

Global Dialogues on Cities: Buildings and Urban Systems

WorldGBC Proposal on Topics for the Global Dialogues

March 28, 2024

About

The World Green Building Council is the largest and most influential local-regional-global action network. Together, with 75+ Green Building Councils we bring together over 44,600 organisations to drive systemic change and deliver on the goals of the Paris Agreement. The collective work of the network demonstrates the breadth of solutions, policies and innovations that already exist across our three key impacts Climate Action, Health, Equity & Resilience, and Resources & Circularity.

Introduction

WorldGBC is pleased that the co-chairs of the [Sharm El Sheikh Mitigation Ambition and Implementation Work Programme](#) (MWP) have communicated that global dialogues taking place under the work programme in 2024 will focus on “Cities: buildings and urban systems”.

The MWP global dialogues can serve as a chance for Parties, observers, and other non-Party stakeholders to facilitate the exchange of information, ideas, and opportunities regarding the importance of the built environment and highlight its cross-cutting nature.

It is therefore key that the dialogues accurately reflect both the impact — but also the opportunity — that an integrated and holistic approach to action in the built environment can play in closing the gap to 1.5°C.

WorldGBC outlines below the opportunity the Global Dialogue presents and our recommendations on how topics the dialogues should cover.

The Opportunity of the Global Dialogues on Cities: Buildings and Urban Systems

Worldwide, buildings are responsible for 37% of global emissions, 34% of energy demand and 50% of materials consumption. Other environmental impacts of buildings include resource depletion, air, water and land pollution and biodiversity loss.

The built environment presents a massive opportunity to tackle the world’s climate and other pressing challenges. By 2050, the global population will increase by 27 per cent to 9.8bn, and the world’s building stock will double, dramatically increasing environmental, social and economic impacts associated with the built environment. Our sector’s demand for natural

resources fuels the climate crisis, and inefficient, unhealthy and poor-quality buildings affect our livelihoods and are less resilient to the impacts of climate change.

With such a significant impact, the dialogues must highlight the built environment as a key cross-cutting sector that can deliver the transformative change needed to decarbonise the global economy. As the largest contributing sector to carbon emissions, the built environment can do more and already has the climate solutions that need to be deployed at speed and scale. Collaboration across the sector's fragmented supply chain is key to accelerating actions and showcasing the many solutions that exist in the sector.

This 2024 dialogue topic that covers 'Cities: buildings and urban systems' provides a timely and unique opportunity to align and scale the solutions that already exist to ensure the sector is playing its optimal role in closing the climate gap.

Recommendation 1: Highlight the importance of Policies and NDCs in closing the emissions and resilience gap in buildings

The latest Intergovernmental Panel on Climate Change (IPCC) report tells us there is a rapidly closing window of opportunity to implement policies that will keep us within the 1.5°C warming limit.

According to the [2022 GlobalABC Status Report](#), despite an overall increase in NDC building actions, there is a growing gap between the actual climate performance of the sector and the necessary decarbonisation pathway, confirming that most of them fall short of the level of ambition to drive the performance levels needed. Based on the [2023 report update](#), there is a very limited number of countries that have a specific reference to building actions in the NDCs.

The report further states that, despite a growth in the number of adopted codes globally, more than 30 per cent have not been updated since 2015 and are unlikely to be mandating high performance standards. Only three countries have codes that are aligned with ZEB principles, while there is a lack of building codes in more than 110 countries.

Building codes relevant to energy differ between countries and regions. In 2022, only 26% of countries had mandatory energy codes for both residential and non-residential buildings. In Africa, where 70% of the building stock expected to exist in 2040 has yet to be built, only five countries have a mandatory building code. It is estimated that 82% of the population to be added by 2030 will be living in countries without any building energy codes or only voluntary codes (UNEP/GlobalABC, 2022).

