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Press Release

### **Not yet built for purpose: Global building sector emissions still high and rising**

**Nairobi, 7 March 2024** – Energy demand and emissions from the building and construction sector represent over a fifth of global emissions. In 2022, a 1 per cent increase in the sector’s emissions was equal to 10 million more cars circling the Earth’s equator. At the same time, the sector’s energy intensity dropped by 3.5 per cent. These are key findings of a report published by UN Environment Programme (UNEP) and the Global Alliance for Buildings and Construction (GlobalABC) today.

The 2023 Global Status Report for Buildings and Construction tracks progress and outlines recommendations for governments, industry, and civil society towards a zero-emission, efficient, and resilient buildings sector by 2050. It was published on the first day of the [Buildings and Climate Global Forum](#) in Paris.

The report finds that in 2022 the sector accounted for 37 per cent of global operational energy and process-related CO<sub>2</sub> emissions, rising to just under 10 Gt CO<sub>2</sub>. Its energy consumption reached 132 exajoules, more than a third of global demand.

“There is no credible path to address climate change without a fundamental shift in the building and construction sector,” said Inger Andersen, UNEP Executive Director. “Half of buildings that will exist by 2050 have not yet been built. This is a major opportunity for the sector to reimagine the buildings of the future – buildings that prioritise resilience, renovation and reuse, renewable energy generation and low carbon construction, all while addressing social inequalities. Now is the time for governments and industries to follow up on COP28 promises and deliver real-word emission reductions through a true buildings breakthrough.”

The first [global stocktake report](#) indicated that to achieve the goals set out in the Paris Agreement, deep, rapid and sustained reductions in greenhouse gas (GHG) emissions will require ‘Tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030.’ The buildings sector has a key role to play: Energy intensity in the building sector would have to drop by 37 per cent from 2015 levels by 2030. While 2022 saw a modest reduction, it remained 15 per cent above the target trajectory.

In 2022, renewable energy’s share in buildings’ final energy consumption was only 6 per cent, significantly behind on progress needed to reach the 18 per cent target by 2030. The cumulative investment in energy efficiency and high-performance buildings should have been 40 per cent higher, totalling USD 2.7 trillion.

Overall, investment in decarbonising buildings rose in 2022 by 14 per cent to USD 285 billion, largely thanks to the US and European response to energy insecurity. Yet it fell short of net-zero targets for 2030 and 2050 and investments have likely

declined in 2023 to USD 270 billion, even though energy efficiency investments help mitigate both risks to exposure to energy cost volatility and GHG emissions.

A key reason for last year's decrease in energy intensity per metre is the 81 countries with building energy codes. At the same time, 2.4 billion square metres of floor space – an area equal to Spain's entire building stock – were added in 2022 in countries without any building energy codes. 80 per cent of floor area growth expected by 2030 is expected in low-income countries that lack stringent building codes.

Climate Action Roadmaps for the sector can accelerate decarbonisation through collaboration of policymakers, private companies, and NGOs on incorporating material efficiency strategies, low-emission design and technologies, electrification, and renewable energies. Over 15 national and regional buildings and construction roadmaps have been facilitated with the GlobalABC, with 34 countries adopting strategies for decarbonising the building sector. The report calls on all countries to develop similarly ambitious and comprehensive Climate Action Roadmaps for the sector by 2030 and use them in submitting and revising a new cycle of national climate action plans (NDCs).

Additional priorities for governments, businesses and civil society include:

- Developing building energy codes aligned with Zero-Emissions Building (ZEB) principles: As of 2022, only 3 countries have established such energy codes.
- Increasing the rate and impact of retrofitting existing buildings for energy efficiency, from the current 1 per cent to 5-10 per cent per year.
- Adopting passive design measures for all new buildings.
- Collecting data, via tools such as [Building Passports](#).
- Financial incentives for greater investment in decarbonising the buildings and construction sector, including in innovation and a shift to reuse, circularity, natural/bio-based materials, or green mortgages offered by banks: Investments to decarbonisation are expected to fall across 2023 as households and businesses face higher borrowing costs and builders face higher costs of construction in labour and materials.
- Companies in the sector are also encouraged to develop a sound understanding of their social impacts, by incorporating equity and diversity standards into their work.
- NGOs can raise awareness of buildings' role in climate change and advocate for policy changes towards inclusive and sustainable design approaches.

A welcome development in 2023 was the [Buildings Breakthrough](#) launched at COP28, to coordinate between countries to make clean technologies and sustainable solutions in the buildings and construction sector the most affordable, accessible, and attractive option in all regions by 2030.

UNEP, GlobalABC members, and other partners will maintain efforts towards a new framework for decarbonising new and existing buildings and the entire building value chain, including urban development and national development plans, climate adaptation, and inclusion. UNEP as a member of the GlobalABC supports the continued development of climate action roadmaps for the sector, as it completes four new pilots in Ghana, Senegal, Bangladesh, and India.

**NOTES TO EDITORS****About the UN Environment Programme (UNEP)**

[UNEP](#) is the leading global voice on the environment. It provides leadership and encourages partnership in caring for the environment by inspiring, informing and enabling nations and peoples to improve their quality of life without compromising that of future generations.

**About the Global Alliance for Buildings and Construction (GlobalABC)**

Founded at COP21, hosted by UNEP and with 291 members, including 42 countries, the [GlobalABC](#) is the leading global platform for all built environment stakeholders committed to a common vision: A zero-emission, efficient and resilient buildings and construction sector.

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