
In response to questions on the level of its digital development and sustainability, the City of Pully decided to join this ITU-led project, utilizing the needs, aims and solutions of the U4SSC. This ambitious project would help Pully measure and compare its degree of digitalization and sustainability. Findings from this project are expected to form an SSC development trajectory which administrators of other municipalities and cities similar in size and capacity to Pully will be able to adapt when developing their own smart sustainable strategies. The KPIs will also help demonstrate how Pully is progressing in its achievement of the SDGs. Continuing the project could also assist Pully in conducting a periodic internal review of its current ICT-related efforts, allowing the city to benchmark how its ICTs can best be used to monitor and improve its smart city processes and operations. Pully plans to measure its U4SSC KPIs every 5 years, in conjunction with other local KPIs. This project can, therefore, play a key role in planning Pully’s SSC future.

The checklist for Phase 2 is presented below in Figure 5. The checklist for preparedness assessment provides key points to identify areas for promoting and achieving SDGs.

Figure 5

Checklist | Phase 2. Preparedness assessment

☐ An assessment to identify and potentially localize SDGs should be conducted.

☐ Objectives of the sub-national or local government-sponsored VLR and of the COVID-19 recovery plan assessment(s) are declared.

☐ The results of the VLR and the COVID-19 recovery plan assessment(s) should be used for a clear purpose.

☐ Reporting mechanisms must be established to ensure that the VLR assessment results are communicated internally to sub-national and local governments and, where appropriate, externally to citizens, communities, key stakeholders and partners.

(c) Phase 3. Formulation of proposals for sustainable solutions based on recommendations of the city performance assessment. Institutionalizing cooperation for the VLRs.

Based on the analysis and recommendations of the city performance assessment, proposals for projects and activities need to be formulated. During this stage, it is important to develop a clear institutional structure for the development and implementation of VLR recommendations. In many cities, smart city labs or similar activities have been created to promote cross-sectoral cooperation as well as cooperation with other cities and organizations (see Box 5). These smart city labs can support the development of actions focused on value-creation and sustainable urban planning. These include planning of buildings, neighbourhoods and mobility systems, as well as enabling urban energy efficiency and sustainability. These diverse actions support sustainable and inclusive shared-value creation for local communities.

Box 5
The Living Lab Project: the case of Open Trondheim

The Living Lab project is a series of experiments: past, current and future. Whereas the experiments themselves aim to create high-functioning cities, structuring the process as a lab creates awareness about which methods are most suited to deal with the issues at hand. The aim of Living Lab is to create a thriving network of living labs where the city connects citizens, universities and businesses, and where social entrepreneurship can thrive.

Trondheim and the Norwegian University of Science and Technology (NTNU) are set to achieve the first truly comprehensive University City Agreement with University City Trondheim 3.0 (UCT3). This aims for an integrated governance model which shares personnel and knowledge systems, rendering the city a “living lab”.

The engagement of multiple stakeholders and community groups is crucial for localizing sustainable solution opportunities which focus on value creation. VLRs should therefore emphasize action-oriented objectives and value creation in local communities. Furthermore, VLRs should go beyond being a tool to monitor progress towards SDG localization by exploring innovative governance methods and using a networked approach to leave no community behind (Box 3). VLRs enable sub-regional and local governments to become aware of local community needs and include them in local policymaking and action plans. Stakeholder engagement is a crucial part of the VLR process to understand the challenges and opportunities of local communities and businesses.

The checklist for this phase is presented below in Figure 6. “Opportunities for sustainable solutions” highlights key points for local and regional engagement in sustainable development.

Figure 6
Checklist | Phase 3. Opportunities for Sustainable Solutions

☐ Most relevant priorities (environment, local economy, energy transitions, communities and well-being, or vulnerable groups) for the region or city’s vital interests should be identified.

☐ Governmental authority should led responsibility for the VLR and the COVID-19 recovery plan assessments at the sub-national or local level.

