# Adaptive reuse accelerates as a key strategy to tackle urban climate and housing crises



Adaptive reuse is gaining momentum as a strategic approach to urban development, offering a method to repurpose existing buildings and infrastructure to meet modern needs while addressing climate, economic, and social challenges. This practice involves transforming underutilized or historic properties into vibrant, functional spaces, blending architectural heritage with contemporary demands.

Cities across the globe are increasingly adopting adaptive reuse to combat rising climate risks and resource limitations. By reusing existing urban assets, cities can reduce waste, curtail emissions, and embrace circular economy principles in their built environments. The World Economic Forum, collaborating with international experts and municipalities, has developed a Model Policy on Adaptive Reuse. This framework sets out principles and best practices to help cities accelerate their adaptive reuse initiatives and magnify their impact.

Adaptive reuse projects have revitalised numerous renowned urban spaces worldwide. London's Tate Modern Gallery, converted from a former power station, New York City’s High Line, transformed from an abandoned railway into a public park and greenway, and Toronto's Distillery District, once an industrial facility, are prime examples. Such transformations not only preserve architectural heritage but also stimulate economic activity through job creation, tourism, and cultural engagement.

These projects also respond to pressing social needs, including affordable housing, community services, and economic resilience. Vacant or obsolete structures can be reimagined to bridge disparities in access to housing, healthcare, and cultural amenities. By rooting developments in local identity and empowering communities, adaptive reuse supports sustainable urban growth.

From an environmental perspective, adaptive reuse presents substantial advantages. Repurposing existing buildings produces 50-75% less carbon emissions compared to new constructions, especially when combined with efforts to minimise embodied and operational carbon. Additionally, adaptive reuse greatly reduces construction waste, which constitutes roughly 30% of solid waste worldwide. For instance, Chicago's Old Main Post Office project, which revived a property unused for nearly five decades, diverted 87% of construction waste from landfills during its conversion into a public space.

Despite these benefits, a significant portion of global construction waste—over 75%—still goes unrepurposed, and the volume of construction waste is projected to escalate. This highlights an opportunity for cities and industries to harness adaptive reuse systematically, advancing circular economy objectives while lowering emissions.

Cécile Faraud, head of the Clean Construction programme at C40 Cities, stated, "Utilizing existing building and infrastructure assets is a growing opportunity for cities to simultaneously tackle climate and housing crises. It’s the first step in C40’s approach to supporting a clean construction transition." She added that C40 supports adaptive reuse policies as part of meeting residents' needs and encourages more cities to value existing built spaces equitably.

Economic factors further enhance the appeal of adaptive reuse. Construction cost inflation prompts consideration of alternatives, and adaptive reuse can yield savings of 12-15% by negating demolition and new build expenses. Moreover, early adopters gain competitive advantage, leading climate action, embracing circular economy principles, and building resilient urban environments.

Jake Chidester, vice president of Strategy and Innovation at Bedrock, commented to The World Economic Forum, "Repurposing historic buildings, especially in the cases of disused office and industrial typologies, into multifamily housing, hotel and retail or restaurant classes is a win-win-win strategy, translating to real value creation for all parties. Developers benefit from increased demand and absorption through unique product offerings in otherwise homogenous product landscape. Residents and visitors enjoy distinctive and authentic experiences rooted in history. Communities retain their essential heritage and character."

One challenge in scaling adaptive reuse lies in the absence of widely accepted best practices. To address this, the World Economic Forum's Centre for Urban Transformation, in partnership with C40 Cities and Infosys, has introduced the G20 Global Smart Cities Alliance’s Model Policy on Adaptive Reuse of Assets. This guidance assists municipal authorities in creating policies and regulations for converting existing or historic assets. It advocates four core principles: prioritising existing assets over new construction, ensuring community benefits, maximising structural and low-carbon material use, and conducting whole-life carbon assessments before any conversion.

Recognising the uniqueness of each locality, officials are encouraged to customise approaches based on their administrative, cultural, legal, and financial frameworks. Jeff Kavanaugh, head of Infosys Knowledge Institute, highlighted, "Scaling adaptive reuse through technology and cross-sector collaboration brings the Forum’s model policy to life – unlocking sustainable growth, lowering carbon and revitalizing communities, as nearly two-thirds of existing buildings will shape our cities through 2050."

The policy draws upon examples and insights from cities such as Vancouver, Los Angeles, and London. Notably, Los Angeles recently expanded its Adaptive Reuse Ordinance to promote wider conversion of existing buildings into housing citywide, addressing the city’s housing shortage, commercial vacancies, and climate action goals. Ken Bernstein, principal city planner at Los Angeles City Planning’s Office of Historic Resources and Urban Design Studio, said, "The City of Los Angeles is poised to enact an innovative suite of incentives that extend our successful Downtown adaptive reuse programme to the entire city as a key strategy to address the city’s housing crisis, high commercial vacancy rates, and the imperative for climate action."

In conclusion, adaptive reuse represents a transformative urban strategy that aligns environmental sustainability with social and economic development objectives. By repurposing buildings and infrastructure, cities can reduce their carbon footprints, conserve resources, and rejuvenate communities. The World Economic Forum’s model policy offers a comprehensive roadmap to help urban leaders worldwide harness adaptive reuse as they strive to build resilient and thriving cities for the future.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.axios.com/sponsored/empty-buildings-can-find-new-purpose-through-adaptive-reuse> - This article discusses how adaptive reuse addresses the U.S. affordable housing crisis by repurposing vacant buildings, creating housing, revitalizing communities, and reducing the need for new construction.
* <https://www.autodesk.com/design-make/articles/adaptive-reuse> - This article provides examples of adaptive reuse projects, including the High Line in New York City and the Tate Modern in London, illustrating how repurposing existing structures can meet modern needs while preserving architectural heritage.
* <https://www.moderncities.com/article/2020-dec-12-amazing-industrial-adaptive-reuse-projects> - This article highlights the American Tobacco Campus in Durham, North Carolina, showcasing how adaptive reuse can transform industrial sites into vibrant mixed-use developments, blending historical preservation with contemporary demands.
* <https://www.axios.com/local/charlotte/2022/04/26/new-renderings-adaptive-reuse-project-called-the-pass-coming-to-noda-295442> - This article details 'The Pass,' an adaptive reuse project in Charlotte, North Carolina, converting existing structures into office, retail, and residential spaces, exemplifying how adaptive reuse can revitalize urban areas.
* <https://www.underthehardhat.org/adaptive-reuse-giving-old-buildings-new-life/> - This article discusses various adaptive reuse projects, including the High Line in New York City and Ghirardelli Square in San Francisco, demonstrating how repurposing underutilized or historic properties can create vibrant, functional spaces.
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* <https://news.google.com/rss/articles/CBMirwFBVV95cUxOejMtVlROOE9UYkM3OHVfV2t3ZVgwT3ZFOFZld3F4VzRfV29SWXZWWTV6aTV1cEMyR1FrajNrc0hDVGszcXNpNjBIYjZENmpiUE1kaW9iZ1dlRTVOaXpsaG9TXy0wSkRBREJEejgyajBBRUZzWHRlTWJHV1lZeXpSYmMxS2o2SF9qX0RDRDN2TmVwQkQ0VDJPTjAwYVFyR3luc25GdEk2RUtfaU5SUEpv?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data