United Nations

Inter-agency Policy Briefs on Accelerating Progress on the 2030 Agenda from Local to Global Levels:

The Critical Importance of SDG Localization

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List of contributing organizations

United Nations | Department of Economic and Social Affairs

UNDP

ECA

UNECE

UN environment programme

UNITED NATIONS ECLAC

ESCAP
Economic and Social Commission for Asia and the Pacific

UNITED NATIONS ESCWA | Shared Prosperity Dignified Life

UN-HABITAT

UNU IAS

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

GH2 Green Hydrogen Organisation

LOCAL 2030 LOCALIZING THE SDGS

ICLEI Local Governments for Sustainability

OECD
BETTER POLICIES FOR BETTER LIVES

UCLG United Cities and Local Governments

United Nations | Department of Economic and Social Affairs

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List of abbreviations

4P	public private people partnership
AFSD	Arab Forum for Sustainable Development
AI	artificial intelligence
AU	African Union
CAP	Climate Action Plan
CO_2	carbon dioxide
CSO	civil society organization
DDP	district development plan
DEGURBA	degree of urbanization
EGDI	E-Government Development Index
EPI	E-Participation Index
EPR	extended producer responsibility
EUR	euro (currency)
FCV	full cell vehicle
FUR	follow-up and review
GDP	gross domestic product
GHG	greenhouse gas
GW	gigawatt
HCI	Human Capital Index
ICT	information and communication technology
IEA	International Energy Agency
IRENA	International Renewable Energy Agency
ITU	International Telecommunications Union
LGA	local government association
LOSI	Local Online Service Index
LRG	local and regional government
MSW	municipal solid waste
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NDPC	National Development Planning Commission (Zimbabwe)
NUA	New Urban Agenda
OECD	Organization for Economic Cooperation and Development
OSI	Online Service Index

PET	polyethylene terephthalate
PPP	public-private partnership
RLDC	Regionally and Locally Determined Contributions
SDG	Sustainable Development Goal
SIDS	small island developing states
TII	Telecommunications Infrastructure Index
UBS	urban basic services
UCLG	United Cities and Local Governments
UDA	Urban Development Action
UMF	Urban Monitoring Framework
UNDESA	United Nations Department for Economic and Social Affairs
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNECE	United Nations Economic Commission for Europe
UNESCWA	United Nations Economic and Social Commission for Western Asia
UNOSD	United Nations Office for Sustainable Development
UNSC	United Nations Statistical Commission
VLR	Voluntary Local Review
VNR	Voluntary National Review
VSR	Voluntary Subnational Review
WtH	waste to hydrogen
ZUNSDCF	Zimbabwe United Nations Sustainable Development Cooperation Framework

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Key messages to policymakers

At least 65 per cent of the Sustainable Development Goal (SDG) targets are linked to the work and mandates of local and regional governments (LRGs).

SDG localization is the process of adapting and customizing the SDGs and translating them into local development plans and strategies ¬– ones that fit the needs, contexts and priorities of a particular region or locality, in coherence with national frameworks.

There is, therefore, an urgent need to accelerate SDG localization in order to improve policy coherence and integration and deliver on the promise of the 2030 Agenda.

As the tier of government closest to local communities, LRGs best understand their constituencies' needs and priorities. They are well-placed to design people-centred policies that are in-keeping with the principles of leaving no one behind.

LRGs also deliver essential public services, such as housing, education, energy and water. They are also often the first responders to conflict, displacement and disasters linked to climate change and natural hazards.

The importance of LRGs has been increasingly recognized at the national and global levels, too. This has been demonstrated by the increasing number of initiatives and organizations dedicated to the advancement of local and subnational SDG action.

The Global Covenant of Mayors for Climate and Energy, for example, is the largest global alliance for city climate leadership, with 12,773 members to date. In addition, under the guidance of the United Nations Deputy Secretary General, Ms. Amina Mohamed, and the leadership of UN-Habitat and the United Nations Development Programme (UNDP), an unprecedented effort was put in place by the UN System to launch the Local2030 Coalition. This is a multi-stakeholder platform designed to facilitate cooperation across the United Nations and to support the localization of the SDGs.

At the same time, across the globe, increasing numbers of cities, regions and municipalities are producing Voluntary Local Reviews (VLRs). These assess their progress with the 2030 Agenda and motivate further action towards achieving the SDG goals.

In an era of multiple crises, LRGs have demonstrated an immense capacity to address rapidly changing needs and implement innovative sustainable solutions. These solutions will have a strong bearing on how the international community tackles further challenges in the future. The multiple roles of LRGs will only become increasingly important, too, as urbanization advances.

This report examines the critical importance of SDG localization in advancing progress on the 2030 Agenda. It does this through a series of policy briefs that explore specific kinds of SDG action at subnational levels. The report also discusses the value of LRGs as agents of change in developing and implementing innovative solutions – and the need for local, national and global actors to recognize the importance of LRGs and bolster their initiatives.

In order to maximise this positive synergy, this report makes a number of recommendations and stresses the following key messages:

1. **Integrating the SDGs into cities and regions' sustainable development strategies, plans and policies can help ensure cohesion between global, national and local plans and strategies and overcome the limitations of sector-based planning.** This integration is critical to ensuring on-the-ground implementation of the global goals. Furthermore, it can facilitate a shift from a siloed to a more integrated, multisectoral approach in the formulation and implementation of urban and territorial development policies.

2. **Governments at all levels should embrace the principles of multilevel governance, prioritizing both vertical and horizontal integration and collaboration.** Vertical integration of planning mandates and implementation capacities with both top-down and bottom-up communications helps improve the cohesion of strategies and policies across global, national and local levels. Horizontal dialogue across ministries, sectors and departments helps break down siloes for a more comprehensive and unified whole-of-government approach. This approach can better address the integrated nature of the SDGs and avoid duplication of efforts.

3. **Governments at all levels should pursue partnerships and collaboration with non-state actors and other LRGs.** These actors include civil society, the private sector, academia and people in vulnerable situations. Participatory methods and tools should be used to ensure the widest possible societal reach and inclusion to mainstream the needs of underrepresented groups in decision-making processes. Broad participation not only ensures greater ownership and buy-in from special interest groups, but also helps ensure that underrepresented groups are not left behind, in accordance with the 2030 Agenda. Organizations such as the Forum of Mayors provide a good example of trans-jurisdictional connections.

4. **Subnational reviews – including VLRs and Voluntary Subnational Reviews (VSRs), along with Regionally and Locally Determined Contributions (RLDCs) and Climate Action Plans (CAPs) – are essential tools for aligning national, subnational and local actions with global SDG frameworks.** The expansion of VLRs in different regions, including the African and Arab regions, has highlighted the critical role played by subnational governments in localizing the SDGs and engaging different stakeholders. These reviews can help improve the efficiency, funding, strategic alignment and political buy-in of local SDG initiatives. They can do this by providing evidence and data showcasing local success stories in sustainable development. The review processes can also present an opportunity to enhance vertical and horizontal alignment within the government, as well as broader, more inclusive engagement with external stakeholders.

5. **Robust subnational data monitoring and reporting mechanisms are critical to gauging SDG progress, identifying gaps and opportunities and informing action plans to effectively accelerate SDG localization.** Prioritizing inclusive and participatory methods in data collection improves the relevance and accuracy of data. Effective and comprehensive data analysis is supported by fostering partnerships, improving funding and utilizing innovative technologies.

6. **To improve government service delivery, transparency and citizen participation, governments at all levels should establish digital platforms. Local e-government is crucial to achieving the SDGs,** yet local governments often lack resources, skilled personnel and infrastructure to implement effective e-government solutions. At the same time, digital disparities hinder progress. Strategies such as national-local alignment, internet access expansion, workforce training and resource distribution can all help meet this challenge.

7. **Leveraging synergies between SDG localization and subnational climate action presents an opportunity to accelerate local, tangible progress towards multiple agendas simultaneously and drive just climate solutions.** Cities and regions should leverage the SDGs to design and implement sustainable development policies, promote synergies and manage trade-offs among sectoral initiatives.

8. **Addressing the triple planetary crises of pollution, biodiversity loss and climate change depends on collaboration between national and local levels.** The SDGs provide a framework to address pressing challenges globally. Local governments play a key role in implementing sustainable practices and nurturing innovative solutions for the circular economy. LRGs are particularly important as agents of change in the waste crisis as they hold direct responsibility for local waste management. LRGs are also instrumental is advancing a just energy transition. There is an urgent need to increase analysis at the local level on the potential of net zero economy accelerators, such as green hydrogen. Research gaps exist on additionality and the localized impacts of this on cities and rural municipalities. There is also a lack of research on multilevel governance of green hydrogen projects and investments.

9. **Strengthening the financial capacities of local governments is critical to achieve the SDGs. Global, national and local actions are needed to boost finance for SDG localization, primarily through 1) Strengthening international development cooperation to build local governments' capacity to access private and public finance (2) Providing sufficient, timely, and equitable transfers of funding from national to local levels, and (3) Strengthen the capacity of local government to raise their own revenues.** The UN system is also embarking on innovative programmes to enhance local financial viability through greater local capacities in sustainable infrastructure asset management, and through sustainable borrowing from private and public sources.

Policy brief 1:
Multilevel governance for SDG localization

CONTRIBUTING ORGANIZATION: **UN-HABITAT**

1. Introduction

This policy brief seeks to highlight the importance of integrating a multilevel governance approach within decision-making and policymaking processes and mechanisms. It does this in order to support the localization of the Sustainable Development Goals (SDGs) and is aimed at civil society and all levels of government.

This brief also provides information on the context of multilevel governance, as well as on the challenges facing it. It then makes recommendations for fostering this important approach. In doing so, this brief seeks to assist policymakers and urban development practitioners in developing vertical and horizontal institutional integration and policy coherence.

2. Key messages

1. **Governments at all levels should strive to enhance collaboration, vertical integration of planning mandates and implementation capacities.** This should be achieved via mechanisms such as integrated development plans, transfer of resources and coordinated data collection and reporting processes. SDG localization should be used as a framework to align policy priorities, incentives and objectives across all levels.

2. **Horizontal dialogue and cooperation within sectors and departments should be ensured by governments at all levels.** Furthermore, in order to adequately address the integrated nature of the SDGs and avoid duplication of efforts, a whole-of-government approach should be taken. This can be done through mechanisms such as interministerial and interdepartmental working groups, city-to-city exchanges and capacity building. In this context, national urban policies, subnational urban policies and collaboration on Voluntary Local Reviews (VLRs), Voluntary Subnational Reviews (VSRs) and Voluntary National Reviews (VNRs) are key instruments in promoting institutional coordination and SDG localization.

3. **Governments at all levels should pursue partnerships and collaboration with non-state actors.** These include civil society, the private sector, academia and vulnerable groups. Participatory methods and tools should be used to ensure the widest possible societal reach and inclusion. These include stakeholder forums, public information campaigns and a mainstreaming of the needs of vulnerable groups in decision-making processes.

4. **Governments at all levels should establish digital platforms.** This should be done in order to enhance public participation and transparency, as well as to collect and leverage data and information. Such platforms will also help build towards an integrated, connected and open government. While improving efficiency and accountability, these digitalization processes should also be undertaken in a manner that protects the public interest and respects individual privacy, as well as fundamental human rights.

3. Background

Multilevel governance is defined as a set of strategic arrangements that engage politically independent, yet interdependent, institutional actors at the national, regional and local level. Furthermore, such governance avoids exclusive policy competence and stable hierarchy assertion.[5] It also provides a distinct lens on policymaking processes centred on cohesive leadership, vertical coherence and horizontal coordination for improved service delivery – both by and among all spheres of governance. The multilevel governance approach underscores the interconnectedness necessary to navigate the intricate landscape of sustainable development and urban governance.

Within this framework, SDG localization plays a pivotal role in harmonizing global aspirations with local realities. **The process of SDG localization strengthens integrated planning, the implementation of set goals and the monitoring of progress. It is also a process inherently rooted in institutional arrangements that facilitate the effective engagement of a multitude of stakeholders across diverse spheres of society and governmental levels.** Tailoring the objectives of the 2030 Agenda to community-specific needs, SDG localization empowers local actors to shape sustainable development initiatives.

As part of global efforts to localize SDGs, 43 per cent of local government associations (LGAs) and 59 per cent of local and regional governments (LRGs) have developed, or are in the process of developing, an indicator system aligned with the SDGs. In most cases, these organizations are working with other institutions, such as national statistical offices, the United Nations or the Sustainable Development Solutions Network. Many are also taking advantage of systems produced by international organizations such as UN-Habitat's Global Urban Monitoring Framework, or the *European Handbook for SDG Voluntary Local Reviews* produced by the European Commission's Joint Research Centre.[6]

The collaborative essence of multilevel governance aligns with and acts as an accelerator of SDG localization, emphasizing engagement at the national, regional and local level. Integrating SDG localization within this framework overcomes siloed thinking, addressing unique challenges with context-specific solutions.

The COVID-19 pandemic made this clear. In 2020, a survey by the Organization of Economic Cooperation and Development (OECD) and the European Committee of the Regions found that 71 per cent of the 300 European cities and regions that responded[7] recognized the critical function of multilevel governance mechanisms in addressing the emergency.

The multilevel governance approach also ensures the universal resonance of the 2030 Agenda, while acknowledging and leveraging the diverse contexts of particular localities. In this way, it fosters a more impactful realization of the SDGs.

It is also imperative to acknowledge the roles of both formal and informal institutions at the local and national levels. Both types of institution play a crucial role in facilitating the collaborative and participatory approaches that are essential for achieving the SDGs – and, by extension, the New Urban Agenda (NUA)[8] and other global programmes.

4. Challenges

Globally, governments grapple with institutional challenges. These can span from a lack of coordination in data governance, financing and policy coherence to a deficiency in commitment to localizing the SDGs.

LRGs often find themselves excluded from national policy discourse and key implementation mechanisms. A UN-Habitat survey from 2022 found that of 70 reporting countries, only 28 per cent of them had engaged LRGs in national coordination mechanisms between 2016 and 2021. A further 21 per cent had experienced weak engagement and 44 per cent had seen no engagement at all.[9]

On the other hand, the participation of LRGs in the VNR process is advancing. The 2023 Local and Regional Governments Report to the High-Level Political Forum on Sustainable Development[10] showed that there had been a slight increase in local and regional governments' participation in the VNR process since the first of these were published, back in 2016. That year, LRG involvement was medium to high in 32 per cent of the countries that had produced a VNR. By 2023, that figure had risen to 39 per cent. Progress, however, is not steady and is marked by important regional disparities. This exclusionary trend contributes to a disconcerting imbalance in responsibility and accountability, favouring national authorities and perpetuating hierarchical power dynamics.

Other challenges include:

- **Weak planning systems:** These hinder the meaningful alignment of plans, creating gaps in tools, budget resources and the prioritization of SDGs. This is particularly so at the intermediate and city levels. Weak planning systems result from siloed thinking and a lack of coordination and consultation with the different levels and sectors of government. As a result, government intervention lacks informed decision-making, leading to ineffective planning processes.

- **Lack of commitment and trust:** When this occurs between and within different government strata, it poses a significant obstacle to the effective localization of SDGs. Governments at all levels often lack cohesive commitment and trust, resulting in fragmented efforts. These disconnects among national, regional, and local governments disable SDG integration into policy frameworks, hindering the establishment of a unified vision for sustainable development. Within each level of government, competing priorities and conflicting agendas, along with a lack of robust commitment – also sometimes caused by a lack of understanding of the 2030 Agenda – impede the cohesive incorporation of SDGs into local strategies and initiatives.

- **Lack of coherent strategy in the financial realm:** In this, resources are often allocated without a coherent strategy, leading to inefficiencies and suboptimal outcomes. The absence of a coordinated financing approach impedes the ability to address the diverse needs identified in the planning process. The lack of resources affects the subnational levels in particular. There, governments face many challenges, such as underdeveloped capital markets, low creditworthiness, unfavourable lending terms, inadequate fiscal decentralization and limited managerial capacity.

- **Lack of data:** Inadequate data flow from the local level to the national government and vice versa also contributes to reduced coordination and alignment. Data-related challenges include: a lack of disaggregated data; obsolete and incomplete datasets; limited capacity and resources; competing priorities for monitoring between the sub-national and national levels; and competing priorities for the management of data and maintenance. These data-related challenges impede the different levels of government from making informed and evidence-based decisions, leading to ineffective policies and interventions.

- **Limited public participation:** When this occurs within the legislative and institutional frameworks, it can undermine decision-making and the success of localization initiatives. When relevant stakeholders are not engaged in participatory processes for the definition of policies, there is a higher risk of not accommodating their needs and leaving them behind. Limited avenues for inclusion and consultation can result in the failure of projects and initiatives due to missing ownership and limited awareness in society.

5. Solutions and recommendations

In response to the institutional challenges faced by governments around the world, this policy brief proposes several strategic recommendations.

To vitalize these, Member States should incrementally and officially integrate LRGs into the national coordination mechanisms and reporting processes of the 2030 Agenda. This will ensure that a clear commitment is backed by enforcement and accountability mechanisms.

Effective processes in relation to policy coherence, planning, transfer of resources and data management should also be established. In addition, technological innovation and open governance mechanisms should be made available to facilitate the engagement of LRGs in areas relevant to sustainable development.

Therefore, the strategic recommendations of this policy brief are:

- **Strengthen and align planning**

  Member States should focus on ensuring meaningful alignment of their activities, overcoming issues in tools, limited budget resources and SDG prioritization.

  The first step involves fostering alignment and consistency among supranational, national, and subnational strategies, utilizing the SDGs as a framework to synchronize policy priorities across different levels. This alignment can be defined and strengthened through horizontal integration. More specifically, this means establishing interministerial and interdepartmental working groups across different levels and sectors of government, as in the Philippines, Argentina, Ghana, Italy and Jordan.[11]

- **Enable stakeholder management and inclusion**

  National, regional and local governments should engage with a wide variety of stakeholders, such as civil society organizations (CSOs), private companies, women/youth/elderly groups, academia and research institutes. They should also incentivize participation by these stakeholders via digital platforms.

These linkages will enhance the planning and political ownership of strategies among sectors and levels of government. This reinforces an effective commitment to SDG implementation.

- **Improve financial capacity and management**

  Member States should promote whole-of-government and whole-of-society perspectives. This should be done by specifying the roles, contributions and responsibilities of different actors. It should also include the adoption of tailored mechanisms and a strengthening of stakeholder capacity, leading to strong horizontal and vertical integration.

  This specification and distribution of responsibilities not only enhances coordination and accountability, but also sets the stage for more strategic deployment of financial resources. Furthermore, enhanced collaboration and partnerships among stakeholders not only fosters the pooling of knowledge and expertise, but also helps pool those potential financial inputs.

  Promoting alignment between SDG planning and fiscal mechanisms, leveraging public procurement for the SDGs at sub-national levels, and designing transparent governance systems all play crucial roles in ensuring the effective use of financial resources. They are also all vital in the alignment of strategic plans for sustainable development.

  Finally, capacity-building programmes on participatory budgeting tools and financial management ¬– held across governmental levels – can make an important contribution to informed financial decision-making.

- **Strengthening data flow and coherence**

  Ensuring alignment with the indicator frameworks developed at national, supranational and global levels is paramount for Member States. This should also be done while allowing for sometimes limited territorial data. Investing in the collection and analysis of new, localized data and fostering collaboration with national statistical offices enhances the information base for informed decision-making.

  Member States should promote enabling environments for subnational reporting and connect local governments to VNR processes. Encouraging bottom-up reporting by local governments and their communities facilitates global knowledge sharing in the pursuit of SDG localization. This requires the translation of updated indicators into VLRs and VSRs. This enables the anchoring of the VLR process to the development of long-term strategic plans, emphasizing territorial partnerships and cross-sectoral coordination.

  The sharing of baseline data, trends and performances across sectors and regions – combined with the integration of official statistics, alternative data sources and digital platforms for consultation with citizens – contributes to a more comprehensive understanding of progress. Moreover, fostering participatory monitoring mechanisms and utilizing reviews and monitoring reports by societal actors all enhance accountability and decision-making processes. This ensures sustained commitment across broader society.

Lastly, integrating actions and initiatives by societal actors into the monitoring system further emphasizes the holistic nature of sustainable development efforts.

- **Close the capacity gap at the local level**

  Along with other global agendas, such as the response to climate change, the SDGs bring new tasks and roles to LRGs. Many of these need to be assimilated by the existing structures and workforce. However, some LRGs may lack the financial or personnel resources to respond. Capacity-building in – for example – emergency management, digital governance, environmental management, human rights and planning therefore needs to be tailored to the context and availability of resources.

6. Conclusions

This policy brief underscores the significance of multilevel governance and SDG localization as mutually reinforcing approaches.

Challenges such as the exclusion of LRGs from national decision-making processes, planning misalignment, financial deficiencies and data limitations hinder progress, with the worst consequences affecting local governments and communities.

Overcoming these challenges means integrating LRGs into national coordination. It also means aligning plans, promoting collaboration and enhancing data management in terms of both vertical and horizontal integration.

This brief advocates for the strategic deployment of financial resources, transparent governance systems and participatory monitoring. It also suggests the improved use of digital technologies to boost a coherent and collaborative approach across different government levels and sectors. This step is key to fostering meaningful SDG localization in the pursuit of sustainable development.

Policy brief 2: SDG localization: Data, monitoring and reporting

CONTRIBUTING ORGANIZATIONS: **UNDESA, UN-HABITAT**

1. Key messages

1. **There are a wide range of significant data challenges in SDG localization.** These include: a lack of common indicators and thresholds; poor data quality; an absence of disaggregated data; obsolete and incomplete datasets; inadequate coordination; limited capacities and resources; and a frequent lack of data interoperability between subnational and national levels.

2. **Prioritizing inclusive and participatory methods in data collection improves the relevance and accuracy of data.** It also improves subsequent policymaking and resource allocation.

3. **Effective and comprehensive data analysis is supported by enhancing capacities.** It is also advanced by fostering partnerships, improving funding and utilizing innovative technologies.

2. Introduction

Localization transforms the SDGs into actionable solutions by empowering local communities to identify, measure and act on their locally-aligned priorities.[12]

Central to SDG localization's success are robust data monitoring and reporting mechanisms. This includes processes that accurately gauge SDG progress, identify gaps and opportunities, inform action plans and financing, and track advancement towards development targets.

While SDG monitoring faces common challenges at all levels of government – including timeliness, availability and quality – local-level monitoring encounters additional complexities. This can be due to limited capacity, for example. It can also result from fragmented data sources and a lack of coordination between data custodians.

To address such challenges, tailored approaches and targeted support are essential to ensure inclusive and effective implementation of the SDGs at the local level.

This policy brief provides an overview of various data, monitoring and reporting challenges faced by LRGs in relation to SDG localization. It also highlights relevant approaches, solutions, opportunities and recommendations for addressing these challenges. The brief relies on analysis of existing studies and lessons-learned by UN-Habitat and the United Nations Department of Economic and Social Affairs (UNDESA) in their efforts to support SDG localization in collaboration with LRGs and other partners.

3. Challenges

Meeting the increasing demand for timely and credible local-level data involves tackling numerous issues. These include inconsistent definitions, poor data quality and limited resources. A comprehensive approach is needed to overcome these obstacles and realize the full potential of local-level statistics in informing and advancing the SDGs.

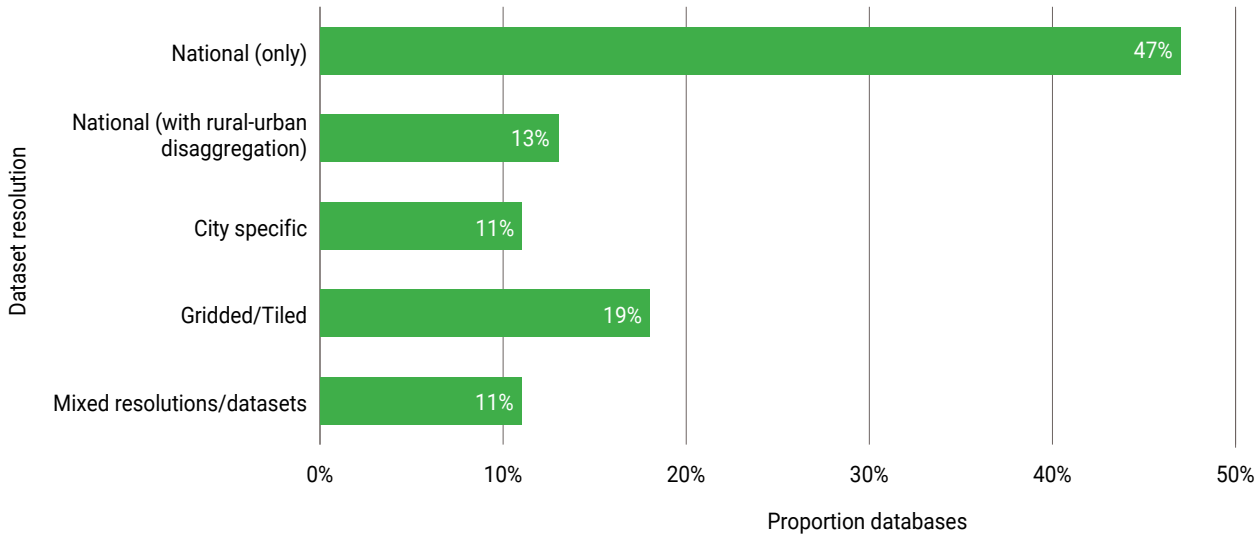
Key challenges include:

- **Defining key terms and indicators inconsistently:** This impedes local data standardization and comparison. Additionally, a lack of universal agreement hampers alignment with national and global frameworks, causing interpretation and reporting inconsistencies. Noteworthy, the existing SDG indicators may not fully capture the unique challenges and dynamics of local communities.

- **Limited data availability and insufficient disaggregation:** This can hinder consistency and scope of local SDG monitoring. Without detailed breakdowns according to geographical region and demographics, it is hard for LRGs to address disparities and tailor policies accordingly. In the current SDG global database, only 16 out of 231 indicators feature disaggregated data by location since 2015.[13] UN-Habitat has identified inadequate city-scale data as a key challenge, with many datasets available only at the national levels. Additionally, as seen in Figure 1 below, a 2020 survey conducted by UN-Habitat on accessible national and city-level data portals showed that only around 10 per cent of the 138 data portals had city-specific data.

