

# Expert Group and Intersessional Thematic Meeting on: Housing Sustainability

## OEWG-H process

The Open-ended Intergovernmental Expert Working Group on Adequate Housing for All (OEWG-H) was established pursuant to resolution 2/7 on Adequate Housing for All, adopted by the UN-Habitat Assembly in 2023. Accordingly, the first session of the OEWG-H was held at the headquarters of UN-Habitat in Nairobi on 9-11 December 2024. The elected co-chairs, France and Kenya, developed a road map for 2025, which includes virtual intersessional meetings to pursue the work on the identified priority thematic areas, and a second meeting of the Working Group (OEWG-H2) to be held in 2025.

In June 2025, virtual intersessional thematic meetings were held for each of the four topics: Housing Finance, Tenure Security, Informal Settlements, and Social Housing. Member states made observations and recommendations on each theme. The draft recommendations will be presented at the second session of the OEWG-H, scheduled to take place in Nairobi from 22 to 23 October 2025.

A second round of virtual intersessional thematic meetings will take place in September. There will be two sessions for each topic to cater to different time zones, according to the following schedule:

- **Sustainability:** 16th September 2025 10:00-1:00 pm EAT (English, Russian, Arabic) and 4:00-7:00 pm EAT (English, French, Spanish, Arabic)
- **Definition of Homelessness:** 17th September 2025 10:00-1:00 pm EAT (English, Russian, Arabic)
- **Definition of Informal Settlements:** 17th September 2025 at 4:00-7:00 pm EAT (English, French, Spanish, Arabic)
- **Monitoring framework:** 18th September 2025 10:00-1:00 pm EAT (English, Russian, Arabic) and 4:00-7:00 pm EAT (English, French, Spanish, Arabic)

The recommendations from the sessions held in September will be presented at the third session of the OEWG-H in 2027. Similar processes will take place in the following years, and a comprehensive set of housing policy recommendations will be presented at the third session of the Habitat Assembly in 2029. Such recommendations will already guide policy reform at the country level before 2029 and will inform other key multilateral processes.

## Objectives of the meeting

The meeting intends to review and provide input to the information contained in this paper, particularly:

1. Describe the key challenges, trends and opportunities related to the environmental sustainability of housing, and
2. Provide draft recommendations for actions for the overall environmental sustainability of the housing sector.

## Housing Sustainability Global Challenges

Adequate housing is recognized as a human right (UDHR, 1948) and a cornerstone for health, education, employment, and social well-being. Yet, globally, over 1.6 billion individuals worldwide reside in inadequate housing. By 2050, it is anticipated that 70% of the global population will live in cities, with up to 3 billion individuals, or approximately 40% of the global population, residing in slums and informal settlements. Demand for new housing is unprecedented; 60% of the buildings required by 2050 still need to be constructed, creating both a challenge and an opportunity to steer urban development toward sustainability and inclusivity.

At the same time, climate change accelerates vulnerabilities. Housing is both a contributor—the building and construction sector being responsible for 37% of energy-related CO<sub>2</sub> emissions—and a victim of climate impacts, with poor, informal, and unregulated housing being most exposed to the effects of climate change, especially extreme weather, heatwaves, and cold fronts. Communities in informal settlements—often lacking resilient infrastructure—are particularly exposed.

To address the global housing crisis and growing demand amidst the three planetary crises—climate change, biodiversity loss, and pollution—along with resource depletion and rising energy needs, sustainability must be central to global housing policy. Sustainable housing goes beyond eco-friendly construction, integrating environmental, social, and economic dimensions to ensure affordable, secure, and inclusive living conditions. Increasingly, environmental sustainability is recognized as an essential “eighth element” of housing adequacy, vital for building equitable and resilient housing systems.

### Environmental Impact of Housing Development

Housing is a significant driver of environmental impact, responsible for 21% of global GHG emissions and 40% of CO<sub>2</sub>, with around 70% stemming from building operations. It accounts for 30% of raw material extraction, is heavily reliant on carbon-intensive concrete and metals and consumes 12% of global freshwater.

Most buildings are not designed for reuse, leading to substantial construction and demolition waste. Demolitions intensify pollution, resource use, and social vulnerability. Limited systems for material recovery further hinder progress toward circularity.

Urban expansion converted 0.93 million km<sup>2</sup> of natural landscapes to built-up areas between 2000 and 2020, with another 0.5 million projected by 2050. This consumes farmland, fragments habitats, and reduces ecosystem services. Informal and unplanned sprawl heightens flood risks and weakens land governance, threatening productivity and ecological resilience.

### Positive Contributions of Sustainable Housing

Sustainable housing delivers critical environmental, social, and economic benefits. It reduces emissions through efficient design, renewable energy, and sustainable materials, while strengthening resilience to climate risks. Health outcomes improve through better air quality, thermal comfort, and access to clean energy, reducing illness and premature deaths. Economically, energy savings and green construction create jobs, raise property values, and reduce public costs. Socially, upgrading informal settlements and expanding affordable housing foster inclusion, stability, and protection for vulnerable groups. In sum, sustainable housing is both a climate imperative and a driver of equity and development.

## Regional Energy Use and Mitigation Potential in Residential Buildings

Global demand for resources and housing energy has been steadily increasing. Yet the housing sector remains one of the most impactful and cost-effective areas for climate action. Improvements in energy efficiency, integration of low-carbon energy, and climate-responsive design provide practical pathways to cut emissions while enhancing housing adequacy.

The challenges and opportunities differ across regions. In rapidly urbanizing areas, much of the housing that will exist in the coming decades has not yet been built, creating a critical opportunity to adopt efficient, resilient, and inclusive design standards from the outset. In more developed housing markets, the priority lies in upgrading and retrofitting existing buildings to reduce energy use, enhance resilience, and improve living conditions.

## Barriers to Adopting Sustainable Housing Solutions

Decarbonizing housing faces multiple, interconnected barriers. Despite advances in energy-efficient and low-carbon technologies, adoption is slowed by high upfront costs, limited finance, and weak subsidies—especially in the Global South.

Information gaps, poor labelling, and a lack of intermediaries leave many households unaware of benefits, while cultural preferences and risk aversion dampen demand. On the supply side, shortages of skills, affordable materials, and stable policies further limit progress.

Rapid urbanisation often drives low-quality, low-cost development, while retrofitting remains complex and costly. As a result, many older buildings risk becoming stranded assets, deepening inequality.

Informal settlements—home to over a billion people—are especially neglected. Between 2003 and 2023, they received only 3.5% of global climate finance, despite being among the most climate vulnerable.

## Emerging Positive Trends

Encouragingly, efforts are underway to decarbonize housing through energy efficiency retrofits, low-carbon construction, and renewable integration. Nature-based solutions, risk-informed building codes, and passive cooling strategies are increasingly applied. Social sustainability is strengthened through participatory upgrading of informal settlements and inclusive urban planning. Fiscal tools and targeted subsidies are beginning to link affordability with sustainability, while local governments and communities lead innovation in adaptation and resilience.

## Key questions

EGM participants will be asked to reflect and answer the following questions on the environmental sustainability of housing:

1. What key recommendations can guide efforts to balance the urgent need for new housing, particularly in emerging economies, to achieve environmental sustainability?
2. What are the key changes and recommendations required in green building certification to ensure they account for housing sustainability of informal housing practices and adapt to diverse socio-economic and climatic conditions?
3. How can housing sector align land-use planning, efficient water, energy management and circular economy principles to achieve sustainable, resilient and inclusive urban growth?