UN-HABITAT

Climate Change & Urban Environment Strategy

Regional Office for Asia & the Pacific

2024-2030

UN-HABITAT

UN-Habitat ROAP Climate Change & Urban Environment Strategy 2024-2030

United Nations Human Settlements Programme (UN-Habitat)
P.O. Box 30030 00100 Nairobi GPO KENYA
Tel: 254-020-7623120 (Central Office)
www.unhabitat.org

Coordination: Bernhard Barth
Principal author: Maria Adelaida Cea
Contributing authors: Alicia Van der Stighelen, Samantha Poncabare
Layout and graphic design: Alicia Van der Stighelen, Samantha Poncabare
Acknowledgements: This strategy was developed with UN-Habitat's Asia-Pacific country office managers and the country focal points for Climate Change and Urban Environment across the region. Thanks are extended to national and local government partners and other urban stakeholders, in particular the global and regional cities and climate change and biodiversity partners.

01
Foreword

UN-Habitat's Regional Office for Asia and the Pacific (ROAP) is pleased to present this regional Climate Change and Urban Environment (CCUE) Strategy 2024-2030. This strategy addresses climate change, biodiversity, and urban environmental challenges in Asia and the Pacific. Its development was informed by urbanization trends, and recent findings from global, regional, and country reports on climate change projections and impacts. This new strategy takes into account the inputs from stakeholders, partners and member states.

Building upon UN-Habitat's past and ongoing climate change and urban development initiatives as well as the global initiatives RISE-UP and SURGe, supporting the global CHAMP pledge, the strong partnerships with city networks and the Marrakesh Partnership, the objective of this regional strategy is to:

*"Strengthen and expand support for Asia-Pacific national and local governments and non-state actors to **increase climate ambitions**, and **accelerate implementation** of tailored adaptation, mitigation, and biodiversity conservation actions through robust **multi-level governance** and transformative urban and human settlements initiatives"*

Firmly rooted in UN-Habitat's Strategic Plan 2020-2025, this Asia Pacific CCUE Strategy will be a guide for ROAP's country teams and partners to engage and contribute to the achievement of results envisioned in national development plans as well as in realizing the goals of the New Urban Agenda, the Paris Agreement, the Kunming-Montreal Global Biodiversity Framework, the Sendai Framework and the Sustainable Development Goals.

To achieve the ambitions targets set out in this strategy, concerted efforts across scales - local, national, and regional - and sectors will be needed. A climate resilient urban development framework will be applied, bringing together climate change adaptation and mitigation, natural asset protection and enhancement as well as actions in support of loss and damage cooperation. Climate change aggravates development challenges and other crises. Thus in implementing this strategy, an integrated approach to climate, biodiversity, pollution, development, conflict and displacement will be taken. The Strategy will be operationalized considering national realities, and the UN Sustainable Development Cooperation Frameworks in the countries across the region.

This being a process and results delivery guide, we encourage stakeholders to work with UN-Habitat to implement the strategy towards building inclusive, safe, resilient, and sustainable cities and human settlements in Asia-Pacific.

Bernhard Barth
Subprogramme Coordinator (a.i.),
Climate Change and Urban Environment

Bruno Dercon
Officer-in-Charge, Regional Office for Asia and the Pacific

Country Managers' Retreat, April 2023, Fukuoka, Japan [UN-Habitat

02

Executive Summary

Climate change is already creating profound effects on the planet and its inhabitants. Urban areas and cities are highly vulnerable to climate impacts on critical infrastructure, transportation systems, water and sanitation facilities, health, and livelihoods. Urban areas also contribute significantly to these climate-related challenges, as they produce 70% of global greenhouse gas (GHG) emissions, with their share continuing to grow.

The Asia-Pacific region is now at a critical juncture as it is faced with the complex interplay of urbanization, climate change, and biodiversity loss. Currently 50% of the population resides in urban areas. The total urban population is expected to grow from 2.5 to 3.5 billion by 2050.

The region is a significant contributor to global GHG emissions, accounting for over half of the total worldwide emissions in 2020. The majority of these emissions are from urban areas, predominantly from the energy sector (73%) (UNDP, 2024), followed by sectors like transportation, manufacturing, construction, and agriculture. If current trends continue, the region's emissions could nearly double by 2060. Despite commitments to carbon neutrality, current national actions outlined in the Nationally Determined Contributions (NDC) are insufficient to align with the goal of the Paris Agreement to limit global warming to 1.5°C above pre-industrial levels. A critical gap exists in integrating climate mitigation with other national policies, especially at the local level where technical and institutional capacities are often inadequate.

Asia-Pacific countries are already experiencing an increase in climate-related disasters, such as typhoons, floods, and heatwaves. These escalating risks, outpacing current adaptation efforts, are projected to intensify, with the IPCC AR6 report indicating that extreme events will become more severe across all emissions scenarios. The region faces potential GDP losses of 24% by 2100, disproportionately affecting the most vulnerable populations. Urban areas, in particular, are constrained in their adaptation capabilities due to governance, financial, and infrastructural limitationsThe region is highly vulnerable to a variety of natural hazards, leading to significant loss and damage. This includes economic losses in South and South-West Asia and rising death tolls and affected populations in the Pacific. Addressing urban crises is essential, focusing on vulnerable and displaced groups.The recent establishment of a global loss and damage fund has the potential to provide critical financial support to the most affected countries.

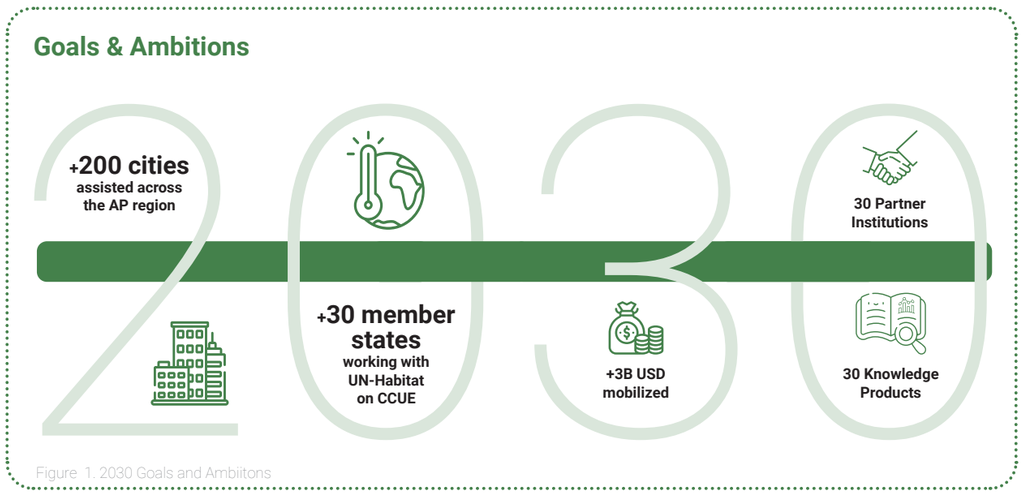


Figure 1. 2030 Goals and Ambiitons

The Paris Agreement's global stocktake underscores the need to synergistically address climate change and biodiversity loss. The Kunming-Montreal Global Biodiversity Framework Target 12 focuses on increasing green and blue spaces in urban areas to enhance biodiversity and human well-being. However, the region's biodiversity is under significant threat from deforestation, unsustainable agricultural practices, and urbanization. This could result in potential GDP losses higher than the global average due to the substantial economic reliance of the region's food and agricultural sectors on natural resources. By 2100, an estimated 13% to 42% of all species in Southeast Asia are projected to be lost. Transitioning to nature-positive urban plans and investments is imperative. Key economic sectors, including food, land, urbanization, ocean use, infrastructure, and energy, contribute to biodiversity loss, yet present opportunities for significant economic gains if managed sustainably.

The Asia-Pacific region faces formidable challenges in reducing GHG emissions, adapting to climate impacts, addressing loss and damage, and conserving biodiversity. Coordinated and ambitious efforts are essential to ensure the region's resilience and sustainability. The goals and ambition of the UN-Habitat ROAP Climate Change and Urban Environment Strategy for 2024-2030 is to have:

- 200+ cities across the region assisted on climate and urban environment actions
- 30+ member states supported in line with the UN-Habitat CCUE targets
- USD 3 billion mobilized to support urban and urban-related climate and environment actions. This includes UN-Habitat implemented projects and projects for which UN-Habitat has provided project preparation support.
- 30 knowledge products released and issued in collaboration with 30 partner institutions.

To achieve this ambition, UN-Habitat ROAP will focus on five means of implementation namely, (1) Knowledge Management & Communication, (2) City & Local Level Actions, (3) National Level Support, (4) Partnerships, and (5) Regional and Multi Country Actions.

The implementation of the strategy will seek to foster urban and climate sustainability principles that can be adjusted according to the challenges and realities faced in the areas of action. Monitoring, evaluation and learning (MEL) are key activities for this regional strategy.

The MEL approach for this strategy will create synergies with already existing activities and MEL systems at the national and regional levels. This will help maximizing the impact of on-going activities and complementing already established systems, especially those tracking the National Adaption Plans (NAP) and Nationally Determined Contributions (NDC) with urban specific dimensions.

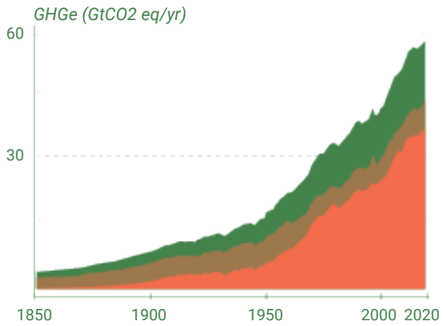
By highlighting lessons learned and emerging innovations from UN-Habitat's past and current initiatives at the country, regional, and global levels, this Regional Strategy provides entry points to strenghten partnerships and multi-level actions in support of its implementation.

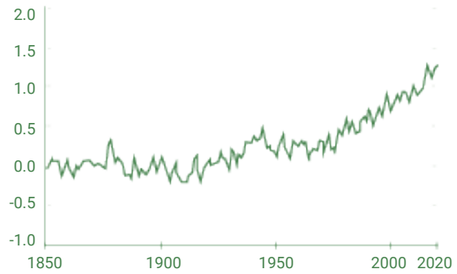
Table of Contents

01
02
03
04
05
06
07

Wuhan, China [UN-Habitat ROAP]

Greenhouse gas emissions from human activities continue to increase and the Earth's surface temperature continues to rise...





non-CO2 emissions

CO2 from land use, land-use change & forestry

CO2 from fossil fuels and industry

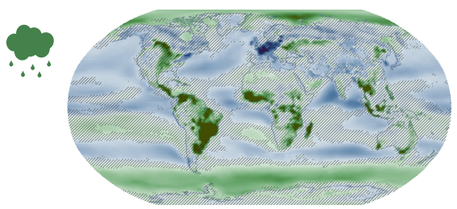
Temperature rise compared to 1850-1900 (°C)

0 0.5 1.0 1.5

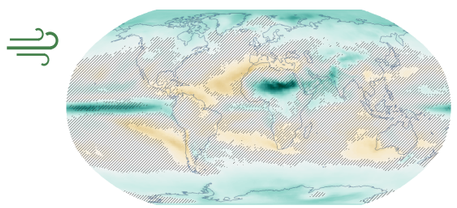
1.1 °C **Total Temperature increase since the industrial revolution**

... creating profound effects on the planet and its inhabitants

Changing precipitation



Changing surface wind



... with heavy contributions from and negative impacts on cities and urban areas

70%

Contribution of urban areas to global GHG emissions, with this share continuing to grow

290,000 SQ KM

of natural habitat likely to be lost to urban growth between 2000 and 2030 -comparable in size to the total land area of the Philippines

Figure 2. Data source: IPCC, 2022.

03
The Global Climate Challenge

The atmospheric concentration of greenhouse gases has increased since the industrial revolution due to human activities. This anthropogenic warming, which has already reached about 1.1°C, is accelerating and reached 1.4°C for 2023. Based on IPCC reports, warming will be in the range of 1.2°C to 1.8°C, even under a very low GHG emissions scenario over the near term (2021-2040). Over the mid-term (2041-2060), an intermediate emissions scenario has a 2°C increase as the best estimate, with 2.1°C to 3.5°C as the very likely range of global temperature increase, according to the IPCC 6th Assessment Report (IPCC AR6).

This human-induced warming is causing climate change, which is already creating profound effects on the planet and its inhabitants. Climate change is now manifesting with increased mean temperatures, changes in rainfall and variability, sea-level rise, and disasters from heat and drought, wildfires, landslides, flooding, and other weather-related events.

Urban areas and cities are highly vulnerable to climate impacts on critical infrastructure, transportation systems, water and sanitation facilities, health, and livelihoods. Furthermore, urban areas also contribute significantly to these climate-related challenges, as they produce 70% of global GHG emissions (see figure 2), with their share continuing to grow. Without successfully addressing climate change issues emerging from and impacting urban areas, the targets of the Paris Agreement will be impossible to achieve.

Furthermore, climate change and urban growth contribute to the loss of natural ecosystems and biodiversity. Recent studies have flagged that over 90% of the cities in the world's 36 biodiversity hotspots are expanding in direct conflict with biodiversity and often aggravating climate risk. The conversion of nature for human habitation is accelerating, with 290,000 sqkm of natural habitat likely to be lost to urban growth between 2000 and 2030.

Due to the strong interlinkage between urban development, climate and natural systems, urban systems thinking is more than ever required to ensure we avert locking-in cities and emerging urban areas into high emissions pathways and, critically, to avoid mal-adaptation. Failure to act will not only lead to further aggravation of climate change, but also trigger a chain of dire consequences including food insecurity, increased incidence of diseases, social instability, and irreversible loss of ecosystems and species.

Whilst concerted global efforts are needed to address these challenges, climate change impacts and urbanization challenges vary across the globe. Hence, nuanced approaches relative to national and local risk and emission contexts must be strategically considered when adapting to climate change and promoting low-carbon pathways.

*"**Cities** are at the core of reducing emissions and adapting to climate change. However, they cannot do it alone. We need an all-house approach and collaboration of local, regional, national, and international systems."*

Maimunah Mohd Sharif,
Former Executive Director of UN-Habitat and Under-Secretary-General of the United Nations

04

A Call to Urban Climate Action in the Region

The Asia-Pacific region is now at a critical juncture as it is faced with the complex interplay of "urbanization, climate change, and biodiversity loss". Currently 50% of the population resides in urban areas. The total urban population is expected to grow from USD 2.5 to 3.5 billion by 2050.

The significant demographic and economic shifts that come with urban growth can further contribute to climate change as well as create immense pressure on natural assets with further repercussions on the urban systems.

Greenhouse Gas Emissions

The outcome of the 2023 global stocktake on the implementation of the Paris Agreement noted with alarm that the progress on mitigation is not on track towards achieving reductions in global greenhouse gas emissions of 43% by 2030 and 60% by 2035 relative to the 2019 level and reaching net zero carbon dioxide emissions by 2050. As such, the COP28 Decision called on all Parties to make deep, rapid, and sustained reductions in greenhouse gas emissions to be in line with 1.5 °C pathways.

Future NDCs of countries, must be informed by the latest science, and different national circumstances and to be ambitious must cover economy-wide emission reduction targets, cover all greenhouse gases, sectors, and categories. Countries, including those in the Asia-Pacific region, are urged to contribute to global efforts on mitigation especially in the energy, transport and infrastructure sectors, as well as in the phasing out inefficient fossil fuel subsidies that do not address energy poverty or a just transition, as soon as possible.

Asia-Pacific's GHG emissions surpass 50% of the global total, experiencing accelerated growth primarily propelled by urban areas

Global GHG Emissions, 2020, GtCO2e

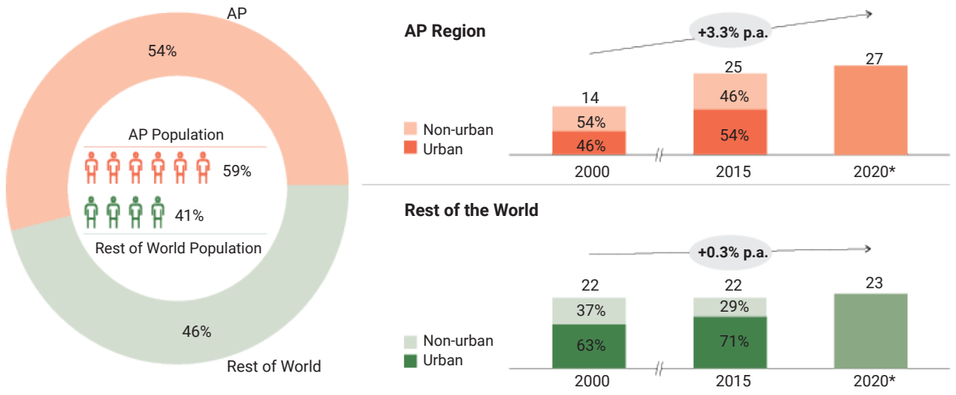


Figure 3. Data source: ESCAP, 2022; IPCC, 2022. (*) Note: No urban GHGe distribution data for 2020.

