



# SUSTAINABLE DEVELOPMENT GOALS

## Monitoring Human Settlements Indicators

**11** SUSTAINABLE CITIES  
AND COMMUNITIES



A SHORT GUIDE TO HUMAN SETTLEMENTS  
INDICATORS GOAL 11+

**UN HABITAT**  
FOR A BETTER URBAN FUTURE



# 11 SUSTAINABLE CITIES AND COMMUNITIES



## **SUSTAINABLE DEVELOPMENT GOALS** Monitoring Human Settlements Indicators

A SHORT GUIDE TO HUMAN SETTLEMENTS INDICATORS GOAL 11+

An aerial photograph of a city skyline. The foreground is filled with dense, multi-story residential buildings with balconies. In the middle ground, several prominent skyscrapers rise, including a very tall, slender glass tower and two cylindrical towers with grid-like facades. The background shows more city buildings under a sky with scattered white clouds. A semi-transparent dark grey banner is overlaid across the top third of the image, containing white text.

# CITIES AND COMMUNITIES IN THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

## AT THE CORE OF SUSTAINABLE DEVELOPMENT; DEDICATED GOAL ON CITIES AND HUMAN SETTLEMENTS

Today, more than half the world's population lives in cities. By 2030, it is projected that 6 in 10 people will be urban dwellers. By 2050, the figure will have risen to 6.5 billion people; representing two-thirds of all civilization. Taking into account the increasing rural to urban migration and the rapid growth of cities in the developing world, it is clear that cities face a myriad of problems that may hinder planned growth and development. Despite numerous planning challenges, it is from these cities, that benefits of economies of scale are realized leading to proper provision of goods and services all of which eventually become inclusive. With sound planning and management, cities can transform into incubation centres for innovation and growth, and drivers of sustainable development.

The rapidly increasing dominance of urban areas ensures that the process of urbanization is among the most significant global trends of the 21st century. Urbanization is not only a demographic or spatial phenomenon but a force which if steered and deployed correctly can help the world to overcome some of its major global challenges including poverty, inequality, environmental degradation, climate change, fragility and conflict, which are all critical elements of the 2030 agenda. Proportional increases in the urban population and the spatial expansion of cities has other important social, behavioural, political, economic and environmental dimensions. Urban life influences consumption and production patterns, as well as levels and rates of urban socio-economic activities, growth and development.

Sustainable development seeks to combine two goals aimed towards meeting the needs of the present without compromising the ability of future generations to meet their needs. Sustainable cities goal is a transformative agenda that believes everyone must have a dignified life and live in an environment that allows people

to grow and flourish. The future we want includes cities that have opportunities for all, with access to basic services, energy, housing, transportation and more. With an increasingly urbanized world, this requires the attention of both local regional and national governments to work towards achieving these goals.

Cities are hubs for ideas, commerce, culture, science, productivity, social development and much more. At their best, cities have enabled people to advance socially and economically through creation of jobs and providing opportunities. However, many challenges exist when trying to maintain cities in a way that they continue to create jobs and prosperity while not straining land and resources. The challenges cities face need to be overcome in ways that allow them to continue to thrive and grow, while improving resource use and reducing pollution and levels of poverty. Given the strong transformative effects of urbanization and the vitality of cities, a stand-alone and dedicated urban sustainable development goal was established. In September 2015, the United Nations Sustainable Development Summit adopted a new framework to guide development efforts between 2015 and 2030, entitled "Transforming our world: the 2030 Agenda for sustainable development". The 2030 Agenda includes a dedicated goal on human settlements (SDG 11) that sets out to make cities inclusive, safe, resilient and sustainable. By endorsing a stand-alone goal on cities (Goal 11), known as the 'urban SDG', the international community recognized urbanization and city growth as a transformative force for development. SDG 11 expands the focus of MDGs' emphasis on basic services and slum reduction to cover a broader aspect of provision of basic services. SDG 11 not only has strong linkages to all other SDGs, but also underpins them. We also acknowledge the existence of other human settlements indicators in other goals within the SDG framework.

## NEW URBAN AGENDA FOR PEOPLE, PLANET AND PROSPERITY

The New Urban Agenda (NUA) was adopted during the Habitat III conference in Quito, October 2016. The Conference gathered more than 30,000 accredited participants, and involved more than 150,000 people in the entire preparatory process including regional and thematic meetings, negotiations, meetings with stakeholders, and the preparation of policy papers amongst others. The New Urban Agenda brings with it many years of UN-Habitat's combined cumulative experience in implementing the most important aspects of ensuring that urbanization remains the strategic issue, both for local and for national governments. This includes the consolidated vision of urbanization as the key driver and source of development as well as the engine for prosperity and human progress, as reflected in the 2030 Agenda for Sustainable Development.

