



SDG 11 Global Report 2026

Housing at the Centre of Sustainable Cities and Communities





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SDG 11 Global Report 2026: Housing at the Centre of Sustainable Cities and Communities

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Aerial view of Kibera, Nairobi, Kenya, one of the city's largest informal settlements. Photo: Johfbaks/Shutterstock

Foreword



Today's global housing crisis lies at the heart of the challenge of achieving SDG 11. More than 3 billion people worldwide live in inadequate housing, including more than 1.16 billion people in informal settlements and slums. Since 2015, the informal settlement and slum population has increased by more than 130 million – nearly double the number from the preceding decade. These figures reflect a wider failure to ensure that urbanization is matched by adequate housing and basic services, with far-reaching implications for sustainable development globally.

This report highlights that housing is not only one target under SDG 11. It is a foundation for progress across the wider Goal. Where housing is unaffordable, insecure, poorly located or disconnected from services, progress is constrained across transport, public space, environmental quality, disaster risk reduction, health and economic opportunity. Delivering adequate housing and transforming slums and informal settlements is therefore one of the most important tests of whether we are achieving SDG 11 and its vision of sustainable cities and communities where no one is left behind.

Progress has been achieved in some areas, but remains too slow and uneven overall. Access to public transport, municipal waste collection, national urban and housing policy frameworks, and disaster risk reduction strategies have all improved. Yet too often these gains are not

keeping pace with urban growth. Public space remains out of reach for many, urban green areas continue to decline, air pollution remains far above safe levels, and disasters continue to affect more than 100 million people each year. The report's analysis of Voluntary National Reviews also shows that adequate housing remains a persistent concern, especially in low-income contexts, but also increasingly in cities across Europe and Northern America.

With only four years remaining until 2030 and the New Urban Agenda now at its midpoint, incremental progress will not be enough. We must place adequate housing at the centre of SDG 11 implementation, shape more sustainable urban growth patterns, enable local and regional governments to deliver, and treat urban data as essential infrastructure for urban action. New technologies, partnerships, and renewed multilateral cooperation, including through the Global Urban Data Coalition and the Open-ended Intergovernmental Expert Working Group on Adequate Housing for All, hold significant potential to strengthen monitoring, target action and accelerate implementation.

The choices we make in the final years to 2030 will determine whether cities and human settlements become more inclusive, safe, resilient and sustainable, or whether existing patterns of exclusion, vulnerability and risk become further entrenched.

By acting with urgency and ambition, we can turn evidence into better urban outcomes and improve the lives of people in cities and communities worldwide, through 2030 and beyond.

Anacláudia Rossbach

Under-Secretary-General and Executive Director
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Acronyms & Abbreviations

µg/m ³	Micrograms per cubic metre
AI	Artificial intelligence
API	Application programming interface
BEAM	Building & Establishment Automated Mapper
BRT	Bus rapid transit
CESCR	Committee on Economic, Social and Cultural Rights
CODI	Community Organizations Development Institute
COVID-19	Coronavirus disease 2019
CRS	Creditor Reporting System
DAC	Development Assistance Committee
DRR	Disaster risk reduction
DUA	Deprived urban area
ESA	European Space Agency
F1	Harmonic mean of precision and recall
GDP	Gross domestic product
GHS-POP	Global Human Settlement Layer Population Grid
GHSL	Global Human Settlement Layer
GIS	Geographic information system
GPT-5	Generative Pre-trained Transformer 5
IBGE	Brazilian Institute of Geography and Statistics
JSON	JavaScript Object Notation
KOTAKU	Cities Without Slums programme, Indonesia
LDCs	Least developed countries
LLDCs	Landlocked developing countries
NDCs	Nationally Determined Contributions
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
OOF	Other official flows
PAC	Growth Acceleration Programme, Brazil
PDF	Portable Document Format
PM _{2.5}	Fine particulate matter with an aerodynamic diameter of 2.5 micrometres or less
PM ₁₀	Particulate matter with an aerodynamic diameter of 10 micrometres or less
pp	Percentage points
PPP\$	Purchasing power parity dollars
SDG	Sustainable Development Goal
SDGs	Sustainable Development Goals
SHRRP	Sindh Housing Recovery and Reconstruction Platform
SIDS	Small Island Developing States
TOD	Transit-oriented development
TP1	Time period 1 (2015–2020)
TP2	Time period 2 (2021–2026)
UIS	UNESCO Institute for Statistics
UN DESA	United Nations Department of Economic and Social Affairs
UN-GGIM	United Nations Committee of Experts on Global Geospatial Information Management
UN-Habitat	United Nations Human Settlements Programme
UN-OICT	United Nations Office of Information and Communications Technology
UNITAC	United Nations Innovation Technology Accelerator for Cities
USD	United States dollars
U4SSC	United for Smart Sustainable Cities
VNRs	Voluntary National Reviews
WHO	World Health Organization
WRI	World Resources Institute
WUF12	Twelfth session of the World Urban Forum
WUP	World Urbanization Prospects

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01

Introduction

The *SDG 11 Global Report 2026: Housing at the Centre of Sustainable Cities and Communities* serves as the United Nations system's collective input to the review of SDG 11 at the 2026 High-Level Political Forum on Sustainable Development. The report brings together evidence and analysis from custodian agencies, partners and other stakeholders to assess progress towards making cities and human settlements inclusive, safe, resilient and sustainable. Reflecting on a decade of progress, it highlights the central role of housing as a cross-cutting driver of urban outcomes, shaping progress across SDG 11 targets from transport and planning to environmental impacts and public space.

At least
3 billion
people live in
inadequate housing,
including more than
1.1 billion in slums and
informal settlements

1.1 SDG 11 remains off track

Three years ago, the 2023 SDG 11 Global Synthesis Report concluded that the world was severely off track in achieving SDG 11. Of the five indicators with sufficient data for global assessment, only two (11.2.1 on transport and 11.6.1 on waste management) were found to be at a moderate distance from achievement, while the remaining three indicators (11.1.1 on slums and inadequate housing, 11.6.2 on air quality, and 11.7.1 on public space) were classified as far from target.

Today, with only four years remaining until 2030, this report finds that the world is still far off track in achieving SDG 11. While some improvements have been recorded, particularly in access to transport and basic services and the adoption of national urban and housing policies, overall progress remains too slow and uneven, as rapid urban growth continues to outpace the delivery of housing, services and infrastructure in many cities, especially in developing countries.

1.2 Housing at the centre

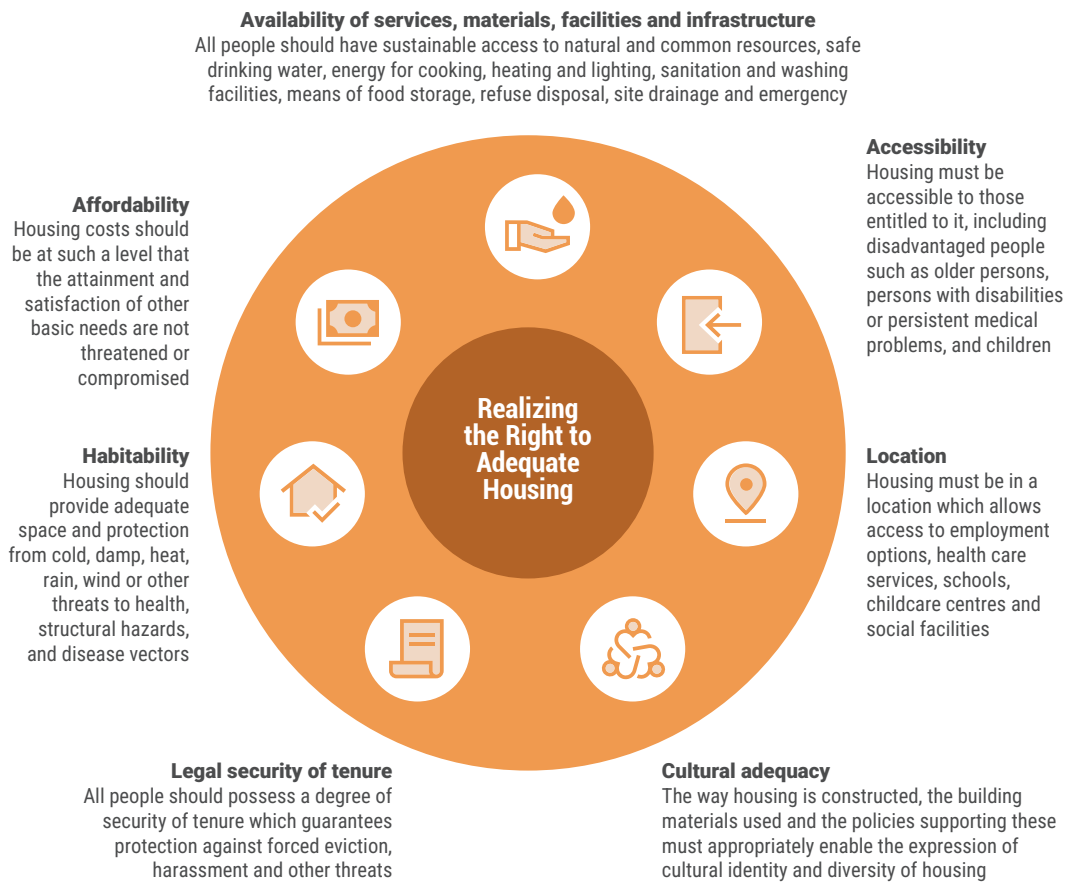
The world is experiencing a deep and widening global housing crisis. At least 3 billion people live in inadequate housing, including more than 1.1 billion in slums and informal settlements. At the same time, housing costs continue to outpace incomes in cities worldwide, intensifying wider cost-of-living pressures and deepening existing inequality.

Importantly, adequate housing is more than just a physical structure or a market commodity. It is a basic need and human right recognized in international law and reflected in national constitutions, laws, and policy frameworks across much of the world. Under international standards, adequate housing encompasses security of tenure, affordability, habitability, availability



Homes in an informal settlement near the Western Express Highway in Dahisar, Mumbai, India, with high-rise development in the background. Editorial use only. Photo: Parikh Mahendra N/ Shutterstock

Figure 1.1: Dimensions of adequate housing



Source: World Cities Report 2026; adapted by UN-Habitat from CESCR, 1991.

of services, location, and cultural adequacy, with sustainability increasingly recognized as an additional dimension.¹ Housing is also foundational to the realization and enjoyment of other human rights, such as the rights to health, education, and work, and a critical determinant of broader social, economic, and environmental outcomes for people in cities and communities worldwide.

Housing is especially important to SDG 11 as it shapes progress across the wider urban agenda beyond target 11.1. Well-located, affordable and secure housing improves access to jobs, education, health, transport and public space, strengthens resilience to climate and disaster risks, and reduces urban inequalities. Conversely, when housing is inadequate, poorly located or unaffordable, it can slow progress across multiple SDG 11 targets, including those related to

transport, sustainable urbanization, environmental quality, disaster risk reduction and public space.

Yet despite this multidimensional role, housing has too often been treated narrowly in global policy discourse and monitoring, considered chiefly under target 11.1 rather than as a cross-cutting lens through which progress across SDG 11 can be better understood.

Recent efforts by UN-Habitat and Member States have begun to address this gap. The 2026–2029 UN-Habitat Strategic Plan² places housing at the centre of the organization’s work, while the establishment of the first Open-ended Intergovernmental Expert Working Group on Adequate Housing for All³ has supported efforts to address housing data gaps and generate recommendations across key housing policy areas. The Pact for the Future further

underscores this renewed political attention, with Member States committing to ensure access for all to adequate, safe and affordable housing and to support developing countries in planning and implementing just, safe, healthy, accessible, resilient and sustainable cities. Complementing these efforts, the World Cities Report 2026: The Global Housing Crisis⁴ provides an in-depth analysis of the state of housing globally and sets out policy recommendations for addressing the crisis.

Building on these efforts, this report places adequate housing at the centre of its analysis of SDG 11. For the first time, it examines how adequate housing intersects with each of the ten SDG 11 targets. This marks a departure from past iterations, which have largely assessed housing exclusively under target 11.1. Instead, the report analyses how housing connects to issues such as transport, urban planning, disaster risk reduction, public space, heritage, and local finance, drawing on new data and case studies to show how housing conditions, systems, and policy choices shape progress across the wider urban agenda.

1.3

A pivotal year for urban action

This report is issued at a critical moment for global urban action. More than a decade has passed since the adoption of the 2030 Agenda for Sustainable Development in 2015, including Goal 11, the first global development goal dedicated exclusively to cities and human settlements.

The year 2026 also marks the halfway point in the implementation of the New Urban Agenda, which continues to serve as an essential roadmap for achieving SDG 11. As part of the agenda's midterm review, in July, the General Assembly will convene a high-level meeting to review progress and consider priorities for the decade ahead, informed by the Secretary-General's quadrennial report on implementation of the New Urban Agenda.

This year has also featured the thirteenth session of the World Urban Forum in Baku, Azerbaijan, culminating in the Baku Call to Action, as well as the launch of the 2026 edition of the World Cities

Report, both of which place a strong emphasis on adequate housing for all. Together, these milestones make 2026 a pivotal year for taking stock of progress, confronting persistent gaps, and sharpening priorities for accelerated urban action.

1.4

Persistent data gaps

Persistent data gaps continue to constrain robust assessment of global progress. Although SDG 11 monitoring has advanced over the past decade as indicator methodologies have developed and voluntary national and local reviews have become increasingly common, major challenges remain in data availability, comparability and disaggregation for several indicators. This has been exacerbated by recent cuts in support for traditional data collection systems and key input surveys, which has further weakened the SDG 11 evidence base in many countries and regions.

Emerging technologies, partnerships, and renewed multilateral cooperation, however, present fresh opportunities to turn the tide and fill critical SDG 11 data gaps. Technologies such as artificial intelligence, crowdsourcing platforms, and Earth observation have already enabled new data sources to emerge in key target areas, such as slums and informal settlements. At the same time, new multistakeholder partnerships, such as the Global Urban Data Coalition led by UN-Habitat, have brought together national statistical officers, international agencies, research institutions, local actors and other key stakeholders to strengthen data systems and harmonize methodologies in key SDG 11 areas such as slums and informal settlements and urban expansion. Similarly, the work of the Open-ended Intergovernmental Working Group on Adequate Housing for All is fostering renewed international cooperation on housing data and evidence, helping to strengthen the measurement of housing conditions and support more informed policy action. Ensuring the effective integration of these processes into official statistical systems will be essential to their long-term success in strengthening SDG 11 monitoring and advancing implementation in the final years to 2030.



Precast homes in Portugal, demonstrating how modular construction can help accelerate the delivery of affordable housing while reducing material waste. Photo: Summary Architecture

1.5

What is new with the 2026 report

In addition to focusing on housing, this 2026 edition of the report introduces several new features, data, and analysis. First, it presents updated global estimates for a number of SDG 11 indicators, including slum and informal settlement populations and proportions (11.1.1), access to sustainable public transport (11.2.1), urban land consumption and sprawl (11.3.1), civil society participation in urban planning and management (11.3.2), heritage expenditure (11.4.1), disaster impacts (11.5.1, 11.5.2 and 11.5.3) and resilience frameworks (11.b.1, 11.b.2) and access to public

space (11.7.1). For several of these indicators, the report explores how outcomes vary by housing conditions and housing type, helping to shed new light on the relationship between housing and progress across other SDG 11 targets.

Second, the report introduces an experimental analysis of the extent to which SDG 11 themes are reflected in Voluntary National Reviews. Using in-house artificial intelligence tools, the analysis examines the relative frequency of references to SDG 11 target themes in national reporting, offering an indication of how Member States are framing urban priorities in the context of SDG implementation. The results should be interpreted as a measure of reporting emphasis rather than implementation progress.

Third, the report draws on case studies collected by UN-Habitat through a global call for housing practices, open to national and local governments and all stakeholders, to document proven housing solutions that have delivered tangible results on the ground. These cases were reviewed and scored by a panel of subject matter experts and are used selectively in the report to illustrate how housing-linked action can help advance multiple dimensions of SDG 11 in practice.

The pages that follow begin with an overview of global and regional progress on SDG 11, before examining each target in turn through data, analysis and selected examples. The report then provides an assessment of persistent urban data challenges and emerging opportunities to strengthen urban monitoring, before concluding with recommendations to accelerate implementation of SDG 11 in the final years to 2030 and beyond.

Endnotes

- 1 General Comment No.4 (1991) of the Committee on Economic, Social and Cultural Rights
- 2 UN-Habitat, Strategic Plan for the period 2026–2029 (Nairobi, 2025).
- 3 UN-Habitat, Proposed Roadmap for the work of the Open-ended Intergovernmental Expert Working Group on Adequate Housing for All for the period 2025–2029, HSP/OEWG-H.2025/4, 2025.
- 4 UN-Habitat (2026). World Cities Report 2026: The Global Housing Crisis. Nairobi, Kenya.

02

Progress on SDG 11
targets and indicators

2.1

Overview of global progress and national reporting trends

Across SDG 11, progress since 2015 has been uneven and, in most areas, insufficient. Important gains have been recorded in some enabling and service-related dimensions, including the wider adoption of national urban policies, gradual improvements in access to public transport and municipal solid waste collection, and the expansion of national and local disaster risk reduction strategies.

However, these advances have generally not kept pace with the scale and speed of urban growth. Housing conditions remain under severe strain, with slum populations growing in absolute terms. Public transport and open public space remain far from universal in many cities. Land consumption continues to outpace population growth, while civil society participation in urban planning remains limited. Public and green spaces are under pressure in many parts of the world, and disaster impacts continue to weigh heavily on vulnerable regions and countries. Progress also remains highly uneven across regions, with low-income and rapidly urbanizing regions generally facing the largest deficits in infrastructure, services, resilience and implementation capacity.



Johannesburg, South Africa, viewed across the city centre. Photo: Saffa O/Shutterstock

Table 2.1.1: Qualitative assessment of SDG 11 indicator status and direction of progress

Indicator	Progress snapshot
11.1.1 Slums, informal settlements and inadequate housing	Progress remains limited, with worsening absolute numbers. Slum prevalence has changed little since 2015, while the absolute number of people living in slums and informal settlements continues to rise. Housing inadequacy and affordability pressures remain severe.
11.2.1 Convenient access to public transport	Access is improving, but remains insufficient. The share of the urban population with convenient access increased between 2020 and 2025, but about 4 in 10 urban residents in sampled cities still lack access. Regional and city-level gaps remain large, and proximity does not fully capture affordability, reliability, safety, accessibility or service quality.
11.3.1 Land consumption and population growth	Progress is mixed. Land-use efficiency has improved as the gap between land consumption and population growth has narrowed, but urban land continues to expand faster than population. Outward expansion remains the dominant spatial pattern of built-up growth.
11.3.2 Civil society participation in urban planning and management	Trend assessment is limited by insufficient comparable data. Most sampled cities report low or medium levels of regular and democratic participation. The main gap is operational, with formal participation provisions often not translating into effective local practice.
11.4.1 Expenditure on cultural and natural heritage	Reporting has improved, but investment remains uneven. More countries are reporting heritage expenditure, and spending is recovering in some contexts, but per capita investment remains low in many countries. Large disparities persist and local and private financing remain weakly captured.
11.5.1 Disaster mortality and affected persons	Progress is mixed. Disaster mortality has declined, reflecting improved preparedness, but the number of people affected remains persistently high and underlying exposure continues to grow.
11.5.2 Direct economic losses from disasters	Progress remains difficult to assess and likely limited. Reported economic losses remain high and disproportionately affect vulnerable economies. Actual losses are likely underestimated due to underreporting, weak loss accounting and limited capture of indirect impacts.
11.5.3 Damage to critical infrastructure and service disruptions	Progress remains difficult to assess and likely limited. Disasters continue to damage critical infrastructure and disrupt essential services at large scale, with cascading impacts across urban systems. Trend interpretation remains constrained by reporting and measurement limitations.
11.6.1 Municipal solid waste collection and management	Waste collection shows tentative signs of improvement, but progress remains uneven. City-level data show generally high but uneven collection coverage, with limited repeated observations suggesting modest improvement in some cities. However, the sample is not balanced enough for strong trend claims, major regional gaps remain, and collection does not necessarily imply controlled or sustainable waste management.
11.6.2 Urban air quality	Progress has stalled. PM _{2.5} levels remain far above WHO guideline values. Global concentrations declined between 2010 and 2020, but have since largely plateaued, with persistent regional disparities and limited improvement in several high-burden regions.
11.7.1 Access to open public space	Access to open public space declined between 2020 and 2025 in sampled cities, and most urban residents still lack convenient access. Urban green areas have also declined over the longer term.
11.7.2 Harassment in public space	Official data remain insufficient to assess global or regional trends. Proxy evidence suggests some improvement in perceived safety, but persistent gender gaps and harassment risks continue to restrict equal access to public space.
11.a.1 National urban policies and regional development plans	Policy alignment is improving, but implementation gaps remain. More countries have national urban policies or regional development plans aligned with SDG 11.a.1, but local fiscal space remains the weakest dimension and implementation capacity is uneven.
11.b.1 National disaster risk reduction strategies	National strategy adoption has improved substantially, but implementation gaps remain. National DRR strategies have expanded rapidly since 2015, but financing, coordination and integration into planning, budgeting and investment remain uneven.
11.b.2 Local disaster risk reduction strategies	Local strategy adoption is improving, but remains uneven. Local DRR strategies are increasingly common, but adoption and implementation vary across local governments. Local capacity, financing and vertical coordination remain major constraints.
11.c.1 ODA and other official flows for urban infrastructure	Progress is difficult to assess, while finance remains very limited and uneven. Official flows identified as exclusively supporting urban infrastructure remain very small relative to overall ODA and urban investment needs. Flows are uneven across sectors and regions, and the indicator only partially captures the target's focus on resilient buildings, local materials and sustainable construction.

Growing data gaps have also reduced the ability to assess progress quantitatively across SDG 11 targets. As of this 2026 report, only one indicator, SDG 11.1.1 on the population living in slums or informal settlements, has sufficient data to reliably estimate its distance from target achievement, compared with five indicators for which target distances were estimated in the 2023 report.⁵ This decrease in quantitative assessment capacity reflects, above all, declining support for national and local data collection, especially in lower-income regions where monitoring capacities remain most constrained. Section 3 discusses these challenges in more detail, along with emerging opportunities to strengthen SDG 11 monitoring.

Voluntary National Reviews provide a supplementary lens on SDG 11 priorities

Given persistent data constraints, UN-Habitat has explored complementary sources of evidence to better understand how countries are framing urban priorities in the context of SDG implementation. This report therefore introduces an experimental analysis of 397 Voluntary National Reviews submitted between 2015 and 2026, examining the relative frequency of references to SDG 11 target themes in national reporting. While the analysis is not a substitute for official indicator-based monitoring, it does provide a useful supplementary lens on which dimensions of SDG 11 are receiving greater or lesser attention in national policy and reporting discourse.

Overall, the analysis suggests that recent national reporting on SDG 11 has become increasingly shaped by risk, loss and resilience. Disaster impacts have moved rapidly to the foreground, while housing, basic services, slums and informal settlements remain a persistent concern across regions. Heritage is also more visible than might be expected, while several themes central to integrated urban development, including urban planning, public and green space, urban-rural linkages, and sustainable buildings and local materials, receive comparatively limited attention.

The results also point to important differences by income group. While low-income countries give the highest relative attention to disaster impacts and housing, high-income countries give greater attention to environmental quality, heritage, transport, urban planning, public space and sustainable buildings.

Disaster impacts have become the most commonly referenced theme

References to disaster impacts increased sharply between VNRs submitted in 2015–2020 and those submitted in 2021–2026, rising from 1.4 per cent to 3.2 per cent of VNR text on average and becoming the most referenced SDG 11 theme in the later period. This was also a broad-based shift, with 76 per cent of countries with VNRs in both periods recording an increase in references to disaster impacts.

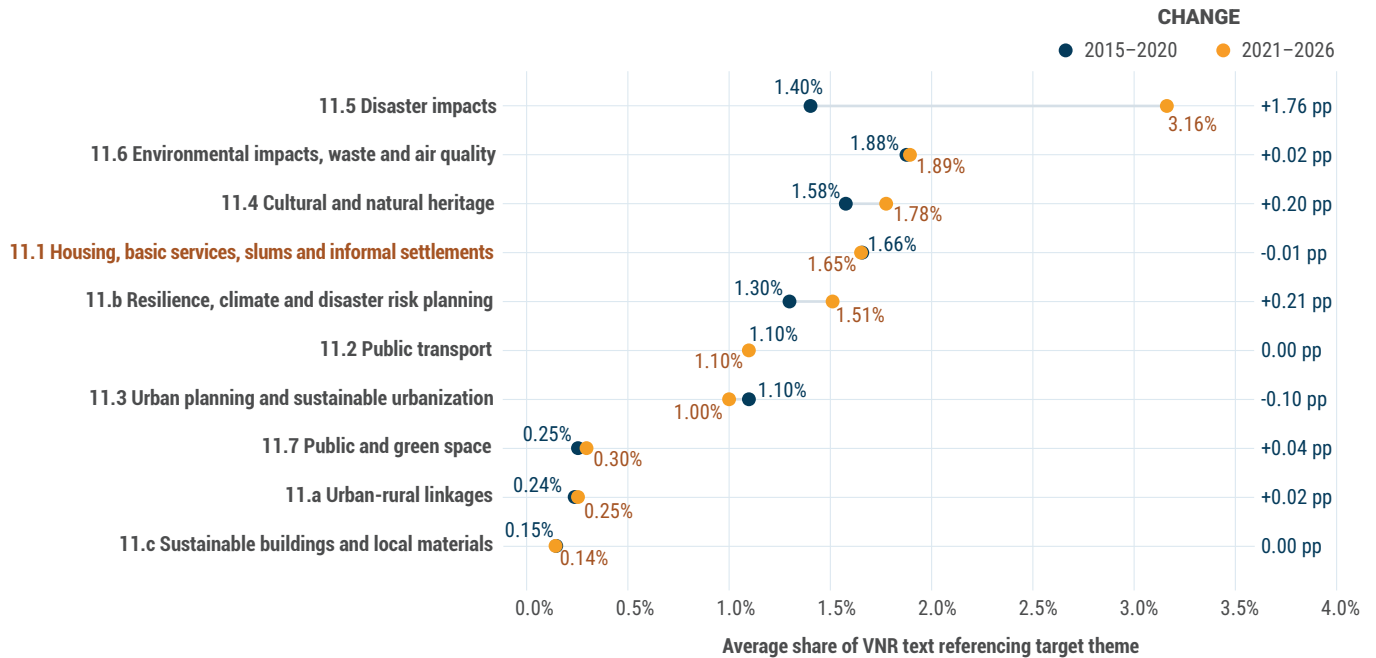
This trend suggests that national reporting on cities and human settlements is increasingly shaped by climate-related hazards, disaster losses, infrastructure damage, displacement and service disruption. The growing prominence of disaster impacts may also reflect heightened attention to risk, preparedness and recovery in the wake of the COVID-19 pandemic and rising concern over conflict-related crises in recent years.

Disaster impacts were the most referenced SDG 11 theme in the most recent VNRs submitted by countries across nearly all regions: Central and Southern Asia, Eastern and South-Eastern Asia, Latin America and the Caribbean, Northern Africa and Western Asia, and Sub-Saharan Africa. Europe and Northern America was the main regional exception, with urban environmental issues, waste and air quality ranking first, followed by heritage. High-income countries show a similar pattern, with environmental quality and heritage remaining especially prominent even as references to disaster impacts have increased.

Oceania also had a distinctive profile, with resilience, climate and disaster risk planning under target 11.b receiving the highest current reference share. Northern Africa and Western Asia recorded the largest regional increase in references to disaster impacts between the two periods, followed by Latin America and the Caribbean, Central and Southern Asia, Eastern and South-Eastern Asia, and Sub-Saharan Africa. References to resilience, climate and disaster risk planning under target 11.b also increased, though less dramatically, reinforcing the broader finding that risk and resilience have become more prominent in recent SDG 11 reporting.

Figure 2.1.1: Shifts in attention to SDG 11 target themes in VNRs: 2015-2020 and 2021-2026

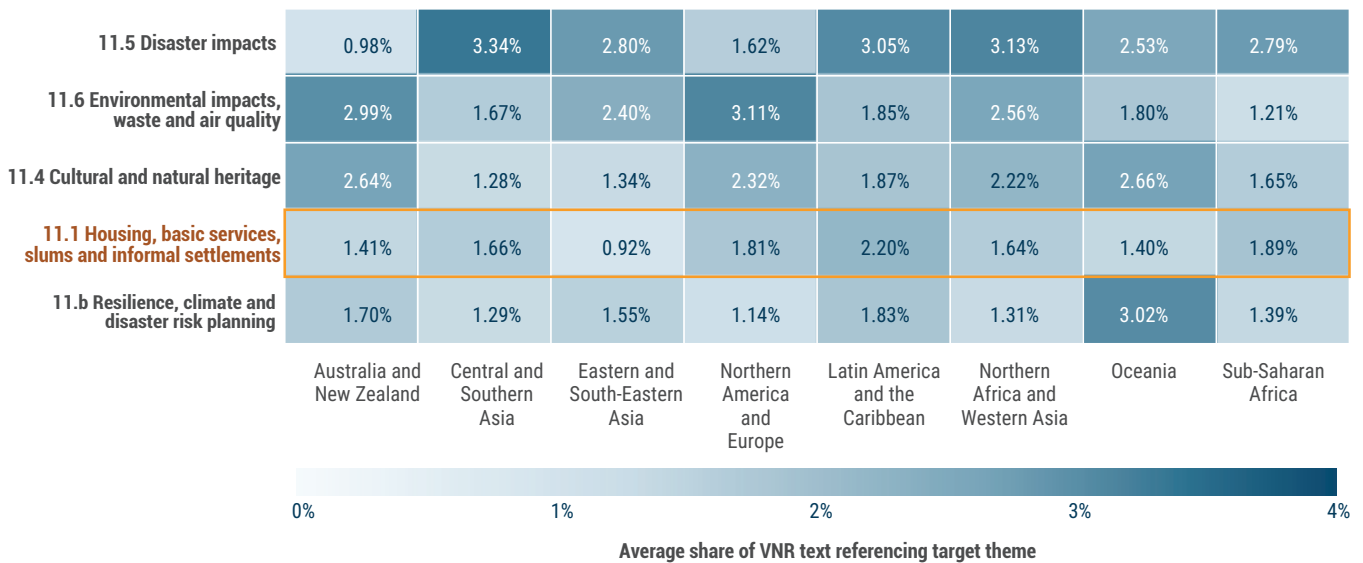
Average share of references in VNR submitted during 2015-2020 and 2021-2026



Note:
Themes are ordered by their average reference share in 2021-2026. Changes show percentage-point differences in reporting emphasis and should not be interpreted as implementation progress.

