To: UNFCCC Sharm el-Sheikh mitigation ambition and implementation work programme

Issue: Sharm el-Sheikh mitigation ambition and implementation work programme

Title: Parties, observers and other non-Party stakeholders to submit their views on opportunities, best practices, actionable solutions, challenges and barriers relevant to the topics of the dialogues referred to in paragraph 13 of Decision 4/CMA.4 (4 weeks before each dialogue)

Mandate: Decision 4/CMA.4, para 14 FCCC/PA/CMA/2023/L.16, para 9

Executive Summary

CarbonCare InnoLab (CCIL) appreciates the opportunity to contribute to the 2024 global dialogues under the Sharm el-Sheikh mitigation ambition and implementation work programme (MWP), focusing on "Cities: buildings and urban systems." As an NGO observer to the UNFCCC process dedicated to unlocking the climate action potential of cities, CCIL recognizes the crucial role of cities in driving decarbonisation efforts. This submission offers key recommendations to enhance the MWP's foundation for global dialogue, drawing from CCIL's programme and advocacy experiences in Hong Kong SAR, as documented in its annual Paris Watch Hong Kong Climate Action reports. CCIL proposes the following topics for the upcoming global dialogue under MWP:

1. Establish a Global Benchmark and Building Sector-specific Transition Roadmaps;
2. Develop Viable Business Models for Accelerating Renewable Energy and Energy Efficiency;
3. Promote a Just Transition and Adopting the Talanoa Dialogue Approach
4. Promote Data Transparency and Availability for Effective Monitoring and Evaluation

Through discussions on the above topics, the building sector in cities worldwide can develop and deliver robust, Paris-aligned net-zero roadmaps and implementation plan. CCIL is committed to supporting the decarbonisation of the building sector in cities globally.

1. Introduction

The existential threat posed by climate change demands urgent and far-reaching transformations across all sectors of society to prevent catastrophic consequences, requiring all sectors to align with the Paris Agreement's goals to keep global warming below 1.5°C. Cities play a pivotal role, generating over 70% of global carbon emissions. The building sector, in particular, is a significant contributor to global energy demand and greenhouse gas emissions, accounting for more than 34% of energy demand and around 37% of energy-related CO_2 emissions. Climate-related hazards disproportionately impact cities worldwide and exacerbate inequalities, while the sector's vulnerability further compounds these issues. The projected doubling of the sector's floor area by 2060, driven by rapid urbanization in developing countries, underscores the urgency of the situation. Additionally, inadequate housing affects more than 1.6 billion people worldwide, further emphasizing the pressing need for climate action.

2. Context Analysis

Global Commitments to Decarbonize the Building Sector Come at a Critical Time

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The French government and UNEP organized the first Buildings and Climate Global Forum on 7-8 March 2024, focusing on decarbonising and enhancing climate resilience in buildings. The Ministerial Declaration from the Forum pledges to establish an "Intergovernmental Council for Buildings and Climate" and encourages collaboration through initiatives like the Buildings Breakthrough launched at COP28. The declaration demonstrates the commitment of 70 countries and numerous local governments to achieve zero-carbon buildings by 2030 and zero-carbon built environments by 2050. Signatories also commit to developing and implementing policies to drive decarbonisation and resilience, as well as reporting on progress and sharing best practices.

The proposed global engagement mechanism for local and subnational governments and other stakeholders, embedded within the Global Alliance for Buildings and Construction (GlobalABC), the Sustainable Urban Resilience for the Next Generation (SURGe) (launched at COP27), and the Coalition for High Ambition Multi-level Partnerships (CHAMP) (launched at COP28) initiatives, complements the Ministerial Declaration's objectives by creating momentum for this transition through international collaboration, commitments, and the exchange of experiences and best practices. The declaration's acknowledgment of the GlobalABC's role aligns with the increasing role of local and subnational governments in international processes, such as the Paris Agreement, the UAE Consensus, and the Sharm-El-Sheikh Implementation Plan. These pledges, initiatives, and engagement mechanisms serve as timely opportunities to fast-track climate action in the building sector in cities.

Despite the inclusion of the building sector in many countries' Nationally Determined Contributions (NDCs), only 26% have mandatory building energy codes for the entire sector, revealing a significant gap between the sector's current performance and the necessary pathway to achieve decarbonisation and resilience. These pledges, initiatives, and engagement mechanisms serve as timely opportunities to fast-track climate action in the building sector in cities.