The New Urban Agenda simplifies as a plan of action geared towards addressing the complex challenges of urbanization through identification of places of action and the responsible actors that can change and carry out the changes in the path towards urbanization. The NUA, operates on five key principles of i) National Urban Policy; ii) Rules and Regulations; iii) Urban Planning and Design; iv) Financing Urbanization; and v) the Local implementation of the NUA. The principles are in line with the SDGs human settlements related indicators making these two global frameworks complementary in nature as well as ease the monitoring and reporting on the global performance of both.

## TARGETS AND INDICATORS OF SUSTAINABLE DEVELOPMENT GOAL 11

Indeed, many argue that how the world deals with its cities in the coming years will do much to define the overall success of the SDGs. As U.N Deputy Secretary-General Jan Eliasson said, "Cities are where the battle for sustainable development will be won or lost if we all fail." Goal 11 contributes to further work that begun as part of MDG Goal 7 on improving basic services and reducing slums.

Making progress in Monitoring of SDG 11 is crucial in ensuring the success of the SDG framework. It is therefore necessary to identify and apply specific, measurable and action-oriented methods and approaches for localizing implementation of SDG. The Inter Agency Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs), led by Member States, was responsible for developing an indicator framework for SDG monitoring at the global level and for supporting its implementation. UN-Habitat was highly involved throughout the SDG process and supports IAEG-SDGs on behalf of the United Nations system with regard to SDG 11.

SDG 11 contains ten targets: seven are outcome-oriented and three are process-oriented. The goal aims to provide safe and affordable housing and public transport and develop well-planned cities with environmentally sustainable buildings and increased green public spaces where cultural and national heritage is protected. It also aims to improve resilience to disaster and risk management. The latest targets and associated indicators, as listed by IAEG-SDGs are presented below. For more information, please refer to <http://www.un.org/sustainabledevelopment/cities/>

## OVERVIEW OF TARGETS AND PROPOSED INDICATORS FOR GLOBAL MONITORING OF SUSTAINABLE DEVELOPMENT GOAL 11 AND OTHER HUMAN SETTLEMENTS INDICATORS IN OTHER GOALS

Indicators as listed by the Inter-Agency Expert Group on Sustainable Development Goal (IAEG: SDGs).



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



Current Indicator

**11.1.1:** Proportion of urban population living in slums, informal settlements or inadequate housing

### Background

Rapid urbanization, if not well managed, increases informal settlements/housing and poverty. This leads to spatial inequalities that are expressed as segregation

of certain population groups, which may indicate poverty as well as inadequate living conditions in urban areas. Therefore, to develop appropriate policies it is necessary to identify and quantify the proportion of the population living in slums, informal settlements or those living in inadequate housing. A prosperous and inclusive city or nation seeks to reduce spatial inequalities and provide comprehensive responses to the challenges of urban poverty.



**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.”



## Current Indicator

**11.2.1:** Proportion of the population that has convenient access to public transport by sex, age and persons with disabilities

### Background

The ability of residents including persons with disabilities and businesses to access markets, employment opportunities, and service centres such as schools and hospitals is critical to urban economic development. The transport system thus provides access to resources and employment opportunities. Moreover, accessibility allows planners to measure the effects of changes in transport and land use systems. The accessibility of jobs, services and markets also allows policymakers, citizens and businesses to discuss the state of the transport system in a comprehensible manner. With accessibility to services, goods and opportunities for all as the ultimate goal, priority is given to making cities more compact and walkable through better planning and the integration of land use planning within transport planning.



**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.



## Current Indicators

**11.3.1:** Ratio of land consumption rate to population growth rate

### Background

A defining feature of many of the world's cities is an outward expansion far beyond formal administrative boundaries, largely propelled by the use of automobiles, poor urban and regional planning and land speculation. A large proportion of cities both from developed and developing countries have high consuming suburban expansion patterns, which often extend to even further peripheries. In order to effectively monitor land consumption growth, it is not only necessary to have the information on existing land use cover but also the capability to monitor the dynamics of the resulting changes in land use. This should take into account the modifications resulting from the changing demands of increasing population and forces of nature acting to shape the landscape because all land cover today is altered principally by direct human use .