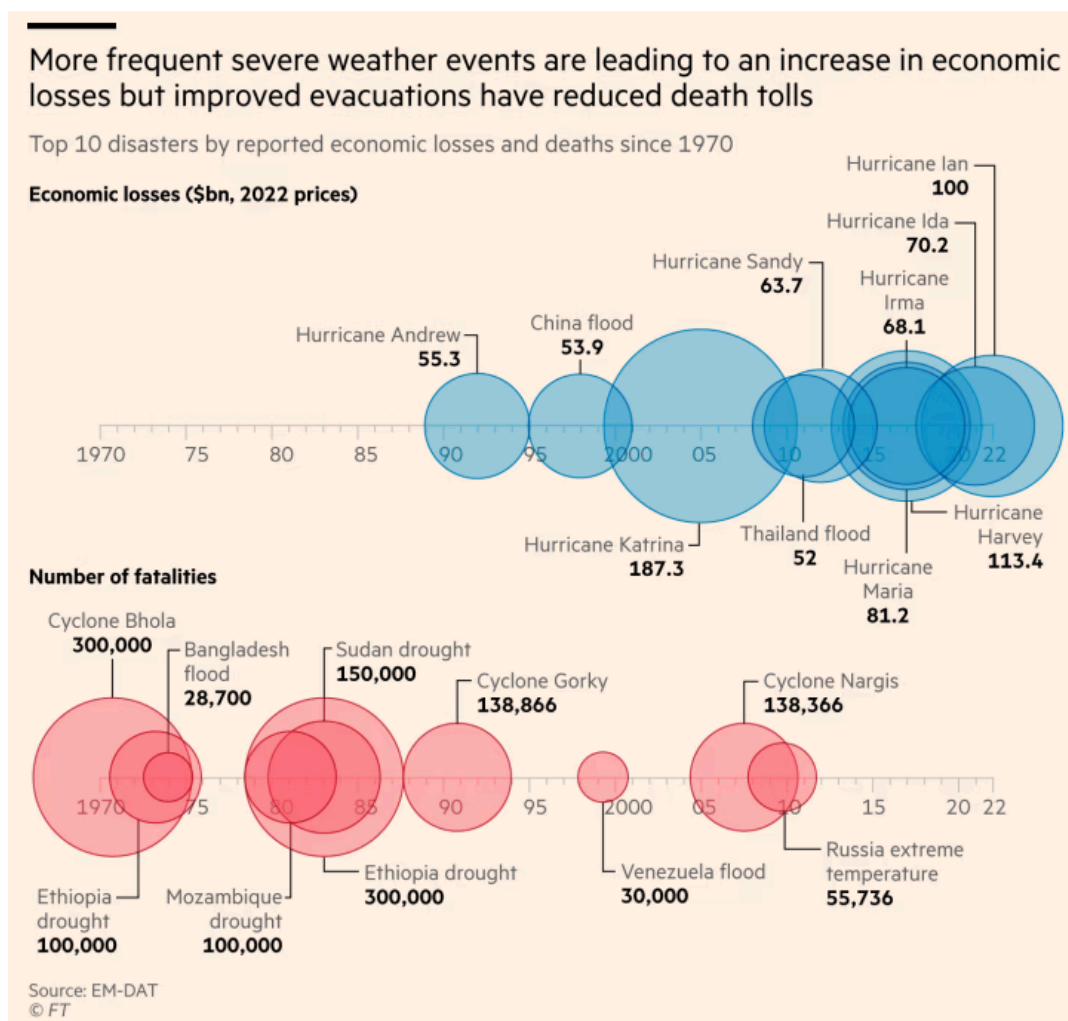
This clearly points to a need to close the policy gap, and this need is reinforced by the conclusion of the first Global Stock Take (GST) and the UAE Consensus which signalled the need for more ambition regarding buildings. Parties are requested to strengthen their 2030 targets and also to 'come forward' with economy-wide emission reduction targets that cover all GHG and sectors, clarifying a key role for the buildings sector.

Delivering on the above requires policy action now and this must be delivered through deep collaboration between governments and cities, regions, businesses and investors. Taking action to strengthen and implement building policies that support transformative action in the built environment will send a clear signal to the market and enable industry to deliver the innovative solutions needed to lower de-risk investment and lower the cost of the transition.

Recommendation 2: The dialogues must recognise the spiralling risks and the size of the investment opportunity

Our buildings are at risk and can destabilise humanity's global wealth.

Real estate is a major asset class accounting for two-thirds of global real assets and is at risk from physical risks. Insured losses from natural catastrophes have increased 250% in the last 30 years - it is becoming increasingly difficult to insure any building in areas prone to natural disasters ([World Property and Casualty Insurance Report 2022](#)).