Hong Kong's Experience Shows the Importance of a Robust Plan to Deliver on Pledges and Commitments

In Hong Kong, buildings account for 90% of electricity consumption and 60% of carbon emissions. Compared to 2015 levels, Hong Kong aims to reduce the electricity consumption of new and existing commercial buildings by 30% to 40% and residential buildings by 20% to 30% by 2050, and reduce the electricity consumption of new and existing commercial buildings by 15% to 20% and residential buildings by 10% to 15% by 2035, according to the Hong Kong Climate Action Plan 2050.

Hong Kong has taken steps towards improving energy efficiency in buildings through various initiatives, such as the Buildings Energy Efficiency Ordinance (Cap. 610), the voluntary Building Environmental Assessment Method (BEAM) Plus, and the piloting of energy-efficient District Cooling Systems in new development areas. These initiatives demonstrate the availability of benchmarking methodology, technology, and solutions for the building sector to take climate action.

While Hong Kong's existing measures to promote energy efficiency and renewables in buildings were a step in the right direction, the requirements have been too lenient to drive meaningful progress. According to CCIL's Paris Watch Hong Kong Climate Action Report 2022, buildings in Hong Kong have the highest energy consumption compared to Singapore, Seoul, and Tokyo, with minimal year-over-year improvements in efficiency. The key to achieving substantial carbon reductions is to accelerate and scale up efforts, based on clear carbon reduction roadmaps for

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the building sector that lay out milestones and timelines, along with rigorous implementation plans and monitoring frameworks. Top priorities should include phasing in mandates for renewable energy systems and zero-energy buildings, while providing promotions and subsidies to catalyse energy-efficient retrofits of both new and existing structures. Taking these ambitious steps would allow Hong Kong to fulfil its potential as a global leader in building decarbonisation, if underpinned by a comprehensive and rigorously executed strategy.

CCIL's On-the-Ground Programme Experiences Offer Valuable Insights for Dialogues

CCIL's flagship SolarCare Programme demonstrates a viable model for Hong Kong to accelerate energy saving and reduce carbon emissions from buildings by installing rooftop photovoltaic (PV) systems at grassroots non-profit organizations (NPOs). Since 2019, the project has installed 33 systems with a total capacity of 2.4MWp, with plans for 40 more by 2025. The estimated 73 PV systems will avoid approximately 2,300 tonnes of CO2 equivalent per year, with a cumulative historical impact of 2,455.89 metric tons of CO2-equivalent avoided since the project's founding.

The SolarCare Programme not only delivers environmental benefits but also promotes social impact through ongoing NPO engagement, mainstreaming climate action and propagating renewable advocacy community-wide. The project has secured initial funding from local philanthropy and is projected to generate approximately HK$16 million annually through the Feed-in Tariff Scheme, sustaining the initiative and supporting PV maintenance and climate education programming over the long term. CCIL's collaborative model is financially viable, replicable, and scalable.

Meanwhile, CCIL's Climate Community Dialogue Project provides a local example of how multi-stakeholder dialogues can achieve a just transition in Hong Kong. The project convenes vulnerable groups, NGOs, think tanks, academics, businesses and government officials to address the climate impacts on vulnerable groups like outdoor workers through community dialogues. After conducting eight rounds focused on those most affected, CCIL has valuable insights to offer in creating and facilitating an inclusive, participatory, and transparent dialogue. By providing a platform for participants to share their stories and experiences, CCIL's community-driven approach can inform efforts to ensure a just transition globally.

3. Core Principles

Drawing from the insights and experiences discussed above, CCIL highlights the importance of considering core guiding principles as follows when integrating various solutions into the global dialogue on decarbonizing the building sector in cities. These principles can help ensure a comprehensive, ambitious, and just approach to achieving net-zero emissions in the building sector while promoting social equity and resilience:

a. A Paris Agreement-aligned buildings sector:

The Ministerial Declaration's core messages emphasize the need to accelerate the transition towards a Paris Agreement-aligned buildings sector, aligning with its goal to keep global warming below 1.5°C, and prioritizing resilience, efficiency, and sufficiency in urban planning and construction. This includes prioritizing the reuse and renovation of existing buildings, using sustainable materials, and minimizing resource consumption and waste. The declaration also stresses the importance of implementing inclusive decarbonisation and resilience pathways, supported by policies, financial frameworks, and capacity building.

b. A just, inclusive, and equitable approach to decarbonizing the buildings sector:

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The Paris Agreement also acknowledges "the imperatives of just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities." The Local Leaders Roundtable outcomes reinforce the Paris Agreement and the Ministerial Declaration's call for a just, inclusive, and equitable approach to decarbonizing the buildings sector. Local governments' use of various levers, such as procurement, policy-making, integrated urban planning, and financial incentives, aligns with the declaration's focus on implementing inclusive decarbonisation and resilience pathways.