☐ Sub-national or local vision to develop a VLR and COVID-19 recovery plans in the region or city must be determined.

☐ Priorities in terms of sustainable development within the region or city should be established along the following dimensions: i) city planning or land use; ii) human and social; iii) economic and financial; iv) environmental; and v) institutional or governance.

(d) Phase 4. Local actions and projects, innovative financing.

VLRs should devise tangible solutions to address the 2030 Agenda. Sub-national and local governments are significantly affected by the multidimensional impacts of the COVID-19 pandemic. Local governments are the local communities' front line; they understand the socioeconomic damage to the city brought on by the pandemic.

The VLR is a framework with a long-term vision to provide local actions and specific emergency projects to build back better in the wake of the COVID-19 pandemic. Financial mechanisms are vital to this; sub-regional and local governments need financial and human resources to achieve VLR local actions and projects for sustainable development. Cities and municipalities need efficient financial tools to define objectives and monitor indicators.

33 Open Trondheim – Living Lab. More information is available at the following link: https://sites.google.com/trondheim.kommune.no/bigdesign/living-lab.
Regional governments and municipalities have highlighted best practices in their COVID-19 recovery and actions plans. The city of Bristol, United Kingdom, set up a Business Plan 2020-2021 to address the socioeconomic emergency caused by the COVID-19 pandemic. The Business Plan develops 160 local actions, of which 153 are linked to the SDGs. The city government highlighted the activities which support local implementation of SDGs (see Box 6).

Box 6

COVID-19 recovery and renewal actions – community and people:

Action 1. Implement the Local Outbreak Management Plan to prevent, manage and contain outbreaks of COVID-19 in Bristol and ensure strong, inclusive and accessible communication and public engagement. Take particular action to prevent and manage outbreaks in high-risk settings, such as care homes and schools. SDGs 3, 4, 8 and 11.

Action 2. Work in partnership with Golden Key and the United Kingdom National Health Service to support rough sleepers temporarily housed in hotels during lockdown. This “move on” project will identify appropriate new accommodation and provide practical help, including mental health services, to enable them to move on to permanent accommodation rather than returning to the streets. SDGs 1, 3 and 11.

Action 8. Work to address the disproportionate impact of the COVID-19 pandemic on black, Asian and minority ethnic communities and other under-represented groups vulnerable to the disease, including people with health problems. This includes enacting appropriate policy recommendations stemming from a Rapid Research Review by the University of Bristol (commissioned by the Council) on the pandemic’s impacts on these communities. SDGs 3, 5 and 10.

Source: Bristol City Council.

Box 7 presents an example of local actions and projects in the city of Malaga, which published its first Progress Report on the Sustainable Development Goals and the 2030 Agenda in 2018, containing inputs from various local organizations.

Box 7
The 2020 Voluntary Progress Report by the city of Malaga on meeting the United Nations 2030 Agenda

The achievement of Sustainable Development Goals (SDGs) has been gradually integrated into features of municipal planning, paving the way forward for the Malaga Strategic Plan and 2030 Agenda. The first Progress Report on the Sustainable Development Goals and 2030 Agenda for the city of Malaga was introduced in 2018. It contains 116 monitoring indicators, transferring 17 SDGs into local settings with the goal of implementing multiple activities to raise awareness about SDGs. The publication of the 2020 Voluntary Progress Report by the city of Malaga highlights good practices put into effect during the COVID-19 pandemic, forming an integral aspect of the recovery plan.

In addition to the above-mentioned good practices, the 2020 Voluntary Progress Report works towards maintaining a continuous and solid system to track progress, with over 170 indicators. In 2020, a digital tool was established to provide a clearer picture of the degree of implementation of the 2030 Agenda.