- **Inadequate data coordination:** Decentralized governance often leads to fragmented data collection practices, while coordination challenges with other stakeholders – including national agencies and CSOs – result in gaps and redundancies. Lack of coordination also creates data silos and incompatible formats, hampering information exchange and reliability. Competing monitoring priorities can lead to disjointed reporting and inconsistencies in data collection, limiting synergistic action and collective impact. Furthermore, resource constraints can be exacerbated by the duplication of efforts and miscommunication. Political and administrative factors further exacerbate these issues by impeding transparency and efficiency. These factors can include bureaucratic hurdles and a lack of mechanisms for accountability.

FIGURE 1. Resolution of datasets in accessible national and city-level data portals surveyed by UN-Habitat, 2020



Source: UN-Habitat, 2020

- **No clear mechanisms for turning insights into action:** Local governments collecting data without such mechanisms, limit the impact of what is collected and its ability to facilitate informed decision-making. Often, data is collected without an analysis of the causes that have contributed to progress or setbacks, hindering learning for future strategies. Limited engagement with stakeholders and communities further hampers ownership, accountability, and support for action.

- **Limited technical capacities and resources:** Many of the above-mentioned challenges stem from this, including lack of sufficient investment by national authorities and LRGs in local data production. While, for example, national agencies may have strong data collection mechanisms and resources to explore advanced technologies, subnational entities often lack resources and expertise, leading to incomplete or unreliable datasets.

4. Opportunities and solutions

Effective solutions for localizing the SDGs and ensuring thorough monitoring and analysis of progress with them are vital. Policymakers must prioritize support at the local level, recognizing its vital role in achieving the SDGs through a bottom-up approach.

The following solutions and opportunities are proposed:

- **Promotion and improvement of capacity-building**

  Capacity-building is essential if LRGs are to create outputs of high quality and benefit from innovative approaches. Initiatives such as localizing the SDGs Academy[14] in Indonesia and UN-Habitat's Earth Observation Toolkit for Sustainable Cities and Human Settlements[15] provide meaningful insights into improving local data collection and analysis. The first of these examples provides capacity-building programmes on SDG localization and technical assistance to government officials at all levels. The second provides a repository of data sources, tools and methodologies for accessing, analysing and utilizing spatial urban data.

  In addition, guidance, training and tools should be offered to LRGs and those assisting data analysis processes. This assistance can provide information on good practices, help establish networks for knowledge exchange and troubleshooting, and find effective ways to link data with strategic action. Important resources include UN Habitat's *Action-Oriented Voluntary Local Review Methodology*,[16] which offers a step-by-step guide on the VLR process. There are also a variety of regional guidelines that include a wealth of context-specific insights and good practices on VLRs.[17] UN-Habitat and its partners, such as United Cities and Local Governments (UCLG), have also produced additional guidance materials.[18]

- **Fostered partnership and coordination**

  For effective SDG localization, it is crucial to enhance partnership and coordination between LRGs and non-state actors, such as academia, CSOs and the private sector. This collaboration provides access to proprietary datasets, innovative approaches, expertise and new perspectives. Formal intergovernmental mechanisms should be established to facilitate discussion, align priorities and ensure consistency in data collection. Training programmes, such as the Open Government Data Platform[19] in India, demonstrate successful approaches to strengthening coordination and interoperability between government levels.

Other noteworthy initiatives include the Collaborative on Citizen Data[20] from UNDESA, which brings together a range of stakeholders to promote citizen-generated data. These include national statistical offices, human rights institutes and local governments, with the aim of making data more available and inclusive for local communities and marginalized population groups.

Additionally, the Global Partnership for Sustainable Development Data[21] brings together governments, businesses and CSOs to harness data for sustainable development. The Data for Development[22] in Africa programme exemplifies collaboration between governments and technology companies in leveraging mobile phone data for SDG monitoring, enhancing data accessibility and inclusivity.

- **Promoting inclusive and participatory data collection methods**

  To ensure a comprehensive and complete assessment that leaves no one behind, it is essential to engage the most vulnerable and marginalized groups. Flexible mechanisms accommodating diverse needs, such as childcare support and varied meeting times, are crucial. Targeted outreach and capacity-building empower marginalized communities, while community-based approaches enhance inclusion. Inclusive data tools and strategies address diverse literacy levels. Collaborating with employers can further ensure inclusion in data collection and removal of barriers.

- **Global-level partnership and coordinated efforts**

  Global partnerships are vital for aligning approaches and promoting local-level data comparability across countries. Initiatives such as the Degree of Urbanization (DEGURBA) of the Statistical Office of the European Union (Eurostat)[23] enable consistent measurement of trends and enhance data comparability within and across countries. Collaborative efforts, such as the UN-Habitat Global Urban Indicators Database,[24] aggregate urban data from various sources to analyse national, regional and global trends in urban performance.

  Another significant approach is that of twinning programmes, such as that between Tampere (Finland) and Mwanza (Tanzania). This aims to facilitate knowledge exchange and joint monitoring of progress in SDG implementation. Moreover, increasingly, national governments have inclusive coordination mechanisms for SDG implementation and VNR production. Yet, while these fora are valuable spaces for partnership and coordination, they sometimes exclude local governments. Acknowledging and leveraging these spaces is essential in maximizing collaboration and contributing to progress in the SDGs.

- **Adaptation and/or implementation of the Global Indicator Framework**

  Several initiatives and frameworks have been developed to support the local monitoring of the SDGs, capturing the unique socioeconomic, cultural and environmental characteristics of subnational contexts. The SDGs themselves provide a comprehensive framework for assessing progress in different dimensions, such as gender, age and location. The New Urban Agenda (NUA) further supports SDG localization by providing standards and principles for sustainable urban development, facilitated through guidelines for reporting[25] and a monitoring framework.[26] As illustrated in Figure 2 in page 28, UN-Habitat's Urban Monitoring Framework (UMF),[27] endorsed for global implementation, serves as the comprehensive reference for urban monitoring efforts. Other guiding initiatives include the SDG Cities Flagship Initiative[28]

FIGURE 2. Workflow for applying the UMF

Source: UN-Habitat Data and Analytics section, Global Urban Monitoring Framework, 2022

and VLRs themselves, which have emerged as powerful tools for subnational self-assessment and reporting. These reports have the flexibility to include (and create) a range of different indicatorsand discuss targets with reference to local contexts and priorities.

In addition, initiatives such as the Indigenous Navigator[29] propose indicators for indigenous rights, while local government associations have also developed indicator sets. Examples of the latter include Kolada[30] in Sweden. Cities can also create their own indicators, such as New York's OneNYC,[31] or Obuasi (Ghana)'s indicators regarding funerals.

Guidance and tools should be provided to LRGs to help them navigate a wide range of indicators and support their alignment and selection. In this regard, UN-Habitat has developed a data tool that aligns all SDG indicators with those of the UMF and the NUA. It also assists by adding measures from existing national, local or strategic plans to a harmonized and comprehensive indicator framework.

- **Harness innovative data sources**

  For a comprehensive analysis, local SDG data collection should blend diverse sources to enhance validity and reliability. These sources could include citizen-generated data, artificial intelligence (AI) models, data forecasting and geospatial technologies. The Davao Region of the Philippines, for example, measured its progress on SDG9.1.1 by using geospatial data on rural road access – a critical factor for inclusive and sustained growth.[32] By embracing advanced technologies, local entities can enhance data accessibility, timeliness, quality, transparency and inclusivity. This ultimately facilitates more efficient and

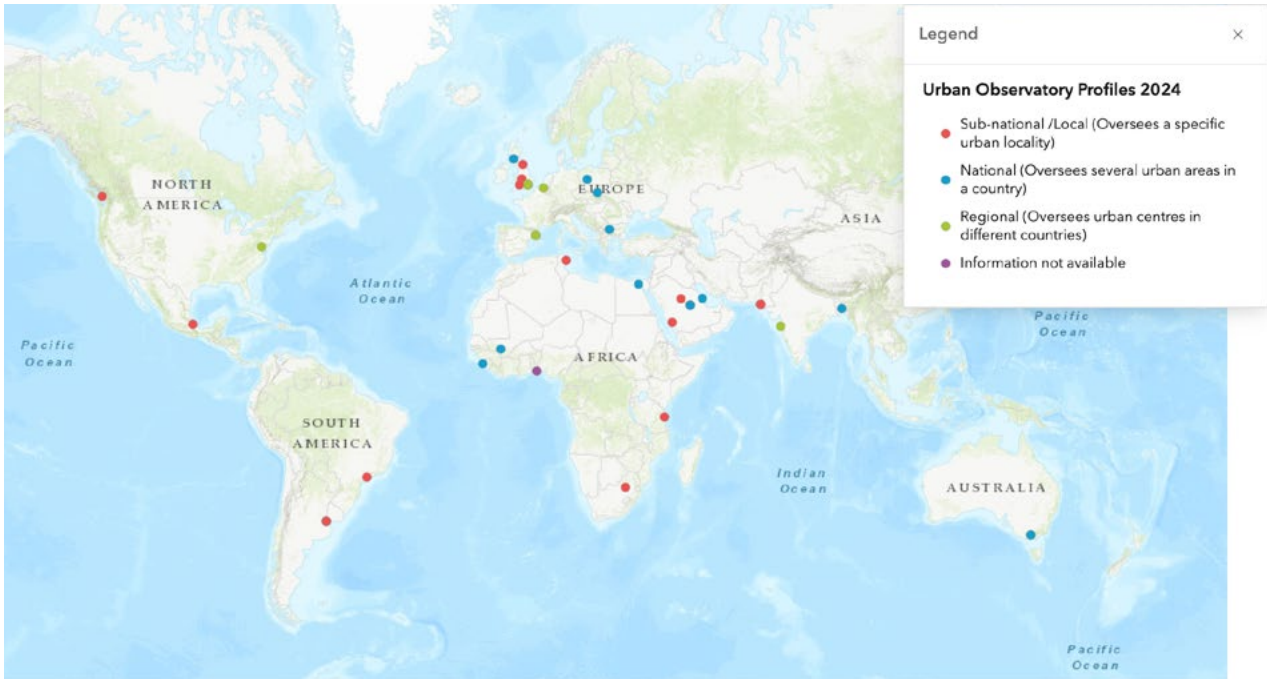
sustainable models of local development. Platforms such as OpenStreetMap[33] and KoboToolbox[34] aid the generation, alignment and reporting of urban data by integrating crowdsourcing data with official data in a complementary way.

While recognizing the myriad benefits of innovative data sources, it is imperative, in line with the United Nations Statistical Commission (UNSC), to conscientiously address the associated opportunities and challenges pertaining to standards, methodologies, ethical guidelines and data privacy.

- **Enhanced data platforms and continuous monitoring**
  Leveraging initiatives like the UN-Habitat Urban Observatory Model[35] can maximize urban data benefits by reducing data acquisition costs and supporting trend analysis. UN-Habitat has offeredguidance urban observatories,[36] with this leading to the development of the Global Urban Observatory Network (GUO-Net) illustrated in Figure 3 below. This network fosters information exchange and capacity-building for the implementation of the NUA and SDG targets at the national and local levels.

  A comprehensive VLR repository can enable comparative analysis, empower LRGs to enhance actions, harmonize indicator frameworks and promote shared learning, both among LRGs and with national governments.

FIGURE 3. Profiles of urban observatories



Source: UN-Habitat Global Urban Observatory, 2023

- **Linking data to action**

  Data integration into development plans and policy reviews is crucial, with strategic ties to mandated plans and budgets. In Suva, Fiji, for example, the VLR directly shaped the upcoming 10-year development plan, guiding project prioritization.[37] VLRs should proactively identify projects and funding opportunities to address gaps. Tools focused on the national level, like the Arab Financing for Development Gateway,[38] developed by the United Nations Economic and Social Commission for Western Asia (UNESCWA), could be expanded to support local-level SDG financing.

5. Conclusion

The challenges surrounding localization for SDG in terms of data collection, monitoring and reporting at the local and regional levels are multifaceted. They include issues related to data availability, timeliness, relevance, quality, disaggregation, coordination, and utilization. These challenges often stem from limited capacities, insufficient investment in local data generation, and a lack of coordination between data custodians. Additionally, the complexity and multidimensionality of localities further complicate the development of universally meaningful indicators for consistent monitoring and comparison.

Improving capacities, strengthening cooperation, leveraging technology and engaging stakeholders offer possible solutions. Addressing these challenges can lead to more evidence-based sustainable development planning, advancing SDG achievement and inclusivity.

Policy brief 3: Harnessing local e-government for the 2030 Agenda

CONTRIBUTING ORGANIZATION: **UNDESA**

1. Key messages

1. **Local e-government is crucial in achieving the SDGs.** It improves service delivery, transparency and citizen participation at the community level.

2. **Digital disparities hinder progress.** Gaps exist between urban and rural areas, and between developed and developing regions. Closing these gaps is essential.

3. **Local governments need support.** They often lack resources, skilled personnel and infrastructure to implement effective e-government solutions.

4. **There are opportunities to address challenges.** Strategies such as national-local alignment, Internet access expansion, workforce training, and resource distribution can help.

5. **Collaboration is key.** Partnerships between the private sector, international organizations and national and local governments are crucial for success.

2. Background

Technological advances in the era of digitalization are potent allies when it comes to achieving the ambitious goals laid out in the 2030 Agenda. The 2023 Global Sustainable Development Report emphasizes this by highlighting the critical role digital transformation plays in enabling the effective implementation of the SDGs.[39]

By adopting e-government solutions, governments can improve the efficiency and effectiveness of service delivery, promote participation and increase transparency and accountability. Local e-government, utilizing information and communications technology (ICT) to deliver and manage public services at the local level, emerges as a powerful tool in advancing the 2030 Agenda. LRGs are the governing bodies closest to communities and are responsible for providing a wide range of essential services, such as education, healthcare and public safety. Their influence in driving progress for the SDGs is therefore far-reaching.

The United Nations E Government Survey, issued biennially by UNDESA, evaluates digital transformation in 193 Member States. It measures e government effectiveness through the E Government Development Index (EGDI). This analyses a country's performance across three core components: the Online Service Index (OSI), the Telecommunications Infrastructure Index (TII) and the Human Capital Index (HCI). Supplementary indexes, such as the E Participation Index (EPI) and the Local Online Service Index[40] (LOSI), offer further insights into engagement and local public service delivery, respectively. The UNDESA survey guides policymakers and analysts in enhancing e government development worldwide.

The 2022 edition of the survey highlights significant strides in local e government progress since 2020, based on the comparison of 83 cities assessed in both editions. The LOSI reveals a noteworthy increase in the number of cities classified in the very high and high categories. This number rose from 30 in 2020 to 46 in 2022, equating to a 54 per cent increase. This shift indicates a heightened implementation of LOSI features and marked enhancements in the provision of online government services at the local level.

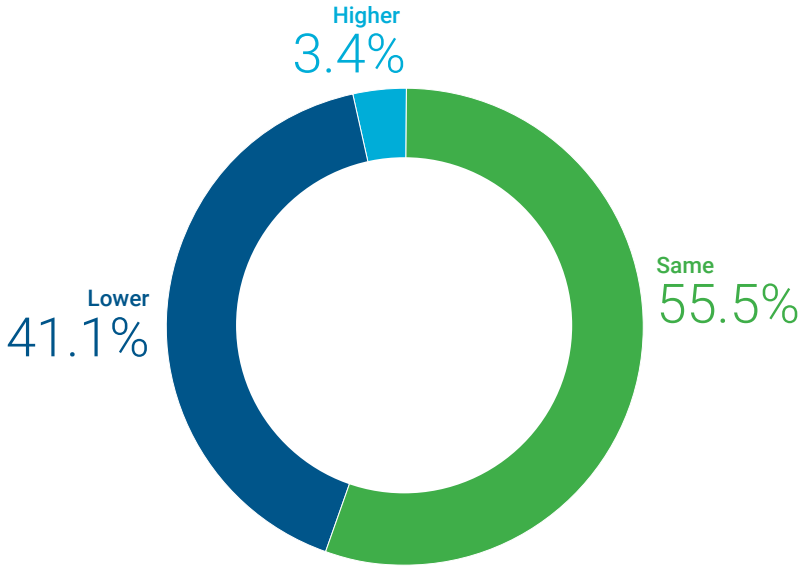
Despite this notable progress, however, challenges persist. The findings of the UN E Government Survey 2022 reveal a persistent gap between city and national portals. Out of 146 city portals evaluated, 81 aligned with their national counterparts, while 60 lagged behind and only 5 were above their countries' OSI level. This gap highlights the critical need for equitable digital infrastructure and continuous monitoring to support digitalization in the public sector across all levels.[41]

As millions embrace the benefits of a digital government and economy, those unable to access this realm face heightened disadvantage and marginalization. This digital gap is stark across Asia, the Americas and Africa, exacerbated by factors such as limited Internet, inadequate digital infrastructure, knowledge disparities, and financial constraints.[42] To address these disparities, enhancing global digital cooperation is paramount. As emphasized by the Stockholm+50 Conference and the United Nations Conference on Least Developed Countries, collective efforts are recognized as a tool to accelerate the transfer of knowledge, technology and resources, with the aim of bridging the digital divide.[43,44]

In addition, while global cooperation is pivotal, current structures often fall short in addressing the needs of marginalized groups and local entities. The Secretary General's Roadmap for Digital Cooperation[45] highlights the ineffectiveness and exclusivity of the current architecture. This disproportionately affects those with limited resources, including local governments.

This Policy Brief examines how local e-government can be more effectively harnessed to advance the 2030 Agenda. The upcoming sections will explore the challenges faced by local governments in efficiently utilizing technology for that agenda, as well as the consequences of inaction. The brief then continues with a series

FIGURE 4. LOSI and OSI 2022 levels: Convergence and divergence in 146 city portals



Source: UNDESA, UN E Government Survey, 2022

of good practices for local and national level entities on overcoming technical and human challenges. It then concludes with some key recommendations fostering an enabling environment for the localization of the SDGs within public institutions.

3. Navigating digital disparities: Challenges in local e government development

The assessment of 146 city portals in the 2022 LOSI survey revealed intricate challenges hindering uniform progress in local e-government.

Those challenges were:

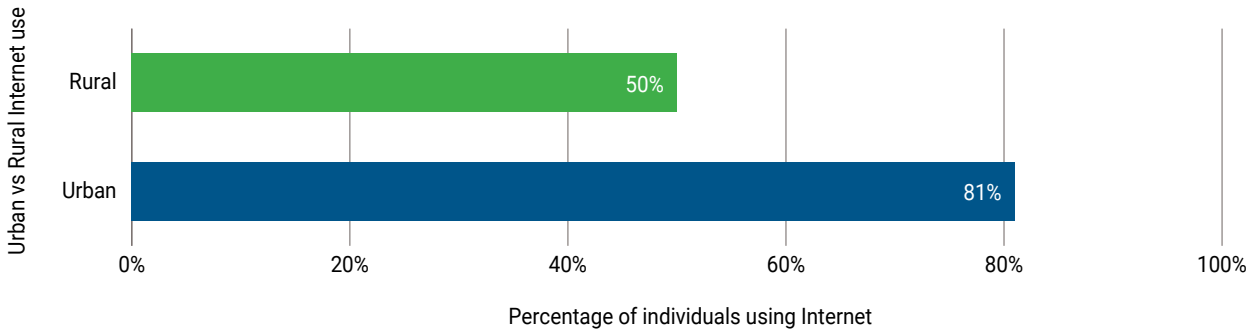
- **National and local discrepancy:** At least 41 per cent of cities fall short in comparison to their countries' OSI levels. This is often due to limited financial and human resources. This impedes the abilities of local and regional governments to invest in and provide digital infrastructure.[46]

- **Urban and rural divide:** According to recent International Telecommunications Union (ITU) statistics, while 81 per cent of urban residents, worldwide, had Internet access in 2023, only 50 per cent of those in rural regions could say the same. This discrepancy is even more pronounced in low-income nations, where less than one-fifth of rural inhabitants have Internet access, highlighting a deepening digital disparity in rural setting.[47] The digital gap persists even within cities and regions, revealing internal discrepancies in Internet availability and usage.[48]

  Beyond simple access, this divide also widens the knowledge gap between urban and rural, as urban populations benefit from superior educational resources and digital literacy programmes, while rural areas face shortages, limiting crucial digital skills.[49]

- **Lack of skilled personnel:** The lack of skilled personnel in local governments not only affects the management and maintenance of digital systems, but also hinders the development of a strategic vision for leveraging digital technologies. Developing skills that support the formulation of strategic visions for

FIGURE 5. Percentage of individuals using the Internet in urban and rural areas, worldwide, 2023



Source: UNDESA, ITU

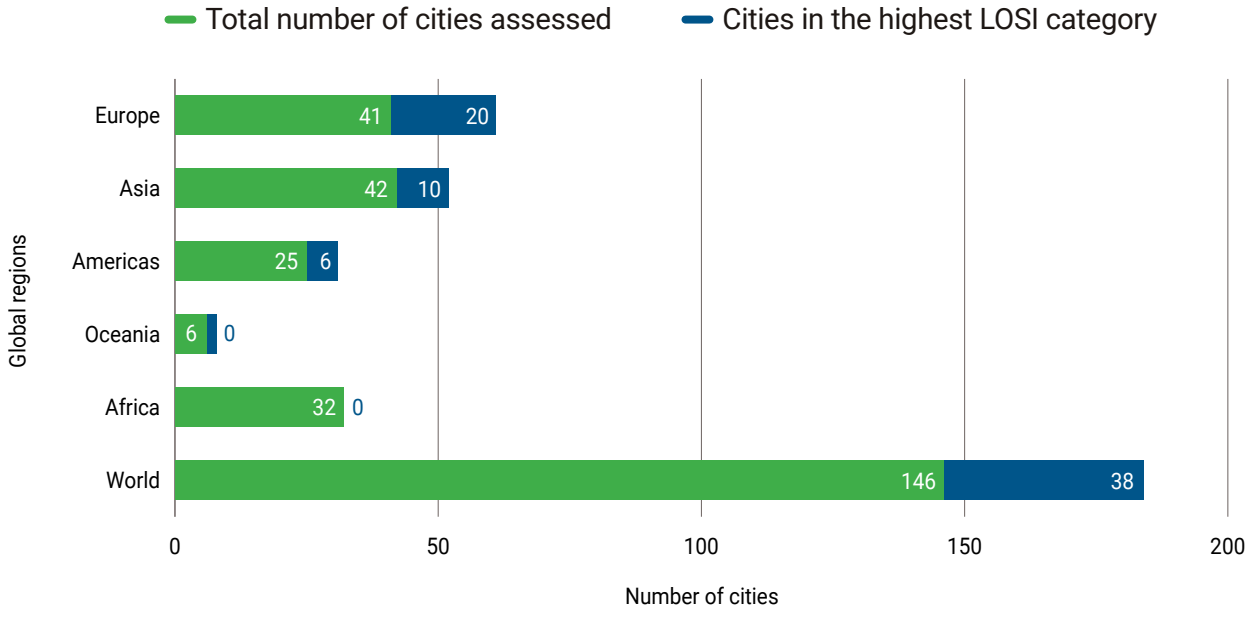
digital transformation can empower local governments to harness technology effectively and promote innovation in service delivery. This includes fostering competencies in assessing emerging technologies and identifying opportunities for their application. It also includes designing comprehensive digital strategies aligned with local development objectives.

- **Gender disparities:** In the digital sphere, gender imbalances persist not only within local government administrations, but also across the supplier and developer landscape. The underrepresentation of women in these roles contributes to a lack of diverse perspectives in the design and implementation of local e-government initiatives, hindering their effectiveness and inclusivity. Gender disparities in access to digital technologies further exacerbate inequalities in participation within decision-making processes, limiting the reach and impact of local e government services. Recognizing and addressing these gender disparities is crucial for fostering more equitable and inclusive local e-government development.

- **Digital age gap:** According to the ITU,[50] more than 90 per cent of young people in high-income countries with available data use the Internet. This compares with less than half of people aged 75 years or over in most high-income countries with available data. The digital gap was significantly wider when comparing both age groups in middle-income economies. When disaggregated by sex, the data shows a gender gap, too, with older men having higher rates of Internet use than older women across nearly all countries. This was regardless of the income level of the individual.

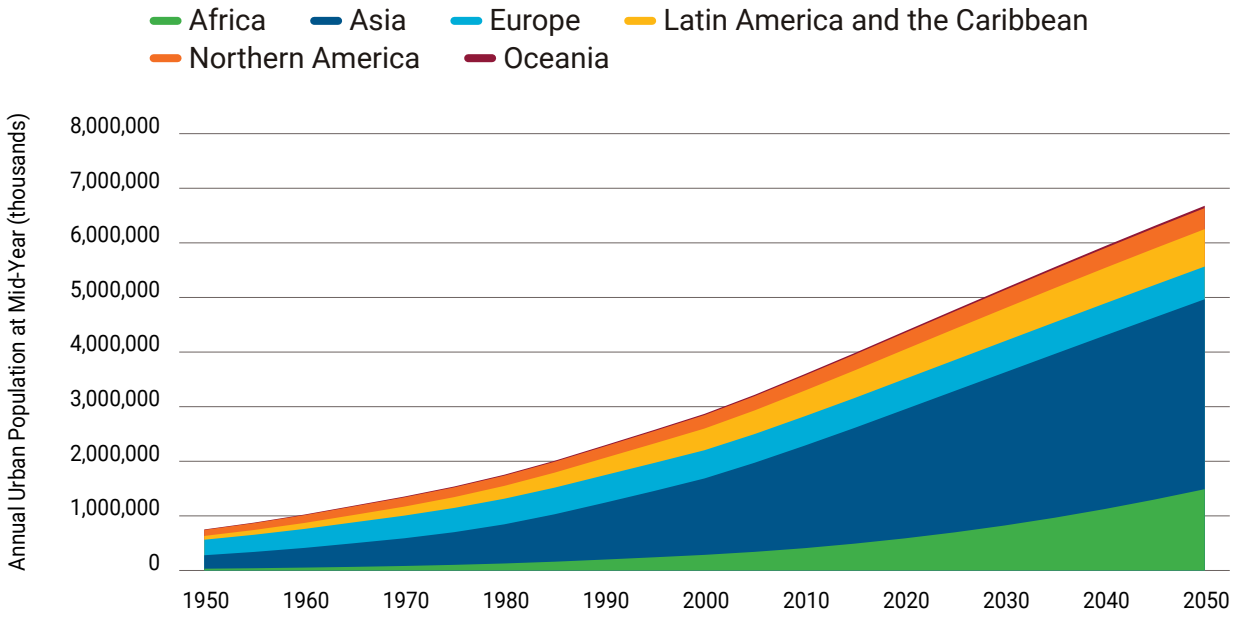
- **Resource disparity:** While 20 cities in Europe, 10 in Asia, 6 in the Americas, and 2 in Oceania meet the highest LOSI tier, the striking absence of major cities in African nations is a cause for concern. This highlights a significant disparity across regions.[51]

FIGURE 6. Distribution of cities per region with the highest LOSI level, 2022



Source: By author, UN E-Government Survey 2022

FIGURE 7. Urban population projections by world regions, 1950-2050 (thousands)



Source: UNDESA Population Division, 2018

As the world races to achieve the 2030 Agenda, the urban population is projected to reach an estimated 5.1 billion by 2030.[52] This rapid urbanization, particularly prevalent in Africa and Asia, underscores the urgent need to address digital disparities in achieving the SDGs. This should be done through the establishment of strong and adaptive local e government frameworks.

