



Climate Action Network

Submission on opportunities, best practices, actionable solutions, challenges, and barriers relevant to the Mitigation Work Programme dialogue on “Cities: buildings and urban systems”

April 2024

Climate Action Network (CAN) is a global network of more than 1,900 civil society organisations in over 130 countries driving collective and sustainable action to fight the climate crisis and to achieve social and racial justice.

In response to the encouragement to parties, observers, and non-party stakeholders to submit their perspectives regarding the first global dialogue in 2024 under the Sharm el-Sheikh **mitigation ambition and implementation work programme**, CAN International submits its views on **opportunities, best practices, actionable solutions, challenges and barriers** relevant to the topics of the dialogues regarding the topic of “**cities: buildings and urban systems**”.

CAN International welcomes that cities and the built environment are considered in this year’s dialogues for addressing the pre-2030 emissions gap.

SUMMARY OF KEY ASKS:

1. CAN International is recommending several sectoral deep dives to accordingly address resilient and 1.5C compatible discussions. These are:

- Energy
- Infrastructure
- Transport
- Land Use

2. The protection of the rights of over 860 million informal settlers in connection with infrastructure projects (climate change adaptation and mitigation infrastructures as well as basic infrastructures), the phasing out of fossil fuels and the promotion of sustainable mobility systems are exemplary anchor points of urban climate policies.

3. CAN International is recommending “enabling roundtables” to touch the potentials of urban governance and appropriate financing facilities to unlock urban decarbonization potentials with a multi-stakeholder approach, having at heart best-practices in governance.

4. CAN International is encouraging meaningful dialogues that emphasize a pro-poor perspective and support the rights of informal settlers and human rights.

The 21st century is "the century of cities". Cities have a responsibility and show opportunities to contribute significantly to limiting global warming to 1.5C. Currently, cities are responsible for approximately 70% of energy related carbon emissions.

- Historically speaking, urban societies in the Global North have contributed the most to the climate crisis. To limit global warming, there is no doubt that existing cities must decarbonise fast and promptly in their given (mostly fossil-based) structures.
- Urban areas have a key role to play in tackling climate change. Whilst informal settlements may seem a challenge, they also present an opportunity for urban climate action. Most urban infrastructure has not been built yet – this is the biggest opportunity for low carbon urban development and is also bringing about co-benefits in mitigation, adaptation and for many social goals.

By 2050, urban population figures will sharply increase around the globe. Scale and scope of the ongoing urbanization are unprecedented, with the urban population doubling in only 30 years from 4,38 billion persons in 2020 to 6,68 billion persons in 2050. 90% of this increase will happen in Asia and Africa. The increase is mainly expected in poor population groups. Urban growth is very unequally spread: 50% of all urbanization globally is taking place in just eight countries (India, China, India, China, Nigeria, DR Congo, Pakistan, Indonesia, USA, Bangladesh). Small and medium-sized towns have a significant share in urban growth (UN DESA 2018).

Developing sustainable and resilient urban infrastructures constitutes a challenge. Newly emerging neighborhoods and settlements of the growing cities of the Global South offer opportunities to leapfrog fossil development pathways. The irreversible aspects of land use (in particular: change of land use), the long lifespans of buildings and urban infrastructures, their energy and mobility systems can lead to path dependencies (e.g. energy use, emissions, lifestyles and consumption patterns, etc.) which would be difficult to change once established, even in the long term. This can be seen in the Global North, where fossil dependencies and fossil development pathways block sustainable and resilient urbanization. Yet, cities like Copenhagen, Bogota, Pune or Amsterdam portray that decarbonization is possible. Based on such positive examples, one of the priorities of this dialogue could be the identification of levers to scale up and accelerate these dynamics both in emerging and carbon-intensive cities.

60% of infrastructure that will exist in 2050 is yet to be established, mostly in the cities that are currently emerging. Evolving neighborhoods and cities prompt the opportunity of creating land use, including housing as well as energy and mobility systems, that pursue social and ecological objectives equally from the outset.

At the same time, the vulnerability of poor urban dwellers to climate and environmental risks must be given particular attention. As the IPCC report on Asia points out, adaptation and mitigation measures in cities are often intertwined and need to be conceptualized together (Shaw et.al 2022). The inclusion of the rights of the vulnerable population groups including informal settlers in the decision-making of post-fossil urban development is key.