Figure 2.1.2: Most referenced SDG 11 target themes in recent VNRs, by region

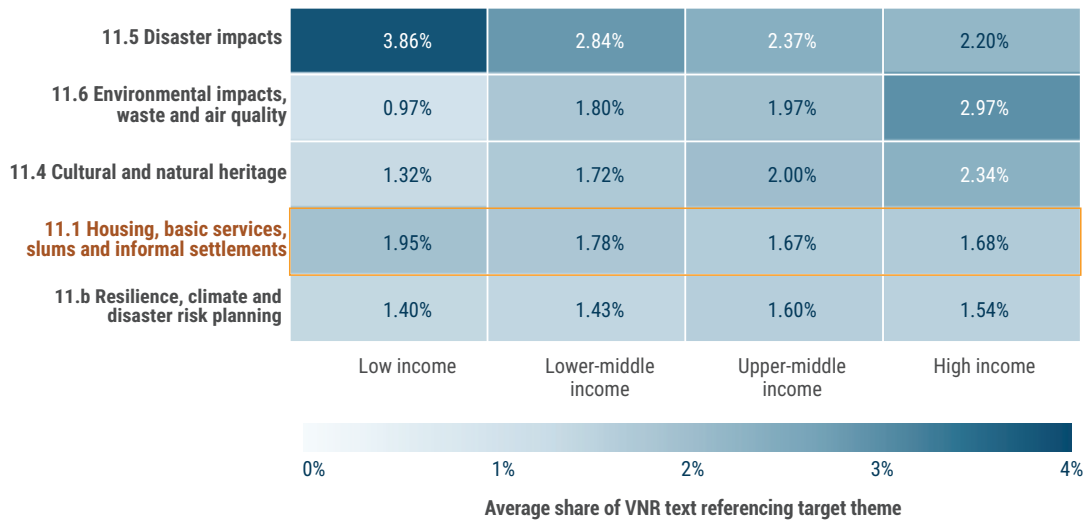
Average share of references within the most recent VNR submitted by each country, by region



Average share of VNR text referencing target theme

Figure 2.1.3: Most referenced SDG 11 target themes in recent VNRs, by income group

Average share of references within the most recent VNR submitted by each country, by income group



Housing remains a persistent concern rather than an emerging one

Housing, basic services, slums and informal settlements remain among the most consistently referenced SDG 11 themes in national reporting, underlining the continued centrality of target 11.1 to urban development priorities. Between 2015 and 2020, housing was the second most referenced SDG 11 theme across VNRs, after urban environmental impacts, waste and air quality. However, while references to disaster impacts surged in the later period, the relative share of references to housing remained broadly stable, at around 1.7 per cent in both reporting periods. This suggests that housing has remained a persistent concern rather than an emerging one.

This global stability masks important regional and income-group differences. Housing is most prominent in recent VNRs from Latin America and the Caribbean and Sub-Saharan Africa, and receives the highest current reference share among low-income countries. In these contexts, national reporting continues to link SDG 11 to basic services, informal settlements, urban poverty, affordability and inclusive urban development. Low-income countries also show the clearest combined increase in references to disaster impacts and housing, suggesting growing attention to the intersection between urban vulnerability, disaster exposure and basic living conditions.

Europe and Northern America represents a partial exception to the broader trend, with references to housing increasing modestly between the two periods. This may reflect growing political attention to housing affordability and homelessness across parts of the region. By contrast, housing references declined in several other regions and in upper-middle-income countries, even as disaster-related references increased. Overall, the analysis suggests that housing remains central to national reporting on SDG 11, but its relative prominence has not grown in the same way as risk- and disaster-related content.

Heritage ranks among the most referenced themes

Cultural and natural heritage ranks among the most referenced SDG 11 themes overall. It was also one of only three themes, along with disaster impacts under target 11.5 and resilience, climate and disaster risk planning under target 11.b, to record a notable increase in references between the two reporting periods.

This visibility may reflect the importance of heritage, culture, tourism, historic urban areas, natural landscapes and identity in national sustainable development narratives. It may also point to growing concern over the protection of heritage from climate and disaster risks. However, these findings should be interpreted with caution. References to culture, tourism or natural heritage



Two men travel by boat past floating homes in the Belén area of Iquitos, Peru, on the Itaya River floodplain. Editorial use only. Photo: Chris Allan/Shutterstock

may not always correspond directly to urban heritage policy under target 11.4, and higher reporting attention does not necessarily imply commensurate investment or implementation.

Core SDG 11 themes remain under-referenced

By contrast, several themes central to integrated urban development receive comparatively limited

attention in VNRs. Public and green space, urban-rural linkages, and sustainable buildings and local materials remain among the least referenced SDG 11 themes across almost all regions and income groups. Sustainable buildings and local materials under target 11.c had the lowest reference share in both reporting periods and showed almost no change over time.

Urban planning and sustainable urbanization under target 11.3 also receive comparatively limited attention in national reporting, despite their central importance for managing urban growth, housing location, service delivery, public space and resilience. The average share of VNR text referring to target 11.3 was slightly lower in 2021-2026 at 1.0 per cent, compared with 1.1 per cent during the 2015-2020 period. However, sensitivity analysis did not indicate a clear change over time, and this difference should therefore be interpreted as indicative rather than conclusive.

These lower levels of reference do not necessarily indicate limited action. However, they suggest that several spatial, territorial and built-environment dimensions of SDG 11 remain less visible in voluntary national reporting. Strengthening attention to these themes would help provide a fuller picture of how countries are addressing the conditions that shape sustainable, inclusive and resilient urban development.

Box 2.1.1. Key facts from the VNR analysis

- The analysis covers 397 Voluntary National Reviews submitted between 2015 and 2026.
- Disaster impacts became the most referenced SDG 11 theme in VNRs submitted during 2021–2026.
- References to disaster impacts increased from 1.4 per cent to 3.2 per cent of VNR text on average between the two reporting periods.
- Among countries with VNRs in both periods, 76 per cent recorded an increase in references to disaster impacts.
- Housing, basic services, slums and informal settlements remained broadly stable, at around 1.7 per cent of VNR text on average in 2015–2020 and 2021–2026.
- Urban planning and sustainable urbanization declined slightly between the two periods, from 1.1 per cent to 1.0 per cent.
- Sustainable buildings and local materials remained the least referenced SDG 11 theme in both periods.

2.2

Target 11.1. By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums



Affordable housing project in Nairobi, Kenya. Photo: Ministry of Housing, Kenya

Target 11.1 remains the clearest expression of the wider housing crisis at the heart of SDG 11. Yet, as articulated throughout this report, adequate housing is not only a single target but a foundation for inclusive, safe, and sustainable cities. Well-located, affordable and secure housing supports health, access to jobs and education, resilience to climate and disaster risks, safety from violence against women, children and marginalized groups, and a reduction of urban inequalities. Yet progress under target 11.1 continues to be shaped by powerful structural pressures, including rapid demographic growth, rural-to-urban migration, weak investment in housing, serviced land and infrastructure, and in fragile contexts, displacement into under-serviced urban settlements.

Its continued prominence in national reporting suggests that housing has remained a persistent

urban priority rather than a passing concern. The report's analysis of Voluntary National Reviews shows that housing, basic services, slums and informal settlements remain among the most consistently referenced SDG 11 themes overall, with attention to housing remaining broadly stable across the two reporting periods. Housing is also particularly prominent in recent VNRs from low-income countries, Sub-Saharan Africa, and Latin America and the Caribbean, where national reporting continues to link SDG 11 to informal settlements, urban poverty and affordability. However, housing concerns have also become increasingly prominent in Europe and Northern America, becoming the region with the third most references to housing in the most recent VNR period, as housing affordability and homelessness have become increasingly salient issues in cities and countries across the region.

Indicator 11.1.1. Proportion of urban population living in slums, informal settlements or inadequate housing

Quick facts

- **The global housing crisis has deepened since 2015**, with at least 3 billion people living in inadequate housing.
- **Slums and informal settlements remain one of its clearest manifestations.** Since 2015, the global slum population has increased by more than 130 million, reaching over 1.16 billion in 2024.
- **Progress in reducing slum prevalence has slowed sharply.** While the share of the world's urban population living in slums fell from 30.6 per cent in 2000 to 24.8 per cent in 2024, relatively little progress has been made since 2015, with the global proportion remaining close to one quarter.

- **At the regional level, Latin America and the Caribbean has achieved the strongest long-term reduction** in both the proportion and number of people living in slums, while **Sub-Saharan Africa and Central and Southern Asia remain the most affected regions**, with large absolute increases in slum populations despite proportional progress.
- **Housing affordability has reached crisis levels**, with nearly 45 per cent of households worldwide spending over 30 per cent of their income on housing expenses.



People experiencing homelessness camp in Trafalgar Square, London, United Kingdom. Editorial use only. Photo: Sean Aidan Calderbank/Shutterstock

A deepening global housing crisis

More than 3 billion people continue to live in inadequate housing.⁶ This includes over 1.16 billion people living in slums and informal settlements, alongside many others who are homeless, displaced or unable to afford a place to live.⁷ At the same time, nearly 45 per cent of households worldwide are housing-cost-burdened, spending more than 30 per cent of their incomes on housing-related expenses.⁸ Sub-Saharan Africa faces the highest housing-affordability burden, with 55 per cent households spending above the 30 per cent threshold, followed by Europe and Northern America (50 per cent) and Latin America and the Caribbean (48 per cent). While this 30 per cent threshold provides a useful benchmark for global comparison, it should be interpreted as an indicative measure rather than a universal affordability standard across regions, especially for lower-income households and in contexts where food, transport, health care

education, energy and other essential costs absorb a larger share of income.⁹

At the core of this deepening crisis is a growing mismatch between housing systems and the needs of urban residents.¹⁰ In many cities, housing demand has outpaced appropriate supply, contributing to a widening gap between costs and incomes. Between 2010 and 2023, the global price-to-income ratio increased from 9.3 to 11.2,¹¹ reflecting growing affordability pressures across most regions. At the same time, vacant, underoccupied or poorly located units often coexist with overcrowding, informal settlements and homelessness, showing that the crisis cannot be understood solely as a shortage of housing stock.¹² It is also a question of whether homes are affordable for different income groups, safe and secure from forced evictions and climate hazards, accessible and suited to diverse household needs and cultural contexts, and connected to services, public space, livelihoods and opportunity. These pressures are often most acute for groups already facing marginalization, including older persons, young people, persons working informally, refugees and migrants, who may encounter discrimination, insecure tenure, documentation barriers or exclusion from formal housing markets, reinforcing the need for inclusive housing policies and approaches.

Absolute slum populations continue to rise as proportional progress slows

Over the past decade, the challenge of slums and informal settlements has intensified. The number of global slum dwellers has increased at an accelerating rate since 2015, reaching over 1.16 billion in 2024. Over 130 million people have been added to the global slum population during this period, nearly doubling the 70 million added during the preceding decade.

At the same time, progress in reducing the prevalence of slum dwellers has slowed sharply. After falling from 30.6 per cent in 2000 to 25.3 per cent in 2015, the share of the world's urban population living in slums or informal settlements has remained at about 25 per cent over the past decade (declining only slightly from 25.3 per cent in 2015 to 24.8 per cent in 2024). This divergence between rising absolute numbers and stagnating

proportions suggests that, while housing conditions and access to services have improved for some residents, these gains have failed to keep pace with the scale and speed of urban population growth.

Recent global shocks have likely added further pressure in many contexts. The COVID-19 pandemic exposed and deepened existing housing vulnerabilities as many low-wage and informal workers experienced job losses, often with limited or no access to social safety nets,¹³ while climate-related disasters and conflict-induced displacement have increased pressure on already strained urban housing and service systems. Forced displacement has emerged as a particularly important factor in some contexts, as many displaced people are forced to settle in overcrowded and under-resourced urban areas with limited access to formal housing, basic services and social protection.¹⁴ These pressures have compounded pre-existing deficits in housing supply, serviced land and urban infrastructure, especially in fragile and rapidly urbanizing contexts.

Nevertheless, the continued rise in absolute numbers should not obscure important institutional progress. In several countries, slums and informal settlements have become more visible in official statistics, urban policy and public investment systems, strengthening the basis for more targeted upgrading. Brazil's improved census mapping of favelas and urban communities shows how better data can make informal settlements more visible in national planning and investment decisions (see Box 2.2.1),¹⁵ while Argentina's registry and legal framework for socio-urban integration

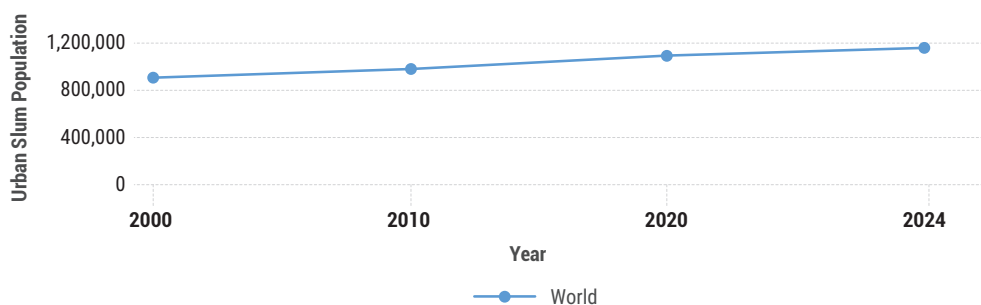
illustrate how recognition can be linked to tenure security, service provision and neighbourhood improvement.¹⁶ Indonesia's national slum upgrading programme (KOTAKU)¹⁷ and South Africa's in-situ upgrading framework meanwhile highlight the importance of embedding upgrading in national and local implementation systems.¹⁸

Sub-Saharan Africa and Central and Southern Asia remain the most affected regions

Sub-Saharan Africa and Central and Southern Asia continue to record the highest proportions of urban populations living in slums and informal settlements, despite notable improvements over time. In Sub-Saharan Africa, the proportion of people living in slums declined from 60.1 per cent in 2000 to 54.8 per cent in 2015 and further to 49.4 per cent in 2024. Yet this substantial reduction has been accompanied by the largest increase in absolute slum population of any region, with more than 56 million people having been added to slums in the last decade alone.

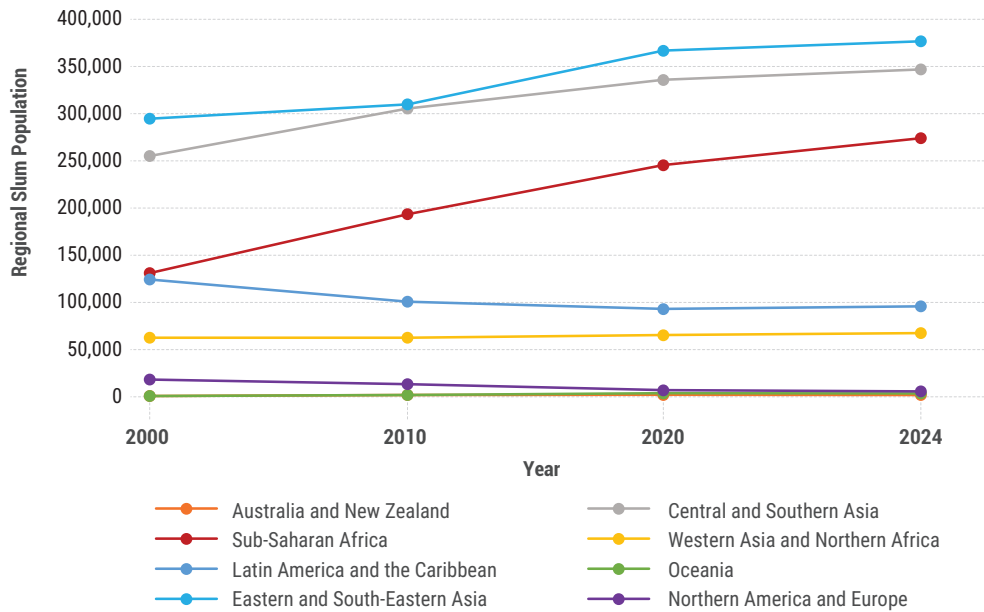
This combination of falling proportions and rising absolute figures points to a structural challenge. While many countries have reduced the relative scale of urban deprivation, progress in expanding adequate housing, infrastructure and basic services continues to be outpaced by rapid urban growth, including natural population increase, rural-to-urban migration and the outward expansion of informal settlements. Nevertheless, countries such as Tanzania demonstrate that substantial reductions are attainable where infrastructure upgrading, urban services and municipal capacity are sustained over time, while South Africa

Figure 2.2.1: Total urban population living in slums or informal settlements, 2000-2024



Source: UN-Habitat, Global Urban Indicators Database, 2026

Figure 2.2.2: Total urban population living in slums or informal settlements, by region, 2000-2024



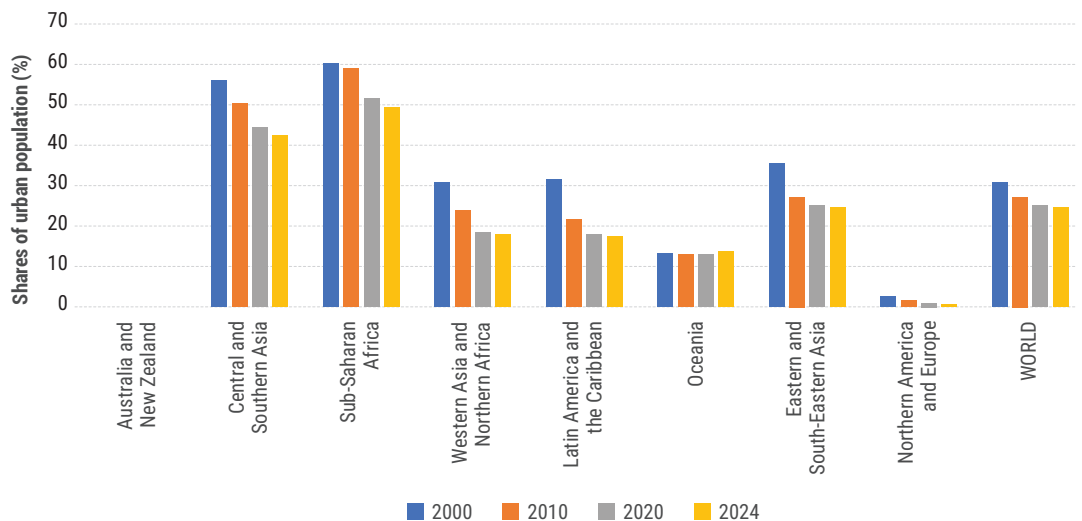
Source: UN-Habitat, Global Urban Indicators Database, 2026

illustrates the importance of embedding in-situ upgrading more firmly in national housing policy and local implementation systems.

Central and Southern Asia shows a similar pattern. The region retains the second highest prevalence of slum dwellers globally and has achieved even greater proportional progress over the longer-term, with its share of population living in slums falling

from 56 per cent in 2000 to 47.3 per cent in 2015 and 42.6 per cent in 2024. India has achieved notable proportional progress, supported in part by state-level interventions such as Odisha’s Jaga Mission, which combines land rights, community organization and infrastructure upgrading to integrate informal settlements more fully into urban systems.¹⁹ Bangladesh has also made more modest proportional gains, alongside community-

Figure 2.2.3: Proportion of urban population living in slums or informal settlements, 2000-2024



Source: UN-Habitat, Global Urban Indicators Database, 2026

based urban poverty reduction efforts in slums and low-income settlements. However, as in Sub-Saharan Africa, this proportional progress has not translated into a reduction in absolute numbers. Since 2015, the region's slum population has increased by about 25 million people, underscoring the continuing challenge of expanding adequate and affordable housing quickly enough to meet the needs of a rapidly growing urban population.

Progress has slowed in several regions after strong earlier gains

Latin America and the Caribbean stands out as the clearest case of long-term progress. It is the only region with a significant slum population to have reduced both slum prevalence and absolute numbers over the past 25 years. Between 2000 and 2015, slum prevalence fell from 31.7 per cent to 18.4 per cent, while absolute numbers declined by 34 million. These gains point to the

impact of long-running investments in in-situ settlement upgrading, basic services, poverty reduction and more inclusive urban policy in many countries across the region, such as Argentina, Brazil, Colombia and Mexico. Since then, however, progress has slowed sharply. Between 2015 and 2024, the regional slum share declined by only one percentage point, while the slum population increased by around 4 million, suggesting that affordability pressures, urban expansion and persistent inequality are making further reductions harder to achieve across the region.

Eastern and South-Eastern Asia followed a similar pattern of strong earlier gains followed by slower progress. The proportion of the urban population living in slums fell from 35.5 per cent in 2000 to 24.9 per cent in 2024, yet almost all of this progress occurred before 2015. This earlier progress likely reflects the region's rapid expansion of infrastructure, services and housing quality alongside broader economic transformation, most notably in China. Over the past decade, however, the regional slum share has remained nearly unchanged, while the absolute slum population increased by more than 46 million, reaching almost 377 million. This underscores the scale effect of large and fast-growing urban systems, where even modest proportional improvements can be outweighed by continued urban population growth. Indonesia nevertheless shows that continued progress is possible, with national slum upgrading efforts linking community-based planning and local government implementation to investments in roads, drainage, water, sanitation and solid waste services.

Western Asia and North Africa also achieved major reductions between 2000 and 2015, with slum prevalence falling from 30.7 per cent to 18.4 per cent. Earlier gains were particularly visible in parts of North Africa, where Morocco's Cities Without Slums programme²⁰ and Egypt's large-scale efforts²¹ to address unsafe areas illustrate the role of national housing, land and infrastructure programmes in reducing severe shelter deprivation. Since then, however, progress has largely stalled. By 2024, the regional slum share remained around 18 per cent, while the slum population had risen again to 68 million. This suggests that earlier gains have become harder to sustain, particularly in a context of rising conflict, displacement and broader economic strain.



Homes in Kampung Pelangi, Bandung, Indonesia. Editorial use only. Photo: ardiwebs/Shutterstock

Box 2.2.1: Building the legal and data foundations for favela upgrading in Brazil

Brazil's urban inequalities have been shaped by decades of rapid and uneven urbanization. Millions of people live in favelas and urban communities where tenure is insecure, infrastructure is incomplete and access to public services remains limited. The challenge has never been simply the physical condition of housing, but the legal and institutional position of these communities: whether land can be regularized, whether public investment can reach informal areas, and whether urban policy can recognize land and property as serving a social function.

Brazil's response has combined constitutional principles, urban legislation, institutions, data and investment programmes. The 1988 Constitution established the social function of land and property and gave municipalities a central role in urban policy, including through compulsory master plans for cities with over 20,000 inhabitants. Building on this framework, the 2001 City Statute then provided municipalities with the legal and planning tools to regularize informal settlements, reserve land for social housing through Special Zones of Social Interest for affordable housing and slum upgrading, capture land value gains to finance urban development and institutionalize participation in urban planning. The creation of the Ministry of Cities in 2003 helped bring housing, sanitation, mobility and land-use policy into a more integrated national framework, while also establishing a National Council of Cities to facilitate the participation of local governments, civil society, grassroots movements, and other stakeholders in urban policymaking.

Data and terminology have also played an important role. The Brazilian Institute of Geography and Statistics (IBGE) developed a long-standing methodology for identifying and measuring informal settlements, working closely with municipalities and local communities to define their boundaries and characteristics. By combining geospatial technologies with field surveys, IBGE generated more reliable data on settlement perimeters and populations, mapping 12,348 favelas and urban communities, home to 16.4 million people across 656 municipalities. The shift from the term "subnormal agglomerations" to "favelas and urban communities" also marked an important change in official language, moving away from a framing centred on abnormality or illegality and recognizing these areas as culturally rich urban communities whose residents are part of the city.

Large-scale programmes, including PAC, Minha Casa, Minha Vida and the more recent Periferia Viva initiative, have built on this framework by financing housing, infrastructure, land regularization and neighbourhood upgrading. At the local level, these national frameworks have been translated into participatory master plans, neighbourhood upgrading strategies, social work with communities and financing arrangements that combine federal investment with municipal resources, including land-based instruments used in cities such as São Paulo to help finance infrastructure in informal settlements.⁶⁶ While Brazil's housing and infrastructure deficits remain significant, the country's measured slum prevalence declined substantially over the past 25 years, even as improved census methods have made favelas and urban communities more visible in official statistics. Brazil's experience therefore demonstrates the importance of legal and institutional reforms, data and mapping improvements, public investment, and participatory and rights-based approaches in creating the conditions for long-term progress in recognizing, upgrading and integrating informal settlements.

Source: Government of Brazil; IBGE; Ministry of Cities.



Housing developments and integrated public spaces in Comunidade do Aço, Rio de Janeiro, Brazil, delivered through the Morar Carioca programme and informed by data produced with UN-Habitat support. © UN-Habitat

High-income regions remain at near-zero slum prevalence, yet informal housing responses are on the rise

Europe and Northern America, and Australia and New Zealand, continue to record very low slum prevalence by global standards. In Europe and Northern America, the proportion of the urban population living in slums fell from 2.2 per cent in 2000 to 0.3 per cent in 2024, while the number of people living in slums declined from about 16.9 million to 3.0 million. Australia and New Zealand meanwhile remained close to zero throughout the period, with only negligible absolute numbers.

These low levels reflect near-universal coverage of basic urban services and the predominance of formalized housing and land systems. They should not, however, be interpreted as evidence that housing stress is absent. Many cities in these regions continue to face severe housing unaffordability and rising homelessness, with some households resorting to informal or temporary arrangements such as living in tents or vehicles, while others experience less visible forms of housing insecurity, including “doubling up” with friends or family or remaining in the parental home longer into adulthood.

Box 2.2.2: Sustaining affordability through public housing in Vienna

Vienna’s social housing system emerged from severe housing shortages, overcrowding and poor sanitary conditions in the early twentieth century. Many working-class households lived in cramped dwellings with shared water and sanitation, while rising rents and speculative markets deepened insecurity. The city’s response was to treat housing as a long-term public responsibility, using regulation, land policy and public investment to expand access to affordable and high-quality homes.

The foundations were laid during the “Red Vienna” period, when the municipal government used progressive taxation, including the 1923 housing construction tax, to finance large-scale public housing. After 1945, the model continued through municipal construction, rent regulation, land policy and partnerships with limited-profit housing associations. Today, Vienna’s housing system combines around 220,000 municipal flats with roughly 200,000 subsidised dwellings, making publicly supported housing a central part of the city’s housing market.

This long-term commitment has helped keep a large share of the population in affordable, secure and good-quality housing. Around half of Vienna’s residents live in municipal or subsidized dwellings, a scale that helps moderate rents across the wider market and supports social mix and reduced spatial inequality across the city, with social housing distributed across all districts. Energy-efficient construction furthermore promotes environmental sustainability, while close proximity to parks and green spaces helps support the city’s high quality of life, with Vienna consistently ranked among the world’s most liveable cities. The lesson from Vienna’s experience is that delivering high-quality affordable housing depends on institutions and policies that endure over time: public land, sustained investment, regulated non-profit providers, tenant protections and housing programmes designed for broad social inclusion rather than residual assistance alone.

Source: City of Vienna, Social Housing in Vienna



Social housing at Rudolf-Bednar-Park in Vienna’s Leopoldstadt district, Austria. Editorial use only. Photo: Kagan Kaya/Shutterstock

Slum prevalence rises modestly in Oceania

Oceania remains small in global terms but shows a more concerning direction of change. The share of the urban population living in slums increased from 12.6 per cent in 2015 to 13.5 per cent in 2024, making it one of the few regions where slum prevalence has risen in the past decade. Over the same period, the number of people living in slums increased from 343,000 to 453,000. Although these totals are modest compared with other regions, the upward trend is notable. It points to the vulnerability of smaller and more isolated urban systems, where limited land availability, high infrastructure costs, constrained fiscal capacity and growing exposure to climate-related risks can make adequate housing provision especially difficult.

Accelerating progress requires inclusive housing finance and delivery systems

Overall, the continued growth in the number of people living in slums and informal settlements underscores the urgency of scaling up action

under target 11.1. Reducing the share of the urban population living in slum conditions is insufficient if the total number of people affected continues to rise, and if other forms of housing inadequacy remain poorly addressed. Scaling progress will depend heavily on whether housing finance systems can reach the people and places currently excluded from adequate housing, including low-income households, informal workers, renters, residents without secure tenure or regular documentation, and communities living in informal settlements.

Accelerating progress will require more than the construction of new housing alone. Formal mortgage markets, public subsidies and private investment often fail to reach informal settlements, incremental self-construction, rental housing or well-located affordable homes. Financing gaps are also compounded by the high cost of serviced land, weak municipal revenue and borrowing capacity, fragmented land governance, and the rising cost of climate-resilient infrastructure and disaster recovery. Experiences from countries such as Brazil and Kenya, as well as long-standing social housing systems such as Austria's (Box 2.2.2), show that housing finance can be expanded through subsidies, refinancing institutions, public investment and regulated social housing providers. However, these tools are most effective when linked to serviced land, tenure security, infrastructure provision, affordability safeguards, participatory in-situ upgrading and local implementation capacity.

Housing responses must also reflect the full dimensions of adequate housing. Homes need to be affordable for different income groups, secure from forced evictions and climate hazards, accessible to persons with diverse needs, culturally appropriate, and connected to services, public space, livelihoods and opportunity. Better local data that reflect the diverse experiences and needs of different groups and communities, stronger coordination across levels of government, and greater participation in decision-making by people affected by housing policies will be essential for designing responses that are commensurate with the scale of the challenge.

Public housing apartments in Singapore. Photo: Wheelsan Images/Shutterstock.



2.3

Target 11.2. By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.



Rush hour in central Kampala, Uganda. Editorial use only. Photo: Andreas Marquardt/Shutterstock

Public transport is essential to whether cities function inclusively and efficiently. It connects people to jobs, education, healthcare and other essential services, while reducing dependence on private vehicles, lowering congestion and emissions, and supporting more compact and productive urban development. In this sense, public transport should be understood not only as a mobility service, but as a strategic investment in access, inclusion and urban productivity.²² For low-income households in particular, the cost, quality and reach of public transport strongly shape access to opportunity.

Yet despite its cross-cutting importance, transport has only received modest attention in VNRs, with the report's analysis suggesting that transport remains a mid-level theme, neither among the most prominent nor among the least referenced, and with little change over time. This relative stability may indicate that transport

is widely recognized as important, yet still too often approached as a sectoral issue rather than as a cross-cutting determinant of inclusion, productivity and environmental sustainability.

