

Arab Group Submission on the Global Dialogues of the MWP
March 2024

Saudi Arabia, on behalf of the Arab group, welcomes the opportunity to provide views on opportunities, best practices, actionable solutions, challenges, and barriers relevant to the topic of “Cities: Buildings and Urban Systems”.

Principles

The MWP and all its dialogues shall continue to be conducted in a manner consistent with the principles set out in Decision 4/CMA.4, which decides that the outcomes of the work programme will be “non-prescriptive, non-punitive, facilitative, respectful of national sovereignty and national circumstances, take into account the nationally determined nature of nationally determined contributions and will not impose new targets or goals”. Taking fully into account the principles of equity and common but differentiated responsibilities of the Convention and its Paris Agreement to address climate change.

It is important to clarify that the MWP is operationalized through focused exchanges of views, information, and ideas within a specific scope (Decision 4/CMA.4 paragraph 4). It is not the space to implement or follow up on the mitigation component of the GST, as this would create a prescriptive process which contradicts the non-prescriptive nature of this work program as well as the bottom-up, nationally determined nature of NDCs.

As we leverage the learnings from the successful global dialogues of 2023, we aim for this year’s discussions to be more comprehensive, balanced, and inclusive, highlighting the socioeconomic contexts of urbanization in developing countries, the challenges they face, and the opportunities for sustainable urban development.

Socioeconomic context of developing countries

The built environment plays a crucial role in shaping human life. About 57% of the global population—equivalent to 4.4 billion people—resides in urban areas, projected to rise to 70% by 2050 (World Bank, 2024). As populations surge, cities struggle to accommodate the influx, leading to strained infrastructure and services. Informal settlements increase, characterized by inadequate housing and a lack of essential amenities such as clean water, sanitation facilities, and reliable energy sources.

Social disparities exacerbate existing problems, as marginalized communities bear the brunt of inadequate infrastructure and energy access, exacerbating poverty and health disparities. Addressing these multifaceted challenges demands comprehensive and integrated strategies that are context specific and respond to the unique needs of each city. Investments in resilient infrastructure, affordable housing, inclusive planning processes, and efforts to enhance energy access and affordability are essential to fostering equitable and sustainable urban environments in developing countries.

A number of cities in developing countries lack institutional, financial and technical capacities to address the aforementioned challenges, influencing their ability to innovate and implement ambitious mitigation action. Additionally, the growth trajectory of urban populations in these regions necessitates significant investment in housing, roads, and urban infrastructure to accommodate expanding populations. This trend underscores the pressing need for a co-benefits approach in which urban areas can couple mitigation, adaptation, and sustainable development while closing infrastructure gaps and enhance institutional, financial, and technical capacities.

The co-benefits approach: integrated actions toward mitigation, adaptation, and sustainable development

The co-benefits approach in cities and buildings offers a powerful framework for achieving sustainable development objectives while addressing climate change. Our focus should be on linkages with SDGs and perspectives for economic development, competitiveness, and equity. The co-benefits approach promotes integrating climate objectives with broader development benefits, enabling urban areas to simultaneously address climate change, adaptation, and infrastructure gaps. For instance, investment in sustainable infrastructures serve dual purposes for mitigation and adaptation, providing an effective strategy for integrating these efforts at the urban level. These infrastructures not only contribute to GHG emission reductions but also enhance urban resilience, biodiversity, and residents' well-being, thereby supporting SDGs related to climate action (SDG 13), sustainable cities and communities (SDG 11), and life on land and below water (SDGs 14 and 15).

Furthermore, initiatives aimed at poverty eradication and equity, such as affordable housing programs and improved access to public services, contribute to SDGs 1 (no poverty) and 10 (reduced inequalities). Similarly, efforts to enhance education and quality of life align with SDGs 3 (good health and well-being) and 4 (quality education). Moreover, promoting energy access stimulates economic growth and job creation, supporting SDGs 7 (affordable and clean energy) and 8 (decent work and economic growth). Additionally, community-driven initiatives that prioritize social inclusion and empowerment contribute to SDGs 5 (gender equality) and 16 (peace, justice, and strong institutions).

Barriers and challenges

1. *Financial resource limitations* pose a significant hurdle, particularly in developing countries where resources are often scarce and prioritized elsewhere.
2. *Weak institutional capacity* in many urban areas complicates efforts to plan, implement, and monitor sustainable development projects.
3. *Conflicting political and economic priorities* also pose obstacles to sustainable development efforts.
4. *Limited public awareness*: Achieving meaningful progress becomes increasingly difficult without community support and participation.
5. *Infrastructure challenges*: Outdated or inadequate infrastructure inhibits efforts to promote sustainability, requiring significant investments and technical expertise to retrofit existing buildings and implement sustainable solutions.
6. *Social inequities*: Informal settlements often lack basic services and infrastructure, making sustainable development initiatives more challenging and exacerbating disparities in access to resources and opportunities.
7. *Climate change-related events*' increasing frequency and severity exacerbate challenges, particularly in vulnerable urban areas. Flooding, storms, and heatwaves pose significant risks to infrastructure, public health, and economic stability.