Source: [The uninsurable world: what climate change is costing homeowners. Financial Times, 2024.](#)

Governments and their citizens need to better understand climate related risks on buildings and infrastructure. Insurers and reinsurers are increasing insurance premiums, or even pulling their offerings out of areas prone to natural risks. This is not only a symptom of spiralling risks from climate change, but also a reason for concern that costs from chronic and acute physical impacts from climate change will have to be borne by landlords and homeowners directly, and essentially backed by governments.

With additional global warming, risks are becoming increasingly intense, complex and more difficult to manage. Furthermore, there are limits to how much adaptation can reduce climate

risks - as climate change progresses, human and natural systems increasingly face adaptation limits (where adaptive measures become ineffective in reducing risk and safeguarding against harmful consequences).

A large majority of buildings are located in coastal areas, however governments are not well-equipped to assess future coastal risks. For example, current assessments of future coastal risks lack consideration of human population dynamics and do not take into account subnational spatial and temporal patterns of human development, such as urbanisation and migration ([EU Commission & IPCC authors, 2024](#)).

The first step to minimising physical risks from climate change is prevention, i.e. climate change mitigation. As governments meet to discuss the safeguarding of a stable, liveable climate, they should keep in mind the largely underestimated and under-researched risks from climate change to our global wealth and respond to the urgency to reform financial systems and rules starting with the mandatory disclosure of climate-related physical risks.

The transition to a sustainable built environment calls for massive upfront investments, benefitting the planet and people.

The building sector accounts for more than 50% of global wealth, offering a cost effective pathway to reducing energy demand and associated emissions while supporting adaptation and resilience.

We need roughly three times more annual investment in energy efficiency in the buildings sector between now and 2030 to fulfill IEA's Net Zero Scenario ([IEA, 2023](#)). With only incremental increases in the past years (even a slight decline in 2023), global energy efficiency investments barely surpassed 200 USD billion per year.

These additional investments needed to construct new, and retrofit existing, buildings as zero carbon buildings are in the order of billions and but a fraction of total annual 'conventional' investments, which are in the order of trillions. Construction investments amounted to close to 20 USD trillion in 2022 alone, according to [Oxford Economics](#).

By 2030, green buildings will offer close to 25 USD trillion investment opportunity in emerging markets, particularly across Asia and the Pacific, which will house half the world's urban population by 2030 ([IFC, 2023](#)).

At the same time, there is a growing body of evidence that green buildings outperform their non-green counterparts. In Belgium, a study found that the value of retrofitted properties increased by 7% more than non-retrofitted properties between 2011 and 2021; in London, JLL, a developer, asset owner and facility manager, found that buildings with sustainability credentials achieved an average capital value premium of more than 20%; in the Netherlands, the Energy Efficient Mortgages Initiative found that mortgages on more efficient buildings are less prone to default.

If better buildings drive up prices and rents then the green transition brings a big risk of increasing inequality - which will backfire. Energy poverty remains a major challenge and the decline in welfare due to the COVID-19 crisis as well as the inflation rise in the past 2 years may exacerbate energy poverty. More than 110 million people in developing Asia and Africa may have lost the ability to afford an essential and extended bundle of electricity services by the end of 2020 ([Tracking SDG 7, 2021 edition](#)). In China, 19% of households could not afford modern energy and 46% were sensitive to energy prices - households consumed less electricity than required for a "basic demand" ([Lin and Wang, 2020](#)).

Those suffering from energy poverty benefit the most from lowered operational energy expenses. This is because energy spending often has a much higher share in monthly spending of low-income households, yet those households cannot afford the investments that would help them out of the energy poverty trap ([Tracking SDG 7, 2021 edition](#)).

Public funds directed to green buildings alleviate energy poverty and reduce the need for fossil fuel subsidies, which hit an all-time record in 2022 (as did profits from fossil fuel companies). Governments provided over 1.7 USD trillion in public money to support fossil fuels in 2022 through direct subsidies (USD 1.3 trillion), investments by state-owned enterprises in G20 countries (USD 350 billion), and lending from public financial institutions by G7 countries and multilateral development banks (USD 22 billion) ([IISD, 2023](#)). The IMF further calculated that global fossil fuel subsidies amounted to over 7 USD trillion in 2022 (or roughly 7% of global GDP) by undercharging supply costs (such as tax exemptions) and due to undercharging for global warming and local air pollution (untaxed externalities) ([IMF, 2023](#)).

