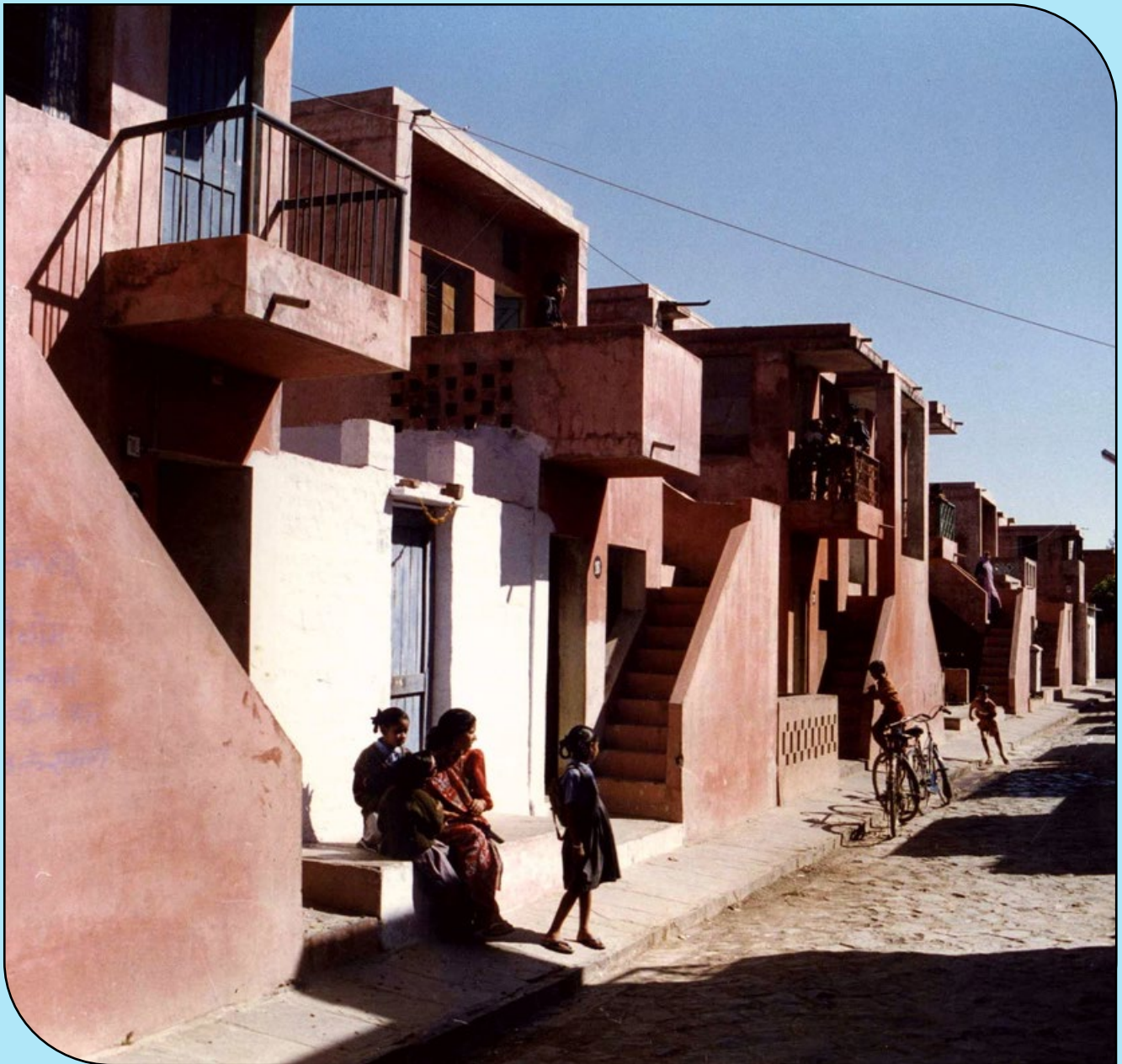


Reframing housing construction

Aligning clean construction with the human right to adequate, affordable housing



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June 2026. This paper is prepared by **The Shift** and **C40 Cities**. The work is independent and has not been commissioned or influenced by any business, government or other institution.

The Shift is a global nonprofit, led by Leilani Farha, the former UN Special Rapporteur on the Right to Housing, which connects and mobilises anyone working to secure the right to housing, to end homelessness, unaffordability, and evictions globally.

C40 is a global network of nearly 100 mayors driving climate action for the 920 million people who live and work in and around C40 member cities, representing approximately 23% of the global economy.

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Cover image:Aranya Low Cost Housing, Indore, India. Credit: Vāstu Shilpā Foundation

About

This white paper was created to support local and subnational governments to act on the affordable housing and climate crises by reframing their approach to policy, practice and engagement with the construction and real estate sector. This paper invites dialogue with the construction and real estate sector and aims to build on and scale leading solutions globally.

The paper discusses the topic of 'affordable housing' which has many definitions rooted in local and historical contexts and varies greatly from one region to the next. This paper does not attempt to propose a single definition or give preference to a single interpretation but is guided by the United Nations seven characteristics for the human right to adequate housing.¹ For the purposes of this paper, broadly speaking 'affordable housing' is discussed as adequate housing which is affordable to rent or buy at a ratio of up to 30% of household gross income.

Housing is a right, not a privilege.

- Clara Brugada Molina, Jefa de Gobierno of Mexico City

We must commit to housing development as a tool to fight poverty.

- Carlos Fernando Galán, Mayor of Bogotá, Colombia



Public housing renewal in Praga district, Warsaw, Poland. Credit: C40

Introduction

There is a lingering fear that going green makes housing more expensive, and that building fast means ignoring the planet.

Around the world, city leaders are recognizing that solving the housing crisis and fighting the climate emergency must be addressed together. To many, these feel like competing priorities. There is a lingering fear that 'going green' makes housing more expensive, and that 'building fast' means ignoring the planet. The affordable housing crisis is often oversimplified as a matter of supply and demand, but this narrative fails to explain the macroeconomic factors behind it.² What is needed is not just more homes. Cities need more homes that are habitable, affordable and sustainable, and well-suited to people's needs for today's realities and tomorrow's uncertainties. Cities are at a point where they can no longer afford to treat social justice and environmental sustainability as separate.

Between 2016 and 2021, total public investment in housing and community amenities increased by roughly 40%.³ With so many competing priorities, however, climate action can be seen as an obstacle to affordability. This white paper addresses the tension by aligning the human right to housing with the principles of clean construction.

The Shift is a social organisation set up to address the deeply rooted causes of housing unaffordability and the structural inequalities that reproduce homelessness. They are guided by the United Nations human rights framework and advocate for housing systems that implement housing as a right and social good.