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

### Background

Public participation ensures a positive relationship between government and public by communicating effectively and solving the conflicts in a gentler way. In many cases when people see urban planning decisions made without letting them know, they act radically, which results to potentially explosive situation of the society. Ensuring that a wide variety of opinions are considered assists the decision makers with understanding the interlinked nature of problems facing the city. This people centred approach is vital in urban planning and implementation of community projects and remains one of the key methodologies being developed to address priority development issues at city wide or local levels.





### Target 11.4 “Strengthen efforts to protect and safeguard the world cultural and natural heritage.”



#### Current indicator

11.4.1: Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed, World Heritage Centre designation), level of government (national, regional, and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector, sponsorship).

#### Background

Financial efforts/actions made by public authorities, both at the local, national and international levels, alone or in partnership with civil society organizations (CSOs) and the private sector aimed at protecting and safeguarding the world’s cultural and natural heritage have a direct impact in making cities and human settlements more sustainable. This ensures the safeguarding of cultural resources and assets to keep attracting people (inhabitants, workers, tourists, etc.) and financial investments, to ultimately enhance the total amount of expenditure necessary.



**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.”



## Current Indicators

**11.5.1:** Number of deaths, missing persons and directly affected persons attributed to disaster per 100,000 population

### Background

Cities around the world, as well as rural populations, witness growing disaster risks. Impacts of climate change on sustainable development are observable through slow-onset events (e.g. sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification) and extreme weather events. Cities are some of the most vulnerable areas to natural disasters. Unplanned urban development (e.g. informal settlements, overcrowding, inadequate infrastructures) exacerbates urban vulnerability to climate change impacts and hydro-meteorological and geological hazards. Better management of natural resources strengthens the resilience of the poor, by reducing the likelihood of natural hazardous events and offering resources to help cope with them.

**11.5.2:** Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters.

### Background

There are several dimensions of poverty closely related to environment, often affected by natural disasters. Large numbers of people remain perilously close to falling into poverty, experiencing shocks that they are unable to cope with in the aftermath of large catastrophic events. For the poor, a shock of even a relatively short duration can have long-term consequences because of unsustainable coping strategies and mechanisms. The poverty reduction agenda could include well-designed social protection schemes to help protect the poor against sudden shocks and the development of capacities to better predict and prepare for such shocks. The economic loss indicator seeks to track loss of agricultural, industrial and commercial sectors and damage to housing and critical infrastructure.



**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



## Current Indicators

**11.6.1:** Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities.

### Background

Managing solid waste is one of the important challenges of urban areas of all sizes. Waste collection and management is intended to lessen adverse effects of waste on health, the environment or aesthetics, and the entire ecosystems that support the city or urban area. Urban households and businesses produce substantial amounts of solid waste, including industrial, construction and hazardous waste that needs to be collected regularly and properly disposed of in order to maintain healthy and sanitary living conditions. Uncollected and improperly managed solid waste can end up in drains and dumps leading to blocked drainage and cause unsanitary conditions providing breeding grounds for disease vectors. A prosperous city seeks to collect and manage appropriately all of its solid waste and improve standards of living, cleanliness and hence decrease the chances of having disease outbreaks related to the improper management of waste. Sustainable solid waste management is essential for the sustainability of cities especially if it includes waste reduction, reuse, recycling and composting, incineration, and disposal in landfills.

**11.6.2:** Annual mean levels of fine particulate matter (e.g. PM<sub>2.5</sub> and PM<sub>10</sub>) in cities (population weighted).

### Background

Urbanization has enormous environmental consequences, both global and local. Already city dwellers are indicated as responsible for up to 70% of the world's greenhouse gas emissions. Air pollution consists of many pollutants, among other particulate matter. These particles are able to penetrate deeply into the respiratory tract and therefore constitute a risk for health by increasing mortality

from respiratory infections and diseases, lung cancer, and selected cardiovascular diseases. Therefore, in order to tackle climate change, avoid lasting damage to vital ecosystems and improve the health and well-being of billions of people, solutions to these problems must be sought at the city level. Economic growth and urbanization are inevitable; and if matched with appropriate and effective policies and governance, the environmental consequences are manageable. Cities must build the financial and other institutions required to achieve environmental sustainability (without which economic growth will fall short of ensuring shared prosperity).