It is essential for the COP process and for governments to think beyond traditional one-dimensional business-case oriented arguments for sustainability in real estate and to address social inequalities in housing along climate policies. It is also important to focus discussion on raising finance to retrofit “worst performing” existing buildings in the Global North, and cost-effective, resilient, new green buildings in the Global South.

Investors’ are calling for an enabling regulatory environment - governments need to write financial regulation faster and more effectively

The largest lever to move the heterogenous built environment at the speed and scale needed to safeguard safe climate and functional ecosystems and to avoid greenwashing of investments is a sound regulatory framework covering industry and finance actors.

Limiting global warming to 1.5°C or 2°C this century requires us to decrease the energy intensity of our buildings to 85-120 kWh/m² by 2030 ([State of Climate Action 2023](#)). For this to happen, we need greater prioritisation of near-term climate investments, with rapid, deep reductions in GHG emissions in this critical decade, ie. 2020-2030 ([EU Commission & IPCC authors, 2024](#)).

We need targeted, smart, and effective public interventions to spur financial trigger points. The increase in energy efficiency investments in the building sector in 2022 resulted from a few policies such as the US Inflation Reduction Act in the USA, energy efficiency as a tool to ensure energy security in Germany, and green building standards in China (see [IEA, 2023](#)).

As one of the most direct links to the COP processes, an entry-point discussion should focus on the role of public financial institutions (PFIs) to effectively mobilise large-scale finance. Given their counter-cyclical role and ability to link diverse financial and political actors, PFIs are integral to supplying, channeling, and catalyzing climate finance from a range of sources, particularly in emerging markets and developing economies ([Climate Policy Initiative, 2023](#)).

In the wider market, Green Building Councils (GBCs) around the world have been at the forefront of catalysing sustainable finance for many years at a local, regional and global level, using tools such as green building certifications which many GBCs operate. These have become a de-facto gold standard for many sustainable investments.

WorldGBC has leveraged this pioneering work, shaped and defined green mortgage standards, influenced the recommendations of the first Technical Expert Group (TEG) on

climate mitigation criteria for the EU Taxonomy, and subsequently steered the definition of technical screening criteria for the building sector in the EU Platform on Sustainable Finance. In March 2023, WorldGBC released the paper ‘Ahead of the Wave: Financing the transition to a decarbonised built environment’, building upon the #BuildingLife initiative which led to the development of more than 10 national roadmaps helpful to guide investment decisions ([WorldGBC, 2023](#)),

Our recognised expertise in sustainable finance comes from decades of experience in both defining the environmental performance standards for buildings and infrastructure, as well as through GBC certification schemes and our network’s role as a catalyst for political and industry action to champion sustainable buildings through advocacy, training and awareness raising.

In 2022, WorldGBC launched the Sustainable Finance Taskforce, which amplifies and builds upon the work carried out by our network in order to strategically convene the finance community and built environmental professionals, as well as leverage our influence to drive the sustainability agenda across the real estate industry.

COP Dialogues can help knowledge sharing to develop effective policy packages and draw financial incentives, tuned to the regional/national context whilst building experiences in the market, both in terms of voluntary schemes and existing financial regulations by government and financial organisations, such as stock exchange authorities.

Recommendation 3: The dialogues should help align and scale solutions that already exist

The built environment represents a significant opportunity to reduce emissions by 2030, not through new technologies, but through existing climate solutions that can be delayed at scale today. However, owing to the fragmented nature of the supply chain, collaboration across the value chain is difficult to facilitate - yet is key to accelerating efforts.

WorldGBC has long championed the power of collaboration and, ahead of the UN Climate Summit COP26, joined with a group of organisations to create the ‘BuildingToCOP’ Coalition and form a partnership alongside the UN High Level Climate Champions. The goal of the coalition was to catalyse climate action in cities, regions and the built environment.