Housing and transport are critical to one another. Well-located and affordable housing, developed near public transport and urban services, is essential to achieving convenient access to sustainable mobility. At the same time, high-quality and accessible transport systems can expand access to adequate housing by connecting residents to jobs, services and daily commitments beyond their immediate neighbourhoods. This is especially important where lower-cost housing is built on cheaper peripheral land, as without reliable public transport, such development can deepen exclusion, raise household transport costs and increase emissions. Conversely, outward expansion, low-rise development and fragmented housing growth make public transport more costly to provide and less efficient to operate. Housing location, urban form and transport access are therefore closely intertwined under target 11.2.

Indicator 11.2.1. Proportion of population that has convenient access to public transport, by sex, age, and persons with disabilities.

Quick facts

- **Access to public transport is improving but remains far from universal.** In a sample of 414 cities across 126 countries, the share of the urban population with convenient access rose from 53.2 per cent in 2020 to 61.5 per cent in 2025, yet about 4 in 10 urban residents still lack access.

- **Many cities remain well off track.** In 2025, 114 sampled cities had convenient public transport access for less than 25 per cent of their population, while a further 70 cities remained below 50 per cent.
- **The access gap is widest in Sub-Saharan Africa and Western Asia and Northern Africa,** where many cities remain very far from the target.
- **High levels of access are achievable, including in low- and middle-income countries.** In Australia and New Zealand, Northern America and Europe, and **Latin America and the Caribbean,** more than half of sampled cities provide convenient access to over 75 per cent of their populations.
- **Current access depends heavily on low-capacity systems.** Buses and similar modes account for most convenient access, while high-capacity systems such as metro, rail and ferries account for only 22 per cent.
- **Walking and cycling are essential to mobility and public transport access, but remain underinvested.** A recent global analysis of 11,587 cities found that walking accounts for about 14 per cent of urban trips and cycling about 2 per cent, with density and safe street design strongly shaping active mobility.²³
- **Road safety remains a major barrier to safe and inclusive mobility.** Road traffic crashes kill about 1.19 million people each year, with more than half of deaths occurring among pedestrians, cyclists and motorcyclists.

A KL Monorail train and bus pass through the Chow Kit area of Kuala Lumpur, Malaysia. Editorial use only. Photo: gracethang2/Shutterstock



Public transport remains central to inclusive and sustainable cities

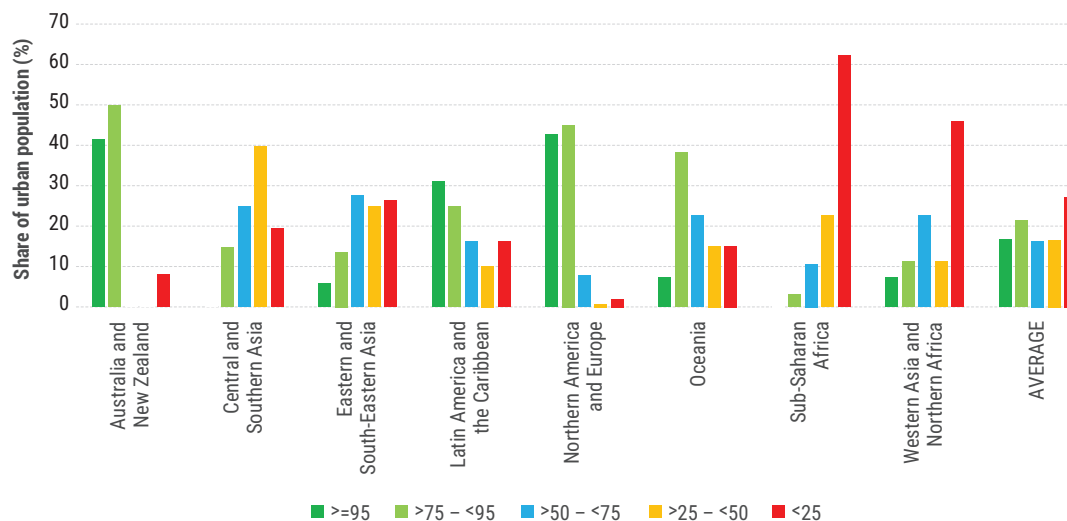
Public transport is fundamental to inclusive urban development. It connects people to jobs, education, healthcare and other essential services, while reducing dependence on private vehicles, lowering congestion and emissions, and supporting more productive and compact urban growth. For low-income households in particular, the cost, quality and reach of public transport can strongly influence where people are able to live and what opportunities they can access.

At the same time, the viability of public transport depends heavily on urban form. Rapid outward expansion, low-rise development and fragmented spatial growth make public transport more costly to provide and less efficient to operate, especially in newly urbanized and peripheral areas. These patterns can deepen inequalities in access to opportunity.

Access is improving, but 4 in 10 urban residents still lack convenient public transport

Data from a sample of 414 cities across 126 countries show that, as of 2025, about 4 in 10 urban residents still do not have convenient access to public transport, defined as living within 500 metres of a low-capacity public transport stop, or within 1 kilometre of a high-capacity system.²⁴ However, some progress is visible. Across the sampled cities, the share of the urban population with convenient access increased from 53.2 per cent in 2020 to 61.5 per cent in 2025. Yet current access remains far from universal, and many cities are still not expanding service fast enough to keep pace with urban growth.

This apparent improvement should be interpreted carefully. It may reflect real expansion of public transport services, especially bus and feeder networks, but also better mapping of existing routes, stops and low-capacity systems that were previously undercounted. Because most measured access comes from low-capacity modes, improvements in bus coverage, paratransit integration, route data and stop inventories can significantly affect indicator results, even where high-capacity systems remain limited. This makes

Figure 2.3.1: Proportion of cities with different levels of access to public transport, 2025

Source: UN-Habitat, Global Urban Indicators Database, 2026

the trend encouraging, but it also underscores the need to interpret access data alongside information on affordability, reliability, safety, service quality and accessibility.

Convenient access, however, does not necessarily equate to accessible transport. Distance to a stop or station is an important measure, but it does not fully capture whether transport can be used safely, affordably and independently by all residents. For persons with disabilities, older persons, caregivers, children and others with specific mobility needs, even 500 metres or 1 kilometre may represent a significant barrier. Proximity also does not capture the cost of travel, safety and security, service reliability, physical accessibility, or the inclusiveness of payment, information and navigation systems. More disaggregated data, including by sex, age and disability status, is therefore needed to understand who can actually access and use public transport.

Many cities remain substantially off track

A closer look at city-level performance reveals how uneven progress remains. In 2025, 114 of the sampled cities, or 27.5 per cent, were classified as very far from the target, meaning that less than 25 per cent of their populations had convenient access to public transport. A further 70 cities, or 16.9 per cent, recorded access levels between 25 and 50 per cent.

At the other end of the spectrum, 71 cities, or 17.2 per cent, had either achieved or were very close to universal access, while 90 cities, or 21.7 per cent, were close to the target. These patterns show that, although progress is possible, it remains unevenly distributed and often highly dependent on long-term investment and planning capacity.

Transport access remains lowest in Sub-Saharan Africa, Western Asia and Northern Africa

Cities in Sub-Saharan Africa remain the most disadvantaged of all regions, with 62.6 per cent classified as very far from the target, followed by cities in Western Asia and Northern Africa, at 46.2 per cent. These patterns point to the scale of the infrastructure and institutional deficits that continue to constrain public transport provision in rapidly urbanizing contexts. In many cities, urban growth has outpaced the expansion of formal public transport, while informal and paratransit systems provide essential daily mobility but remain unevenly regulated, integrated and captured in official data.

Nevertheless, some cities are beginning to address these gaps through more integrated approaches. Dakar illustrates one emerging pathway in Sub-Saharan Africa, combining investment in electric bus rapid transit with efforts to restructure public transport and

professionalize paratransit operators.²⁵ In Western Asia and Northern Africa, investments in metro, BRT and tramway systems in cities such as Cairo,²⁶ Amman²⁷ and Casablanca²⁸ point to the importance of linking network expansion with integrated land-use planning, walking and cycling access, affordability and service integration.

By contrast, cities in Australia and New Zealand, Northern America and Europe, and Latin America and the Caribbean generally have more established and robust transport systems. In each of these regions, more than half of sampled cities provide convenient access to public transport for more than 75 per cent of their populations. Latin America and the Caribbean shows that high access is achievable in middle-income contexts where investment has been sustained over time, including through BRT systems, metro networks, cable cars and integrated mobility systems. Medellín and Bogotá, for example, have used cable systems to connect low-income hillside and peripheral areas to wider public transport networks,²⁹ while Mexico City has expanded and integrated public transport, bus and bikeshare systems.³⁰

In Eastern and South-Eastern Asia, Jakarta offers a particularly relevant example of formal-informal integration.³¹ Its transport reforms have linked mass transit and bus systems with microbus services, route integration and fare integration, helping extend the reach of public transport into dense neighbourhoods and areas not easily served by high-capacity modes. In Central and Southern Asia, cities such as Delhi and Dhaka show the importance of expanding mass transit and bus systems while improving feeder services, walking and cycling access, and multimodal integration.³² These examples suggest that progress depends not only on building new infrastructure, but on connecting routes, fares, data systems, feeder services and land-use planning into more coherent metropolitan mobility systems.

Most transport access still depends on low-capacity systems

Public transport access in the sampled cities is still dominated by low-capacity systems such as buses. These account for an average of 78 per cent of the population with convenient access,

compared with only 22 per cent served by high-capacity modes such as metro, rail and ferries.

This helps explain both the progress observed since 2020 and the limitations of current access. Low-capacity modes can expand coverage more quickly and at lower cost than rail or metro systems, and they are often the only feasible way to serve dispersed, low-density or rapidly growing urban areas. However, where these systems are poorly regulated, overcrowded, unreliable, inaccessible or disconnected from wider networks, proximity to a stop may not translate into safe, affordable or usable transport. The challenge is therefore to improve and integrate low-capacity systems while also investing in high-capacity corridors where density and demand justify them.

Walking and cycling remain essential but continue to lack adequate investment



People cycle and walk across a bridge in Munich, Germany. Photo: Thu Lai Photography/Shutterstock

Walking and cycling are fundamental to inclusive and sustainable mobility. They are the most affordable and lowest-emission forms of transport, support health and local economic activity, and provide the first- and last-mile connections that make public transport usable. Yet they remain underprioritized in many transport systems, even though almost every public transport trip begins or ends on foot.

Walking and cycling rates are shaped by both urban form and infrastructure.³³ Higher densities bring more destinations within feasible walking and cycling distance, while safer street design, protected cycling facilities, crossings, lighting, shade and accessible footpaths make active

mobility more comfortable and reliable. In lower-income contexts, however, walking and cycling are often driven by financial necessity rather than choice, meaning that high levels of walking do not necessarily indicate safe or adequate conditions.

This is especially important in rapidly urbanizing regions where walking and cycling are widely used but poorly protected. In many African cities, for example, large shares of residents walk every day to reach work, school, health care, food, public transport and other services, yet pedestrian and cycling infrastructure remains limited, unsafe or inaccessible.³⁴ Investment in walking and cycling should therefore be treated as core transport investment, not as a secondary amenity. Safe footpaths, protected cycling networks, accessible crossings, traffic calming and walkable access to public transport stops are essential to making transport systems safe, affordable and accessible for all.

Road safety continues to be central to safe and inclusive mobility

Target 11.2 also calls for improved road safety, making safety a core part of sustainable urban mobility. Roads connect people to daily opportunities, but they also remain among the most dangerous public spaces in many cities. Road traffic crashes kill about 1.19 million people each year globally and injure tens of millions more, with the burden falling disproportionately on low- and middle-income countries and on vulnerable road users, including pedestrians, cyclists and motorcyclists.³⁵

This has direct implications for urban inclusion. Where streets are unsafe, convenient proximity to public transport does not translate into real access, especially for children, older persons, persons with disabilities, women, low-income residents and people who walk, cycle or use motorcycles because they have few alternatives. Unsafe roads can also discourage walking and cycling, weaken public transport access, increase household transport costs and reinforce dependence on private vehicles.

Improving road safety therefore requires a safe-system approach that places people, not only vehicles, at the centre of street design. Lower speeds, safer crossings, protected space for pedestrians and cyclists, safer public transport stops and interchanges, better street lighting, road safety data, enforcement and safer vehicles are all part of making transport systems more inclusive. Progress under target 11.2 should therefore be assessed not only by the distance to the nearest transport stop, but also by whether people can reach and use transport safely, affordably and independently.

Informal transport remains essential but undercounted

In many cities, informal and paratransit systems form the backbone of daily mobility. They often provide critical first- and last-mile connectivity, serve dense low-income neighbourhoods and peripheral areas, and connect residents to jobs, markets, schools and services beyond the reach of formal transport networks. Despite their importance, however, their contribution is often poorly captured in official monitoring, as information about their routes, stops, service frequency, safety and reliability usually lack documentation.

The priority should therefore be to recognize, improve and integrate the informal mobility systems that already serve many urban residents. This requires better data on informal routes and operations, safer and more accessible interchanges, coordinated routes and fares, improved vehicle and service standards, and meaningful engagement with operators, workers and users. Integrated approaches can also strengthen labour protection and local economic

Students use a 3D pedestrian crossing created through the My City Initiative, State of Palestine. © UN-Habitat





A cable car travels above hillside neighbourhoods in Medellín, Colombia. Photo: Natalia Schuchardt/Shutterstock

development, ensuring that transport reforms improve service quality without excluding the workers and small enterprises that sustain everyday mobility.

Transit-oriented development provides a critical link between transport access, housing and local economic development. In cities where informal transport and informal work are central to daily life, TOD should be planned around multimodal access, affordable housing, walking and cycling, public space, markets and feeder services. Station areas and corridors can support inclusion when they connect formal mass transit with informal and community-based mobility systems, rather than displacing them.

Faster progress will require more integrated transport planning and investment

Cities across many developing regions remain significantly off track on target 11.2. Closing these gaps will require stronger local transport institutions, better regulation and monitoring, and sustained investment in both low-capacity and high-capacity public transport. In many contexts, it will also require more realistic approaches to

informal and paratransit systems, recognizing their role in daily mobility while improving safety, reliability, accessibility, labour conditions and integration with formal networks.

These investments should be linked to integrated land-use and transport planning, including transit-oriented development and more inclusive urban design. TOD can help connect housing, mobility and local economic development when affordable housing, public space, jobs, markets and feeder services are planned around public transport corridors and stations. Accelerating this shift will also require supportive governance and financing tools, including stronger metropolitan transport institutions, zoning and land-use reforms that enable mixed-use and affordable housing near transit, parking reforms, and land value capture mechanisms that can help finance public transport, affordable housing and community facilities. The United Nations Decade of Sustainable Transport, 2026 – 2035, provides an important opportunity to accelerate action under target 11.2 by mobilizing greater attention, partnerships and investment around safe, affordable, accessible and low-carbon mobility systems.

Box 2.3.1: Connecting affordable homes to low-carbon mobility in California

When affordable homes are located far from jobs, services and public transport, low-income households often face higher travel costs, longer commutes and greater dependence on cars. In California, these pressures have been compounded by a severe housing affordability crisis and the need to reduce transport-related emissions. The Affordable Housing and Sustainable Communities Programme was created to address these challenges together, linking housing investment with transit access, walking, cycling and neighbourhood improvements.

The programme uses revenues from California's cap-and-trade system to fund integrated projects that place affordable housing near transit, jobs and daily services. Funding can support affordable housing development, housing-related infrastructure, transit improvements, active mobility networks and community amenities. This allows local governments, housing providers and transport partners to package investments around access rather than treating housing and mobility as separate sectors. The programme also prioritizes underinvested communities, where housing affordability pressures and transport disadvantages often overlap.

Over its first decade, the programme has supported more than 22,000 affordable homes in climate-friendly communities across California, with projects across dozens of counties and cities. Many combine new housing with cleaner transport options, including improved transit access, safer walking and cycling routes, electric vehicle charging and neighbourhood services. Its relevance for target 11.2 lies in a simple but often overlooked point: expanding public transport access depends as much on where affordable housing is built as on the transport network itself. When housing policy, climate finance and transport investment are aligned, they can reduce household costs, expand access to opportunity and support lower-carbon urban growth.

Source: California Strategic Growth Council



Millbrae Transit Station in California, United States, with BART service and nearby housing. Photo: Leonid Andronov/Shutterstock

2.4

Target 11.3. By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated, and sustainable human settlement planning and management in all countries.



Residents attend a city-organized meeting on proposed construction projects in Stockholm, Sweden. Editorial use only. Photo: Schager/Shutterstock

The outcomes of urbanization depend on how urban growth is planned, governed and negotiated. Target 11.3 sits at the core of the wider SDG 11 agenda because it addresses both the physical pattern of urban expansion and the governance arrangements through which urban decisions are made. When cities grow through more integrated planning and more regular, democratic and inclusive forms of participation, they are better able to respond to citizen needs, use land efficiently, allocate infrastructure more fairly and avoid locking in patterns of exclusion, congestion and environmental stress.

The relatively limited attention to sustainable urbanization and urban planning in VNRs is striking given how strongly they shape wider urban outcomes. The report's VNR analysis suggests that urban planning and urbanization have received comparatively limited attention, with the average reference share even slightly lower in 2021–2026 than in 2015–2020, although sensitivity analysis did not indicate a clear change over time. This does not mean that

planning has become less important. Rather, it suggests that one of the most foundational drivers of sustainable urban development often remains less visible in national narratives than the more immediate outcomes it helps produce, from disaster losses and housing deficits to environmental pressures, weak access to services and uneven patterns of urban growth. Legal and regulatory frameworks, which strongly influence whether urbanization is compact, inclusive and well managed, are similarly underrepresented, pointing to a gap between reporting on urban outcomes and reporting on the governance systems that shape them.

Housing choices directly shape whether urbanization becomes more compact, inclusive and sustainable or more fragmented and exclusionary. Housing demand drives much of urban expansion; housing location determines access to jobs, services and infrastructure; and housing typologies influence whether growth takes the form of compact development or low-density sprawl. The report's findings also show

that outward expansion is driven less by informal settlements than by planned low-rise housing at the urban edge. At the same time, housing outcomes are also shaped by governance, including whether communities can participate meaningfully in planning, whether priorities reflect lived realities, and whether urban growth is managed in ways that are socially inclusive as well as spatially efficient.

Indicator 11.3.1. Ratio of land consumption to population growth rate

Quick facts

- **Cities continue to consume land faster than their populations grow.** Across a sample of 781 cities in 123 countries, land consumption has remained higher than population growth since 2000, pointing to persistent inefficiencies in urban expansion.
- **The gap between land consumption and population growth is narrowing.** Both rates have declined over time, suggesting some improvement in land-use efficiency, yet urban land continues to expand faster than the population it accommodates.
- **Outward expansion remains the dominant spatial pattern of growth.** Between 2000 and 2025, built-up growth outside the 2000 urban footprint occurred at an average annual rate of 4.3 per cent, compared with 0.7 per cent for infill growth within that footprint, underscoring the continued importance of planning and servicing the urban edge.
- **Housing is the main driver of urban expansion.** In a sample of 110 cities, housing accounted for about 82 per cent of built-up areas, with low-rise housing alone taking up nearly 70 per cent of urban space and 63 per cent of newly built-up areas between 2010 and 2025.
- **More compact growth will need to be both better planned and more inclusive.** Densification, infill and mixed-use development are essential for land-use efficiency, but must be accompanied by affordable housing, inclusive zoning, tenure security and informal settlement upgrading to avoid displacement and exclusion.



Kinshasa city centre, Democratic Republic of the Congo. Photo: Issa Kashala/Shutterstock

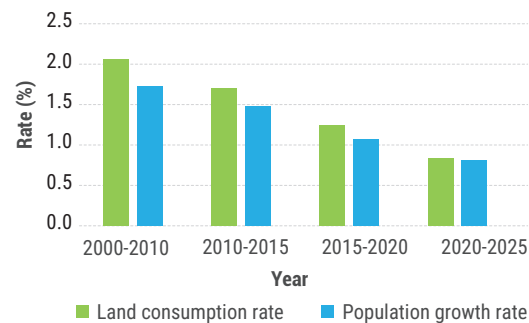
Cities continue to consume land faster than their populations grow, although the gap is narrowing

Urbanization continues to reshape the world. By 2025, an estimated 57.8 per cent of the global population was living in cities and urban areas, more than double the 28.8 per cent recorded in 1950.³⁶ Using the globally harmonized definition of urbanization, about 45 per cent of the world's population lives in cities, with a further 36 per cent in dense and semi-dense towns. This rapid growth in urban population has been accompanied by even faster spatial expansion.

Advances in remote sensing and geospatial analysis have made it increasingly possible to track changes in built-up areas over time. Although available datasets differ in methodology and may produce varying results at city or country level, they consistently point to the same pattern: cities continue to consume land faster than their populations grow. Earlier work by UN-Habitat and others also shows that smaller towns and urban areas often expand faster than larger cities, raising concerns about the loss of agricultural land, natural ecosystems and other important land uses.³⁷

New data from a sample of 781 cities in 123 countries confirm that **urban land consumption has remained higher than population growth since 2000. Yet the gap between the two rates has narrowed substantially**, from 0.34 percentage points in 2000–2010 to only 0.02 percentage

Figure 2.4.1: Land consumption rate and population growth rate, 2000-2025



Source: UN-Habitat, Global Urban Indicators Database, 2026

points in 2020–2025, as both land consumption and population growth rates have declined. This suggests some improvement in land-use efficiency over the past two and a half decades, with urban expansion becoming less land-

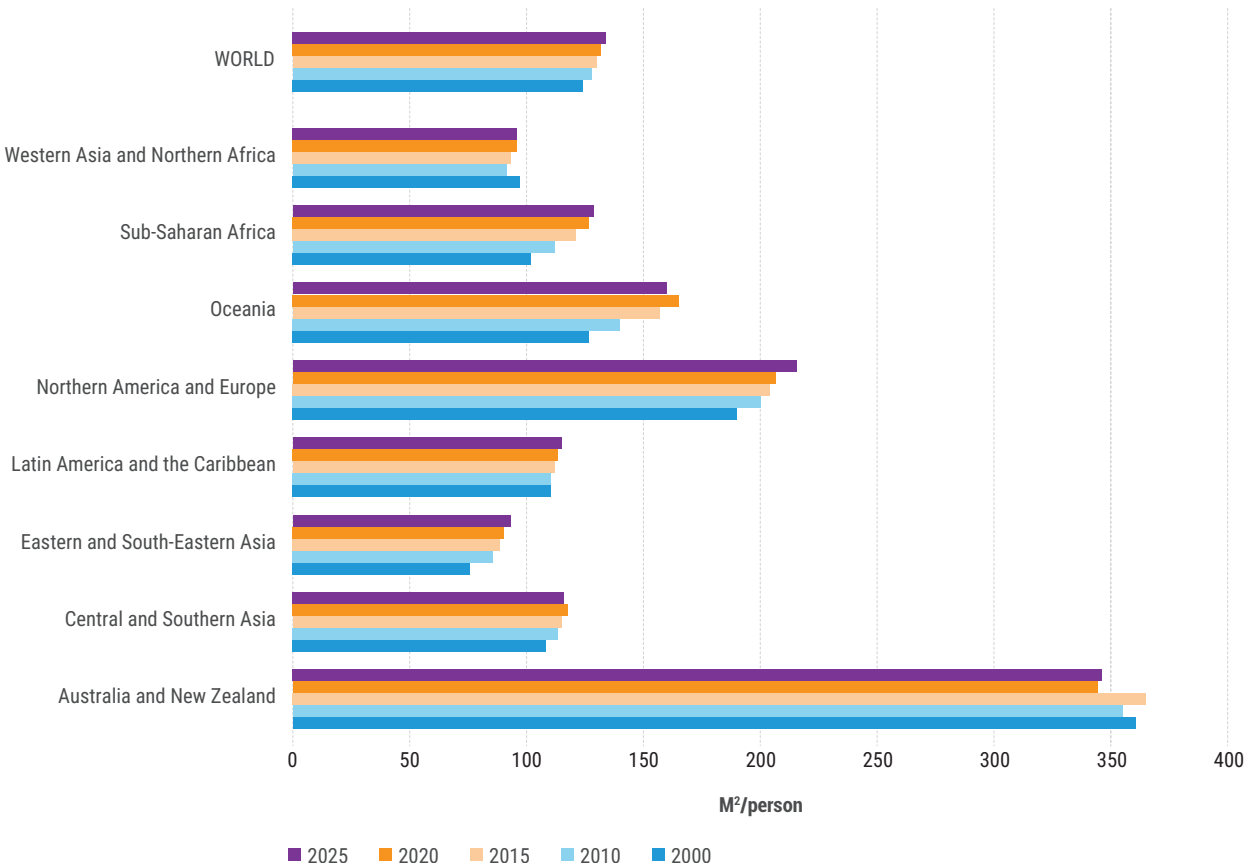
intensive relative to population growth. However, continued land consumption still raises concerns where expansion occurs into agricultural land, ecosystems, hazard-prone areas or poorly serviced urban peripheries.

One visible consequence is the gradual increase in built-up area per person. Across the sampled cities, built-up area per capita rose from 124 square metres in 2000 to 133 square metres in 2025 (Figure 2.4.2). This trend is likely linked in part to long-term changes in household formation, including declining household size,³⁸ which can increase land, infrastructure and energy needs per person even where population growth is slowing.

Outward expansion remains the dominant spatial pattern of growth

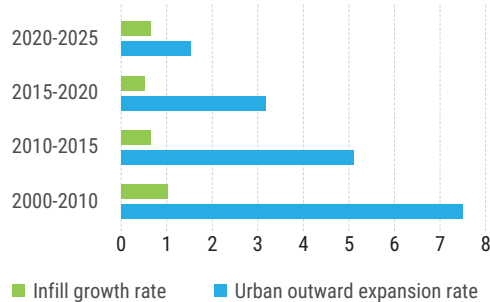
Two main spatial growth patterns emerge from the data. **Cities are both adding built-up area within their earlier urban footprints and**

Figure 2.4.2: Built-up area per capita by region, 2000-2025



Source: UN-Habitat, Global Urban Indicators Database, 2026

Figure 2.4.3: Average annual rate of urban outward expansion and infill growth, 2000-2025



Source: UN-Habitat, Global Urban Indicators Database, 2026

expanding outward into newly urbanized areas, but outward expansion has occurred much faster. Between 2000 and 2025, built-up growth outside the 2000 urban footprint occurred at an average rate around six times higher than infill growth within that footprint.

Both forms of growth have slowed over time (Figure 2.4.3), reflecting the broader slowdown in urban physical expansion shown above. However, outward expansion has remained the dominant pattern throughout the period, even as its rate has declined sharply since 2000. This suggests that much of the future sustainability challenge will continue to be decided at the urban edge, where decisions about land conversion, infrastructure provision, transport connectivity and environmental protection shape long-term patterns of urban development.

This pattern likely reflects a combination of cheaper and more readily available peripheral land, infrastructure investments that open new areas for development, weak land-use controls, and affordability pressures that push households and activities away from central locations. It underscores the need to guide expansion proactively through serviced land, public transport, basic infrastructure, environmental protection and stronger metropolitan and territorial planning.

Critically, these patterns should be interpreted as measures of the location of built-up growth, rather than as direct measures of sustainability or demographic density. Outward expansion can include planned, compact and well-

serviced development beyond earlier urban boundaries, while infill growth can include low-density construction or the loss of open and green spaces. The sustainability of either pattern therefore depends on the form, location and governance of development, including whether new growth is compact, connected to infrastructure and public transport, protective of ecosystems and agricultural land, and aligned with long-term urban and territorial planning.

Planned low-rise housing is the largest driver of outward urban expansion, not informal settlements



Low-rise suburban housing in Brisbane, Australia. Photo: Ecopix/Shutterstock

Housing demand is one of the main forces shaping outward urban expansion. Population growth, rising housing costs in central areas, preferences for larger living spaces and government-led development on urban fringes have all contributed to this pattern. Yet the data point to an important and often overlooked finding: in the sampled cities, **outward expansion is driven primarily by formal low-rise housing, rather than by unplanned housing or informal settlements.**

Evidence from a sample of 110 cities shows that housing accounts for by far the largest share of classified built-up areas, averaging about 82 per cent. Low-rise single housing alone occupies nearly 70 per cent of urban space. By comparison, non-residential areas account for around 18 per cent, multi-family apartments 5 per cent, unplanned low-rise housing 4 per cent and row housing 3 per cent.

Box 2.4.1: Enabling more homes within existing city limits in Auckland

Auckland's housing pressures were intensified by a planning system that limited the supply and diversity of homes in many already urbanized and well-connected areas. As the city grew, restrictions on density made it harder to accommodate new housing close to jobs, public transport, town centres and services, increasing pressure for outward expansion and contributing to affordability challenges.

The 2016 Auckland Unitary Plan changed the city's planning rules by rezoning much of its residential land to allow more intensive housing development. Rather than relying primarily on greenfield expansion, the reforms enabled more apartments, townhouses and multi-unit housing in existing urban areas, especially near public transport, employment and amenities. This made land-use policy a central lever for shaping how Auckland would absorb population growth.

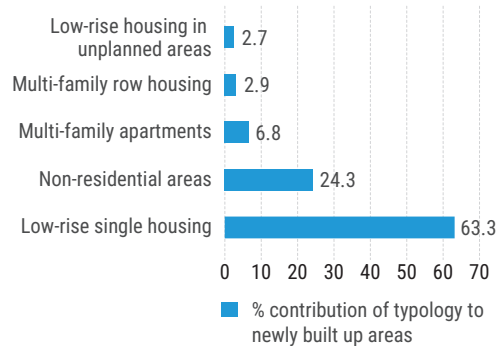
According to the Auckland City Council, around 21,800 additional homes approved between 2016 and 2021 were directly attributable to the Unitary Plan, representing about one third of all residential approvals during that period. Rents and house prices in Auckland also followed a lower growth path than the New Zealand average after the reforms, suggesting a positive impact on housing affordability as well. Auckland's experience points to the importance of aligning housing policy with urban form. More compact growth requires planning rules that allow enough homes to be built in areas located close to services and opportunities, while still managing infrastructure, environmental and affordability outcomes over time.

Source: Auckland Council; University of Auckland research.



Apartment construction in Auckland's central business district, New Zealand. Photo: corners74/Shutterstock

Figure 2.4.4: Average contribution of different housing types to newly built-up areas, 2010-2025



Source: UN-Habitat, Global Urban Indicators Database, 2026

The same pattern is visible in newly built-up areas. Between 2010 and 2025, low-rise single housing accounted for nearly two thirds of outward expansion, making it the single largest contributor to new urban land consumption (Figure 2.4.4). Unplanned housing, by contrast, represented only a small share of new urban growth in the sample, challenging the common assumption that informal settlements are the principal source of inefficient urban expansion. The evidence instead points to the land-intensive character of low-rise housing development, including the role of planning laws, zoning rules and infrastructure decisions that often allow, incentivize or actively promote low-density expansion at the urban edge. This underscores the need to rethink how cities regulate, finance and service new housing, so that planned development supports more compact, connected and inclusive urban growth.