Global Urban Pathways and Key Dynamics to Influence

According to the latest UNFCCC NDC Synthesis report, the implementation of current climate planning is projected to lead to total GHG emission levels that are 5.3% lower than in 2019. Further, the level of cumulative CO₂ emissions in 2020–2030 would use 86% of the remaining carbon budget aligned with 1.5C warming. As a matter of climate justice, cities and city societies of the Global North need to opt for post-fossil development pathways immediately. Parallely, emerging cities should opt for post-fossil development pathways to avoid fossil path dependencies.

Four crucial levers for achieving the Sustainable Development Goals and meeting the Paris Agreement lie in cities and urban communities and the quality of the built environment: infrastructure, land use, energy system and mobility system. These sectors should form part of specific deep dives during the third Global Dialogue of the MWP.

Leveraging Infrastructure Development to achieve just and climate-responsive neighborhoods and cities

At least 60% of the infrastructure that will exist worldwide in 2050 is yet to be built. Thus, leveraging the post fossil nature of these emerging infrastructures is a major concern. Consequently, all countries with a high urbanization rate and high-capita emissions play a decisive role in designing socially just and climate-responsive cities. These two perspectives belong together. The nature and design of infrastructures together with the land use (infrastructures and land use do influence each other mutually) are decisive factors that will significantly influence the pathways of present and future energy demands, as well as the well-being of their population.

Urban development (formal or informal) is therefore a decisive lever for potentially positive or negative path dependencies of cities. Aspects of density, use, interconnectivity, and access are relevant, regarding social equity and ecological sustainability. Additionally, the interdependence between the structural aspects of the city layout and the social aspects are a key factor.

Leveraging the Urban Energy Demand

A large proportion of urban emissions are attributable to the areas of energy (including construction and housing) and mobility (transportation). This includes both energy use on site as well as emissions caused by mining processes and energy generation beyond the city limits (Pichler 2017). The energy demand of cities is an example of urban and rural connectivity. Due to the crucial role of the energy sector in cities' carbon footprint, it is important that the transformation of the energy system is accelerated. Presently, cities hardly generate energy. As cities are primary consumers, their demand can accelerate the generation of decentralized renewable energy (e.g. through rooftop solar panels).

However, first and foremost cities and their infrastructures need to be designed in a way that keeps their energy demand low. Key elements in this respect are, for example: the decarbonization of the construction sector (including respective policies and regulatory

building codes), the creation of built environment that reduces heat stress (including surface heat) and provides thermal comfort through efficient technologies such as heat pumps or increased tree cover; the use of sustainable/circular material for the construction of buildings, efficient appliances, etc.

Leveraging Urban Mobility Systems

Around the world, the mobility sector's share in greenhouse gas emissions is steadily rising. Between 1990 and 2020, traffic emissions increased globally by 2% each year. In 2020, direct greenhouse gas emissions amounted to one fourth of the global energy-related emissions.. While the projected increase in traffic emissions is calculated differently in different studies, they all agree that traffic emissions are strongly increasing. Even if all decarbonization measures announced so far are fully implemented, the transport sector's energy-related CO₂ emissions will increase by 16% by 2050 (ITF Transport Outlook 2021).

It is therefore imperative to adopt stronger measures, while seizing the opportunity to design mobility in a socially just and climate-responsive way. The priority is to expand and center public transportation and active mobility (cycling, walking), e.g. through the design of "15-minute city", as well as electric modes of transportation and the phase out of Internal Combustion Engine (ICE) vehicles.

This also comprises planning and building arising settlements and cities with minimal land use. It is imperative to build infrastructures that are accessible and affordable, for poorer population groups.

Leveraging Urban Land Use

While the urban population is doubling till 2050, the urban land area will triple by 2050, thus urban land use is growing disproportionately high, and mostly beyond the city borders. Urban land use and urban form have considerable influence on many aspects of the transformation towards sustainability, e.g. on the mitigation of and adaptation to climate change, resource use, and access to adequate housing and public spaces.