The Global Dialogues must draw attention to such collaborations and offer a platform to discuss solutions that already exist to support actions to scale them. Examples of such solutions being brought forward within WorldGBC’s network are listed below:

WorldGBC Advancing Net Zero Programme

Advancing Net Zero is WorldGBC’s global programme working towards our North Star Goal for Climate Action - total sector decarbonisation by 2050. The Advancing Net Zero team collaborate with 35 Green Building Councils across the network to:

- Increase awareness and education of the urgency and achievability of net zero carbon buildings;

- Achieve alignment and commonality between GBC approaches and certification schemes;
- Expedite uptake in global markets by sharing market leadership examples.

Across our five Regional Networks we are delivering programmes to accelerate the uptake of Net Zero to meet our ambitious global goal. Our [Asia Pacific Net Zero Readiness Framework](#) (currently also being implemented in our MENA and Americas regions) outlines clear milestones for government, industry, finance, as well as data and mindset to reach net zero and facilitates the development of national decarbonization roadmaps.

WorldGBC Net Zero Carbon Buildings Commitment

WorldGBC developed the [Net Zero Carbon Buildings Commitment](#) to recognise and promote advanced climate leadership action from businesses, organisations, cities and subnational governments in decarbonising the built environment, to inspire others to take similar action and remove barriers to implementation. The Commitment considers the whole lifecycle impact of buildings and builds on WorldGBC's [Whole Life Carbon Vision](#) and best practice principles for implementation.

Business signatories are required to reduce the energy consumption and eliminate emissions from energy and refrigerants in their buildings and remove fossil fuel use as fast as practicable (where applicable) by 2030. Where necessary, signatories must compensate for all residual operational emissions. New developments and major renovations must be built to be highly efficient, powered by renewables, with a maximum reduction in embodied carbon and compensation of all residual upfront embodied emissions.

As of 28 February 2023, there are 180 signatories, which includes 145 businesses and organisations, 29 cities, and six states and regions. The businesses and organisations signed up to the Commitment account for approximately 7.3 million (tCO₂e) of portfolio emissions annually, nearly 20,000 assets and \$400 billion annual turnover.

WorldGBC Global Policy Taskforce - Connecting Global Ambition with Local Action and Implementation

In 2023, WorldGBC Global Policy Task Force - consisting of Green Building Councils all over the world - launched the [“Global Policy Principles for a Sustainable Built Environment”](#). These principles support policymakers around the world to adopt a holistic approach to built environment sustainability, and ensure that new and updated policies and legislations deliver the transformative action needed to reach the Paris Agreement and Sustainable Development Goals.

The principles are structured around seven key focus areas: carbon, resilience, circularity, water, biodiversity, health, equity and access. These areas are supported by detailed policy levers to show how they can be effectively implemented through regulation, information and incentives.

Green Building Councils around the world are now working to ensure that these Principles can be integrated in Nationally Determined Contributions and local policies ahead of the 2025 update cycle.

WorldGBC Circularity Accelerator

The WorldGBC's [Circularity Accelerator](#) Programme was set up to catalyse action towards our [North Star Goal for Resource Efficiency and the Circular Economy](#), by convening our network to work towards a built environment with net zero whole life resource depletion, and the restoration of resources and natural systems within a thriving circular economy. With a Steering Committee of 20+ Green Building Councils around the world, the Programme is facilitating knowledge exchange of best practice around the world, leading the development of technical guidance, thought leadership and frameworks to accelerate the transformation of the sector, and collaborating with leading industry actors to leverage and scale market action.

The WorldGBC is also a founding partner of the [Circular Buildings Coalition](#), a flagship international collaboration driving circularity in the built environment through dedicated advocacy campaigns, industry guidance and solutions-oriented pilot project investments.

WorldGBC BuildingLife Campaign

The [#BuildingLife](#) project was launched to drive public and private sector progress on tackling Whole Life Carbon in Europe. The project has led to the development of an [EU Whole Life Carbon Roadmap](#) and 12 national Whole Life Carbon Roadmaps developed by GBCs across Europe with the involvement of stakeholders across the value chain.

It has also produced a [policy briefing](#) on the harmonisation of Whole Life Carbon reporting and target setting which achieved consensus among the 24 GBCs and seven partners in the WorldGBC Europe Regional Network.