The energy sector emerges as the principal GHG emission source in the Asia-Pacific region, with distribution disparities observed across its subregions

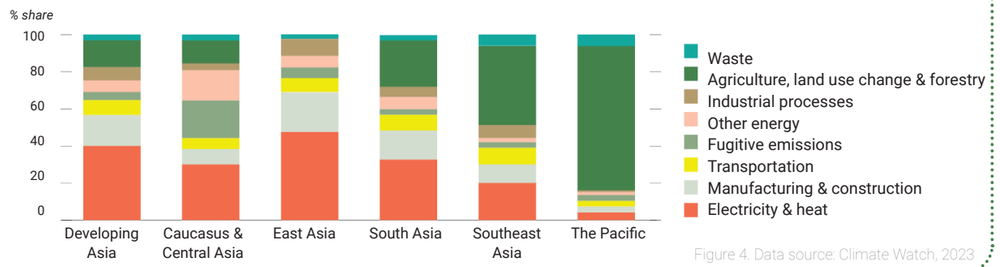


Figure 4. Data source: Climate Watch, 2023

Countries in Asia-Pacific were responsible for more than half of the global GHG emissions in 2020. Urban emissions in the region continue to increase faster than urban growth. With rapid urbanization and socioeconomic growth that is expected from Asia-Pacific countries, the regional emissions could rise to 63 GtCO2e by 2060, in a business-as-usual scenario. This estimate which is based on the Shared Socioeconomic Pathways (SSP) 4-8.5 model, is almost double the 2020 regional emissions of 35 GtCO2e.

The Intended Nationally Determined Contributions (INDCs) were first prepared for COP21. They and their revisions and updates (as Nationally Determined Contributions, NDCs) are intended to communicate national climate change commitments internationally and guide climate action nationally. UN-Habitat has analyzed the NDCs in 2016 and subsequently for COP26 (White Paper) and COP27 (2022 Analysis). The next round of NDC revision will take place in 2025. To understand the urban content of the NDCs, three clusters were built (A: strong urban content, B: moderate urban content, C: low or no urban content) (See Section 7 Appendix on Urban Content of the NDCs); identifying urban mitigation challenges and responses and urban adaptation challenges and responses by sector; and highlighting specific urban needs on finance, capacity building and technology.

The analysis highlights the (mis)alignment between: General mitigation/adaptation challenges vs Urban mitigation/ adaptation challenges; Urban mitigation challenges vs urban mitigation responses; Urban adaptation challenges vs urban adaptation responses; Urban mitigation/adaptation challenges/responses vs request for finance; Urban mitigation/adaptation challenges/ responses vs request for technology; and Urban mitigation/adaptation challenges/responses vs request for capacity building.

This analysis is instrumental to supporting Parties' efforts in further integrating national climate policies and urban climate actions, which is considered fundamental to raising ambition and developing adequate and timely actions as required by the current climate emergency. This review can be instrumental for advocacy and direct support to countries by partner organizations.

TABLE 1. STATUS OF CARBON NEUTRALITY PLEDGE, 2022 — Source: ESCAP, 2022; PwC, 2022; Climate Action Tracker, 2023; UNDP, 2023

Not Yet Considered	Declaration/ Pledge		Policy		Adopted	Achieved
BGD (N/A)[3]	AFG (N/A)	MMR (N/A)	KHM (2050)	SGP (2050)[123]	FJI (2050)[13]	BTN (2050)[3]
IRN (N/A)	BRN (2050)[23]	PAK (N/A)[13]	CHN (2060)[3]	SLB (2050)	JPN (2050)[13]	
MNG (N/A)[3]	IND (2070)[4]	PNG (2050)[13]	IDN (2060)[123]	LKA (2050)[2]	KOR (2050)[123]	
PHL (N/A)[123]	KIR (N/A)	TUV (2050)	LAO (2050)	THA (2065)		
TLS (N/A)	FSM (N/A)[1]	VUT (2050)[13]	MYS (≥2050)[13]	VNM (2050)[23]		
			NPL (≤2045)[123]			

Member State Indicators: (year) Carbon Neutral/ Net Zero target*; ([1]) Global Methane Pledge; ([2]) Global Coal to Clean Power Transition Statement; ([3]) Declaration on Forest and Land Use; ([4]) COP26 Delcaration on Accelerating Transition to 100% Zero Emission Cars and Vans.

Challenges and gaps to achieve low-carbon pathways in the region

As of 2023, all the UN member states in the Asia-Pacific region have submitted their NDCs. Carbon-neutrality pledges were made by 39 countries whilst 23 countries have developed long-term low emission strategies. However, despite these submissions, "all NDC commitments fall short in their emission reduction ambition to deliver on the desired 1.5°C pathway, and also not sufficient to contain warming within 2°C by 2030" as noted in the 2023 Review of Climate Ambition in Asia and the Pacific: Just transition towards regional net-zero climate resilient development (ESCAP, ILO, UNFCCC/RCC Asia-Pacific, UNIDO, 2023).

Although GHG emissions from the Asia-Pacific region are significant, the capacity in the region to address this challenge is not yet fully in place. Many countries in the region still face challenges in aligning their climate mitigation plans with other national policies related to urbanization, development, and economics. Disjointed plans and policies can undermine the effectiveness of low-carbon strategies, especially at the local level where technical and institutional expertise on low-carbon technologies and methodologies on GHG mitigation planning and mitigation action implementation are often weak. Another key gap observed is the absence of data on city level GHG emissions which hinders effective targeting and inclusion of urban specific mitigation actions in national and local mitigation climate plans and investment programs. This limits the funding support to city mitigation actions as access to funds requires baseline data and verifiable results.

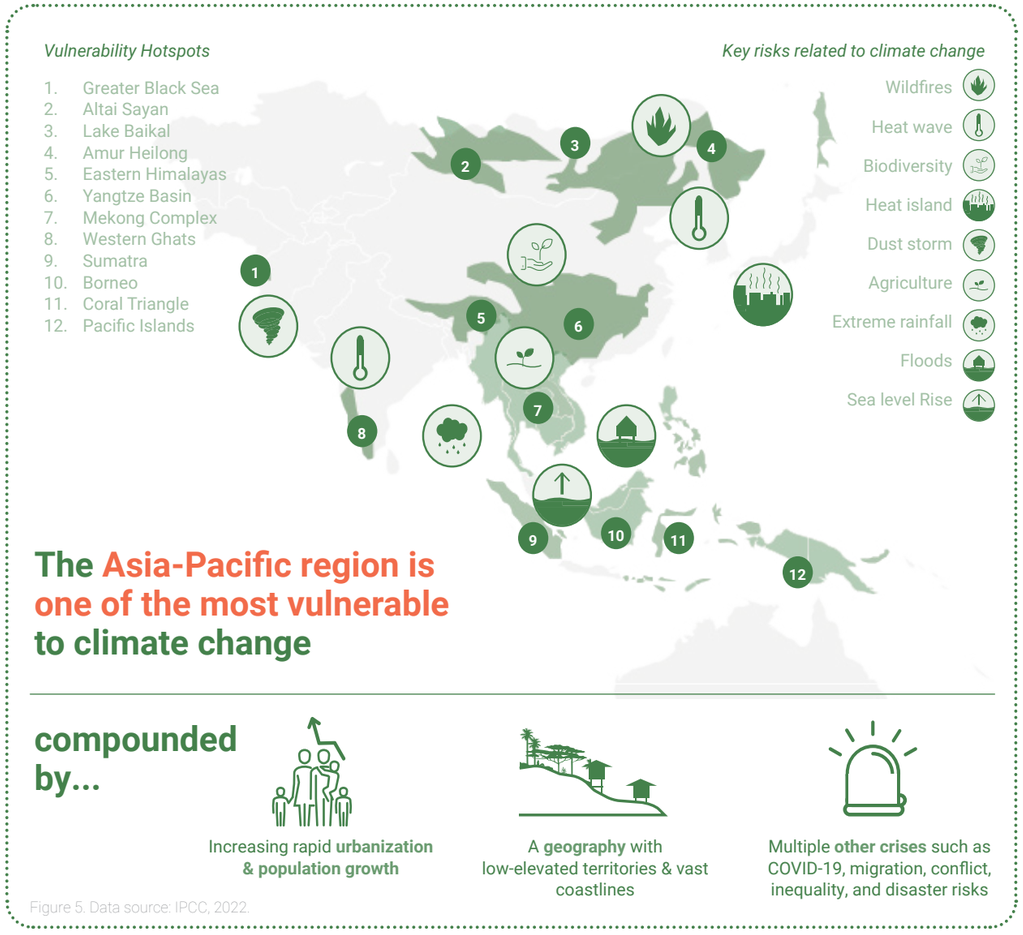


Figure 5. Data source: IPCC, 2022.


Floods, Sri Lanka [UN-Habitat Sri Lanka]


Plastic waste, Viet Nam [Nguy Ha]


Typhoon Yolanda damage [UN-Habitat Philippines]

Urban Climate Vulnerability and Risks

Whilst many climate adaptation initiatives are currently being pursued by all countries and cities in the Asia Pacific, the accelerating climate risks are still outpacing the adaptation practice across the region. Extreme events like cyclones, which are observed to now be less frequent but more intense, are reversing economic gains and resulting in loss of livelihoods and even lives. Philippines' Super Typhoon Haiyan in 2013, one of the strongest tropical cyclones ever recorded, caused over 6,000 fatalities and economic losses of USD 2.8 billion. Climate change under a high emissions scenario could impose gross domestic product (GDP) losses of 24% in the whole of developing Asia by 2100 (ADB, 2023).

Whilst challenges exist, the number of countries and local governments in the region which are committing to carbon neutrality and net-zero development by 2050 are on the rise. There is therefore a great opportunity to further increase the ambition of countries in the Asia-Pacific region on emissions reduction and accelerate implementation of emission reduction and avoidance actions.

Human vulnerability will be high in informal and rapidly growing settlements, while rural areas face heightened risks due to factors such as emigration, climate-sensitive livelihoods, and reduced habitability. The IPCC AR6 highlights "poverty and inequality both present significant adaptation limits, resulting in unavoidable impacts for vulnerable groups, including women, young people, the elderly, ethnic and religious minorities, Indigenous People, and refugees. Climate change is likely to force many of them to switch from their main source of income to other forms of wage labor, with implications for labor migration and urbanization."

Cities and towns are composed of complex interdependent and interacting systems such as roads, water and energy systems, ecosystems, buildings, etc. Disruptions in one system can lead to a cascading failure effect where other systems are affected due to the interdependencies between urban systems. Key infrastructure systems and low-lying Small Island Developing States, as well as mountain regions, will experience increased vulnerability, if climate conditions are not adequately considered in urban design and planning (IPCC AR6, 2021).

Given the already-felt impacts and projected future devastation that climate change can bring, the need to increase adaptation investments and support for vulnerable countries and cities in the region is extremely urgent. Governance capacity, financial resources, and the way existing urban infrastructure was planned and designed could constrain how cities and settlements can adapt to climate impacts (IPCC AR6, 2022).

Loss and Damage

Negative climate change impacts result in devastating economic and non-economic loss and damage in the absence of, or despite, mitigation and adaptation efforts. In the Asia-Pacific region, some cities are highly vulnerable to slow onset changes, such as sea level rise, while others face extreme events of increasing severity and frequency, such as floods, or a combination of both. In the urban context, these can result in significant damages to infrastructure, public services and ecosystem services.

Countries in the Asia-Pacific region have historically contributed the least to greenhouse gas emission but bear the greatest brunt of climate change impacts with a significantly reduced capacity to respond and adapt to climate change as well as to achieve the Sustainable Development Agenda, giving rise to climate justice concerns and demands for greater financial and capacity support (WMO, 2022; IPCC AR6, 2022).

CASES IN POINT ON LOSS AND DAMAGE CONCERNS IN THE ASIA-PACIFIC REGION

The nature of loss and damage varies across the sub-regions of Asia-Pacific . While South and South-West Asia are experiencing a substantial rise economic losses and damages, the Pacific region is witnessing increasing trends of deaths and people affected. Moreover, while productive sector losses are highest in South-East Asia (80% of disaster losses), then in South and South-West Asia (60%) and in the Pacific (30%). Losses in the cross-cutting sectors (economic, social, and infrastructure) are highest in the Pacific compared to the other regions. This finding highlights the importance of a comprehensive accounting of risks at the sectoral level for guiding adaptive measure to enhance future resilience (ESCAP 2022).

The Pacific Small Islands Developing States based their call for a loss and damage fund with assumptions and evidence that loss and damage is a consequence of the failure to ramp up mitigation financing and actions; that existing financial mechanisms established under the UNFCCC such as the Green Climate Fund (GCF) may have potential and growing policy pressure to help 'address' elements of loss and damage but will be unlikely to be institutionally able (due to donor preferences and expectations) to direct the scale of expertise, attention, and policy reform required to fund high trade-off issues; that the need for additional financing to address loss and damage like financing for adaptation or mitigation will be targeted at nationally determined priorities and needs and not proposed to be a 'blank cheque' approach from which to price compensation for all climate impacts; that the call for loss and damage financing must be distinct and additional to mitigation and adaptation inancing; and that no singular fund under the UNFCCC is expected o provide a complete financial solution to loss and damage and that a spectrum of arrangements will need be considered and linked to the central fund (Policy Primer on Loss and Damage Considerations for Pacific Island Countries, UNDP 2023).

Advocacy on loss and damage is also being reflected in NDCs. About 60% of second-generation NDCs from Climate Promise supported countries in the region refer to loss and damage. For instance, Sri Lanka included a chapter on loss and damage and identified NDC targets and actions for addressing loss and damage, while Pakistan included a section on loss and damage as part of means of implementation for its NDC. Nauru included loss and damage as one of eight areas that contribute to sustainable development. Vanuatu's NDC notes that loss and damage actions are part of the country's National Climate Change and Disaster Risk Reduction Policy while Nepal indicates that it will develop a national strategy and action plan on loss and damage by 2025. Cambodia, Myanmar, Viet Nam, Maldives, Lao PDR, and Tonga all speak to loss and damages occurring from increasing disasters, and some countries have detailed cost estimates and systems for tracking this information (UNDP 2022).

Indonesia, Thailand, Vietnam, Philippines, Timor Leste and Bhutan are all members of the Santiago Network (which catalyzes technical assistance for averting, minimizing and addressing loss and damage) and proactively documenting and integrating loss and damage in their adaptation plans (UNFCCC).

With the establishment of the global loss and damage fund during COP28, it is anticipated that both national and sub-national governments will be able to access loss and damage finance. This provides an opportunity to prioritize the needs and demands of the most vulnerable communities, including the urban poor and displaced populations migrating towards cities, both in terms of financial assistance and capacity-building to accumulate needed human resources, leverage available technologies, and gain the expertise to effectively manage financial resources (SEI, 2022).

Asia-Pacific cities will need to allocate substantial resources to manage the increasing effects of climate change while concurrently addressing existing and future gaps in infrastructure and services. Addressing the gap of knowledge and data on loss and damage in the urban context will be necessary to center urban policies and actions around the most vulnerable groups and displaced populations migrating towards cities. Loss and damage to urban infrastructure (water and energy supply, sanitation and drainage, transport and communication), services (health care, emergency services), the built environment, ecosystem services and biodiversity, and the urban economy can be translated in the context of consequences on the lives and well-being of urban residents (loss of life, harm to health, including mental well-being, direct financial losses, resulting from the destruction of housing or other assets, and diminished productivity, including time spent addressing the repercussions) (IIED 2014).

Biodiversity Loss and Urban Environment

The first global stocktake on the implementation of the Paris Agreement underscored the urgent need to address, in a comprehensive and synergetic manner, the interlinked global crises of climate change and biodiversity loss in the broader context of achieving the Sustainable Development Goals, as well as the vital importance of protecting, conserving, restoring and sustainably using nature and ecosystems for effective and sustainable climate action (UNFCCC/PA/CMA/2023/L.17). Ecosystems and biodiversity are the foundation for human and socioeconomic well-being and thus must be protected from the impacts of climate change as well as maximized to support adaptation and resilience building.