4. Seizing opportunities: Advancing local e government for sustainable development

This section presents seven targeted opportunities for tackling key challenges hindering local e-government in its efforts to achieve the SDGs, while leveraging the full potential of digital technologies. The first four opportunities directly address core challenges, while the latter three address broader issues. These recommendations should be taken into consideration in coordination with broader national and local priorities. The examples provided are illustrative, but not exhaustive.

1. Promoting national and local institutional coordination

Clear institutional coordination mechanisms and frameworks should be established at the national level. This is to ensure alignment between national and local governments in developing and maintaining digital infrastructure. This could involve: the creation of intergovernmental committees or working groups tasked with overseeing digital infrastructure projects and ensuring coherence; enhancing transparency and accountability; and fostering collaboration and information-sharing to facilitate efficiency and avoid the duplication of efforts.[53]

Example of innovative practice: India's Smart Cities Mission. A dedicated national fund and capacity-building programme supporting local governments in developing digital infrastructure and enhancing governance and services.[54]

SDG target addressed: 11.3.

2. **Promoting people-driven participatory and inclusive service transformation**

Inclusive decision-making practices for local online services aligned with the SDGs should be implemented. This should be done in collaboration with national and regional municipal associations. A dynamic online hub for accessible guidelines should be launched, encouraging active participation from diverse stakeholders, including vulnerable groups.[55]

Example of innovative practice: The "Better Reykjavik" initiative in Iceland enables residents to propose and prioritize ideas, actively involving them in decision-making.[56]

SDG target addressed: 16.7

3. **Embracing an integrated data strategy**

Standardized protocols for seamless data sharing and interoperability across government levels should be established and enforced. A centralized platform for efficient data exchange should be created, fostering communication and collaboration between diverse government entities while promoting evidence-based decision-making.[57]

Example of innovative practice: Singapore exemplifies integrated data empowerment by enforcing standardized protocols for seamless data sharing. Their centralized platform promotes collaboration and evidence-based decision-making.

SDG target addressed: 16.6

4. **Bridging the Internet access divide**

Targeted initiatives for rural connectivity should be launched. These should, include: 1) partnerships with telecommunication companies to expand broadband coverage; and 2) subsidized data plans for rural residents.[58]

Example of innovative practice: The Philippines' Free Wi-Fi for All programme is a notable example of efforts to bridge the Internet access gap. Through partnerships with telecom companies, the initiative expands broadband coverage in rural areas, subsidizes data plans, and promotes digital literacy.[59]

SDG target addressed: 9.C

5. **Enhancing transformational leadership and the digital workforce**

   Institute specialized training programmes for local personnel, focusing on e-governance policies, digital platforms and data management.[60] Local governments frequently lack skilled personnel to make informed decisions about the adoption and management of smart technologies, which can result in outsourcing to private sector entities that may not have a deep understanding of, or be aligned with, the needs or priorities of the city.

   Example of innovative practice: The Danish Government Digital Academy equips civil servants with essential digital skills, offering tailored courses in areas including strategy, data management and collaboration. These are guided by the Model of Digital Skills.[61]

   SDG target addressed: 8.6

6. **Promoting equitable resource distribution**

   A thorough assessment of resource distribution among cities should be conducted. This should identify gaps and allocate resources based on need and effective resource allocation.[62] Cities should be encouraged to raise their own funding and implement policies to incentivize private sector investment.

   Example of innovative practice: The Making Cities Resilient 2030 (MCR2030) initiative, led by the United Nations Office for Disaster Risk Reduction, empowers cities to assess resilience, identify resource gaps and implement policies for equitable distribution.[63]

   SDG target addressed: 11.A

7. **Promoting digital rights**

   Digital rights in an urban context should be promoted through city-wide action. This should aim to resolve common digital challenges and work towards legal, ethical and operational frameworks that advance human rights in digital environments.

   Example of innovative practice: In November 2018, the Cities Coalition for Digital Rights was formed by Amsterdam, Barcelona and New York. It is now also supported by UN Habitat, the UN Office of Human Rights, UCLG and Eurocities. The coalition aims to protect and uphold human rights on the Internet at the local and global levels. There were around 60 cities in the coalition, as of April 2024.

   SDG targets addressed: 10 and 11

8. **The LOSI Network – a global platform to champion local e governmen**t

   UNDESA tools, such as the LOSI Network and the comprehensive guidance on the application of LOSI methodology, should be leveraged. This should empower stakeholders, inform policy, gather insights and drive action, advancing local e-government and sustainable development, while promoting the LOSI methodology globally.[64]

Example of innovative practice: Numerous United Nations Member States, such as Jordan, Brazil, India and Uzbekistan – along with the State of Palestine – are active members of the growing LOSI Network. They have implemented the LOSI methodology across various municipalities within their respective countries. Their involvement and LOSI findings have facilitated informed policy decisions, offering valuable insights into best practices and challenges in local e-government.

SDG target addressed: 17.17

5. Policy recommendations

Strengthen collaboration and resource allocation between national and local governments to ensure equitable access to digital infrastructure and capacity building.[65]

Invest in expanding Internet access and digital literacy programmes in rural areas.[66] This could involve partnering with private sector companies to provide affordable Internet access, establishing community technology centres, and developing targeted digital literacy training programmes for rural residents.

Provide training and support to local government officials on how to effectively manage and maintain digital systems.[67]

Encourage regional cooperation and knowledge sharing among local governments in different parts of the world.[68] The LOSI Network[69] offers access to a global community of e government stakeholders and serves as a catalyst for collaboration.

Mainstream local e government in national development strategies. Integrating local e-government objectives and targets into national development plans and policy frameworks and establishing mechanisms for multi-level governance coordination and collaboration.

Promote human rights in the implementation of local e-government initiatives. By mainstreaming digital human rights in the implementation of local e-government initiatives, cities can create inclusive and equitable digital ecosystems that empower residents while upholding their rights.

Policy brief 4:
Urban basic services: Service delivery at the local level

CONTRIBUTING ORGANIZATION: **UN HABITAT**

1. Purpose

The purpose of this policy brief is to examine the key role of urban basic services and service delivery at the local level. It seeks to discuss the challenges faced by national, regional and local governments, CSOs and the private sector in performing this key role. The policy brief then proposes solutions to these challenges.

2. Key messages

1. **Due to increasing urbanization, the pressure on LRGs will continue to intensify.** To meet increased demand, build resiliency and be prepared for multifaceted crises, efficient and adaptable urban basic service delivery must be established at the local level.

2. **Adopting a human rights-based approach emphasizes equitable access and dignity for all, recognizing urban basic services as global common goods.** This necessitates inclusive governance and community collaboration to ensure fair management practices. It also addresses disparities among residents, in line with the principles of the 2030 Agenda.

3. **LRGs are particularly well-placed to guarantee universal access to quality basic services.** As direct providers, contractors, managers or supporting service delivery models, LRGs play a wide range of pivotal roles regarding urban basic services (UBS). Investment in the human, technical and financial capacities of LRGs helps bolster more efficient delivery of these services and builds resilience.

4. **Challenges in multilevel governance and multi stakeholder engagement must be addressed.** Multilevel governance and multi stakeholder ecosystems must be enhanced by the provision of sustainable funding mechanisms and enabling infrastructure. This can address pervasive inequalities and the marginalization of communities while ensuring reliable UBS. Prioritizing the enhancement of local data and inclusive decision-making through participatory processes will help ensure timely, effective and equitable services.

3. Background

UBS are the essential amenities and facilities provided within urban settlements by local governments, or other service providers, in order to meet the fundamental needs of residents. These services typically include access to clean water, sanitation, waste management, electricity, adequate housing, transportation, healthcare, education and public safety. In addition, as the world rapidly develops, so does demand for what many consider another UBS – access to technology.

Ensuring the continued delivery of quality and sustainable UBS is crucial not only for the preservation of human life and dignity, but also for driving economic growth and ensuring social equality.

In emergency contexts, UBS delivery becomes a vital, foundational element of effective emergency response and emergency preparedness. Major migration flows, displacement, health crises and other shocks are often first felt in cities. These impact the quality of people's lives and livelihoods and can lead to economic volatility in the face of increased public service demand.

According to a 2020 United Nations report,[70] around 95 per cent of COVID-19 cases came from urban areas. During the pandemic, LRGs faced unprecedented challenges in keeping the population safe, ensuring the delivery of basic services and preventing an economic collapse. Efficient basic services delivery at the local level can not only alleviate such crises, but can also eliminate some challenges altogether. From now on, reinforcing the capacity of local UBS systems will define how cities and territories mitigate the negative impact on their populations of complex, future emergencies.

At the same time, strengthening the effective and equitable delivery of services directly promotes economic growth and the reduction of inequality, positioning the most vulnerable communities at the centre of LRG responses. Better-managed cities with improved services contribute to peace and security, encourage greater investment in people and support just and democratic governance.

UBS and the 2030 Agenda share two common features which make SDG localization a key element in their fulfilment. Firstly, UBS are interconnected – much like the SDGs, in which enhancing one aspect contributes to the improvement of another. Secondly, both require localization, necessitating a focus on bringing services and goals to the local level.

Ensuring that UBS delivery is universally accessible, inclusive and affordable is crucial for the implementation of the 2030 Agenda and its pledge to "leave no one behind".

4. Challenges

Demand for water in urban areas is predicted to grow by 80 per cent within the next three decades. Over the same period, the number of people facing water scarcity in cities is expected to double to between 1.7 billion and 2.4 billion.[71]

Fewer than 35 per cent of the cities in developing countries have their wastewater treated. Moreover, today, 1.6 billion people, globally, live in inadequate housing, often with no security of tenure. With almost 70 per cent of the world's population forecast to live in urban areas by 2050,[72] effective urban service delivery becomes a key element in sustaining and improving the lives and livelihoods of the rapidly growing number of urban dwellers.

The frequency and intensity of the cascading and interlinked crises we are currently facing will only increase. With the added pressures of the climate crisis and increasing conflicts, UBS providers are facing significant obstacles in fulfilling their duties. Addressing these issues demands immediate attention and coordinated effort.

Further challenges include:

- **Multilevel governance constraints:** Policy incoherence and insufficient coordination between different levels of government (national, regional and local) can constrain effective service delivery. In many countries, the national government holds centralized control of UBS, which often leads to a disconnection between what is being provided and the specific needs of the local communities.

This disparity underscores the challenges faced by LRGs in fulfilling their responsibilities. Furthermore, local governments can experience a lack of city-level, disaggregated data and monitoring mechanisms. This presents a substantial challenge in informing evidence-based UBS delivery. Insufficient data on housing affordability, for example, or homelessness rates and housing conditions within different areas of a city make it difficult for local governments to implement targeted housing policies.

The principle of subsidiarity and the enhancement of multilevel governance ecosystems with effective local government structures has become crucial for the delivery of services. LRGs need to be equipped with adequate legal, technical and financial capacities to enhance their role as local public service providers.

- **Funding constraints:** Despite their mandate to provide essential services, local governments are frequently underfunded. They also often lack opportunities for revenue generation or enabling subsidiary fiscal policies. In addition, local governments often have less revenue and expenditure autonomy than national and regional governments. This is despite the fact that they are the level of government closest to communities and the first line of defence in a crisis.

  More than 80 per cent of global gross domestic product (GDP) is generated in cities, making UBS delivery essential to economic growth at the local level.[73] Furthermore, prioritizing local public procurement practices and supporting indigenous businesses can help cities leverage UBS investments, stimulating economic activity and job creation within communities.

  Adequate UBS delivery enables citizens to become drivers of economic and social development. Failure to tackle financial constraints on LRGs could put vital urban infrastructure investments at risk. This can lead to reductions in public services, ultimately undermining broader initiatives for sustainable urban development.

- **Infrastructure gaps:** Urban areas continue to face challenges with outdated and insufficient infrastructure that obstructs provision of essential services. It is crucial to address these barriers to ensure the safety, accessibility and sustainability of these services.

  While beneficial, new essential services, such as e governance and climate-friendly housing, put pressure on the already limited resources of urban areas and local governments. It is essential to address this gap by updating or enhancing existing structures to promote urban development. This task becomes more complex in situations involving displaced people and refugees, where there is a heightened demand for a variety of basic services. In today's era of connectivity, the lack of network connections worsens the infrastructure gap. This hinders smooth service delivery and technological progress. Cities and communities struggling with the digital gap experience increasing inequality and marginalization.

- **Inequality and marginalization:** Marginalized and vulnerable communities often encounter limited access to UBS due to socioeconomic disparities, discrimination and inadequate planning.

In many cities, social or public housing is constructed in peripheral neighbourhoods. These are not well connected to more affluent central areas and services. Without any other support, these communities find themselves taking the lead to ensure their access to basic services.

Disparities in access to UBS contribute to socio-economic inequalities within urban populations, which harms the overall sustainable development of an urban area. Providing equal UBS is particularly important for populations that are structurally discriminated against. Their quality of life and opportunities often directly depend on the quality and accessibility of these services. Through the creation of public-community partnerships, LRGs can support those efforts already in place, making them more affordable, sustainable and just.

Sometimes, inadequate community engagement and participation can also result in insufficient services, leading to dissatisfaction and mistrust. Through inclusive and participatory processes in decision and policymaking, LRGs can play a key role in rebuilding people's trust in governments – one of the key pillars identified by the UN Secretary-General in *Our Common Agenda* for creating a new social contract.[74]

5. Solutions and recommendations

1. Enhance multilevel governance and systems of multi stakeholder collaboration

Effective management of basic services requires LRGs to establish a clear, coherent and transparent dialogue with national governments – and vice versa. At the same time, there is a crucial need for LRGs to foster regular communication and collaboration mechanisms among themselves and with internal and external stakeholders. This horizontal and multi stakeholder collaboration can ensure that UBS delivery – as well as emergency response – is unified, coordinated, and complementary. It can also ensure accountability and transparency for local communities.

Effective multilevel governance requires institutional and legal frameworks that clearly define the roles and responsibilities of all levels of government, guided by the principle of subsidiarity. LRGs need to be equipped with the necessary legal, technical and financial capacities to be able to fulfil their role as service providers. When they have the capability to invest in capacity building, institutional efficiency, infrastructure and partnerships with civil society, they can guarantee a continued, inclusive and quality delivery of services to their users.

At the same time, by creating multilevel governance systems centred on LRGs, national governments will be able to create policies better targeting local needs. They can also do this while strengthening their implementation capacity, in order to give policy a concrete impact at the local level.

2. Develop sustainable funding mechanisms and enabling infrastructure

LRGs should develop financial strategies to ensure the long-term viability of urban basic service delivery and resilience to fluctuating demand. To respond to future crises, local governments need to access adequate, diversified sources of funding. The flow of investment into UBS, for example, could be catalysed by forging strategic partnerships with regional development banks and bilateral

donors. It could also be enhanced by public-private partnerships and public-community partnerships. Collaborating with neighbouring jurisdictions can further amplify the impact and economic efficiency of local initiatives. Furthermore, taking advantage of the cost savings possible from urban economies of scale can reduce expenses, as can combining service and infrastructure projects.

National governments should promote fiscal decentralization and autonomy at the local level to ensure effective strategic planning and resource mobilization for UBS. Additionally, national governments should support the connection of subnational governments with global financing mechanisms and partners that typically do not target the local level.

3. **Improve access to data**

   In an ever more digitally connected world, LRGs need better access to data in order to keep residents safe and adjust service delivery in a crisis. The latter requires investing in the digital capacity of subnational governments so that they are in a better position to respond to impending emergencies.

   Working with real-time data helps LRGs maintain and adjust service levels to match unprecedented changes in behaviour – such as in demand for public transport. At the same time, such data must sufficiently protect privacy and security.

4. **Enhance inclusive decision-making through participatory processes**

   The needs and priorities of women, children, older persons, persons with disabilities, migrants, refugees and those living and working in informal settlements need to be taken into account. Creating an enabling environment for underrepresented people to take leading roles in decision making processes is essential to ensure equitable provision of urban basic services across all dimensions.

   To ensure the effective continuation of service delivery whilst also prioritizing the most marginalized users, local governments should maintain strategic oversight of public services during an emergency.

6. Invest in capacity building

Local governments can increase their ability to better manage crises and guarantee continued and inclusive quality services for all by investing in: capacity building, social dialogue with trade unions, institutional efficiency, partnerships with civil society, infrastructure and staff.

With the rise of new essential services, facilitating user capacity building in technological realms becomes essential. This is because it guarantees widespread Internet access and narrows the digital divide across urban and rural areas, genders, generations and regions.

Advocacy, dissemination of knowledge and provision of technical assistance are pivotal strategies in catalysing transformative change.

7. Conclusions

Local and regional governments play a pivotal role in providing and managing UBS, which are essential to ensuring quality of life, economic growth and social equality. Recognizing these services as global common goods emphasizes inclusive governance and community collaboration. Ensuring universal access without exclusion or privatization is crucial, especially in marginalized areas. By collectively managing and preserving these services, communities promote resilience, social justice and the well-being of all residents, safeguarding fundamental human rights and dignity.

SDG localization, with two-way communication, helps UBS better align with the needs of specific populations, while taking into account the key pledge of leaving no one and no place behind.

In this context, this policy brief emphasizes the importance of working through multilevel governance and applying the principle of subsidiarity for UBS delivery, as well as the prioritization of financing basic services. This is especially important in low and lower-middle-income countries where the gaps between required investment and current resources are widest.

Investment in capacity building is key for creating capacities at all levels and effectively delivering on UBS. It is also key in the enhancement of participatory and inclusive processes at the local level, while also being crucial to the improvement of relationships between public, private and civil society stakeholders at local, national and international levels.

Policy brief 5:
Transformative change from the ground up: the role of local reporting in accelerating multilevel SDG achievement

CONTRIBUTING ORGANIZATIONS: **UNDESA, UNDP, UN-HABITAT, UCLG**

1. Introduction

This brief draws on selected examples of VLRs and VSRs that have been shared with the authors by local governments. It also recognizes and gives broader consideration to the important contributions of all VLRs and VSRs.

2. Key messages

1. **Voluntary Local Reviews (VLRs) and Voluntary Subnational Reviews (VSRs) help local and regional governments (LRGs) integrate the SDGs into their policymaking.** They also help LRGs achieve and monitor progress, while demonstrating success stories in sustainable development across all areas of planning. These areas include: strategy and design; budgeting and procurement; data, monitoring and evaluation; and coordination and stakeholder engagement.

2. **With 65 per cent of SDG targets linked to the work and mandates of LRGs, the VLRs and VSRs serve to reinforce local SDG action.**[75]

3. **Connecting VLRs, VSRs and Voluntary National Reviews (VNRs) has a transformative potential, strengthening multilevel governance and coordination.**

3. Background

In their efforts to localize the 2030 Agenda, LRGs and their associations – often in partnership with national governments – are increasingly engaging in local-level reviews of SDG implementation.

Known as VLRs and VSRs, LRGs are also increasingly linking these reviews with VNR processes.[76] VLRs are typically prepared by local and regional governments on an individual basis, while VSRs are prepared by LRG associations, addressing subnational developments across a country. The VNRs were introduced as part of the follow-up and review mechanisms of the 2030 Agenda for Sustainable Development, which encourages Member States to "Conduct regular and inclusive reviews of progress at the national and subnational levels, which are country-led and country-driven" (GA Resolution 70/1, paragraph 79).[77]

VNRs, VLRs and VSRs all serve as essential tools in discussing and implementing SDG actions and monitoring SDG progress at multiple levels.

To date, 191 countries have presented at least one VNR. These reports present a snapshot of where each country stands. They also help accelerate progress by sharing experiences, peer learning, identifying gaps and good practices, and mobilizing partnerships.

Unlike the VNRs, however, subnational reviews do not have an official basis in the 2030 Agenda. Nonetheless, that agenda does underline the importance of working closely with regional and local authorities in its implementation.

Since 2018, LRGs and their associations have produced over 240 VLRs for areas representing 579 million people. They have also produced 44 VSRs, representing more than 175,000 LRGs and a staggering population of 1.7 billion people.[78]

Figures 8 and 9 below show the countries that have produced VLRs since 2017, with the largest number coming from the European region, followed by Latin America and the Caribbean, and then Eastern and South Eastern Asia.

FIGURE 8. VLRs by location

Source: UN Habitat, 2023

FIGURE 9. Geographical distribution of VLRs by region, based on number of VLRs

Source: UN Habitat, 2023

With their numbers growing, the United Nations Secretary-General has affirmed that the global VLR movement has provided "an unprecedented push towards localization."[79] VLRs serve as innovation engines driven by and for LRGs, fostering multilevel governance by increasing dialogue between national and local governments. At the national level, many Member States have invited LRGs and local government associations (LGAs) to contribute data, best practices, case studies and perspectives to their VNRs, demonstrating how local actions lead the way towards achieving national goals. In 2023, 39 per cent of all VNRs were prepared with the involvement of LRGs.[80]

VLRs and VSRs can serve as transformative tools to accelerate SDG achievement and share best practices with national governments, other LRGs and entities of the United Nations system. The process of preparing VLRs and VSRs presents an opportunity to operationalize commitments. These include those made during the 2023 SDG Summit, for which localization was identified as an essential cross-cutting enabler for SDG transformation.[81]

4. Key benefits of VLRs and VSRs

- **They raise awareness of the SDGs and promote action towards their achievement.** VLRs and VSRs play a critical role in raising awareness of the SDGs and demystifying them among government entities, as well as across civil society, academia, the private sector and among the general public. This increases commitment to and ownership of the global agenda. **Marsabit** in Kenya and **İzmir** in Türkiye have both used their VLRs to raise SDG awareness by discussing local sustainability initiatives and how they contribute to SDG indicators. Also in Türkiye, **Kadıköy** launched the "Tell Us Kadıköy" project to engage the public in planning and monitoring SDG progress.[82] In **Tokyo**, Japan and in **eThekwini**, South Africa, they have taken innovative approaches to raising awareness. These include working directly with schools and science clubs to teach students about the SDGs and to solicit their ideas and contributions. VSRs in Flanders in Belgium and Rwanda have contributed to emphasizing the LGAs' engagement with sustainable development. These reviews have included explicit reference to how subnational work contributes to overcoming the challenges mentioned in the respective VNRs.

- Incorporation of SDG considerations in planning and budgeting. LRGs can leverage VLRs and VSRs to inform and improve strategic and procedural approaches to achieving the SDGs. **Melbourne** in Australia and **Mixco** in Guatemala both identified their first VLRs as baselines for ongoing monitoring. They also committed to conducting periodic reviews to inform and strengthen development policies and planning. In other cases, VLRs and VSRs have highlighted instances in which LRGs formed new government structures or timelines specifically designed to prioritize the SDGs. **Sao Paulo** in Brazil, for example, has created a Municipal Commission for Sustainable Development Agenda 2030. This is composed of public authorities and CSOs, with thematic chambers supporting specific areas of sustainable development. **Düsseldorf** in Germany, **Montevideo** in Uruguay and **Sarchi** in Costa Rica have reported applying new structures and/or planning timelines to better align their strategies with the SDGs. In its VLR, **Amsterdam** in the Netherlands showcased its monitoring framework as a key priority for the city's long-term sustainability plans, including its commitment to the principles of Doughnut Economics.[83] LRGs have also utilized VLRs and VSRs to report on the alignment of their budget processes with the SDGs and to

increase transparency for citizens. **Belo Horizonte** in Brazil, **Busia** in Kenya and **Cascais** in Portugal have all developed transparent tools for monitoring allocation of government budgets to each SDG. Several LRGs, including **Amman** in Jordan), **Barcelona** in Spain and **Gladsaxe** in Denmark, are implementing sustainable procurement policies to prioritize sustainability in all public purchases.

- **They can strengthen local data on SDG indicators.** The VNRs, VLRs and VSRs can help LRGs strengthen local data and indicators and find innovative solutions to fill data gaps. In Romania, a VSR prepared by the **Association of Communes of Romania** (ACOR) and **Romanian Municipalities Association** (AMR) represented an important first step in the process of collecting data for sustainable development. **Suwon City** in the Republic of Korea worked with the Suwon River Network and leveraged citizen participation in target-setting and monitoring to accumulate long-time data on river ecosystems. This was in spite of having a relatively small budget. The **Kambia District** in Sierra Leone faced large data gaps, but still enhanced monitoring to ascertain that progress was achieved on a total of 26 indicators. The **State of Pará** in Brazil is working with geospatial services provided by the National Aeronautical and Space Administration (NASA) and the United States Agency for International Development (USAID) to detect fires, deforestation and illegal mining. Data can also help improve multilevel governance by enabling harmonized data across different subnational entities within a country. In Indonesia, the Ministry of National Development Planning (BAPPENAS) maintains a formal reporting requirement and national indicator framework for all Indonesian regions and municipalities. **West Java** is using this framework in its first VLR. To conduct its VLR, **Toyota City** in Japan has worked with the United Nations Centre for Regional Development (UNCRD) to develop monitoring dashboards using open data. These tools are now being used by other cities in Japan for their VLRs.

- **VLRs also highlight government initiatives to make data more accessible and inclusive.** In their reviews, **North Rhine-Westphalia** in Germany, **Lombardy** in Italy, the Norwegian Association of Local and Regional Authorities (KS) and the Swedish Association of Local Authorities and Regions (SALAR) highlighted open, accessible portals for collecting and analysing data through SDG-related indicators. **Winnipeg** in Canada has a VLR that notes that the First Nations, Inuit and Métis Nation – Indigenous peoples of Canada – have developed distinct protocols for ownership, control and use of Indigenous data. The VLR also stresses the importance of applying a respectful, rights-based and reconciliation-based approach. The rural **Ngora District** in Uganda has carried out focus group discussions with stakeholders, including special interest groups. These include women, youth, older persons, people living with HIV/AIDS, farming groups and community associations. This type of qualitative data collection can help triangulate and supplement quantitative data, especially if there are data gaps or underrepresented groups.

