Submission by Peru on behalf of the Independent Association of Latin America and the Caribbean on opportunities, best practices, actionable solutions, challenges and barriers relevant to the topics of Global Dialogue on Urban Systems under the Sharm el-Sheikh mitigation ambition and implementation work programme in 2024.

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The Independent Association of Latin America and the Caribbean (AILAC) is honoured to present its views on behalf of its member states. This submission outlines our suggested approach and insights in relation to conducting the fourth Global Dialogue under the Sharm el-Sheikh mitigation ambition and implementation work programme (MWP).

Emissions from urban areas account for a significant portion of global greenhouse gas emissions, often estimated in the range of 67 to 72 percent. This statistic is particularly relevant in the context of Latin America, where a significant 81.2% of the population currently resides in urban areas. This high percentage underscores the role of cities in the region as important contributors to GHG emissions, and is expected to continue increasing, reinforcing the urgency of implementing sustainable urban planning and development practices in the region.

AILAC takes note of the message from the co-Chairs of the MWP, stating that the global dialogue taking place under the work programme in October 2024 will focus on "Urban systems," and that topics will include (1) Spatial planning and low-carbon infrastructure, (2) Electrification and switching to net-zero emission resources, and (3) Enhancing carbon storage through green and blue infrastructure.

Content

Spatial Planning and Low-Carbon Infrastructure

Description:

Spatial planning and low-carbon infrastructure aim to design and organize urban spaces to reduce greenhouse gas (GHG) emissions and support sustainable development. This approach involves creating compact, well-connected cities that minimize the need for long commutes and reduce reliance on private vehicles. Effective spatial planning also integrates clean technologies and sustainable materials in both the construction and operation of urban infrastructure. Incorporating green spaces and conserving natural ecosystems within urban planning is crucial for climate adaptation and mitigation, as these areas offer vital ecosystem services, such as carbon sequestration, temperature regulation, and stormwater management. Strategies should include the development of urban parks, green belts, and the restoration of natural habitats to enhance urban biodiversity and connectivity. Additionally, integrating green areas and the preservation of natural ecosystems within urban planning is essential for creating sustainable, resilient, and livable cities.

Key Elements:

- Compact Urban Design: Fostering urban densification with mixed-use areas that enable people to live, work, and access essential services without long travel distances. This concept includes promoting "15-minute cities" where essential services are accessible within a 15-minute walk or bike ride, encouraging more sustainable urban lifestyles.
- Efficient Public Transport: Developing integrated mass public transport systems and active mobility networks (such as bike lanes and pedestrian zones) to reduce car dependency. Development-Oriented Transit (DOTS) focuses on structuring urban growth around public transport hubs, reducing reliance on private vehicles, easing traffic congestion, and fostering more sustainable urban growth patterns. Planning should prioritize mixed-use developments that encourage shorter commutes and foster a sense of community, along with public space, urban infrastructure, and transportation systems that reduce reliance on private vehicles.
- Green Infrastructure: Integrating parks, green roofs, and natural spaces that not only lower the carbon footprint but also enhance the quality of urban life. Creating ecological corridors to support clean mobility, along with pedestrian- and cyclist-friendly public spaces, and green areas that help cut carbon emissions and promote biodiversity, is essential. Strategies should promote active mobility through ecological corridors, ensuring safe routes for pedestrians and cyclists. Additionally, informal settlements should be addressed by integrating these communities into the formal city through infrastructure upgrades, legal recognition, and social services.

Key Concepts:

- Types of Population: Recognizing the diversity in large cities in terms of population sizes, structures, and needs, and how territorial planning affects the solutions required to mitigate climate change.

Emphasizing the need for affordable housing initiatives to combat socio-economic disparities and ensure equitable access to essential services.

- Migration and Displacement: Addressing how these dynamics impact urban planning, the needs of urban systems, and the development of mitigation strategies. Equitable access to services such as healthcare, education, and transportation should be prioritized, particularly for underserved populations.
- Carrying Capacity of an Urban Ecosystem: Highlighting that urban resources are finite, including their ability to absorb pollutants such as GHGs. This aspect must be a central focus in urban planning to prioritize mitigation measures. Furthermore, sustainable urban planning integrates considerations for soil preservation, local economic development, efficient logistics, waste and resource management, and the promotion of a circular economy.

