

Global Status Report for Buildings and Construction 2024-2025: Key Messages

The [Global Status Report for Buildings and Construction 2024-2025: Not just another brick in the wall](#) published by the UN Environment Programme (UNEP) and the Global Alliance for Buildings and Construction (GlobalABC), provides a snapshot of the sector on a global scale using the latest data.

Since the signing of the Paris Agreement in 2015:

- Policies prove to be working but need to be implemented faster, on a greater scale.
- Buildings consume 32% of global energy.
- Buildings contribute 34% of global CO₂ emissions.
- Materials, like cement and steel, drive 18% of building CO₂ emissions.
- Insufficient progress to reach the Paris Agreement goals:
 - In 2023, for the first time, global floor surface growth was decoupled from GHG emissions, which have plateaued in the sector.
 - Between 2015 and 2023, energy intensity of the sector declined by 9.5%, short of the 18.2% target.
 - Total CO₂ emissions from building operations still rose by 5.4%, lagging the 28.1% reduction target.
 - Renewable energy's share in final energy demand rose by 4.5% points, below the 17.8 percentage point goal.
 - Cumulative energy efficiency investments grew. Still missing USD 1.1 trillion.

Looking forward:

- By 2030, energy demand in the sector is expected to peak in high-income countries and then decline by 0.3% annually through to 2050.
- In middle- and low-income countries: Energy demand in the sector to rise by 1.5% until 2030 and by 1.3% annually until 2050, mostly for cooling needs.
- To meet 2030 targets, annual improvement now needs to accelerate to almost twice the original rate required in 2015.

Strides in global, regional and national policy:

- Global forums sustain momentum and highlight best practices with the Brazil, France and Kenya-led Intergovernmental Council for Buildings and Climate (ICBC), the [Declaration de Chailot](#), the [Buildings Breakthrough](#), and the G20's [Voluntary Action Plan on Doubling Energy Efficiency](#) by 2030.
- 80% of countries address mitigation in buildings in climate action plans (NDCs).
 - Yet only 18% feature quantifiable targets.
 - Financial pathways are inconsistent.
 - Only 19 countries have detailed actions integrated building sector strategies.
 - Just two countries have implemented energy codes aligned with Zero Energy Building standards.
- Mandating Extended Producer Responsibility offers a way of curbing emissions: being pursued by the Netherlands, France, and India.
- The report highlights more positive national policies from the Arab region, Australia, Bangladesh, China, Denmark, EU, France, Germany, Ghana, India, Kenya, Mexico, The Netherlands, Nigeria, Rwanda, Senegal, South Africa, Tunisia, UK, USA, and Vietnam.

Building energy codes:

- Ambitious energy codes: most effective tool to curb operational emissions.
- 85 countries have codes for residential buildings, 80% are mandatory.
- Half of new buildings stick to traditional ways: of nearly 51 billion square meters of floorspace newly constructed in emerging and developing economies, over 50% remains uncovered by building codes.
- Just three countries updated building codes in 2024 (it was over 20 in 2023).

Adoption of renewable energy and electrification:

- 17% of total energy demand in buildings was met by renewable sources, especially for heating and cooling.
- 30 countries mandate the use of renewable energy for buildings.
- Natural gas consumption dropped by over 4%, continuing trend since 2022.

Growing demand for green leases for low-carbon office spaces from over 7,600 companies in several OECD economies, including Australia, France and the USA.

Circular construction practices gain ground: e.g., recycled materials account for 18% of construction inputs in Europe.

Six challenges to close the emissions gap on buildings and construction:

- I. **Building Codes:** Major carbon-emitting countries need to adopt mandatory zero-carbon building energy codes by 2028; Other countries with existing codes need to make zero-carbon-ready standards mandatory by 2030; Countries without codes to establish a pathway to mandatory adoption by 2035.
- II. **Building energy efficiency retrofits** (including efficient and passive design, insulation, HVAC systems like heat pumps, and renewable energy): the rate of building energy efficiency retrofits should be tripled by 2030 to achieve 35% reduction in energy intensity.
- III. **Renewable energy adoption:** Reflect global goal of tripling renewable energy in buildings; Accelerate deployment of renewables on-site from 6% to 18%; Raise the total share of energy consumed from renewable sources (on- and offsite) from 17.5% to 46% by 2030.
- IV. **NDC integration:** Major emitters to include detailed building code reform plans in NDC 3.0 submissions; Use Biennial Update Reports to track progress.
- V. **Embodied carbon:** Major emitters to adopt embodied carbon limits in building codes by 2030, with clear guidance on reporting. Other countries promote low-carbon materials, prioritizing reuse, and setting stretch targets.
- VI. **Finance remains a critical challenge:** Double global building energy efficiency investment from \$270 billion to \$522 billion by 2030. All governments to ensure financing accounts for carbon costs and social value of decarbonizing buildings.
 - Global investment in buildings' energy efficiency in 2023 fell by 7% to USD 270 billion (from 290 billion in 2022), with rising borrowing costs and the tapering of government programs, particularly in Europe.
 - Only 4% of total global investment in building construction was directed towards green and energy-efficient projects.
 - Construction cost to remain high, due to demand for construction, project pipeline, and lack of skilled workers, and despite a slowdown in global construction cost inflation.