**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



### Current Indicators

**11.7.1:** Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities

### Background

Many public areas have been gradually forgotten or are no longer safe spaces for many city residents. In order for cities to be vibrant and safe places, we need to think of them as systems of interdependent parts and complex connections, as interactive and social spaces. Reclaiming urban spaces for people is part of

how we can humanize our cities and make our streets more communal. Public spaces are often more than anonymous places that can be replaced with one another: the meetings and exchanges that occur there affect our relationships with each other, giving meaning to our communities and urban landscapes. Cities that improve and sustain the use of public space, including streets, enhance community cohesion, civic identity, and quality of life. Having access to open public spaces does not only improve the quality of life: it is also a first step toward civic empowerment and greater access to institutional and political spaces. Measuring how much public space a city has is only one part of measuring whether residents actually benefit from the space.

**11.7.2:** Proportion of person's victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months

### Background

Sexual harassment is a violation of human rights and a prohibited form of violence against women in many countries. The experience of sexual harassment causes devastating physical and psychological injuries to a large percentage of the victims. In urban and rural areas, developed or developing countries, women and girls are constantly subjected to these forms of violence on streets, on public transport, in shopping centres and in public parks, in and around schools and workplaces, in public sanitation facilities and water and food distribution sites, or in their own neighbourhoods. Such harassment reinforces the subordination of women to men in society, violates women's dignity and creates a health and safety hazard in public space.



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



Current indicator

**11.a.1:** Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city.

### Background

National Urban Policy (NUP) and Regional Development Plans (RDP) promotes coordinated and connected urban development. A coordinated effort from government through a NUP or RDP provides the best opportunity for achieving sustainable urbanization and balanced territorial development by linking

sectorial policies, connecting national, regional and local government policies, strengthening urban, peri-urban and rural links through balanced territorial development. This indicator provides a good barometer on global progress on sustainable national urban policies. It serves as a gap analysis to support policy recommendations. It also enables the identification of good practices and policies among countries that can promote partnership and cooperation between all stakeholders.



**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.”



## Current Indicators

**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.

### Background

Cities are very vulnerable to natural disasters, especially climate-related shocks. Over half of all coastal areas are urbanized and 21 of the world's 33 megacities lie in coastal flood zones. Coastal cities are particularly affected by sea level rise, coastal flooding and erosion, and extreme events (e.g. tsunamis and storm surges) due to the undermining natural protective barriers, low levels of development combined with rapid population growth in low lying coastal areas and inadequate capacity to adapt. In addition to the impact on communities and non-human species, unplanned urbanization also undermines the ecosystem services that support much of the hard urban infrastructure. This type of development also exacerbates urban vulnerability to climate change impacts, including hydro- meteorological and geological hazards.



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



Current indicator

### Background

Disasters such as droughts, fires, floods, earthquakes are some of the major disasters that affect majority of the cities in the world. Fires and floods are in particularly costly at the local level because of the widespread destruction and loss of life that usually arises after every disaster. Local government are at the forefront of dealing with disasters when they arise. Local government officials are usually the first people who have to deal with a disaster, and if the disaster is not too large, it is often the only local government involved. This is the main reason why each local government needs to be prepared to manage a disaster. They need therefore to have an existing disaster management policy and strategy to be prepared on how to handle disasters. They should be able and ready to provide the necessary emergency shelters and provisions. It is imperative that each city or local government has a disaster management policy and thus be adequately prepared to manage a disaster.



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



### Current indicator

**11.c.1:** Proportion of financial support to the least developed countries that is allocated to the construction and retrofitting of sustainable, resilient and resource-efficient buildings utilizing local materials.

### Background

The performance of the construction sector is important for the economic health of a country, and particularly relevant for enhancing resilience, sustainability and

inclusiveness in Least Developed Countries (LDCs). In addition, the use of local building materials can make a substantial contribution to a building's sustainability, in terms of embodied energy, resource-use and other life-cycle impacts. Local building materials are defined as materials of which the entire life cycle (extraction, manufacturing, sale, use and recycling) is tied to the same geographic region. The number of jobs in the manufacture of local building materials can indicate the share of green construction jobs that contribute to sustainable cities and human settlements and, by inference, the sustainability of the building sector as a whole. Often in LDCs, the construction industry is heavily dependent on the informal sector, making-up a substantial portion of a country's total output; both formal and informal jobs should therefore be taken into consideration.