Human activities coupled with impacts of climate change significantly contribute to the unprecedented rate of biodiversity loss and environmental degradation. Urban growth often leads to land conversion and the loss of forests, wetlands, and other natural habitats, with consequent impacts on biodiversity and ecosystem services. As a relevant response, the Kunming-Montreal Global Biodiversity Framework Target 12 seeks to "significantly increase the area and quality, and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature, and contributing to inclusive and sustainable urbanization and to the provision of ecosystem functions and services."

The Asia-Pacific region is rich in biodiversity - forests, coral reefs, and large river basins and other key natural capital abound. However, issues and challenges loom as rapid deforestation, expanding agriculture, and urbanization create adverse effects to terrestrial, coastal, and marine ecosystems. Considering is people's reliance in its natural capital, nature loss in the region will have result in economic activities losses, with as much as 63% (USD 19 trillion) of Asia-Pacific's GDP at risk – a higher share than the global average (TEMASEK/WEF, 2021). Nature-positive urban plans and investments, with strong sustainability policies and regulations are needed in the region.

Along with climate change, economic activities in three socioeconomic systems have been identified as key contributors to biodiversity and nature loss: food, land, and ocean use; infrastructure and the built environment; and energy and extractive sectors. Nature positive transitions in these areas can add up to opportunities of up to USD 4.3 trillion in annual business value in 2030 for Asia-Pacific. This estimate is based on the WEF report (2021) which further breaks it down as potentials of over USD 1.6 trillion of opportunities in the food, land and ocean use system (38% of regional total), over USD 1.2 trillion in the infrastructure and built environment system (29%), and over USD 1.4 trillion in the energy and extractives system (33%).

The succeeding part of this section elaborates on (1) climate impact driver - trends and hazards – and the challenges they bring to the region, as well as (2) nexus of the built environment with natural capital and assets with climate change and ecosystem degradation.

Rising Temperature

The Asia-Pacific region is experiencing a warming trend with an average temperature increase of 1.5°C between 1901 and 2020. The increasing temperature is affecting human and land productivity considering its links to health, food production, and other urban activities. While the degree of warming may vary across the region, IPCC data reveals that there is a common upward trend and a high confidence that future mean surface temperatures and extreme heat will increase in the future.

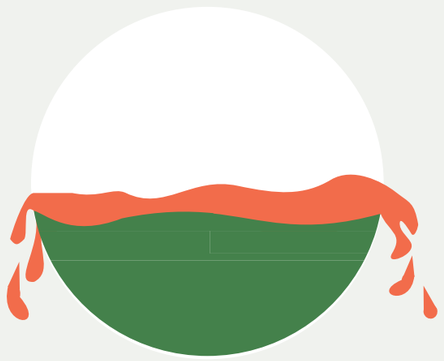
Temperature increase in urban areas and cities due to climate change can be amplified because of dense population and other activities. Insufficient natural cooling mechanisms, such as shade from vegetation and from water bodies, can compound urban heat which can cause impacts on health, energy demand, as well as further challenge environmental issues within the urban settings. Changing mean temperature are rarely considered and taken into account in most urban policies.

Changing Precipitation Pattern

Changes in rainfall patterns and volumes are already being observed in the the region. The IPCC AR6 projects an increase in annual precipitation for East Asia, South Asia, and Southeast Asia during the 21st century, while Central Asia is likely to experience precipitation decrease.

The intensity and duration of monsoon season in the region is observed to be more variable and unpredictable. Changes in monsoon patterns can have disastrous effects on agricultural production cycles, water resources, built environment, and natural assets like forests, wetlands, and other habitats which are vital for urban biodiversity and the ecosystem services.

For instance, severe flooding due to prolonged monsoon rains in 2019 affected parts of India, Nepal, Bangladesh, and Pakistan. Over 2,000 lives were lost, and millions were displaced. In India alone, the estimated economic loss was around USD 10 billion. In the Mekong River Basin, alterations in river flow regimes have been linked to changes in monsoon patterns. According to reports from the Mekong River Commission, this is affecting the Mekong River Basin's highly diverse freshwater ecosystems which are crucial for the livelihoods of more than 60 million people relying on its resources.



Sea-Level Rise (SLR)

Sea-level rise (SLR) is a very significant threat to many countries in the Asia-Pacific region as it is home to numerous low-lying island nations and archipelagos. An increase of 3.0mm per year between 1993 and 2019 has been observed in Asia-Pacific. This increase is faster than the global average of 2.2 mm per year.

Accelerated SLR poses a significant threat to low-lying urban areas and cities and island nations in the region. The IPCC AR6 estimates that, by 2050, over 570 million people in the region could be exposed to coastal flooding due to sea-level rise, storm surges, and subsidence. SLR can accelerate coastal erosion and degradation which threaten infrastructure and livelihoods. When compounded by other human activities and other natural processes like change in natural sedimentation, SLR impacts can lead to land and biodiversity losses as well as displacement of communities. These impacts lead to permanent inundation, more frequent coastal flooding, as well as saltwater intrusion.

Many Pacific Island nations such as Kiribati, Tuvalu, and the Marshall Islands, which are just a few meters above sea level are facing existential threat as any rise in sea levels could render them uninhabitable. The IPCC has warned that some of these islands could become entirely submerged by the end of the century. For Bangladesh, the IPCC projects that by 2050, permanent inundation due to SLR could result in the country losing approximately 11% of its land. This would impact an estimated 15 million people.

Extreme Weather Events

Extreme weather events such as Typhoons/Cyclones, floods, and heat waves are becoming more catastrophic. The major disasters of 2022 fell across the development spectrum, from floods in Afghanistan, Bangladesh, India, Pakistan and Thailand, drought in China, Kiribati and Tuvalu, typhoons Megi and Nalgae in the Philippines, to heatwaves in India, Japan, and Pakistan. Floods were the deadliest, accounting for 74.4% of disaster events in the region and 88.4% of total deaths globally (ESCAP, 2022).

Rising heatwave frequency and intensity cause health crises across the region. Drought conditions, particularly in South and Southeast Asia, are worsening, impacting water availability and agricultural productivity. For example, the 2015-16 El Niño event caused a severe drought across Southeast Asia, affecting over 60 million people and causing agricultural losses over USD 10 billion. Additionally, increased ocean temperatures result in more intense cyclones, increasing wind-speeds and rainfall. Such events not only cause immediate devastation but disrupt essential services, complicating recovery. For instance, 2020's Cyclone Amphan extensively damaged Kolkata's infrastructure, causing week-long service disruptions. Furthermore, post-cyclone health impacts in densely populated urban areas can be significant, with waterborne diseases spreading due to contaminated water sources.

Urban Heat Islands (UHI)

The Urban Heat Island (UHI) effect, where urban areas experience significantly higher temperatures than their surrounding rural areas, is a phenomenon that is primarily due to the high concentration of buildings, roads, and other infrastructures that trap and release heat, as well as the lack of vegetation and water which provides cooling influence.

Climate change is exacerbating the UHI effect which is occurring in many parts of the globe due to urbanization. The Asia-Pacific region, which is undergoing rapid urbanization, is particularly vulnerable to amplified UHIs, which lead to not only heightened energy consumption and greenhouse gas emissions due to increased demand for air conditioning, but also threatens public health, particularly among vulnerable populations like the elderly, children, and those with pre-existing health conditions.

UHI changes the local wind patterns, humidity, and precipitation rates, which can lead to the formation of heat domes over cities. These changes in the microclimate can disrupt local ecosystems and affect the city's overall livability and sustainability. This UHI combined with climate change impacts affect local species' survival and reproduction rates, leading to a decrease in urban biodiversity ultimately limits ecosystem services that urban residents could benefit from. For example, Bangkok's Chao Phraya River in Thailand is experiencing increased temperatures due to the city's UHI effect. The thermal pollution has led to lower oxygen levels in the water, negatively impacting the river's aquatic life and contributing to harmful algal blooms.

Ecosystem Degradation

Terrestrial, coastal, and marine ecosystems in the Asia-Pacific region are faced with growing threats from climate change and unsustainable urbanization. Urban growth often leads to land conversion and the loss of forests, wetlands, and other natural habitats, with consequent impacts on biodiversity and ecosystem services. Ultimately, urbanization pressures to biodiversity and ecosystems are also key to the constraint that limits the adaptive capacity of people and its spaces to adapt to and manage climate change impacts.

The rise in temperatures and increased instances of flooding can cause damage to road and rail infrastructure, disrupting supply chains and urban mobility. The long -term impacts of flooding and climate stressors can also alter land use due to abandonment of arable land and transformation of arable/ agricultural land to other land use types like residential blocks, industrial area, urban areas. For instance, the recent 2022 floods in Pakistan affected 33 million people and inundated 1.1 million hectares of cropland area in the Sindh province (ESCAP, 2023).

Climate actions and urban development needs to be biodiversity-inclusive and be designed with nature to improve urban health and quality of life. Green and blue spaces can provide important habitat for species, improve habitat connectivity, provide ecosystem services, and help manage impacts of extreme events brought by climate change.

Air and Water Pollution

Addressing air and water pollution is essential for achieving sustainable urban development and mitigating climate change impacts in the Asia-Pacific. Megacities and urban regions in Asia frequently experience episodes of extremely poor air quality, particularly during stagnant weather conditions. These episodes of air pollution are characterized by high outdoor or "ambient" concentrations of fine particulate matter (PM2.5; aerosol particles with an aerodynamic diameter of 2.5 μm or less), which have serious effects on human health. Long-term exposure to ambient PM2.5 pollution was reported to be responsible for up to 3.6 million early deaths in Asia in 2019, which is around 80 deaths per 100,000 people. The overall ambient PM2.5 exposure risk has been increasing, with rises mainly occurring in countries with a low to middle socioeconomic status e.g., countries in South Asia, and Southeast Asia (ESCAP, 2023).

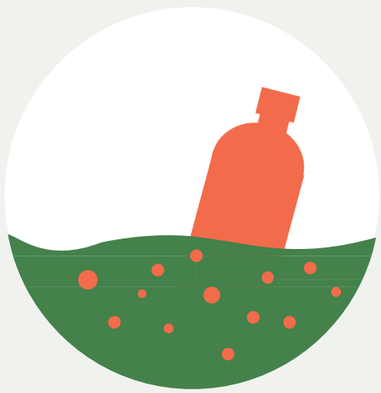
Rapid urbanization and industrialization have likewise led to significant water pollution due to solid and liquid wastes. This negative condition is exacerbated by climate change, compounding the risks felt by people and communities. The World Bank estimates that water pollution in the Asia-Pacific region costs around 1% of regional GDP annually due to health costs, reduced fish catches, and polluted water resources.

Water Scarcity

It is estimated by ADB that 3.4 billion people could be living in water-stressed areas in Asia by 2030 if no urgent measures are taken. This challenge on water stress and scarcity is further exacerbated by climate change and rapid urban development.

The reliability of water supply is affected by climate change due to the change in rainfall patterns, the occurrence of frequent droughts and floods. These climate change impacts coupled with demand from growing population and urban activities may result in water losses, contamination of sources, and insufficient supply. In 2019, Chennai, India's sixth-largest city, made global headlines when it virtually ran out of water. The crisis was attributed to a combination of poor management, lack of rainfall, and rapid urbanization.

Water scarcity has broad socio-economic impacts. It can lead to food and energy shortages, hinder economic growth, and lead to political instability. Furthermore, it disproportionately affects the most vulnerable populations who have the least capacity to adapt.



Call to Action | **Latest Developments in Climate Change Governance**

Global Action

1 The importance of urban actions and the critical role of cities in the climate battle, as well as in biodiversity conservation, is increasingly recognized at the international level, as evidenced by growing attention to urban issues in multilateral forums. The latest IPCC report and multilateral environmental agreements such as the Paris Agreement (COP21), COP26, COP15 (UN Biodiversity Conference), COP27, and COP28 all reflect this trend. Specifically, the Sharm-El-Shekh Implementation Plan, developed during COP27, has recognized the need for multilevel and cooperative action beyond national-level involvement. At UNFCCC's COP27 and the Convention on Biological Diversity (CBD) COP15 in 2022, multiple initiatives emerged in direct response aiming to enhance engagement with line ministries and municipalities, among which;

- The **Ministerial Meeting on Urbanization and Climate Change** at COP27 and COP28.
- The COP28 **Local Climate Action Summit** and the **Coalition for High Ambition Multilevel Partnerships (CHAMP) for Climate Action** pledge which calls on nations to commit to consulting their local and regional governments to build their national climate goals, and to resource them to implement ambitious climate projects.
- The COP27 launch of the **IPCC report's Summary for Urban Policymakers (SUP)** series with implementable climate solutions and challenges for specifically for cities, citizens, businesses and national governments.
- The COP27 launch of the **Sustainable Urban Resilience for the next Generation (SURGe)** initiative aiming at local and urban climate action through multi-level governance, engagement, and delivery.
- The CBD COP15 **Global Biodiversity Framework and Plan of Action for Biodiversity** which set the first global target on green and blue spaces in urban areas
- The **G7, G20, Commonwealth and Belt-Road Initiative** also emphasized the role of cities for achieving the **SDGs and climate goals** via their Ministerial or Heads of States Communiques.

Regional Action

2 Regional level cooperation to address climate change and environmental sustainability remains vital in the facilitation of concerted actions and joint learning to achieve results at scale. Regional forums and organizations have been instrumental in ensuring vertical and horizontal linkages of commitments and actions on climate and urban environmental sustainability. For instance, the **Association of Southeast Asian Nations (ASEAN)**, have made considerable strides in policy harmonization and in issuing binding agreements among its member countries in cooperating in reducing disasters losses and achieving resilience (AADMER Agreement) as well as other regional issues like reducing transboundary air pollution, promoting smart and sustainable urban development, etc.

Collaboration is also evident in forums like the **Pacific Islands Forum (PIF)**, which consistently advocates for the specific needs and vulnerabilities of Pacific Island nations on the global stage, especially in UNFCCC negotiations. The PIF also issued a "Framework for Resilient Development in the Pacific" which guides the integrated approach to address climate change and disaster risk management (DRM) in the Pacific region, promoting climate-resilient sustainable development. In 2023, the PIF Secretariat hosted the **6th Pacific Urban Forum (PUF6)** with a double focus on urban climate action and SDG localization.

There are regional and sub-regional level mechanisms which are promoting plans and programmes that are supportive of urban climate and environmental sustainability. For example, the **South Asian Association for Regional Cooperation (SAARC)** has thematic areas such as adaptation, mitigation, technology transfer, finance and investment, and capacity building for its member states; the **Asia-Pacific Network for Global Change Research (APN)** is facilitating cooperation between 22 member countries and supports global change research in the region while enhancing the region's capacity to participate in global scientific research; APAN, or the Asia-Pacific Adaptation Network, is a regional network that provides a platform for knowledge sharing, capacity building, policy information, and best practices as well conducts activities to support countries in the region in developing and implementing their National Adaptation Plans (NAPs).

These examples highlight the significant role of regional cooperation in addressing climate change and promoting environmental sustainability in the Asia-Pacific region. The scale of the challenge, however, still necessitates further intensifying these efforts, including bolstering regional policies, investing in research and technology, and mobilizing even greater resources for urban climate action and environmental protection.

National Action

3 National governments are determined to reinforce the urban dimension in their national climate policies in the form of **Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs), National Urban Policies (NUPs)**, and other climate change and urban frameworks. In six years (2016-2022), the number of NDCs with strong urban content has considerably increased from 14% to 22%. In the Asia-Pacific region, 18 countries have included new adaptation targets in their updated NDCs (2022). Furthermore, national governments aim to improve the policy framework to enable conditions for effective regulation and response by cities.

City Action

4 More than 13,000 cities and local governments spanning 142 countries across six continents have united under the **Global Covenant of Mayors for Climate and Energy (GCoM)**. Their primary aim is to facilitate the translation of cities' climate aspirations into concrete actions. To this end, the GCoM has developed three core initiatives, namely Data4Cities, Innovate4Cities, and Invest4Cities. Through the GCoM Asia Project, the EU supports region-specific GCoM implementation in Southeast Asia, South, Asia, and East Asia (I.e., Japan, China, and South Korea).

Besides this, the **United Cities and Local Governments Asia-Pacific (UCLG ASPAC)** also supports cities' climate action plans and SDG localization through acting as a knowledge management hub.

05
Strategic Framework

All cities and urban areas in the Asia-Pacific region have a key role to play in addressing the climate crisis through innovation and implementation. The success of their efforts relies on implementing simultaneous systems transitions. This strategy embraces a Climate Resilient (Urban) Development approach promoted by the IPCC, which incorporates adaptation, mitigation, biodiversity action and supporting sustainable development.