> *"Discussing metrics and gathering data to construct the most relevant local indicators for our reality has been and continues to be a challenging task. However, it has allowed us to course-correct and rethink our actions."*
>
> VLR of Francisco Morato, State of Sao Paulo, Brazil, 2023, p. 5 – Message of the Mayor

- **They can increase horizontal government coordination and stakeholder engagement.** In developing their VLRs and VSRs, many governments improved horizontal coordination to better address the SDGs and break down siloes. The province of **Cordoba** in Argentina, **Catalonia** in Spain and the **Consorcio de Gobiernos Autónomos Provinciales del Ecuador** [Consortium of Provincial Autonomous Governments of Ecuador] (CONGOPE) improved inter-ministerial coordination while developing their reviews to address the SDGs across government bodies. The state of **Puebla** in Mexico noted that a key feature during the development of its VLR was collaboration between the state and municipal authorities, as well as with CSOs, higher education institutions and the United Nations Development Programme (UNDP) Mexico.

In **Tucumán** in Argentina, the Padilla Hospital developed a new management plan based on the SDG framework. The hospital community, including doctors, nurses and administrators, worked together with the provincial government to form a concrete plan. This included indicators, activities and the delegation of responsibilities to address select SDGs.

Working across 47 counties and in coordination with the national government, the Council of Governors in **Kenya** composed one section of Kenya's 2020 VNR and produced a second VSR for 2023.

Many LRGs utilized the VLR and VSR processes to strengthen stakeholder engagement across sectors and functions. Oaxaca in Mexico formed working committees on social inclusion, economic growth, and environmental sustainability with shared leadership structures and the participation of stakeholders from civil society, the private sector and academia. **Orlando** in the United States formed a working group of community leaders, business representatives, NGOs and other institutions to assess priorities, identify best practices and review recommendations for the city's VLR. The group continued to collaborate on SDG implementation after publication of the VLR. In **Botswana**, the Botswana Association of Local Authorities (BALA) has achieved enhanced stakeholder engagement as a result of the VSR.

5. The role of VLRs and VSRs in informing and showcasing SDG progress

VLRs provide a platform to showcase examples, promising practices and success stories. These can reinforce positive action and support peer learning.

This boxes below illustrate a few of the many examples of promising practices highlighted by VLRs.

SDG6

Dhulikhel, Nepal: Using decentralized water facilities and community-managed options, flexible water systems that reduce scarcity and climate vulnerability were established. The local municipality is also improving access to sanitation and safe drinking water for low-income and remote communities through free public taps and improved wastewater treatment systems.

SDG9

Buenos Aires, Argentina: The city authorities highlighted efforts to advance sustainable and inclusive infrastructure and transport systems. The BA SDG 16+ Lab: Gender, Mobility, and Security in Rodrigo Bueno project, for example, has improved traffic signage and road safety and increased the frequency of public transport. This was done specifically to make mobility safer for women.

SDG17

Mwanza, Tanzania, Tampere Finland: In conducting their VLRs, these two cities established a two-way collaboration, facilitated by UN-Habitat, to engage in peer learning and share experiences on SDG advancement.

6. The role of VLRs and VSRs in advancing multilevel governance

When implemented in coordination, VNRs, VSRs and VLRs advance SDG localization and promote inclusive and accountable multilevel governance systems. Through VLRs and VSRs, national governments gain access to a wealth of data from the bottom-up, enabling better measurement of their country's performance, gaps and strengths. This can then help inform policies and budgets.

Italy, for example, adopted the National Sustainable Development Strategy (NSDS) and created institutional mechanisms to help LRGs develop sustainability plans in line with this. In its 2020 VNR, **Costa Rica** noted the absence of a national SDG localization strategy and subsequently launched the Red de Cantones Promotores de los ODS [Network of Cantons Promoting the SDGs] with UN technical support. Elsewhere, the **Gambia** initiated a round of VLRs in parallel to its preparation of a 2022 VNR, allowing for coordination of data collection and consultations at national and local levels. In **Mexico**, all 32 federal entities have established government bodies and/or mechanisms to implement the 2030 Agenda. There, LRGs – including **Ciudad de México**, **Durango**, **Estado de México**, **Guadalajara**, **Mérida**, **Oaxaca**, **Tabasco** and **Yucatán** – have published VLRs and VSRs. These were then discussed in the country's 2021 VNR in order to bring them to national and international attention. In **Cambodia**, the National League of Local Councils (NLC) has reached out not only national sustainable development officials, but to a wide range of government ministries.

7. Challenges

VLRs and VSRs have given an unprecedented push in advancing all dimensions of SDG localization. Nevertheless, the capacity of LRGs to deliver transformative change is limited by multiple factors.[87] These include:

- **Weak or absent multilevel governance and coordination**

  This includes a lack or absence of participation by LRGs in national development strategies, coordination mechanisms and VNR processes in which VLRs and VSRs would be critical inputs.

- **Inadequate resources**

  These can be financial, human and/or technical.

- **Challenges in regularly monitoring and evaluating SDG localization**

  This is often due to gaps in data and indicator systems.

- **Difficulty in fully and systematically involving local communities**

  This is often due to resource limitations. and

- **A lack of necessary competences at the local level to localize the SDGs**

To address these challenges in an integrated, comprehensive manner will require strong enabling frameworks to support long-term localization processes at all levels, centred on VLRs and VSRs.

8. Policy recommendations

1. **Encourage the conduct of cyclical local reporting exercises – including VLRs and VSRs – to monitor local implementation of the 2030 Agenda for Sustainable Development and its SDGs.**

2. **Leverage the VLR and VSR processes to improve alignment and coordination of development frameworks, strategies, planning and decision-making processes and policies to achieve the SDGs.**

3. **Enhance coordination between VNRs, VLRs and VSRs through systematic and structural interaction between spheres of government.**

4. **Utilize VLRs and VSRs to enhance relationships and create opportunities for participation among all constituents.** Implement and strengthen human rights-based, inclusive and participatory governance reflecting the voices of all stakeholders, particularly disadvantaged or marginalized groups and those in vulnerable situations.

5. **Enhance government capacities for implementing SDG action at local levels,** particularly by strengthening SDG awareness and data collection capacities at subnational levels.

Policy brief 6:
Towards a just transition: Synergies and co-benefits for SDG localization and subnational climate action

CONTRIBUTING ORGANIZATION: **UNESCAP**

1. Introduction

To address the global climate emergency and achieve the SDGs, local action is crucial. This brief examines the potential for VLRs and VSRs, in collaboration with RLDCs[85] and CAPs, to drive a just transition[86] for subnational and local governments and other stakeholders. To enhance the alignment of local climate action and SDG action, this brief makes recommendations for integration, streamlined subnational SDG-climate reporting and inter-municipal cooperation.

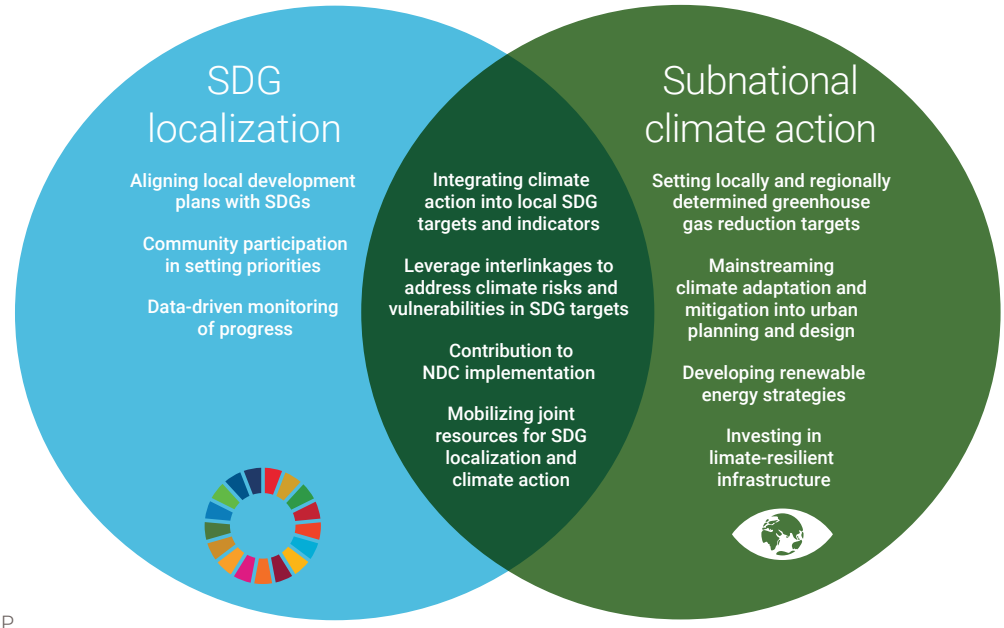
2. Background

SDG localization is the process of adapting, customizing and translating the SDGs into subnational and local development plans and strategies. When localized, these are designed to meet the needs, realities and priorities of local communities and governments, in alignment and coherence with national frameworks.[87,88]

Subnational climate action, including mitigation and adaptation measures taken by subnational and local governments, similarly values the engagement of local level actors in addressing climate risks. Cities develop CAPs and climate-related strategies that fit their local contexts, address their needs and protect their communities. RLDCs are voluntary commitments to reduce greenhouse gas (GHG) emissions and take adaptation measures at the subnational level to meet the country's Nationally Determined Contribution (NDC) to the Paris Agreement.

There is a need to strengthen systematic SDG localization and subnational climate action to utilize interlinkages and make integrated action more effective and efficient. SDG localization and subnational climate action synergies therefore refer to opportunities where addressing climate change at the local level simultaneously advances multiple local SDG targets, fostering sustainable development and climate resilience. Figure 10 highlights examples of these synergistic overlaps.

FIGURE 10. Finance and governance synergies: Examples of SDG localization and subnational climate action planning



Source: UNESCAP

Evidence indicates that these synergies offer 'win-win' opportunities that outweigh any potential trade-offs.[89] Climate action investment in renewable energy, for example, helps achieve universal electricity access whilst also saving municipal resources.

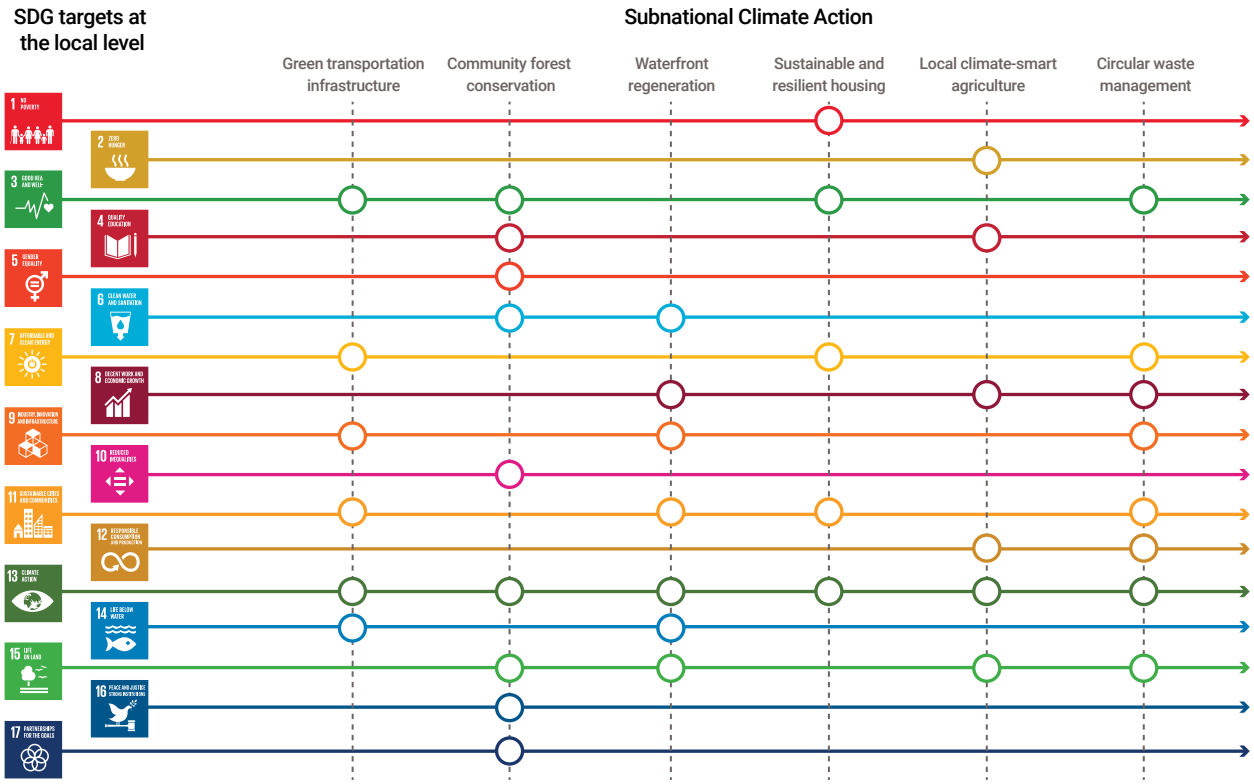
Figure 11 gives examples of the co-benefits that can be leveraged, while Figure 12 gives examples where subnational climate action can drive progress across multiple SDGs. Additionally, the Urban Development Action (UDA) impact matrix by City WORKS[90] in Annex 1 offers a detailed overview of possible synergies.

FIGURE 11. Examples of the co-benefits of SDG localization and subnational climate action

EXAMPLE ACTIVITIES	BENEFITS FOR CLIMATE ACTION	BENEFITS FOR SDGS
Urban forest programmes	Enhanced carbon sequestration reduces GHG emissions. Strategically planted trees around buildings provide natural cooling in summer and windbreaks in winter, reducing energy system needs.	Trees act as natural filters, trapping pollutants and ozone, improving air quality and human health (SDG3) They mitigate the urban heat island effect (SDG11) and provide habitat and food sources for a variety of wildlife (SDG15).
Inclusive city and subnational climate action planning, disaster risk reduction	Provides equitable access to resources and services necessary for climate resilience, such as clean water, energy, healthcare and transportation. This addresses infrastructure gaps for adaptation and mitigation measures.	Gender-responsive climate planning addresses the unique needs and vulnerabilities of women and girls, who often bear the brunt of climate change impacts (SDG5). Inclusive planning and design addresses existing inequalities among low-income populations, ethnic minorities, persons with disabilities, indigenous peoples and all stakeholders (SDG10, 11, 17).
Accessible low carbon transport infrastructure projects	Low-carbon transport infrastructure, such as public transit systems, bike lanes and pedestrian-friendly pathways, can significantly reduce emissions from vehicles, particularly those powered by fossil fuels.	Improvement in traffic-related air quality has significant health benefits in urban areas (SDG3). Alternative modes of transportation that are less vulnerable to disruptions help ensure continuity in transportation services during emergencies (SDG11). Compact, transit-oriented development reduces urban sprawl and preserves green spaces and ecosystems. These play a crucial role in maintaining biodiversity (SDG11, 15).
Local investments in renewable energy	Shifts energy use from fossil fuel sources. Distributed renewable energy systems can enhance the resilience and reliability of the local energy infrastructure, particularly in the face of extreme weather events or other disruptions.	Localized energy generation reduces reliance on imported fossil fuels, enhancing energy security and reducing vulnerability to price fluctuations (SDG7). The renewable energy sector creates jobs across manufacturing, installation, maintenance and research and development, thereby attracting private investment and fostering innovation (SDG8, 9). Decentralized renewable energy solutions can provide reliable and affordable electricity access to underserved or remote communities (SDG7, 10).
Revitalization of cultural heritage	Adaptive measures to protect cultural heritage sites from climate impacts. These sites often include green spaces. Revitalizing them helps preserve urban greenery, which mitigates the urban heat island effect and improves air quality. Retrofitting historical buildings with modern, energy-efficient technologies can reduce energy consumption and GHG emissions.	Cultural heritage sites can stimulate economic growth by attracting tourists, supporting local businesses, and creating job opportunities (SDG8). Revitalizing cultural heritage can strengthen social cohesion by fostering dialogue, understanding and collaboration among diverse local communities, promoting inclusivity and social integration (SDG10, 11,16).

Source: UNESCAP

FIGURE 12. Examples of the intersections between subnational climate action and SDGs



Source: UNESCAP

Cities have found that VLRs can facilitate three stages of implementing SDGs at the local level: localisation, implementation and follow-up and review. These stages, however, are not consistently addressed by VLRs. In particular, for cities without detailed SDG roadmaps, VLRs assist in localising the 2030 Agenda, enabling priority selection and indicator identification. They showcase SDG efforts through actionable initiatives. Additionally, VLRs are increasingly integrated into policy cycles, aiding in structuring local follow-up and review processes. Consequently, this highlights the need for VLRs to transcend mere reporting, serving as integrated tools within policy cycles for evidence-based decision-making and progress assessment.

Integrated climate and local development planning can provide the following benefits:

- **Strengthened planning:** By integrating findings from VLRs/VSRs into RLDCs and CAPs, local stakeholder voices can be better incorporated into local development and climate action plans. This integration informs national policy action based on local realities, strengthening local follow-up and review (FUR) of the SDGs. Combined stakeholder engagement from integrating these tools therefore enhances the planning process by tailoring it to local needs and spreading awareness of the impacts of climate change and the importance of SDGs to local communities.[91] An integrated VLR/VSR and RLDC/CAP process can identify opportunities to address inequalities or trade-offs in climate action.

The Asian Development Bank, for example, is supporting cities in Indonesia in aligning their masterplans with the SDGs whilst building on their first generation of RLDCs launched at COP28. The RLDC emphasizes the need to reduce carbon emissions and energy intensity in the development of the new Indonesian capital.

Integrating findings can also help foster coherence between local, regional and national governance systems.[92] These can in turn facilitate more efficient allocation of functional responsibilities and resources across different levels of government. This can enable joint action and overcome departmental silos.

VLRs/VSRs, RLDCs and CAPs should be integrated into national frameworks, such as VNRs, NDCs and National Adaptation Plans (NAPs). This will highlight how subnational efforts are contributing to national goals.

- **Enhanced data practices:** The data collected and analysed for VLRs/VSRs provide valuable insights for evidence-based subnational climate action planning and implementation. As an example, VLRs/VSRs focus significantly on collecting spatial data which, if leveraged for RLDCs and CAPs, can inform climate-friendly zoning practices and area-based local resilience interventions. Additionally, compiling data from SDG and climate action reporting can tackle institutional fragmentation, breaking down policy silos to create more coherence in bringing together SDGs and climate action.[93]

  Santa Rosa City in the Philippines, for example, is using its existing GHG inventory to inform climate-SDG priorities in their upcoming VLR report. This ensures that local policies and initiatives are strategically aligned to drive both SDGs and climate action.

  The 'burden of reporting' on subnational and national governments associated with global agreements and frameworks can be significantly reduced by integrating VLRs/VSRs with RLDCs and CAPs. Streamlined reporting of these subnational tools can leverage overlapping areas of data collection and progress-tracking, reducing the overall time and resources needed to undertake reporting.

- **Effective implementation:** Improved multilevel and cross-sector coordination, stakeholder engagement and strong data collection can help inform subnational climate and development planning. This helps it to better address the needs of local stakeholders and identify priority investments.

  Undertaking VLRs/VSRs alongside RLDCs and CAPs showcases local commitment to sustainable development and climate action, helping cities access development and climate finance. Globally, this has been steadily increasing,[94] yet some see this flow as in competition with declining overall development finance. However, exploiting win-win opportunities by integrating VLRs/VSRs, RLDCs and CAPs into local development strategies allows cities to leverage climate finance for the SDGs and development finance for climate action.

An integrated SDG-climate approach showcases long-term commitment to sustainability. This can boost investor confidence and attract further support from national governments, multilateral financial institutions and the private sector.

In Suva, Fiji, for example, the Pacific's first VLR report provided new data on climate induced sea level rise, energy use and disasters. This was then used to develop the city's priority investments in its subsequent 10-year development plan. This aspect of Suva's VLR – as a tool in supporting 'means of implementation' at the national level – was further featured in the Government of Fiji's 2023 VNR report.

3. Opportunities and challenges

Subnational climate finance refers to financial mechanisms and resources allocated to regional or local governments to address climate change and implement initiatives at the local level. These initiatives can include mitigation efforts, such as renewable energy projects, or adaptation measures such as building resilient infrastructure.

Municipal and subregional governments, however, often lack the technical expertise and financial resources to effectively integrate SDG localization and climate action in their planning and implementation processes.[95]

Insufficient or unpredictable national transfers, coupled with limited local revenue generation and access to climate finance, are some of the challenges. Limited local capacities also indicate a vulnerability to climate change and other crises.[96]

Many subnational and local governments are yet to produce their first VLR/VSR reports and may have insufficient data and monitoring mechanisms for accurate baselines, target setting and indicator-based progress tracking. Additionally, many cities do not have stand-alone GHG emissions inventories or city-wide hazard and vulnerability assessments. This hinders the evidence-based decision-making needed for comprehensive and targeted climate interventions.

Exploiting synergies between SDG localization and subnational climate action presents an opportunity to accelerate local, tangible progress towards multiple agendas simultaneously. Leveraging VLRs/VSRs along with RLDCs and CAPs can address policy siloes and avoid duplicate efforts across multiple projects. It also improves the efficiency, funding and political buy-in of projects that can tackle multiple policy objectives.

Although these subnational SDG and climate action tools are usually not statutory documents, if used in combination with each other and alongside mandated plans, they can help influence policies, budgets and plans at the municipal level. Alignment with national priorities reflected in VNRs, NDCs and NAPs may also improve local government access to national climate and sustainable development missions.

Inter municipal cooperation across sectors is also needed to adequately respond to climate and development challenges. Many of these issues are transboundary by nature – coastal disasters, floods and droughts, for example, affect many municipalities simultaneously. This can lead to territorial and/or administrative governance gaps that require major cross-border cooperation to address.[97] When subnational and local governments collaborate across their legal boundaries within a functional urban or environmental area, they can combine resources to scale-up interventions across the rural-urban continuum, draw greater support from state and national governments, and negotiate better opportunities for pooled financing. The Spatial Development Framework,[98] for example, supported by the Adaptation Fund in Côte d'Ivoire and Ghana, identified both transboundary climate and development challenges to tackle several issues at once.

Finally, VLR/VSR integration with subnational climate action can drive just climate solutions. These prioritize inclusivity for disadvantaged communities impacted by the climate crisis. By synthesizing approaches, both local sustainable development and climate action can provide more far-reaching benefits for social inclusion than if targeted separately. This was a key consideration for the Nairobi River Basin Regeneration Programme, which fosters environmental conservation and inclusive socio-economic growth for many urban communities living along the river basin.[99] In addition, Bangkok Metropolitan Administration in Thailand is implementing a climate action plan to design green spaces and low carbon public transport hubs. These are accessible and well-lit, resulting in safer mobility options for women, children and persons with disabilities.

4. Recommendations

The following policy recommendations are suggested to exploit the numerous synergies between SDG localization and subnational climate action:

- **Integrate climate and local development planning and design**

  Subnational and local governments should seek to integrate VLR/VSR processes into subnational climate action planning and design, including CAPs and RLDCs, and vice versa. They should also vertically integrate these with VNRs, NDCs and NAPs undertaken by central authorities. This improves climate action co-benefits and meaningful stakeholder engagement and data collection. It also increases policy coherence across government and reduces the burden of reporting. This ultimately supports effective implementation of local sustainable development and climate action, in line with national goals and community priorities.

- **Strengthen inter municipal cooperation**

  To address territorial and/or administrative gaps and maximize effective action against transboundary climate and development issues, municipal governments should actively cooperate across jurisdictions. In doing this, they can share knowledge and experiences, leverage local and regional data, and pool resources to tackle wider territorial issues. These could include responses to natural disasters, or shared watershed management.

- **Promote multi-level partnerships to strengthen local capacities**

  To overcome capacity limitations, cities should partner with research institutions and development partners to invest in training programmes. These should be tailored to different stakeholders, including mayors, technical staff and community leaders. This would equip subnational governments and communities with the skills needed for integration. Mainstreaming technical skills, including data analysis, joint planning processes and FUR, should make it easier for cities to effectively utilize VLRs/VSRs and CAPs/RLDCs together.

- **Leverage climate finance to localize the SDGs**

  To exploit synergies, as well as scale up local adaptation efforts, subnational and local governments should look to a mix of national and international funding streams. Investments which consider both climate action and the SDGs can support enhanced safeguarding, reduce risk and unlock a wider pool of potential funding sources. They can do this by attracting both climate and development-specific resources. The principles of fiscal federalism should be embraced, with these including: an expansion of subnational, own-source revenues; adequate, predictable and rule based intergovernmental fiscal transfer systems; and responsible borrowing. Decentralizing climate funding helps build resilience from the ground up, contributing to more localised sustainable development pathways.

Policy brief 7:
The renewable energy transition and the green hydrogen economy: Ensuring local SDG impacts

CONTRIBUTING ORGANIZATIONS: **UNDESA (UNOSD), ICLEI, THE GREEN HYDROGEN ORGANISATION AND UN-HABITAT**

1. Key messages

1. **There is an urgent need to increase analysis at the local level on the potential of net zero economy accelerators such as green hydrogen.** These accelerators offer a variety of benefits across the SDGs, including food security, mobility, water management, industry and job creation. As over 65 per cent of SDG targets involve LRGs,[100] this highlights the need for them to be included in analysis of this potential.

2. **National net zero targets are driving policy commitments for a fair and just transition to clean power.** In these targets, hydrogen is playing an increasingly vital role at the local level. Though limitations remain, this role runs across a variety of sectors, such as transportation and energy grids.

3. **While hydrogen production is currently primarily dependent on fossil fuels, 64 countries have currently adopted green hydrogen strategies, roadmaps or policy frameworks.** This is a 100 per cent increase on the end of 2022. Around 90 per cent of those national hydrogen strategies have a focus on local level industry and urban services, such as transport, energy grids and more.

4. **Research gaps exist on additionality and the localized impacts of a green hydrogen for cities and rural municipalities.** There is also a lack of research on multilevel governance of green hydrogen projects and investments.

> Urban areas require an uninterrupted supply of energy, consuming 75 per cent of global primary energy.
>
> **UN HABITAT**[101]

2. Background

Local governments, especially in cities, are at the forefront of efforts to mitigate climate change, ensuring a just energy transition and provision of renewable energy for all. Cities account for between 71 per cent and 76 per cent of global carbon dioxide (CO_2) emissions. These come largely from a carbon-intensive infrastructure and fossil fuel dependence in the industrial and transportation sectors[102]. Numerous studies highligh green hydrogen's potential in decarbonizing these industries and sectors.