The discussions that have taken place as part of #BuildingLife with EU and national policymakers have had a real impact and contributed to the [introduction of Whole Life Carbon measures](#) in the EU's Energy Performance of Buildings Directive for the first time, while at the national level:

- The Spanish government invited GBC España to draft a roadmap to implement WLC reporting in the Spanish building code.
- Irish GBC has built cross-party support for WLC policies in Ireland and gave evidence from their WLC roadmap at a parliamentary hearing.
- GBC Italia's discussions with the Italian government contributed to the introduction of WLC reporting into Green Public Procurement criteria.
- UKGBC presented their WLC roadmap to civil servants after the government debated a proposal for WLC to be introduced into building regulations.

WorldGBC Built4People Partnership

In 2021, WorldGBC entered into a strategic partnership with the European Commission and the European Construction Technology Platform (ECTP) to develop the topics and funding calls for allocating €380 million to advance sustainability in the European built environment. This year the first group of innovation projects were awarded. On 1 June 2022, WorldGBC hosted the inaugural Built4People Stakeholder Forum, bringing together almost 200

innovators from across the region to communicate the work of the partnership and how businesses and organisations can get involved.

Africa Manifesto for Sustainable Cities and the Built Environment

[The Africa Manifesto](#) was launched ahead of the UN Climate Summit COP27 in Egypt, articulating policies related to energy, water, materials, finance and infrastructure that African business leaders, city and government officials must support to deliver the 'Africa We Want': a net zero carbon, healthy, resilient, equitable, socially and economically inclusive built environment for everyone, everywhere.

The Manifesto is a collaborative piece of work developed with 15 African Green Building Councils (GBCs), [WorldGBC](#) and the [BuildingToCOP](#) Coalition partners ([High Level Climate Champions](#), [We Mean Business](#), [C40 Cities](#)).

Green Building Council Ratings Tools

Over half of World Green Building Councils member GBCs administer a [sustainable buildings rating tool](#). These tools are used to assess and recognise buildings which meet certain sustainability requirements or standards, recognising and rewarding companies and organisations who build and operate greener buildings.

They kick-start the market by setting standards that in turn elevate the ambition of government building codes and regulation, workforce training, and corporate strategies. In 2022 the collective floor space certified by these tools totalled 4.31 billion metres squared.

Green Building Policies

According to the [Global Status Report](#), 82 percent of countries now refer to buildings as part of their NDC action plans and 41 percent of countries have mandatory or voluntary regulations or codes for building energy performance.

The last few years have seen some key policy developments — often supported by local GBCs — which recognised the role of the Green Building Councils. Progress from several key markets is highlighted below:

- **Europe: Ongoing Revision on the Energy Performance of Buildings Directive (EPBD).** At the end of 2023, EU legislators agreed on a revision to the Energy Performance of Buildings Directive, which the European Parliament has since approved. The new EPBD mandates zero emission standards for new public buildings by 2028 and all new buildings by 2030. European Union countries must cut residential energy use by 2030 or 2035, targeting inefficient buildings first, and enforce MEPS on non-residential buildings from 2030. Funding for new fossil fuel boilers is banned from 2025, with a complete phase out by 2040. The policy also requires calculating and reporting the Global Warming Potential for new buildings by 2030, alongside implementing Whole Life Carbon targets. You can read more about the EPBD vote and the contribution of WorldGBC and our network of GBCs [here](#).

- **US: Inflation Reduction Act.** In 2022, President Biden revealed the Inflation Reduction Act (IRA). [This briefing](#) from USGBC outlines the provisions related to green building and sustainable communities in the IRA.
- **Japan: Building Energy Conservation Act.** In July 2022, Japan revised and strengthened its Building Energy Conservation Act, aiming for compliance with building energy efficiency standards across the building stock by 2025.
- **Chile: National Energy Efficiency Plan.** Between 2022–2026, Chile’s National Energy Efficiency Plan aims to reduce thermal energy demand in buildings by 30 per cent by 2026 and 50 per cent by 2050 over 2019 levels, through the promotion of energy-focussed retrofit, district energy programmes and capacity building. This builds on the 2021 Energy Efficiency Law, which states that new buildings in the residential, commercial and public sectors must have a certified energy label.