Urban mitigation strategies include a rapid transition to renewable energy and the electrification of urban systems, phasing out fossil-fuel-driven vehicles, urban green and blue infrastructure, energy efficiency, sustainable production and consumption including reduced food waste. Urban adaptation strategies include disaster risk management, early warning systems, social safety nets, community-based adaptation, and nature/ecosystem-based solutions (NbS/EbA) such as urban greening, and restoration of wetland or upstream forest ecosystems. Especially the latter offers a threefold dividend of firstly mitigating greenhouse gas emissions, secondly protecting ecological assets and biodiversity, and thirdly effectively adapting communities and the built environment, including the urban poor and informal settlements, to climate change. Nevertheless, trade-offs between adaptation and mitigation should be considered and addressed, such as increased urban density and reduced transport emissions, hand in hand with increased vulnerability to heat waves and flooding.

Cities at the forefront of local climate action do not only provide a pivotal opportunity for rapid and substantive decarbonization and systematic transformation, but also hold the potential to reap the benefits of multi-level collaboration and prosper (e.g. post-COVID recovery, enhanced health, new green job opportunities, reduction of inequalities within and between cities, eradication of energy poverty and food insecurity as well as increased standards of living). The IPCC AR6 highlights that urban mitigation and adaptation, disaster risk reduction (DRR), and achieving the SDGs are all strongly interlinked and create synergies along the sustainable development pathway.

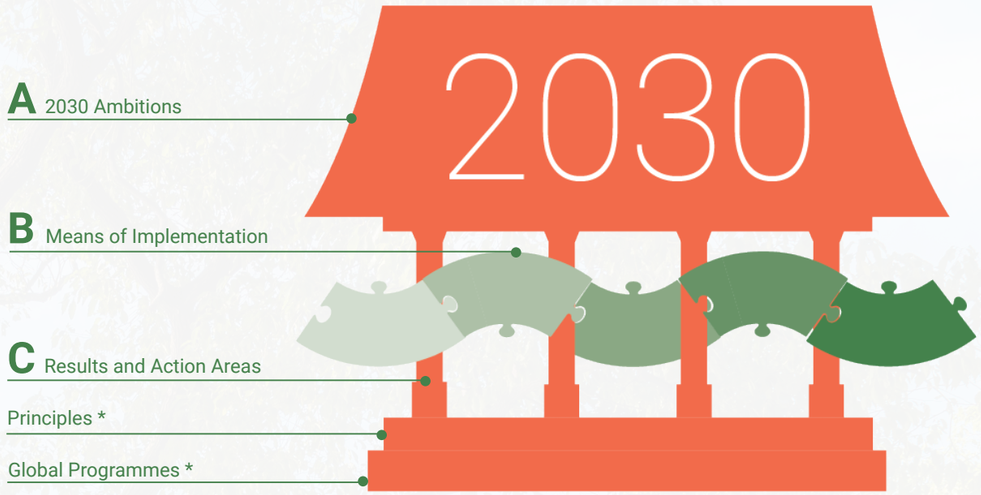


Figure 6. Strategic Framework

(*) Note: See Appendix

"Cities are at the heart of the climate crisis. They can be at the forefront to the solution to set out low emission, resilient green, and inclusive urban development pathways."

Maimunah Mohd Sharif,
Former Executive Director of UN-Habitat and Under-Secretary-General of the United Nations

Wuhan, China [UN-Habitat ROAP]

Figure 7. 2030 Ambitions

+200 cities

More than 200 cities across Asia-Pacific will be assisted in planning and implementing climate change and urban environment actions.

+30 member states

UN-Habitat will expand its support for climate change and urban environment initiatives to over 30 countries in the region, providing policy advisory services and subnational technical and investment. assistance.

3B USD mobilized

USD 1B will be mobilized by UN-Habitat and an additional USD 2B will be leveraged for follow-up investments by partners at the regional, national, sub-national, city and local levels.

30 Partner Institutions

30 Knowledge Products

UN-Habitat will establish partnerships with over 30 key national and regional partners to accelerate climate change and urban environment action. We will develop 30 regional and country-level knowledge products and

Strategic Framework | **B. Means of Implementation**

UN-Habitat ROAP will implement the strategy through five key approaches (see below) that can be (a) integrated into one programmatic scheme, (b) combined strategically as necessary, and (c) as a single entry-point to deliver specific results as part of a pathway approach to deliver impacts. These five implementation approaches will complement existing regional cooperations and national targets.

Knowledge Management & Communication

UN-Habitat will ensure the use of existing and emerging knowledge from within the institution as well as from its scientific collaborators in achieving the targets of this strategy. It will endeavor to collate, analyze, and disseminate the latest scientific research and data on climate change and urban environment issues. Through the Knowledge Management and Communication (KM&C) activities, and the Innovate4Cities partnership, which brings together climate change research and innovation to answer the most pressing questions that cities and local governments face when assessing why and how to take action on climate change. The strategy will support evidence-based decision-making and help stakeholders understand the urgency and scale of the challenges faced. Communication will also play a critical role in raising awareness and advocating implementation of transformative actions at various scales. Tailored communication strategies will be developed to target different audiences, from policymakers to the general public, using various mediums such as workshops, webinars, social media campaigns, and more.

City & Local Level Action Implementation

Cities and local communities are on the frontline of the climate crisis and will be our main partners in the implementation of this strategy. Aligned with UN-Habitat's global programmes (Appendix), including the SURGe and RISE-UP Initiatives, we will support them in developing and implementing local climate action plans, promoting sustainable urban environment, and building resilience to climate change impacts. This will involve capacity building, technical assistance, and the promotion of participatory approaches that involve local communities in decision-making processes.

Partnerships

Core to this regional strategy is the promotion and support for collaborative partnerships. We aim to further develop our robust partnerships with a range of urban actors and stakeholders, including national and local governments, city networks, international organizations, civil society, academia, the private sector, and local communities. Through these partnerships, we will pool resources, share knowledge and expertise, and work collaboratively towards building low-carbon, resilient, and sustainable cities and human settlements in the Asia-Pacific region.

National Level Support

Through its regional, multi-country, country offices, and global programmes, including the national SURGe Facility (Appendix), UN-Habitat will work closely with governments to integrate climate change and urban environment considerations into national policies, strategies, and plans. This will involve providing technical support, capacity building, and policy advice. Furthermore, we will support countries in accessing climate finance, which is critical to implement their climate change mitigation and adaptation actions. Key areas of support shall be particularly but not exclusively focused on the urban and human settlements dimensions of the NDC, the NAP and other related policies.

Regional & Multi-country Actions

Regional cooperation and multi-country actions are vital to address climate change and urban environment issues, which transcend political boundaries. We will facilitate and promote regional and multi-country joint undertakings and cooperation, support the sharing of best practices, and ensure stakeholders access to lessons learned through existing platforms and other innovative schemes. Additionally, UN-Habitat in the region will support multi-country projects and programmes aimed at addressing shared challenges - for example, the protection of transboundary ecosystems, crucial for urban development or for the development of regional climate change adaptation strategies.

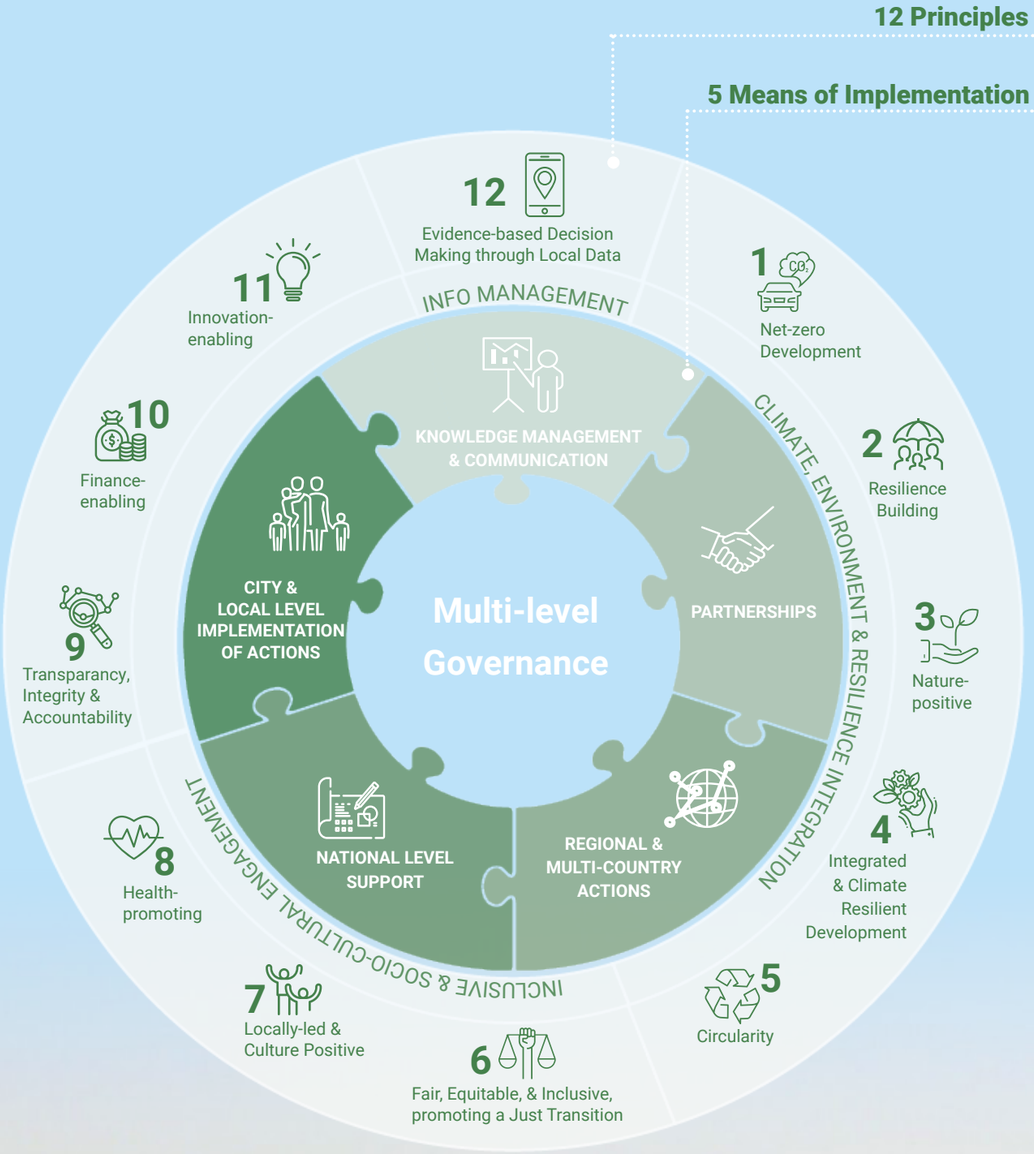
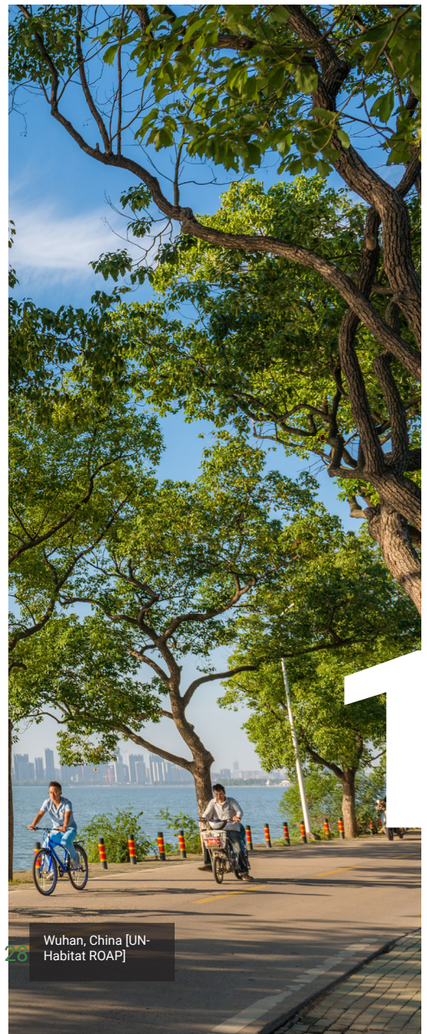


Figure 8. Means of Implementation and Principles Wheel

Amer Fort, Jaipur [UN-Habitat India]

Results areas of this regional strategy adopt the organizational focus of UN-Habitat on climate and urban environment as presented in its Strategic Plan 2020-2025.

Facilitating Greenhouse Gas Emissions Reduction and Avoidance



Wuhan, China [UN-Habitat ROAP]

Improving Resource Efficiency and Protection of Ecological Assets

[UN-Habitat Laos]

Advancing Adaptation Actions in Cities and Human Settlements and Building Community Resilience

Protective Wall, Hoi An, Viet Nam [UN-Habitat/ Alyssa Grinberg]

Enhancing Knowledge and Actions to Address Loss and Damage

Post Tsunami Hambantota, Sri Lanka [UN-Habitat ROAP]

1 Facilitating Greenhouse Gas Emissions Reduction and Avoidance

This action area is focused on facilitating the reduction and avoidance of greenhouse gas emissions in the region, particularly in urban areas, through transformative change in energy, transport, waste management, building and construction, urban planning and design, as well as land use practices. It involves advancing low-carbon development pathways, promoting energy efficiency and carbon neutral technologies and processes as well as renewable energy.

Indicator/s:
- Number of partner countries with stronger urban content in national and global climate action frameworks and instruments
- Number of partner cities and human settlements monitoring and reporting on urban climate change mitigation actions

Key Results

- Avoided and reduced greenhouse gas emissions in partner cities and communities as a result of sectoral interventions.
- Increased number of stakeholders who are developing and implementing urban low-carbon strategies and net-zero action plans across the Asia-Pacific region.

Supporting Results

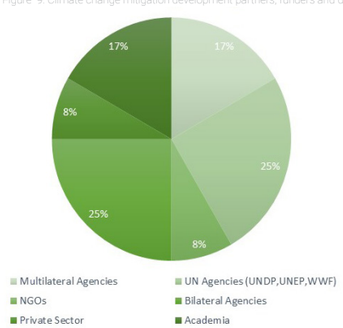
- Enhanced capacity of urban decision-makers to plan and implement low-carbon development pathways.
- Improved policies and regulations supporting energy efficiency, renewable energy, and sustainable urban mobility in cities and towns.
- Improved and increased investment in low-carbon urban infrastructure and services, contributing to greener, more sustainable cities.
- Improved practices in Urban Land Use, Housing, Building and Construction contributing to GHG emission reduction and avoidance.
- Expanded engagement and participation of urban communities, particularly women and youth, in low-carbon initiatives and decision-making processes.

PARTNERS & DONORS

Private sector engagement, especially from technology and energy companies as well as developers, provides potential for innovative low-carbon solutions and partnerships. The inclusion of urban-focused, low-carbon strategies in many countries' NDCs also presents an opportunity for policy alignment and resource mobilization at the national level.

Furthermore, regional networks and initiatives, such as the Asia-Pacific Urban Energy Association (APUEA) and the Low Carbon Asia Research Network (LoCARNet), can facilitate knowledge exchange and collaborative action.

Figure 9: Climate change mitigation development partners, funders and donors



Pipeline & Ambition Projects

Green Buildings

Advancing Technological and Process Innovations for Green Buildings through the Busan Innovation Centre for Global Green Cities Solutions and its Regional Roll-Out Programme. The Centre will serve as a platform for policy and technical advisory support, access to climate finance, capacity-building, project development, and strengthening multi-level partnerships for climate action. Country-level implementation include China, Nepal and Pakistan.

Smart Cities

Building Green Resilient Smart Cities in ASEAN with an emphasis on circular economy, waste management, connectivity, and regional knowledge sharing.

Building People-Centered and Climate Smart Cities in the Philippines and China.

Urban Energy

Green Transformation (GX) and Addressing the Climate and Cost of Living Crises through energy poverty interventions through a collaboration between Kyushu Electric and UN-Habitat. Building on existing country-level engagements and partnerships with development partners the projects aims to support national and local governments to transition energetically, through city-level energy transition plans and partnerships between energy utilities, support of the implementation of Nationally Determined Contribution (NDC) strategies towards energy transformation, and to implement pilot initiatives at the city level. Under consideration are cities in Pakistan, Cambodia, Thailand, Mongolia, Sri Lanka, and Philippines.