Addressing these multifaceted challenges requires a comprehensive and inclusive approach involving strengthening institutional capacity, financial support, raising public awareness, promoting social inclusion, and fostering stakeholder collaboration.

Suggested subtopics:

Urban greening

- A subset of nature-based solutions (NBS), urban greening acts as both climate mitigation and adaptation measures by reducing heat stress, improving air quality, reducing noise improving urban biodiversity and enhancing well-being, including contributions to local development. Parks and green spaces not only act as carbon sinks but also bring down temperatures in cities.
 - Parks and recreational areas, tree planting, urban agriculture, green roofs and walls.

Urban planning, design, and land use

- Ensuring that sustainable urban planning and design creates urban environments that are environmentally sustainable, economically viable, and socially equitable.
- Mixed-use developments: encouraging mixed-use spaces that combine residential, commercial, and recreational uses to reduce travel distances and foster community interactions.
- Context specific and climate-appropriate neighborhood designs supporting use of heritage design principles and locally sourced materials.

Sustainable construction materials (materials transition)

- Stimulate the use of sustainable materials: transition from traditional materials to nonmetallic polymer-based materials. This transition involves a comprehensive approach to drive sustainable change in the entire materials ecosystem, encompassing the development and integration of reliable, advanced, and sustainable nonmetallic polymer-based materials, at both the local and global level.
- Switching from steel rebars—traditional material—to Glass Fiber Reinforced Polymer (GFRP) rebars would reduce CO2 emissions by 91%, 46% reduction coming directly from the decrease in weight of the material.
- Expanded Polystyrene (EPS) presents several technical advantages which include, ease of installation, up to 70% lower carbon emissions in its entire lifecycle, higher energy efficiency (reaching up to 80% reduction in energy consumption), and close to zero waste generation during the construction process.

Retrofitting existing buildings

- Upgrading insulation, windows, lighting (LED), HVAC systems (smart thermostats).
- Innovative business models to enhance energy efficiency solutions uptake.
- Challenges for established cities (such as historical value of buildings and complexity of densely built environments) vs. new and expanding cities (such as rapid urbanization outpacing the planning and development of adequate infrastructure and services).

Efficiency in buildings: smart building technologies

- Building Management Systems (BMS) ensure the building's systems are operating as efficiently as possible, reducing energy consumption and costs while maintaining comfort.
- Sensors – automate and optimize building systems. For example, motion sensors can trigger lights to turn on or off based on occupancy, saving energy. Similarly, air quality sensors can adjust ventilation rates in real-time to ensure optimal indoor air quality.
- Smart thermostat – optimize temperature settings automatically and adjusting indoor temperatures in anticipation of outdoor temperature changes.
- Smart lighting – adjust lighting levels based on occupancy or the time of day. For example, they can dim or turn off lights in unoccupied areas.

Behavioral change interventions

- Promote energy-efficient behavior among residents (e.g., awareness campaigns and implementation of behavioral interventions such as: feedback systems, social norms, and information campaigns to promote energy-efficient behavior among building occupants).

Capacity Building and financial support

- Developing countries face unique challenges in implementing sustainable solutions in cities, which include a mix of technical, institutional, and financial constraints. Capacity building and financial support are crucial for overcoming these challenges, enabling cities in developing countries to pursue sustainable urban development paths that are environmentally sound, economically viable, and socially inclusive.
- Develop the technical expertise and knowledge necessary for urban planners, engineers, and policymakers.
- Increase access to funding and support, such as international climate finance mechanisms and grants for sustainable urban projects in developing countries and ensuring that financial support and investments are equitably distributed.

Managing trade-offs, costs of mitigation, and the impacts of response measures

- Managing trade-offs, costs of mitigation, and impacts of response measures within the urban context requires a nuanced understanding of the interplay between environmental sustainability and socio-economic development, especially in developing countries. Efforts to integrate climate change mitigation and adaptation into urban planning must consider the immediate costs against long-term benefits, balancing the need for resilient infrastructure and access to basic services against fiscal constraints and technical capacities. This entails prioritizing initiatives that offer co-benefits and support broader development goals while fostering inclusivity and ensuring that interventions do not exacerbate existing inequalities.