34 Bristol City Council, more information is available online at the following link: https://www.bristol.gov.uk/documents/20182/4629037/Corporate_Business_Plan_2021-22.pdf/b89295d6-7db8-f4c7-30ff-a1c6cf208e58?t=1618998864503.
36 City of Malaga. Open urban data. Available at https://datosabiertos.malaga.eu/
The report further highlights the work towards aligning municipal policies and plans. These range from the Strategic Plan and the Urban Agenda to plans of municipal departments, companies and public and private organizations. The Malaga 2030 SDGs Action Plan combines all these elements with good practices, not only for the SDG Plan but also for individual projects contained within the plan.

Engagement of stakeholders forms one of the primary pillars of the Progress Report. Since 2015, key city agents, such as the University of Malaga, the Confederation of Entrepreneurs, the Union Organizations, the Regional Government and multiple companies of various sizes, have increasingly taken part in the “Network of SDG Agents Malaga”. The primary aim of this network is to “leave no one behind” in the context of the practical application of the 2030 Agenda.

The checklist for this phase is presented below in Figure 7.

Figure 7
Checklist | Phase 4. Local Actions and Projects

- A clear strategy should be in place to communicate and involve citizens, communities and businesses in sustainability and the 2030 Agenda.
- The outcome of the VLR assessment must be communicated to the citizens and communities in a clearly defined form.
- There should be easily identifiable trends and factors influencing sustainability for local communities and multi-stakeholder engagement.
- There should be a well-developed plan for following up on lessons learned and recommendations emerging from the VLR report.

V. Conclusions

In the short-term, regions and cities urgently need to address the socioeconomic impacts of the COVID-19 pandemic in communities and among the most vulnerable groups. VLRs are a tool to create long-term strategies for sustainable development.

These Guidelines foster the synergy between COVID-19 recovery plans and VLRs. They focus on value creation, measurable opportunities and nature-based solutions for the community to leave no one behind.

Multi-governance and multi-stakeholder engagement through strengthened participation are two crucial factors to combine VLRs and COVID-19 emergency recovery plans. This type of commitment can accelerate sustainable impacts by linking local action to regional and national action.

The collection of reliable and accurate data from local governments is vital in establishing an evidence-based approach for VLRs and COVID-19 recovery plans. Therefore, the Guidelines present the KPIs as an effective tool for local governments to develop a self-assessment on the VLR process to achieve SDGs.

The Draft Guidelines for the Development of Voluntary Local Reviews in the ECE Region, combined with the use of the KPIs for SSC, offer cities a stable and tested tool to promote and track their pursuit of prosperity, fairness and sustainability. They also attempt to respond to a flexible paradigm of risk-processing and opportunity-seizing while remaining usable, comparable and accurate. Moreover, they need to fit into each local context, providing flexibility and adaptability. Most critically, they should help avoid putting excessive stress on cities’ capacities to deliver community services and obligations within the framework of the 2030 Agenda.

Therefore, the tools underpinning VLRs need to include a built-in improvement mechanism that entails coordinated participative approaches to address these needs. These mechanisms are based on a continuous stock-

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taking of the concrete experiences of ECE cities in performing evaluations, in particular prospective timeframes, resources required, targets reached and potential challenges. In addition, the financial mechanism and innovative approaches are essential to moving VLRs and COVID-19 recovery plans into the implementation and monitoring phases.

New useful tools can emerge from this participative process, rendering VLRs progressively more straightforward and effective while retaining their potential for meaningful comparison and experience-sharing. Examples include SSC Rapid Testing tools, where a limited subset of “core” KPIs could be selected based on a city’s experiences.
### Annex I. Key international guidelines and handbooks for Voluntary Local Reviews (VLRs)