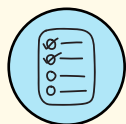
C40 is a global network of nearly 100 mayors driving climate action for the 920 million people who live and work in and around C40 member cities. C40's three missions are to halve fossil fuel use by 2030, increase urban resilience against climate impacts, and ensure a fair, inclusive green transition. C40, through its Inclusive Climate Action Programme, mainstreams equity in C40's work to support member cities to implement actions that follow inclusive processes, policy design and distribution of equitable impacts.⁴

C40 and The Shift have brought their existing frameworks together (see figures 1 and 2): the legal terms of the right to housing and the principles of clean construction. This offers a reframing of the challenges to affordable housing provision by looking at how the right to housing reinforces the social outcomes of clean construction solutions and how these solutions can ground the right to housing in practical applications with environmental outcomes. **Combined, these two frameworks create the foundations for meaningful and productive discussion about the key role of city governments globally to accelerate affordable housing delivery in a fair, equitable and sustainable manner.**

City governments can deploy hard and soft powers to unlock some of the challenges, starting with convening a diversity of actors to help shape policy and practice which puts communities, particularly marginalised ones, at the centre of the housing system. Local and subnational authorities are already delivering numerous world-class examples of affordable and sustainable housing by deploying a range of powers to overcome financial barriers.⁵

This paper provides the framing for solutions and outstanding city examples which can be scaled in different contexts. It aims to spark conversation on the collaborative mechanisms and solutions that already exist, to scale them and accelerate action in response to climate breakdown, while guaranteeing everyone the right to a healthy, safe, dignified and affordable home.

FIGURE 1: The Shift's Right to Housing framework



Progressive realization

The right to housing is a process requiring governments to take deliberate, concrete, and targeted steps towards the goal of ensuring the full realization of the right to housing for all. This requires governments to take immediate, urgent, and expeditious actions and protect the most vulnerable and marginalized population and ensure that homelessness and housing precarity do not continue to rise.



Reasonableness

When securing the right to housing, governments are held to the standard of reasonableness. This means that measures, allocated resources, and timeframe must be proportional to the magnitude of the issue and the objective capacity of the public authority. Reasonableness requires governments to proactively and honestly identify barriers to the realization of the right to housing and create plans that are, to the greatest extent possible, aimed at securing this right.



Meaningful participation

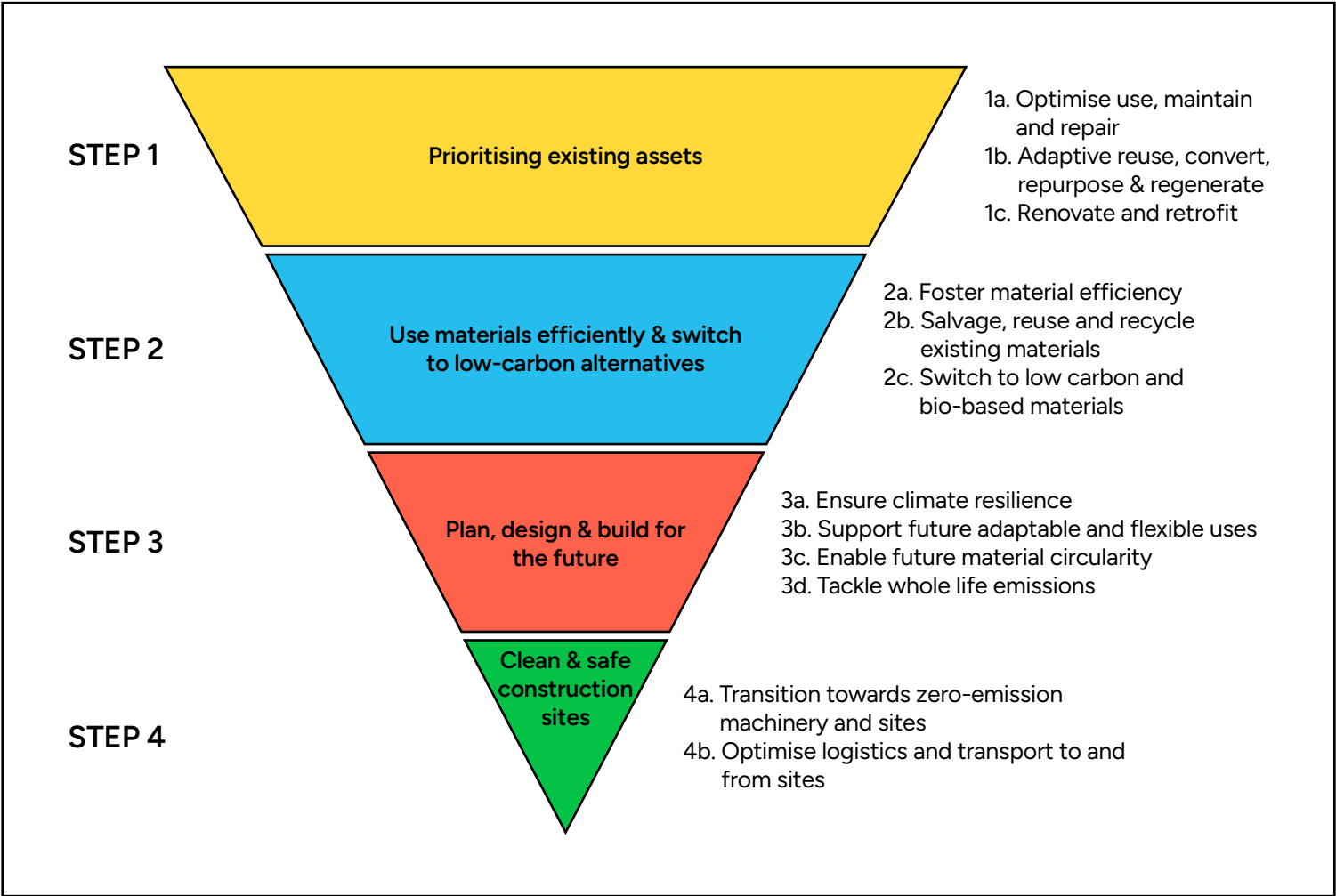
As policy is developed for a given area or community, it is a necessity that those who will be impacted by the policy are a part of developing it. This means that the solutions must be created collaboratively, ensuring individuals and communities have a say in every step of the process. Meaningful engagement and participation ideally culminate in unique, sustainable, functional solutions to meet community needs.



Maximum of available resources

When governments commit to securing the right to housing, they commit to using all the resources they have available or can make available in order to progressively realize the right to housing, and whether all resources that may be available have been levied (taxation). Resources are also not just about money, they are also about investing time, people, and capacity.