Low Emission Development – city-wide and sectorally

Providing City-wide Policy and Technical Advisory Support in Lao PDR, Pakistan and Vietnam.

Improving Urban Mobility in Nepal, Philippines and Sri Lanka.

Emission Reductions through Managing Waste and Waste Water in Sri Lanka, Thailand and China.

Under this action area, UN-Habitat ROAP's current, pipeline and ambitions climate change project portfolio is estimated at USD 295 million as of June 2024.

OPPORTUNITIES & EMERGING THEMES

Opportunities for greenhouse gas emissions reduction and avoidance in the Asia-Pacific region are vast, particularly given the region's rapid urbanization and technological advancement. International organizations, such as the Green Climate Fund (GCF), offer both technical and financial support for low-carbon initiatives. Other emerging themes include Urban Planning and Design and Land-use Planning in support of carbon neutral development.

PRIORITY PRINCIPLES

01 Net-zero Development

04 Integrated & Climate Resilient Development

11 Innovation-enabling

2 Improving Resource Efficiency and Protection of Ecological assets

This action area aims to improve resource efficiency in cities and protect valuable ecological assets to ensure their continued provision of vital ecosystem services. This involves enhancing urban planning and design, promoting sustainable consumption and production patterns, and integrating biodiversity and ecosystem considerations into urban decision-making to contribute to achieving the targets of the Kunming-Montreal Global Biodiversity Framework (2022), the Paris Agreement on Climate Change (2015), and the SDGs.

Indicator/s:

- Number of partner cities and human settlements that are implementing resource efficiency policies, plans and standards
- Number of partner cities with municipal solid waste received by recovery facilities out of the total municipal solid waste generated
- Number of partner countries and cities with improved and increased blue and green spaces

Key Results

- Improved resource efficiency in cities, particularly in sectors such as energy, water, and waste.
- Enhanced protection and restoration of ecological assets within and around urban areas.
- Development and implementation of urban biodiversity strategies and action plans in alignment with the Convention on Biological Diversity (CBD).
- Reduction of Marine Plastic Pollution through land-based, city and community-level interventions.

Supporting Results

- Increased incorporation of biodiversity and ecosystem considerations into urban planning and design across the Asia-Pacific region.
- Strengthened capacity of urban decision-makers to integrate biodiversity and ecosystem considerations into planning and policy-making.
- Promoted enhanced urban policies and regulations on resource efficiency and protect ecological assets, and increased urban dimension of National and Local Biodiversity Strategies and Action Plans.
- Increased public and private sector investment in green infrastructure and nature-based solutions.
- Raised awareness and engagement of urban communities, particularly youth, in biodiversity conservation and resource efficiency initiatives.

PARTNERS & DONORS

Engagement with the private sector, particularly industries involved in construction, real estate, and infrastructure, can help drive investments in green infrastructure and nature-based solutions. Partnerships with plastic producers in the Philippines have shown early success in tackling marine plastic pollution. Furthermore, regional networks and initiatives, such as ICLEI's Cities Biodiversity Center and the Asia-Pacific Biodiversity Observation Network (APBON), provide platforms for knowledge sharing and collaborative action. Aligning urban biodiversity strategies with national biodiversity strategies and action plans can also facilitate policy coherence and resource mobilization at the national level.

Pipeline & Ambition Projects

Ecological Asset Protection

Improving Ecosystem Services to protect Vulnerable Human Settlements in Ancestral Domains in the Philippines

Settlement Planning for mitigation of the Human-Elephant Conflict in Sri Lanka

Supporting a Green Audit for Colombo Municipal Council

Implementing the Sustainable Buildings and Construction Roadmap 2020-2050 in Sri Lanka

Blue and Green Economy

Supporting Resource-dependent Island Provinces and Communities through Blue Economy Integration in Territorial Planning and Investment Programming in the Philippines.

Advancing Green Resilient Urban Transformation of Hanoi Capital, Vietnam.

National and Local Biodiversity Strategies and Action Plans (NBSAPs & LBSAPs)

Supporting the Integration of Urban Content into National Biodiversity Strategies & Climate Action Plans (NBSAPs) and the development of Local Biodiversity Strategies & Climate Action Plans (LBSAPs). The initiative aims to ensure that integrated solutions for ambitious biodiversity and climate action are pursued by society as a whole, through strengthening structures, capacities, and resource availability at the sub-national and local levels, as well as enhancing the broad participation of the relevant governmental agencies for relevant sectors, civil society and the private sector.

Urban Nature-based Solutions

Building Climate Resilience and supporting Nature-Positive Development of Vulnerable Communities using Nature-based Solutions. The initiative aims to demonstrate the efficacy of urban ecosystem-based adaptation (EbA) through ecosystem restoration, strengthen the capacity of city authorities to implement urban EbA, and build the knowledge base and awareness of urban EbA. The project further supports the protection and restoration of ecosystems to the benefit of the communities. Country-level implementations include Pakistan, Cambodia, and Nepal.

Sustainable Consumption, Production and Waste Management

Supporting Knowledge Sharing on Sustainable Consumption, Production and Waste Management in China through partnerships and innovation documentation.

Integrating Solid Waste Management for Promoting Circularity and Resource Recovery in Pakistan.

Under this action area, UN-Habitat ROAP's current, pipeline and ambitions climate change project portfolio is estimated at USD 155 million as of June 2024.

OPPORTUNITIES & EMERGING THEMES

The Asia-Pacific region's rich biodiversity and natural resources present significant opportunities for resource efficiency and ecological asset protection. International bodies like the Convention on Biological Diversity (CBD) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) offer technical guidance and support for biodiversity-focused initiatives. Synergies with the Biodiversity Agenda include Targets 1 (Protecting Spaces), Target 11 (Nature-based Solutions and Urban Ecosystem-based Adaptation), and Target 12 (Green Spaces and Urban Planning).

PRIORITY PRINCIPLES

03 Nature-positive

12 Evidence-based Decision Making through Local Data

05 Circularity

3 Advancing Adaptation Actions in Cities and Human Settlements and Building Community Resilience

The action area of advancing adaptation actions in cities and human settlements involves prioritizing and integrating climate resilience into urban planning and infrastructure, safeguarding vulnerable urban populations, and leveraging urban systems to enhance adaptive capacity. Result delivery will support accelerating urban actions towards achieving the targets of the Global Goal on Adaptation and its framework.

Indicator/s:

- Number of partner countries with stronger urban content in National Adaptation Plans
- Number of partner cities and human settlements monitoring and reporting adaptation actions
- Number of partner cities, human settlements and communities that have integrated gender and social inclusion issues in their climate action and resilience plans

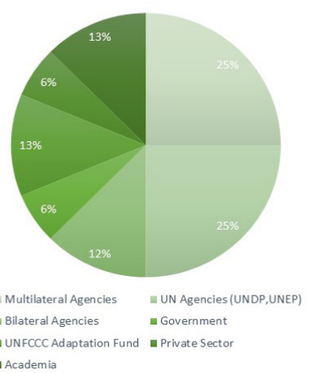
Key Results

- Enhanced adaptive capacity of urban communities, particularly the most vulnerable, through inclusive, participatory processes.
- Climate-resilient urban infrastructure and services to manage and reduce climate risks.
- Increased contribution of stakeholders and cities from the Asia-Pacific region on urban-focused climate knowledge, innovation, and best practices.

Supporting Results

- Urban resilience strategies and plans developed and implemented in cities across the Asia-Pacific region.
- Enhanced technical capacity and understanding of urban climate risks among urban planners and decision-makers.
- Promoted urban policies and regulations to integrate climate resilience considerations towards transformative development.
- Increased investment in climate-resilient urban infrastructure, contributing to safer, more sustainable cities.
- Strengthened participation and engagement of urban communities in resilience-building activities and decision-making processes.

Figure 10. Climate change adaptation development partners, funders and donors



PARTNERS & DONORS

Global Vertical Climate Funds and other dedicated international climate finance remains critical to support urban and community-level climate change adaptation. Private sector engagement in urban climate resilience is also growing, offering potential for innovative financing and partnership models. The increased focus on urban climate resilience in the updated NDCs of many countries in the region also provides a supportive policy environment for advancing adaptation actions in cities and human settlements.

PRIORITY PRINCIPLES

- 02 Resilience-building
- 04 Integrated & Climate Resilient Development
- 07 Locally-led & Culture Positive

Pipeline & Ambition Projects

RISE-UP

Leveraging large-scale investments to build urban adaptation and climate resilience in regional hotspots of vulnerability through a Regional RISE-UP Facility and Implementation Programme that uses an integrated approach to tackle issues of poverty, spatial inequality and resilient settlements at the same time.

Urban Heat

Improving Urban Biodiversity, Energy Efficiency and Heath Outcomes through a Regional Urban Heat Programme. The initiative aims to advance the development of heat-resilient infrastructure in the region and enhance information system and knowledge for evidence-based policies and decisions.

Pacific Urban Resilience Hub

Localizing SDG Achievement in the Pacific and Catalyzing Local and Regional Stakeholder Engagement on Urban Climate Risk Reduction and Resilience through the Pacific Urban Resilience Hub and Country Implementation Programme. The Hub is envisioned to be a centre for urban resilience initiatives in the Pacific and to model a global example of effective engagement and implementation for all Small Island Developing States (SIDS).

Adaptation Research Alliance

Supporting the Adaptation Research Agenda (ARA) on Urban Resilience and Least Developed Country (LDC) Adaptation Policy. Formed at COP26, the ARA produces knowledge products on demand-driven and community-endorsed projects, bridging sciences, innovation, and implementation. UN-Habitat aims to amplify regional knowledge production and exchange on urban resilience and LDC adaptation policy through the ARA platform.

Country Initiatives

Afghanistan: Integrating Livelihood Support & Climate-resilient Public Assets I Enhancing Spatial Planning for Climate-resilient Settlements I Integrating Housing Land and Property & Climate Resilience, and Mobilizing Municipal Finance for Climate Investments.

China: Knowledge Sharing and Capacity Development on Strengthening Climate Resilience of Urban and Residential Environments in China in its Implementation of the National Climate Change Adaptation Strategy 2035.

Cambodia: Increasing Climate Resilience through Small-scale Infrastructure Investments and Enhancing Adaptive Capacity of Vulnerable Communities in Kampot and Koh Kong Provinces I Clean Cities and Healthy Oceans through Marine Plastic Reduction.

Iran: Strengthening Climate Change Adaptation in Coastal Cities.

Lao PDR: Advancing the National Adaptation Plan (NAP) through Climate Change Vulnerability Assessments for Disaster Risk Management in Human Settlements I Enhancing Provincial Adaptive Capacity, Building Resilient Housing in Vulnerable Communities I Increasing Urban Resilience in Vientiane.

Malaysia: Building Green Ports and Transportation in Human Settlements (Green PaTHS).

Myanmar: Myanmar Climate Change Alliance (MCCA) I Enhancing Climate Resilience of Human Settlements through Green Solutions in Housing, Community Infrastructure and Energy I Facilitating Access to Climate Finance, Integrated Resilience Building in Cyclone-affected Communities I Strengthening Livelihoods and Food Security through Nature-based Solutions (NbS) I Building Resilient Schools & Improving Disaster Risk Reduction.

Nepal: Implementing Urban EbA for Multi-level Climate Resilient Development I Addressing Climate Change induced Floods, Landslides and Heat waves in Nepal's Koshi Province I Land Tenure Security for Climate-responsive Land Use Planning and Development.

Philippines: Climate-Resilient Cities in Southern Leyte, Providing Capacity Development Support for the Urban Dimensions of the National Adaptation Plan I Integrating Climate Risk Analysis for Risk-informed Planning and Investment Programming.

Sri Lanka: Improving the Network of Open and Green Spaces Urban Climate Resilient and Climate Action for Local Government Authorities.

Vietnam: NbS and Green Technologies to improve the Resilience of the North-Central Coastal Communities (NAGTECH) I Promoting Multi-value Integrated Permaculture and Eco-human Settlement-building for Climate-smart Communities in Peri-urban Areas.

Under this action area, UN-Habitat ROAP's current, pipeline and ambitions climate change project portfolio is estimated at USD 620 million as of June 2024.

OPPORTUNITIES & EMERGING ISSUES

There are numerous opportunities and resources available to advance adaptation actions in cities and human settlements in the Asia-Pacific region. Existing networks like the adaptation network, GCoM-Asia, etc can facilitate knowledge exchange and capacity building. Multilateral development banks, climate funds, and bilateral aid agencies can provide funding for climate-resilient urban infrastructure and services. Other opportunities emerging include:

- Energy Poverty, Displacement, Climate Change and Health, and Indigenous Communities
- Nexus Approach to Prevent Urban Crisis: Integrated Climate Change Actions in Planning, Housing, and Disaster Response
- Toolkits and Guides on New Approaches to Urban Design in Southeast Asia; Urban Health, Urban and Territorial Planning and climate change; Integrated approaches for addressing Urban Heat; Strengthening National Adaptation Plans, Leveraging Climate Resilience and Loss & Damage for SDG localization.

4 Enhancing Knowledge and Actions to Address Loss and Damage

This action area is focused on enhancing knowledge and actions to address loss and damage in the region through observing and anticipating urban loss and damage trends, advocacy, supporting partners to access loss and damage funding, and integrating loss and damage components in policies and NDCs.

Indicator/s:

- Number of partner countries with stronger urban-related loss and damage content in their NDC and NAP
- Number of partner cities that have integrated loss and damage data and actions that support gender and social inclusion

Key Results

- Built knowledge on loss and damage from both sudden and slow on-set climate impacts at the regional and country levels.
- Enhanced national and subnational government policies that address loss and damage, particularly highlighting impacts to poor urban communities. Loss and damage components integrated in NAPs, NDCs, and other urban policies and implementation instruments.
- Improved partners' capacity to access loss and damage funding.
- Developed research/studies on loss and damage in urban contexts for economic development and on other SDGs.

Supporting Results

- Enhanced technical capacity of national and local planners in accessing the loss and damage fund and other finance instruments in support of minimizing and addressing loss and damage through urban plans and investments as part of the integrated and anticipatory climate actions plans.
- Increased engagement of urban actors with technical/expert groups and task force developing the knowledge base and mechanisms for loss and damage.
- Sustained regional and sub-regional knowledge exchange and cooperation in advancing the action agenda on loss and damage.
- Engaged global and regional networks (e.g. Santiago Network) in discussing, promoting, and institutionalizing loss and damage funding agreements.

Pipeline & Ambition Projects

Under this action area, UN-Habitat ROAP aims to mobilize USD 10 million.

Urban Loss and Damage Action Programme in the Asia-Pacific Region

Pacific Regional Urban Loss and Damage Support Project

OPPORTUNITIES & EMERGING ISSUES

The agreement on the creation of the global loss and damage fund and discussion on its operationalization were amongst the most important outcomes of last COPs. The fund will allow direct access by subnational entities (amongst others) and provide small grant funding for communities. Contributions from developed nations to the loss and damage fund have reached USD 792 million.

PRIORITY PRINCIPLES

01 Net-zero Development

06 Fair, Equitable, Inclusive & Promoting a Just Transition

10 Finance-enabling

Sub-Regional Opportunities for Climate Action & Urban Environment

East Asia & Pacific Subregions

- Understanding the **level of government** responsible for each action –as well as **business, local communities, and science**.
- True **co-creation platforms** that support and incentivize collaboration.
- Biggest **gap around adaptation** – both in terms of understanding the data as well as the solutions.
- Cities are increasingly looking to transfer or share **risk associated with climate impacts**, but opportunities and legal implications are not fully understood.

South Asia & South-East Asia Subregions

- Governance at the heart of potential for successful climate action- need for **consistent strategy** across political transitions.
- Cities need **accessible translations of the latest science** – not only to inform (and provide evidence for) their own policy but also to educate citizens, starting at an early age.

Cross Cutting Actions

While our projects are designed to cut across the four designated results and action areas, this section's particular emphasis is on identifying **cross-cutting entry points that facilitate integrated approaches**.

As we advance the implementation of our Regional Strategy for Climate Change, one of our primary objectives is to reinforce cross-cutting linkages across our mandates in other area such as **Housing, Crisis Prevention, Humanitarian Assistance, and Urban Economy**, integrating them into spatial planning and development.

Additionally, our Strategy promotes **multi-level partnerships, gender-responsive actions, and inclusive urban development** within the region. Furthermore, it enables us to address emerging concerns including **Urban Health, Urban Youth, Transparency, Integrity, Justice, and Governance**.