<table>
<thead>
<tr>
<th>Publication and Institution</th>
<th>New contributions to support local governments</th>
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</thead>
<tbody>
<tr>
<td>United Nations Department of Economic and Social Affairs (UNDESA), 2020</td>
<td>The Global Guiding Elements for Voluntary Local Reviews (VLRs) of SDG implementation document looks at VLRs solely as a report to the UN on achieving SDGs at the local level and provides general recommendations for a possible structure and content of VLR reports. 38</td>
</tr>
<tr>
<td>UN-Habitat and UCLG, 2020</td>
<td>The Guidance for Voluntary Local Reviews (Vol. 1) provides key information and recommendations to present this tool to local and regional governments (LRGs) and analyses the structure, content and methods of the 37 VLRs published as of June 2020. This first volume aims to highlight the intrinsic value of VLRs as a political process that can enhance coordination between different government spheres.</td>
</tr>
<tr>
<td>United Nations Economic Commission for Asia and the Pacific (ESCAP), 2020</td>
<td>The Asia-Pacific Regional Guidelines on Voluntary Local Reviews provide practical tools, checklists and templates that local governments and other stakeholders can use when conducting VLRs. These Guidelines serve as a flagship knowledge product at the Penang Platform for Sustainable Urbanization (PPSU) 39 which is a multi-stakeholder partnership to leverage cities' strengths and support local, regional and national governments in achieving the SDGs and the New Urban Agenda in Asia and the Pacific.</td>
</tr>
<tr>
<td>United Nations Economic Commission for Latin America and the Caribbean (ECLAC)</td>
<td>UNECA, in partnership with UN-Habitat and UCLG Africa, will launch the Regional Guidelines for VLRs in Africa during the 2021 edition of the High-Level Political Forum. While connecting the 2030 Agenda and Agenda 2063, the Guidelines provide a step-by-step template for the development of VLRs.</td>
</tr>
<tr>
<td>United Nations Economic Commission for Western Asia (ESCWA)</td>
<td>ESCWA, in partnership with UN-Habitat, is currently supporting cities in the MEWA region to develop their VLRs, including Greater Amman Municipality and Rabat. ESCWA’s Regional Guidelines will be developed according to the outcomes and lessons learned from primary VLR experiences in the region.</td>
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38 More information is available in Annex II of the UNDESA proposal for a structure of a VLR.

39 The PPSU was launched at the Seventh Asia-Pacific Urban Forum (APUF-7) in 2019 in Penang, Malaysia. Available at: https://www.unescap.org/news/new-penang-platform-sustainable-urbanization-accelerate-city-actions-sdgs
<table>
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<tr>
<td>European Commission, 2020</td>
<td>The European Handbook for SDG Voluntary Local Reviews (VLRs) provides information and recommendations to policymakers, researchers and practitioners to set up VLRs. The Handbook aims to support European cities in preparing their VLRs. It suggests using sound evidence in the review process to foster better decision-making and achieve SDGs at the urban level.</td>
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<tr>
<td>European Handbook for SDG Voluntary Local Reviews</td>
<td></td>
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<tr>
<td>The Organization for Economic Co-operation and Development (OECD), 2020</td>
<td>The report, A Territorial Approach to the Sustainable Development Goals, argues that many OECD countries are increasingly seizing the SDGs’ potential to strengthen multilevel governance and, in particular, vertical coordination. The report seeks to document local and regional performance and disparities through a common set of indicators that allow cities and regions to see where they stand vis-à-vis the SDGs and compare them to their national averages and those of their peers.</td>
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<tr>
<td>A Territorial Approach to the Sustainable Development Goals</td>
<td></td>
</tr>
<tr>
<td>Global Taskforce of Local and Regional Governments, 2020</td>
<td>The Roadmap for Localising the SDGs is one of the very first efforts of the GTF, UCLG, UN-Habitat and UNDP to provide concrete support to local and regional governments in locally implementing the Global Goals. As part of this alliance, and with the key support of partners such as Plataforma and the Provincial Council of Barcelona (DIBA), the institutions have created a series of learning modules on SDG localization, including one on monitoring and VLRs.</td>
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<tr>
<td>Roadmap for Localising the SDGs: Implementation and Monitoring at Subnational Level</td>
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Annex II. A summary of conclusions of the "Local Governments: The Role of SDG Voluntary Local Reviews"