FIGURE 2: C40 Clean Construction Hierarchy⁶



Human rights understands that the housing and climate crisis took decades to form and they will not be solved overnight, it will require progressive realisation

How the right to housing strengthens clean construction

This section focuses on four key principles on the implementation of the right to housing (figure 1) and illustrates how they reinforce the clean construction hierarchy (figure 2).

The right to adequate housing is understood to be more than just four walls and a roof. Rather, it is a place to live in peace, security and dignity.

For housing to be adequate, it must fulfil seven key characteristics:⁷

1. Security of tenure
2. Availability of services
3. Affordability
4. Habitability
5. Accessibility
6. Location
7. Cultural adequacy.

While the right to housing is considered a fundamental human right, this does not mean that governments must provide housing for everyone immediately. It actually means that

governments must take immediate steps and use the maximum of their available resources to deliver on this right. The four key principles outlined in figure 1 are the guiding human rights standards, and in the following section they highlight how these can support clean construction practices for the delivery of adequate, affordable housing.

Progressive realisation

Realising the right to housing is not an immediate obligation for cities. It is an incremental process that takes progressive steps towards delivering adequate housing for all, starting with those who are most vulnerable, such as those living in homelessness or housing precarity. These steps should be precise, ideally with municipal governments developing housing strategies that outline their goals and targets based on housing needs, and delivered over clear timelines. Human rights understands that the housing and climate crisis took decades to foment and they will not be solved overnight, it will require progressive realisation.



BE+ST construction innovation centre where they are testing low carbon and modular homes to house the homeless, Glasgow, UK. Credit: C40

The benefit of progressive realisation is that it allows municipal governments the space to innovate, so that they can develop construction practices that deliver on adequate housing within planetary boundaries. For example, carrying out assessments of a city's built environment to better understand how existing assets can be prioritised for affordable, adequate housing. This kind of information gathering is a step towards progressive realisation because it informs more effective use of spaces and more coherent coordination between housing, planning and climate departments. Progressive realisation does not mean the simple building of new housing supply, it can look like a city developing the knowledge and institutional capacity to deliver on sustainable, adequate housing more effectively.

Maximum available resources

Maximum Available Resources (MAR), as a human rights principle, has traditionally been understood as requiring governments to ensure sufficient funds and capacity to deliver housing. There is now a broader understanding that MAR should be interpreted as far beyond financing and delivery capacity to include the use of all municipal regulations and levers to protect existing affordable, adequate housing, and to assess the existing built environment so that it may be adapted to increase the supply of affordable, adequate housing.

Cities can use incentives and regulations to prioritise existing assets (see below three case studies under 'prioritising existing assets') but must also dedicate efforts to retain and acquire existing buildings by not selling off social infrastructure or public assets to the private market, as well as advocating for municipal tools like the right of first refusal.⁸ Municipal governments should also try to invest in developing in-house expertise, including real estate brokers, developers and financial experts, so that they have the necessary competencies to negotiate with private actors.

The principles of MAR equally apply to the efficient use of building materials, and ensuring materials are reused, salvaged and recycled where possible. This not only reduces embodied carbon and construction costs, but supports the delivery of more adequate, affordable housing by ensuring finite materials, public funds and city capacity are directed as efficiently as possible toward housing needs.

Meaningful participation

To respect human rights and tailor interventions for local needs, communities and individuals must have a meaningful say in the housing policies that impact them, particularly if those policies are meant to embed resiliency. Communities are keepers of vast knowledge on how their homes can be adapted or reused to serve their current and future needs. Meaningful participation addresses real needs, not expert assumptions alone. It helps bring hyper-local context and local ownership which ensures long-term stewardship. It helps to overcome the green gap, which arises when residents are not meaningfully engaged in green building or retrofit processes and so lack the knowledge and expertise to use their homes as efficiently as possible. As a result, they also do not benefit from energy savings projected at the design stage. Directly involving residents in retrofits, for example, provides education on how their living space is insulated and heated, enabling them to use their homes more efficiently and maximise energy-saving measures.

When local governments use their close proximity to communities to ensure meaningful participation, resources are used more effectively because solutions are designed around actual needs rather than assumptions. This reduces the risk of costly redesigns, underperforming retrofits, and programmes that fail to gain community support. This approach doesn't just build structures, it builds community stewardship. Communities are far more likely to take active ownership of their homes and shared spaces, directly extending the lifespan of buildings.

Reasonableness

Municipal government action is not bound by the principle of perfection. According to human rights law, it must be assessed against the standard of reasonableness, taking into account each government's specific circumstances, available resources, and capacity, while recognising that the urgency of the housing and climate crises demands the most ambitious action possible to transform construction practices in ways that simultaneously advance the right to housing and respect planetary boundaries.

In practice, a reasonable housing and construction policy is one that is comprehensive, coordinated across departments (not just housing departments), and gives priority to those in greatest need. It does not require cities to solve the housing crisis immediately, but it does require that their policies reflect a genuine and coherent effort to do so. A city that focuses its clean construction investment exclusively on new, high-end development, while leaving homelessness unaddressed, would struggle to meet this standard. Reasonableness asks whether the overall approach is responsive to the full scale and nature of housing need, including the needs of the most vulnerable.

For municipal governments, this is a useful design principle. It creates space to pilot, learn and refine approaches, while maintaining a clear obligation to demonstrate that each successive policy cycle is moving in the right direction. Applied to clean construction, this might mean prioritising retrofit programmes for low-income communities who face the greatest exposure to energy poverty and inadequate housing conditions. It also means taking active steps to stop the loss of existing affordable housing stock, whether through vacancy taxes, tenant protections, right of first refusal mechanisms, or conditions attached to planning permissions. What matters is that the trajectory is clear, the reasoning is transparent, and the most in need are not left waiting indefinitely while more ambitious solutions are developed.

When applying clean construction to the right to housing, every affordable home becomes a climate solution.



Reinventing cities competition winning project, Campus for Living Cities built with cross-laminated timber in Madrid Spain, Credit: C40

How clean construction strengthens the right to housing

To look at these two frameworks another way, and to see how clean construction supports the right to housing, some clear examples emerge where cities are playing a leading role.

By adopting clean construction approaches to deliver decarbonised, resource-efficient, resilient and socially just construction systems, with a right-to-housing approach – cities can establish a shared set of values and legal responsibilities for public-sector bodies and private entities to uphold. When applying clean construction to the right to housing, every affordable home becomes a climate solution.

Cities can simultaneously cut emissions, clean the air, and house people quickly and safely, in homes that are sustainable, energy efficient and affordable. Instead of choosing green buildings for the few, or adequate housing for the many, it is possible to deliver both: resilient, low-emission, adequate homes that individuals and families can afford. The following headings outline the benefits of local governments implementing clean construction by linking environmental and social aims.