Well-planned, inclusive and compact urban growth is needed

Outward expansion remains the dominant spatial pattern of urban growth. Better managing this trend will be essential for improving land-use efficiency, protecting agricultural land and natural ecosystems, reducing infrastructure costs, and strengthening the economic and environmental benefits of urban concentration.

This will require a shift towards more compact, connected and coordinated forms of urban development. Policy frameworks should support more efficient land use through integrated spatial planning, land-use regulation, stronger land governance and zoning systems that enable a wider range of housing types and mixed-use development. They should also guide outward expansion proactively, ensuring that new growth is connected to public transport, basic infrastructure, services and long-term metropolitan and territorial plans.

At the same time, compact development must be pursued in an inclusive and equitable way. Without adequate safeguards, infill growth and redevelopment can worsen housing affordability, reduce open space or contribute to displacement. Efforts to promote more efficient urban land use therefore need to be matched by affordable housing, inclusive zoning, secure tenure, participatory planning and the upgrading of informal settlements, so that the benefits of compact and connected growth are broadly shared.

Indicator 11.3.2. Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically

Quick facts

- **Participatory urban governance remains underdeveloped in most cities.** Data from 338 cities in 65 countries show that regular and democratic civil society participation in urban planning and management remains limited, with most cities recording low or medium levels of participation.
- **The gap is not only legal, but operational.** Many countries have formal laws and policies on participation, but implementation at local level remains uneven or inadequate for community needs, highlighting the difference between participation rights on paper and mechanisms that function in practice.
- **Participation is strongest for targeted groups, but weaker across broader urban governance.** Cities report more structures for the participation of women, youth, low-income groups, persons with disabilities and ethnic groups than for broad-based civic engagement across planning and management.
- **Budgeting remains the least participatory area.** Compared with urban planning, design and management, budget decision-making offers the weakest opportunities for participation, limiting residents' influence over how resources are allocated.
- **Stronger participation will require institutionalized and inclusive systems.** Clear mandates, regular procedures, local capacity, transparency and effective feedback mechanisms are all needed if participation is to move beyond consultation and shape urban development more meaningfully.



Women review a participatory settlement map in Afghanistan, supporting housing, land and property rights in areas of return © UN-Habitat

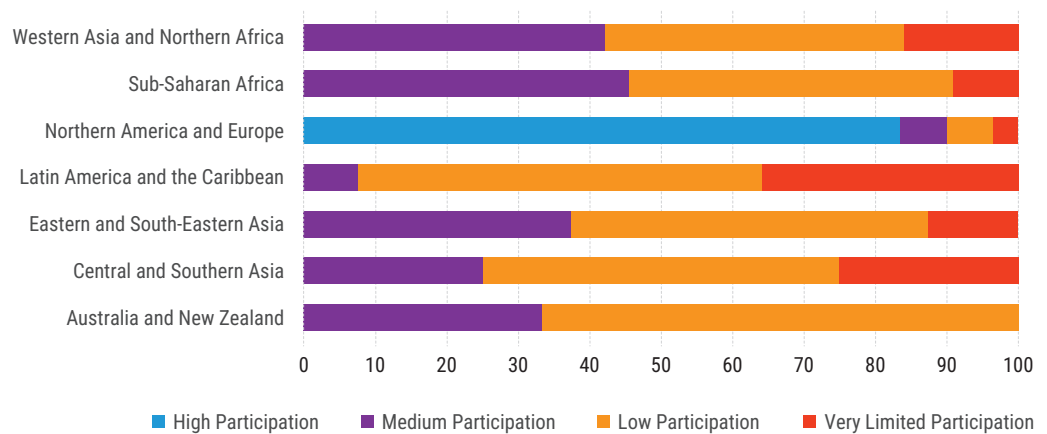
Civil society participation remains limited in most cities

Inclusive urbanization depends both on how cities grow and on whether residents can influence that growth. To this latter end, indicator 11.3.2 measures the extent to which cities have direct participation structures through which civil society can engage regularly and democratically in urban planning and management.

Data from 338 cities in 65 countries during the 2024–2025 period highlight that such participation remains limited in most cities.³⁹ Across nearly all regions, cities record low levels of participation, followed by medium levels and then very limited participation (Figure 2.4.5).⁴⁰ North America and Europe is the only region that appears to deviate from this trend, with over 80 per cent of sampled cities recording high levels of public participation.⁴¹

However, these regional results should be treated with caution, as they may not adequately capture progress on public participation in all contexts. Sampled cities from Latin America and the Caribbean, in particular, show very low levels of public participation, with over 90 per cent of cities recording low or very limited participation and no cities recording high participation levels. This finding is quite unexpected given the region's long history of participatory urban governance, including in budgeting, planning, master plans and community oversight mechanisms. Cities such as Porto Alegre, Belo Horizonte, Medellín, São Paulo and Rosario show that participation in the region has often moved beyond consultation,

Figure 2.4.5: Proportion of cities with a direct participation structure for civil society in urban planning and management that operates regularly and democratically⁴¹



helping residents influence municipal investment, local planning and neighbourhood priorities.⁴¹ The current results therefore suggest uneven institutionalization across the sampled cities and across the specific dimensions measured by the indicator, rather than an absence of participatory practices in the region.

Nevertheless, these findings point to a persistent gap in urban governance. Although participatory structures exist in many places, they are often not yet operating at the level needed to support more inclusive and accountable urban development.

The gap is not only legal, but operational

Many countries have established legal and policy frameworks to support public participation in urban planning, budgeting and decision-making. Brazil's City Statute, South Africa's municipal and spatial planning framework, Kenya's devolved county planning system⁴² and Colombia's territorial planning legislation⁴³ all illustrate how participation has been embedded in law, planning procedures or local governance systems. In some cities, digital platforms have also expanded the tools available for consultation, deliberation and participatory budgeting.

Yet indicator 11.3.2 goes beyond the existence of such provisions. It asks whether participation structures operate regularly and democratically in practice. In many cities, that remains a major weakness. Formal rights to participate do not necessarily translate into effective

local engagement for all parts of a community or into mechanisms that shape planning and management decisions in a sustained way.

Some participation models go further by linking engagement with long-term stewardship of land, housing and neighbourhood assets. Community land trusts, for example, can give residents a more durable role in decisions affecting land and housing by separating land ownership from housing use and retaining land for community benefit. The Caño Martín Peña Community Land Trust in San Juan, Puerto Rico (United States), illustrates this approach in a context of tenure insecurity, flood risk and displacement pressure.⁴⁴ By placing land under collective ownership and community governance, the model has helped residents remain in their neighbourhood while participating in decisions on upgrading, relocation, infrastructure and environmental recovery. For target 11.3, such models show how participation can move beyond one-off consultation toward co-management of the urban systems that shape community life.

Participation is weakest in budgeting

Across the sampled cities, **the most common participation structures are those that support the engagement of specific groups**, including women, youth, low-income groups, persons with disabilities and ethnic groups, **averaging 62 per cent**. These are followed by participation structures in urban planning and design (59.8 per cent) and urban management (57.8 per cent).

Participation in urban budget decision-making scores lowest, at 52.5 per cent.

This matters because budgeting directly influences how resources are allocated and which communities benefit from public investment. Where participation is weaker in this area, residents have less influence over the spatial and social distribution of urban development benefits.

More institutionalized participation is needed

Strengthening participation will require moving beyond ad hoc consultation towards more institutionalized and reliable systems of

engagement. This includes clear legal mandates, regular procedures, stronger local capacity and feedback mechanisms that show how public input is used.

Accessible digital tools can help expand reach, but they do not replace the need for inclusive local processes. Community-based engagement remains especially important in contexts where connectivity, digital skills or trust in public institutions are limited. Stronger participation will be essential if cities are to manage land expansion, housing pressures and infrastructure deficits in ways that are right-based, inclusive and broadly supported.

Box 2.4.2: Putting communities at the centre of upgrading in Thailand

Thailand's Baan Mankong programme emerged from a persistent challenge: many low-income urban communities faced insecure tenure, inadequate housing, weak infrastructure and limited influence over the decisions shaping their neighbourhoods. Conventional upgrading furthermore too often treated residents as merely beneficiaries of projects designed elsewhere. Baan Mankong has helped to change this relationship by making organized communities and citywide networks central to the planning, financing and implementation of settlement upgrading.

Launched in 2003 by the Community Organizations Development Institute (CODI), a public organization under Thailand's Ministry of Social Development and Human Security, the programme channels infrastructure subsidies and housing loans to community organizations rather than delivering standard housing projects directly. Communities survey settlements, prepare citywide upgrading plans, organize savings groups and negotiate with landowners, local authorities and public agencies to secure land through purchase, lease, land sharing or cooperative arrangements. This has allowed upgrading to address not only housing quality, but also tenure security, services, local infrastructure and the relationship between low-income communities and municipal planning systems.

Over time, Baan Mankong has become one of the world's most influential community-driven upgrading programmes, supporting housing and tenure improvements for hundreds of thousands of low-income households across Thai cities. Its relevance to target 11.3 and indicator 11.3.2 on public participation lies in the way participation has been embedded in its delivery. Residents are at the centre of the entire intervention, helping to define priorities, manage resources, negotiate land solutions and implement improvements. The experience underscores that more inclusive urban planning depends on institutions that trust communities as co-producers of urban development, while providing the finance, technical support and legal space needed for participation to shape outcomes.



Two-storey housing in Phuket, Thailand. Editorial use only. Photo: Karyna Kolesnyk/Shutterstock

2.5

Target 11.4. Strengthen efforts to protect and safeguard the world's cultural and natural heritage.



Historic streetscape in Narai-juku, a former post town on Japan's Nakasendo trail in the Kiso Valley. Photo: R.M. Nunes/Shutterstock

Cultural and natural heritage remains central to inclusive, resilient and place-based urban development

Cultural and natural heritage is an essential part of sustainable urban and territorial development. It anchors identity, social cohesion and place-based development, while also contributing to environmental sustainability, resilience, quality of life and the right to culture. Yet heritage assets are under growing pressure from rapid urbanization, climate change, conflict, disasters, environmental degradation and insufficient investment.

Its strong visibility in recent national reporting suggests that heritage continues to carry political and cultural weight well beyond the heritage sector itself. The report's analysis of VNRs suggests that heritage remains more visible in SDG 11 reporting than might be expected, ranking among the most referenced themes overall. This likely reflects the importance of culture, tourism, historic urban areas, natural landscapes and identity in national development narratives. At the same time, such references do not always correspond directly to urban heritage policy under target 11.4 and should therefore be interpreted with caution.

The cultural adequacy of housing is one of the least acknowledged ways in which heritage is lived and reproduced. Housing design, materials and settlement patterns help shape, maintain and safeguard the cultural identity of cities and communities, while historic housing areas often form part of a city's living heritage. In this sense, safeguarding heritage is not separate from the wider urban agenda, but part of ensuring that urban development remains locally grounded, socially meaningful and responsive to the rights, needs, identities and traditions of communities.

Indicator 11.4.1. Total per capita expenditure on the preservation, protection, and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal).

Quick facts

- **Investment in heritage remains low in many countries.** More than one third of reporting countries spent less than 10 PPP dollars per capita on cultural and natural heritage in 2024, or the latest available year.
- **Heritage spending is recovering, but unevenly.** Fifty-seven per cent of reporting countries recorded higher investment in 2024 than in 2021, while others continued to report lower or constrained expenditure.
- **Reporting has improved substantially.** The number of countries reporting on indicator 11.4.1 or related components rose threefold, from 30 in the initial 2020 survey cycle to 92 in the latest cycle.

- **Large disparities persist across countries and regions.** Europe and Northern America recorded the highest median per capita public expenditure, at 93 PPP dollars, while median spending remained below 20 PPP dollars in Latin America and the Caribbean and in Northern Africa and Western Asia.
- **Local and private expenditure remain weakly captured.** Only 41 per cent of survey respondents reported local government spending at least once, and most countries do not systematically compile data on private financing for heritage.

Box 2.5.1: Culturally adequate housing for the Samu Bajau community in Surigao City

Cultural heritage is lived through housing, settlement patterns, construction practices and the relationships that communities maintain with land, water, materials and place. In housing, cultural adequacy means designing homes that reflect local climate conditions, livelihoods, household structures, cultural identity and ways of living, while meeting modern standards of safety, services, resilience and dignity.

In Surigao City, Philippines, Sama Bajau families have faced precarious housing, poverty and persistent exclusion from mainstream housing programmes. Land-based relocation models have often failed to reflect their seafaring way of life, weakening ties to coastal livelihoods and cultural identity while leaving households exposed to monsoon and typhoon risks. The Huy-anan nan Bajau sa Surigao initiative responded by developing a coastal ecovillage that combined secure tenure with climate-resilient stilt housing adapted to the community's relationship with the sea.

The project brought together the City Government of Surigao, UN-Habitat Philippines, national agencies, community members and other partners. Through the People's Process, Sama Bajau families helped shape housing design, organize construction and participate in local decision-making. The initiative also linked housing with renewable energy and water systems, livelihood support, mangrove rehabilitation, waste management, legal identity and access to education. It reportedly provided 132 households, or around 660 people, with secure tenure and resilient housing. Its relevance for target 11.4 lies in demonstrating that culturally adequate housing safeguards heritage by enabling communities to remain connected to the environments, livelihoods, social practices and governance arrangements through which their identity is lived.

Source: UN-Habitat.



Climate-resilient stilt homes in the Huy-anan nan Bajau ecovillage in Surigao City, Philippines, designed with the Sama Bajau community to support culturally appropriate coastal living. Photo: UN-Habitat.

Reporting on heritage has expanded rapidly

Monitoring of indicator 11.4.1 has improved markedly in recent years. Following the fifth UNESCO Institute for Statistics global survey, 92 countries reported data on the indicator or its related components at least once, compared with 30 in the initial 2020 cycle. Seventy-four of these countries reported data on public expenditure for cultural and natural heritage.

This expansion points to stronger national engagement with the indicator and improved capacity to track heritage-related expenditure. It also suggests better coordination in some countries between institutions responsible for culture, environment and public finance.

Public expenditure remains low in many countries

Despite better reporting, spending levels remain modest in many contexts. More than one third of reporting countries spent less than 10 PPP dollars per capita on heritage preservation, protection and conservation in 2024 or the latest available year. The largest share of countries, 27 per cent, reported expenditure between 10 and 40 PPP dollars per capita.

These figures suggest that, although heritage is widely recognized as important, public investment often remains limited relative to the scale of the pressures facing cultural and natural assets. In rapidly urbanizing areas, this can leave heritage sites particularly exposed to redevelopment pressures, environmental degradation and climate-related risks.

Spending levels vary sharply across and within regions

Public expenditure on heritage varies widely across countries and regions. Europe and Northern America recorded the highest median per capita expenditure, at 93 PPP dollars. At the same time, this regional figure masks wide internal disparities, with per capita spending ranging from as little as 3 PPP dollars to more than 500.

Among the other regions with sufficient reporting coverage, median spending remained below 20 PPP dollars per capita, including 12.97 PPP dollars in Latin America and the Caribbean and 18.77 PPP dollars in Northern Africa and Western Asia. These disparities point to unequal fiscal capacity to protect and conserve heritage, even where reporting systems have improved.

Recovery since the pandemic has been uneven

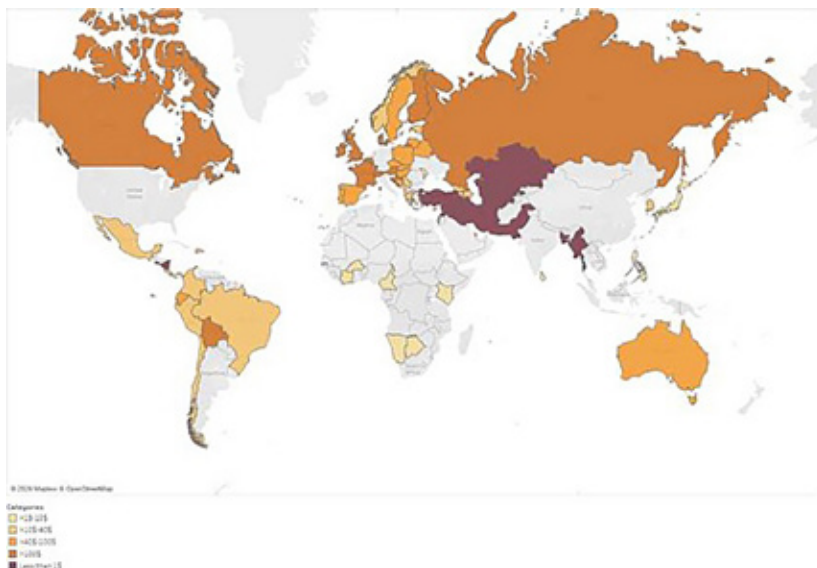
After the disruptions associated with the COVID-19 pandemic, expenditure on heritage preservation has increased in many countries. Fifty-seven per cent of reporting countries indicated that their investment levels in 2024 were higher than in 2021.

The recovery, however, has been uneven. Some countries continue to report lower or constrained expenditure, suggesting that heritage remains vulnerable to fiscal pressure and shifting budget priorities. This matters because risks to heritage are rising, particularly from climate impacts, disasters and uncontrolled urban development.

Local and private financing remain major blind spots

Important gaps remain in the expenditure picture. Only 41 per cent of all survey respondents reported local or municipal government

Map 2.5.1: Public expenditure on cultural and natural heritage, per capita PPP\$ (Constant 2017), 2024 or latest available year



Source: UNESCO, UIS, 2026, SDG 11.4.1 database

expenditure on cultural and natural heritage at least once, despite the central role of cities and local authorities in managing historic urban areas, cultural landscapes and development pressures.

Private financing remains even less visible. Most countries do not systematically compile data on private expenditure for heritage preservation. As a result, current reporting provides only a partial view of national and local efforts to safeguard heritage and does not yet capture the full range of financing that may support conservation. The

connection between heritage investment and urban development is especially visible in historic residential areas, where conservation choices directly affect housing conditions, public space, safety, local livelihoods and the ability of long-standing communities to remain in place.

Better data will be needed to guide investment and accountability

Recent improvements in reporting are important, but stronger data systems will be needed if expenditure data are to support policy and accountability more effectively. More comprehensive monitoring across levels of government, better consolidation of public expenditure data, improved cooperation between culture and environment institutions, and stronger city-level reporting are all needed to assess whether heritage protection is keeping pace with urbanization and rising risk.

Expenditure data also need to be interpreted alongside wider evidence, including conservation outcomes, policy frameworks, local good practices and exposure to climate and disaster risk. Without that broader perspective, spending figures alone provide only a partial picture of progress under target 11.4.

Safeguarding heritage will require stronger investment and more integrated approaches

Protecting cultural and natural heritage will require more than higher spending alone. It will also depend on how effectively investment is linked to local planning, conservation practice, risk reduction and community needs. In many urban contexts, heritage protection competes with other urgent demands for land, infrastructure and public resources, making integration into wider urban and territorial development strategies essential.

This is also relevant to housing. Cultural adequacy remains an overlooked dimension of adequate housing, even though housing is closely tied to the cultural identity and heritage of cities. Stronger attention to locally appropriate design, the use of sustainable materials and housing solutions that reflect community practices and identities can help strengthen the connection between heritage protection and more inclusive urban development.

Box 2.5.2: Revitalizing living heritage along Bahrain's Pearling Path

Muharraq, Bahrain's former capital, was once a major centre of the Gulf pearling economy. After the decline of the pearling industry in the twentieth century, many of the city's historic houses, markets and public spaces deteriorated, while the urban fabric that had supported pearling-related livelihoods and community life came under pressure. The challenge was to safeguard heritage that was embedded in an active urban neighbourhood, rather than preserve isolated monuments detached from daily life.

The Revitalisation of Muharraq, linked to the Pearling Path World Heritage site, restored and adapted historic buildings associated with Bahrain's pearling history while improving the surrounding public realm. The intervention connected merchant houses, shops, storehouses, a mosque, the seashore and other heritage assets through a walkable route, supported by new cultural venues, public squares, shaded spaces, wayfinding, lighting and landscape improvements. The project combined conservation with contemporary architecture and urban design, helping reconnect historic buildings with streets, community facilities and local economic activity.

The experience offers a strong example of heritage protection as urban regeneration. By restoring historic buildings, creating usable public spaces and reactivating cultural and community uses, Muharraq shows how conservation can strengthen the identity and everyday life of old urban districts. For target 11.4, it points to the importance of safeguarding heritage through place-based investment that links buildings, public spaces, local livelihoods, cultural memory and the wider urban fabric.

Source: Bahrain Authority for Culture and Antiquities; UNESCO World Heritage Centre; Aga Khan Trust for Culture.



People walk through a historic street featuring traditional architecture and fishing baskets in Manama, Bahrain. Editorial use only. Photo: frantic00/Shutterstock

2.6

Target 11.5. By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.



Flooding disrupts daily life in Kathmandu, Nepal, in July 2024. Editorial use only. Photo: AP Tolang/Shutterstock

Disaster risk is increasingly exposing the costs of urban development that is not risk-informed. Rapid urbanization, climate change, environmental degradation and the concentration of people, infrastructure and assets in hazard-prone areas are increasing both exposure and vulnerability, especially in low-income and rapidly urbanizing contexts. As a result, disasters are not only interrupting urban development; they are also revealing where it has been least resilient, least equitable and least prepared.

Recent national reporting illustrates how strongly disasters now shape the urban agenda. The report's analysis of Voluntary National Reviews finds that disaster impacts have become the most referenced SDG 11 theme in recent reporting, rising sharply between the 2015–2020 and 2021–2026 periods across all regions and income groups. This shift suggests that climate-related hazards, losses, displacement and infrastructure disruption are increasingly defining how countries view progress on sustainable development, especially in cities. A similar pattern is reflected in national climate plans, with UN-Habitat's recent analysis of 142 NDCs

3.0 finding increased explicit urban references to climate risks such as floods, droughts and extreme heat, as well as emerging attention to urban loss and damage.⁴⁵

Housing meanwhile plays a critical role in disaster impacts, as unsafe conditions can elevate hazards into large-scale disasters. Climate-related hazards are projected to destroy 167 million homes by 2040, underscoring the scale of the threat facing housing systems.⁴⁶ Poor-quality housing, informal settlement growth in floodplains, unstable slopes and other high-risk areas, and inadequate access to resilient infrastructure can all magnify disaster impacts. These risks are not evenly distributed: informal settlements and low-income communities often face disproportionately high exposure and limited adaptive capacity, amplifying existing vulnerabilities and deepening housing inequalities. Conversely, safer housing, risk-informed land-use planning and the upgrading of high-risk settlements can help reduce mortality, displacement and economic loss, while strengthening resilience for the communities most exposed.

Indicator 11.5.1. Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population

Quick facts

- **Disaster mortality has declined, but human impacts remain high.** Between 2015 and 2024, disasters caused an average of 41,023 deaths annually worldwide, while the global mortality rate averaged 0.75 deaths and missing persons per 100,000 population.

- **The number of people affected remains persistently high.** During the same period, disasters affected an average of 123 million people each year, equivalent to 2,445 persons per 100,000 population.
- **Preparedness has improved, but underlying risk continues to grow.** Expanded early warning systems, preparedness and evacuation planning have helped reduce mortality, yet rapid urbanization, climate hazards and informal settlement growth continue to increase exposure.
- **Housing systems are increasingly exposed to climate-related hazards.** Climate-related hazards are projected to destroy 167 million homes by 2040, with informal settlements and low-income communities facing disproportionate exposure and limited adaptive capacity.
- **The burden remains highly unequal.** LDCs, LLDCs and SIDS continue to experience disproportionately high disaster mortality relative to their population size.
- **Reducing losses will require more risk-informed urban development.** Safer housing, resilient infrastructure, settlement upgrading and risk-informed land-use planning will be essential to reduce exposure and vulnerability.

Flooded homes in Anam, Anambra State, Nigeria. Photo: Chinedu Chime/Shutterstock



Disaster mortality has fallen, but the number of people affected remains high

Member States report on indicator 11.5.1 through the Sendai Framework Monitor under Targets A and B of the Sendai Framework. Between 2015 and 2024, the global disaster mortality rate averaged 0.75 deaths and missing persons per 100,000 population, corresponding to an average of 41,023 disaster-related deaths annually.

At the same time, the number of people affected by disasters remained persistently high. During the same period, an average of 123 million people were affected each year, equivalent to 2,445 persons per 100,000 population. This contrast suggests that, while life-saving capacities have improved, underlying risk drivers remain insufficiently addressed.

Rising exposure is outpacing gains in preparedness

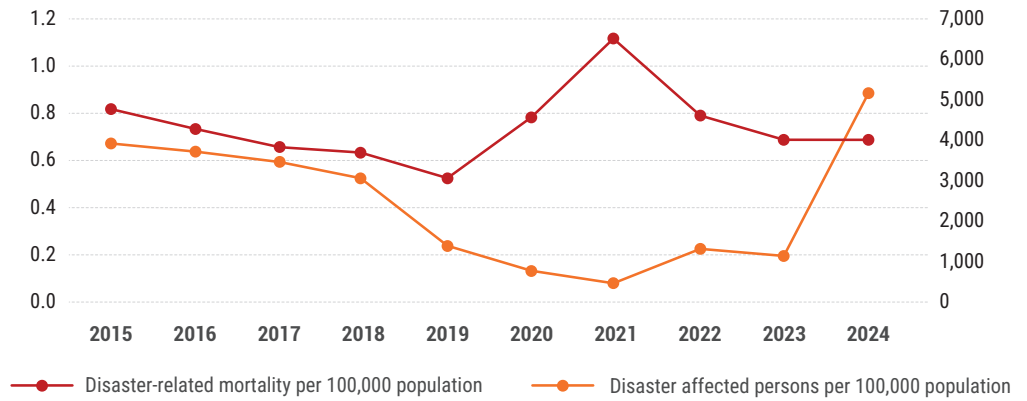
Improvements in disaster preparedness, evacuation systems and multi-hazard early warning systems have helped reduce mortality in many regions. Yet these gains are being offset by rising exposure and vulnerability, driven by rapid urbanization, environmental degradation, expanding informal settlements and intensifying climate-related hazards.

In urban areas, these risks are increasingly systemic. Damage to housing, transport, water, energy and health systems can trigger cascading effects that disproportionately affect low-income and vulnerable populations. The persistence of high numbers of affected people shows that better preparedness alone is not enough if urban growth continues to create new risk.

Vulnerable countries continue to bear a disproportionate burden

Countries in special situations continue to experience disproportionately high disaster impacts. Between 2015 and 2024, LDCs accounted for 28.7 per cent of global disaster mortality despite representing only 12 per cent of the population of reporting countries. LLDCs accounted for 20.8 per cent of global mortality while comprising 5.1 per cent of the population,

Figure 2.6.1: Disaster mortality and affected persons, 2015-2024



Source: Sendai Framework Monitor.

and SIDS represented 1.6 per cent of global mortality despite accounting for only 0.5 per cent.

These disparities reflect the combined effects of higher exposure, weaker infrastructure, constrained fiscal capacity and lower adaptive capacity. They also reinforce the need for targeted support to countries facing the greatest structural vulnerabilities.

Risk drivers remain deeply embedded in patterns of urban development

Progress on this indicator continues to be constrained by the way urban growth is taking

place. Informal settlement expansion, weak land-use control, poor housing quality and inadequate infrastructure continue to increase the number of people exposed to hazards, particularly in floodplains, unstable slopes and other high-risk areas.

Stronger risk-informed planning, better housing and infrastructure, and more systematic upgrading of high-risk settlements will therefore be essential to reduce future mortality and the number of people affected. Multi-hazard early warning systems also need to be matched by sustained investment in prevention and resilience.



Two boys walk past damaged buildings in the Syrian Arab Republic, where UN-Habitat is supporting post-earthquake recovery planning, damage assessment and the restoration of basic services. © UN-Habitat

Box 2.6.1: Rebuilding safer homes and settlements after floods in Sindh

The 2022 floods in Pakistan exposed the depth of housing and settlement vulnerability in Sindh. Flood-affected families faced widespread damage to homes, displacement, limited access to resilient infrastructure and gaps in technical and social support for recovery. Reconstruction was further constrained by weak coordination across sectors, limited inclusive planning, shortages of skilled labour and materials, and continued reliance on carbon-intensive brick production. The challenge extended beyond replacing damaged homes to rebuilding settlements in ways that could reduce future flood risk and improve access to essential services.

Catholic Relief Services, working through the Sindh Housing Recovery and Reconstruction Platform, responded through three linked areas of action. First, it supported owner-driven reconstruction of disaster-resilient homes, using locally appropriate materials and four construction typologies, with cash assistance released in tranches and technical support provided to households and local masons. Second, it piloted the Climate Resilient Settlement Development Plan in nine villages, integrating housing recovery with water and sanitation, education, disaster risk reduction and local infrastructure planning. Third, it began work to reduce the environmental impact of reconstruction by supporting training on Zigzag technology for brick kilns. Drone mapping, GIS dashboards and flood modelling were used alongside community-led planning to guide decisions and monitor progress.

By 2025, CRS had supported the reconstruction of 755 flood-resilient homes, trained 1,900 local masons in resilient construction and supported 18 women as construction supervisors. The programme also helped validate and include 61 households initially missed in beneficiary surveys. The Climate Resilient Settlement Development Plan pilot covered 800 households and is being scaled through provincial planning systems to more than 1,600 settlements across 14 districts. The Government of Sindh has also endorsed minimum construction guidelines informed by the initiative. Sindh's experience underscores that post-disaster recovery is more durable when safer housing is linked with settlement-level planning, community leadership, local skills, inclusive targeting and coordination across housing, infrastructure, services and climate action.

Source: Catholic Relief Services (CRS) and Sindh Housing Recovery and Reconstruction Platform (SHRRP), case study submission to UN-Habitat.



A community in Sindh Province, Pakistan, where flood-resilient housing and climate-resilient settlement planning are supporting recovery from the 2022 floods. Photo: Catholic Relief Services.

Indicator 11.5.2. Direct economic loss attributed to disasters in relation to global gross domestic product

Quick facts

- Disaster losses remain persistently high.** Between 2015 and 2024, direct economic losses from disasters averaged more than \$110 billion annually worldwide.
- Losses continue to undermine development gains.** Reported losses were equivalent to about 0.28 per cent of the GDP of reporting countries during the period.
- The burden falls disproportionately on vulnerable economies.** LDCs and LLDCs continue to experience much higher disaster losses relative to the size of their economies.
- Actual losses are likely higher than reported.** Methodological challenges and underreporting, especially of indirect losses and impacts on informal economies, mean the global total is likely underestimated.
- Reducing losses will require stronger risk-informed investment.** Fiscal policy, infrastructure planning, housing development and financial systems all need to integrate disaster and climate risk more systematically.