Pre-meeting, 11 March 2021

This Annex provides highlights of the report on the "Local Governments: The Role of SDG Voluntary Local Reviews" Pre-meeting to the Regional Forum on Sustainable Development for the ECE Region on "Sustainable and resilient recovery from the COVID-19 pandemic and action and delivery on the 2030 Agenda for Sustainable Development in the ECE Region". The report was delivered at the Regional Forum Plenary Session "Experiences from the region with Voluntary National Reviews (VNRs)" held on Thursday, 18 March 2021. Outcomes include:

(a) Voluntary Local Reviews (VLRs) are an important tool to support economic and social recovery from the COVID-19 pandemic. Cities are on the frontline of the global health crisis, the deepest economic recession since World War II, while coping with the accelerating climate crisis. Despite this, in 2020, VLRs gained significant momentum and, to date, over 60 cities globally have published their own VLRs. This indicates the importance of cities in the VLR process at this challenging time, utilizing them as a tool in the recovery process.

(b) Engagement in evidence-based and multi-stakeholder processes offers a pathway for improved urban resilience and preparedness for future shocks. VLRs need to be pro-active and holistic, rooted in the local context, address multiple needs, and be informed by robust and reliable data. When possible, the implementation should be accelerated through the use of digital tools and open-source data, and with the involvement of all relevant stakeholders. This will enhance cities’ ability to adapt and recover from shocks such as the COVID-19 pandemic.

(c) VLRs need to focus on sustainable and inclusive value creation for local communities. Understanding the needs of local communities is a first critical step for cities looking to develop VLRs. The following aspects improve cities’ capacity to deliver valuable outcomes and multiple benefits for all urban residents: further focusing VLRs on addressing the needs of the local communities through engaging them in the preparation of VLRs; enabling cross-sectoral collaboration within city governments; promoting engagement of local businesses; and documenting and sharing experiences.

Regarding the recommendations, the following key messages stood out:

(a) Enhance VLRs as a forward-looking instrument by linking them with concrete, actionable projects and national plans, including VNRs. It is important to improve policy coherence between VLRs and VNRs, including establishing linkages with the national level and cooperation with key national players, such as Ministries of Finance. Connecting VLRs with concrete projects helps to mobilize financing. Ultimately, financing is key, and cities need to explore innovative financing mechanisms to expand their budgets and scale up and replicate successful projects and programmes.

(b) Promote the use of indicators and metrics to measure progress in achieving the SDGs and foster intersectoral cooperation. Cities often lack metrics to measure the progress in achieving the SDGs. Anchoring VLRs to internationally agreed metrics provides an opportunity for inclusive, cooperative, all-encompassing processes and impacts. Furthermore, the use of metrics, and collecting and analysing data helps connect projects with financing, both national and international.

(c) Enhance the political importance of VLRs. Currently, VLRs are not part of an official framework for the review of achieving SDGs at the United Nations High-Level Political Forum on Sustainable Development. New pathways are needed for local authorities to engage in international decision-making processes. Mayors’ participation at the United Nations level needs to be enhanced.
Annex III. Proposed detailed structure of the Voluntary Local Reviews (VLRs)

(Based on the structure of the Smart Sustainable Cities Profiles (SSCP) available in ECE/HBP/2020/5, Annex II).

The SSCP consists of five parts, complemented by a Preface/Acknowledgements, Executive Summary and Annexes:

**Part I** – Vision and goal statement of the city. The first part of the VLR report should examine the city’s long-term goals and present the connections between the United Nations’ goals and the city’s goals. It should present the long-term vision of the city. This part of the VLR report should be based on the goals established by the city council in consultation with the city’s inhabitants and key stakeholders.