Prioritise existing assets

Between 20-50% of a building's emissions over the course of its lifetime are 'hidden' or embodied⁹ in its materials and construction. Demolishing a structure wastes this embodied carbon and requires significant additional carbon output to build a replacement. Studies show that reusing an existing building can reduce emissions by 50-75% compared to an identical new build.¹⁰ If existing buildings are already of sufficient quality and in line with a city's needs, maintaining or retrofitting them enables more efficient use of urban infrastructure and services than building construction.

Optimising existing buildings not only reduces embodied carbon, it facilitates and/or maintains access to well-located, good quality homes to those who need them most. Most existing and underutilised buildings tend to be in central

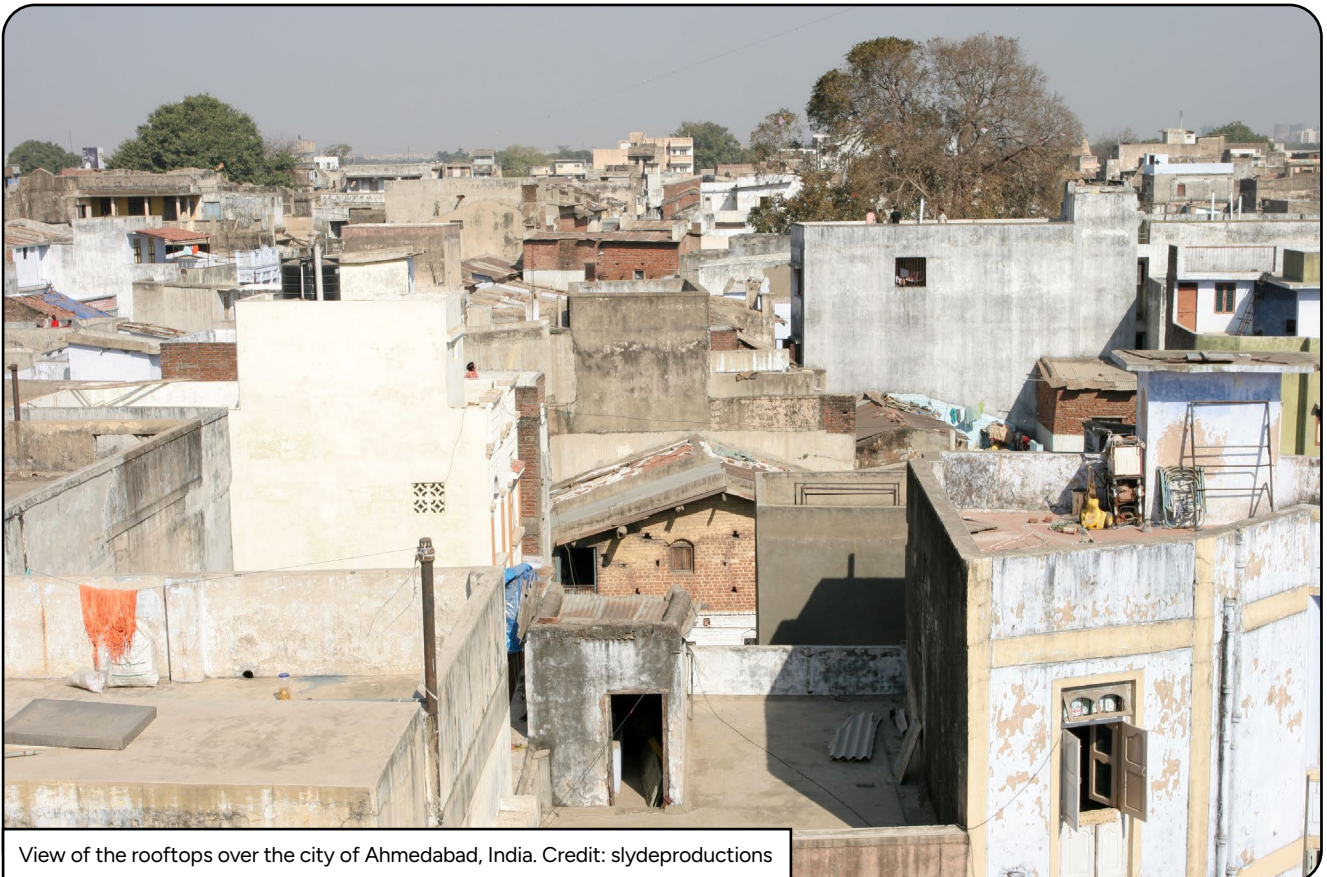
areas, which usually have better access to infrastructure, services and jobs. Providing homes in such places can significantly improve the wellbeing of a city's most vulnerable and disenfranchised inhabitants. Human rights are a fundamental lever that can help shift cities away from the traditional profit-driven real estate paradigm that continues to define how and why housing is built despite its negative effects on the right to housing.

Case study

AHMEDABAD, INDIA: Heat Action Plan and Cool Roofs Initiative

In response to the deadly 2010 heatwave, the Ahmedabad Municipal Corporation (AMC) pioneered the first Heat Action Plan (HAP) in South Asia, specifically targeting the heat-poverty trap in the city's informal settlements. Recognising that residents in tin-roofed slum housing face indoor temperatures often 3-5°C higher than outside, the city partnered with the Mahila Housing SEWA Trust (MHT) to implement a massive 'cool roofs programme'. This municipal policy treats passive cooling as essential housing infrastructure. By applying solar-reflective white paint and installing 'Modroofs' (recycled coconut husk and paper ceilings), the city has successfully reduced indoor temperatures by 2-5°C, significantly lowering the risk of heatstroke and respiratory distress among the urban poor.