TOP CROSS-CUTTING PRINCIPLES

OPPORTUNITIES & EMERGING ISSUES

Advancing Climate Justice and the Just Transition through the regionalization of the RISE-UP (Resilient Settlements for the Urban Poor) Flagship Programme and expanding it with climate resilient urban development concepts.

Integrated Research, Innovation and Knowledge Management: Strengthening the Engagement with the IPCC Special Report on Climate Change and Cities, UN-Habitat's World Cities Report and its Case Studies, and the Innovate for Cities (I4C) Conference.

Climate Change Communication for Urban Leaders: Building the knowledge and capacity of local and national governments and policy makers to better understand, communicate about and advocate for key global and local climate change and climate justice issues.

Development and Climate Change: Aligning SDG achievement with the achievements of the goals of the Paris Agreement at the local level through integrated planning and implementation.

Urban Planning and Design: Supporting national government agencies, local governments, and other stakeholders in pursuing resilient and sustainable development through urban planning and design.

Overshoot: The 2018 IPCC Special Report outlines two pathways to limit the average mean temperature rise to 1.5°C by 2100. The first pathway aims to stabilize warming at or below 1.5°C above pre-industrial levels. The second, an "overshoot" pathway, anticipates global warming to exceed 1.5°C mid-century before coming back to below 1.5°C by 2100. The risk of surpassing 1.5°C is high and rising, posing increasing threats to human health, food security, water availability, social stability, and ecosystems. Both pathways require an integrated approach that promotes mitigation and adaptation efforts across sectors such as energy, transportation, forestry, and land use.

Pipeline & Ambition Projects

Enhancing the Urban Content of the NDCs

Providing support in the form of **policy analysis, policy advisory support, facilitating co-creation processes of urban content with urban stakeholders, and capacity development of climate change negotiators**. Leading up to COP30 and beyond, government partners and key urban stakeholders will be assisted in advancing NDC ambitions and implementation plans especially the critical actions from cities and the urban sector.

Providing CHAMP pledge assistance to supporting governments in partnership with global stakeholders.

Implementing the urban and local content of the NDCs, in partnership with UNDP's Climate Promise. This includes providing planning and implementation support to subnational governments across the region.

SURGe

As the SURGe Initiative takes shape, a **Regional SURGe (Sustainable Urban Resilience for the Next Generation) Secretariat/Support Facility as well as country-level SURGe projects will be further developed to advance multilevel climate action** with concrete impacts at the local level through integrated climate action.

Leveraging the SURGe initiative and promoting **Climate Resilient Urban Development** through regional programmes in South-Asia and South-East Asia.

Urban Health

Enhancing Urban Health through regional climate initiatives such as disaster preparedness, nature-based solutions, and green buildings. This approach not only addresses the growing international focus on health, especially post-pandemic, but also **integrates the SURGe and CHAMP initiatives for greater synergy.** By acknowledging and addressing health inequalities exacerbated by climate change, the programme aims to ensure that no one is left behind.

In Mongolia, for instance, the programme would address air pollution and promote the integration of climate resilience considerations in the renewal of building norms to improve the health of urban poor and vulnerable communities.

SDG Localization for Climate Resilient Urban Development in the Pacific

The programme delivers a **comprehensive approach to accelerate development planning, financing and multi-level governance for the localization of the SDGs**. By engaging stakeholders and building capacities at multiple levels, it seeks to transform Pacific Island cities and towns for improved livability, inclusivity, and sustainability for all.

Integrity Matters for Cities - Regional Training Programme

Enhancing Transparency and Accountability through the integration of urban data and information in mitigation, adaptation, loss and damage, and urban climate governance.

Integrated Approach to Climate Change and Crisis

This regional programme operates at the **intersection of urban crisis, displacement and climate change with the aim of consolidating peace, stability and social cohesion through climate actions.** Country-level implementions include Myanmar, Lao PDR, and Afghanistan.

Under this cross-cutting action area, UN-Habitat ROAP's current, pipeline and ambitions climate change project portfolio is estimated at USD 65 million as of June 2024.

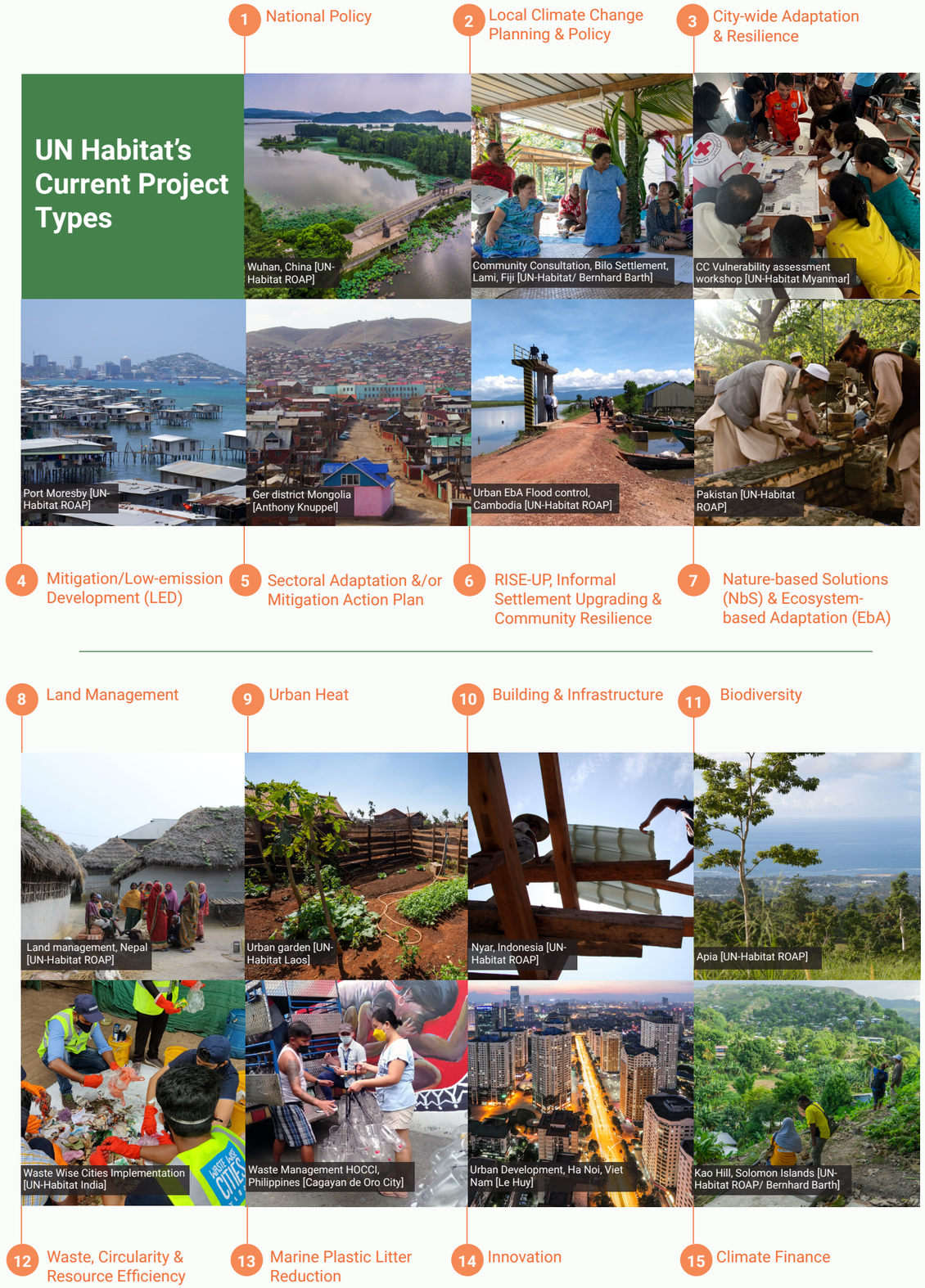


Figure 11. Types of UN-Habitat's current climate change projects in the Asia-Pacific Region

06

Monitoring, Evaluation and Learning (MEL)

Monitoring, evaluation, and learning (MEL) are key to the success of this regional strategy. The MEL framework for the strategy is directly aligned and draws on the institutional processes and methodologies applied at the level of UN-Habitat Strategic Plan to ensure consistency and collective delivery of results across the agency.

The underlying workplan for regional and country project and activities, is designed in light of the Strategic Plan indicator framework, thus all projects, even at the ambition level, are not only aligned with the strategic plan but also its monitoring and reporting framework. Monitoring will facilitate the tracking of progress in delivering results across the region. It will likewise facilitate reviewing the effectiveness and efficiency of the means of implementation defined in Section 5A (2030 Ambitions) of this strategy in view of the action areas identified whilst also documenting the practice of the guiding principles outlined in this strategy.

Tracking and reviewing will help UN-Habitat and its partners to apply adaptive measures and decisions towards steadily moving forward with actions that advance climate resilient urban development in the Asia-Pacific region. The regular inputs from the UN-Habitat country offices and regional CCUE team and headquarters sector experts, as well as those from other partners provide the basis for tracking progress. A progress report will be regularly shared within and outside the organization using various means and tools, through print and electronic media, as well as through forums and conferences most importantly the Ministerial Meeting on Urbanization and Climate Change at the UNFCCC Conference of Party (COP).

Tracking progress and analyzing results is fundamental to support the learnings required by stakeholders to effectively develop locally appropriate solutions to the dynamic and evolving issues from the nexus of climate-urbanization-environment. To support learning, knowledge management practices will be used as tools to support collaboration from multi-level actors and to sustain motivation for better decision-making at the community, city, national and regional scales. Learnings will be facilitated via improved urban planning and implementation tools, policy briefs, research and studies on innovative practices, among others.

Moreover, the MEL approach for this strategy will create synergies with already existing activities and MEL systems at the city and local level (including the reporting under the unified reporting platform) as well as national and regional levels to avoid redundant processes. This will help create focus on maximizing on-going activities and complementing already established systems, especially those tracking the NAPs and NDC with urban specific dimensions. As such, the regional strategy has outlined in the succeeding parts of this section the previous and existing initiatives of UN-Habitat at the country, regional, and global levels. Lessons learned and emerging innovations are useful entry points to sustain and support partnerships and multi-level actions that can jumpstart implementation of this regional strategy for Asia and the Pacific.

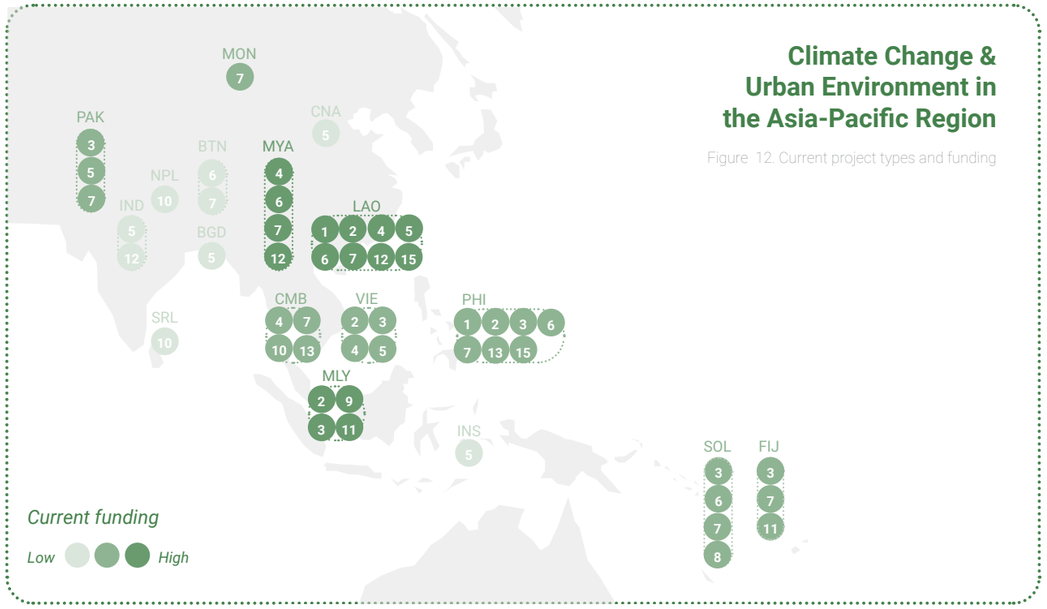
MEL | **UN Habitat's Current Engagement**

UN-Habitat in the region **leverages global programmes** such as the Sustainable Urban Resilience for the Next Generation (**SURGe**) and the Resilient Settlements for the Urban Poor (**RISE-UP**) initiatives, supports the implemetation of the **CHAMP pledge**, applies tested tools, emerging knowledge and cutting-edge science and innovation from within the organization, as well as from its academic and research collaborators to **accelerate urban climate change adaptation, mitigation and environmental protection.**

Core to the strategy implementation is the **promotion and support of partnerships** to facilitate pooling of resources, cross-learning, and implementing actions at community, city and national levels.

Our regional and country delivery mechanisms will support governments in **accessing finance for urban action** in order to implement climate, environment and development commitments. This strategy will hence advance UN-Habitat's work with **cities and communities** who are on the frontline of the climate, biodiversity and pollution crises.

1 National Policy
2 Local Climate Change Planning
3 City-wide Adaptation & Resilience Implementation
4 Mitigation / Low-emission Development (LED)
5 Sectoral Adaptation &/ or Mitigation Action Plan
6 RISE-UP, Informal Settlement Upgrading & Community Resilience
7 Nature-based Solutions (NbS) & Ecosystem- based Adaptation
8 Land Management
9 Urban Heat
10 Building & Infrastructure
11 Biodiversity
12 Waste, Circularity & Resource Efficiency
13 Marine Plastic Litter Reduction
14 Innovation
15 Climate Finance



Climate Change & Urban Environment in the Asia-Pacific Region

Figure 12. Current project types and funding

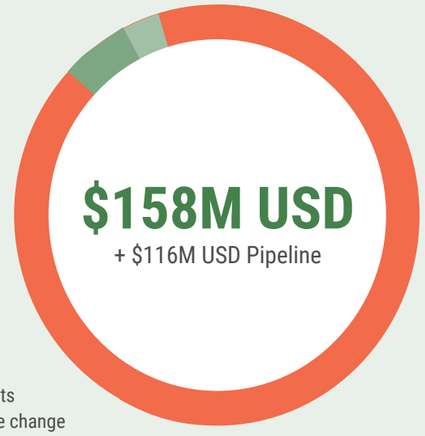
MEL | **UN Habitat's Current Engagement: Case Studies**

GLANCE

Current portfolio 2024-2025

As of June 2024, the current portfolio of $158M USD consists of 28 country projects, 1 regional project, and 2 global projects across 14 countries in the Asia-Pacific region. Our top 3 funding partners are the Adaptation Fund Board, the Government of Japan, and the European Union.

Looking at thematic entry points, the current portfolio focuses on climate adaptation (DoC 3.3), more specifically on disaster vulnerability and resilience, and climate resilient basic urban services.



3.1 Reduced greenhouse gas emissions & improved air quality
3.2 Improved resource efficiency & protection of ecological assets
3.3 Effective adaption of communities & infrastructure to climate change

3.1 & 3.2 CASE STUDY UN-HABITAT MYANMAR

Myanmar Climate Change Alliance (MMCA)

The objective of the project is to support Myanmar in becoming a climate resilient and low-carbon society that is sustainable, prosperous, and inclusive.

Under the output 1, resilience at local level is supported considering specific needs and demands of women and youth, the project is supporting the communities in the targeted townships to be more resilient to the climate risk, and local NGOs, school children and youth to be capacitated to promote climate resilience.

Under output 2, Improve climate sector dialogue through knowledge generation, awareness raising, and communication, the project has been supported to develop and implement a climate change communication strategy and to establish a digital knowledge hub to guide and support awareness raising about climate change among diverse target groups including the private sector. It is intended to deepen the understanding of climate change's impacts on the nature and human beings.


Children drawing competition [UN-Habitat Myanmar]

MCCA Youth talk [UN-Habitat Myanmar]

3.1 CASE STUDY UN-HABITAT INDIA

GHG Emissions Estimation Guide for Strategic Planning Interventions

The GHG Estimation methodology estimates carbon emissions for strategic urban projects, aiding city governments in adopting a low-carbon path. It considers investments like open space design, affordable housing, improved mobility, and mixed-use development areas. India-specific emission data was used to calculate carbon emissions and potential savings. Projects were evaluated and ranked based on cost and emission-effectiveness. The methodology focused on direct emissions (Scope 1*) within the city's boundary and did not include indirect emissions (Scope 2 and 3*) from the GHG inventory. By comparing two scenarios – "business as usual" and "low emission" – net carbon emission savings were determined for each strategic project.