Despite progress on electrification, 675 million people still lack energy access, with around 80 per cent of this total living in sub-Saharan Africa.[103] With renewables powering nearly 30 per cent of electricity, their use in transport – a key urban sector where green hydrogen could play a role – remains minimal. Hydrogen and its derivatives could meet 14 per cent of global final energy consumption by 2050.[104] But for a just energy transition, investments in renewables should also meet energy needs and access gaps in urban and rural municipalities.

> COP28 highlighted the call to triple renewable energy capacity by 2030, underscoring that a fossil fuel phase out is not only necessary but inevitable.
>
> **UN SDG Report**[105]

Hydrogen has a growing role in the energy transition, with its use increasing, globally. Yet, there has been limited scale-up to meet rising urban energy needs and energy access gaps in rural municipalities. An increasing number of countries are adopting green hydrogen strategies, however, with a view to decarbonizing key urban sectors such as transport, energy, buildings and others. In 2017, Japan became the first country to adopt a national hydrogen strategy and by the end of 2022, a total of 32 governments had such a plan.[106] Nearly one year later, 64 countries have adopted hydrogen strategies, roadmap or policy commitments.[107] Some 58 of these have a clear focus on renewables-based hydrogen and local development through hydrogen valleys, such as in South Africa, Croatia an Turkey, regional hubs, such as in th United States, or in cities, such as India and the new city of NEOM in Saudi Arabia. Sub-national governments are also developing strategies and making commitments for hydrogen cities.

Localizing these national strategies in regional and local hydrogen roadmaps and investment plans is key to enabling green hydrogen's role in a sustainable energy transition.

Green Hydrogen is based on the use of renewable energy as the source to derive the hydrogen molecules from electrolysis of water. However, as 95% of hydrogen production still relies on fossil fuels,[108] the hydrogen economy as a whole should aim for electrolysis-based hydrogen production to achieve the SDGs and a zero-emissions future.

FIGURE 13. Countries with national strategies committing to renewables-based hydrogen or green hydrogen

Source: The Green Hydrogen Organization

FIGURE 14. The hydrogen rainbow

PRODUCTION	TERMINOLOGY	TECHNOLOGY	FEEDSTOCK/ ELECTRICITY SOURCE	GHG FOOTPRINT*
PRODUCTION VIA ELECTRICITY	Green Hydrogen	Electrolysis	Wind Solar Hydro Geothermal Tidal	Minimal
	Purple/Pink Hydrogen		Nuclear	
	Yellow Hydrogen		Mixed-origin	Medium
PRODUCTION VIA FOSSIL FUELS	Blue Hydrogen	Natural gas reforming + CCUS Gasification + CCUS	Natural gas coal	Low
	Turquoise Hydrogen	Pyrolysis	Natural gas	Solid carbon (by-product)
	Gray Hydrogen	Natural gas reforming		Medium
	Brown Hydrogen	Gasification	Brown coal (lignite)	High
	Black Hydrogen		Black coal	

*GHG footprint given as a general guide but it is accepted that each category can be higher in some cases.

Source: Cheng, W. and S. Lee, 2022.[109]

3. Localizing SDG progress through the hydrogen economy

From Asia to the Americas, an increasing number of national governments are committing to hydrogen cities, hydrogen hubs and hydrogen valleys. Yet, the engagement of local governments in national strategy development is mixed. Hydrogen use for urban services can, however, enable SDG progress on an et zero path, especially in transport and local industry. There is therefore clear room for progress in fully leveraging the potential of green hydrogen at the local level to drive impacts across the SDGs.

The following sections detail how green hydrogen can accelerate the SDGs according to each goal and its relevant areas.

- **SDG 2: Key impacts on food security**

  Current gas-based fertilizer production is centralized in a small number of locations and is sensitive to fluctuating gas prices. This undermines food security in countries reliant on fertilizer imports.[110]

Kenyan President William Ruto believes a green hydrogen economy will decarbonize industry and "enhance food security, including expansion of green production of Kenyan tea, coffee, horticulture, floriculture and grains."

Kenya's green hydrogen roadmap aims to counter food insecurity and decrease dependence on fertiliser imports by 2032. In a first phase, Kenya plans to have the first commercial-scale green hydrogen projects by 2027, to support production of 100000 t of nitrogen fertilisers, replacing a large share of fertiliser imports. https://gh2.org/countries/kenya. UN SDG Report[105]

- **SDG 6: Key impacts on water**

  Green hydrogen production (and its high demand on water) can present a challenge or opportunity for water-stressed regions. If managed correctly, leveraging electrolyser technology for green hydrogen can support universal access to safe and affordable drinking water, particularly in water-stressed renewable energy-rich regions. By 2040, India is likely to have 99 per cent of its hydrogen capacity in extremely water-stressed regions.[111]

  Namibia's green hydrogen project, the Southern Corridor Development Initiative, utilizes desalinated water for green hydrogen production and will supply local communities, thus enhancing water security and management, in line with SDG 6.

- **SDG 7: Affordable and clean energy**

  In line with SDG7, green hydrogen presents a significant opportunity to enhance renewable energy access, grid stabilityand market development. However, its energy-intensive production process requires careful implementation, especially in areas with basic energy access challenges.

  To mitigate potential negative impacts, projects can be designed to supply excess electricity to local communities, as seen in HDF Energy's Renewable model power plants in South Africa. These combine renewable energy sources with hydrogen storage to provide stable power, exemplifying green hydrogen 's role in supporting sustainable energy systems.

  Africa's vast potential for renewable energy remains largely untapped, contributing to high energy costs, leaving an estimated 600 million people on the continent without access to electricity. Affordability and cost-effectiveness are crucial for bridging this gap, especially in urban and peri-urban areas across developing countries. Fortunately, projections[112] suggest that by 2035, Africa could have a green hydrogen production capacity exceeding 50 million tonnes per year, with highly competitive prices.

  Success stories exist already. In Bourakébougou, Mali, a pilot project generating about five tonnes of natural hydrogen per year provides the local communities with free, zero-emission electricity – showcasing the potential local impacts for SDG 7.[113]

- **SDG 8: Decent work and economic growth**

  Green hydrogen projects promote economic productivity, diversification and innovation, creating significant job opportunities. The International Renewable Energy Agency (IRENA) estimates the need for electrolysers alone will create 2 million jobs worldwide by 2030.[114] The Africa Green Hydrogen Alliance report[115] forecasts the generation of 4.2 million jobs, showcasing green hydrogen's role in sustainable economic growth and employment.

- **SDG 9: Building resilient infrastructure, inclusive and sustainable industrialization and fostering innovation**

  Green hydrogen projects contribute by developing new infrastructure essential to the energy sector, thereby enhancing local economies. India's National Green Hydrogen Mission, for example, aims to bolster the domestic manufacturing of electrolysers by 2030 with an investment, in euros (EUR), of EUR 2.24 billion. In this way, it will advance sustainable industrialization and innovation.

  The construction industry, from material production to building operation, is responsible for about 40 per cent of global energy and industrial-related CO_2 emissions.[116] Green hydrogen offers a promising solution for decarbonization in this industry. For example, in Chile, Compañía Siderúrgica Huachipato launched a pilot of a green hydrogen mill to decarbonize steel production.[117] Meanwhile, in the Dominican Republic, CEMEX is implementing hydrogen technology at its San Pedro de Macoris cement plant.[118]

- **SDG 11: Hydrogen cities and key sectors**

  Green Hydrogen can be a key technology to help decarboniz e hard-to-abate sectors such as urban transport with improved territorial planning frameworks. Research from Norway[119] and China[120] highlights green hydrogen's potential as an energy carrier and feedstock in decarbonizing heavy industry, and as a fuel for decarbonizing transport. Elsewhere, a Net-Zero America study[121] suggests hydrogen's potential for stabilizing electricity grids by the late 2040s through flexible production and utilization in power plants.

  Concerning the East Asia region, Beijing, Seoul and Tokyo have taken the lead in the advancement of fuel cell vehicle adoption by releasing long-term strategies with concrete actions, such as fuel cell vehicle (FCV) demonstration projects, subsidies, regional cooperation and expansion of the charging infrastructure.[122]

- **SDG 12: Sustainable consumption and production patterns**

  Globally, municipal solid waste generation is forecast to grow from 2.3 billion tonnes in 2023 to 3.8 billion tonnes by 2050.[123] At least 33% of this waste is mismanaged through open dumping or burning.[124] Instead of generating landfill-based methane emissions, waste-to-hydrogen (WtH) – or biohydrogen – offers an alternative by converting organic waste into clean hydrogen.

  Though in initial stages, research results are promising for WtH, with continued research, investment and supportive policies crucial to unlocking its full potential. Japan, for example, aims to launch a first WtH production facility by 2030. This would have a daily processing capacity of between 200 tonnes and 300 tonnes of municipal waste.

- **SDG 13: Climate action**

  The United Nations Marrakech Partnership's Climate Action Pathway on Green Hydrogen aims for 1.5°C compatible energy sector by 2050.[125]

  Green hydrogen is pivotal for decarbonizing sectors that cannot be electrified, reducing reliance on fossil fuels. The European Union, for example, plans to install 40 gigawatts (GW) of electrolysers and produce 10 million tonnes of renewable hydrogen by 2030. By lowering carbon emissions significantly, this advances SDG 13.

4. Challenges

To capture local content and value creation from the hydrogen economy, local governments need to know about the applications of renewables-based hydrogen to different sectors. These include transport, chemicals and other industries, such as steel.

Addressing this, ICLEI — Local Governments for Sustainability looked at three different local contexts and modelled how they might reach 100 per cent renewable energy supply by 2050. The three localities were: Avellaneda (Argentina), Kisumu County (Kenya) and West Nusa Tenggara (Indonesia).

The models showed green hydrogen to be a key enabler in achieving the 100 per cen renewables and net-zero targets, particularly in the power, energy storage and transport sectors. Indeed, in no scenario was 100 per cent renewable energy possible without green hydrogen.[126]

However, challenges in localizing SDG impacts and the green hydrogen economy in cities include:

- **Capturing local investment in green hydrogen:** Cost is one of the greatest barriers to scaling up green hydrogen.[127] To reduce costs, public and private investment in research – with greater regional cooperation – is necessary.

- **Enabling localized value creation from green hydrogen:** A green hydrogen economy at the local level requires short to long term planning, finance, capacity and collaboration between governments, industry, and the public.

  Central to this effort is the alignment of green hydrogen projects with local development strategies, focusing on renewable energy access, effective water management and employment opportunities. Green hydrogen initiatives should also prioritize new renewable energy capacity (additionality). This will ensure they genuinely contribute to increasing clean energy sources and maximizing their environmental and socio-economic benefits.

  These efforts must build on innovation, comprehensive stakeholder participation, and a solid alignment with the 2030 Agenda. This will ensure transparent execution and the strategic use of both private and public funds. Green hydrogen projects offer numerous advantages, including enhanced energy security and economic development. Yet, they must carefully navigate through the challenges presented by changing regulations and rapid technological advancements. They must also be aware of the need for fair distribution of benefits, in order to prevent negative effects on social equality and ecological health.

5. Recommendations for the future

SHORT-TERM ACTIONS	MEDIUM-TERM ACTIONS	LONG-TERM ACTIONS
• Develop an integrated approach to local and regional transition towards renewable energy. Include green hydrogen as a transition enabler. • Include local governments in national strategy development to ensure multi level political commitment.	• Shift the focus of an integrated approach toward renewable energy strategy and planning towards green hydrogen, mapping local potential and demand. • Align local and regional energy needs and plans with national green hydrogen policy processes.	• Raise the ambition of installed capacity targets.
• Establish a clear and legally binding definition of green hydrogen as enabling technology for energy transition and a deduction from non-renewable sources.	• Establish certification processes and standards to ensure quality and safety.	• Strengthen national standards and inclusive planning to facilitate market development.
• Ensure green hydrogen projects contribute positively to SDG 7 by integrating them with renewable energy sources to enhance energy access and grid stability.	• Scale up renewable energy capacity and green hydrogen production to create jobs and promote economic growth, in line with SDG 8.	• Establish comprehensive strategies for green hydrogen to significantly contribute to SDG 13 by decarbonizing hard-to-abate sectors.
• Develop the renewable energy infrastructure and regulations to support green hydrogen projects, focusing on technological innovation and environmental sustainability to advance SDG 9.	• Develop a robust hydrogen infrastructure, including production facilities, storage solutions and distribution. Provide transparent information on grid considerations. • Leverage green hydrogen for water management, utilizing electrolysis and desalination to support SDG 6. • Carry out local systemic risk assessments that target water-related impacts before the development of green hydrogen.	• Further improve infrastructure to solve supply-chain issues. • Maintain long-term analysis and modelling of hydrogen and freshwater supply impacts.
• To reduce costs, public investment in research and development to advance green hydrogen production technology, storage and utilization.	• Promote sustainable agriculture through green hydrogen-derived ammonia for fertilizers, addressing SDG 2.	• Extend local capacity building from the public to private sector.
• Increase sectoral demand for green hydrogen to stimulate additional private sector investmen. • Assess local context for implementation of green hydrogen to meet local, just energy transition needs.	• Develop local public procurement processes to include criteria aiming at zero-emissions solutions, assessing the effectiveness of green hydrogen. • Decrease administrative hurdles and facilitate the deployment of green hydrogen permitting processes. • Local capacity building on technical know-how for projects.	
• Implement financial incentives to promote green hydrogen technology and encourage private investment.	• Establish partnerships with potential funders; explore international and private funding opportunities.	• Evaluate public and private funding sources for efficiency.
• Engage local communities to raise awareness and address concerns, building acceptance for green hydrogen projects.	• Private-public multi-level collaborations and partnerships to exchange knowledge, accelerate innovation and promote green hydrogen (and its funding possibilities) among stakeholders: horizontal and vertical integration.	• Monitor progress of community engagement, redefine strategies if needed and share findings and best practices.

Policy brief 8: Localizing the SDGs: Waste management systems and the circular economy

CONTRIBUTING ORGANIZATIONS: **UNDESA (UNOSD), UNEP, UN HABITAT AND UNU**

1. Key messages

1. **The SDGs provide a framework within which to address the world's most pressing challenges.** These include waste management and the transition to a circular economy. While these two development issues directly contribute to the achievement of SDG targets 11, 12 and 14, they can also positively impact progress in all the other SDGs.

2. **Local governments play a key role in implementing sustainable practices and nurturing innovative solutions for the circular economy, as they hold direct responsibility for local waste management.**

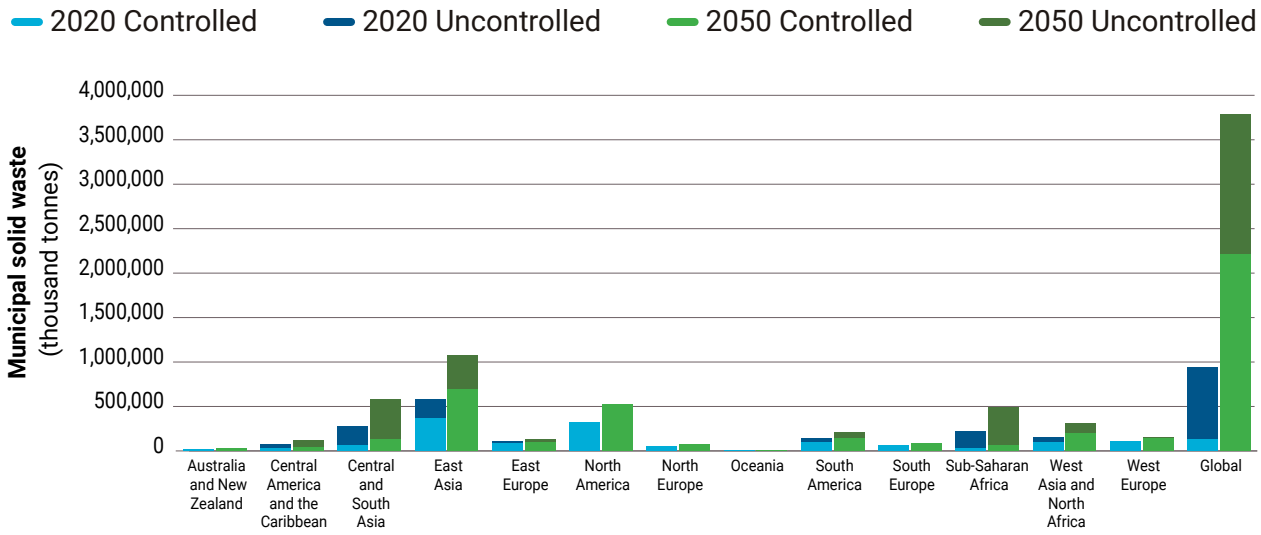
3. **Addressing the waste crisis and the triple planetary crisis of pollution, biodiversity loss and climate change depends on collaboration between national and local levels.**

> *"We need to massively invest in the ability of countries, cities and local governments to develop and scale-up modern waste management systems, and policies that encourage people to re-use and recycle everything from plastic bottles to ageing electronics."*
>
> UN Secretary-General António Guterres

2. Background

Humanity already generates an estimated 2.1 billion tons of municipal solid waste (MSW) annually, with this likely to rise more than 77 per cent by the end of 2050.[128] Currently, only 62 per cent of the world's MSW is managed in controlled facilities.[129] Approximately 90 per cent of waste in low-income countries is discarded in unregulated dumps, where waste is often burned openly.[130] The waste sector contributes an

FIGURE 15. MSW generation: Controlled and uncontrolled, 2020 and 2050 projection



Source: UNEP, 2024

estimated 20 per cent of human-caused methane emissions.[131] It is estimated that over 400 000 people in developing countries die each year due to diseases from mismanaged waste.[132] This striking reality calls for national and local government action to urgently accelerate progress towards effective waste policymaking and implementation.

The circular economy requires a system change in how we think about, generate and manage waste, with strong national leadership needed to enable a shift at the household level. Waste is a resource, with the effective management of MSW needing to be based on integrated, circular and/or holistic approaches. These start with a rethinking of what waste is, along with the designing of products and services that maximize the lifespan of materials and minimize residual waste. The 5R principles – **refuse the use of single-use items**, rethink, reduce, reuse and recycle – are key to this shift.

Many countries are now moving towards viewing waste as a resource. Examples include Brazil, the European Union, Morocco, Rwanda, Türkiye and Nigeria. In the latter, the State of Lagos has recently banned Styrofoam boxes and single use plastics to reduce plastic pollution. As countries make this transition, policy frameworks and local legislation are also changing. In some cities, it is no longer a question of MSW management, but instead zero-waste underpinned by a resource circularity approach. Along with this change, the waste management hierarchy is expanding into the circular economy hierarchy.

Cities transitioning from a linear to a circular economy are mostly located within Europe. In 2014, the capital of Slovenia, Ljubljana, become the first European capital to move towards zero waste. Elsewhere, major cities such as Dar es Salaam, Dhaka South, New York and Washington DC are also demonstrating that zero-waste pathways can begin at the local level, while potentially setting frameworks for eventual national level legislation.

FIGURE 16. The waste management and circular economy hierarchies

Source: UNEP (2016)[133] Kirchherr, Reike and Hekkert (2017)[134]

Although developing countries have made progress on implementing a 5R approach in waste management and are successfully accomplishing programmes or projects at local level, many local municipalities suffer from technical, financing and capacity gaps. These hinder their ability to address growing waste volumes.

In 2023, the United Nations Office for Sustainable Development (UNOSD) analysed the current challenges expressed by a select number of developing countries according to their VNRs, survey responses and other policy documents.

The impact of the COVID-19 pandemic was reported as a driver for increased waste generation across countries. The most common challenges reported were: low resource recovery; a lack of data on integrated national governance of waste; and a lack of capacity and skills at the national and local levels. The number of VLRs, which provide local authorities with an opportunity to report their implementation of the 2030 Agenda and their key challenges, is increasing. Yet, the majority of VLRs undertaken are currently by cities located in developed countries.

The most recent SDG data shows that SDG11, which includes the primary indicator in MSW management, has the most insufficient data among the 17 SDGs. At the same time, SDG12.5.1 (national recycling rates, including MSW and e-waste), has large data gaps. According to a UNOSD in-house analysis using UNSD data, Africa and the small island developing states (SIDS) are falling furthest behind in reporting waste-related country data.

3. Key trends and challenges

- **Mega-trends, such as population growth and urbanization, act as drivers of MSW generation in cities.** While urbanization is driving increasing waste generation globally, it is particularly important in Africa and Asia, where urbanization rates are highest. Lack of planning and provision of MSW infrastructure can lead to increased improper disposal of waste and exposure to communicable diseases. Well-managed urban areas, however, can deliver better access to waste management services.

- **Economic growth drives waste generation.** This growth currently relies on the extraction, processing and consumption of finite resources. As household incomes rise, the type and composition of waste generation also changes, with significant increases seen in plastic and e-waste generation. With its increased spending power, the middle class in the Asia-Pacific region is projected to significantly increase waste generation and influence its composition in the future.

- **Developing countries lack the means of implementation to properly manage rapidly increasing amounts of waste, with data gaps creating significant challenges.** Data gaps mean that the projected amount of solid waste generation may be conservative. In consequence, infrastructure planning is carried out based on incomplete information. Data is also essential in comparing global and national progress in the shift to a circular economy.

- **The informal sector plays an important role in the collection and recovery of MSW, with many developing countries relying on informal recycling and resource recovery initiatives.** While these informal processes advance resource circularity, the people within this sector – particularly women and children – are in a

situation of vulnerability. Inadequate data on the positive or negative externalities of these processes limits the reach and impact of policy. In addition, waste management initiatives do not always address the inclusive dimensions needed to support local livelihoods.

- **Governance challenges are hindering waste management practices.** There are a variety of challenges in adapting national legislation to local needs. These include: policy inconsistencies across national, regional and local levels; divided responsibilities among authorities; and the diverse waste compositions that arise due to context – for example, urban versus rural. Local implementation of protocols can be difficult, especially when strong coordination is needed between and within authorities. This is particularly so with transboundary issues, such as controlling river pollution.

- **There are technological and financial constraints on the ability of the local level to respond to increasing waste volumes.** Although there is an urgent need for circular solutions, many cities face limitations on their ability to adequately invest in sustainable infrastructure and context-appropriate technological alternatives, including controlled disposal sites.

- **In urban environments, social factors – such as rapid production and consumption patterns, coupled with limited awareness and behavioural change – exacerbate the challenge of waste management.** The prevalence of convenience culture further contributes to the escalating volume of waste generation, with more than 77 per cent of this attributed to urban areas and around 90 per cent of MSW in developing countries being mismanaged.[135] This trend is underscored by unsustainable practices. These include overconsumption, improper disposal behaviour, reliance on disposable items and insufficient community engagement.

4. Solutions and recommendations

Zero waste policies: Strategies and initiatives that aim to minimize waste generation and maximize resource efficiency are key to sustainable MSW management. Such strategies include promoting waste prevention, recovery, composting and other sustainable waste management practices.

One recent example of this is the packaging reduction and recycling infrastructure act passed by the Environmental Conservation Committee of the New York State Assembly. This prohibits the use of toxic chemicals in packaging, the quantity of which it also aims to reduce. Market based instruments, such as taxes and subsidies, can also guide producer and consumer behaviour. The polluter pays principle can be applied by, for example, extended producer responsibility (EPR). This is a policy tool that holds manufacturers accountable for the entire lifecycle of their products and provides incentives for them to design goods that are reusable, able to be re purposed or easily repaired. This internalises the environmental costs of a product into its pricing and design. As the recent negotiations for the Global Plastics Treaty highlight, all initiatives – whether international, national or local – should be implemented to ensure a just transition.

Innovative models: These are needed, for example, to improve engagement with relevant stakeholders, including the informal sector, local businesses, entrepreneurs, and community representatives, whereby increasing insight into market trends, demands, and challenges. Targeted efforts are needed to promote education and awareness, foster sustainable behaviour and drive changes in the design of products and

services. Adopting new branding models can promote sustainability. These could include focusing on local production for local consumption, which could transform waste into value-added products tailored to the needs of communities. As one example, polyethylene terephthalate (PET) bottles can be recycled into fabric, plates, cups and cutlery. This then allows customers to contribute to environmental protection through their purchasing decisions.

Low and high technology measures: These can include composting and biogas generation, which can reduce GHG and methane emissions. Adaptation co-benefits can be accrued by using compost as an organic fertilizer to improve drought resilience and reduce land degradation. New Town Kolkata Municipal Authority in India, for example, set up a bio methanation plant where energy produced from organic waste powered streetlights. The integration of cutting-edge technologies can be harnessed to optimize MSW management and data, from waste accumulation forecasting and collection to processing and classification. The Aundh-Baner-Balewadi region, Pune, India, is developing a zero-waste neighbourhood using global positioning software and radio frequency identification to enhance waste truck tracking, waste bin identification and monitoring waste areas.

Public-private partnerships (PPP) or public–private–people partnerships (4P): At the municipality level, these can address resource and technological constraints. The municipality of Antananarivo, Madagascar, for example, currently has a PPP with APIS Solutions SAS (a consortium of five companies) to upgrade the capital's waste management systems.

5. Concluding policy recommendations

- **Promote the principles of the circular economy**

  A lifecycle approach to waste management should be embraced. Such an approach emphasizes resource circularity and sustainable practices from production to disposal, doing this through an eco-design approach that considers the environmental impact in every phase of a product's life. This decouples economic growth from the use of finite resources. Integrating the "polluter pays" principle also ensures that producers internalise the environmental costs of their products. Value chain analysis should be incorporated, promoting easy source segregation for efficient waste management.

- **Context-tailored waste policy and implementation**

  Context-specific waste management policies that address the unique challenges faced at national and local levels should be developed. These should consider factors such as waste composition, cultural sensitivities and ministerial responsibilities. MSW systems need to be consistent and coordinated, with regulatory instruments and incentives (such as taxes and subsidies) to steer behaviour and decision making. These can also link national and local policy and planning to implementation at the local level, thereby addressing gaps between policy intentions and practice.

- **Short, medium and long-term planning**

  Changes in waste generation patterns driven by spatiotemporal changes in population and shifting consumer spending dynamics should be anticipated and planned for. This is particularly so in regions experiencing rapid economic growth. Interventions should be tailored accordingly.

- **Enhance data collection and analysis**

  There should be investment in comprehensive waste management data collection. This will enable better understanding of the scale of the waste problem; identify vulnerable populations; and inform evidence-based decision-making.

- **Facilitate stakeholder collaboration**

  Collaboration between and among national and local governments, the informal sector, the scientific community, civil society, and PPP or 4P, should be fostered to design and implement effective waste management programmes.

- **Engage the informal sector**

  The informal sector should be integrated into formal waste management systems. This should be done through knowledge sharing and dialogue, as well as by developing policies and strategies that fully acknowledge the informal sector's critical role and ensure decent working conditions and standards of living for those within the sector.