The economic data behind this environmental policy is stark: every degree the indoor temperature rises above 25°C results in a 2% loss in productivity for home-based workers, many of whom are women. By stabilising the thermal environment of over 30,000 households, the HAP prevents low-income families from being pushed further into poverty by income loss and rising electricity costs. The programme's success has turned cool roofs from a luxury into a mandated municipal standard for all new affordable housing projects in the city. By 2026, this model had expanded beyond Ahmedabad to over 30 Indian cities, demonstrating that simple, low-cost environmental interventions can be the most effective way to preserve housing affordability and public health simultaneously.¹¹



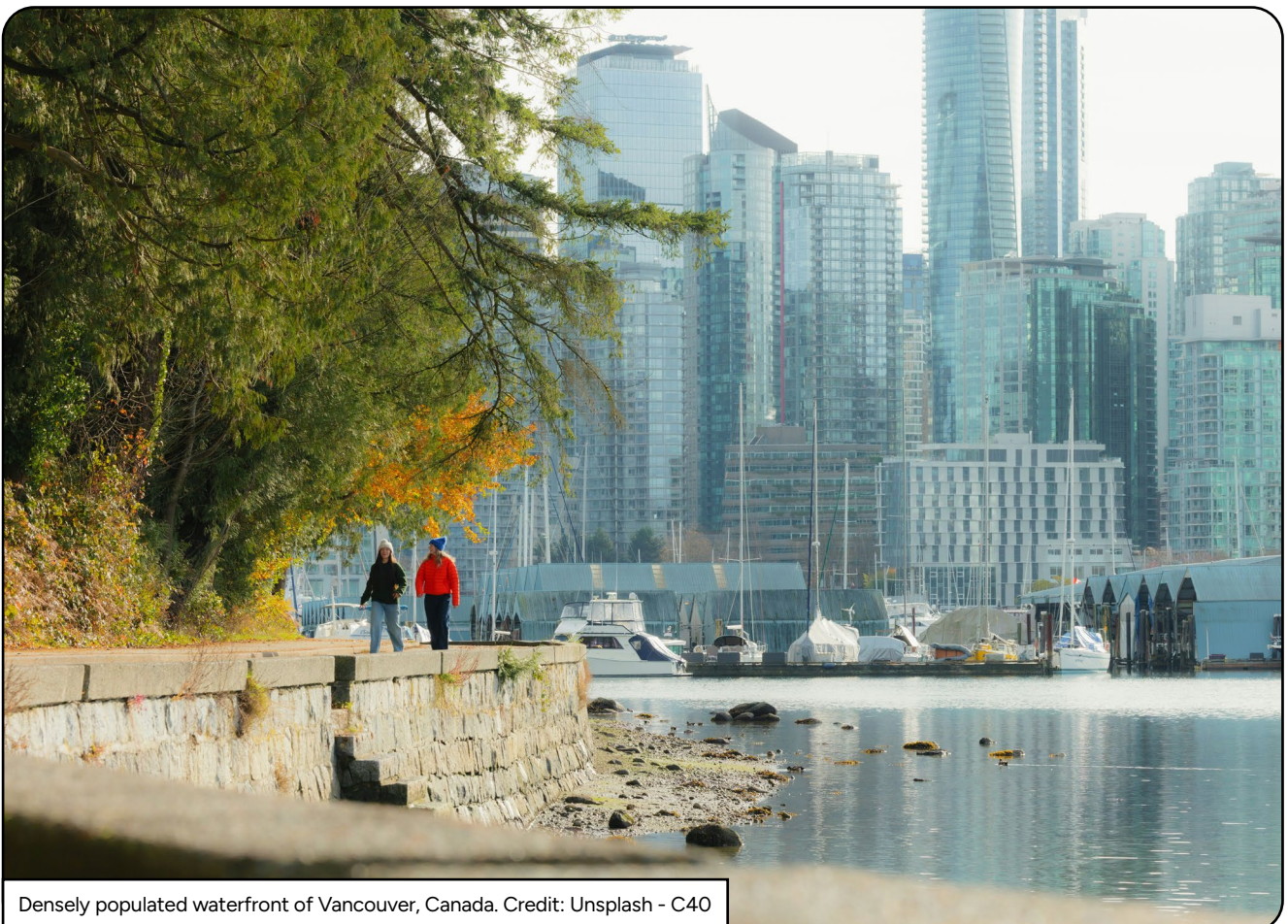
View of the rooftops over the city of Ahmedabad, India. Credit: slydeproductions

Case study

VANCOUVER, CANADA: Empty Homes Tax

Vancouver's Empty Homes Tax (EHT) reinforces the principle that housing is a fundamental human right, not just a vehicle for speculative financial gain. At its current 3% rate, the tax effectively penalises the 'financialisation' of the city's housing stock, incentivising owners to return vacant units to use and release thousands of homes into the rental market. By converting empty square footage into active living spaces, the EHT has successfully repatriated thousands of units to people who work and live in the city, reducing the number of vacant properties by 25%. More importantly, the net revenue, which has exceeded \$170 million, is reinvested directly into affordable housing initiatives, ensuring that the right to housing is treated as a social priority rather than a luxury commodity.¹²

The tax serves as a strategic policy for climate action by prioritising the efficiency of urban density over the carbon-intensive expansion of suburban sprawl. An empty home requires heating and maintenance that consumes energy without providing any human utility. By incentivising the occupancy of existing urban stock, the EHT promotes compact, transit-oriented living, which significantly lowers the per-capita carbon footprint compared to car-dependent developments on the city's periphery. This approach ensures Vancouver utilises its current infrastructure to its maximum potential, while the tax proceeds help fund green retrofits and zero-emission social housing.¹³



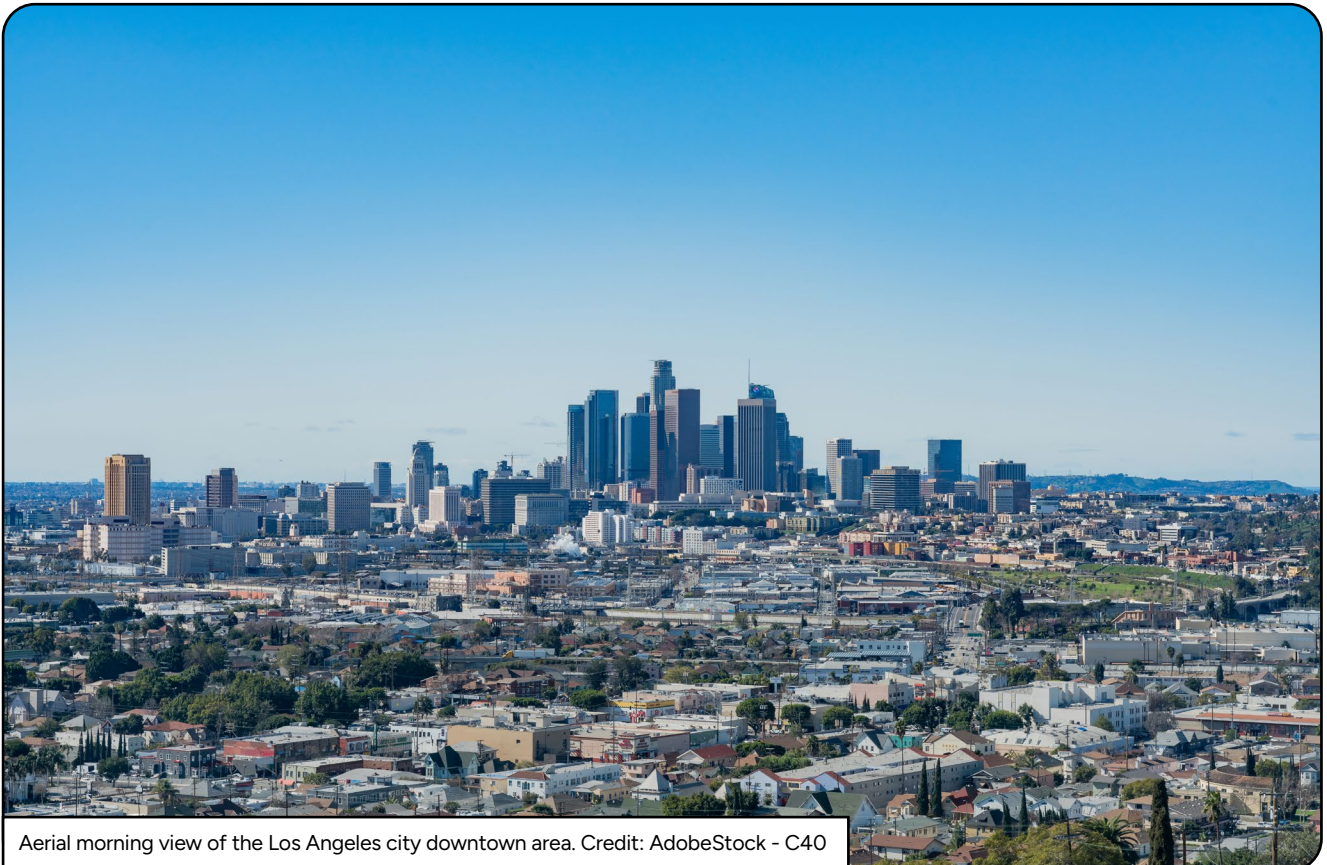
Densely populated waterfront of Vancouver, Canada. Credit: Unsplash - C40