Urban land use (formal or informal), including the use of space are decisive levers for positive, but also negative path dependencies of cities. Again, ecological, and social aspects are most closely intertwined. In a temporarily open window of opportunity, the urban development and/or expansion process offers numerous options for making land use a lever for influencing the transformation process towards sustainability in cities and avoiding unwanted path dependencies.

For example, cities can - based on future projections of climate crisis impacts and expected population developments - identify and recognise climate sensitive areas for the provision for conservation and adaptation measures. This needs to go hand in hand with the recognition of non-negotiable land use and the protection of the most vulnerable population groups. Civil society organizations focussing on urban land use have developed methodologies to assess urban land use accordingly. One entire Asian megacity has been mapped already.

In the current global urbanization process, existing settlements are growing and changing on an unprecedented scale. The stronger the dynamic with which cities grow and change, the more complex are the processes of urban-land development and use. Land use planning

needs to systemically include sufficient and quality spaces of affordable housing including all basic infrastructures and access to affordable and sustainable mobility systems, based on the social and ecological parameters (SDGs and Paris Agreement).

Respective Key Elements of Resilient and 1.5C Compatible Cities
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Ecologic and social transformation	
Pro-poor perspective	<ul style="list-style-type: none"> - irrespective of the nature of the measure, ensure that the most vulnerable population groups (poorest 40% of the population) benefit most from the measures - mainstream climate measures in which urban poor lead climate action - ensure that human rights are protected and promoted - prior informed consent decision making processes - adhere to binding social, environmental, and human rights guidelines to prevent evictions - ensure civil society and affected communities participate in the design of conservation and climate protection measures. - urban climate action that is promoting development - access to employment, energy, clean water, education and waste treatment as indicators
Create a conducive narrative of positive change	<ul style="list-style-type: none"> - capacity building for all stakeholders - highlight opportunities - cooperation with science - seek new modes of communication - cooperation in alliances (civil society can leverage regulatory codes)
Post-fossil cities and socially just cities	
New settlements planned and designed as net-zero and featuring equity	<ul style="list-style-type: none"> - decarbonize the construction sector - holistic planning and design of built environment featuring social and ecological objectives/ limits (SDG, Paris Agreement) - low carbon circular use of materials - treatment of wastewater and waste - thermal comfort, “thermal comfort for all”-policies - tenure security in housing with thermal comfort
Limiting energy demand, and serving energy demand by renewable energies (re), renewables supply	<ul style="list-style-type: none"> - limit energy intensity by following regulatory policies featuring energy efficient buildings (including subsidies to make such buildings available to low-income groups) - facilitate energy efficient city development - limit energy demand in existing and new emerging cities - increase public investment in renewables to accelerate decentralized RE-solutions in cities - increase the target for renewable energies in end-use sectors

Post-fossil mobility systems	<ul style="list-style-type: none"> - transitioning away from Internal Combustion Engine (ICE) vehicles by 2040 - prioritization and expansion of public transport (including planning for well-laid out last-mile options that are accessible to the poorest and most vulnerable) - providing space for active mobility - support mixed land use to avoid trips (15-minute city)
Urban Land Use Efficiency and its implications for the built environment	
Limit land use	<ul style="list-style-type: none"> - develop urban land usage policies which recognise the most vulnerable populations on city policies and plans - minimize consumption of new land by decentralized concentration and revitalization of land - orientation of urban land towards the common good (policies for more efficient resource delivery and access) - create opportunities for adaptability and reversibility of urban land use, interim usages of spaces - create public open spaces, shared spaces - promote green spaces and surfaces to absorb heat - implement regulatory land use schemes
Circular Economy and Zero Waste	
Recycling and zero waste	<ul style="list-style-type: none"> - promotion of waste management, circularity, water management - increase of recycling quota - zero waste hierarchy

Enabling Factors for Resilient and 1.5C Compatible Cities

Governance

To influence the emergence of inclusive, socially just, and climate-responsive cities, transformative urban governance must find answers to the key challenges described above as well as to the scale and scope of the changes. It is essential to enable cities to take responsibility for their development pathways, in close cooperation with their citizens, including informal settlement families.

These fundamental changes require participation and leadership as well as decision-making power. Presently, cities have limited decision-making powers that are needed to address the main levers (infrastructure, land use, energy and mobility). Furthermore, human capacities are limited, as well as available (climate) finance.