**Target 1.4:** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.



## Current indicators

**1.4.1:** Proportion of population living in households with access to basic services

### Background

Providing access to basic services such as water supply, sanitation, power, roads, transport, housing, etc. helps to improve the quality of the urban poor communities. The lack of basic service provision and the lack of empowerment and involvement of local governments in basic service delivery (Water and sanitation, electricity, solid waste etc.) undermines the economic growth and quality of life in urban communities. Proper basic service delivery system promotes socio-economic welfare of the inhabitants and ensures that priorities needed to enhance economic growth social inclusion and reducing poverty and inequality are met. Urban areas are the basic cornerstone of economic growth, the inter-relationship between urban basic services and social well-being, economic development and the environment make the provision of adequate services a complex urban governance challenge.

**1.4.2:** Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure

### Background

Secure tenure rights to land and natural resources are a key for poor populations to access the very basic resources that would allow them to develop and sustain their livelihoods. Without secure land tenure, families and communities are vulnerable to expropriations and face numerous challenges to access financial resources, markets and other services. Land is a source of food and shelter; the basis for social, cultural and religious practices; and a central factor in economic growth. As a result, land tenure security has been recognized as highly relevant to the achievement of SDGs; for ending poverty, ending hunger, achieving food security, gender equality, and sustainable cities and human settlements, and for the protection and sustainable use of terrestrial ecosystems.







**Target 6.3:** By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.



Current indicator

6.3.1: Proportion of wastewater safely treated

### Background

Continuous population growth, urbanization, land use change, industrialization, food production practices and the increased living standards have instilled poor water use practices accompanied with ineffective wastewater management strategies. Consequently, majority of wastewaters, septage and faecal sludge end up discharged without any form of treatment into the environment increasing risks of spreading disease to humans and damaging key ecosystems such as coral reefs and fisheries as well as undermining the water quality. Wastewater management strategy (or the lack thereof) has a direct impact on the biological diversity of aquatic ecosystems, disrupting the fundamental integrity of our life support systems, on which a wide range of sectors, from urban development to food production and industry, depend. This has huge economic and financial impacts (e.g. increased treatment costs to make water usable purposes). It is essential that wastewater management be considered as part of an integrated, full life cycle, ecosystem-based management system that operates across all three dimensions of sustainable development (economic, social and environmental).

# MONITORING HUMAN SETTLEMENTS INDICATORS



## IMPORTANCE OF MONITORING

Accurate and correct data and metrics enable cities to make correct decisions on the best policies and means to track changes and systematically document performances at the city level. This reinforces advocacy, stimulates political commitment and public private investments, informs decision-making at all levels and prompts well-placed investments targeted towards optimum sustainable cities. An innovative monitoring mechanism will assist in avoiding an excessive sectorial approach to urban development. For example, when designing sustainable urban mobility solutions, we need to ensure an integrated approach to urban planning and land use regulations.

Over time, monitoring can also help to identify best practices and support productive integration across sectors and targets within SDG framework. It also promotes accountability of different actors as well as stimulate inclusive dialogue on improving the effectiveness of development cooperation and actions.

## GLOBAL MONITORING OF SDG 11

Member States are encouraged to measure, monitor and report on the targets of SDG Goal 11 using a proposed framework that will entail enhancing their statistical capacities, and tapping into new and non-traditional data sources for spatial analysis. While monitoring the indicators, national governments are recommended to define a national sample of cities based on their own system of cities that is proportionally representative of all sub-regions, sizes of urban settlements and functionality.

Countries and cities have been presented with the possibility to monitor progress towards targets that are not necessarily global indicators. A challenging task, but if well planned it will allow them to customize monitoring to a city or country context, as part of the local and national strategic planning and dialogue process. The countries that are planning to monitor and report on a consistent

set of cities that are representative of their territories, geographies and history can request UN-Habitat to assist them to draw a National Sample of Cities. This will enable countries to report on a nationally representative sample, in order to keep trend analysis, and undertake the longitudinal analysis of urban changes. In addition to this sample, cities are also encouraged to monitor and report on the targets that have an urban dimension in close collaboration with national governments systems and SDG reporting arrangements.

Standardized methods for measurement will enhance the comparability of results across cities and countries. It will also be possible to aggregate them for regional and global monitoring and reporting. Additionally, UN-Habitat is working on frameworks to address uncertainties on how reports will create consistency and use times series analysis, to ensure uniformity in reporting of same cities over time. Finally, further discussions are warranted on how missing values will be handled in national, regional and global aggregations and progress reports if cities and countries do not collect particular indicators, or they do so in sporadic manner.