Case study

LOS ANGELES, USA: Citywide Adaptive Reuse

The Citywide Adaptive Reuse Ordinance (ARO) in Los Angeles, which came into effect in early 2026, supports the right to housing by enabling the conversion of the city's aging office towers and underutilised retail centres into vital social infrastructure rather than static assets. By allowing buildings as young as 15 years to be converted into residential units, the ordinance reduces regulatory barriers that have historically prioritised commercial zoning over residential use. This shift addresses the underutilisation of office space, incentivising the creation of residential units of varying sizes in neighbourhoods previously subject to restrictive land-use designations. Most critically, the ordinance's Unified Adaptive Reuse provisions provide significant density bonuses and streamlined approvals for projects that include income-restricted affordable housing.

The ARO reflects the principle that reusing existing buildings can reduce the environmental impacts associated with new construction. Constructing new high-rises from scratch is a carbon-intensive endeavour, yet by repurposing existing concrete and steel, adaptive reuse can reduce embodied carbon emissions by up to 95% compared to new construction. This policy supports high-density, transit-oriented development; with over 70% of these projects located near underground rail stations, the ordinance reduces vehicle miles travelled and lowers the city's collective carbon footprint. By locking in existing parking levels and allowing for the conversion of surplus garages into living space or communal gardens, Los Angeles is trading car-centric land use for a compact, walkable urbanism.



Aerial morning view of the Los Angeles city downtown area. Credit: AdobeStock - C40

Use materials efficiently and switch to low carbon alternatives

Rapid urbanisation, rising inequality, population growth, and the number of people facing homelessness or inadequate housing will require the construction of new housing in many cities. Part of the solution will involve increasing housing supply to meet people's needs in the right places. These homes should be built in the most sustainable way possible to reduce climate impacts from the start with the right choice of location, design and materials. This is where a clean construction approach helps meet the human right to housing while also delivering better, more resilient homes in less time with fewer climate impacts. When construction projects use fewer and less environmentally harmful materials per housing unit, it directly translates to more materials being available for additional housing projects, effectively multiplying the number of homes that can be built with the same resource allocation.¹⁴

Several proven strategies are transforming the environmental impacts of construction materials. Off-site modular construction achieves significant waste reduction and 30-50% faster build times compared to standard methods.¹⁵ Material alternatives prove equally powerful, for example, cross-laminated timber reduces

whole-life carbon emissions by 40%, while cement composition and use improvements cut cement emissions by up to 76%. Studies demonstrate these low-carbon alternatives (including recycled materials, bamboo, and low-carbon concrete and steel) meet all structural and safety requirements at minimal cost. Research from Germany and Canada confirms significant carbon reductions at price parity with conventional construction. One study indicated 19-46% embodied carbon reduction for less than 1% cost premium.¹⁶

Improving how cities build is non-negotiable. Business-as-usual construction sites are hotspots for air, noise and soil pollution, damaging the health and wellbeing of workers and neighbouring communities. Sustainable construction sites support cleaner air and a healthier environment in cities with low to zero-emission construction machinery and logistics. This can also help alleviate public concern around construction projects, as electrified sites reduce air pollution, noise and disruption to surrounding areas.



The University of Calgary team installs solar panels on the roof of its technological residence house.
Credit: Dept of Energy Solar Decathlon / US Department of Energy