- **Focus on behaviour change**

  Resources should be allocated towards strategies that enable changes in behaviour in order to encourage sustainable practices among communities and stakeholders.

Policy brief 9: Mainstreaming the SDGs in the policies and strategies of cities and regions

CONTRIBUTING ORGANIZATION: **OECD**

1. Key messages

1. **The SDGs are more than a checklist for compliance.** They offer a framework to guide policy formulation and implementation and to promote innovative policy paradigms. They also offer this for LRGs, with 105 of the 169 SDG targets unachievable without the engagement of cities and regions.

2. **Integrating the SDGs into cities and regions' sustainable development strategies, comprehensive development plans and planning frameworks can provide a practical tool for overcoming the limitations of sector-based planning.** This integration can facilitate a shift from a siloed to a more integrated, multisectoral approach in the formulation and implementation of urban and territorial development policies.

3. **Cities and regions should leverage the SDGs to design and implement sustainable development policies, promote synergies and manage trade-offs among sectoral policies.** They should do this by assessing the impact of specific policies on other policy areas. An example would be assessing the effect of climate measures on social inequalities. National governments should use a place-based approach to elaborate and implement their SDG strategies and actions.

2. Background

Although the SDGs were not expressly designed by, or for, local and regional governments, they provide an opportunity to promote innovative policy paradigms. While establishing concrete and common objectives for 2030, they also recognise the need for action tailored to the unique needs and circumstances of different places.

At least 105 of the 169 targets that underlie the 17 SDGs depend on the engagement of local and regional governments.[136] Subnational governments have a hand in a wide array of policy areas, such as housing, transportation, infrastructure, land use, waste management, access to clean drinking water and sanitation, energy efficiency and addressing climate change. They therefore hold some critical levers in sustainable development. In 2021, they accounted for 55 per cent of public investment and 37 per cent of total public spending in OECD countries.[137] Furthermore, their proximity to people, local businesses and civil society puts them in a unique position to mobilise collective action to achieve the SDGs.[138]

Yet, on a global scale, only 15 per cent of SDG targets are considered to be on track for achievement by 2030, while 48 per cent are moderately or severely behind schedule. A further 37 per cent are stagnating or have even regressed.[139] The latter include crucial targets related to poverty reduction, hunger eradication and climate change. Moreover, at least 80 per cent of regions from OECD countries have not achieved the targets for 2030 in any of the 17 goals. Similarly, more than 70 per cent of cities have not achieved the targets in 15 out of the 17 SDGs.[140]

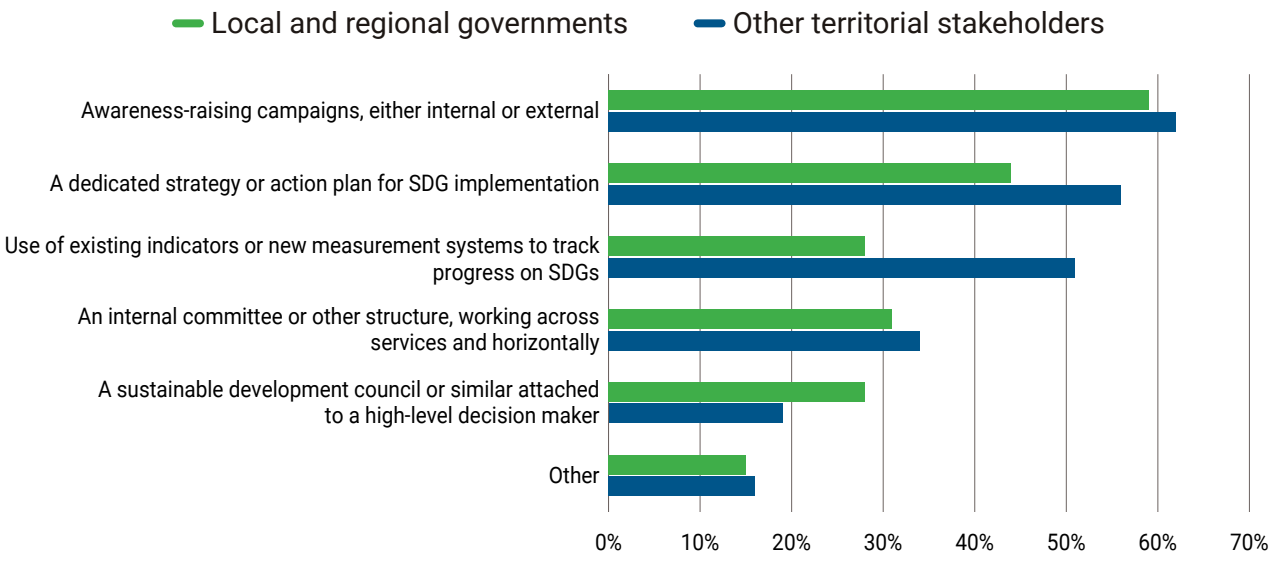
3. Integrating the SDGs in policies and strategies at local and regional level

Many cities and regions across the world have already been anchoring sustainability through the SDGs lens in their territorial development strategies, plans and programmes. Using the SDGs as a framework to assess how their programmes align with the 2030 Agenda, they have revised current plans and strategies to reflect the SDGs, or to guide the elaboration of new sustainable development strategies.[141] A recent

survey jointly conducted by the OECD, the United Nations Sustainable Development Solutions Network and the European Committee of the Regions showed that 56 per cent of responding governments had developed a dedicated strategy or action plan for the SDGs,[142] as shown in Figure 17 below.

The survey also showed that political leadership was the main success factor in implementing the SDGs at the local level. Political leadership is also at the core of the VLR movement, which has seen an increasing number of cities and regions worldwide showcasing their progress on the SDGs. These have included local and regional governments in some non-OECD countries, such as the province of Córdoba in Argentina, the city of Cape Town, South Africa, the DKI Jakarta Province of Indonesia In OECD countries, the Basque Country in Spain has established the Agenda Euskadi Basque Country 2030 strategy to align its programmes and sectoral policies to the SDGs. The Euskadi Basque policy initiatives split into 4-year blocks, mirroring the legislative cycle, with social, economic and cultural stakeholders in each policy area responsible for driving progress.[143] In Iceland, Kópavogur was the first municipality in the country to mainstream the SDGs in its local development strategy using the SDGs and their targets as a platform to explore synergies between interconnected goals. Based on these, Kópavogur has prioritised its efforts across different policy domains and identified policy blind spots.[144] Outside, of OECD countries, the state of Paraná has harnessed the SDGs to mitigate territorial disparities, aligning its planning instruments with the 2030 Agenda and fostering the exchange of exemplary practices among municipalities at varying stages of development. In its 2020-2023 Multi-Year Plan (PPA), Paraná strategically identified policy priorities that are consistent with the goals outlined in the 2030 Agenda.[145]

FIGURE 17. Policies and actions adopted by cities and regions to implement the SDGs (percentage of respondents selecting the respective options, multiple responses possible)



Source: OECD/SDSN, 2024

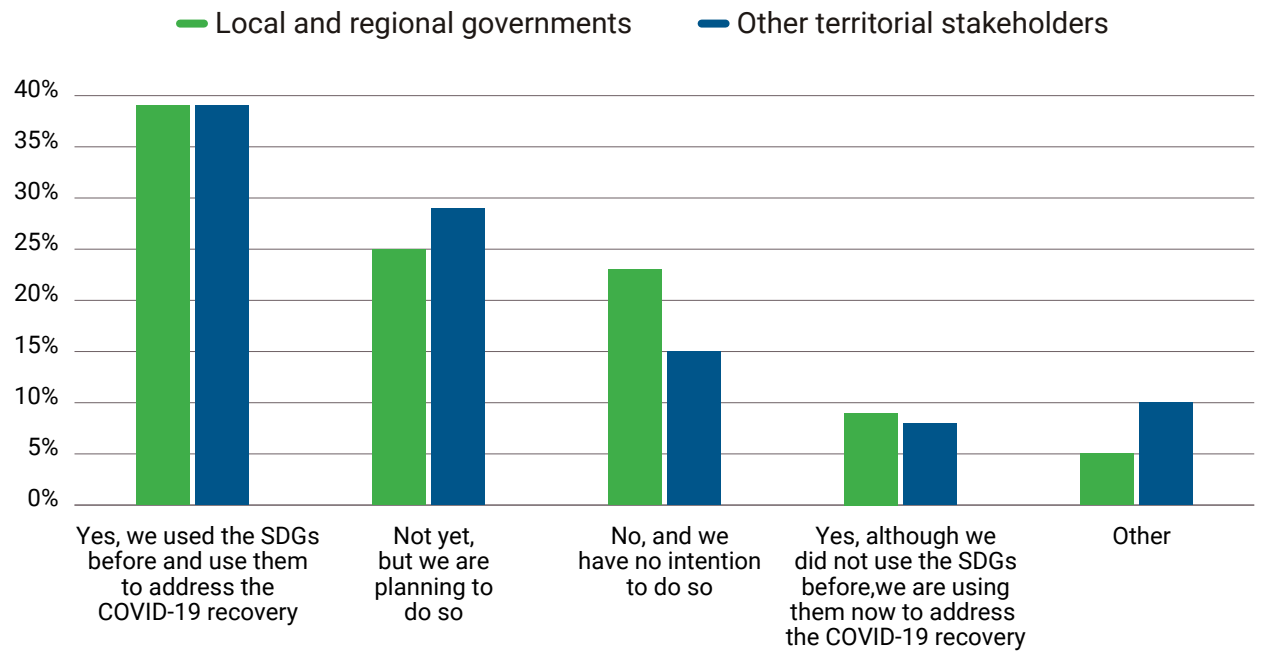
The SDGs have also proven their value-added as a policy-making framework in times of crises. Among respondents to the above survey, around 39 per cent of local and regional governments used SDGs as a framework for policy-making before the COVID-19 pandemic as well as in the recovery phase. About 10 per cent of subnational governments also seized the opportunity of the COVID-19 recovery to initiate work on the SDGs,[146] as shown in Figure 18 below.

The SDGs provide a key tool for local and regional governments to overcome their territorial development challenges. Nevertheless, many cities and regions are still grappling with diverse territorial development challenges, often centred around sustainable mobility, affordable housing and the need to transition to green and inclusive growth.[147] The SDG framework can help subnational governments prioritise goals while considering and managing the synergies, impacts and trade-offs concerning other goals and policy areas.[148] If properly implemented, the SDGs provide a practical tool to overcome the limitations of sector-based planning, facilitating a shift from a siloed to a more integrated, multisectoral approach in the formulation and implementation of strategies and policies.

4. Using the SDGs to manage synergies and trade-offs

The following section analyses the challenges and provides some examples of how the SDGs can help to guide synergies and trade-offs across policy areas.

FIGURE 18. Usage of the SDGs as a framework for the COVID-19 recovery phase (percentage of respondents selecting the respective options)



Source: OECD/SDSN, 2024

- **Sustainable mobility, emissions and inequalities**

  In OECD countries, the transport sector is the second largest contributor to GHG emissions, responsible for some 23 per cent of the total in 2021.[149] While vehicle energy efficiency has improved, the distances travelled, the number, size and weight of vehicles have all gone up, driving higher fuel consumption.[150] Emissions from road traffic went up by more than 19 per cent between 2000 and 2018.[151] Reducing air pollution and incentivising low-carbon transport will be key to building sustainable cities, but require managing trade-offs between policy areas. As an example, mitigation and adaptation to climate change (SDG13) through lower GHG emissions (SDG11) also needs to consider the potential impact on inequality (SDG10). This is because the expansion of renewable energy sources, or the establishment of congestion charges, could disproportionately affect populations experiencing vulnerabilities, such as low-income households.[152]

  Some cities and regions use the SDGs as a framework to take these interlinkages into account in their policies and strategies. For example, by expanding public transport, car sharing and upgrading the cycling infrastructure to reduce inequalities by making mobility more affordable, accessible and less polluting, health benefits are also provided through lower exposure to particulate matter. For instance, the Autonomous Province of Bolzano-Bozen, Italy, has developed a Sustainable Mobility and Logistics Plan, which integrates all transport modes. The province is also transitioning its public bus fleet to hydrogen power to reduce emissions and is enhancing cycling infrastructure to promote low-carbon mobility and health benefits.

  The province also offers the South Tyrol Pass, a year-long electronic ticket for all public transport. This features a degressive pricing model, in which the cost per kilometre decreases with longer journeys. This allows users to travel for free above a certain threshold, thus improving the affordability of public transport.[153]

- **Affordable housing, environment and public services**

  Cities worldwide are facing a housing crisis, with growing informal settlements. In recent decades, housing has also become increasingly unaffordable for many residents. In OECD countries, on average, real house prices increased by 77 per cent between 1996 and 2022, while per capita GDP grew by only 29 per cent. In many cities, housing supply has failed to keep pace with rising demand. The housing sector in OECD countries is also marked by declining direct public investment in dwellings. This amounted to less than 0.01 per cent of average GDP in 2018.[154]

  In attempting to solve the housing crisis, cities often face complex trade-offs around access to quality and affordable housing, environmental issues and pressure on public services. For example, reducing GHG emissions means maintaining and developing green spaces, while also catering to a growing need for affordable housing. The SDGs can help consider these interconnections. For example, sustainable construction using recycled material to address housing shortages can simultaneously tackle SDG9 and SDG12. A multi-stakeholder approach that addresses issues related to cost of land and infrastructure can help boost affordable housing availability. This might be achieved, for example, by sharing social infrastructure costs with developers and tapping into private finance.

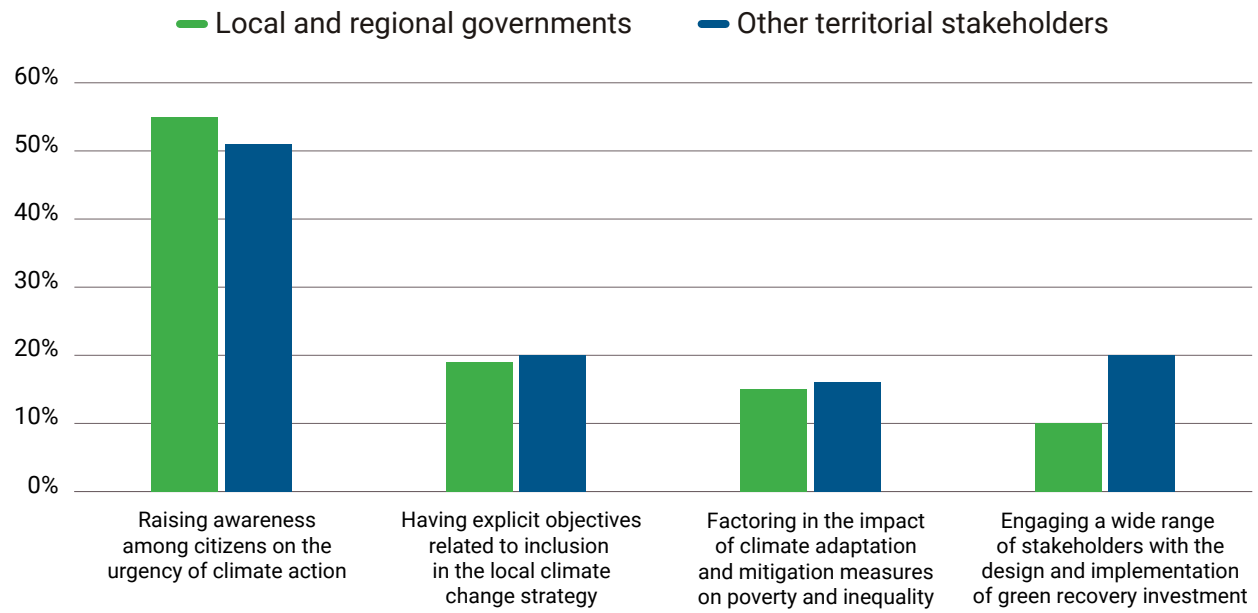
The City of Bonn, Germany, for instance, has introduced the Bonn Building Land Model to alleviate housing market stress by increasing affordable housing and sharing infrastructure costs with developers. The model mandates developers to dedicate 40 per cent of new project areas to subsidised housing and to help finance childcare facility development.[155]

- **Transition to green and inclusive growth**

Most regions are far from meeting climate neutrality targets. In 2018, only 14 per cent of large regions within the OECD had per capita production-based emissions below the threshold consistent with the 2050 Net Zero Emissions scenario of the International Energy Agency (IEA).[156] At the same time, these regions are witnessing enduring inequalities.[157] In both capitals and less developed areas, the disposable income of the wealthiest 20 per cent is approximately seven times greater than that of the poorest 20 per cent.[158]

Many cities are promoting green growth strategies, with these seeking to generate not only environmental sustainability, but also economic opportunities and inclusion (see Figure 19 below). To successfully manage potential trade-offs, it is crucial to integrate green growth with social and economic sustainability. Such trade-offs include balancing the economic costs of green technologies with job losses in traditional industries, or uneven access to green technologies such as energy-efficient appliances or electric vehicles. The SDGs can guide this process by promoting a just transition that includes expanding the circular economy to enhance economic and environmental outcomes. Developing new green industrial sectors (SDG9) can facilitate cooperation between the private and research sectors (SDG13), thereby promoting job creation (SDG8) and educational opportunities (SDG4).[159]

FIGURE 19. SDGs 10 and 13: **Priority actions** by cities and regions **to achieve climate objectives** with **inclusivity (percentage of respondents selecting the respective option as their top priority)**



Source: OECD, 2022

The city of Kitakyushu in Japan, for example, uses the SDGs as a tool to explicitly connect environmental, social and economic goals through an urban transformation agenda. This agenda is centred around offshore wind power generation, eco-tourism and culture, to generate job opportunities, attract youth and promote social cohesion.[160]

5. Recommendations

To accelerate progress on the SDGs, local, regional and national governments need to upscale their efforts to use the SDGs as policy-making tools. In particular, they should:

- **Leverage the SDGs to design and implement sustainable urban and regional development policies.**

  National and subnational governments should continue to mainstream the SDGs in their sustainable development policies and strategies. National governments should use a place-based approach to design and implement their sustainable development strategies, provide technical and financial support to the sub-national levels and engage them in the preparation of VNRs. Local and regional governments should periodically assess progress on the implementation of their local development plan and policy priorities against the SDGs, making any necessary adjustments to strategies as conditions evolve. These adjustments should include enhancing resilience and preparedness for future shocks and crises.

- **Promote synergies between sectoral policies through the SDGs.**

  Integrating the SDGs into sustainable development policies, spatial plans and frameworks can help local and regional governments move beyond sector-based planning. It can also enable a more holistic approach to territorial development. This, in turn, can help overcome silos and fragmentation.

  Cities and regions should implement policies, programmes and actions that connect environmental, social and economic SDGs. This can create new job opportunities and promote social cohesion, while also addressing environmental and climate concerns. Policies and programmes could include stimulating clean and affordable energy to generate energy-efficiency cost savings for low-income populations. They could also include an expansion of the circular economy to create new job opportunities. The environmental impacts of industrial production could also be reduced by leveraging green technology and innovation as drivers of environmental sustainability.

- **Apply the SDGs to manage trade-offs between competing policy areas.**

  Local and regional governments should assess how the different SDGs and their targets intersect with local or regional policy areas. In order to do so, they should identify any potential trade-offs or adverse effects that may arise when implementing actions to achieve one or more targeted SDGs. They should do this by, for example, using data analysis and stakeholder consultations to examine potential trade-offs between climate protection measures and social inequalities. With the potential effects identified, alternative strategies should then be explored. If such alternatives are not feasible, local and regional governments need to develop and implement measures to mitigate adverse effects.

Policy brief 10: Promoting multilevel cooperation through the Forum of Mayors

CONTRIBUTING ORGANIZATION: **UNECE**

1. Key messages

1. **The Forum of Mayors has shown potential in shaping urban regeneration, promoting inclusive multilateralism and contributing to the localization of global agendas.** These agendas include the Pact for the Future and the 2030 Agenda for Sustainable Development.

2. **Mayors, including those in conflict or crisis regions, have emerged as key figures due to their direct engagement with citizens and resource mobilization abilities.** Demonstrating the power of connections and inclusive multilateralism, the Forum of Mayors fosters connections that catalyse innovative initiatives, such as comprehensive masterplans for conflict-affected cities.

3. **The Forum of Mayors provides a platform for cities to exchange strategies to address challenges.** Originating within the United Nations Economic Commission for Europe (UNECE) Committee on Urban Development, Housing and Land Management, the forum's expansion beyond the UNECE region reflects the global nature of urban issues. As the forum evolves, discussion of its growth and impact becomes.

2. Backgound

The Forum of Mayors stands as a crucial platform fostering multilevel cooperation, giving cities a voice at the United Nations. It operates as a subsidiary body of the UNECE Committee on Urban Development, Housing and Land Management, enabling city leaders to exchange experiences, ideas, and initiatives to address local, regional, and global challenges.

An example of this exchange was the adoption of the Geneva Declaration of Mayors in 2020. This identified sustainable city goals and expressed the commitment of the mayors present to achieving them.

Recent meetings and mayors' recommendations have therefore demonstrated that the forum holds significant potential in shaping urban regeneration and promoting inclusive multilateralism. The forum also holds great potential as a contributor to the localization and implementation of global agendas. These include the 17 SDGs of the 2030 Agenda for Sustainable Development and the Pact for the Future, to be adopted by United Nations Member States at the United Nations Summit of the Future in September 2024

Mayors have emerged as key actors due to their direct engagement with citizens and their ability to mobilize resources and support. This includes mayors from regions experiencing conflict or crisis. Indeed, the development of comprehensive masterplans for cities affected by conflict has been catalysed by innovative initiatives arising from interaction between mayors at the Forum of Mayors' meetings. A good example was the interaction between Mayor Terekhov of Kharkiv and architect Norman Foster during the second meeting of the Forum of Mayors, held in 2022. This led to the *pro-bono* preparation of a new masterplan for Kharkiv by the Norman Foster Foundation. This comprehensive plan aims to "build back better" and includes pilot projects focusing on heritage, rivers, industry and housing.

This initiative spurred several others, including the Masterplan for Mykolaiv by the OneWorks Foundation and the UNECE UN4UkrainianCities project, supported by the German Government.[161] While the project has a special focus on Kharkiv and Mykolaiv, it is dedicated to aiding all cities in Ukraine in post-war urban planning and resilience building.

Third meeting of the UNECE Forum of Mayors, Group picture, 3 October 2023, Room XVII, Palais des Nations, Geneva, Switzerland (UNECE photo by Violaine Martin).

It is reasonable to say that none of these initiatives would have materialized without the facilitation of connections through the Forum of Mayors' meetings.

3. Conclusions and recommendations

- **There is immense value in involving local and regional authorities in the processes of the United Nations.** Acceptance of this proposition lays the groundwork for a more inclusive multilateralism at the global body. This involves incorporating city authorities and other new actors, with arenas like the Forum of Mayors undoubtedly spurring interaction and new initiatives. Given the challenges that national governments encounter in navigating the complexities of globalization, this inclusivity is paramount – particularly since achieving the SDGs necessitates involvement from local and regional authorities.

- **While the United Nations has sometimes engaged with stakeholders beyond Member States, the integration of cities into the international arena remains complex and insufficiently addressed.** This gap underscores the necessity of flexible and tailored approaches that cater to the unique needs and dynamics of different processes and stakeholders. The recent "Draft recommendations on urban regeneration from the third Forum of Mayors"[162] underlines this imperative, urging Member States to actively involve cities in relevant United Nations work in order to promote a more inclusive and dynamic multilateralism.

- **The Forum of Mayors has also expanded to include an interregional element, facilitating the participation of cities beyond the UNECE area.** This expansion underscores the global nature of urban challenges, opening avenues for formal and informal relationships with other, Geneva based global processes of the United Nations.

- **As the Forum evolves, discussions about its growth and potential impact are imperative.** Looking ahead to the rest of 2024, from 30 September to 1 October the Forum will host the *Cities Summit of the Future* in Geneva, after the *United Nations Summit of the Future*. This broad scope underscores the Forum's potential to address the localization of all SDGs and bring mayors to the forefront of the global agenda.

In conclusion, as the Forum of Mayors navigates its path forward, the international community in Geneva should explore avenues for its evolution and growth. The upcoming fourth edition of the forum presents an opportune moment to seize its potential and demonstrate how a new multilateralism embracing cities can effectively function in practice.

Policy brief 11: National structures promoting localization: Practical examples from Africa

CONTRIBUTING ORGANIZATION: **UNECA**

1. Key messages

1. **The expansion of VLRs in the Africa region highlights the critical role played by subnational governments in localizing the SDGs.** It also highlights their key role in tracking and monitoring SDG goals and in developing local-level initiatives that are responsive to national and global targets.

2. **Scaling VLR production nationally not only leads to strengthened reporting and improved systems of multilevel governance, but also helps address data gaps often encountered in VNRs**.

3. **Establishing a multistakeholder drafting team at the national level promotes broad participation in subnational and national review processes.** This not only ensures greater ownership and buy-in from special interest groups, but also that vulnerable and marginalized groups are not left behind, in accordance with the 2030 Agenda.