**Part II** – Economic and social situation. Legal, financial and institutional framework for city development. This part should include a short presentation of the social and economic situation in the city, including the most important data on the city’s development. It should further provide a description of the institutional structure of the management and list key legal documents regulating city development. This part should also provide an assessment of the municipal public financial management system to understand existing practices, revenue and expenditure trends and patterns, the relevance of those to SDGs, fiscal space, fiscal accountability and technical capacities of the cities to align their budget cycles with the 2030 Agenda.

**Part III** – Assessment of the city performance as smart and sustainable, including progress towards achieving the SDGs at the city level. The assessment should provide evidence on the city performance based on the collection of data and its analysis against the Key Performance Indicators for Smart and Sustainable Cities. The U4SSC KPIs can be complemented by additional indicators using a “plug-and-play” approach, for instance, if there is a need for a specific city to analyse a specific aspect of urban development, such as urban resilience etc.

**Part IV** – Recommendations from the assessment for achieving the SDGs at the city level and proposals for concrete programmes and projects to be developed and implemented to support achieving the SDGs and rendering the city smart and sustainable.

**Part V** - Financial Framework for supporting city efforts to achieve the SDGs and implement proposed programmes and projects.

**Part VI** – Conclusions and proposals for next steps.

A survey is used in order to source information for the VLR. The purpose of the survey is to gather information about the geopolitical, social, economic and environmental context of a given city including its achievements and potential areas for improvement. The structure of the survey mirrors the four main parts of the VLR: (i) general overview and background; (ii) legal and institutional framework for urban development, (iii) analysis of the indicators; and (iv) financial framework for urban development.

The draft VLR is prepared by the evaluator and shared with the government for comments. The evaluator reviews the comments and prepares a second draft of the profile, without making changes or modifications to the values of the verified KPIs for SSC. After the revisions, the final draft of the VLR is prepared.

The final version of the VLR is published in English, an official United Nations language, and is made available to the public through the ECE website. Official translation into another official language of the United Nations, i.e., French or Russian, is possible subject to availability of financial resources. The government who requested the Profile can translate the draft at its own expense. This translation will be marked as an “unofficial translation”.
References

Bristol City Council, more information is available online at the following link: https://www.bristol.gov.uk/documents/20182/4629037/Corporate_Business_Plan_2021-22.pdf/b89295d6-7db8-f4c7-30ff-a1c6cf208e58?Expires=1618998864503


ITU ‘United for Smart Sustainable Cities (U4SSC).’ https://www.itu.int/en/ITU-T/ssc/united/Pages/U4SSC-info.aspx


Trondheim Living Lab more information is available online at the following link. https://sites.google.com/trondheim.kommune.no/bigdesign/living-lab


UNDESA ‘Voluntary Local Reviews. Reports from local Authorities’ https://sdgs.un.org/topics/voluntary-local-reviews


UNDESA ‘Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.’ https://sdgs.un.org/goals/goal17


UNEC Pre-meeting ‘Local Governments: The role of SDG Voluntary Local Reviews’ to the Regional Forum on Sustainable Development for the UNECE Region. Geneva, 2021.


UNECE ‘Ministerial Meeting on Urban Development, Housing and Land Management and the 82nd session of the Committee on Housing, Urban Development and Land Management.’ Geneva, 2021. https://unece.org/housing/cudhlm-session82#:programme:text=The%20UNECE%20Ministerial%20Meeting%20on,as%20part%20of%20the%20eighty%20D


UNECE ‘Sustainable Smart Cities.’ https://unece.org/housing/sustainable-smart-cities


Voluntary Local Reviews (VLRs) have been undertaken in all parts of the world, with different rates of progress which is most noticeable in the UNECE region, especially in Northern and Western Europe. Different cities and regions are using very different approaches to developing their VLRs. This document contains UNECE Guidelines for the Development of the VLRs which were developed at the request of the UNECE Committee on Urban Development, Housing and Land Management at its 81st session in October 2020 with the aim to support local and regional governments in the development of the VLRs. The Guidelines were endorsed by the Committee in October 2020.