c. Talanoa dialogue approach:

The Talanoa Dialogue concept originates from traditional problem-solving practices in South Pacific island communities. It was introduced on the global stage when Fiji hosted the COP23 climate summit in 2017, as outlined in the Informal Note by the COP22 and COP23 Presidencies (Annex II to Decision 1/CP.23). Talanoa promotes participatory and transparent discussion through storytelling, in order to address problems in a non-accusatory and supportive way. CCIL's Climate Community Dialogue Project has adopted this Talanoa approach for dialogues within Hong Kong's own communities. Drawing on this experience, CCIL recommends embracing the spirit and format of Talanoa Dialogue to enable participants to share their stories and insights at the upcoming Global Dialogue. This would help foster open and constructive exchanges toward solutions.

4. Proposals for Global Dialogues

Based on the analysis and guiding principles above, CCIL proposes the following topics for the upcoming global dialogues of the MWP:

i. Establishing a Global Benchmark and Building Sector-Specific Transition Roadmaps

To ensure that the building sector's decarbonisation efforts are aligned with the Paris Agreement's 1.5°C goals and contribute to equitable outcomes, this dialogue will discuss the establishment of a global benchmark that evaluates the robustness and Paris-alignment of decarbonisation plans for the building sector. The benchmark should be based on science-based targets and best practices, taking into account the specific challenges and opportunities faced by the building sector in different regions and contexts. Standardized benchmarking against science-based targets, robust verification mechanisms, enhanced data comparability, sectoral granularity and broadened stakeholder engagement can spur a race-to-the-top among the building sector of cities worldwide.

In addition to the global benchmark, the dialogue should explore the importance of mandating building sector-specific transition roadmaps with interim targets. These roadmaps should outline the specific strategies, policies, and actions needed to decarbonize the building sector in line with the Paris Agreement's goals. They should be developed through inclusive and participatory processes, engaging diverse stakeholders such as local governments, industry actors, civil society organizations, and vulnerable communities, including low-income households, workers, women, and youth.

To support the implementation of the building sector-specific transition roadmaps, the dialogue should discuss the importance of providing adequate resources, capacity building, and technical assistance to cities and stakeholders. This may include exploring financial mechanisms, such as green building incentives, energy efficiency financing, and carbon pricing, as well as knowledge sharing platforms, best practice databases, and peer-to-peer learning networks.

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By focusing on the establishment of a global benchmark and the development of building sector-specific transition roadmaps with interim targets, this dialogue aims to provide a robust framework for accelerating the decarbonisation of the building sector in cities worldwide, ensuring alignment with the Paris Agreement's goals and promoting just, equitable outcomes.

ii. Developing viable business models for accelerating renewable energy and energy efficiency

To achieve significant reductions in greenhouse gas emissions from buildings, the dialogue should explore the importance of making energy-saving and renewable energy measures mandatory. This can include energy audits, renewable energy installations, and zero-emissions labelling schemes. Drawing from CCIL's advocacy work in Hong Kong, as documented in the Paris Watch Hong Kong Climate Action Report, the dialogue should discuss the potential for expanding the regulatory scope of building energy efficiency ordinances to mandate energy audits for all commercial and residential buildings and provide subsidies for existing buildings to retrofit and meet energy-saving standards, such as installing renewable energy systems.

However, the implementation of these mandatory measures must be supported by the development of viable business models that enable the deployment of renewable energy and energy efficiency in buildings. This may require deep energy retrofits for all new and existing buildings and the provision of financial support measures for building owners. CCIL's SolarCare Programme serves as an example of a viable business model, which operates renewable energy installations in buildings of non-profit organizations with the support of local philanthropy and the Feed-in Tariff scheme.

The dialogue should explore various viable business models across cities and develop roadmaps towards the implementation of mandatory building energy codes. By sharing best practices and innovative approaches, cities can learn from one another and accelerate the transition towards energy-efficient and renewable energy-powered buildings. The discussion should also address the challenges and opportunities associated with implementing these mandatory measures, such as financing mechanisms, capacity building, and stakeholder engagement, to ensure a just and inclusive transition in the building sector.

iii. Promoting a Just Transition and Adopting the Talanoa Dialogue Approach

As cities work towards decarbonizing their building sectors, it is crucial to ensure that the implementation of decarbonisation plans adheres to the principles of a just transition. The dialogue should explore how a just transition can be realized in the building and construction sector, focusing on actively including communities most vulnerable to building decarbonisation plans, such as low-income households, workers, women, and youth, in relevant dialogues and decision-making processes. Moreover, a just transition should focus on engaging these groups and creating green job opportunities in the building sector.