Disaster-related economic losses remain high

Member States report on indicator 11.5.2 through the Sendai Framework Monitor under Target C of the Sendai Framework. Between 2015 and 2024, reported direct economic losses from disasters averaged more than \$110 billion annually worldwide, equivalent to 0.28 per cent of the GDP of reporting countries.

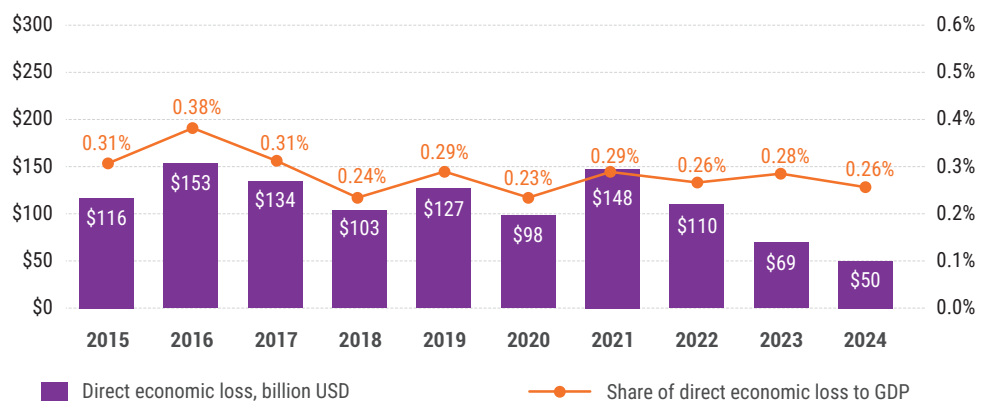
These losses remain substantial despite growing attention to resilience and preparedness. They continue to undermine sustainable development gains and place pressure on already constrained public finances.

Vulnerable economies face the greatest relative impacts

The burden of disaster losses is highly uneven. Between 2015 and 2024, LDCs accounted for 12.91 per cent of globally reported economic losses despite representing only 1.36 per cent of total GDP of reporting countries. LLDCs accounted for 7.19 per cent of losses while representing only 1.33 per cent of GDP.

These figures highlight the disproportionate impact of disasters on countries with limited fiscal space and high exposure to hazards. In such settings, disaster losses can have long-lasting consequences for development, recovery and debt sustainability.

Figure 2.6.2: Direct economic loss, in billions (USD), 2015-2024



Source: Sendai Framework Monitor.

Systemic risks are increasing the scale and complexity of losses

Disaster losses are increasingly shaped by systemic and cascading risks linked to climate change, environmental degradation, rapid urbanization and interconnected infrastructure systems. Damage to housing, transport, energy and supply chains can trigger wider economic disruption that extends far beyond the directly affected area.

Housing is central to this pattern. Damage to homes represents a major share of disaster losses in many urban areas and can generate long-term displacement, livelihood disruption and social vulnerability. Where building standards are weak and development expands into hazard-prone areas, future losses are likely to continue rising.

Better loss data and stronger risk governance will be essential

Progress is constrained not only by exposure, but also by weak loss accounting. Many countries still face difficulties in measuring and reporting disaster losses comprehensively, especially indirect losses and impacts on informal economies. As a result, actual losses are likely substantially higher than current figures suggest.

Reducing future losses will require stronger integration of disaster and climate risk into public investment, infrastructure planning, housing policy and financial regulation. Better disaster loss data, more resilient infrastructure and stronger international support for vulnerable economies will all be needed to limit the accumulation of future risk.

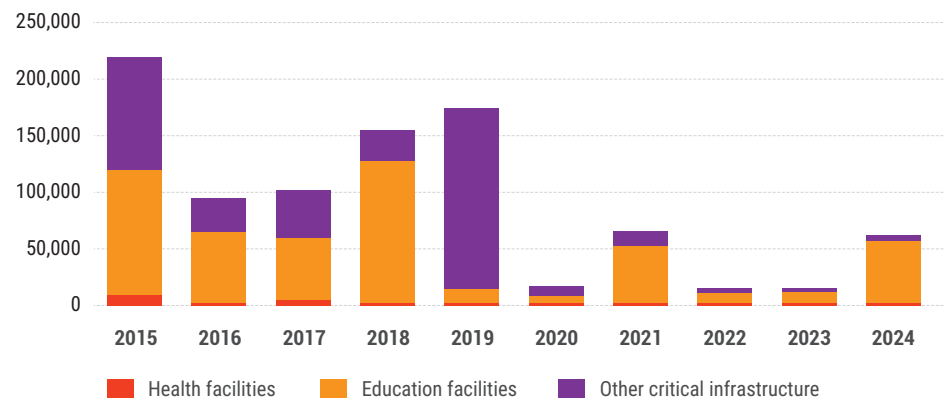
Fire-damaged industrial buildings.
Photo: Ajdin Kamber/Shutterstock



Indicator 11.5.3. Damage to critical infrastructure and disruptions to basic services attributed to disasters

Quick facts

- **Disasters continue to damage critical infrastructure at large scale.** Between 2015 and 2024, disasters destroyed or damaged an average of 91,847 critical infrastructure units and facilities each year.
- **Service disruptions remain widespread.** Over the same period, disasters caused more than 1.5 million disruptions to essential services annually, including health and education.
- **Infrastructure impacts are increasingly systemic.** Damage to transport, energy, water, communications and public services can create cascading effects across urban systems.
- **Rapid urbanization and climate risks are increasing infrastructure vulnerability.** Aging assets, informal expansion and infrastructure deficits continue to heighten risk in many cities.
- **More resilient and better coordinated systems are needed.** Stronger design standards, continuity planning and risk-informed investment will be essential to reduce future disruption.

Figure 2.6.3: Disruption to health, educational facilities, and other critical infrastructure, 2015-2024

Source: Sendai Framework Monitor.

Damage to infrastructure and services remains widespread

Member States report on indicator 11.5.3 through the Sendai Framework Monitor under Target D of the Sendai Framework. Between 2015 and 2024, disasters destroyed or damaged an average of 91,847 critical infrastructure units and facilities annually. During the same period, they caused more than 1.5 million disruptions to essential services each year, including health and education.

These figures illustrate the continuing scale of disaster-related disruption and its implications for communities, service delivery and recovery.

Infrastructure failures are increasingly cascading across urban systems

Damage to infrastructure does not only generate direct losses. It also disrupts the interconnected systems on which urban life depends. Failures in transport, electricity, water, communications, housing and health services can quickly cascade across sectors, prolong displacement, interrupt livelihoods and slow recovery.

These risks are becoming more complex as climate change, environmental degradation, urban concentration and interdependencies between physical and digital systems continue to deepen. In rapidly growing cities, infrastructure deficits and informal expansion often make these vulnerabilities more severe.

Resilience gaps remain pronounced in rapidly growing and vulnerable cities

Progress on this indicator is constrained by aging infrastructure, inadequate maintenance, weak coordination and limited investment in resilience. In many urban areas, especially those experiencing rapid growth, infrastructure systems are expanding without sufficient risk assessment, redundancy or continuity planning.

These weaknesses are particularly consequential for low-income households, who are often less able to absorb prolonged service disruption. In dense informal settlements, disruptions to water, sanitation, electricity or transport can quickly deepen displacement and vulnerability.

More resilient infrastructure will require sustained investment and coordination

Reducing future disruption will require stronger integration of climate and disaster risk into infrastructure planning, design, construction and maintenance. Governments will need to prioritize resilient infrastructure, stronger building standards, infrastructure redundancy and regular stress-testing of critical systems.

Progress will also depend on better coordination among national and local authorities, infrastructure operators and financing institutions. More risk-informed investment in transport, water, energy, health and education systems can significantly reduce cascading impacts and improve continuity of essential services during disasters.

2.7

Target 11.6. By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management



Young volunteers take part in a community clean-up campaign in Tunisia, promoting waste awareness and environmental stewardship. © UN-Habitat

The environmental burden of urban life is still falling most heavily on those least able to avoid it. Air pollution, uncollected waste and weak environmental services continue to undermine public health, water quality, climate resilience and the quality of everyday life in cities, with the greatest impacts often concentrated in low-income and underserved communities. Reducing the environmental impact of cities is therefore both an ecological objective as well as a matter of equity, health and urban inclusion.

Environmental quality has become one of the more visible urban themes in national SDG discourse. The report's analysis of Voluntary National Reviews suggests that waste, air pollution and related environmental pressures remain among the most consistently referenced SDG 11 themes overall, and are especially prominent in high-income countries and in Europe and Northern America. This visibility likely reflects the growing recognition that urban environmental

risks are increasingly central to how countries understand liveability, resilience and sustainability.

Poor housing conditions often turn environmental exposure into a daily urban reality. The connection to housing is especially clear where overcrowding, weak basic services, household fuel use, open waste burning and poorly planned settlement patterns heighten exposure to pollution and environmental hazards. Better located, better serviced and more resilient housing can therefore help reduce not only shelter deprivation, but also the environmental risks that shape health and well-being across cities.

Indicator 11.6.1. Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated by cities

Quick facts

- **Municipal waste collection shows tentative signs of progress, but remains uneven.** City-level data show average collection coverage of 90.4 per cent in the latest sample, while repeated observations suggest modest improvements in some cities. However, the dataset is not sufficiently balanced to support strong global or regional trend claims, and large gaps remain where waste systems have not kept pace with rapid urban growth.
- **Regional disparities remain stark.** Average coverage exceeds 90 per cent in Australia and New Zealand, Western Asia and Northern Africa, Northern America and Europe, and Latin America and the Caribbean, but falls to 65.8 per cent in Eastern and South-Eastern Asia, 62.5 per cent in Oceania and 58.4 per cent in Sub-Saharan Africa.

- **Many cities are still far from universal collection.** Only 45 per cent of cities reached collection coverage above 90 per cent, while a smaller but highly vulnerable group remained below 50 per cent.
- **Sub-Saharan Africa faces the largest service gap.** The region records both the lowest average coverage and the highest concentration of cities with very low levels of waste collection, with particularly serious implications for residents of slums, informal settlements and underserved neighbourhoods.
- **Global waste generation is rising rapidly.** Recent global estimates suggest that municipal solid waste generation has already reached more than 2.5 billion tonnes per year and could approach 3.8–3.9 billion tonnes by 2050 without stronger action.
- **Collection alone is not enough.** Progress under target 11.6 depends not only on collecting waste, but also on managing it in controlled facilities and reducing disposal through prevention, recovery and recycling.

Waste collection shows tentative signs of progress, but major service gaps remain

Effective waste management is fundamental to public health, environmental protection and climate resilience. To this end, indicator 11.6.1 measures the proportion of municipal solid waste that is regularly collected and managed in controlled facilities. As waste generation rises, cities need to expand regular collection while also ensuring that collected waste is safely treated, recovered or disposed.

Recent global evidence confirms that waste generation is rising faster than many local systems can manage. The World Bank's What a Waste 3.0 estimates that the world generated 2.56 billion tonnes of municipal solid waste in 2022, already reaching a level that earlier projections did not expect until 2030, and projects that this could rise to 3.86 billion tonnes by 2050 under business as usual.⁴⁷ UNEP's Global Waste Management Outlook 2024 similarly warns that the direct and hidden costs of waste are rising rapidly, including through pollution, health

impacts and climate-related costs.⁴⁸ These global trends reinforce the importance of expanding collection while also shifting towards controlled management, prevention, recovery and circular economy approaches.

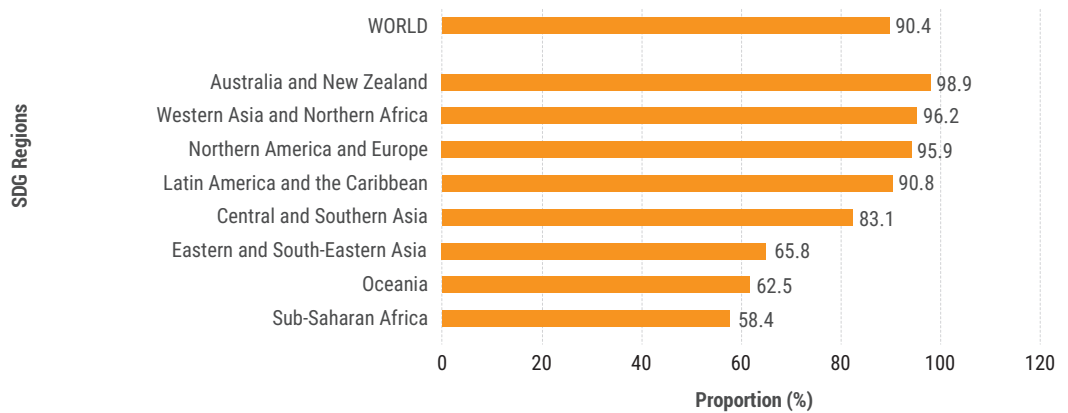
UN-Habitat city-level data show generally high but uneven waste collection coverage in the available sample. Average municipal solid waste collection coverage stands at 90.4 per cent in the latest data, reflecting relatively strong service coverage in many reporting cities. However, the dataset is better suited to cross-sectional analysis than to temporal trend analysis. Although it includes more than 4,800 city-level observations across 160 countries and territories, most cities appear only once, and the sample is heavily concentrated in 2018. Among the limited repeated-city sample, collection coverage shows modest average improvement, but many cities remain unchanged, often because they were already at or near universal collection. The results should therefore be read as evidence of generally high but uneven coverage, with indicative signs of progress rather than a definitive global trend.

Regional inequalities in waste collection remain pronounced

Regional disparities in collection coverage remain wide. According to the latest city sample, Australia and New Zealand recorded the highest average collection coverage at 98.9 per cent, followed by Western Asia and Northern Africa at 96.2 per cent, Northern America and Europe at 95.9 per cent, and Latin America and the Caribbean 90.8 per cent. By contrast, coverage was lower in Central and Southern Asia, at 83.1 per cent, and much lower in Eastern and South-Eastern Asia at 65.8 per cent, Oceania at 62.5 per cent and Sub-Saharan Africa at 58.4 per cent.

These figures broadly reflect differences in municipal finance, institutional capacity and the extent to which waste collection has been established as a basic urban service. However, they should also be interpreted in the context of uneven sample composition. Latin America and the Caribbean accounts for a large share of city-level records, driven mainly by Mexico and Colombia, while the relatively high value for Western Asia and Northern Africa is influenced by

Figure 2.7.1: Average municipal solid waste collection coverage by region, 2015-2025



the better-served countries and cities represented in the sample, including Türkiye, Azerbaijan and Israel. These patterns are consistent with evidence that many larger and more urbanized cities in Latin America and the Caribbean have long-standing municipal collection systems, and that parts of Western Asia and Northern Africa have relatively high collection coverage. However, they should not be read as evidence that all cities in these regions have achieved sustainable waste management, since controlled disposal, source separation, recovery and recycling remain uneven.

collection systems have expanded in many cities, rapid urban growth, service gaps and disposal challenges continue to place pressure on local systems. At the lower end of the regional distribution, Sub-Saharan Africa and Oceania continue to show the most acute service gaps, reflecting persistent constraints in infrastructure, municipal finance, operational capacity and local data systems.

Many cities remain far from universal collection

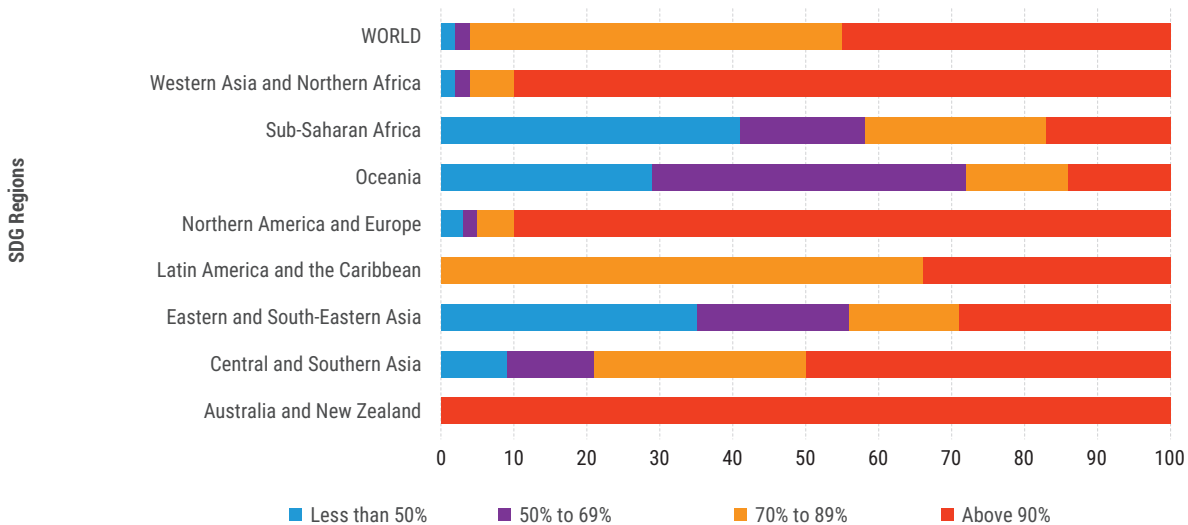
Central and Southern Asia sits between the higher- and lower-performing regional cohorts, suggesting more mixed progress. While

The city-level distribution of waste collection coverage points to a marked divide between cities with well-established systems and those still

Homes in an informal settlement beside the Odaw River in Agbogbloshie, Accra, Ghana, where inadequate housing and environmental risks overlap. Editorial use only. Photo: DELBO ANDREA/Shutterstock



Figure 2.7.2: Proportion of cities with different levels of solid waste collection, 2015-2025



struggling to provide basic service. Only 45 per cent of cities have reached collection coverage above 90 per cent. At the other end of the spectrum, 2 per cent remain below 50 per cent, exposing residents to uncollected waste, open dumping, blocked drainage, pollution and elevated public health risks.

These gaps matter most in slums, informal settlements and fast-growing underserved urban areas, where weak or absent collection services can reinforce existing inequalities and worsen environmental health outcomes. Uncollected waste can accumulate near homes, block drainage, increase flood risk, contaminate water, create breeding grounds for disease vectors, expose waste workers and residents to hazardous conditions, and contribute to open burning and air pollution. In this sense, waste management is closely connected to the realization of other SDG and Goal 11 priorities, including adequate housing, basic services, disaster risk reduction, public health and urban resilience.

Sub-Saharan Africa faces the most acute waste service deficit

Sub-Saharan Africa continues to record the weakest waste management performance across the city sample. Only 17 per cent of reporting cities in the region achieved collection coverage above 90 per cent, while 41 per cent remained below 50 per cent. This reflects the

combined pressures of rapid urban growth, constrained municipal finance, limited waste infrastructure and weak local data systems.

Complementary evidence from World Bank and UNEP global reports point to the same concern. Waste collection rates remain lowest in the regions where urban growth is fastest and municipal systems are most constrained. This creates a growing service gap, as cities must expand collection to newly urbanizing areas while also improving disposal, recycling and recovery systems that are often already under strain. The challenge is especially acute in smaller and intermediate cities, where administrative and financing capacity may be weaker than in large metropolitan areas, even as waste volumes increase.

High collection coverage does not guarantee sustainable waste management

Collection, however, is only one part of the challenge. Progress under target 11.6 depends not only on collecting waste, but on ensuring that it is managed in controlled facilities and, increasingly, diverted from disposal through source separation, recycling, composting, material recovery and waste prevention.

Cities with high collection coverage may still face serious shortcomings if disposal systems remain weak, if landfill gas and leachate are not controlled, or if recyclable and organic materials continue to

be buried or burned. Organic waste is particularly important because it contributes to methane emissions when it decomposes in landfills or dumpsites without proper management. Reducing food and organic waste, expanding composting and anaerobic digestion where appropriate, improving landfill management and preventing open dumping can therefore support both local environmental quality and climate mitigation.

The social dimension is equally important. In many cities, informal waste workers play a central role in collecting, sorting and recovering materials, often under unsafe and insecure conditions. More inclusive waste systems can improve recycling and recovery while strengthening livelihoods, worker protection and local economic development. Colombia's recognition of waste pickers as recycling service providers illustrates how circular economy reforms can be linked to social inclusion when informal workers are organized, recognized and remunerated for the services they provide.⁴⁹ In Nairobi, the Waste Wise Nairobi – Korogocho Chapter similarly shows how decentralized material recovery in an informal settlement can support community-based organizations and local waste workers while reducing waste sent to dumpsites.⁵⁰

These approaches form part of a growing global movement towards zero waste, reflecting a shift from waste management towards waste prevention and circular resource use. Since the adoption of the

2022 United Nations General Assembly resolution⁵¹ on promoting zero-waste initiatives, cities and local governments have increasingly advanced measures to reduce waste at source, expand separated collection, recover materials and reduce reliance on dumping and landfilling. Türkiye has played a leading role in advancing this agenda through its Zero Waste Initiative, with support from UN-Habitat, while the Secretary-General's Advisory Board of Eminent Persons on Zero Waste provides a platform to promote local and national zero-waste initiatives and the exchange of good practices.

Better local data and stronger systems are needed to close service gaps

Persistent data gaps continue to limit targeted action, especially in informal settlements and rapidly growing peri-urban communities. In many cities, weak subnational reporting makes it difficult to identify where waste service deficits are most severe and who is most affected. Data gaps are also important because collection coverage alone does not show whether waste is managed safely after collection.

More regular city- and neighbourhood-level data, stronger collaboration between national statistical offices and local governments, and wider use of geospatial, community-based and digital monitoring tools will be important for improving both reporting and investment targeting. The Waste Wise Cities Tool provides one practical approach for cities to assess waste generation, collection, composition and management in controlled facilities in line with SDG indicator 11.6.1.⁵² Wider use of such tools can help cities move beyond rough estimates and generate evidence that is useful for planning, financing and service improvement.

Waste management needs to move closer to the centre of urban environmental policy

Closing waste service gaps will require more targeted investment in municipal systems, especially in regions and cities where collection remains low. It will also require integrating waste management more fully into wider urban policy on public health, water quality, climate mitigation, flood risk reduction, local economic development and urban safety.

The Korogocho Material Recovery Facility in Nairobi, Kenya, where the Waste Wise Nairobi initiative supports decentralized waste recovery, community-based organizations and local waste workers in an informal settlement.
© UN-Habitat



More effective systems can generate multiple gains: reducing pollution, lowering health risks, protecting water systems, supporting climate goals and creating green jobs. This is especially important where inclusive approaches, including support for waste pickers and circular

economy activities, can strengthen both service delivery and livelihoods. At the neighbourhood level, source separation and circular economy models can help move waste systems beyond collection and disposal, while improving the living environment in residential areas.

Box 2.7.1: Turning household waste into cleaner neighbourhoods and green jobs in Dhaka

Dhaka generates more than 7,000 tons of waste each day, including organic, plastic and industrial materials. Much of this waste is collected without segregation and disposed of in landfill sites, where it contributes to methane emissions, toxic leachate and contamination of air, water and soil. For low-income communities, weak waste systems can directly affect living conditions, health and the quality of the surrounding environment, while valuable materials that could support local livelihoods remain unused.

Launched in 2023 under the *Waste to Wealth for Sustainable Housing* project, World LinkUp's Smart Waste Initiative introduced source segregation through smart bins in pilot households, supported by awareness campaigns and practical training. Collected waste is transported to a warehouse facility for sorting, processing and transformation into products such as compost and bio-fertilizer from food waste, recycled plastic goods, paper crafts and construction materials made from compressed plastic and glass. The model combines household behaviour change with community-based collection and sorting, private-sector partnerships, e-commerce channels and training for women and young people in recycling-related micro-enterprises.

The pilot has reached more than 500 households and processes around 20 tons of waste each month. Project reporting indicates a 60 per cent reduction in unmanaged household waste among participating homes, the creation of 150 green jobs for women and youth, and an average 30 per cent increase in income among trained participants. While the initiative remains limited in scale, it points to the potential of waste systems that extend beyond collection and disposal. Source separation, material recovery and local enterprise can improve neighbourhood conditions while creating livelihoods and reducing pressure on landfill sites. Wider adoption would require stronger municipal partnerships, financing for household and neighbourhood-level infrastructure, and integration of circular economy approaches into formal waste management policy.

Source: World LinkUp, case study submission to UN-Habitat.



A canal filled with waste and plastic in Dhaka, Bangladesh. Editorial use only. Photo: Sk Hasan Ali/Shutterstock

Indicator 11.6.2. Annual mean levels of fine particulate matter in cities

Quick facts

- **Urban air pollution remains a major environmental health risk.** In 2023, the global average annual PM_{2.5} concentration was 26 µg/m³, about five times the WHO air quality guideline value.
- **Global progress has slowed.** PM_{2.5} concentrations declined from 2010 to 2020, but have since largely plateaued.
- **Regional patterns are uneven.** Urban PM_{2.5} exposure remains highest in Central and Southern Asia, despite substantial reductions since 2012–2014. Eastern and South-Eastern Asia has also improved sharply, while Sub-Saharan Africa and Western Asia and Northern Africa have shown little overall improvement.
- **Urban-rural trajectories differ by income level.** Air pollution is generally higher in cities and towns than in rural areas, but in low-income countries rural air pollution is also increasing.
- **Cleaner air will require integrated action across sectors.** Transport, energy, waste, land use and household fuel use all shape urban air quality and require coordinated responses.

Dense smog obscures an urban skyline, illustrating the impacts of air pollution. Photo: ultramansk/Shutterstock



Air pollution remains one of the largest environmental risks to urban health

Air pollution continues to pose a major threat to public health, although it can be mitigated through more sustainable urban development. Particulate matter, especially PM_{2.5} and PM₁₀, is associated with respiratory disease, cardiovascular illness, stroke, lung cancer, and premature mortality, as well as other adverse health outcomes.⁵³ Exposure is particularly harmful in cities, where population density is high and pollution sources are diverse and abundant. In some contexts, particulate matter also originates beyond city or national boundaries, complicating local and national efforts to reduce exposure.

In 2023, the global average annual PM_{2.5} concentration was 26 µg/m³, around five times higher than the WHO air quality guideline value.⁵⁴ This confirms that urban air pollution remains a severe and widespread problem.

Progress has been uneven and has recently stalled

Globally, PM_{2.5} concentrations declined between 2010 and 2020, but have since largely plateaued.

This suggests that earlier gains from cleaner energy, industrial controls and stronger air-quality regulation are increasingly being offset by persistent or rising exposure in rapidly urbanizing and highly polluted regions, where transport growth, household fuel use, waste burning, industrial activity, dust and transboundary pollution remain difficult to address.

Regional trends remain uneven. **Asia continues to record the highest levels of urban PM_{2.5} exposure, as well as some of the strongest improvements.** However, its trajectory is not uniform. Central and Southern Asia remains the most polluted SDG region, despite a substantial decline since 2012–2014. Eastern and South-Eastern Asia has also recorded a sharp reduction, driven in large part by China's sustained pollution-control efforts (see Box 2.7.2), bringing regional levels much closer to the global average. By contrast, Sub-Saharan Africa and Western Asia and Northern Africa have shown little overall improvement, while Europe and Northern America and other high-income settings continue to

Box 2.7.2: Coordinating urban air pollution control across China's city regions

China's rapid industrialization and urbanization between the 1980s and 2010s placed severe pressure on urban air quality, especially in regions affected by particulate pollution from coal consumption, industrial production, construction activity and vehicle emissions. Air pollution rapidly became a daily health and quality-of-life concern for urban residents, especially for those living near major roads, industrial zones and dense construction areas. Addressing the air quality challenge, however, would require more than individual city-level action, given that pollution often crosses administrative boundaries and reflects national or regional energy, transport and industrial systems.

Beginning with the Air Pollution Prevention and Control Action Plan in 2013, followed by blue sky action plans in 2018 and 2023, China developed a more coordinated approach to urban air governance. Central authorities supported joint prevention and control in key regions, including Beijing-Tianjin-Hebei and the Yangtze River Delta, combining industrial upgrading, cleaner energy use, vehicle-emissions control, dust management and wider monitoring and accountability systems. The approach linked national policy direction with regional coordination and local implementation, while using air quality monitoring to track progress and strengthen enforcement.

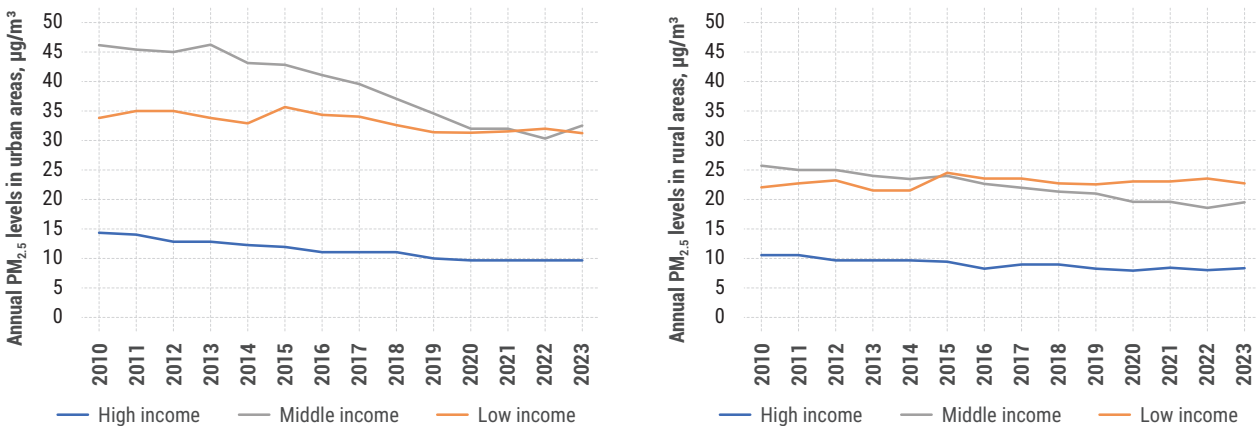
Between 2016 and 2024, the proportion of days with good air quality increased and average PM_{2.5} concentrations in cities declined substantially. In 2024, the average PM_{2.5} concentration in prefecture-level and above cities fell to 29.3 µg/m³, remaining below China's national standard for the fifth consecutive year. The experience highlights the importance of treating urban air quality as a governance challenge that cuts across sectors and jurisdictions. Sustained progress depends on coordinated regulation, cleaner energy and transport systems, industrial restructuring, reliable monitoring and continued attention to remaining pollution sources, including those that affect residential areas most directly.