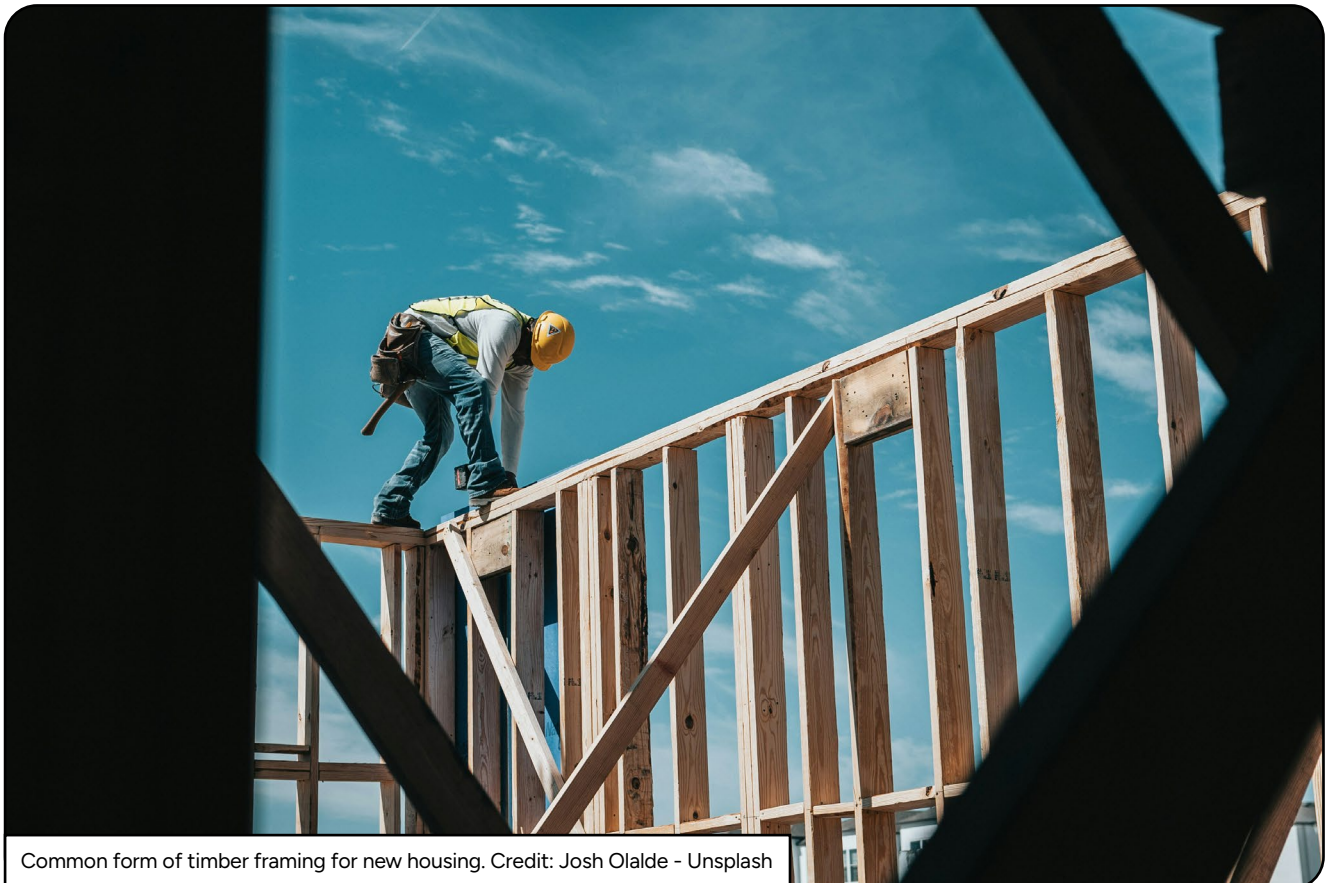
Case study

BARCELONA, SPAIN: Industrialised housing and timber construction

Barcelona's Industrialised Public Housing strategy, manifested through its pioneering APROP (Provisional Proximity Housing) programme, reimagines the city as a 'circular mine'. By utilising recycled shipping containers and 'dry' modular construction, the city can deploy high-quality, dignified social housing in under a year, a fraction of the time required for traditional builds. These units aren't just temporary fixes, they are award-winning, architecturally sophisticated homes that treat the city's vacant plots as opportunities to expand the public safety net without the long-term wait of conventional development.

Barcelona's shift toward sustainable materials, particularly Cross-Laminated Timber (CLT), is a key element of its Climate Plan. By mandating

industrialised methods that prioritise wood and other carbon-sequestering materials in new social housing tenders, the city has successfully reduced the embodied carbon of its buildings by up to 35% compared to traditional concrete and steel. These projects, such as the renowned La Borda cooperative, function as 'thermal batteries,' providing high energy efficiency that reduces utility bills for low-income residents while simultaneously cooling the urban heat island. Through this policy, Barcelona is moving away from the extractive construction model, instead fostering a circular urbanism in which building components are designed to be disassembled and reused, demonstrating that urban growth can be both socially inclusive and ecologically regenerative.¹⁷



Common form of timber framing for new housing. Credit: Josh Olalde - Unsplash

Case study

BOGOTÁ, COLOMBIA: Regulation for evaluating and reducing risk in informal masonry housing

From a social equity perspective, this initiative advances the human right to housing for historically marginalised communities. By structurally reinforcing homes against seismic and climate shocks, the policy actively protects low-income families from the dual threats of structural collapse and involuntary displacement. Furthermore, enabling families to safely expand vertically by adding a second story provides a scalable solution to overcrowding without pushing residents to unsafe, unserved urban peripheries. This supports equitable, community-led density that allows multi-generational households to remain in their neighbourhoods while unlocking pathways to local financial security.

By prioritising retrofitting over demolition, Bogota serves as a successful model for clean, low carbon construction within informal urban settings. Preserving the existing structural fabric of self-built masonry homes avoids the massive upfront embodied carbon emissions generated by conventional redevelopments, which rely heavily on new, carbon-intensive concrete and steel. This hyper-local engineering approach drastically reduces construction waste, minimises disruption to the local environment, and optimises resource efficiency. It demonstrates that achieving urban climate resilience does not require the demolition of vulnerable neighbourhoods, but rather their structural adaptation and reinforcement.¹⁸



View from Chapinero "Centro de Felicidad", Colombia's first vertical park. Credit: Peter Lievano

Case study

NEW YORK, USA: Mass timber and circular construction guidelines

New York City's clean construction initiatives represent a significant shift in housing standards focussed on health and dignity. By updating the city's building code to allow cross-laminated timber (CLT) up to 85 feet and launching the NYC Mass Timber Studio, the city is accelerating the production of lower-carbon homes that are faster to build and healthier to inhabit. Projects like the New Stapleton Waterfront, which integrates nearly 500 affordable and market-rate units, demonstrate how these sustainable materials reduce construction timelines and noise pollution, allowing the city to respond to the housing crisis with greater agility. Because mass timber offers improved thermal performance and non-toxic indoor air quality, these buildings may reduce exposure to respiratory risks and lower utility costs relative to aging, fossil-fuel-dependent building stock.

NYC's focus on embodied carbon, via Executive Order 23 and the Circular Design & Construction Guidelines, targets the 23% of global emissions generated by the construction sector. While policies like Local Law 97 target operational energy, the shift toward bio-based materials and low-carbon concrete addresses the embodied emissions of a building's structural components. By mandating a 50% reduction in the carbon footprint of all municipal construction by 2033, the city is using its massive capital portfolio to advance a circular economy. This approach ensures every new affordable housing unit can store carbon over time, reducing overall environmental impact.