To facilitate inclusive and participatory discussions, CCIL strongly recommends adopting the Talanoa dialogue approach in the upcoming global dialogues. The Talanoa dialogue approach fosters inclusive, participatory, and transparent discussions by sharing stories, experiences, and best practices, allowing stakeholders to collectively identify challenges, opportunities, and actionable solutions to decarbonize the building sector in cities. CCIL has conducted a series of Climate Community Dialogues to promote just transition in cities, practicing the Talanoa Dialogue approach for the renewable energy sector, which formed part of the Hong Kong Just Transition Report. These experiences can serve as a valuable reference for such a dialogue in the

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building sector. The dialogue should explore how the Talanoa dialogue can be effectively adopted to achieve a just transition in the building and construction sector.

iv. Promoting Data Transparency and Availability for Effective Monitoring and Evaluation

Data transparency is crucial for monitoring and evaluating the building sector's progress towards net-zero emissions. However, data availability remains a challenge and barrier to effective monitoring and evaluation. The dialogue should explore ways to identify gaps and bottlenecks, and propose improvements in making data available and credible, supported by robust methodologies and data collection systems.

To promote inclusive participation and facilitate the achievement of decarbonisation goals, the dialogue should discuss the importance of publishing annual work plans and evaluation reports regularly. This transparency will help to build trust and accountability, and drive progress in the building sector's transition to net-zero emissions. By making data and progress reports publicly available, stakeholders can better understand the challenges and opportunities in decarbonizing the building sector, and contribute to the development of effective strategies and solutions.

The dialogue should also explore best practices in data collection, management, and sharing across cities, and discuss the potential for developing standardized reporting frameworks and platforms. This can help to enhance comparability and knowledge sharing, and facilitate collaboration among cities and stakeholders in driving the building sector's transition to net-zero emissions.

By prioritizing data transparency and availability, and promoting inclusive participation through the publication of work plans and evaluation reports, the dialogue can contribute to the development of a robust monitoring and evaluation framework for the building sector's decarbonisation efforts. This will be essential for tracking progress, identifying areas for improvement, and ensuring accountability in the transition towards a sustainable and resilient built environment.

5. Conclusion

The Ministerial Declaration and Local Leaders Roundtable outcomes from the Buildings and Climate Global Forum provide a strong foundation for accelerating the transition towards a Paris Agreement-aligned buildings sector. By prioritizing resilience, efficiency, and sufficiency, and adopting a just, inclusive, and equitable approach, the building sector can drive decarbonisation efforts and contribute significantly to the global fight against climate change. The comprehensive and multi-level framework presented in the Ministerial Declaration, informed by the outcomes of the Local Leaders Roundtable, emphasizes collaboration and commitments while recognizing the crucial role of local and subnational governments. This lays the groundwork for accelerating the transition towards a sustainable and resilient built environment, addressing the building sector's significant impact on energy demand, emissions, and vulnerability to climate-related hazards.

The upcoming global dialogues under the MWP present a pivotal opportunity to accelerate the decarbonisation of the building sector in cities worldwide. By establishing a global benchmark aligned with 1.5°C pathways, mandating just transition principles, requiring transparent data disclosure, and implementing inclusive stakeholder engagement, the building sector can develop and deliver robust, Paris-aligned net-zero roadmaps. CCIL's experiences and advocacy work in Hong Kong underscore the importance of setting ambitious energy-efficiency targets,

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expanding regulatory scope, and implementing mandatory energy-saving and renewable energy measures, as documented in the Paris Watch Hong Kong Climate Action Report. In addition, the SolarCare Programme showcases the potential for a financially viable, replicable, and scalable model that delivers positive environmental and social impact, while the Climate Community Dialogues and the Hong Kong Just Transition Report demonstrates the role of Talanoa Dialogue in delivering a Just Transition in urban setting.

As an engaged stakeholder, CCIL stands ready to support the development of a gold standard Framework that empowers cities' building sector to lead in delivering climate justice and securing a liveable climate future for all. However, truly realizing these goals will require an unwavering commitment to transparency, accountability, and justice from cities worldwide, with support from cities and subnational authorities, civil society, and the UNFCCC. By working together and adhering to the principles of integrity, transparency, and accountability, we can unlock the immense potential of cities and the building sector to drive ambitious climate action for all.

References:

1. Paris Watch Hong Kong Climate Action Reports (2018-2022)
2. Hong Kong Just Transition Report and Climate Community Dialogue
3. HKJC SolarCare Programme

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