4. **SDG reporting templates with standardized indicators are effective tools for consolidating subnational data and information collected through VLRs.** National statistics offices can complement these templates with disaggregated indicators

2. Background

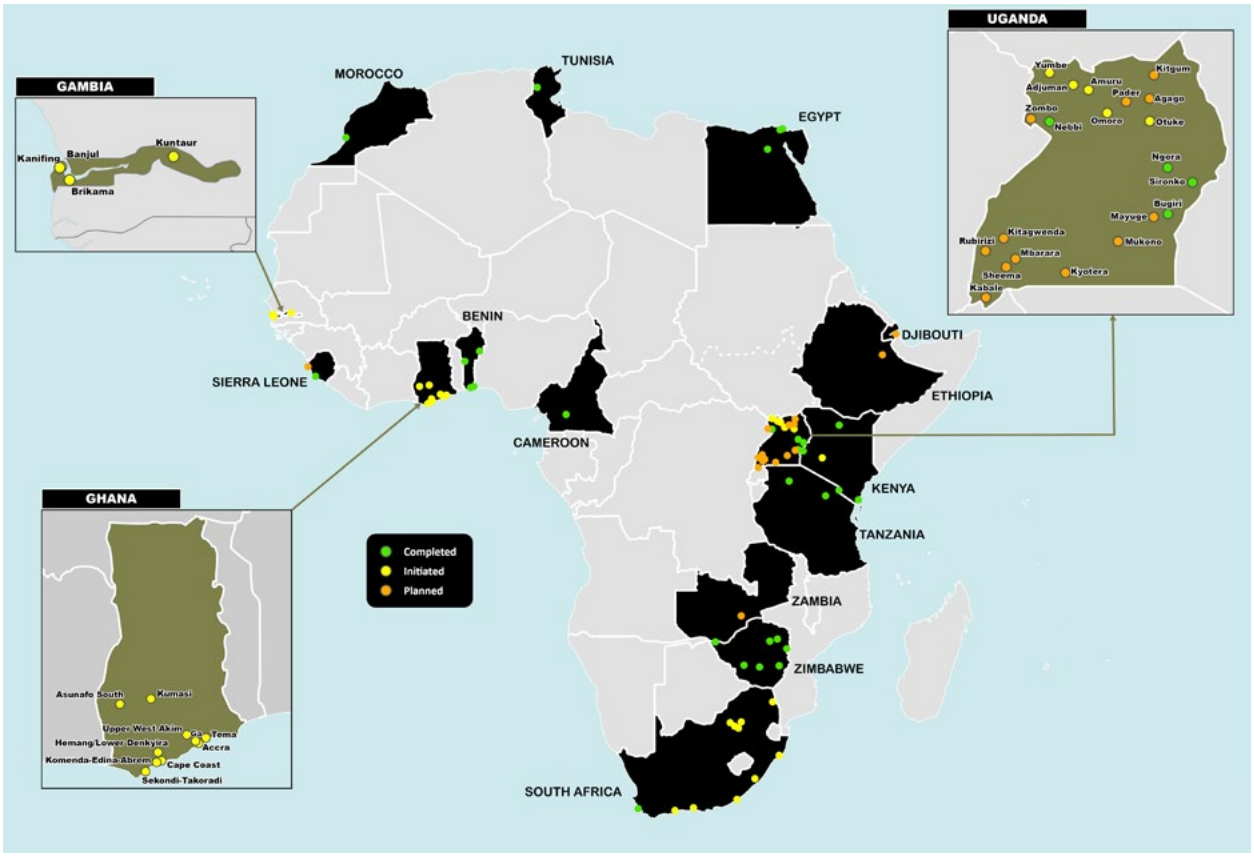
Globally, the world is not on track to meet the SDGs by 2030. In the Africa region, progress on these and the African Union (AU) *Agenda 2063: The Africa we want* has been uneven, or even regressive.[163] While there have been some achievements in technological development, research and innovation, both the 2030 Agenda and Agenda 2063 have been impacted by recent global and local crises, increasing the region's vulnerability to inequality and extreme poverty. This is increasingly evident in cities and towns, where with the urban population has grown rapidly. In 1950, urban areas accounted for 27 per cent of the continent's total inhabitants, with this figure reaching 40 per cent in 2015 and projected to reach 60 per cent by 2050, outpacing economic growth.[164] Additionally, the lack of sufficient, reliable and timely data in the region makes tracking the goals difficult.

With less than a decade to go to meet the 2030 Agenda, however, targeted action at all levels has been highlighted as a possible lever to success, particularly at the local level.[165]

The VLR presents an opportunity to help rescue the SDGs. The VLR is a mechanism that takes the local context into account in setting goals and targets, as well as in determining indicators for measuring and monitoring progress on the implementation of the SDGs. The VLR has thus been adopted by dozens of subnational governments, globally.

Since 2018, there has also been growing momentum and buy-in from African national and sub-national governments. They wish to carry out VLRs to better assess the implementation of the 2030 Agenda and Agenda 2063. During the sixth session of the Africa Regional Forum for Sustainable Development, Member States collectively welcomed VLRs as a tool to support subnational governments in localizing, monitoring and reporting progress with these agendas. This enthusiasm led to the production of Africa Regional Guidelines for VLRs,[163] jointly published by the United Nations Economic Commission for Africa (UNECA), UN-Habitat and UCLGA.

FIGURE 20. VLR Momentum in Africa



Source: Map by GiViS/ACS/ECA. Data Source: UDS/GPSPD/ECA, 2024. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

Throughout the African region, the significance of VLRs in local and national development is now increasingly evident. The VLR movement began with several pilot VLRs supported by UNECA – namely Accra in Ghana, Harare in Zimbabwe, the Ngora District of Uganda, Victoria Falls in Zimbabwe, Yaoundé in Cameroon and four districts in Kenya. Now, the region has seen more than 20 VLRs completed with more than 30 planned or underway. Since 2020, findings from local reviews have fed into annual SDG progress reports and underpinned the development of VNRs in the region.

3. Challenges and solutions: Examples from the region

- **Uganda**

  In Uganda, the government, under the SDG Secretariat in the Office of the Prime Minister, has scaled VLR production in districts across the country, mainstreaming findings into local and national development processes. The SDG Secretariat will incorporate findings from available VLRs into its 2024 VNR report.

  As a result of the Ngora District VLR, the district committed to pay attention to the goals by fully aligning the objectives of its district development plan (DDP) to the SDGs. It also committed to the allocation of more resources to the implementation of the goals, particularly where performance was lagging.

As a result, VLR outcomes are now anchored in the objectives and performance monitoring indicators of the DDP and its budget. Following Ngora District, the districts of Bugiri, Nebbi and Sironko have conducted VLRs, while five more districts[167] have initiated the process and 13 additional districts[168] are in the pipeline.

As part of its dissemination of the Africa VLR guidelines, the Uganda SDG Secretariat and UNECA held a national training of trainers and sensitization workshop. This led to a further increase in the number of VLRs produced, as well as the creation of new partnerships to support VLR development.

Makerere University School of Public Health and the Uganda SDG Secretariat, for example, are now collaborating to support Mukono and Mayuge districts in conducting their VLRs. This highlights the importance of involving diverse stakeholders in sensitization and training workshops. Such participants can come from academia, community organizations and the private sector.[169]

The process of conducting a review and feeding data and information into the 2024 VNR has also been eased with the creation of an SDG assessment tool. This has been developed for all districts to help them acquire knowledge about the SDGs and a variety of other factors. These include: the extent to which the goals have been integrated in DDPs; the priorities at the district indicator level; the sources of data, including surveys, administrative sources, the census and others; the methods used for data collection; and actions taken to localize the goals. The tool thus assists local governments in compiling relevant information on SDG localization efforts, while also training and building capacity. As a result, Uganda's VNR will be enriched by local contributions that respond to local-level data gaps and better targeted policies at the national level.

- **Zimbabwe**

Similarly, in Zimbabwe, the national review will benefit from inputs from five VLRs. These include reviews from the Murewa, Mutasa and Bikita rural district councils, Zvishavane Town Council and Bulawayo City. All of these VLRs took place between 2022 and 2024, along with the 2021 VSR, led by the Zimbabwe Local Government Association.[170] This association has developed a roadmap for producing reviews via an inclusive and comprehensive process, offering significant lessons for other countries in the region.

In contrast to past processes, Zimbabwe has established four national-level SDG clusters, as shown in Figure 21. These align with the three dimensions of sustainability around social, economic and environmental development. They also align with the country's National Development Strategy 1, 2021 2025 and the 2022 2026 Zimbabwe United Nations Sustainable Development Cooperation Framework (ZUNSDCF).

The ZUNSDCF lays out strategic priorities and actions for implementation. It also provides a channel for the government, the United Nations country team and other stakeholders to respond to challenges around gender equality, human rights and climate action.[171]

FIGURE 21. SDG clusters: Zimbabwe

Source: Government of Zimbabwe SDGs Agenda 2063 Coordination Unit

For the preparation of Zimbabwe's VNR, a multi stakeholder drafting team composed of ministries, departments, agencies and civil society organizations was set up to better integrate the voice of local communities – and marginalized voices in particular. The drafting team received training at a national capacity building workshop coordinated by the Ministry of Public Service, Labour and Social Welfare. They then held consultations in each of the country's 10 provinces.[172]

To complement these stakeholder consultations, the country carried out a series of cluster meetings. These utilized media – including radio and TV – to bring more citizens into the VNR process. Due to these inclusive provincial consultations, organizations representing children found that separate consultative workshops would be needed to engage children. These consultations will culminate with the first ever children's chapter in Zimbabwe's final 2024 VNR report. Messages from each individual VLR are currently being consolidated and validated by a national technical steering committee.

- **Ghana**

  In Ghana, the AU Agenda 2063 and the SDGs have been mainstreamed at the national level into the country's Medium-term Development Plan. This is used to inform local government planning. Through the National Development Planning Commission (NDPC), the government acknowledges the VLR as instrumental in tracking and monitoring SDG implementation at the subnational level. As a result, the NDPC has begun a national VLR programme, running from 2023 to 2025, and asked all interested metropolitan municipal and district assemblies to prepare VLRs. The actions and initiatives outlined in these will be used to mobilise investments from donors and partners. Furthermore, a coordination platform has been established. This has key stakeholders from the municipal, district and metropolitan levels of government, as well as from the private sector, civil society organizations and traditional leaders. As a part of the national VLR drive, nine reviews are underway, while interest has been expressed by other districts in conducting their own reviews.

4. Conclusions and recommendations

The VLRs are a valuable tool not only for SDG reporting, but also for better aligning national plans to local strategies – and vice versa. Outcomes from local reviews can ensure subnational governments are at the core of the follow-up and review process of Agenda 2030 and Agenda 2063.

The case studies presented in this brief show how developing standard tools for data collection can highlight major barriers or challenges facing subnational governments. They can also help consolidate national priorities for development, as well as help consolidate the available resources on addressing multiple issues. Other jurisdictions can learn to design more inclusive and locally-led processes by studying the structures set up in the countries featured in this brief.

We therefore make the following recommendations:

- **To national governments**

  1. In the region, cities and towns are rapidly growing and sub-national governments play a strategic role in national development. To produce a robust and comprehensive VNR, a national process of integrating the outcomes and key messages from VLRs should be established.

  2. The availability of granular and timely data is critical to setting priorities and monitoring progress on the SDGs. Local data can provide a complete picture of where Agenda 2030 implementation is lagging nationally. At the same time, coordinating national and local level data collection simultaneously can enhance collection at both levels. National statistics offices and academia can build subnational capacity through the VLRs, collecting disaggregated and timely data via the development of standardized templates and procedures for data collection.

  3. To raise awareness among stakeholders, it is recommended that a defined process of engagement is established at the national level. This can sensitize stakeholders on the global goals and the tools available to facilitate localization. It can also help in sharing best practices and lessons learned.

- **To local governments**

  1. The 2030 Agenda calls on major groups and other stakeholders to report on their contributions towards implementing the SDGs. To better engage stakeholders, VLRs are an opportunity for consulting the community through coordination platforms, or local committees. Integrating local voices in the process of implementing and monitoring the SDGs ensures ownership.

  2. To mainstream the SDGs at the local level, local governments should align local level plans and investments with national frameworks.

- **To the United Nations system and development partners**

  1. The United Nations system can continue to support localization in the region. It can do this by facilitating peer learning and knowledge sharing, leveraging international finance and providing technical assistance for the undertaking of VLRs and VNRs.

Policy brief 12: SDG localization in the Arab region: VLRs and policy coherence

CONTRIBUTING ORGANIZATION: **UNESCWA**[173]

1. Key messages

1. **VLRs are essential tools for aligning national, subnational and local actions with global SDG frameworks.** These reviews have the potential to strengthen all dimensions of SDG localization,[174] ensuring policy coherence across governance levels and encouraging evidence based policymaking.

2. **In the Arab region, the significance of VLRs is now emerging.** As seen in Amman and Agadir, this emergence marks a pivotal step toward leveraging VLRs for improved policy coherence, multilevel governance and evidence-based decision making.

3. **Enhancing SDG localization across the Arab region is crucial in expanding partnerships and stakeholder engagement.** This includes engagement with government entities, the private sector, civil society and academia in mobilizing diverse resources and expertise for more inclusive sustainable development.

4. **SDG localization plays a critical role in addressing development challenges in the Arab region.** This includes areas of conflict and fragility, with multilevel and strategically aligned policymaking fostering resilient communities and inclusive governance.

2. Background

The whole-of-government and society approach of the 2030 Agenda for Sustainable Development has been empowering local governments to take ownership of the SDGs. This ensures that strategies for sustainable development are relevant and effective at the local level.

Policy coherence is central to SDG localization. This is because it ensures that policies at the local, subnational and national levels – and across different sectors, such as the economic, environmental and social – are integrated and mutually reinforcing.

Horizontal integration emphasizes the need for coordination and collaboration across different sectors and stakeholders to address challenges and opportunities comprehensively. **Vertical integration** focuses on aligning strategies, policies and actions across different levels of governance to ensure consistency and support in achieving the SDGs.

VLRs and VSRs have the potential to empower policy coherence in SDG localization. They can do this by providing a structured platform for governments to assess, report on, enhance their strategies and advance local development. To fulfil this potential, it is crucial that VLRs and VSRs have mechanisms in place for effective communication and negotiation with higher level governments. Related to the implementation of sustainable development policies, these higher level authorities could be at the subnational and/or national level.

The emerging importance of VLRs in the Arab region was marked by the publication of the first three local reviews between 2022 and 2023. These initiatives represent a significant step towards leveraging VLRs for informed local development and policy coherence.

In the Arab context, cities face multiple interrelated challenges. These include acute inequality, the need for greater resilience against environmental and socio-economic shocks, and the pervasive impact of armed conflict. The process of SDG localization actively involves local stakeholders in shaping strategies that are both globally informed and locally applicable, while recognizing the diversity of the region.

3. Challenges and solutions: Examples from the region

Achieving policy coherence in the SDG localization process presents a unique set of challenges. These include: aligning diverse local actions with national and global SDG frameworks; overcoming institutional and sectoral silos; assigning clear responsibilities and ownership of tasks and actions; facing data gaps; and addressing the limited capacity and resources of local governments.

VLRs can serve as powerful mechanisms to ensure policy coherence in the SDG localization process. They should be leveraged not only as reporting tools, but also as catalysts for developing integrated, cross-sectoral approaches that bolster local governance capacities. This strategic approach is essential for bridging gaps between global SDG commitments and local actions.

In addition, even if the VLR format is not set in stone, it can provide a common framework within which to approach sustainable development. This ensures an important level of consistency in reporting and assessment methodologies across different cities, countries and regions, facilitating the comparison and sharing of good practices. This common framework can also enhance policy coherence in SDG localization by promoting aligned actions and strategies across different levels of governance, reducing policy conflicts and duplications, maximizing the impact of initiatives and facilitating an efficient allocation of resources.

4. Solutions and case studies: Amman and Agadir

An important step towards SDG localization in the Arab region came with the publication of VLRs for Amman[175], Agadir[176], Al Madinah[177], Port Said[178], Beheira[179] and Fayoum.[180] From these, we have chosen Amman and Agadir for the insights their reviews bring with regard to the practical application of VLRs on policy coherence. We will also highlight the challenges, strategies and successes encountered in the journey of each city towards sustainable development.

- **Amman, Jordan**

  Led by the Greater Amman Municipality – and in partnership with UNESCWA, UN-Habitat and UCLG-Middle East and West Asia Section (UCLG-MEWA) – the Jordanian capital became the first city in the Arab region to publish a VLR, in 2022.[181]

  This pioneering effort faced a multitude of challenges, however, as it emerged from the complex regional socio-economic landscape around it.

  From its inception, Amman prioritized policy coherence in its VLR development. The review process was undertaken in parallel with the preparation of Jordan's second Voluntary National Review (VNR), ensuring that both documents aligned in identifying policies, priorities and challenges for SDG localization. This marked a significant milestone in intergovernmental cooperation, with the complementarity and synergies between the VLR and VNR validated and cross-referenced by key stakeholders.

A major challenge faced by cities developing VLRs worldwide is the availability of high-quality data, especially at the local level. In Amman's case, policy coherence played an integral role in tackling this challenge. Amman's Urban Observatory, which serves as a data-driven department within the greater municipality, focused on gathering and analysing urban data to generate Amman's key indicators. This aided decision-making and progress evaluation towards local and global objectives, playing a pivotal role in addressing SDG data gaps. The municipality also collaborated with the National Department of Statistics to ensure high-quality data. This was collected by using surveys, interviews, documentary data analysis and stakeholder consultations to validate and ensure data quality and consistency.

Amman promoted substantive multisectoral alignment and stakeholder engagement through consultation with 15 public sector national-level entities, encompassing representatives from 9 different ministries, 7 United Nations agencies and 9 entities from academia, the private sector, and civil society. This participatory process ensured the inclusion of different perspectives in the SDG localization discussion, providing in-depth focus on selected SDGs being reported in the VLR.

The synergy created through policy coherence was also instrumental in elevating Amman in the international arena. The alignment between Amman's first VLR and Jordan's second VNR culminated with their presentation at the High-Level Political Forum in 2022 and 2023. This showcased the potential for solid multilevel alignment in SDG localization. Amman's international positioning was further advanced by its valuable experience with policy coherence then being shared at various international forums. These included the World Urban Forum in Katowice, the Forum of Mayors in Geneva, the Local and Regional Government Forum in New York HQ and the Arab Forum for Sustainable Development 2023 (AFSD 2023) in Beirut.

Amman's spearhead engagement with policy coherence in the Arab region also empowers further VLRs in Jordan and in other countries. The localization of SDGs indeed depends on active knowledge-sharing, supporting the circulation of good practices worldwide.

- **Agadir, Morocco**

In partnership with UNESCWA, UN-Habitat and UCLG-MEWA, the Municipality of Agadir became the first city authority in North Africa to publish a VLR, in 2023.[182]

Agadir's review demonstrates the importance of policy coherence in aligning VLR development with already existing municipal initiatives. In Morocco, these initiatives include the Urban Development Programme. Commissioned by King Mohammed VI, this focuses on inclusivity, smart solutions and sustainability. The alignment of the VLR with this provides the SDG localization process with a clear vision and strategic implementation outline.

Vertical integration with higher government levels, especially through Morocco's decentralized structure, was central to the development of Agadir's VLR. Organic Law 113.14 defines municipal roles in the country across three competencies: own; shared with the national government; and transferred. This legislative framework and support from the national government created an enabling environment for

the localization of SDGs and for the integration of Agadir's VLR with relevant national plans, such as the Strategic Plan for Urban Planning. This process included continuous data feedback from and to the VLR.

Through document analysis and expert meetings, Agadir also ensured strategic alignment between initiatives such as the Souss-Massa 2035 vision, the Territorial Plan for the Fight Against Global Warming, and the National Digitization Strategy for Cities. This collaborative and strategic approach ensured that Agadir's urban planning articulated local, subnational and national objectives, including the municipality's vision of developing Agadir into a smart, sustainable city.

Agadir's VLR development process also showcased the effectiveness of horizontal alignment, achieved through a comprehensive stakeholder engagement process. VLR development included capacity-building workshops to inform regional multi-sectoral partnerships and foster cooperation. It also included evidence-based policy and decision-making and the ensuring of an alignment between progress towards SDGs and local priorities. These workshops brought together representatives from academia, civil society and various levels of government, creating a collaborative environment for dialogue and exchange.[183]

This inclusive approach with multiple stakeholders was central to facing the challenge of data gaps for SDG localization. Agadir promoted several joint sessions to gather, validate and triangulate quantitative and qualitative data. This resulted in a more comprehensive understanding and documentation of Agadir's development needs and opportunities. This strategy of engaging diverse stakeholders was also central for capacity-building, especially concerning evidence-based decision-making.

Agadir's VLR also serves as a benchmark for the Arab region, with the city's international positioning further advanced by the sharing of its valuable experience with policy coherence. This took place through participation in various international forums, such as AFSD 2023, the 27th Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC), and the UN Habitat Assembly, "Achieving SDGs in times of global crises, 2023".

Building on the successes of the first VLRs in the Arab region, three new Arab cities are now developing reviews. These are: Ennour in Tunisia; Irbid in Jordan; and Ramallah in the State of Palestine. Additionally, the *Practical Guidelines for VLRs in the Arab Region* (to be launched in 2024) and developed by UNESCWA in partnership with UN-Habitat and UCLG-MEWA, will provide municipalities with a structured approach to developing their VLRs.

5. Recommendations

National, subnational and local governments in the Arab region are encouraged to localize the SDGs and to leverage VLRs and VSRs. This should be done in order to:

- **Promote partnerships and regional cooperation in resource mobilization and funding in order to support SDG localization.** This will encourage Arab governments to collaborate on shared challenges and opportunities. This includes creating funding mechanisms and platforms for knowledge exchange and leveraging collective bargaining power to access international financing.

- **Integrate VLR findings into national policy-making and international reporting mechanisms.** This provides a crucial opportunity for national governments and multilateral organizations to better assess the impact of local initiatives on global SDG targets, thereby promoting a more coordinated and integrated approach to SDG implementation.

- **Develop sound data collection, treatment and analysis systems focused on SDG progress.** It is crucial to refine the relationship between national and local statistics offices to ensure the seamless flow and alignment of relevant data for both VLRs and VNRs. Additionally, it is important to establish partnerships with academic institutions and think tanks, leverage technology for data management and conduct regular training for local and national officials.

- **Expand data capabilities through urban observatories and academic partnerships to fill data gaps.** This can be done through collaboration between national, subnational and local governments, as well as through the creation of partnership opportunities with international organizations and academic institutions that possess the necessary expertise.

- **Promote the engagement of stakeholders in the planning, data collection and implementation of SDG-related actions.** This engagement should involve civil society, the private sector and academia. It should also be structured through regular consultations, raising awareness, participatory decision-making processes and collaborative platforms. It is also crucial to institutionalize these processes within the broader framework of SDG implementation. This should ideally build on existing structures, such as citizen forums, town hall meetings and participatory budgeting processes.

- **Prioritize capacity-building initiatives focused on SDG implementation.** This includes training programmes on integrating SDG indicators into local policymaking for government officials and stakeholders. Upskilling initiatives can improve the effectiveness of SDG strategies at the local level, ensuring that personnel across all sectors are adequately equipped.

Annex 1: Urban Development Action (UDA) matrix

Urban Development Action

		Compare with selected UDA	MT-1	MT-2	MT-3	MT-4	MT-5	MT-6
		Impact Matrix Categories	developing sustainable public transport	expanding cycling infrastructures	improving walkability	ensuring accessibility	improving traffic safety	improving existing transport infrastructure
Direct Impact, potential impacts, trade-offs	Social	1 - Strengthened social cohesion						
		2 - Improved infrastructures for better quality of life						
		3 - Improved public health						
		4 - Reduced vulnerability						
		5 - Improved building conditions for better quality of life						
		6 - Increased resilience						
		7 - Contributions to food security						
		8 - Strengthened governance						
		9 - Improved public management						
	Economic	10 - Increased resource efficiency						
		11 - Advancing technological change						
		12 - Creation of local businesses and jobs						
		13 - Sustainable supply chains						
		14 - Contributions to energy security						
	Ecological	15 - Reduced carbon emissions						!
		16 - Improved air quality						!
		17 - Reduced noise emissions						
		18 - Conservation and regeneration of ecosystem services	!					!
		19 - Improved condition of water resources						
		20 - Improved condition of soil	!	!				!
Global Agenda Targets, Direct/Indirect Relevance	2030 Agenda – Sustainable Development Goals and Targets	Goal 1 - No Poverty				1.4		
		Goal 2 - Zero Hunger						
		Goal 3 - Good Health And Well-Being	3.9	3.9	3.9		3.6	
		Goal 4 - Quality Education						
		Goal 5 - Gender Equality						
		Goal 6 - Clean Water And Sanitation						
		Goal 7 - Affordable And Clean Energy						
		Goal 8 - Decent Work And Economic Growth						
		Goal 9 - Industry, Innovation And Infrastructure	9.1	9.1				9.1
		Goal 10 - Reduced Inequalities						
		Goal 11 - Sustainable Cities And Communities	11.2, 11.6	11.6	11.6	11.2, 11.7	11.2	11.2
		Goal 12 - Responsible Consumption And Production						
		Goal 13 - Climate Action						
		Goal 14 - Life Below Water						
		Goal 15 - Life On Land						
		Goal 16 - Peace, Justice And Strong Institutions						
		Goal 17 - Partnerships For The Global Goals						
	Paris 2015	A - contributes to the mitigation of climate change						
		B - contributes to climate adaptation						
	Sendai Framework for DRR 10 Essentials for Making Cities	1. Organise for disaster resilience						
		2. idetify, understand and use risk scenarios						
		3. strengthen financial capability for resilience						
		4. pursue resilient urban development and design						
		5. safeguard natural buffers						
		6. strengthen institutional capacity for resilience						
		7. strengthen societal capaciy for resilience						
		8. increase infrastructure resilience						
		9. ensure effective disaster response						
		10. expedite recovery and build back better						
	New Urban Agenda Commitments	1. Provide basic services for all citizens						
		2. Ensure that all citizens have equal opportunities						
		3. Promote measures that support cleaner cities						
		4. Strengthen resilience in cities						
		5. Take action to address climate change						
		6. Fully respect the rights of refugees						
		7. Improve connectivity and support green initiatives						
		8. Promote safe, accessible and green public spaces						
	AAAA 7 Cross-Cutting-Areas	Delivering social protection and essential public services for all.						
		Scaling up efforts to end hunger and malnutrition.						
		Establishing a new forum to bridge the infrastructure gap.						
		Promoting inclusive and sustainable industrialization.						
		Generating full and productive employment and decent work for all.						
		Protecting our ecosystems for all.						
		Promoting peaceful and inclusive societies.						