Electrification and Switching to Net-Zero Emission Resources

Description:

Electrification and switching to net-zero emission resources involve transforming urban energy and transportation systems to depend on electricity generated from renewable sources rather than fossil fuels. This shift is vital to meet decarbonization goals in cities, as many of the most polluting sectors, such as transportation and heating, currently rely heavily on fossil-based energy. Efforts should explore and assess strategies to accelerate the shift towards net-zero energy systems in urban settings, addressing energy use in transport and city systems, including cooling, heating, cooking, and electricity generation. These strategies should be supported by financial mechanisms, including public-private partnerships (PPPs), green bonds, climate funds, and international climate finance mechanisms like the Green Climate Fund (GCF).

Key Elements:

- Transportation Electrification: Establishing adequate charging infrastructure to support widespread adoption of electric vehicles and ensuring energy availability (linked to ecosystem capacity). Consider financial incentives like tax rebates and replacement bonuses to speed up the transition from fossil fuel-based systems to renewable energy technologies, such as heat pumps and solar rooftops. Discuss strategies to expand solar rooftop installations in new and existing residential buildings by set deadlines.
- Integration of Urban Systems with Net-Zero Buildings: Utilizing construction technologies that enable net-zero emissions buildings, employing renewable energies like solar and wind to enhance energy efficiency, and leveraging synergies with other elements of the urban system surrounding the buildings. Incentives for switching can also involve policies to phase out fossil fuel-based heating and cooling systems, setting mandatory replacement dates, and phasing out subsidies.
- Renewable Energy in the Grid: Incorporating renewable energy sources (solar, wind, hydroelectric) into the urban electrical grid to decrease dependence on high-carbon energy sources and coordinating their integration capacity. Energy communities represent a transformative approach, allowing residents to participate actively in energy generation, consumption, and sharing.

Key Concepts:

- Energy Transition: Emphasizing the strategic importance of planning and implementing actions to ensure the energy supply needed to support urban systems under decarbonization criteria. This involves policies to phase out fossil fuel-based heating and cooling systems in buildings, setting mandatory deadlines for replacing fossil fuel boilers and heaters, and reducing subsidies by specific target years.
- Interrelationships Among Urban System Elements: Focusing on optimizing (efficiency, space distribution, service provision, bioclimatic architecture, etc.) urban system resources to maximize mitigation results and the benefits of technologies, processes, and practices associated with implementing mitigation measures. Energy efficiency in wastewater treatment and disposal systems, along with optimizing the use of urban infrastructure through smart city technologies, such as adaptive lighting and energy management systems, is crucial.

Enhancing Carbon Storage through Green and Blue Infrastructure

Description:

Enhancing carbon storage through green and blue infrastructure involves using nature-based solutions to absorb and store carbon dioxide (CO_2) within urban environments. Green infrastructure includes components such as parks, urban forests, and green roofs, while blue infrastructure encompasses bodies of water, wetlands, and rivers that also capture and store carbon. These solutions contribute to climate change mitigation while offering a range of environmental and social benefits. Promoting social equity and inclusion in urban development is also integral, as these projects can empower local communities, especially in informal settlements, through education, economic opportunities, and legal support.

Key Elements:

- Urban Forests and Parks: Planting and maintaining trees and green spaces in cities to capture CO_2, improve air quality, and provide shade and recreational areas. This can involve the use of green roofs and walls, as well as restoring natural habitats, to improve urban connectivity and biodiversity. Investments in infrastructure for local food markets and community gardens and urban farms can further enhance local food production and community engagement.
- Restoration of Wetlands and Water Bodies: Rehabilitating and conserving wetlands, rivers, and other aquatic ecosystems that serve as carbon sinks, storing significant amounts of CO_2 in their soils and vegetation. Efforts should also focus on maximizing the efficiency of resource use and minimizing waste, contributing to an urban circular economy.
- Green Roofs and Walls: Encouraging the use of green roofs and walls on buildings to boost cities' capacity to capture carbon while also enhancing thermal insulation and reducing the urban heat island effect.