## TECHNOLOGY FOR DATA REVOLUTION FOR SDG GOAL 11

New technologies are rapidly improving the capacity to collect, store, analyze, report and share data, and at the same time reducing related costs. Some examples include the advancements in mobile-phone based tools, geospatial technology such as GPS (Global Positioning Systems), GIS (Geographical Information Systems), and RS (Remote Sensing). Data will be available in real time for various uses through mobile to web based applications.

Spatially disaggregated data provides relevant information for policy makers to decide on local-level allocation of resources and the monitoring of equitable

outcomes across and within cities and human settlements. Simplified and affordable technology will thus allow for the expansion of citizen service, which, in turn will help reduce monitoring costs and challenges related to resource-constrained or remote settings and improve data disaggregation.

## NATIONAL MONITORING AS THE FOUNDATION FOR REGIONAL AND GLOBAL MONITORING

Individual member states will be responsible for monitoring and reporting of the SDGs and the main beneficiaries of improved access to higher quality data. All monitoring initiatives therefore must be sensitive to the national needs of member states hence capacity development is necessary to ensure the sustainability of monitoring and processes.

Regional and global monitoring should be enhanced, and used to reinforce national monitoring. Harmonized monitoring, use of similar standards and definitions across countries approaches are therefore necessary to allow for comparison of data among countries and over time, and to track progress at the regional and global levels.

## STEPS FOR PROGRESSIVE MONITORING

We encourage member states to begin monitoring efforts at a level in line with their national capacity and available resources, and apply flexible methodologies, for which the concept of progressive monitoring steps is useful. Significant opportunities for combining various methods and data sources, including using direct measurements, surveys, remote-sensing measurements, estimates and literature reviews to that will enhance their statistical capacities and tapping into new and non-traditional sources for spatial analysis.

National governments are encouraged to consult UN-Habitat in defining their national sample of cities based on their own system of cities that is proportionally representatives of sub-region, sizes of urban settlements and functionality. In the longer term, as the monitoring capacity and resources improve, national monitoring will feed directly into global monitoring.





# IMPLEMENTING GLOBAL MONITORING AT THE NATIONAL LEVEL

The implementation and reporting of the SDGs will require a paradigm shift in governance with renewed participation and involvement of local government. It is estimated that 23 percent of all SDGs indicators have a local or urban component. This represents a great opportunity to advance the urban agenda, but also presents an immense challenge. Cities cannot and should not act alone. The successful implementation of the SDGs requires promoting the empowerment of civil society, including different economic, social and political actors. It also requires expanding participation and reinforcing collaboration between different levels of government.

The work of implementing global monitoring of SDG 11 and other urban related indicators is under the leadership of UN-Habitat and other partners. At the national level, this includes development of monitoring methodologies and supporting countries in data collection, analysis and reporting. Within SDG 11 targets/indicators, there are specific lead agencies and partners. e.g. 11.5, 11.b (UNISDR), 11.7.2 (UNODC), 11.4 (UNESCO), 11.6.2 (WHO). Each United Nation agency has focal points as well as the designated leads. The monitoring methodologies will differ in their nature and scope, and data collection may involve different stakeholders and governmental bodies. The motivation for work at the national level is nevertheless to bring all the relevant stakeholders together in a coordinated manner to ensure less duplication of efforts around SDG 11 monitoring and to maximize synergies and minimize overlaps. The appointed focal point from the United Nations system will facilitate interaction among this team and national structures and efforts.

Member states have the task to decide on suitable structures for implementation on the national level as well as the responsibility for national data collection, analysis and dissemination and reporting. Establishing mechanisms for easy

and transparent sharing and validation of data will be critical in ensuring a strong link between national and global monitoring. For the purpose of SDG 11 monitoring and reporting, it is necessary to develop a global data repository. Formalities related to data ownership and use, data transfer will be agreed upon among partners and stakeholders

## INTEGRATED MONITORING OF SDG GOAL 11-CPI

Building on national monitoring efforts, UN-Habitat stands ready to support member states in the global monitoring of SDG 11 and other SDGs indicators with an urban basis through a coherent and integrated monitoring framework. This entails the capability of developing and establishing a measure that works through data collection and analysis with clear definitions. The City Prosperity Initiative (CPI) is one of those tools.