*Scope 1 emissions are emissions from sources that an organization owns or controls directly. Scope 2 emissions are emissions that a company causes indirectly and come from where the energy it purchases and uses is produced. Scope 3 emissions encompass emissions that are not produced by the company itself and are not the result of activities from assets owned or controlled by them, but by those that it's indirectly responsible for up and down its value chain.

Grand Trunk Road, Guntur [UN-Habitat India]

3.1 CASE STUDY UN-HABITAT CHINA

UN-Habitat China Future Cities Council (CFCC)

UN-Habitat China Future Cities Council (CFCC) is developing its 3rd flagship report Future Cities Advisory Outlook 2023: Digital Innovations Empower Urban Net-Zero Carbon Transition. The report will focus on how Chinese cities use digital innovations to promote urban net-zero carbon transition and provide a roadmap for cities world wide to reach such goals. It will also summarize practical cases covering building, energy, mobility, solid waste, etc. and experience of carbon reduction with digital tools and provide important references for cities heading towards green and low-carbon future and contribute to climate change and SDGs. The report was launched in the end of 2023.

CFCC Cover [UN-Habitat China]

3.2 CASE STUDY UN-HABITAT VIET NAM

Eco-human settlements for vulnerable coastal communities

UN-Habitat Vietnam is currently supporting transformative change through the development of eco-human settlements through a combination of soft and hard interventions, with a focus on the most vulnerable communities of the coastal Mekong River Delta. The overarching goal is to reduce climate exposure and risks and enhance the adaptive capacity of coastal communities sustainably. Built institutional and community capacity will be translated into action plans, strategies, and policies to strengthen vertical and horizontal coordination and effectively respond to climate risks. Community resilience is further reinforced through piloted small-scale hard interventions for sustainable water resource management and eco-friendly coastal protection.

3.2 CASE STUDY UN-HABITAT PHILIPPINES

Localization of the National Action Plan on Marine Litter through the Healthy Oceans & Clean Cities Initiative (HOCCI)

Since 2020, UN-Habitat Philippines has been strengthening national and local government capacities to reduce marine plastic litter through the localization of the National Action Plan on Marine Litter.

Through the Healthy Oceans and Clean Cities Initiative (HOCCI) funded by the Government of Japan, six cities developed the first City Plan of Action on Marine Litter in the country. They have also enhanced waste data collection systems using the Waste Wise Cities Tool, piloted solid waste management projects, and provided alternative livelihoods to vulnerable groups including women and informal waste workers through plastic 3R social enterprises.

Waste Management HOCCI, Philippines [Cagayan de Oro City]

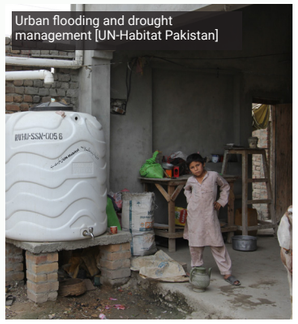
3.3 CASE STUDY UN-HABITAT PAKISTAN

Cooperation with Pakistan Engineering Council: Implementation of National Green & National Rainwater Harvesting Codes

The UN-Habitat Pakistan has initiated their work on the Green Buildings with the development of Policy Guidelines on Green Building Code shifting focus on low carbon emission roadmap through development of Green Building Codes.

UN-Habitat is providing technical expertise to the Pakistan Engineering Council to review the framework and prepare Green Building Code 2023 for Pakistan. This strategic collaboration model has proven its excellence in developing the Building Code of Pakistan 2021, Green Building Code of Pakistan 2023, and Rainwater Harvesting Provisions for Building Code of Pakistan 2023 within a record period of 3 years. On this basis, ICC has nominated the Pakistan Engineering Council for ICC Global Award 2023, which is to be awarded in the COP28.

The Green Building Code 2023 of Pakistan promotes passive solar design, energy efficient buildings, green roofs, installation of renewable energy, introduction of water saving technologies, and the use of sustainable material construction.



Urban flooding and drought management [UN-Habitat Pakistan]

3.3 CASE STUDY UN-HABITAT LAOS

Field visit to vulnerable areas in Pakse City considering possible EbA solutions [UN-Habitat Laos]

Building resilience of urban populations with ecosystem-based adaptation (EbA) solutions

Under the "Building resilience of urban populations with ecosystem-based solutions in Lao PDR" project, UN-Habitat supports strengthening of institutional capacity for integrated flood risk management and implementation of urban EbA in four cities of Lao PDR: Vientiane Capital, Paksun, Kaysone and Pakse. In these cities, UH-Habitat has developed and provided training to both technical and decision-making levels from all relevant sectors under these key topics: EbA, Planning for Climate Change, Spatial Planning, Urban Planning, and Legal Frame Work.

MEL | **UN Habitat's Current Engagement: RISE-UP Case Studies**

3.3 CASE STUDY UN-HABITAT MONGOLIA


Ger District, Ulaanbaatar City, Mongolia [Anthony Knuppel]

Ger Community Resilience Project

The project aims to increase the resilience of communities to flooding by constructing physical flood infrastructure, improving sanitation services, and increasing community awareness. The project focuses on engaging representatives of vulnerable community groups to identify and address their climate resilience needs.

3.3 CASE STUDY UN-HABITAT CAMBODIA

Climate Change Adaptation through Protective Small-scale Infrastructure Interventions in Coastal Settlements of Cambodia

The main objective of the project is to enhance climate change adaptation and resilience of the most vulnerable coastal human settlements of Cambodia through concrete climate change adaptation actions, particularly in areas where ecotourism has the potential to sustain such interventions. To achieve this objective, the project focuses its actions on highly vulnerable settlements in Kep Province and Prey Nob District of Preah Sihanouk Province.


Reinforcement of reservoir embankment [UN-Habitat Cambodia]

3.3 CASE STUDIES UN-HABITAT ROAP IN SOLOMON ISLANDS

Enhancing Urban Resilience to Climate Change Impacts and Natural Disasters

In Honiara, Solomon Islands, community level achievements include raised awareness of climate change and enhanced capacity to implement adaptation and climate risk reduction measures, and increased adaptive capacity through community-level actions, such as mangrove restoration, rainwater harvesting, and early warning systems.

At the city level, achievements include reduced risks associated with climate-induced socioeconomic and environmental losses through city-wide governance and capacity strengthening, and raised awareness of climate change adaptation and resilience, safeguard project transparency.


Honiara, Solomon Islands [UN-Habitat ROAP]

3.3 CASE STUDY UN-HABITAT IN FIJI

Increasing the Resilience of Informal Urban Settlements

The project focuses on building resilience in informal settlements across four urban areas and towns in Fiji: Lautoka, Sigatoka, Nadi and Lami, which are located in the Greater Suva Urban Area.

3.3 CASE STUDY UN-HABITAT SRI LANKA


Agro-ecological regions in Mullaitivu District [UN-Habitat Sri Lanka]

Build resilience to climate change addressing drought, landslides and sea water intrusion for vulnerable upland and coastal settlements

The overall objective of the proposed project is to support climate resilient development and increase capacity for climate change adaptation of target communities living in the Mullaitivu District. The project will provide both increased cash income of communities through improvement of livelihood and improved resilience through small-scale infrastructure and will contribute to the generation of evidence-based practices. The project aims to benefit more than 12,000 individuals directly and 16,000 indirectly.


Bangladesh, Dhaka, 2017 [UN-Habitat/Hasyim Hasyim]

07
Appendix

Global Programmes

SURGE

Sustainable Urban Resilience for the Next Generation (SURGe)

SURGe, a COP27 Presidency Initiative, aims to connect local, national, and global levels to achieve climate goals. Through effective multilevel governance, it strives to transform cities into healthy, sustainable, inclusive, low-emission, and resilient urban systems. The initiative equips cities to accelerate local climate action, leveraging cities and sustainable urbanization as allies in delivering Paris Agreement and SDG targets. Developed under COP27 Presidency leadership in collaboration with UN-Habitat and facilitated by ICLEI, SURGe was launched at the Ministerial Meeting on Urbanization and Climate Change during COP27 and has received endorsements from 180+ global partners. Un-Habitat's role in its operationalization has been confirmed at the second UN-Habitat Assembly.

CHAMP

Coalition for High Ambition Multi-Level Partnerships (CHAMP)

In response to the urgent need for increased coordination to catalyze greater ambition and action, the COP28 Presidency has launched the Coalition for High Ambition Multilevel Partnerships for Climate Action (CHAMP) bringing over 62 countries to endorse multilevel governance. CHAMP is an effort intended to drive greater engagement between national and subnational governments—including cities, towns, states and regions—in the planning, financing and implementation of climate strategies, while also looking forward to the development and implementation of the next round of countries' NDCs for COP30 in 2025.

CHAMP seeks to build on existing commitments and initiatives. It goes hand-in-hand with the COP27 Initiative on Sustainable Urban Resilience for the next Generation (SURGe) which acts as a complementary vehicle enabling the translation of this national commitment into localized cross-sectoral climate action and providing a space for local governments and actors to voice their needs in national and international climate agendas.

RISE-UP

Resilient Settlements for the Urban Poor (RISE UP)

The UN-Habitat flagship programme RISE-UP leverages large scale investment to build urban adaptation and climate resilience in the global hotspots of vulnerability. At the same time, it addresses issues of poverty, spatial inequality and resilient settlements. The programme will contribute to make the urban digital transformation work for the benefit of all through pro-poor climate action and resilience mainstreaming, increased investment and financing, and enhanced capacity.

INNOVATE4CITIES

Innovate4Cities

The Innovate4Cities partnership guides climate change research and innovation to answer the most pressing questions cities and local governments ask when evaluating why and how to take climate action. The Global Research and Action Agenda provides the framework for this.

The initiative defines and addresses cities' knowledge and innovation opportunities and creates partnerships between the scientific and academic community, businesses, and governments to overcome the challenges local governments face between their publicly reported ambition and full-scale implementation.


Le Huy
[UN-Habitat]

Principles

Climate, Environment & Resilience

01 Net-zero Development

adopts low-carbon practices to reduce emissions and benefit from cost savings through improved energy and resource efficiency. It focuses on transitioning towards a sustainable development model that embraces greenhouse gas emission reductions and includes removals or offsets as a last resort option towards net-zero.

02 Resilience-building

enhances the capacity of cities and their inhabitants to withstand and recover from the adverse impacts of climate change and to emerge stronger and more robust. It involves measures to improve the adaptive capacity of communities, infrastructure, and systems supporting urban sustainability.

03 Nature-positive

harnesses the power of natural systems, integrating them into urban planning, offers multiple dividends for people and planet including protecting ecological assets and biodiversity, mitigating greenhouse gas emissions, effectively adapting communities and the built environment, and improving overall quality of life.

04 Integrated & Climate Resilient

underscores the significance of integrating adaptation, mitigation, and biodiversity conservation measures into development planning. Incorporating Climate Resilient Development into initiatives and partnerships allows for harnessing the co-benefits of climate investments for sustainability outcomes.

05 Circularity

promotes a transition towards a circular economy across value chains including construction and infrastructure systems, which aims to minimize waste and emissions while promoting energy efficiency, innovation, affordability, ensuring food security, and local development.

Information Management

12 Evidence-based Decision Making through Local Data

promotes local data collection and analytical capacity as the foundation for local monitoring and reporting, for integrating local reporting into national and international frameworks (including Global Common Reporting Framework (GCoM)) and to ensure evidence-based planning and decision-making.

Figure 13. Principles

Inclusive & Socio-cultural Engagement

06 Fair, Equitable, Inclusive & Promoting a Just Transition

emphasizes the importance of mainstreaming Leave No One Behind (LNOB), especially gender inclusion in climate action. It involves engaging in social dialogue, participatory processes, and addressing the needs of the most vulnerable, including urban poor communities and marginalized groups.

07 Locally-led & Culture Positive

empowers local communities and incorporates their cultural contexts and heritage in climate action regarding it as both an asset in need of protection and a resource for transformative change. It involves participation of communities, capacity development and using local data.

08 Health Promoting

highlights the essential correlation between climate resilience and health and well-being. It emphasizes integrating health considerations into climate policies to generate economic and social co-benefits, enhance community support, and build resilience in the face of climate change.

09 Transparancy, Integrity & Accountability

supports transparency in planning, decision making, expenditure and adaptation and mitigation trajectories. Promoting accountability in fulfilling climate pledges and demonstrating the effectiveness of climate initiatives enhances trust and drives investments in climate action.

10 Finance-enabling

provides opportunities for sub-national and city-level financing and facilitates entry points to leverage local climate funding to access external climate finance. It supports evidence-based plans to bridge the financing gaps of communities, cities and countries to achieve their ambitions and initiate innovation,

11 Innovation-enabling

underscores the need to foster innovation and technological advancements to address climate challenges effectively. It encourages the development and deployment of sustainable and climate-friendly solutions, supporting research and creating an enabling environment for transformative technologies and practices.

Facilitative Governance

Apia [UN-Habitat ROAP]

Status of Carbon Neutrality Pledges in the Asia-Pacific Region

TABLE 2. CURRENT STATUS

Source: ESCAP, 2022

Not Yet Considered	Declaration/ Pledge		Policy Document		Adopted a Law	Achieved
2. BGD	1. AFG	19. MMR	5. KHM	24. SGP	7. FJI	3. BTN
10. IRN	4. BRN	21. PAK	6. CHN	25. SLB	11. JPN	
18. MNG	8. IND	22. PNG	9. IDN	26. LKA	13. KOR	
23. PHL	12. KIR	29. TUV	14. LAO	27. THA		
28. TLS	17. FSM	30. VUT	15. MYS	31. VNM		
			20. NPL			

TABLE 3. NDC, POLICIES, MEASURES, & POST-SEPTEMBER 2021 CLIMATE ACTION FRAMEWORKS

Source: IEA, 2022; ESCAP, 2022

✖ Cross-cutting policy Industry sector policy Transport sector policy
Electricity sector policy Buliding sector policy

1. Afghanistan

2. Australia

3. Bangladesh

4. Bhutan

5. Brunei Darussalam

NDC: Reduction in GHG emissions by 20% relative to business-as-usual (BAU) levels by 20306

6. Cambodia

NDC: Emissions reduction target of 41.7% (64.6 Mt CO2eq) by 2030

Enabling Frameworks

- Emissions reduction target of 41.7% (64.6 Mt CO2eq) by 2030
- 'Long-Term Strategy for Carbon Neutrality (LTS4CN)' (2021)

7. China

STEPS

- ✖ NDC: Aim to peak CO2 emissions before 2030, and lower CO2 emissions per unit of GDP by 60% from 2005 levels.
- ✖ Made in China 2025 transition from heavy industry to higher value-added manufacturing.
- ✖ 14th Five-Year Plan:
  - Reduce CO2 intensity of the economy by 18% from 2021 to 2025.
  - Reduce energy intensity of economy by 13.5% from 2021 to 2025.
  - 20% non-fossil share of energy mix by 2025.
  - 25% non-fossil share of energy mix by 2030
  - Renewables targets for 3 300 TWh of renewables by 2025 (of which 1 400 TWh should be solar and wind)d that over 50% of incremental electricity consumption is met by renewables.
- Made in China 2025 targets for industrial energy intensity.
- Reduce comprehensive energy consumption per tonne of steel by 2% by 2025.
- Emissions from steel sub-sector peak before 2030.
- Standard for maximum energy consumption per square metre in buildings.
- Green and High-Efficiency Cooling Action Plan.
- Minimum performance standards and energy efficiency labelling for room air conditioners.
- Meets and exceeds targets from the China Society of Automotive Engineers for new energy vehicles to reach 20% of new vehicle sales in 2025.
- Corporate average fuel consumption target of 4.0 litres/100 km for 2025 and 3.2 litres/100 km for 2030.
- New Energy Automobile Industry Development Plan (2021-2035).
- Extension of purchase tax exemption and subsidies for new energy vehicles.
- National railway investments

APS

- ✖ Carbon neutrality target by 2060
- Overall coal use to decline in the 15th Five-Year Plan period (2025-2030).
- Expansion of the emissions trading system coverage to industry
- China Society of Automotive Engineers target new energy vehicle car sales reach more than half by 2035 including 1 million FCEVs.