Source: Ministry of Ecology and Environment of China.



Air pollution on Zhongguancun Street in Beijing, China, in 2016, before subsequent improvements in urban air quality. Editorial use only. Photo: Nahorski Pavel/Shutterstock

Figure 2.7.3: Air pollution (PM_{2.5}) in urban (left) vs rural areas (right), by income group, 2010-2023



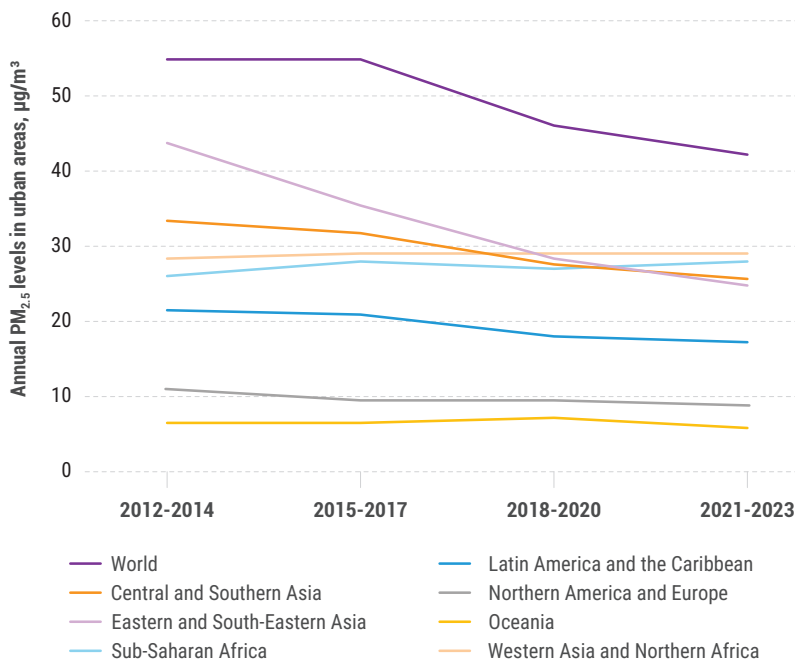
Source: World Health Organization

record much lower levels, reflecting the long-term effects of regulation, cleaner energy systems and emissions controls.

These trends show that sustained policy action can reduce exposure, but also that air quality cannot be treated as a purely local urban issue.

In many of the most polluted regions, PM_{2.5} is shaped by regional airsheds, energy systems, industrial corridors, household fuel use, open burning and natural dust.⁵⁵ Further progress will therefore depend on stronger national standards, regional coordination and urban policies that link air quality with transport, energy, waste, housing and land-use planning.

Figure 2.7.4: Air pollution (PM_{2.5}) three-year average, by region, 2012-2023



Source: World Health Organization

Household energy, waste and land-use patterns shape urban air pollution exposure

Air quality is shaped by multiple aspects of the built environment and urban life. Transport systems, industrial activity, energy production, construction, waste burning and household fuel use all contribute to urban emissions. Housing is especially important in this context. Household fuel combustion for cooking and heating remains a major source of ambient air pollution in some regions, while uncollected waste is often burned, especially where waste services are weak.

Land-use patterns also matter. More compact and mixed-use development can reduce travel demand and support cleaner mobility, but density alone does not guarantee cleaner air. Exposure also depends on the location of housing, roads, industries, waste sites and green spaces, and on whether polluting activities are effectively managed or separated from residential areas. These links make air quality an important part of the report’s broader housing and planning lens.

Weak monitoring and fragmented policy continue to slow progress

Air pollution is context-specific and often shaped by a combination of local and transboundary sources. Yet many countries still lack adequate air quality legislation, reliable monitoring systems, enforceable standards and sufficiently coordinated policy responses. This is especially challenging in low- and middle-income countries, where reference-grade monitoring networks remain limited.

The problem is compounded by the transboundary nature of particulate matter and by additional sources such as conflict, shipping and aviation, which are often insufficiently addressed in urban policy. Better understanding of sources, land-use dynamics and exposure patterns is essential if interventions are to be targeted effectively.

Cleaner air will require stronger law, better data and more integrated planning

Reducing air pollution will require a more integrated response across transport, energy, land use, waste management and household energy. Stronger air quality legislation and standards, aligned with WHO guidelines and supported by monitoring, enforcement and accountability mechanisms, will remain essential.

At the same time, cities and countries will need better data. Satellite observations, low-cost sensors and air quality models can help complement reference-grade monitoring and expand spatial coverage, especially where existing networks are weak. More integrated urban planning, cleaner household energy, better waste management and stronger regional cooperation will all be needed to achieve more substantial improvements in air quality.



A clear-sky view across Beijing, China, with urban green space in the foreground. Photo: Hidden Peak/Shutterstock

2.8

Target 11.7. By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities



Children play in a public park in the Kamilo area of Al Hawtah District, Lahj Governorate, Yemen, following public-space improvements. © UN-Habitat/ Bassam Thabit

Public and green space is one of the clearest measures of whether urban development is serving people well. Open public and green spaces support recreation, social interaction, safety, public health, biodiversity and climate resilience, while helping to reduce inequalities in access to urban amenities. Yet these spaces are often squeezed out by poorly managed urban growth, especially where land is scarce, regulation is weak and development pressures are intense.

The relative absence of public and green spaces in VNRs stands in contrast to their practical importance in cities. The report's analysis indicates that public and green space remains one of the less referenced SDG 11 themes overall, despite its significance for quality of life, inclusion

and resilient urban development. This suggests that public space is still too often treated as a secondary amenity rather than as essential urban infrastructure.

Where people live often determines whether public space is a shared urban resource or a distant privilege.

The connection to housing is therefore direct. The location dimension of adequate housing requires that homes be connected not only to services and opportunities, but also to a healthy and supportive living environment, including access to open and green public space. When housing is poorly located or urban expansion proceeds without space for parks, streets and public amenities, inequalities in access become more deeply embedded in the urban fabric.

Indicator 11.7.1. Average share of built-up area in cities that is open space for public use for all, disaggregated by sex, age and persons with disabilities

Quick facts

- **Access to open public space is moving in the wrong direction.** Across a sample of 412 cities in 127 countries, the share of the urban population with convenient access to open public spaces fell from 48.0 per cent in 2020 to 45.9 per cent in 2025.
- **Most urban residents still lack convenient access to public spaces.** In 2025, less than half the population in the sampled cities lived within a 400-metre walking distance of open public space.
- **Cities allocate too little land to streets and open public spaces.** The average share of built-up land allocated to streets and open public spaces increased only slightly over the past five years, from 16.6 per cent in 2020 to 17.0 per cent in 2025, well below the 30–45 per cent benchmark recommended by UN-Habitat.
- **Public space access remains highly unequal across cities and regions.** More than half of sampled cities had access levels below 50 per cent, with Sub-Saharan Africa recording the weakest performance and particularly acute implications for residents of slums, informal settlements and underserved neighbourhoods.
- **Urban green areas have declined steadily.** Between 1990 and 2025, the share of urban land dedicated to green space fell from 15.4 per cent to 11.3 per cent, while green area per capita dropped from 57.5 m² to 28 m².

Access to open public space is declining rather than improving

Public spaces remain critical to the health, well-being and social cohesion of people in cities and communities worldwide. Yet despite their importance, UN-Habitat data from a sample of 412 cities across 127 countries show that most urban

residents continue to lack convenient access to open public space. In 2025, only 45.9 per cent of the urban population in the sampled cities lived within a 400-metre walking distance of an open public space, down from 48.0 per cent in 2020.

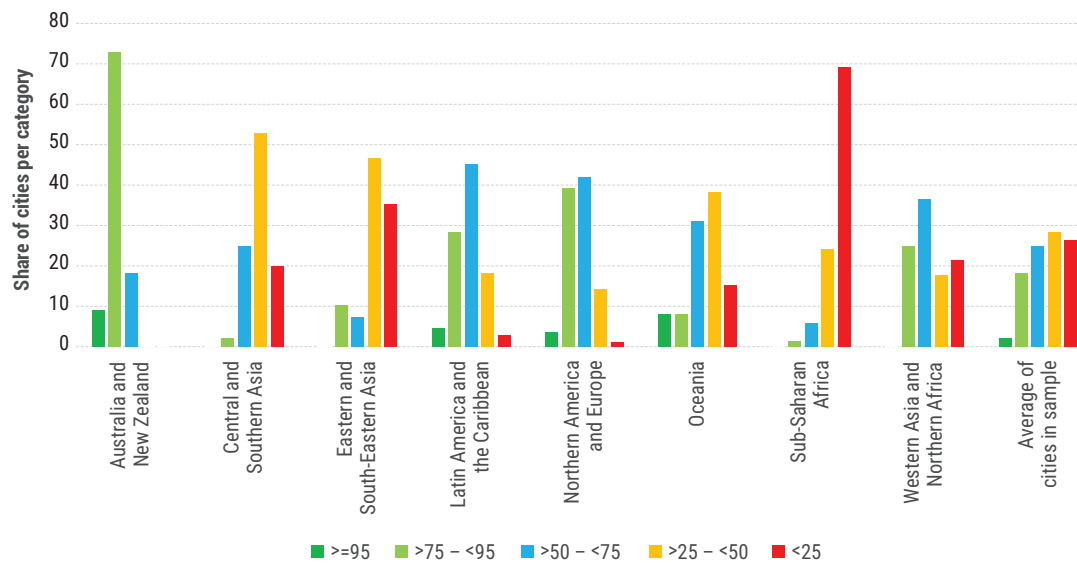
This modest decline suggests that the provision of open public space is not keeping pace with urban growth and changing settlement patterns. As cities expand and densify, new housing, infrastructure and commercial development can increase pressure on land, while public spaces are often not planned, protected or financed early enough. In some cities, temporary public spaces created during the COVID-19 pandemic were later returned to previous uses, but the broader challenge is structural: public space is too often treated as residual land rather than as essential urban infrastructure.

The decline in access can coexist with a slight increase in the share of land allocated to streets and public spaces because the two measures capture different things. Land allocation is area-based, while access depends on where people live in relation to usable open public spaces. If additional public space is concentrated in central areas, new developments or road networks, it may not improve access for residents in fast-growing peripheral, informal or underserved neighbourhoods. This underlines the importance of planning public space as a connected and well-distributed network, rather than only increasing the aggregate amount of land assigned to public use.

Cities devote too little land to public space

The share of urban land allocated to streets and open public spaces remains low. Across the sampled cities, this share increased only marginally, from 16.6 per cent in 2020 to 17.0 per cent in 2025. This remains far below the 30–45 per cent benchmark recommended by UN-Habitat for more inclusive and sustainable urban development.⁵⁶

Within this total, streets account for most of the land allocated to public space, averaging about 15 per cent of built-up areas, while open public spaces account for only about 2 per cent. This underlines the limited availability of parks, squares and other dedicated public spaces in many cities.

Figure 2.8.1: Share of cities per proportion of population with convenient access to open public space

More than half of sampled cities remain far from the target

City-level disparities are stark. In 2025, 110 of the 412 sampled cities had access levels below 25 per cent, while a further 114 cities had access between 25 and 50 per cent. Together, this means that more than half of sampled cities remain critically short of universal access.

At the other end of the distribution, only seven cities achieved near-universal access above 95 per cent. These findings point to large inequalities not only between regions, but also between cities facing different land-use pressures, planning capacities and investment levels.

Regional disparities are especially pronounced in Sub-Saharan Africa

Regional differences in access are substantial. Sub-Saharan Africa is the most disadvantaged region, with both the lowest average access levels and the highest concentration of cities very far from the target. In the available city-level data, most sampled cities in the region fall below 25 per cent access, and almost all fall below 50 per cent. Eastern and South-Eastern Asia and Central and Southern Asia also include large numbers of cities where less than half the population has convenient access to open public space. By contrast, cities in Northern America and Europe

and Latin America and the Caribbean perform comparatively better, although access gaps remain within these regions as well.

These disparities reflect more than differences in the total amount of open land. They point to deeper differences in urban growth patterns, land management, planning capacity, municipal finance and the protection of public land. In rapidly growing cities, especially where expansion takes place through informal or weakly serviced development, public spaces are often not secured before land is subdivided or built over. Cities with stronger planning systems, established street and park networks, and greater capacity to invest in maintenance and upgrading are generally better placed to provide public spaces within walking distance of residents.

The distribution also shows that access is not determined by income level or region alone. Some cities in lower- and middle-income regions, including Dakar, Cape Town, Bogotá and Barranquilla (see Box 2.8.1), perform relatively well or have advanced notable public-space initiatives,⁵⁷ while some cities in high-income settings remain far from universal access. These outliers suggest that urban form, public land protection, planning standards, maintenance capacity and the location of public spaces relative to where people live can significantly shape outcomes. They also demonstrate that public



Addis Ababa, Ethiopia, with green urban space in the foreground. Editorial use only. Photo: Hailu Wudineh TSEGAYE/Shutterstock

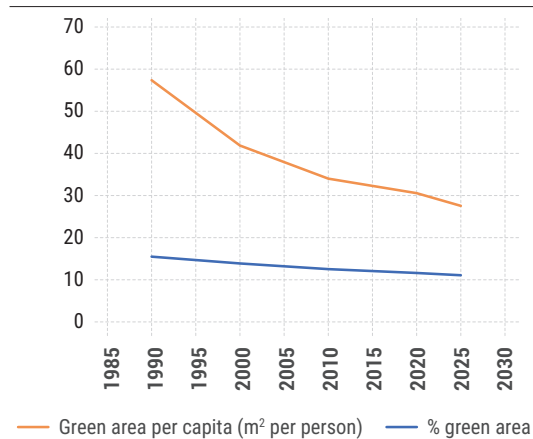
space access can improve when parks, streets and open spaces are planned as connected neighbourhood infrastructure rather than treated as residual land.

Urban green areas are also shrinking

The decline in access to open public space is also accompanied by a longer-term reduction in urban green areas. Between 1990 and 2025, the share of urban land dedicated to green spaces fell from 15.4 per cent to 11.3 per cent, while green area per capita decreased from around 58 square metres to 28 over this same period.

This trend reflects the growing pressure placed on urban land by expansion, densification, infrastructure development and rising land values. It also shows why public space and green space

Figure 2.8.2: Average changes in urban green areas



should be understood as related but distinct types of urban spaces. For example, some public spaces are paved, while some green areas are private, inaccessible, unsafe or poorly connected to residential areas. Protecting and expanding urban greenery therefore requires not only more land for parks and open spaces, but also stronger protection of ecological corridors, tree cover, drainage areas and neighbourhood-level green infrastructure.

The loss of urban green space weakens both human well-being and environmental resilience. Reduced tree cover, permeable surfaces and ecological corridors diminish cooling capacity, water absorption and biodiversity, while also limiting access to recreation, physical activity and social interaction. These impacts are especially severe in dense and underserved neighbourhoods, where limited greenery can compound exposure to heat, flooding and air pollution.⁵⁸

Public space planning remains too weak in many fast-growing cities

Progress under target 11.7 continues to be constrained by weak land-use protection, limited investment and the low priority often given to public space in urban expansion. In many fast-growing cities, open and green space is crowded out by competing demands for housing, infrastructure and commercial development.

These pressures are especially acute in slums, informal settlements and underserved neighbourhoods, where high residential densities, insecure tenure and limited public land can leave little room for parks, playgrounds, green spaces and safe streets. Where public spaces do exist, they are often poorly maintained, weakly connected or perceived as unsafe, limiting their use by women, children, older persons and persons with disabilities.

Integrating public space provision into informal settlement upgrading and participatory planning can therefore improve everyday living conditions while supporting health, safety, social cohesion and climate resilience. Where public space is scarce or poorly located, the social, health and environmental costs of inadequate housing and weak urban planning are multiplied.

Better planning and better data will be needed to expand equitable access

Reversing current trends will require more deliberate planning and stronger protection of open and green spaces within growing urban areas. This includes clearer public-space standards, more inclusive design, better integration of parks and greenery into urban development, and stronger attention to the location of public space relative to residential areas.

Box 2.8.1: Bringing parks within walking distance in Barranquilla

Before the launch of Todos al Parque, many neighbourhoods in Barranquilla, Colombia, had limited access to safe and well-maintained parks. Public spaces were often deteriorated, poorly distributed or disconnected from residents' needs, reducing opportunities for recreation, exercise and community life. These gaps were especially significant in lower-income areas, where residents had fewer alternatives for leisure and access to urban greenery.

Launched in 2011, Todos al Parque made park recovery and creation a citywide priority. The programme combined public investment, inter-agency coordination and neighbourhood-level participation, with residents involved in identifying needs and reviewing designs before construction. What began with initial pilot projects expanded into a citywide system of parks, plazas and green spaces, supported by partnerships on tree planting, lighting, maintenance and public programming.

Today, the programme reaches all 188 neighbourhoods in Barranquilla, with 93 per cent of households living within an eight-minute walk of a green public space. WRI reports that the programme regenerated 202 parks, built 48 new parks and recovered more than 1.45 million square metres of public space. Its relevance for target 11.7.1 lies in treating parks not only as physical assets, but as usable neighbourhood infrastructure. By prioritizing underserved areas, planning parks close to where people live, shaping designs with communities and providing features such as playgrounds, sports facilities, accessible paths and ramps, lighting, programming and ongoing maintenance, Barranquilla shows that access depends on both proximity and quality. Public spaces are more likely to support health, safety and inclusion when they are easy to reach, actively managed and attractive to different groups of residents.

Source: World Resources Institute; WRI Ross Center Prize for Cities



Seven Mouths Park in Barranquilla, Colombia. Editorial use only. Photo: Oscar Garces/Shutterstock

Better data will also be essential. Current monitoring relies mainly on residential population data and does not capture daytime population patterns, limiting understanding of how different groups access and use public spaces across the city. More dynamic and disaggregated data would allow a more accurate picture of real access and equity, and help guide better-targeted investment.

Indicator 11.7.2. Proportion of persons victim of non-sexual or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months

Quick facts

- Official data for indicator 11.7.2 remain too limited to assess global or regional trends.** This continues to constrain understanding of who experiences harassment, where it occurs and how it affects access to public space.
- Available proxy data suggest improvements in global perceptions of safety.** 73 per cent of adults worldwide report that they felt safe walking alone at night in 2024, the highest level recorded by Gallup in nearly two decades.⁵⁹
- Gender gaps remain large in safety perceptions.** In 104 of 144 countries and territories surveyed by Gallup, the gap between men and women who felt safe walking alone at night was at least 10 percentage points.
- Harassment remains a major barrier to the equal use of public space.** UN Women's evidence from the COVID-19 period found that six in ten women surveyed across 13 countries felt that sexual harassment in public spaces had worsened.⁶⁰
- Legal and institutional protections remain incomplete.** While many countries prohibit sexual harassment in employment, far fewer have laws addressing sexual harassment in public spaces or online, leaving important gaps in prevention, reporting and accountability.

Official data remain too limited to assess global trends

Indicator 11.7.2 is intended to measure the proportion of persons who have experienced non-sexual or sexual harassment in the previous 12 months, disaggregated by sex, age, disability status and place of occurrence. However, official data remain sparse and uneven across countries, limiting the ability to assess global and regional trends. This makes 11.7.2 one of the clearest examples of a wider challenge under SDG 11: the aspects of urban life that most affect inclusion and everyday safety are often among the least consistently measured.

As a result, available evidence should be interpreted as complementary rather than equivalent to official indicator data. Perception surveys, violence against women surveys and national victimization surveys do not measure the indicator in exactly the same way, but they provide important insight into how harassment, fear and insecurity shape access to streets, transport, parks, markets and other public spaces.

Perceptions of safety have improved, but large gender gaps remain

Available global evidence suggests some progress in perceptions of public safety. Gallup's global safety data show that 73 per cent of adults worldwide reported feeling safe walking alone at night in 2024, the highest level since the measure began nearly two decades ago, pointing to improvements in perceived community safety in many contexts.

Yet aggregate progress masks persistent gender gaps in safety. Women remain significantly less likely than men to feel safe walking alone at night, with gender gaps of at least 10 percentage points recorded in most countries and territories surveyed.

Harassment restricts access to public space, mobility and opportunity

Harassment and fear of harassment affect how people use the city. They can influence when people travel, which routes they take, whether they use public transport, and whether they participate fully in work, education, recreation and civic life. These effects are especially consequential for women and girls, but also affect children, older

persons, persons with disabilities, LGBTQI+ persons, migrants and other groups who may face heightened risks of harassment, discrimination or violence in public space.

Transport systems are a particularly important setting. Harassment in vehicles, stations, stops and the routes to and from transport can reduce willingness to travel and limit access to livelihoods, education and services. Public space safety therefore needs to be understood as both a crime-prevention issue as well as a core condition for inclusive urban access.

Legal, planning and service systems remain underprepared

Harassment in public spaces is shaped by multiple drivers, including discriminatory social norms, weak legal protections, under-reporting, impunity, limited staff training, and lack of accessible reporting mechanisms, and unsafe design features, such as poor lighting and visibility. Furthermore, in many countries, policy and legal frameworks often address harassment more clearly in workplaces than in public spaces, education, transport or online settings.

The locations of harassment have also expanded and evolved with the rise of digital technologies. Evidence from national surveys shows that harassment may occur across both physical and digital spaces, including streets, transport, schools, workplaces, homes and online platforms. This points to the need for broader prevention systems that connect urban planning, transport policy, policing, education, digital safety and survivor-centred support.

Accelerating progress will require better data and safer public-space systems

Progress under indicator 11.7.2 will require stronger investment in data collection. Regular victimization and safety surveys should include standardized questions on sexual and non-sexual harassment, with disaggregation by sex, age, disability, location and place of occurrence. Better data are essential to reveal patterns that administrative and police records often miss, especially where harassment is normalized, under-reported or difficult to report safely.

It will also require integrated action to prevent harassment and improve everyday safety. This includes gender-responsive urban design, improved lighting and visibility, safer public transport, accessible reporting channels, trained transport and city staff, bystander intervention,

survivor-centred services, stronger legal protections and accountability for perpetrators. Women, girls and other affected groups must be directly involved in identifying risks and designing responses to ensure the safety, accessibility and usability of public spaces for all.

Box 2.8.2: Mobilizing bystanders against street harassment in Montreal

Street harassment affects whether women and girls can use public spaces freely, safely and with dignity. In Montreal, a 2021 study found that 65 per cent of residents had experienced some form of harassment, while in more than half of cases no help had been offered by witnesses.⁶¹ This pointed to a public-space safety challenge that could not be addressed only through enforcement or victim reporting.

In 2023, the City of Montreal, the Montreal Police Service and the Montreal Transport Authority launched an active bystander campaign against street harassment. The campaign provided practical guidance on five actions witnesses could take: create a distraction, join forces with another person, call for help, document the incident and support the targeted person. Posters, digital outreach and a dedicated microsite were used to explain street harassment, share tools for safe intervention and connect survivors with support services.

The campaign was displayed in 1,785 transport authority spaces, including bus stops, metro stations and buses, as well as in Montreal's 45 municipal libraries and other public spaces. More than 44,000 people accessed the microsite during the campaign period, while the digital outreach was viewed more than 8 million times. The experience is relevant to indicator 11.7.2 because it addresses harassment as a barrier to equal access to public space. It also highlights the importance of partnerships with feminist organizations, transport authorities and public institutions in shifting responsibility from individuals experiencing harassment toward a broader culture of collective prevention and support.

Source: UN Women, Safe Cities and Safe Public Spaces for Women and Girls Global Initiative; City of Montreal / SPVM / STM.



Sainte-Catherine Street in Montreal's Village district, Canada, with a rainbow pedestrian crossing. Editorial use only. Photo: Andrei Antipov/Shutterstock

2.9

Target 11.a. Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning



Urban development and surrounding countryside. Photo: Chen Liang-Dao/Shutterstock

Target 11.a addresses the wider spatial logic of sustainable urbanization. It recognizes that urban outcomes are shaped not only within cities, but across broader territories, through the way countries manage population change, regional development and the distribution of public investment. National urban policies and regional development plans are therefore essential for guiding urban expansion, reducing spatial imbalances and strengthening the links between cities, surrounding regions and rural areas.

Stronger urban-rural linkages are critical. They shape the flows of people, goods, services, food, resources and investment across territories. They can strengthen food systems and market

access, improve connections to health, education and basic services, support inclusive economic growth and reduce environmental pressures. In this sense, target 11.a has a cross-cutting role, as integrated territorial approaches can help connect progress on housing, services, climate resilience, poverty reduction and inequality across urban, peri-urban and rural areas.

Despite this, urban-rural linkages have relatively low visibility in VNRs. The report's analysis indicates that urban-rural linkages are among the least referenced SDG 11 themes overall, with only marginal change between the two reporting periods. This does not imply that the issue is peripheral. Rather, it suggests that territorial planning receives less explicit attention in national SDG narratives than themes such as disaster impacts, housing or environmental quality, even though it often determines how effectively those other priorities can be addressed across space.

Housing policy is one of the clearest tests of whether territorial planning is working. Where housing is integrated into national urban and regional policy, countries are better able to align population growth, land development, infrastructure provision and local investment. Recent UN-Habitat analysis shows that nearly half of 159 surveyed countries have a dedicated national housing policy, and nearly two thirds have some form of national housing policy framework. This matters because housing demand is shaped by demographic change, housing location determines access to jobs and services, and local fiscal capacity affects whether cities can finance serviced land, upgrading and new supply. In that sense, stronger housing integration can help turn territorial planning from a policy aspiration into a more effective instrument of balanced and inclusive development.

Indicator 11.a.1. Number of countries that have national urban policies or regional development plans that (a) respond to population dynamics; (b) ensure balanced territorial development; and (c) increase local fiscal space

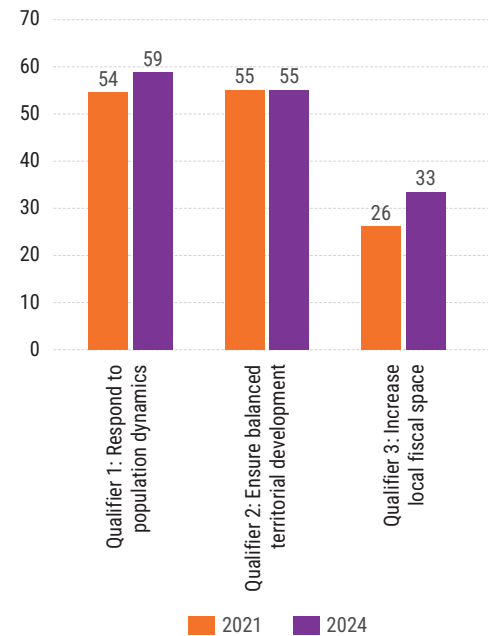
Quick facts

- **More countries are aligning policy frameworks with SDG 11.a.1.** In the latest assessment, 68 countries had national urban policies or regional development plans meeting at least one of the three components, and 40 met all three.
- **Comprehensive policy alignment has improved.** The share of countries meeting all three components rose from 40 per cent in the 2021 survey to 59 per cent in the 2024 findings.
- **Population dynamics remain the most commonly addressed dimension.** Local fiscal space remains the weakest, despite modest improvement.
- **Housing is becoming more visible in national policy frameworks.** Nearly half of surveyed countries have a dedicated national housing policy, and nearly two thirds have some form of housing policy framework.
- **Policy adoption does not by itself guarantee results.** Financing, institutional coordination, local implementation capacity and monitoring remain decisive.

Participants take part in a participatory mapping exercise in Pasto, Colombia, supporting integrated territorial planning and stronger links between urban development, surrounding communities and local ecosystems. © UN-Habitat



Figure 2.9.1: Number of national urban policies addressing population, territorial, and fiscal dimensions of sustainable urbanization



Source: Global State of National Urban Policy Survey 2023

More countries are aligning policy frameworks with SDG 11.a.1

Indicator 11.a.1 measures whether countries have national urban policies or regional development plans that respond to population dynamics, ensure balanced territorial development and increase local fiscal space. As an enabling-environment indicator, it captures countries’ institutional readiness to manage urbanization more effectively.

The latest assessment shows gradual but meaningful progress. Sixty-eight countries had national urban policies or regional development plans that met at least one of the three qualifiers under indicator 11.a.1.⁶² Of these, forty countries, or 59 per cent, met all three qualifiers, while 23 met two and 5 met one. This suggests growing recognition of integrated territorial planning as a foundation for sustainable urban development.

Population and territorial dimensions are better covered than local fiscal space

Among the three qualifiers, population dynamics is the most frequently addressed. The number of

Box 2.9.1: Using national urban policy to guide balanced urban growth in Rwanda

Rwanda's rapid urban growth has created rising demands for housing, infrastructure, services, land and employment. Without a clear national framework, such growth risks becoming overly concentrated in Kigali, increasing pressure on the capital while leaving secondary cities, district towns and emerging urban centres with fewer tools to guide development. Rwanda's National Urbanization Policy responds by treating urbanization as a national and territorial development priority.

A central feature of the policy is its emphasis on a more balanced urban system. Through Rwanda's wider spatial planning framework, growth is organized around Kigali, satellite cities, secondary cities, district towns and emerging urban centres. This approach aims to reduce pressure on the capital, strengthen economic opportunities across the territory and improve urban-rural linkages. Housing is also embedded in the policy agenda, with attention to affordable housing, unplanned settlement upgrading, densification, serviced land and infrastructure provision.

The policy recognizes that implementation depends on the capacity of local governments to finance and manage urban development. It highlights the need to expand municipal finance, diversify own-source revenue and use land value capture mechanisms, while ensuring that revenue generation does not undermine access to land or housing for low-income residents. Rwanda's experience is relevant to target 11.a because it connects national urban policy with the practical systems needed to shape growth: territorial planning, housing, infrastructure, local finance and stronger links between urban and rural areas.

Source: Government of Rwanda, National Urbanization Policy.



Kigali, Rwanda, viewed from the surrounding hills. Photo: Dereje/Shutterstock

policies responding to this dimension rose from 54 in the 2021 survey to 59 in the 2024 findings. Balanced territorial development has also remained widely recognized, with 55 countries addressing this dimension in both survey rounds.

By contrast, local fiscal space remains the weakest dimension. Although the number of countries addressing it increased from 26 in 2021 to 33 in 2024, it is still the least covered of the three qualifiers. This matters because local fiscal capacity shapes whether local authorities can finance infrastructure, services, land management and climate-resilient urban development.

Housing is becoming more visible in national policy frameworks

Housing policy has meanwhile become increasingly relevant to indicator 11.a.1 as it connects directly to all three dimensions. Population dynamics shape housing demand. Territorial development influences the location of housing in relation to jobs, services and infrastructure; and local fiscal space affects the ability of local governments to finance serviced land, upgrading and new supply.