Positive changes to accelerate sustainable urban development could for example include:

- **Including cities as a partner in the climate governance system**, at the national and global level.
- **Strengthening of urban governance** and decision-making powers.

- Identifying and leveraging **city-level participatory planning opportunities** such as city planning processes **to ensure that interests and rights of excluded communities** are part of the decision-making.
- Mainstreaming urban and just climate action in mitigation programming which **entails national governments to encourage just urban policies** and processes for city planning.
- Building of **institutional capacity and mandate**.
- Integration of **cities into regional and national legislation and regulatory processes**.
- Building **human resources in city administrations**, including knowledge about levers to respond to the climate crisis.
- **Participation of all population groups, including informal settler families**.
- Deepening the understanding of communities, civil society and the public about solutions to build **demand for people centric inclusive processes and planning**.
- Enabling **multi-sector action based** on sustainability indicators.

As urbanization is a complex process, involving stakeholders with various backgrounds and expertise is necessary, as well as expanding contact and cooperation across sectors and population groups. Extraordinary alliances (with informal settlers, indigenous people, youth, female collaborations, religious groups...) would contribute to scalability, so that the rapidly growing need for effective policies and implementation can be responded to. Socially just and climate-responsive policies need the support of all population groups, including informal settler families. In recent years, grassroots groups and civil society organizations have also become increasingly involved in the development of (local) climate action plans and participation in Nationally Determined Contributions (NDCs).

In addition, just urban transition requires attention to distributional justice (relating to fair distribution of costs and benefits), procedural justice (relating to equality of power and influence in decision making), and recognition justice (recognition of the distinct needs of different groups of people). These dynamics need to be upscaled.

Finance

In a temporarily open window of opportunity, the urbanization process offers numerous options for making land use a lever for influencing the transformation process towards sustainability in cities and avoiding unwanted path dependencies. However, cities hardly have the institutional and financial capacities to create fast, climate-responsive, and socially just infrastructures, to create their energy systems or mobility systems.

Addressing these challenges requires **a systematic and comprehensive assessment of the current levels of urban sustainable finance directed to climate change mitigation, adaptation, and other environmental and social activities** is the way to go forward.

Therefore, it is the responsibility of the Global North to help provide these prerequisites fast and directly to cities:

- **Direct access to cities and the settlement level** (civil society and community-based organizations)
- Promote **inclusive national mechanisms** that follow the principle of subsidiarity (cities as decisive actors)
- **Climate finance that specifically delivers on climate resilient and sustainable cities**
- Climate finance that is accessible to **leverage community-based action for upscaling**

While the approach to direct action and decentralized engagement with cities should be the primary modus operandi, states/subnational governments are also one of the most important players in the aspired multi-level governance system. This is specifically important in the Global South as they dominate policy implementation and financing of projects in sectors that are relevant to climate change action in cities. Therefore, understanding the role of national governments is also crucial to analyze the role of urban climate action while building a synergistic system with national- and state-level climate priorities, and explore new and innovative financing mechanisms to drive climate action.

Traditionally, development of cities has been undertaken substantially through public funding, relying heavily on federal grants and transfers. However, to address future financial requirements, cities should adopt strategies that increase public financing sources and a stronger enablement of public-private collaboration to bridge the growing sustainable infrastructure financing gap. This collaboration must focus on ecological and social justice and be based on mandatory human rights and environmental due diligence standards for private investments. It is therefore necessary that:

- **The City/States strive to achieve a right balance in devolved funds**, aiming to develop a capacity to leverage “Own Source Revenues” (OSR) and resource generation beyond international grant-based financing for urban development.
- **Bringing efficiency and efficacy in the use and allocation of public funds**; public funds can be used to finance projects that are economically important but financially less viable; especially in sectors (such as education and health services that are related to larger public welfare and social development) leading to build the overall resilience capacity of cities against climate impacts and to bridge the existing infrastructure gap.
- More robust data collection and **transparent public data availability** processes will not only support the implementation and tracking but will provide strategic guidance and direction for cities to pursue climate action. Harmonizing and centralizing data collection will help track progress on their implementation by stand-alone and pooled bonds, blended finance, institutional funds, asset monetization, long term debt issuance and new & innovative public financing sources.

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