Enabling Frameworks

- 'Action Plan for Carbon Dioxide Peaking Before 2030' (2021)
- 'Medium and long term plan for the development of the hydrogen energy industry (2021-2035)' (2022)
- The 14th 'Five-Year Plan on Modern Energy System Planning'
- 'National Strategy for Climate Change Adaptation' (2022)
- 'Wetlands Conservation Law of the People's Republic of China' (2021)
- 'Notice on Financial Support for Carbon Neutralization' (2022)
- National Green Development Fund

8. Cook Islands

9. Fiji

Enabling Frameworks

- 'Climate Change Bill 2021' (2021)

10. India

STEPS

- ✖ Energy-related elements of the Self-Reliant India Scheme (Atmanirbhar Bharat).
- ✖ 450 GW renewables capacity by 2030 and 50% of total installed capacity to be non-fossil fuel-based energy sources by 2030.
- ✖ Enhanced enforcement of energy efficiency policy under the 2022 amendments to the Energy Conservation Act.
- ✖ National Hydrogen Mission.
- Perform, Achieve, Trade (PAT) Scheme to trade energy saving credits.
- Make in India programme. Boost to industry sector by building 11 industrial world-class corridors.
- Union Budget 2021-2022, i.e. the national budget, includes USD 26 billion to enhance the manufacturing capabilities of 14 key sub-sectors.
- Energy Conservation and Sustainable Building Code as part of the Energy Conservation (Amendment) Bill, comprising norms or energy efficiency and conservation, minimum use of renewable energy and other green buildings requirements.
- Cooling Action Plan. Standards and labelling for light commercial air conditioners, freezers and light bulbs.
- Energy efficiency labelling for residential buildings for renters and homeowners.
- Urban and public transit investments.
- Partial implementation of 20% bioethanol blending target for gasoline and 5% biodiesel in 2030.

APS

- ✖ Updated NDC:
  - to reduce national carbon intensity by 45% by 2030 from 2005 levels, increase in non-fossil energy capacity to 500 GW by 2030, and reduce carbon emissions by 1 Gt CO2 by 2030.
- ✖ Net zero emissions by 2070.
- 50% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030.
- Extension of FAME Phase II programme to support the target of 500 000 electric three-wheelers and 1 million electric two-wheelers.
- National railways target of net zero emissions by 2030.

Enabling Frameworks

- Net zero GHG emissions target by 2070, and enhanced policy targets for 2030
- 'Green Hydrogen/Green Ammonia Policy'

11. Indonesia

NDC: Emissions reduction target of 31.89% (29% in first NDC) unconditionally and 43.2% (41% in first NDC) conditionally by 2030

STEPS

- ✖ 23% share of renewable energy in primary energy supply by 2025 and 31% by 2050.
- Introduction of the B30 programme to increase biodiesel blends to 30% with 40% mandate in 2023.

APS

- ✖ Net zero emissions by 2060 or before
- ✖ Commitment to the Global Methane Pledge
- Renewable energy accounts for half (21 GW) of total power capacity addition under the National Electricity Supply Business Plan (RUPTL) 2019-2028.
- Government plans to phase out conventional two-wheelers from 2025 and to have 2 million electric vehicles in passenger light-duty vehicle stock by 2030.

12. Iran

13. Japan

STEPS

- ✖ Implementation of concrete policies (renewable energy, batteries, energy efficiency and nuclear power) announced in the 6th Strategic Energy Plan under the Basic Act on Energy Policy, aiming to realize the Plan's 2030 energy outlook.
- ✖ Public spending on clean energy innovation - 2021 national budget.
- Achieve electricity generation outlook by 2030 in the 6th Strategic Energy Plan.
- Restart nuclear power plants aligned with the 6th Strategic Energy Plan and the Green Transformation (GX) policy initiative.
- Green Innovation Fund provides funding for R&D for innovative technology
- Revised retail labelling system
- National budget 2022 for subsidies supporting electric and FCEVs.
- Fuel economy standard of LDVs to improve fuel efficiency by 32% to 2030 relative to 2016 levels.

APS

- ✖ Full implementation of the 6th Strategic Energy Plan under the Basic Act on Energy Policy, including carbon neutrality target for 2050 and other policy targets beyond 2030.
- ✖ Accelerated nuclear policies, including SMRs under discussion in the Green Transformation (GX) Implementation Council.
- ✖ Commitment to the Global Methane Pledge.
- Green Growth Strategy: 30-45 GW of offshore wind capacity in 2040.
- 6th Strategic Energy Plan, with additional policies to support renewables in power generation to reach 2030 targets.
- G7 commitment: Achieve predominantly decarbonised electricity sectors by 2035
- Technology Roadmap for Transition Finance in the cement, pulp and paper sub-sectors
- New residential and services buildings meet the net zero energy home or net zero energy building standard on average by 2030.
- Green Growth Strategy and the 6th Strategic Energy Plan aiming for sales of 100% zero emissions vehicles (including hybrids) for passenger vehicles by 2035 and for light commercial vehicles by 2040.

Enabling Frameworks

- 'Long-Term Strategy' and the 'Green Growth Strategy'(2021)
- Green Innovation Fund (JP¥ 2 trillion)

14. Kiribati

15. Korea, RO

STEPS

- ✖ New Energy Policy.
- ✖ Korean New Deal Clean Energy Spending.
- ✖ 14th Long-term Natural Gas Supply and Demand Plan (2021-2034).
- ✖ Methane Reduction Plan 2018-2030.

Notes: STEPS = Stated Policies Scenario; APS = Announced Pledges Scenario. NDC = Nationally Determined Contributions (Paris Agreement); CCUS = carbon capture, utilisation and storage; GHG = greenhouse gases; GW = gigawatt; Gt = gigatonnes.

The Intended Nationally Determined Contributions (INDCs) were first prepared for COP21. They and their revisions and updates (as Nationally Determined Contributions, NDCs) are intended to communicate national climate change commitments internationally and guide climate action nationally.

- Increase renewables in electricity generation to over 20% and nuclear power to over 30%, and decrease coal-fired power by 2030 under the New Energy Policy Direction.
- Rebate for purchase of appliances entitled to energy efficiency grade 1.
- Korean New Deal: Increased funding to improve the efficiency of schools, public housing, recreational and healthcare facilities.
- Subsidy scheme to support electric vehicles.
- Investment in urban and mass transit.
- Partial implementation of target for zero emissions vehicles: one-third of new passenger car sales in 2030 are electric vehicle or FCEVs.

APS

- Carbon Neutrality and Green Growth Act for Climate Change committing to CO2 neutrality by 2050.
- Commitment to reduce methane emissions from all sectors by 30% below 2018 levels by 2030, with a 28.6% sectoral reduction target for energy
- All new bulidings meet zero carbon-ready building standards by 2030
- Target to increase the number of FCEVs to 200 000 by 2025 (Green New Deal).
- Full implementation of target for zero emissions vehicles: by 2030, 50% of passenger car sales to be hybrid or plug-in hybrid vehicles and 33% to be battery electric and FCEVs.

Enabling Frameworks

- 'Carbon Neutrality and Green Growth Act for Climate Change'
- '2050 carbon neutral scenario roadmaps'

16. Lao PDR

NDC: Unconditional reduction in GHG in 2030 by 60% compared to a BAU scenario

17. Malaysia

NDC: Reduction in economy-wide carbon intensity (against GDP) of 45% (unconditional) in 2030 compared to 2005 level

STEPS

- Minimum energy performance standards and labelling for washing machines, refrigerators and air conditioners

APS

- Carbon neutrality target by 2050
- Commitment to the Global Methane Pledge
- 100% of cars by 2030 to be electrified, CNG, LPG or biofuel-fuelled vehicles

18. Maldives

19. Marshall Islands

20. Micronesia FSM

21. Mongolia

22. Myanmar

NDC: Total emissions reductions contributions as a part of its NDC are 244.52 million t CO2e unconditionally, and a total of 414.75 million t CO2e conditionally by 2030

23. Nauru

24. Nepal

Enabling Frameworks

- 'Long-term Strategy for Net Zero Emissions' (2021) for net-zero before/ by 2045 and negative carbon emissions by 2050

25. New Zealand

26. Niue

27. Pakistan

APS

- Targets for 30% of passenger light-duty vehicle sales to be electric by 2030 and 90% of truck sales to be electric vehicles by 2040. 90% of urban bus sales to be electric vehicles by 2040. 50% of electric two/three-wheeler sales by 2030.

28. Palau

29. Papua New Guinea

30. Philippines

NDC: GHG emissions reduction and avoidance of 75%, of which 2.71% is unconditional and 72.29% is conditional, for 2020 to 2030

APS

- Commitment to the Global Methane Pledge

31. Samoa

32. Singapore

NDC: Emissions reduction target of around 60 Mt CO2e in 2030 after peaking its emissions earlier

STEPS

- Green Plan 2030
- Enhancements to minimum energy performance standards for light bulbs.

APS

- Targets to phase out passenger internal combustion engine vehicles by 2040

33. Solomon Islands

34. Sri Lanka

35. Thailand

NDC: Reduction in GHG by 30% from the projected BAU level by 2030. The level of contribution could increase up to 40%, subject to adequate and enhanced access to technology development and transfer, financial resources and capacity building support

APS

- Net zero GHG emissions target by 2065
- Target for 100% zero emissions vehicle sales from 2035.
- Enabling Frameworks
- 'Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy' (2021)

36. Timor-Leste

37. Tokelau

38. Tonga

39. Tuvalu

40. Vanuatu

41. Viet Nam

NDC: GHG emissions reduction target of 15.8% (from 9%) unconditionally and 43.5% (from 27%) conditionally, compared to BAU by 2030

STEPS

- Minimum performance standards and labelling for appliances and lighting in residential and commercial buildings

APS

- Carbon neutrality target by 2050
- Commitment to the Global Methane Pledge
- Power Development Plan 8 proposed 19-20 GW of solar, 18-19 GW of wind, 22 GW of natural gas and 37 GW of coal-fired capacity by 2030.

Urban Content of the NDCs in the Asia-Pacific Region

TABLE 4. URBAN CONTENT, ADAPTATION AND MITIGATION, ADAPTATION ONLY, MITIGATION ONLY

Source: UN-Habitat, 2022

: CHAMP Endosers

1. Afghanistan

- Strong urban content (Cluster A) - Adaptation only

2. Australia

- Moderate urban content (Cluster B) - Adaptation

3. Bangladesh

- Moderate urban content (Cluster B) - Adaptation and Mitigation

4. Bhutan

- Strong urban content (Cluster A) - Adaptation and Mitigation

5. Brunei Darussalam

- Low or no urban content (Cluster C)

6. Cambodia

- Strong urban content (Cluster A) - Adaptation and Mitigation

7. China

- Strong urban content (Cluster A) - Adaptation and Mitigation

8. Cook Islands

- Low or no urban content (Cluster C)

9. Fiji

- Low or no urban content (Cluster C)

10. India

- Strong urban content (Cluster A) - Adaptation and Mitigation

11. Indonesia

- Moderate urban content (Cluster B) - Adaptation and Mitigation

12. Iran

13. Japan

- Moderate urban content (Cluster B) - Mitigation only

14. Kiribati

- Moderate urban content (Cluster B) - Adaptation and Mitigation

15. Korea, RO

- Moderate urban content (Cluster B) - Adaptation and Mitigation

16. Lao PDR

- Strong urban content (Cluster A) - Adaptation only

17. Malaysia

- Strong urban content (Cluster A) - Adaptation

18. Maldives

- Moderate urban content (Cluster B) - Mitigation only

19. Marshall Islands

- Low or no urban content (Cluster C)

20. Micronesia FSM

- Low or no urban content (Cluster C)

21. Mongolia

- Moderate urban content (Cluster B) - Mitigation only

22. Myanmar

- Strong urban content (Cluster A) - Adaptation and Mitigation

23. Nauru

- Moderate urban content (Cluster B) - Adaptation and Mitigation

24. Nepal

- Strong urban content (Cluster A) - Adaptation and Mitigation

25. New Zealand

- Low or no urban content (Cluster C)

26. Niue

- Low or no urban content (Cluster C)

27. Pakistan

- Moderate urban content (Cluster B) - Adaptation and Mitigation

28. Palau

- Low or no urban content (Cluster C)

29. Papua New Guinea

- Strong urban content (Cluster A) - Adaptation and Mitigation

30. Philippines

- Low or no urban content (Cluster C)

31. Samoa

- Low or no urban content (Cluster C)

32. Singapore

- Moderate urban content (Cluster B) - Adaptation and Mitigation

33. Solomon Islands

- Moderate urban content (Cluster B) - Adaptation only

34. Sri Lanka

- Strong urban content (Cluster A) - Adaptation and Mitigation

35. Thailand

- Moderate urban content (Cluster B) - Adaptation only

36. Timor-Leste

- Low or no urban content (Cluster C)

37. Tokelau

38. Tonga

- Low or no urban content (Cluster C)

39. Tuvalu

- Low or no urban content (Cluster C)

40. Vanuatu

- Moderate urban content (Cluster B) - Adaptation only

41. Viet Nam

- Strong urban content (Cluster A) - Adaptation and Mitigation

Coalition for High Ambition Multi-Level Partnerships (CHAMP) and Urban Content of NDCs

Launched at COP28, to spur greater collaboration between national and subnational governments in climate action planning, CHAMP represents an important opportunity to strengthen the nexus between climate change and urbanization and enhance the urban content in the NDCs. This was endorsed by over 70 countries representing 33% of the global population, 58% of global GDP, and 35% of global emissions. Notably, CHAMP complements the SURGe initiative launched at COP27, providing an additional platform to translate national commitments into localized, cross-sectoral climate action. CHAMP aims to foster connections between ongoing efforts to support NDC development and promote action at the local level, including initiatives such as Sustainable Urban Resilience for the Next Generation (SURGe), the City Climate Gap Fund, the C40 Cities Finance Facility and the Cities Climate Finance Leadership Alliance, among others.

Notes: **Cluster A** (Strong urban content): NDCs with specific urban sections and/or NDCs in which urban is identified as a priority sector, excluding NDCs that are not backing the prioritization with a clear identification of specific urban challenges and/or responses; **Cluster B** (Moderate urban content): NDCs with generic urban mentions within the body of text; **Cluster C** (Low or no urban content): NDCs with low or no explicit urban mention within the text.

Global initiatives, Knowledge Products and Climate Change Tools

Overview

ROAP Climate Change Landing Page

Master Tool on Climate Change RISE-UP 3: Flagship Resilient Settlements for the Urban Poor

Case Studies

Accelerating Integrated Urban Climate Action: Achievements and Impacts of the Urban-LEDS Phase II Project 2017 – 2021

Path to Climate Resiliency in the Philippines

Integrated Planning

Integrating Climate Change into City Development Strategies (CDS)

Guiding Principles for City Climate Action Planning

Planning for Climate Change: A strategic, Values-based Approach for Urban Planners Volume 1 (Guide) & 2 (Toolkit)

Our City Plans Publication and digital platform for climate resilient planning processes

Intermediary Cities and Climate Change: An Opportunity for Sustainable Development

RISE-UP: Resilient Settlements for the Urban Poor

Climate Change Vulnerability and Risk: A Guide for Community Assessments, Action Planning and Implementation

Pro-Poor Climate Action in Informal Settlements

Nature-based Solutions to Build Climate Resilience in Informal Areas

Building the Climate Resilience of Urban Settlements through EbA

Biodiversity

White Paper - Cities and Nature: Planning for the Future

National Policy

Multilevel Governance for effective urban related climate action in the Global South

Urban Climate Action, The Urban Content of the NDCs: Global Review 2022

Urban Content of NDCs: Local Climate Action explored through In-depth Country Analyses (2024 Report)

Enhancing Nationally Determined Contributions through Urban Climate Action (Guide)

The Critical Role of Nature-based Solutions for Enhancing Climate Resilience in Informal Areas: An Urban Supplement to the UNFCCC Technical Guidelines on National Adaptation PlansSettlements for the Urban Poor

Addressing Urban and Human Settlement Issues in National Adaptation Plans

Addressing Climate Change in National Urban Policy: A Policy Guide for Low-Carbon and Climate-Resilient Urban Development

Mobility

Integration is key: The role of electric mobility for low carbon and sustainable cities

Land

Land Tenure and Climate Vulnerability (GLTN, UN-Habitat, RMIT University in Melbourne Australia)

Social Inclusion

Gender and Urban Climate Policy

Resilience Planning

CityRAP Tool: City Resilience Action Planning Tool

Provincial Climate Risk Diagnostics Tool (PCRD)

Innovation

Findings from Innovate4Cities 2021 and Update to the Global Research and Action Agenda

Urban Design

Urban Planning and Design for Climate Resilience

A better quality of life for all in an urbanizing world

UN-HABITAT

UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME
Regional Office for Asia and the Pacific - Fukuoka
1-1-1 Tenjin, Chuo-ku, Fukuoka 810-0001, JAPAN
Tel: +81-92-724-7121
habitat.fukuoka@un.org