Recent analysis suggests that more countries are putting these issues into policy form.

Nearly half of surveyed countries have a dedicated national housing policy, and nearly two thirds have some form of housing policy framework.⁶³ Affordability is the most frequently referenced dimension of adequate housing in those policies, while climate adaptation is addressed in half of them and energy efficiency in more than half overall. These patterns suggest that housing policy is becoming more integrated with wider concerns around territorial development, resilience and sustainability, even if implementation remains uneven.

Implementation and local fiscal capacity continue to lag behind policy ambition

The overall direction of travel is encouraging, but important gaps remain between policy adoption and implementation. The existence of a national urban policy does not guarantee effective outcomes, particularly where local institutions lack resources, mandates or operational capacity.

The relatively weak coverage of local fiscal space is especially important. Where cities remain heavily dependent on central transfers and have limited ability to raise or manage revenue, implementation of national and regional planning goals is more likely to stall. This can weaken development control, slow investment in infrastructure and services, and limit the ability of local governments to respond to housing pressures and spatial inequality.

Stronger housing-centred and territorially integrated frameworks could accelerate progress

Faster progress on target 11.a will depend on moving from policy recognition to stronger implementation. This will require better

monitoring of national urban policies, stronger fiscal decentralization, clearer institutional coordination and more consistent attention to territorial equity.

Housing should be part of that shift. Where housing is better integrated into national urban and territorial policy, countries are better able to connect land, infrastructure, finance and service delivery across levels of government. More housing-centred policy frameworks can help reduce fragmented interventions, support more balanced territorial development and strengthen the links between urban, peri-urban and rural areas that target 11.a is intended to promote.

Box 2.9.2: Turning housing finance into affordable homes in Egypt

Egypt's housing affordability challenge has been shaped by a large housing shortage, rapid urban growth and the difficulty many low-income households face in accessing formal housing finance. For many families, the main barrier is not only the availability of housing units, but the absence of financing terms, subsidies and institutions that match household incomes. The Housing for All Egyptians programme responds to this gap by linking national housing policy with a dedicated delivery and financing system.

The programme is managed by the Social Housing and Mortgage Finance Fund under the Ministry of Housing, Utilities and Urban Communities, giving the policy a clear institutional home. Its model combines targeted subsidies with mortgage finance and participation from public and private financial institutions. This has helped households that would otherwise struggle to borrow formally to access affordable homeownership and rental options, while also expanding Egypt's housing finance system and reaching groups often excluded from formal markets, including women heads of households.

The programme has reached hundreds of thousands of low-income households across Egypt, showing how national housing policy can move from broad affordability commitments to implementation at scale. Its relevance for target 11.a lies in the systems behind delivery: institutions with a clear mandate, financing tools that match household incomes, partnerships with financial institutions and mechanisms capable of reaching different territories and population groups. Continued attention to location remains essential, so that affordable housing is well connected to jobs, services, transport and wider urban opportunity.

Source: Government of Egypt; World Bank.



Affordable housing blocks developed through Egypt's Housing for All Egyptians programme. Photo: Social Housing and Mortgage Finance Fund

2.10

Target 11.b. By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels



Coastal homes in Fiji, where climate-resilience planning must reflect communities' close ties to land, sea and place. Photo: Habitat for Humanity Fiji

Integrated disaster risk reduction (DRR) and adaptation planning are ever more essential for sustainable and resilient urban development.

As climate change, environmental degradation and rapid urbanization intensify exposure to hazards, cities and human settlements are increasingly shaped by the quality of their risk governance, preparedness systems and resilience investments. This makes target 11.b a key bridge between urban development, climate adaptation and disaster risk reduction.

As disasters and resilience have gained greater attention in recent years, so too have the plans and policies needed for action. The report's VNR analysis suggests that references to resilience, climate and disaster risk planning under target 11.b increased modestly between the 2015–2020 and 2021–2026 reporting periods, though less sharply than references to disaster impacts under target 11.5. This suggests growing recognition of the policy and planning dimensions of resilience, even if national reporting remains more focused

on losses and impacts than on the governance systems needed to reduce risk.

Nationally Determined Contributions provide a complementary lens on these planning and implementation systems. UN-Habitat's analysis of the urban content of NDCs 3.0 finds that cities are becoming more visible in climate commitments, including through references to urban planning, multilevel governance and capacity-building. Among 142 NDCs assessed, 60 include urban planning and land-use content, 56 include multilevel governance, and 66 refer to capacity-building as an urban means of implementation. This suggests that countries are increasingly recognizing that climate and disaster risk cannot be addressed through national commitments alone, but require stronger planning, coordination and implementation at urban and local levels. Examples such as Brazil's climate federalism, Jordan's integration of municipal climate strategies into national implementation, and Paraguay's target for municipal urban and territorial planning show how some countries are beginning to translate urban climate commitments into more concrete planning and coordination mechanisms.

Housing sits at the heart of disaster risk reduction. The loss of homes to disasters globally is substantial. National and local DRR strategies therefore play an important role in shaping where and how homes are built, how informal settlements are upgraded, and whether urban growth creates new risk or reduces existing exposure and vulnerability. Where risk knowledge is integrated into housing, land-use planning and infrastructure provision, cities are better able to protect low-income and hazard-exposed communities.

Indicator 11.b.1. Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030

Quick facts

- **National disaster risk reduction strategies have expanded rapidly since 2015.** By 2024, 141 countries reported national DRR strategies aligned with the Sendai Framework, compared with 56 in 2015.
- **National coverage is now broad, but not universal.** Approximately 72 per cent of countries globally reported having adopted and implemented a national DRR strategy.
- **DRR strategies are increasingly linking climate, development and resilience agendas.** Many countries are using them to connect disaster risk reduction with climate adaptation, public investment and sustainable development planning.
- **Implementation remains uneven.** Financing gaps, institutional fragmentation and weak integration of risk information into planning and budgeting continue to limit impact.
- **Stronger strategies tend to align with stronger preparedness.** Countries with more advanced DRR strategies also tend to report

more developed multi-hazard early warning capacities.

National disaster risk reduction strategies have expanded rapidly

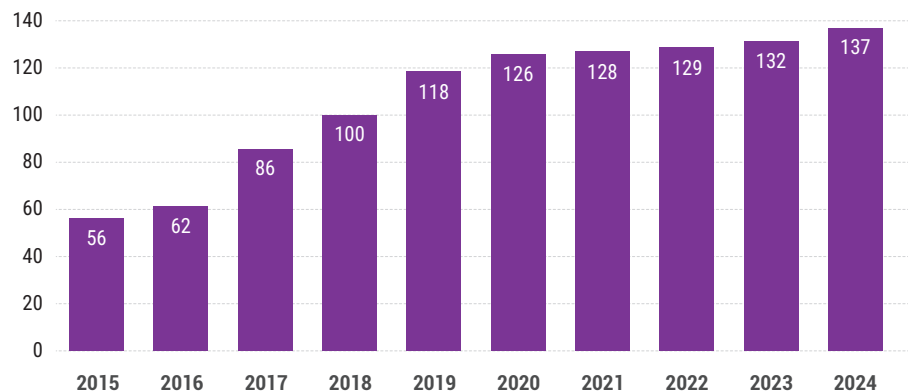
Member States report on indicator 11.b.1 through the Sendai Framework Monitor under Target E-1 of the Sendai Framework. Since 2015, substantial progress has been made in the adoption of national DRR strategies. By 2024, 141 countries had reported strategies aligned with the Sendai Framework, compared with only 56 in 2015.

This expansion reflects broader recognition that risk-informed governance is essential for reducing vulnerability, protecting development gains and strengthening resilience to disasters and climate change. It also suggests that many countries now see DRR strategies as a core part of national planning rather than a stand-alone emergency management instrument.

Risk governance is becoming more integrated

National DRR strategies increasingly serve as policy frameworks for linking disaster risk reduction with climate adaptation, sustainable development planning and resilience investment. This reflects a wider shift towards more comprehensive risk management approaches that combine multi-hazard assessment, cross-sector coordination and longer-term resilience planning.

Figure 2.10.1: Number of countries with national disaster-risk reduction strategies, by year



Source: Sendai Framework Monitor

The growing alignment between disaster, climate and development agendas is significant because many drivers of urban risk are shared. Land-use decisions, infrastructure investment, environmental management and housing policy all shape exposure and vulnerability over time.

Implementation continues to lag behind policy adoption

The spread of national DRR strategies does not by itself guarantee effective implementation. Many countries still face persistent financing gaps, fragmented institutions, uneven local capacities and weak integration of risk information into planning, budgeting and investment decisions.

These constraints are especially important in rapidly urbanizing settings, where disaster risk is evolving quickly and where national strategies need to translate into stronger controls over land use, infrastructure siting and service provision. In many countries, implementation remains the main bottleneck.

Stronger implementation will depend on risk-informed planning and investment

Further progress will require countries to embed disaster and climate risk more systematically into national development planning, infrastructure investment and housing policy. Stronger use of multi-hazard risk assessment, better integration with climate adaptation plans and greater support for local implementation would help turn national strategies into more measurable resilience outcomes.

Better data systems and stronger preparedness capacities will also remain important. Countries with more advanced DRR strategies generally report more developed early warning systems, suggesting that governance quality and operational readiness often reinforce one another.

Indicator 11.b.2. Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies

Quick facts

- **Local disaster risk reduction strategies have become more widespread.** By 2025, 116 countries reported the existence of local DRR strategies aligned with national frameworks.
- **Local adoption is significant, but uneven.** On average, 72 per cent of local governments within reporting countries reported having a local DRR strategy in place.
- **Local strategies are increasingly important as urban risks intensify.** Rapid urbanization, climate change and infrastructure interdependencies are making local preparedness and planning more critical.
- **Implementation capacity remains a major constraint.** Financing, technical capacity and vertical coordination continue to vary widely across local governments.
- **Support platforms are helping to strengthen local action.** Initiatives such as Making Cities Resilient 2030 are contributing to stronger local planning, peer learning and implementation.

Local disaster risk reduction strategies are becoming more common

Member States report on indicator 11.b.2 through the Sendai Framework Monitor under Target E-2 of the Sendai Framework. By 2024, 116 countries reported the existence of local DRR strategies aligned with national strategies. Across reporting countries, an average of 72 per cent of local governments indicated that they had adopted and implemented such strategies.

This points to substantial progress in localizing disaster risk governance. It also reflects growing recognition that disaster risk is experienced and managed locally, especially in cities where exposure, vulnerability and infrastructure interdependencies are concentrated.

Box 2.10.1: Planning climate resilience with residents in Nairobi's informal settlements

Mukuru is one of Nairobi's largest informal settlements, home to more than 100,000 households and exposed to overlapping risks linked to insecure tenure, poor housing, inadequate infrastructure, flooding, pollution, sanitation deficits and proximity to industrial activity. These risks are part of everyday urban vulnerability, affecting health, safety, livelihoods and the ability of residents to improve their homes and neighbourhoods. In 2017, Nairobi City County declared Mukuru a Special Planning Area, creating a legal and planning framework to address these challenges through an integrated development plan prepared with residents and partners.

The process brought together the county government, Mukuru residents, civil society organizations, universities, technical experts and private-sector actors. More than 5,000 residents participated in community planning forums, helping to shape sector plans on housing and land, water and sanitation, transport, health, environment, social infrastructure and livelihoods. The resulting plan is intended to guide development and investment in Mukuru over a ten-year period, while accommodating existing residents, reducing displacement risks, improving infrastructure and services, protecting environmentally sensitive areas and integrating the settlement more effectively with the wider city.

Mukuru's relevance for target 11.b lies in the way it connects disaster risk reduction with the systems that shape vulnerability in informal settlements. Flood risk, unsafe structures, poor drainage, weak sanitation, insecure tenure and exclusion from formal planning are addressed together, rather than through isolated emergency measures. Implementation remains complex, with land, finance, coordination and infrastructure constraints continuing to pose major challenges. Even so, Mukuru offers an important reminder that local resilience strategies are more likely to protect low-income and hazard-exposed communities when they are embedded in participatory upgrading, housing and land governance, infrastructure planning and long-term public investment.

Source: Nairobi City County; Mukuru Special Planning Area Integrated Development Plan.



An informal settlement in Nairobi, Kenya. Illustrative photograph; not Mukuru. Editorial use only. Photo: Boris Golovnev/Shutterstock

Local strategies are increasingly central to urban resilience

Local DRR strategies provide an important framework for integrating climate and disaster risk knowledge into urban planning, infrastructure development, housing, public services and community preparedness. They also support more inclusive governance by incorporating local knowledge and addressing the needs of populations most exposed to risk.

This matters because many urban risks are produced through local development decisions. Expansion into floodplains, informal growth in unsafe areas and weak infrastructure maintenance all create patterns of vulnerability that national strategies alone cannot resolve.

Local capacity and coordination remain uneven

Despite progress in adoption, many local governments continue to face important implementation constraints. Limited financial resources, insufficient technical capacity and weak coordination across levels of government all reduce the effectiveness of local DRR strategies.

These gaps are particularly consequential in rapidly growing cities, where climate-related hazards, informal settlement expansion and infrastructure deficits are increasing the scale and complexity of local risk. In many cases, local authorities also struggle to access the data, tools and long-term financing needed to sustain resilience investments.

Stronger support for local implementation could accelerate resilience

Local governments are well placed to integrate risk considerations into housing, land-use planning, infrastructure management and service delivery, but they require stronger support to do so. Greater financing, technical assistance and vertical coordination between national and local authorities would help translate local strategies into more effective action on the ground.

Peer learning and support initiatives also matter. Programmes such as Making Cities Resilient 2030 can help strengthen local planning, improve access to tools and build momentum for more inclusive and risk-informed urban governance.

2.11

Target 11.c. Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials



A traditional stilt house on Inle Lake, Myanmar. Editorial use only. Photo: Shanti Hesse/Shutterstock

Financing needs remain critical where capacities are lowest. Least developed countries face some of the fastest urban transitions and the largest infrastructure gaps, yet often with the least fiscal space to respond. In these contexts, international support remains important not only for financing housing, transport, water, sanitation and energy systems, but also for strengthening the technical and institutional capacities needed to plan, build and maintain resilient urban infrastructure.

Target 11.c is distinctive because it links international support to the way buildings are constructed. Its emphasis on sustainable and resilient buildings utilizing local materials reflects the importance of lowering construction costs, reducing dependence on imported materials, supporting local skills and livelihoods, and reducing the environmental impacts of the built

environment. This is especially relevant in LDCs, where housing deficits, climate vulnerability, disaster risk and infrastructure gaps often intersect.

However, the current indicator, 11.c.1, does not directly measure the use of local materials or the resilience of buildings. It instead tracks ODA and other official flows for urban infrastructure or urban infrastructure projects.⁶⁴ The indicator should therefore be read as a broad proxy for official support to urban development, rather than as a complete measure of financing for sustainable construction, local building materials or resilient housing.

Sustainable and resilient building construction remains one of the least visible themes in national reporting on SDG 11. The report's VNR analysis shows that references to sustainable buildings and local materials are the lowest of all SDG 11 themes and have changed little over time. However, this does not suggest that the sustainable construction lacks importance.

Rather, it points to the limited visibility of construction practices, building materials and related questions of resilience and sustainability in national SDG narratives, even where housing deficits, climate vulnerability and infrastructure needs are severe.

Housing investment is most effective when it is connected to infrastructure, resilience and more sustainable construction approaches.

International support for urban infrastructure increasingly includes housing, but its long-term value depends on whether it is linked to serviced land, basic services, climate resilience and the use of locally appropriate materials where relevant. Without that wider integration, support may help address immediate deficits while doing less to reduce long-term vulnerability, environmental pressure and construction-related risk.

Box 2.11.1: Building cooler, lower-carbon homes with earth in the Sahel

In many parts of the Sahel, housing construction relies increasingly on cement, steel and corrugated metal, even where these materials are costly, carbon-intensive and poorly suited to extreme heat. Their use can reduce opportunities for local labour and displace traditional building knowledge, while leaving low-income households dependent on imported materials and mechanically cooled interiors that are often unaffordable. In rural and peri-urban communities in Mali and Senegal, the challenge is to provide housing that is affordable, thermally comfortable and resilient to seasonal rains while strengthening local livelihoods.

The Chiwarà Project combines Nubian Vault construction with compressed-earth blocks to build homes and community facilities using locally sourced earthen materials, local labour and climate-responsive design. The process begins with site and climate analysis, community co-design and soil testing, followed by training for local masons in earth construction techniques. Buildings use vaulted structures, ventilation layers and water-protection measures to improve thermal comfort and durability. Construction sites also function as training spaces, allowing masons, artisans and young people to gain practical skills that can be applied in future housing projects.

Project reporting indicates that the approach has delivered more than 3,500 square metres of sustainable buildings in Mali and Senegal, with indoor temperatures 6–7°C cooler than conventional alternatives, construction costs reduced by up to 40 per cent and significant embodied-carbon savings. More than 130 masons and 40 technicians have reportedly been trained and are now involved in further construction work. The model is also being expanded through demonstration schools, health centres and other community buildings that help build confidence in earthen construction and support wider household adoption. For target 11.c, the experience shows how locally rooted building methods can link climate resilience, affordability, cultural continuity and green employment, provided they are supported by training, quality assurance, financing and greater recognition in housing policy.

Source: Chiwarà Project, case study submission to UN-Habitat.



Local workers construct a community building using earth-based materials and climate-responsive techniques in the Sahel. Photo: Chiwarà Project

Indicator 11.c.1. Total official development assistance and other official flows in support of urban infrastructure or urban infrastructure projects, by sector

Quick facts

- **ODA and other official flows are a small but strategically important source of urban infrastructure finance.** Indicator 11.c.1 captures flows identified as exclusively supporting urban infrastructure, but these represent only a tiny share of overall ODA and an even smaller share of estimated urban investment needs.
- **Urban infrastructure represents only a very small share of overall development finance.** The 2024/2025 extraction identifies about \$298 million in ODA and other official flows exclusively for urban infrastructure, equivalent to roughly 0.14 per cent of total DAC ODA in 2024.
- **Housing received the largest share within this narrow urban-infrastructure category, at \$111.2 million, followed by transport at \$93.5 million. However, housing still represented only about 0.05 per cent of total DAC ODA in 2024, underscoring that housing remains severely underfunded overall.**
- **Basic services received much lower levels of support in the extraction.** Water supply and sanitation received \$6.8 million, energy \$4.9 million and waste management \$0.2 million, suggesting that key service dimensions of resilient urban development may be undercounted or underemphasized.
- **Urban infrastructure finance is geographically concentrated.** Northern America and Europe appeared as the largest recipient region in 2024, largely reflecting Ukraine, while Sub-Saharan Africa remained a major priority region. However, as the data are based only on flows identified as exclusively urban, regional patterns should be interpreted as indicative rather than as a complete picture of need or investment.
- **The target's emphasis on resilient buildings and local materials remains only partially captured.** The indicator tracks broad urban infrastructure finance, not whether buildings use local materials, reduce embodied carbon or strengthen local construction capacity.

Urban infrastructure finance is small, strategic and highly uneven

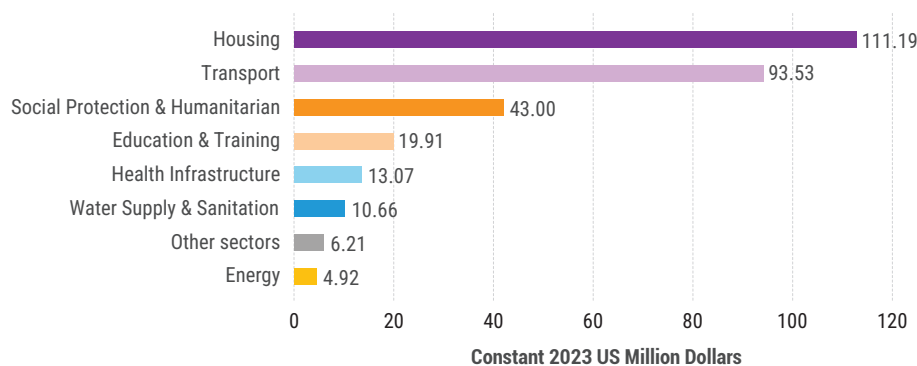
ODA and other official flows represent only a small share of overall urban infrastructure finance, but they remain important in countries and contexts where domestic resources, municipal borrowing and access to capital markets are limited. Their value lies less in closing urban infrastructure gaps directly than in supporting concessional finance, project preparation, technical assistance, institutional capacity and investment in sectors or places that may struggle to attract commercial finance.

At the same time, these flows are uneven across sectors and regions. They are shaped not only by long-term urbanization needs, but also by reconstruction priorities, crisis response and wider donor agendas, including climate resilience and humanitarian support. The figures should therefore be read as evidence of what is captured in this specific ODA and OOF extraction, rather than as a comprehensive measure of urban infrastructure finance.

A traditional wooden house in rural Lao People's Democratic Republic, constructed without nails. Photo: pployp/Shutterstock.



Figure 2.11.1: Total ODA and other official flows reported to the OECD CRS database and identified as exclusively supporting urban infrastructure, by sector, 2024



Source: OECD Creditor Reporting System database, UN-Habitat/OECD analysis, 2025.

Housing and transport received the largest allocations, but the overall financing volume remains very small

The sectoral distribution of ODA and other official flows for urban infrastructure shows a strong concentration in a limited number of sectors. Housing received the largest allocation, at \$111.2 million, followed by transport at \$93.5 million. Together, these two sectors accounted for nearly 69 per cent of flows identified as exclusively supporting urban infrastructure.

However, this should not be interpreted as evidence that housing is well funded. The total urban-infrastructure extraction amounts to only about \$298 million, equivalent to roughly 0.14 per cent of total DAC ODA in 2024.⁶⁵ **Housing itself represented only about 0.05 per cent of total DAC ODA.** Its prominence within the indicator therefore reflects the narrow size and composition of the urban-infrastructure category, not the adequacy of international support for housing.

The relative prominence of housing may also reflect reconstruction, shelter and urban-support activities in crisis-affected contexts, including Ukraine, as well as activities coded as low-cost housing, slum upgrading or urban development. By contrast, water supply and sanitation, energy and waste management received much lower allocations in the extraction. These figures should be interpreted carefully, however, because basic-service components may be embedded

in housing, reconstruction or broader urban development projects and may not always be coded as exclusively urban infrastructure.

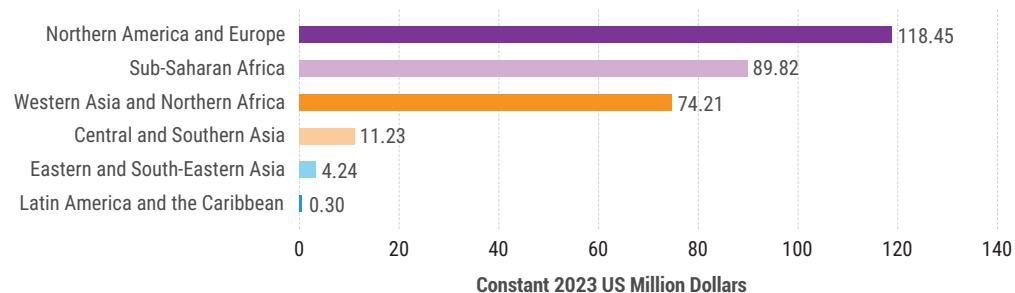
Urban infrastructure finance is concentrated in a limited number of regions and contexts

The regional distribution of finance in 2024 was also highly uneven. Northern America and Europe appeared as the largest recipient region, receiving \$118 million, largely reflecting reconstruction and urban support related to Ukraine. This was followed by Sub-Saharan Africa at nearly \$90 million and Western Asia and Northern Africa at around \$74 million.

This regional pattern appears to reflect a mix of structural urban needs, crisis and reconstruction priorities, and donor reporting practices, rather than a comprehensive assessment of urban infrastructure deficits across regions. The prominence of Sub-Saharan Africa points to continued international concern with rapid urbanization and large infrastructure gaps, while the prominence of Northern America and Europe and Western Asia and Northern Africa appears to reflect the importance of conflict, reconstruction and crisis-related urban support in the 2024 data.

This concentration matters because official finance may not be reaching the full range of cities and countries facing severe deficits in basic urban infrastructure. It also reinforces the need for caution. Since the total volume captured by

Figure 2.11.2: Total ODA and other official flows reported to the OECD CRS database and identified as exclusively supporting urban infrastructure, by recipient region, 2024



Source: OECD Creditor Reporting System database, UN-Habitat/OECD analysis, 2025.

the indicator is small, regional allocations can be strongly influenced by a limited number of projects or recipient contexts.

Basic services and sustainability dimensions remain underemphasized

The current financing profile suggests an imbalance between sectors that receive high visibility and those that are equally essential to inclusive urban development. Water, sanitation, waste management and energy are central to public health, slum upgrading and climate resilience, yet they received comparatively limited support in the 2024 analysis.

The same concern applies to sustainability in construction. Housing-centred finance can contribute positively to urban development, but only if it is linked to serviced land, resilient infrastructure and more sustainable construction approaches. The specific emphasis of target 11.c on resilient buildings and local materials remains only weakly reflected in the pattern of finance captured here.

Better tracking is needed to understand who benefits from urban finance

The indicator is useful for identifying broad patterns in official urban finance, but it has clear limits. It depends on how projects are classified and filtered in the OECD CRS database, and it does not capture all forms of urban investment, private finance, domestic public spending or actual spending on the ground. It also does not show whether support reaches

least developed countries, informal settlements, peri-urban communities or climate-vulnerable neighbourhoods.

Improved monitoring would help clarify how much support reaches countries and cities with the greatest infrastructure deficits, which sectors and locations benefit most, and how housing-related infrastructure finance connects with wider goals of resilience, sustainability and territorial equity. Better tracking is also needed to understand whether financing for urban infrastructure contributes to sustainable construction, local materials, local skills and reduced long-term vulnerability.

International support could do more if used more strategically

ODA can play a more catalytic role than simple project finance alone. Used strategically, it can help de-risk investments, strengthen municipal capacity, support blended finance and align urban infrastructure pipelines with national urban policies, housing strategies and climate commitments.

For that to happen, international support will need to move beyond isolated sector projects and connect more consistently with coherent urban policy frameworks. More housing-centred but also more service-balanced infrastructure finance would help countries respond not only to immediate deficits, but also to the longer-term goals of inclusive, resilient and environmentally sustainable urban development.



A home built using composite bamboo shear walls, combining locally available bamboo with low-carbon, hazard-resilient construction. Photo: Arup

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03

Strengthening SDG 11
monitoring: data challenges
and opportunities

3.1

Why SDG 11 data matters

Reliable urban data are essential to achieving SDG 11. Monitoring progress towards inclusive, safe, resilient and sustainable cities depends on timely, disaggregated and policy-relevant information on housing, basic services, transport, land use, public space, environmental quality and risk. This need is especially acute in urban areas, where conditions can change rapidly and where inequalities often become most visible at the level of cities and neighbourhoods.

Recent shocks have reinforced this imperative. The COVID-19 pandemic showed how overcrowding, informality and unequal access to services shape vulnerability and resilience. More broadly, climate change, disaster risk and rising housing stress have increased demand for urban data that are not only globally comparable, but also locally useful for planning and investment.

3.2

Major challenges remain in frequency, scale and comparability

Despite improvements in methodologies and reporting, SDG 11 continues to face major data constraints. Many indicators still rely on censuses, household surveys and administrative systems that are collected infrequently or with incomplete coverage. In fast-changing urban contexts, this limits the ability to track trends, assess policy impacts and respond in a timely way. These limitations are especially acute in fast-growing peri-urban areas and smaller cities, where settlement change may outpace conventional data collection and informal development can remain insufficiently visible in official statistics and spatial datasets.

The sharpest gaps appear below the national level. As the 2023 SDG 11 synthesis report also noted, data availability and quality tend to weaken as analysis moves from global and national



Homes in a hillside neighbourhood of Guayaquil, Ecuador, with the city skyline in the background. Photo: Tunde Gaspar/Shutterstock

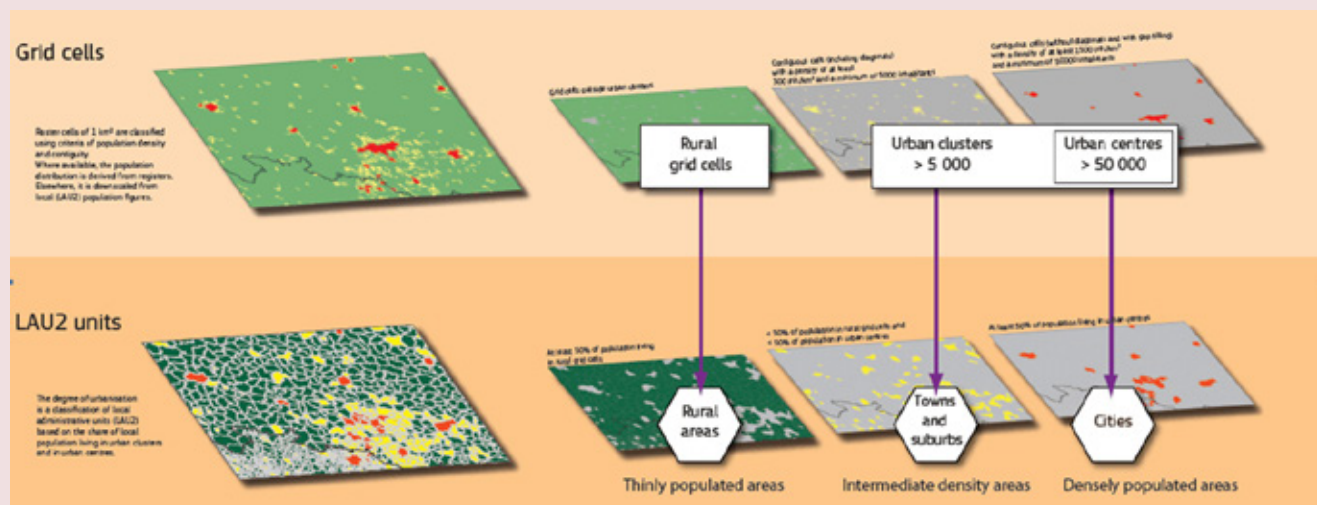
Box 3.1: Making urbanization comparable across the settlement continuum

Urban monitoring is often constrained by inconsistent definitions of what counts as “urban” or “rural”. National definitions remain essential for domestic planning and official reporting, but they vary widely across countries, making international comparison difficult. They can also obscure the role of smaller towns, peri-urban areas and semi-dense settlements, where many SDG 11 challenges related to housing, services, land consumption and exposure to risk are increasingly visible.