A row of timber framed homes in Elmhurst Queens New York, USA. Credit: James Andrews

Case study

KUALA LUMPUR, MALAYSIA: Low carbon buildings and urban resilience

Kuala Lumpur's Low Carbon Building Checklist (LCBC) 2.0, fully integrated as a mandatory digital requirement for all new developments in 2024, supports vulnerable households by directly addressing energy poverty. By requiring developers to meet strict operational efficiency standards from the initial planning stage, the policy ensures that modern housing, particularly the city's Program Perumahan Rakyat (PPR) social housing units, is designed to be inherently affordable to maintain. This equity-first approach means that for the city's most vulnerable residents, a home is not just a place to live but a resource-efficient space where lower utility bills and improved indoor thermal comfort prevent reduces the need to choose between paying for electricity or food. By institutionalising these standards, Kuala Lumpur is supporting a just transition to a more sustainable city, where high-quality, dignified living conditions are a baseline for all citizens rather than a premium for the few.¹⁹

The LCBC addresses both operational and embodied carbon at the design stage. The checklist's web portal uses automated simulations to evaluate building orientation, glazing performance, and the use of sustainable materials such as green concrete and steel, with a target of a 70% reduction in carbon emissions intensity by 2030. This policy shifts a significant share of climate mitigation from the individual tenant to building design, embedding performance standards at the construction stage. By mandating passive design elements that mitigate the urban heat island effect, Kuala Lumpur moving toward its 2050 net-zero goal while also improving resilience to intensifying tropical heat, highlighting the role of rigorous data-driven oversight in enabling a cooler, low-carbon future.



Aerial view of a residential area in Kuala Lumpur, Malaysia. Credit: Adrien Schwab

Plan, design & build for the future

As climate-driven disasters increase globally, adequate housing will mean homes designed to protect their inhabitants today and in the future. Planning for the future helps ensure homes remain habitable long-term, improving security of tenure and liveability – two crucial components of a right to housing approach. This helps reduce future loss and damage to properties, which carry high human, economic and environmental costs.

City governments delivering housing should identify and address the vulnerabilities of residents, especially the most disenfranchised. They should evaluate how housing needs change and increase over time and reflect this in the

design of current and future buildings. Planning requires meaningful, ongoing involvement of vulnerable communities to ensure they are co-designing and reviewing development plans that directly affect their lives.

In relation to new housing, cities planning powers are critically deployed to prioritise brownfield development, to allow higher densities near existing transport infrastructure, and set planning conditions that secure affordable housing. If cities truly want to plan, design and build for the future, they should take a progressive approach that includes meaningful participation of communities.



Cyclists in the car-free sustainable suburb of Vauban Freiburg, Germany. Credit: Alamy

Case study

ILOILO CITY, PHILIPPINES: The Luntiang Bukas (Green Future) Programme

Launched in early 2026, Iloilo City's Luntiang Bukas initiative is a multi-agency collaboration that treats land tenure, climate adaptation, and affordable housing as a single urban intervention. The centrepiece of this programme is the Purok Resilience Village model, which relocates families from high-risk coastal and riverbank zones to climate-ready homes. Unlike traditional relocation projects that often place families in peripheral locations with limited services, Iloilo's model integrates linear park developments that act as flood buffers while providing green space for the community. Sites like Batiano Village combine housing provision with 'Handog Titulo', which has already processed 175 land titles for beneficiaries, with a target of 820 patents to ensure long-term housing security.²⁰

The 'Green and Climate-Resilient' housing units are designed to withstand the intensifying typhoons of the Western Visayas, featuring cool roofs, rainwater harvesting systems, and solar-ready designs. By incorporating nature-based solutions, such as mangroves and riverside parks, the city has created a sponge effect that helps protect the new housing clusters from flooding in the areas that necessitated relocation. This coordinated approach is backed by a direct local government support fund, allowing the city to bypass national administrative delays and respond to environmental risks more rapidly. As of April 2026, the pilot phase has successfully transitioned 30 families from high-hazard zones into permanent, resilient homes, demonstrating that disaster-risk reduction and socialised housing are most effective when delivered as a single package.²¹



Aerial view of the Molo district of Iloilo City, with the island of Guimaras in the distance. Credit: MDV Edwards

Case study

CURITIBA, BRAZIL: Audi União neighbourhood right to stay

The Audi União project, led by Curitiba's municipal housing agency COHAB-CT, represents a shift in urban policy from 'slum clearance' to integrated neighbourhood revitalisation. As Curitiba's largest informal settlement, the site originally housed over 3,000 families (approximately 12,000 people) across 100 hectares of ecologically sensitive land in the Iguaçu River basin. To address chronic flooding and environmental degradation, the city did not relocate residents to the urban periphery; instead, it supported the construction of 1,114 new housing units within the same district for households in high-risk zones. This strategy enabled families to move into safe, modern homes while remaining within a 500-metre radius of their original social networks, schools, and employment. The project also converted floodplains into a linear park, creating a 'green border' buffer that protects the river while providing public recreational space.

Beyond physical infrastructure, the project's success was supported in a 'social engineering' model that prioritised legal security and gender equity. COHAB-CT moved beyond simple relocation by implementing a massive land titling programme that formalised property rights for the remaining 2,000+ remaining households. Over 90% of land titles were issued specifically in the names of female heads of households, a policy associated with reduced risk of domestic displacement and improved long-term family and housing stability. By treating the informal settlement as a permanent part of the city's fabric rather than a temporary condition, Curitiba achieved a near-zero rate of post-project abandonment compared to typical social housing projects. The Audi União model has since been replicated in more than 20 other settlements across the city, proving that municipal leadership, combined with community participation and a 'right to stay' approach, can support the transformation of vulnerable urban areas into resilient neighbourhoods.²²



Modern high rise apartment buildings with traditional low rise in foreground, Curitiba, Brazil. Credit: tupungato

Where cities can go next with housing and climate justice

The transformation of construction from a high-carbon driver of inequality into a sustainable solution for delivering decent and healthy homes that people need requires political leadership alongside continued technical innovation. Repositioning human rights at the core of a highly commodified market requires regulation and visionary leadership. It also requires city governments to better integrate housing and climate teams along with planning, economic development, employment and skills functions. While progress is already being made in many cities, further efforts are needed to diversify teams and strengthen cross-disciplinary working, making local government a more attractive destination for emerging talent.

Many tools exist to help reduce emissions alongside many examples of genuinely affordable housing led by city governments. Pioneering cities are proving that integrated approaches are mutually reinforcing. The question remains whether investors fully

recognise the diversity of these projects and their social value. Increasingly, governments are using urban planning to prioritise development in locations that are well connected to existing transport infrastructure and local amenities, helping to deliver more sustainable communities. This is good news, particularly if affordable housing is being demanded as vital social infrastructure.

As climate risks and impacts intensify and housing crises deepen across global cities, the question is not whether cities can afford to integrate these approaches, but whether they can afford not to. The convergence of clean construction and housing rights provides a pathway towards more equitable and resilient cities. Let us bring together public and private actors across the value chain to put communities at the heart of a new housing system, set a viable pathway for housing and climate action to work together, and secure the right to live in peace, security and dignity.



Low carbon and low cost affordable housing in Vienna, Austria. Credit: C40

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