		Compare with selected UDA	MT-7	MT-8	MT-9	BH-1	BH-2	BH-3
		Impact Matrix Categories	advancing mobility safety for women in (public) transport	ensuring integration of mobility systems	reducing air-polluting vehicles	providing affordable housing	upgrading informal housing	promoting energy-efficient retrofitting of buildings
Direct Impact, potential impacts, trade-offs	Social	1 - Strengthened social cohesion			!			!
		2 - Improved infrastructures for better quality of life						
		3 - Improved public health						
		4 - Reduced vulnerability						
		5 - Improved building conditions for better quality of life						
		6 - Increased resilience						
		7 - Contributions to food security						
		8 - Strengthened governance						
		9 - Improved public management						
	Economic	10 - Increased resource efficiency						
		11 - Advancing technological change						
		12 - Creation of local businesses and jobs						
		13 - Sustainable supply chains						
		14 - Contributions to energy security						
	Ecological	15 - Reduced carbon emissions						
		16 - Improved air quality						
		17 - Reduced noise emissions						
		18 - Conservation and regeneration of ecosystem services				!		
		19 - Improved condition of water resources						
		20 - Improved condition of soil				!		
Global Agenda Targets, Direct/Indirect Relevance	2030 Agenda – Sustainable Development Goals and Targets	Goal 1 - No Poverty					1.5	
		Goal 2 - Zero Hunger						
		Goal 3 - Good Health And Well-Being			3.9			
		Goal 4 - Quality Education						
		Goal 5 - Gender Equality	5.2					
		Goal 6 - Clean Water And Sanitation						
		Goal 7 - Affordable And Clean Energy						7.3
		Goal 8 - Decent Work And Economic Growth						
		Goal 9 - Industry, Innovation And Infrastructure						
		Goal 10 - Reduced Inequalities				10.2	10.2	
		Goal 11 - Sustainable Cities And Communities	11.2, 11.7	11.2	11.2, 11.6	11.1	11.1, 11.5	11.b, 11.c
		Goal 12 - Responsible Consumption And Production						
		Goal 13 - Climate Action						
		Goal 14 - Life Below Water						
		Goal 15 - Life On Land						
		Goal 16 - Peace, Justice And Strong Institutions						
		Goal 17 - Partnerships For The Global Goals						
	Paris 2015	A - contributes to the mitigation of climate change						
		B - contributes to climate adaptation						
	Sendai Framework for DRR 10 Essentials for Making Cities	1. Organise for disaster resilience						
		2. idetify, understand and use risk scenarios						
		3. strengthen financial capability for resilience						
		4. pursue resilient urban development and design						
		5. safeguard natural buffers						
		6. strengthen institutional capacity for resilience						
		7. strengthen societal capaciy for resilience						
		8. increase infrastructure resilience						
		9. ensure effective disaster response						
		10. expedite recovery and build back better						
	New Urban Agenda Commitments	1. Provide basic services for all citizens						
		2. Ensure that all citizens have equal opportunities						
		3. Promote measures that support cleaner cities						
		4. Strengthen resilience in cities						
		5. Take action to address climate change						
		6. Fully respect the rights of refugees						
		7. Improve connectivity and support green initiatives						
		8. Promote safe, accessible and green public spaces						
	AAAA 7 Cross-Cutting-Areas	Delivering social protection and essential public services for all.						
		Scaling up efforts to end hunger and malnutrition.						
		Establishing a new forum to bridge the infrastructure gap.						
		Promoting inclusive and sustainable industrialization.						
		Generating full and productive employment and decent work for all.						
		Protecting our ecosystems for all.						
		Promoting peaceful and inclusive societies.						

		Compare with selected UDA	BH-4	SI-1	SI-2	SI-3	SI-4	SI-5
		Impact Matrix Categories	promoting the construction of eco-efficient buildings	building and sustaining public schools	creating access to health care	ensuring safe access to lively public spaces	improving public safety	promoting community centers
Direct Impact, potential impacts, trade-offs	Social	1 - Strengthened social cohesion	!					
		2 - Improved infrastructures for better quality of life						
		3 - Improved public health						
		4 - Reduced vulnerability						
		5 - Improved building conditions for better quality of life						
		6 - Increased resilience						
		7 - Contributions to food security						
		8 - Strengthened governance						
		9 - Improved public management						
	Economic	10 - Increased resource efficiency						
		11 - Advancing technological change						
		12 - Creation of local businesses and jobs						
		13 - Sustainable supply chains						
		14 - Contributions to energy security						
	Ecological	15 - Reduced carbon emissions						
		16 - Improved air quality						
		17 - Reduced noise emissions						
		18 - Conservation and regeneration of ecosystem services	!	!				
		19 - Improved condition of water resources						
		20 - Improved condition of soil	!	!				
Global Agenda Targets, Direct/Indirect Relevance	2030 Agenda – Sustainable Development Goals and Targets	Goal 1 - No Poverty		1.4	1.4			
		Goal 2 - Zero Hunger						
		Goal 3 - Good Health And Well-Being			3.8			
		Goal 4 - Quality Education		4.1, 4.2, 4.3, 4.4, 4.6, 4.a				
		Goal 5 - Gender Equality						
		Goal 6 - Clean Water And Sanitation						
		Goal 7 - Affordable And Clean Energy	7.1, 7.3					
		Goal 8 - Decent Work And Economic Growth						
		Goal 9 - Industry, Innovation And Infrastructure						
		Goal 10 - Reduced Inequalities					10.3, 10.4	
		Goal 11 - Sustainable Cities And Communities	11.b, 11.c	11.1	11.1	11.7	11.5	11.3
		Goal 12 - Responsible Consumption And Production						
		Goal 13 - Climate Action						
		Goal 14 - Life Below Water						
		Goal 15 - Life On Land						
		Goal 16 - Peace, Justice And Strong Institutions		16.10			16.1, 16.5, 16.6	
		Goal 17 - Partnerships For The Global Goals						
	Paris 2015	A - contributes to the mitigation of climate change						
		B - contributes to climate adaptation						
	Sendai Framework for DRR 10 Essentials for Making Cities	1. Organise for disaster resilience						
		2. idetify, understand and use risk scenarios						
		3. strengthen financial capability for resilience						
		4. pursue resilient urban development and design						
		5. safeguard natural buffers						
		6. strengthen institutional capacity for resilience						
		7. strengthen societal capaciy for resilience						
		8. increase infrastructure resilience						
		9. ensure effective disaster response						
		10. expedite recovery and build back better						
	New Urban Agenda Commitments	1. Provide basic services for all citizens						
		2. Ensure that all citizens have equal opportunities						
		3. Promote measures that support cleaner cities						
		4. Strengthen resilience in cities						
		5. Take action to address climate change						
		6. Fully respect the rights of refugees						
		7. Improve connectivity and support green initiatives						
		8. Promote safe, accessible and green public spaces						
	AAAA 7 Cross-Cutting-Areas	Delivering social protection and essential public services for all.						
		Scaling up efforts to end hunger and malnutrition.						
		Establishing a new forum to bridge the infrastructure gap.						
		Promoting inclusive and sustainable industrialization.						
		Generating full and productive employment and decent work for all.						
		Protecting our ecosystems for all.						
		Promoting peaceful and inclusive societies.						

		Compare with selected UDA	UE-1	UE-2	UE-3	UE-4	WS-1	WS-2
		Impact Matrix Categories	creating and maintaining green urban spaces	interlinking and protecting urban ecosystems	revitalizing urban river spaces	implementing climate risk management	building wastewater treatment infrastructures	providing access to safely managed sanitation services
Direct Impact, potential impacts, trade-offs	Social	1 - Strengthened social cohesion						
		2 - Improved infrastructures for better quality of life						
		3 - Improved public health						
		4 - Reduced vulnerability						
		5 - Improved building conditions for better quality of life						
		6 - Increased resilience						
		7 - Contributions to food security						
		8 - Strengthened governance						
		9 - Improved public management						
	Economic	10 - Increased resource efficiency						
		11 - Advancing technological change						
		12 - Creation of local businesses and jobs						
		13 - Sustainable supply chains						
		14 - Contributions to energy security						
	Ecological	15 - Reduced carbon emissions						
		16 - Improved air quality						
		17 - Reduced noise emissions						
		18 - Conservation and regeneration of ecosystem services						
		19 - Improved condition of water resources						
		20 - Improved condition of soil						
Global Agenda Targets, Direct/Indirect Relevance	2030 Agenda – Sustainable Development Goals and Targets	Goal 1 - No Poverty				1.5		
		Goal 2 - Zero Hunger						
		Goal 3 - Good Health And Well-Being					3.3	3.3
		Goal 4 - Quality Education						
		Goal 5 - Gender Equality						
		Goal 6 - Clean Water And Sanitation		6.6	6.6		6.2, 6.3, 6.6, 6.a	6.1, 6.2, 6.4, 6.b
		Goal 7 - Affordable And Clean Energy						
		Goal 8 - Decent Work And Economic Growth						
		Goal 9 - Industry, Innovation And Infrastructure						
		Goal 10 - Reduced Inequalities						
		Goal 11 - Sustainable Cities And Communities	11.7	11.4	11.4	11.5, 11.b	11.6	11.5
		Goal 12 - Responsible Consumption And Production					12.4	
		Goal 13 - Climate Action	13.1	13.1	13.1	13.1, 13.3, 13.b		
		Goal 14 - Life Below Water		14.1	14.1		14.1	
		Goal 15 - Life On Land		15.1, 15.2, 15.5, 15.9, 15.a	15.1, 15.8, 15.a		15.1	
		Goal 16 - Peace, Justice And Strong Institutions						
		Goal 17 - Partnerships For The Global Goals						
	Paris 2015	A - contributes to the mitigation of climate change						
		B - contributes to climate adaptation						
	Sendai Framework for DRR 10 Essentials for Making Cities	1. Organise for disaster resilience						
		2. idetify, understand and use risk scenarios						
		3. strengthen financial capability for resilience						
		4. pursue resilient urban development and design						
		5. safeguard natural buffers						
		6. strengthen institutional capacity for resilience						
		7. strengthen societal capaciy for resilience						
		8. increase infrastructure resilience						
		9. ensure effective disaster response						
		10. expedite recovery and build back better						
	New Urban Agenda Commitments	1. Provide basic services for all citizens						
		2. Ensure that all citizens have equal opportunities						
		3. Promote measures that support cleaner cities						
		4. Strengthen resilience in cities						
		5. Take action to address climate change						
		6. Fully respect the rights of refugees						
		7. Improve connectivity and support green initiatives						
		8. Promote safe, accessible and green public spaces						
	AAAA 7 Cross-Cutting-Areas	Delivering social protection and essential public services for all.						
		Scaling up efforts to end hunger and malnutrition.						
		Establishing a new forum to bridge the infrastructure gap.						
		Promoting inclusive and sustainable industrialization.						
		Generating full and productive employment and decent work for all.						
		Protecting our ecosystems for all.						
		Promoting peaceful and inclusive societies.						

		Compare with selected UDA	WS-3	WS-4	WS-5	WC-1	WC-2	WC-3
		Impact Matrix Categories	conserving freshwater resources	providing drinking water	managing rainwater	implementing solid waste management	strengthening urban-regional food systems	promoting a circular economy
Direct Impact, potential impacts, trade-offs	Social	1 - Strengthened social cohesion						
		2 - Improved infrastructures for better quality of life						
		3 - Improved public health						
		4 - Reduced vulnerability						
		5 - Improved building conditions for better quality of life						
		6 - Increased resilience						
		7 - Contributions to food security						
		8 - Strengthened governance						
		9 - Improved public management						
	Economic	10 - Increased resource efficiency						
		11 - Advancing technological change						
		12 - Creation of local businesses and jobs						
		13 - Sustainable supply chains						
		14 - Contributions to energy security						
	Ecological	15 - Reduced carbon emissions						
		16 - Improved air quality						
		17 - Reduced noise emissions						
		18 - Conservation and regeneration of ecosystem services						
		19 - Improved condition of water resources						
		20 - Improved condition of soil						
Global Agenda Targets, Direct/Indirect Relevance	2030 Agenda – Sustainable Development Goals and Targets	Goal 1 - No Poverty						
		Goal 2 - Zero Hunger					2.4, 2.c	
		Goal 3 - Good Health And Well-Being	3.9	3.9		3.9		
		Goal 4 - Quality Education						
		Goal 5 - Gender Equality						
		Goal 6 - Clean Water And Sanitation	6.1, 6.4	6.1, 6.4	6.4, 6.5			
		Goal 7 - Affordable And Clean Energy						
		Goal 8 - Decent Work And Economic Growth						
		Goal 9 - Industry, Innovation And Infrastructure						9.1, 9.4
		Goal 10 - Reduced Inequalities						
		Goal 11 - Sustainable Cities And Communities	11.5	11.1	11.5, 11.b	11.6	11.a	11.3
		Goal 12 - Responsible Consumption And Production				12.4, 12.5	12.3	12.4
		Goal 13 - Climate Action	13.1		13.1		13.1	
		Goal 14 - Life Below Water	14.1			14.1		
		Goal 15 - Life On Land	15.1					
		Goal 16 - Peace, Justice And Strong Institutions						
		Goal 17 - Partnerships For The Global Goals						
	Paris 2015	A - contributes to the mitigation of climate change						
		B - contributes to climate adaptation						
	Sendai Framework for DRR 10 Essentials for Making Cities	1. Organise for disaster resilience						
		2. idetify, understand and use risk scenarios						
		3. strengthen financial capability for resilience						
		4. pursue resilient urban development and design						
		5. safeguard natural buffers						
		6. strengthen institutional capacity for resilience						
		7. strengthen societal capaciy for resilience						
		8. increase infrastructure resilience						
		9. ensure effective disaster response						
		10. expedite recovery and build back better						
	New Urban Agenda Commitments	1. Provide basic services for all citizens						
		2. Ensure that all citizens have equal opportunities						
		3. Promote measures that support cleaner cities						
		4. Strengthen resilience in cities						
		5. Take action to address climate change						
		6. Fully respect the rights of refugees						
		7. Improve connectivity and support green initiatives						
		8. Promote safe, accessible and green public spaces						
	AAAA 7 Cross-Cutting-Areas	Delivering social protection and essential public services for all.						
		Scaling up efforts to end hunger and malnutrition.						
		Establishing a new forum to bridge the infrastructure gap.						
		Promoting inclusive and sustainable industrialization.						
		Generating full and productive employment and decent work for all.						
		Protecting our ecosystems for all.						
		Promoting peaceful and inclusive societies.						

		Compare with selected UDA	WC-3	WC-4	ED-1	ED-2	ED-3	ED-4
		Impact Matrix Categories	promoting a circular economy	growing food in the city	establishing sustainable public procurement	promoting inclusive urban economies	strengthening municipal finance	establishing infrastructures for ICT
Direct Impact, potential impacts, trade-offs	Social	1 - Strengthened social cohesion						
		2 - Improved infrastructures for better quality of life						
		3 - Improved public health						
		4 - Reduced vulnerability						
		5 - Improved building conditions for better quality of life						
		6 - Increased resilience						
		7 - Contributions to food security						
		8 - Strengthened governance						
		9 - Improved public management						
	Economic	10 - Increased resource efficiency						
		11 - Advancing technological change						
		12 - Creation of local businesses and jobs						
		13 - Sustainable supply chains						
		14 - Contributions to energy security						
	Ecological	15 - Reduced carbon emissions						
		16 - Improved air quality						
		17 - Reduced noise emissions						
		18 - Conservation and regeneration of ecosystem services						
		19 - Improved condition of water resources						
		20 - Improved condition of soil						
Global Agenda Targets, Direct/Indirect Relevance	2030 Agenda – Sustainable Development Goals and Targets	Goal 1 - No Poverty				1.4		
		Goal 2 - Zero Hunger		2.4				
		Goal 3 - Good Health And Well-Being						
		Goal 4 - Quality Education						
		Goal 5 - Gender Equality						
		Goal 6 - Clean Water And Sanitation						
		Goal 7 - Affordable And Clean Energy						
		Goal 8 - Decent Work And Economic Growth				8.3, 8.5, 8.6, 8.8	8.1	
		Goal 9 - Industry, Innovation And Infrastructure	9.1, 9.4			9.3	9.3	9.c
		Goal 10 - Reduced Inequalities				10.2		
		Goal 11 - Sustainable Cities And Communities	11.3	11.3				11.1
		Goal 12 - Responsible Consumption And Production	12.4		12.7			
		Goal 13 - Climate Action		13.1				
		Goal 14 - Life Below Water						
		Goal 15 - Life On Land						
		Goal 16 - Peace, Justice And Strong Institutions						
		Goal 17 - Partnerships For The Global Goals					17.1	
	Paris 2015	A - contributes to the mitigation of climate change						
		B - contributes to climate adaptation						
	Sendai Framework for DRR 10 Essentials for Making Cities	1. Organise for disaster resilience						
		2. idetify, understand and use risk scenarios						
		3. strengthen financial capability for resilience						
		4. pursue resilient urban development and design						
		5. safeguard natural buffers						
		6. strengthen institutional capacity for resilience						
		7. strengthen societal capaciy for resilience						
		8. increase infrastructure resilience						
		9. ensure effective disaster response						
		10. expedite recovery and build back better						
	New Urban Agenda Commitments	1. Provide basic services for all citizens						
		2. Ensure that all citizens have equal opportunities						
		3. Promote measures that support cleaner cities						
		4. Strengthen resilience in cities						
		5. Take action to address climate change						
		6. Fully respect the rights of refugees						
		7. Improve connectivity and support green initiatives						
		8. Promote safe, accessible and green public spaces						
	AAAA 7 Cross-Cutting-Areas	Delivering social protection and essential public services for all.						
		Scaling up efforts to end hunger and malnutrition.						
		Establishing a new forum to bridge the infrastructure gap.						
		Promoting inclusive and sustainable industrialization.						
		Generating full and productive employment and decent work for all.						
		Protecting our ecosystems for all.						
		Promoting peaceful and inclusive societies.						

		Compare with selected UDA	EN-1	EN-2	EN-3	EN-4	SP-1	SP-2
		Impact Matrix Categories	promoting green technologies	enhancing decentralised renewable energy production	providing safe access to electricity	promoting sustainable cooking fuels	creating a culture of citizen participation	developing an integrated urban development concept
Direct Impact, potential impacts, trade-offs	Social	1 - Strengthened social cohesion						
		2 - Improved infrastructures for better quality of life						
		3 - Improved public health						
		4 - Reduced vulnerability						
		5 - Improved building conditions for better quality of life						
		6 - Increased resilience						
		7 - Contributions to food security						
		8 - Strengthened governance						
		9 - Improved public management						
	Economic	10 - Increased resource efficiency						
		11 - Advancing technological change						
		12 - Creation of local businesses and jobs						
		13 - Sustainable supply chains						
		14 - Contributions to energy security						
	Ecological	15 - Reduced carbon emissions						
		16 - Improved air quality						
		17 - Reduced noise emissions						
		18 - Conservation and regeneration of ecosystem services						
		19 - Improved condition of water resources						
		20 - Improved condition of soil						
Global Agenda Targets, Direct/Indirect Relevance	2030 Agenda – Sustainable Development Goals and Targets	Goal 1 - No Poverty			1.4	1.4		
		Goal 2 - Zero Hunger						
		Goal 3 - Good Health And Well-Being				3.9		
		Goal 4 - Quality Education						
		Goal 5 - Gender Equality					5.5	
		Goal 6 - Clean Water And Sanitation					6.b	
		Goal 7 - Affordable And Clean Energy	7.3, 7.b	7.2	7.1	7.1, 7.3		
		Goal 8 - Decent Work And Economic Growth						
		Goal 9 - Industry, Innovation And Infrastructure	9.4		9.1	9.1		
		Goal 10 - Reduced Inequalities					10.2	
		Goal 11 - Sustainable Cities And Communities			11.1	11.1, 11.6	11.3	11.3, 11.b
		Goal 12 - Responsible Consumption And Production						
		Goal 13 - Climate Action						
		Goal 14 - Life Below Water						
		Goal 15 - Life On Land						
		Goal 16 - Peace, Justice And Strong Institutions					16.7	
		Goal 17 - Partnerships For The Global Goals					17.17	17.14
	Paris 2015	A - contributes to the mitigation of climate change						
		B - contributes to climate adaptation						
	Sendai Framework for DRR 10 Essentials for Making Cities	1. Organise for disaster resilience						
		2. idetify, understand and use risk scenarios						
		3. strengthen financial capability for resilience						
		4. pursue resilient urban development and design						
		5. safeguard natural buffers						
		6. strengthen institutional capacity for resilience						
		7. strengthen societal capaciy for resilience						
		8. increase infrastructure resilience						
		9. ensure effective disaster response						
		10. expedite recovery and build back better						
	New Urban Agenda Commitments	1. Provide basic services for all citizens						
		2. Ensure that all citizens have equal opportunities						
		3. Promote measures that support cleaner cities						
		4. Strengthen resilience in cities						
		5. Take action to address climate change						
		6. Fully respect the rights of refugees						
		7. Improve connectivity and support green initiatives						
		8. Promote safe, accessible and green public spaces						
	AAAA 7 Cross-Cutting-Areas	Delivering social protection and essential public services for all.						
		Scaling up efforts to end hunger and malnutrition.						
		Establishing a new forum to bridge the infrastructure gap.						
		Promoting inclusive and sustainable industrialization.						
		Generating full and productive employment and decent work for all.						
		Protecting our ecosystems for all.						
		Promoting peaceful and inclusive societies.						

		Compare with selected UDA	SP-3	SP-4	SP-5	SP-6
		Impact Matrix Categories	veloping a guiding future visi	stalling disaster response pla	eating post-event recovery pla	applying land-use management
Direct Impact, potential impacts, trade-offs	Social	1 - Strengthened social cohesion				
		2 - Improved infrastructures for better quality of life				
		3 - Improved public health				
		4 - Reduced vulnerability				
		5 - Improved building conditions for better quality of life				
		6 - Increased resilience				
		7 - Contributions to food security				
		8 - Strengthened governance				
		9 - Improved public management				
	Economic	10 - Increased resource efficiency				
		11 - Advancing technological change				
		12 - Creation of local businesses and jobs				
		13 - Sustainable supply chains				
		14 - Contributions to energy security				
	Ecological	15 - Reduced carbon emissions				
		16 - Improved air quality				
		17 - Reduced noise emissions				
		18 - Conservation and regeneration of ecosystem services				
		19 - Improved condition of water resources				
		20 - Improved condition of soil				
Global Agenda Targets, Direct/Indirect Relevance	2030 Agenda – Sustainable Development Goals and Targets	Goal 1 - No Poverty		1.5	1.5	
		Goal 2 - Zero Hunger				
		Goal 3 - Good Health And Well-Being		3.d		
		Goal 4 - Quality Education				
		Goal 5 - Gender Equality				
		Goal 6 - Clean Water And Sanitation				
		Goal 7 - Affordable And Clean Energy				
		Goal 8 - Decent Work And Economic Growth				
		Goal 9 - Industry, Innovation And Infrastructure				
		Goal 10 - Reduced Inequalities				
		Goal 11 - Sustainable Cities And Communities	11.3	11.5, 11.b	11.5, 11.b	11.3
		Goal 12 - Responsible Consumption And Production				12.2
		Goal 13 - Climate Action		13.1		
		Goal 14 - Life Below Water				14.1
		Goal 15 - Life On Land				
		Goal 16 - Peace, Justice And Strong Institutions				
		Goal 17 - Partnerships For The Global Goals	17.14			
	Paris 2015	A - contributes to the mitigation of climate change				
		B - contributes to climate adaptation				
	Sendai Framework for DRR 10 Essentials for Making Cities	1. Organise for disaster resilience				
		2. idetify, understand and use risk scenarios				
		3. strengthen financial capability for resilience				
		4. pursue resilient urban development and design				
		5. safeguard natural buffers				
		6. strengthen institutional capacity for resilience				
		7. strengthen societal capaciy for resilience				
		8. increase infrastructure resilience				
		9. ensure effective disaster response				
		10. expedite recovery and build back better				
	New Urban Agenda Commitments	1. Provide basic services for all citizens				
		2. Ensure that all citizens have equal opportunities				
		3. Promote measures that support cleaner cities				
		4. Strengthen resilience in cities				
		5. Take action to address climate change				
		6. Fully respect the rights of refugees				
		7. Improve connectivity and support green initiatives				
		8. Promote safe, accessible and green public spaces				
	AAAA 7 Cross-Cutting-Areas	Delivering social protection and essential public services for all.				
		Scaling up efforts to end hunger and malnutrition.				
		Establishing a new forum to bridge the infrastructure gap.				
		Promoting inclusive and sustainable industrialization.				
		Generating full and productive employment and decent work for all.				
		Protecting our ecosystems for all.				
		Promoting peaceful and inclusive societies.				

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[83] Based on Kate Raworth's *Doughnut Economics*, and the Brede Welvaart [Broad Prosperity Index], Amsterdam has developed the Amsterdam City Doughnut, a transformative tool designed to help the city build strong social foundations within the limitations of planetary bounds.

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[85] These are climate action plans similar to Nationally Determined Contributions (NDCs), but created at the local level. RLDCs define specific actions that cities, regions, or even smaller communities can take to reduce greenhouse gas emissions (GHGs) towards the overall national target and adapt to the impact of climate change.

[86] A 'just transition' is broadly defined as one that ensures that no one is left behind, or pushed behind, in the transition to low-carbon and environmentally sustainable economies and societies. Such a transition can enable more ambitious climate action and provide an impetus to attaining the SDGs.

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[173] This policy brief was developed by Joao Tavares, United Nations Economic and Social Commission for Western Asia (UNESCWA) consultant on urban development. He worked under the guidance of Sukaina Al-Nasrawi, Lead of the Sustainable Urban Development Portfolio within the cluster on Gender Justice, Population and Inclusive Development, led by Mehrinaz El-Awady. Background research was undertaken by Adnan Hassoun (Research and Coordination Specialist), and Hamza Al Kakoun (Research Assistant) at UNESCWA.

[174] Localizing the SDGs means transforming these goals into reality at the local level, coherent with national frameworks and community priorities. It also means placing territories and communities at the centre of sustainable development – a two-way process in which the local meets the national and the global – as well as vice-versa.

[175] See Greater Amman Municipality (2022), *Voluntary Local Review – The City of Amman, Jorda*n, Greater Amman Municipality, www.unescwa.org/events/launching-voluntary-local-review-city-amman#:~:text=The%20VLR%20examined%20the%20city,and%20modernizing%20the%20public%20sector.

[176] See Municipality of Agadir (2023), *Voluntary Local Review – Municipality of Agadir, Morocco*, Muncipality of Agadir, https://unhabitat.org/sites/default/files/2023/10/agadir_2023_en.pdf.

[177] See Al Madinah Region Development Authority (2023), *Al Madinah City Voluntary Local Review*, Al Madinah Regional Development Authority, https://sdglocalaction.org/wp-content/uploads/2023/12/al_madinah_2023_en.pdf.

[178] See MPED (2023), *Port Said Voluntary Local Review*, Ministry of Planning and Economic Development www.undp.org/egypt/publications/port-said-voluntary-local-review.

[179] See MPED (2023), *Beheira Voluntary Local Review*, Ministry of Planning and Economic Development, www.undp.org/sites/g/files/zskgke326/files/2023-10/2.cleared_beheirasummary_digital_12sep23.pdf.

[180] See MPED (2023), *Fayoum Voluntary Local Review*, Ministry of Planning and Economic Development, www.undp.org/egypt/publications/fayoum-voluntary-local-review.

[181] See note 2.

[182] See note 4.

[183] See UNESCWA (2022), "Smart Cities and localizing SDGs", *UNESCWA workshop, Agadir*, Morocco, www.unescwa.org/events/smart-cities-and-localizing-sustainable-development-goals.