The City Prosperity Initiative (CPI), a new global monitoring tool to measure sustainability at urban level created in 2012 by UN-Habitat, enables city authorities and local stakeholders to identify opportunities and potential areas of intervention in order to formulate better-informed policies. The CPI framework is based on a sound statistical approach that integrates various indicators. The City Prosperity Initiative is already tracking progress on SDG related indicators such as 11.1.1, 11.7.1, 11.6.1 and 11.6.2 with a coherent global mechanism.

The initiative focus is to integrate all the aspects of city management by assessing performance through six dimensions: Infrastructure, Productivity, Quality of Life, Equity and Social Inclusion, Environment sustainability and Governance.



The long-term goals for CPI are to:

- Establish and manage a coherent monitoring framework for SDG 11 to inform the New Urban Agenda and the post -2015 period.
- Contribute to country progress through well-informed decision-making on cities based on synchronized, comprehensive, timely and accurate information.
- Assist member states with a monitoring guide for SDG 11 and other urban related targets.
- Assist in the development of strategies for training and capacity development as well as dissemination, including the development of portals online webpage and systems.
- Report on global progress towards SDG 11.

## HOW TO BE INVOLVED IN MONITORING OF SDG 11

Participation on the technical meeting as well as the regional workshops in 2017/18 provides a greater opportunity to engage in the process of SDG 11 monitoring. In 2017/2018, the focus lies on further developing metadata and methodology for tier III indicators while for tier I and tier II it will involve training workshops for data collection and analysis and pilot testing them in selected countries. The development of the monitoring strategy is based on the proposed indicators for SDG 11.



## TIER CLASSIFICATION FOR HUMAN SETTLEMENTS INDICATORS

Target	Indicator	Tier Classification
1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	1.4.1: Proportion of population living in households with access to basic services	<b>Tier III</b>
	1.4.2: Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure	<b>Tier II</b>
6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1: Proportion of wastewater safely treated	<b>Tier II</b>
11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	11.1.1: Proportion of urban population living in slums, informal settlements or inadequate housing	<b>Tier I</b>
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	11.2.1: Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	<b>Tier II</b>
11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	11.3.1: Ratio of land consumption rate to population growth rate	<b>Tier II</b>
	11.3.2: Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically	<b>Tier III</b>



Target	Indicator	Tier Classification
11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed and World Heritage Centre designation), level of government (national, regional and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector and sponsorship)	<b>Tier III</b>
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	11.5.1: Number of deaths, missing persons and directly affected persons attributed to disaster per 100,000 population	<b>Tier II</b>
	11.5.2: Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters	<b>Tier I</b>
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	11.6.1: Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities	<b>Tier II</b>
	11.6.2: Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	<b>Tier I</b>
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	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	<b>Tier III</b>
	11.7.2: Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months	<b>Tier III</b>

Target	Indicator	Tier Classification
11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	11.a.1: Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city	<b>Tier III</b>
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	11.b.1: Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030a	<b>Tier I</b>
	11.b.2: Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	<b>Tier II</b>
11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	11.c.1: Proportion of financial support to the least developed countries that is allocated to the construction and retrofitting of sustainable, resilient and resource-efficient buildings utilizing local materials	<b>Tier III</b>

**Definitions of the three indicator tiers.**

Tier I: Indicator conceptually clear, established methodology and standards available and data regularly produced by countries

Tier II: Indicator conceptually clear, established methodology and standards available but data are not regularly produced by countries

Tier III: Indicator for which there are no established methodology and standards or methodology/standards are being developed/tested.



## CONTACT INFORMATION

Integrated monitoring of Sustainable Development Goal 11 related targets and other human settlement indicators is an inter-agency collaboration composed of United Nations Human Settlements Programme, United Nations Environment Programme, United Nations Office for Disaster Risk Reduction, World Health Organization, UN Women, United Nations Educational, Scientific and Cultural Organization, United Nations Population Fund, United Nations Office on Drugs and Crime, United Nations Development Programme and United Nations Statistical Division



For any further information, please contact:

Robert Ndugwa

Head of Global Urban Observatory

[Robert.ndugwa@unhabitat.org](mailto:Robert.ndugwa@unhabitat.org)

Eduardo López Moreno

Head Research and Capacity Development Branch

[Eduardo.moreno@unhabitat.org](mailto:Eduardo.moreno@unhabitat.org)