The 2025 Revision of the World Urbanization Prospects and the Degree of Urbanization help address this gap by combining official population data, gridded geospatial information and standardized settlement metrics. Using 1 km² population grids, the Degree of Urbanization classifies the full territory of each country along the settlement continuum into cities, towns and semi-dense areas, and rural areas. This approach is supported by the Global Human Settlement Layer, which combines satellite-derived information on built-up surfaces with gridded population data to map where people live and how settlements change over time.

The GHSL WUP Projections Data Package 2025 extends this approach by linking population and built-up surface estimates and projections over long time periods, including spatial grids, country statistics by Degree of Urbanization and multitemporal urban centres. Continuous monitoring through Copernicus Exposure Mapping can further strengthen this evidence base by providing regularly updated information on the built environment and human settlements. For SDG 11, these tools help connect global comparability with more spatially explicit monitoring of settlement expansion, densification, land-use efficiency and changing patterns of exposure. Their value is greatest when used together with national statistics, local administrative data and community-level evidence, so that globally consistent metrics remain grounded in local realities.

Source: UN DESA, World Urbanization Prospects 2025; European Commission Joint Research Centre, GHSL WUP Projections Data Package 2025; Copernicus Global Human Settlement Layer.



Source: Reproduced from UN-Habitat (2023), SDG 11 Synthesis Report 2023, based on European Union, FAO, UN-Habitat, OECD and World Bank (2021), Applying the Degree of Urbanization: A Methodological Manual to Define Cities, Towns and Rural Areas for International Comparisons, 2021 edition

scales to cities and neighbourhoods. This creates a persistent mismatch between the scale at which urban policies are implemented and the scale at which data are consistently available. Intra-urban disparities, peri-urban dynamics and differences between formal and informal settlements often remain poorly captured.

Comparability also remains uneven. SDG 11 indicators differ in methodological maturity, and countries continue to vary widely in statistical capacity, city-level reporting and the use of harmonized urban definitions. While frameworks

such as the Degree of Urbanization have improved consistency, implementation remains uneven, limiting comparability across countries and across the urban-rural continuum.

A further challenge lies in integration. Statistical, geospatial and administrative data are increasingly all needed for urban monitoring, but combining them remains technically and institutionally demanding. Weak interoperability, fragmented mandates, limited local capacity and financial constraints continue to slow the development of more complete urban data systems.

3.3

New tools and partnerships are expanding opportunities for SDG 11 monitoring

At the same time, important opportunities are emerging. Advances in geospatial technologies, Earth observation, artificial intelligence and digital data systems are making it increasingly possible to monitor urban expansion, informal development, infrastructure and public space more frequently and at finer spatial scales. These tools can help reduce costs, improve spatial coverage and generate more timely evidence for decision-making. However, they do not replace censuses, household surveys or administrative data, particularly for dimensions of urban deprivation that cannot be observed from imagery. Their value lies in complementing official systems with more frequent, spatially detailed and locally validated evidence.

Progress has also been made in frameworks and coordination. The Global Urban Monitoring Framework has helped link SDG 11 indicators

with the wider dimensions of sustainable urban development and the New Urban Agenda. United for Smart Sustainable Cities (U4SSC), coordinated by the International Telecommunication Union, the United Nations Economic Commission for Europe and UN-Habitat, provides a complementary platform of key performance indicators, practical guidance and peer exchange to help cities assess and advance people-centred smart sustainable development. The growing use of voluntary reporting, including VNRs used throughout this report, as well as Voluntary Local Reviews, urban observatories and other city-level monitoring approaches, has also strengthened the evidence base, including at the local level.

Partnerships are becoming more important in this landscape. The Global Urban Data Coalition provides one example of a more coordinated approach to urban data, bringing together national statistical offices, local governments, international organizations, academia and other partners to address persistent gaps and improve interoperability between statistical and geospatial systems. Practical digital tools are also expanding possibilities for local data generation, including in informal settlements and other underserved areas (see Boxes 3.3.2 and 3.3.3).

Box 3.2: Earth observation to strengthen monitoring of informal settlement change

Timely, spatially detailed information on informal settlements remains a substantial challenge in many urban areas. Census records, household surveys and administrative data are essential for SDG 11.1.1 monitoring, but they may be collected infrequently, reported at broad administrative scales or struggle to capture rapid change in peri-urban areas and smaller cities.

The European Space Agency-funded IDEAtlas project demonstrates how Earth observation and artificial intelligence can complement these sources. Using freely available satellite imagery, the project produces harmonized settlement maps, morphology-based indicators and multi-year analyses of visible settlement change. These outputs can help identify where informal development is expanding, track changes over time and support more targeted validation, upgrading and service planning.

IDEAtlas refers to its mapped category as “deprived urban areas” (DUAs). This is a morphology-based classification intended to complement, rather than replace, household surveys, censuses and locally validated information on housing conditions. When combined with high-resolution population grids, such as GHS-POP, the mapped outputs can support estimates of the population living in identified informal or deprived areas and provide an additional evidence base relevant to SDG indicator 11.1.1.

The Medellín example (Figures 3.3.1 and 3.3.2 below) illustrates this potential. Multi-temporal mapping can show changes in settlement patterns over time, while locally validated analysis can help cities interpret these changes in relation to housing, service provision, environmental risk and upgrading priorities. The usefulness of such approaches depends on transparent methods, locally appropriate definitions and meaningful engagement with public authorities and communities.

Source: European Space Agency and IDEAtlas project.

Figure 3.3.1: Earth observation mapping of settlement change in Medellín, Colombia.

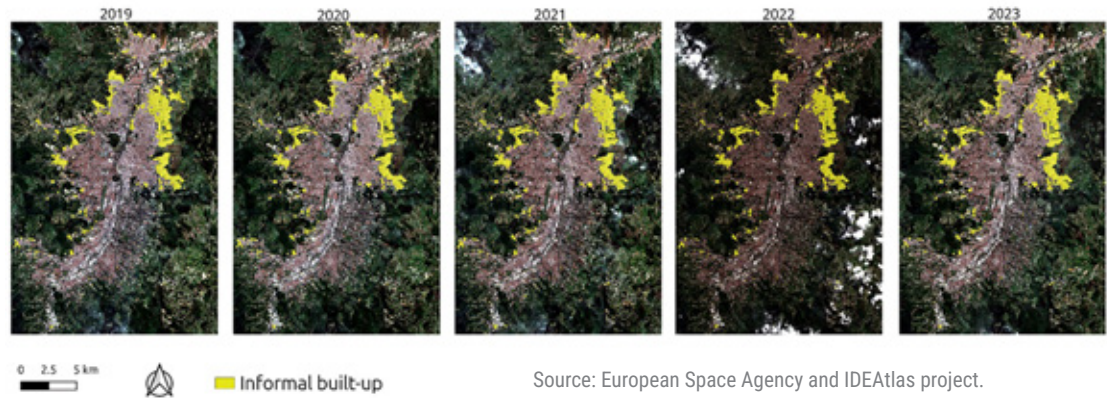
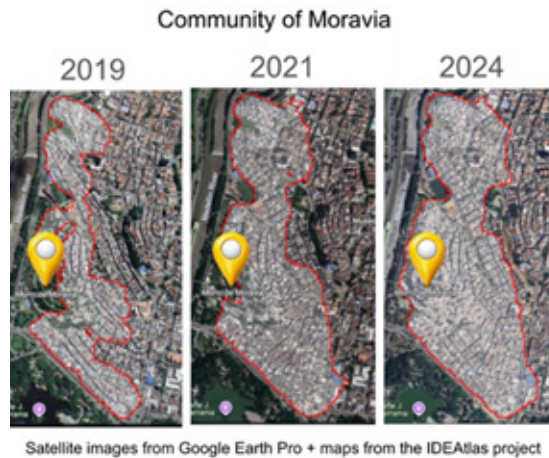


Figure 3.3.2: Moravia, Medellín: mapped settlement dynamics and Earth-observation-based estimates relevant to SDG indicator 11.1.1.



Source: European Space Agency and IDEAtlas project.

Further information: Technical documentation, city-level statistics, and downloadable geospatial data products are available through the IDEAtlas website and User Data Portal.

3.4 Priorities for strengthening SDG 11 data systems to 2030

Looking ahead to 2030, five priorities stand out.

First, disaggregated city-level and neighbourhood-level data systems need much greater prioritization and support. Without stronger local data, it will remain difficult to identify who is being left behind and where urban deficits are most severe.

Second, the integration of statistical, geospatial and administrative data needs to be accelerated. This will be essential for producing more complete and comparable indicators, especially

for targets related to land use, public space, informal settlements and environmental conditions.

Third, investment in data systems needs to become more sustainable. Recent disruptions to major survey programmes have exposed how vulnerable global monitoring remains to fragile funding arrangements. SDG 11 is particularly affected, since several of its indicators depend heavily on external survey and statistical support. More resilient financing and stronger national ownership will therefore be essential.

Fourth, combining multiple sources of urban data is essential. No single dataset can capture the complex and fast-moving reality of cities. Traditional statistics should be complemented by

geospatial data, administrative records, artificial intelligence-enabled analysis, and community- and citizen-generated data. These systems should be co-designed with local governments and communities and validated against local reference data, so that they reflect local conditions, strengthen public accountability and avoid creating new blind spots.

Fifth, data needs to be used more directly in planning and decision-making. Indicators are most valuable when they help guide investment,

improve targeting, support accountability and strengthen policy learning. Better urban data systems should not serve reporting alone; they should also help cities and countries manage urbanization more effectively.

Stronger SDG 11 data systems will therefore require not only better tools, but also better institutions, better coordination and more sustained investment. Without such efforts, progress will remain harder to measure, harder to target and harder to accelerate.

Box 3.3: Using AI to map informal settlements for better urban planning and upgrading

Keeping pace with rapid settlement growth is a major challenge for urban planning and upgrading. Changing settlement boundaries and limited local data capacity can leave authorities reliant on outdated maps or time-consuming manual digitization, limiting their ability to target basic services, risk reduction, housing investment and upgrading. As artificial intelligence and remote sensing become more widely used in urban planning, the quality of underlying data and the transparency of models and algorithms are also becoming central concerns.

The Building & Establishment Automated Mapper, or BEAM, was developed by the United Nations Innovation Technology Accelerator for Cities, a collaboration between UN-Habitat, UN-OICT and HafenCity University Hamburg. BEAM uses machine learning to detect rooftops, building footprints and structures from satellite, aerial or drone imagery. Users can upload images of a selected area, and the tool identifies and geo-references pixels likely to correspond to rooftops, producing spatial layers that can be used in planning and analysis. The tool was first developed with eThekweni Municipality in South Africa and has since been adapted for use in other contexts, including Cape Town and cities in Central America.

BEAM can significantly accelerate the mapping of informal settlements. In eThekweni, UNITAC reports that a citywide mapping process that previously took months could be completed in 72 hours, generating more than 1.5 million building footprints across the municipality. The value of the tool lies in connecting remote sensing, artificial intelligence and local planning needs, as faster mapping can help cities identify settlement growth patterns, prioritize upgrading and basic service investments, and monitor changes over time. At the same time, BEAM points to a broader lesson for SDG 11 data systems. AI can accelerate urban mapping, but its value depends on the quality of the inputs, the transparency of the methods and the ability of local institutions and communities to understand, use and challenge the data that inform planning decisions.

Source: UNITAC; UN-Habitat; UN-OICT; HafenCity University Hamburg.



Informal settlement upgrading in eThekweni, Durban, South Africa © UN-Habitat

04

Key recommendations to
accelerate SDG 11 progress

With only a few years remaining until 2030, accelerating progress on SDG 11 will require more than incremental improvement. The evidence in this report points to the need for a sharper shift in how countries and cities approach housing, urban growth, resilience, local implementation and urban data. The following recommendations highlight six priority areas where more integrated and sustained action could help close persistent gaps and put urban development on a more inclusive, resilient and sustainable path.

1. Put adequate housing at the centre of SDG 11 implementation

Housing should be treated not as one target among many, but as a cross-cutting platform for progress across transport, planning, resilience, environmental quality and public space. That means moving beyond narrow housing-output approaches towards integrated action on serviced land, affordability, tenure security, upgrading, resilient construction and location. In practical terms, countries and cities should align housing policy with transport planning, public space provision, environmental health, heritage protection and disaster risk reduction, so that housing investment reduces rather than reproduces urban exclusion.

2. Transform informal settlements and slums through participatory and rights-based approaches

The continued growth of slum and informal settlement populations requires a stronger shift away from displacement-led responses and towards inclusive upgrading at scale. In-situ upgrading should be prioritized wherever possible, combining improved housing, tenure security, water and sanitation, drainage, waste management, access to transport and public space, and reduction of environmental and disaster risk. These efforts should be guided by human rights principles and move beyond consultation towards co-produced and community-led approaches, giving affected residents, especially women, young people, persons with disabilities and other groups facing exclusion a central role in shaping upgrading

priorities, implementation and accountability. In fragile and crisis-affected settings, upgrading approaches should also be linked to displacement responses, climate adaptation and livelihood recovery.

3. Guide urban expansion towards compact, connected and inclusive growth

A central lesson of the report is that many of today's urban deficits are being built into the physical structure of cities. Urban land continues to expand faster than population, outward expansion remains the dominant pattern of built-up growth, and many new urban areas are not adequately connected to public transport, walking and cycling networks, basic services, public space or risk-informed infrastructure. A stronger policy priority is therefore needed on the form, location and governance of urban growth itself. Governments should protect land for streets, open space and infrastructure early, promote compact, mixed-use and well-connected development, safeguard cultural and natural heritage, steer housing away from hazard-prone areas, and ensure that expansion areas are planned with public transport, safe walking and cycling infrastructure, and basic services from the outset. At the same time, more compact growth must be pursued inclusively, with affordable housing, secure tenure, participatory planning and safeguards against displacement.

4. Move from disaster response to climate- and risk-informed urban transformation

The report shows that disaster impacts have become the most visible SDG 11 theme in recent national reporting, while human and economic losses remain persistently high and infrastructure disruption increasingly systemic. The implication is that resilience cannot sit at the margins of urban policy. It needs to be built into housing, land-use planning, infrastructure design, air quality and waste management, public health protection, local finance and public investment systems. A more preventive model is needed: one that expands multi-hazard early warning and preparedness, but also reduces exposure by upgrading high-risk settlements, enforcing

risk-sensitive development controls, protecting ecosystems, strengthening continuity of basic services, and directing infrastructure and housing finance towards safer, lower-carbon and more resilient urban growth.

5. Enable local and regional governments to deliver

Across several targets, the report points to the same bottleneck: local authorities are expected to manage growth, deliver services, reduce risk, protect heritage, improve environmental quality and implement national plans, yet often without sufficient fiscal space, technical capacity or control over investment. Accelerating SDG 11 will therefore require a stronger implementation compact for cities and local governments. This means deeper fiscal decentralization, more predictable transfers, stronger municipal revenue systems, better access to climate and development finance, and sustained technical support for planning, service delivery, heritage management, environmental monitoring and resilience implementation. Without stronger local delivery systems, better national policies alone will not translate into better urban outcomes.

6. Treat urban data as implementation infrastructure, not just a reporting requirement

Persistent data gaps remain one of the clearest constraints on SDG 11, especially at city and neighbourhood level, where decisions are made and inequalities are felt most sharply. At the same time, the report points to a practical way forward: stronger integration of statistical, geospatial and administrative data; more local monitoring; and more coordinated partnerships through mechanisms such as the Global Urban Data Coalition. The priority now is to build urban data systems that support action, not only global reporting. That means investing in city-level and sub-city data, protecting core survey and statistical systems from funding shocks, improving data on informal settlements, disaster losses, air quality, public space and heritage, and ensuring that new tools such as Earth observation and AI are linked to official systems, local planning and public accountability.

Annex I. Methodological note on the AI-assisted analysis of Voluntary National Reviews

1. Purpose and scope

This report complements conventional SDG 11 indicator monitoring with an experimental, AI-assisted analysis of Voluntary National Reviews (VNRs) presented in Section 2 of the report. The analysis examines how countries frame SDG 11 priorities in national reporting by estimating the share of VNR text substantively aligned with the thematic areas covered by the ten SDG 11 targets.

The dataset comprises 397 VNRs submitted between 2015 and 2026. For each document and target, the method calculates the share of analysable narrative words that is substantively aligned with a target-specific thematic definition. These document-level shares are then aggregated to examine patterns by target, reporting period, region and income group. A VNR with no text substantively aligned with a particular target contributes a zero share for that target.

The target definitions were developed by UN-Habitat experts and reflect the thematic scope of each SDG 11 target and its associated indicators. The method identifies substantive semantic alignment with these definitions rather than relying on keyword counts alone. As some themes may reasonably align with more than one SDG 11 target, target-level shares are not mutually exclusive and should not be summed.

The approach builds on earlier UN-Habitat analytical methods used for the WUF12 Perspectives and NDC 3.0 Urban Content reports, with strengthened evidence grounding, human validation and uncertainty analysis.

2. Interpretation of results

The findings of this analysis should be interpreted as a measure of reporting emphasis within country-led accounts of national priorities and progress, not as an assessment of policy implementation, real-world outcomes or progress towards the SDG targets.

A high reference share may indicate that a theme is prominent in national sustainable development narratives, but does not by itself demonstrate effective action or improved outcomes. Conversely, limited reporting on a theme does not necessarily imply limited activity. The results should therefore be read alongside conventional SDG indicators, qualitative evidence and country-specific context.

3. Analytical approach

The workflow comprised five core processing stages: digitization, translation, segmentation, data extraction and data validation. These stages were followed by aggregation and uncertainty assessment to produce and test the estimates reported in this publication.

3.1 Preparation of the VNR corpus

Digitization. VNR PDFs were converted into structured, analysable text using Azure Content Understanding. The layout-aware parsing process reconstructed each document's logical structure, including headings, paragraphs, columns and visual elements, while retaining source information such as page number, geometry and word offsets.

These source mappings made it possible to trace extracted evidence back to its original location in the source document and supported evidence-grounding checks throughout the subsequent stages of the pipeline.

Translation. Language identification was applied at paragraph level using the Lingua language detector. Paragraphs identified as non-English were translated into English using Azure AI Translator.

Although the extraction model is multilingual, translation was used to reduce cross-language variation and enable the consistent application of English-language thematic definitions and extraction instructions across VNRs.

Segmentation. The digitized and translated text was divided into structured text segments or chunks. Segment boundaries followed natural document breaks wherever possible, while applying configured length limits of 600 characters minimum, 1,800 characters as a soft maximum and 2,800 characters as a hard maximum. This approach sought to preserve sufficient contextual information for interpretation while maintaining a consistent scale for model processing.

3.2 AI-assisted thematic extraction

Extraction. Each text chunk was assessed against standardized thematic definitions for the ten SDG 11 targets. The extraction prompt instructed the model to identify only text that was directly and substantively aligned with a target definition, rather than material containing broadly related keywords or general references.

The standardized prompt and structured JSON output schema were submitted to GPT-5 through Azure AI Foundry. For each chunk, the model returned zero or more target-labelled evidence spans. Each span was required to reproduce continuous text from the source chunk exactly as written.

To strengthen traceability, each model-generated evidence span was mapped back to its original character offset in the source text. This created an evidence chain between the reported results and the underlying VNR content. Spans that could not be aligned with the source text were routed for human review and excluded unless the alignment could be confirmed. This grounding process helped prevent newly generated, inferred or unsupported text from entering the analytical results.

The model name, API version and run dates were recorded to support reproducibility; the principal details are provided in appendix A.1.

3.3 Validation of model outputs

Validation. Human review was used to assess the extent to which model extractions corresponded with expert interpretation of the target definitions. Human reviewers identified character ranges in sampled chunks that were substantively aligned with one or more SDG 11 target definitions. These annotations were treated as a human reference rather than as objective or error-free ground truth.

A total of 300 chunks were sampled for review. Of these, 220 formed the representative component and were selected through stratified random sampling. The remaining 80 formed a diagnostic component, selected to ensure minimum coverage across analytical strata and used for error analysis only. Diagnostic cases were excluded from the aggregate performance estimates reported below.

Model-generated pre-labels were visible to reviewers for 80 per cent of review tasks. The remaining 20 per cent were conducted as blind reviews, with pre-labels hidden.

Performance was assessed using character-level overlap between model extractions and human-reference annotations. Precision measures the share of model-predicted characters that overlapped with the human reference; recall measures the share of human-reference characters captured by the model; and F1 is the harmonic mean of precision and recall.

This character-coverage approach gives proportional credit where the model identifies the correct passage but differs slightly from the reviewer in the precise boundaries of an extracted span. Ninety-five per cent confidence intervals were calculated using document-clustered bootstrap resampling.

Table I.1. Overall weighted character-coverage performance

Metric	Estimated value	95 per cent confidence interval
Precision	0.92	[0.86, 0.97]
Recall	0.81	[0.71, 0.88]
F1	0.86	[0.79, 0.91]

Note: The representative validation component included 124 human-reference spans and 95 model-predicted spans.

3.4 Aggregation and uncertainty assessment

For each target, extracted evidence spans were converted into document-level proportional word-coverage measures. The resulting measure represents the share of each VNR's analysable narrative words substantively aligned with the relevant target definition.

Text extracted from figures and other visual elements was excluded from the word-count denominator in order to avoid chart labels, captions and other non-narrative material distorting estimates of thematic coverage. Unless otherwise stated, reported values are unweighted mean document-level shares. This approach gives each VNR equal weight within the relevant analytical group, rather than allowing longer documents to dominate the results.

Individual AI-assisted extractions may contain random errors, including omitted passages or incorrect target assignments. Aggregation across broader categories, including targets, reporting periods, regions and income groups, reduces the influence of isolated errors, although it does not eliminate the possibility of systematic error.

A document-sensitivity analysis tested whether key results changed when different groups of VNRs were included in the analysis. The analysis used 10,000 bootstrap draws, retaining all VNRs from the same country within the same draw. The resulting corpus sensitivity intervals indicate how sensitive estimates are to the particular composition of the VNR corpus.

Table I.2. Sensitivity of selected proportional word-coverage findings

Finding	Raw estimates	Contrast	Corpus 95 per cent sensitivity interval	Assessment
Disaster impacts: TP1 / TP2	1.402% / 3.162%	+1.760 pp	[1.429, 2.095]	Clear increase across VNR Docs
Housing: TP1 / TP2	1.658% / 1.652%	-0.006 pp	[-0.231, 0.215]	No clear decrease
Urban planning: TP1 / TP2	1.098% / 1.000%	-0.098 pp	[-0.323, 0.173]	No clear decrease
Disaster impacts: high-income / low-income	2.195% / 3.855%	Δ 1.660 pp*	[0.522, 2.908]	Clear difference across VNR Docs

Note: The reporting-period comparison distinguishes VNRs submitted in 2015–2020 (TP1) from those submitted in 2021–2026 (TP2).

*The contrast is calculated as the low-income-country estimate minus the high-income-country estimate.

The analysis also tested whether disaster impacts were clearly the most prominent SDG 11 theme in VNRs submitted during 2021–2026.

Table I.3. Rank clarity for disaster impacts, 2021–2026

Raw estimate	Runner-up	Rank gap	Simultaneous corpus 95 per cent sensitivity interval	Probability of ranking first	Assessment
3.162%	1.893% (11.6)	+1.269 pp	[0.760, 1.777]	100.0%	Clear first rank across VNR Docs

A separate model-divergence sensitivity analysis examined whether the estimated proportional word coverage of SDG 11 targets would change if the model systematically over- or under-estimated coverage relative to human reviewers. The analysis used the 220 chunks in the representative human-labelled sample, applying inverse-probability weights and document-clustered resampling within the original sampling strata.

The validation data did not provide sufficient evidence to support a stable model-divergence adjustment. No adjusted estimates are therefore reported.

4. Limitations

The analysis has several limitations.

First, hosted large language model responses may vary across repeated runs, even where model settings remain unchanged. Re-running the pipeline may therefore not reproduce identical character-level outputs.

Second, model-generated pre-labels were visible in most human-review tasks. This may have influenced reviewer annotations towards the model's initial selections. The blind-review component provides a partial check on this risk, but was relatively small.

Third, non-English text was translated into English before extraction. Translation may alter terminology, phrasing or cultural nuance, potentially affecting semantic alignment with the target definitions.

Fourth, SDG 11 targets contain overlapping themes. Some passages may reasonably align with more than one target, creating an unavoidable element of semantic ambiguity.

Fifth, the pipeline depends on upstream services, including Azure Content Understanding and Azure AI Translator. Errors in layout parsing, language identification or translation may affect the text submitted to the extraction model.

Finally, performance metrics were assessed against a single-reviewer human reference. As inter-annotator agreement was not measured, the validation results indicate agreement between the model and the human reference rather than accuracy against an objective ground truth.

Appendix to Annex I. Technical specifications, thematic definitions and supplementary validation results

A.1 Model Configuration

Item	Value
Access Endpoint	'/v1/chat/completions'
Model Name	'GPT-5'
API version	'2024-10-21'
Run dates	29/04/26 – 04/05/26

A.2 Extraction Prompt

System Prompt:

<ROLE>

You are a careful multi-span text extractor.

<TASK>

Extract any relevant text spans using the extraction label DEFINITIONS.

<RULES>

- Extract text spans ONLY if they are directly and substantively aligned with a label's definition.
- Extract nothing if the text doesn't directly and substantively align with a label's DEFINITION.
- Note: Mentioning the same high-level topic does not represent direct and substantive alignment.
- Note: The text must match the label's DEFINITION's framing to be directly and substantively aligned.

- Extract text exactly as found, do not paraphrase or edit any wording or punctuation.
- Extract in full paragraphs and sentences when possible.

<OUTPUT>

- Return ONLY JSON that exactly conforms to the provided JSON Schema.
- Each label for "extraction_label" must be one of the definition keys shown in DEFINITIONS.
- Each evidence_text entry must be a continuous substring copied exactly from the TEXT.

- If you assign a label, you must include at least one evidence_text span that supports it.
- If multiple spans support a label, include them all in the evidence_text array for that label.
- If no labels are directly and substantively aligned, leave "items" empty.

User Prompt:

<DEFINITIONS>

{definitions_string}

<TEXT>

{content}

Note: {definitions_string} is the rendered list of target definitions shown in section A.4.

Note: {content} is the text from the source chunk.

A.3 Output Structure

```

title: "VNRDynamicExtractionResponse"

type: "object"

additionalProperties: false

required: ["items"]

properties:
  items:
    type: "array"
    description: "List of extracted SDG 11 component items."
    items: { $ref: "#/definitions/Item" }

definitions:
  Item:
    type: "object"
    additionalProperties: false
    required: ["extraction_label", "evidence_text"]
    properties:
      extraction_label:
        type: "string"
        description: "Taxonomy label selected from the bound definitions artifact."
        # enum is injected at runtime from the sdg_11_components labels (closed set)
      evidence_text:
        type: "array"
        description: "One or more contiguous evidence spans copied verbatim from the source text."
        items: { type: "string" }
        minItems: 1
      decision_rationale:
        type: "string"
        description: "Short rationale for the extraction decision."
    
```

Note: extraction_label was bound at runtime to a closed set of SDG 11 target labels. evidence_text required at least one continuous source span. decision_rationale was optional.

A.4 SDG 11 target thematic definitions

SDG 11 target	Thematic definition
11.1	adequate housing / affordable housing / safe housing / basic urban services / slum upgrading / slums / informal settlements / informal settlement upgrading / inadequate housing / housing deprivation / substandard housing
11.2	safe transport / affordable transport / accessible transport / sustainable transport / transport for mobility and opportunity / inclusive public transport / convenient public transport / last-mile access
11.3	inclusive urbanization / sustainable urbanization / integrated urban planning / participatory urban planning / urban management capacity / civil society engagement in urban planning / land use consumption and efficiency / urban expansion
11.4	cultural heritage / natural heritage / cultural or natural heritage protection / cultural or natural heritage conservation / cultural or natural heritage safeguarding / cultural or natural heritage preservation / cultural or natural heritage funding and investment / cultural or natural heritage conservation funding and investment
11.5	disaster impact prevention / disaster impact reduction / disaster impacts and losses / disaster mortality / displacement from disasters / economic impacts from disasters / infrastructure impacts from disasters / basic services disruption from disasters / impacts of disasters on people / impacts of disasters on the poor / impacts of disasters on the vulnerable

SDG 11 target	Thematic definition
11.6	urban environmental impact / urban environmental sustainability / urban pollution / urban air pollution PM2.5 pollution / PM10 pollution / urban air quality / urban particulate matter / waste management and collection / waste treatment facilities / urban recycling / urban circular economy
11.7	public spaces / green public spaces / inclusive public spaces / accessible public spaces / safe public spaces / harassment in public spaces / violence in public spaces / public spaces accommodating women and children / public spaces accommodating older persons and persons with disabilities
11.a	urban-rural linkages / urban-rural economic linkages / urban-rural environmental linkages / urban-rural social linkages / urban-rural development planning / national urban-rural planning / regional urban-rural planning
11.b	integrated urban resilience policies / integrated urban resilience plans / inclusive urban planning / resource-efficient urban planning / urban climate mitigation planning / urban climate adaptation planning / disaster resilience planning / Sendai Framework implementation / disaster risk management
11.c	resilient buildings / sustainable buildings / buildings using local materials / technical assistance for building sustainable and resilient buildings using local materials / financial assistance for building sustainable and resilient buildings utilizing local materials

A.5 Unweighted per-target validation character-coverage performance, including diagnostic component

SDG 11 target	Precision	Recall	F1 score	Gold-span count
11.1	0.923	0.772	0.841	94
11.2	0.988	0.961	0.974	51
11.3	0.901	0.878	0.889	67
11.4	0.933	0.93	0.932	66
11.5	0.902	0.914	0.908	70
11.6	0.948	0.854	0.898	88
11.7	0.934	0.829	0.878	36
11.a	0.948	0.747	0.835	44
11.b	0.841	0.888	0.864	63
11.c	0.910	0.897	0.903	36

Note: These unweighted per-target estimates include the diagnostic component and are provided for descriptive error analysis. They are not directly comparable with the weighted representative performance estimates reported in Table I.1.

A.6 Weighted validation character-coverage performance by publication period

Publication period	Precision	Recall	F1 score	95 per cent confidence interval	Gold-span count
2015-2020	0.901	0.799	0.847	[0.725, 0.926]	68
2021-2026	0.945	0.812	0.874	[0.797, 0.923]	56

A.7 Weighted validation character-coverage performance: blind and non-blind review

Metric	F1 score	95 per cent confidence interval	Gold-span count
Non-blind review	0.90	[0.84, 0.94]	94
Blind-control review	0.66	[0.24, 0.83]	30

Note: The blind-control estimate is based on a relatively small number of human-reference spans and has a wide confidence interval.

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