Key Concepts:

- Accounting Challenge: Acknowledging the difficulty in quantifying the mitigation outcomes of these projects. Also highlighting the importance of global platforms, such as the C40 Cities Climate Leadership Group and the United Nations Human Settlements Programme (UN-Habitat), for sharing knowledge and best practices in urban sustainability.
- Permanence: Stressing how strategic planning can help ensure the conservation of existing and newly developed green and blue structures. Furthermore, strengthened international cooperation and knowledge exchange can support cities in their pursuit of urban sustainability, alongside policies to address informal settlements and support urban food systems for climate mitigation.

Crosscutting considerations

AILAC suggests that the following calls and commitments of decision 1/CMA.5 are addressed in a crosscutting manner within each of the topics, as relevant:

- Para. 186, the MWP should incorporate the GST outcomes into its future activities. We urge the MWP to contribute to the discussion of GST relevant outcomes in this year's topics.
- Para. 36, which relates to the transition towards sustainable lifestyles, production, and consumption practices, highlighting the need to integrate these elements into urban systems planning processes.
- Para. 39, which invites Parties to submit ambitious emission reduction targets in their upcoming NDCs that cover all GHGs, sectors, and categories. In this context, we encourage that the outcomes of this dialogue be utilized by Parties to assess how their NDC update processes can include national actions aimed at strengthening GHG mitigation in urban systems.
- Para. 28 of the GST decision, in particular:
    - A. Improvements in energy efficiency through technologies in sectors such as construction, commerce, transport, industry, logistics processes, and territorial planning.
    - D. Transitioning away from fossil fuels in urban energy systems in a just, orderly, and equitable manner, accelerating action in this critical decade to achieve net zero by 2050, in keeping with the science, including decentralized renewable energy systems, equitable access to clean energy, and urban policy integration.
    - E. Reduction of N_2O emissions through solid and liquid waste management and industrial emission reductions. Additionally, reductions in fluorinated gas emissions can be achieved through refrigerant management, equipment maintenance, and promoting a circular economy within urban systems.
    - G. Emission reductions in transport, viewed from an urban systems perspective, should consider the planning of public spaces, active mobility, and the development of sustainable transport-oriented initiatives.

AILAC suggests organizing the Global Dialogue around the required Transformations in Urban Systems to Align with the 1.5°C Scenario - including actions and necessities in terms of finance and other means of implementation, without compromising development and the livelihoods of urban inhabitants.

We emphasize the importance of presentations that provide a global framework of GHG emissions associated with urban systems, breaking them down by their components, GHGs, sectors, and categories. This should include an analysis of the historical behavior of emissions and their relationship with population dynamics; allowing for a subsequent regional zoom that is as representative as possible regarding Parties and regions.

In addition to the topics already proposed, AILAC recommends exploring the following areas to further enrich the dialogue:

- Funding Options for Sustainable Urban Development: An examination of various funding options, including public-private partnerships (PPPs), green bonds, climate funds, and international climate finance mechanisms like the Green Climate Fund (GCF). This should address challenges related to accessing current funding options, as well as the availability and timeliness of such funds in line with the formulation and implementation of 1.5°C-aligned NDCs; maintaining a balance in terms of relevance across all regions.
- Sustainable Food Distribution Networks: Developing strategies for efficient distribution networks for locally produced food, ensuring these networks support the reduction of food miles and related greenhouse gas emissions.
- Infrastructure for Local Food Markets: Investing in infrastructure that supports farmers' markets and local food distribution systems to enhance the accessibility and affordability of fresh food in urban areas.
- Strategies to Increase End-User and Consumer Awareness: Promoting awareness among end-users and consumers about the benefits of transitioning away from fossil fuels, counteracting misinformation about net-zero technologies, and encouraging the adoption of renewable and energy-efficient alternatives.