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EXPLORING PUBLIC POLICY ISSUES THAT MATTER TO CHICAGO BUSINESS

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How to take on both the climate and the housing crises

A Chicago architect believes his profession can provide the logical and sustainable solutions needed to address these twin issues that threaten the economy and the future.

JAIME TORRES CARMONA



TWEET



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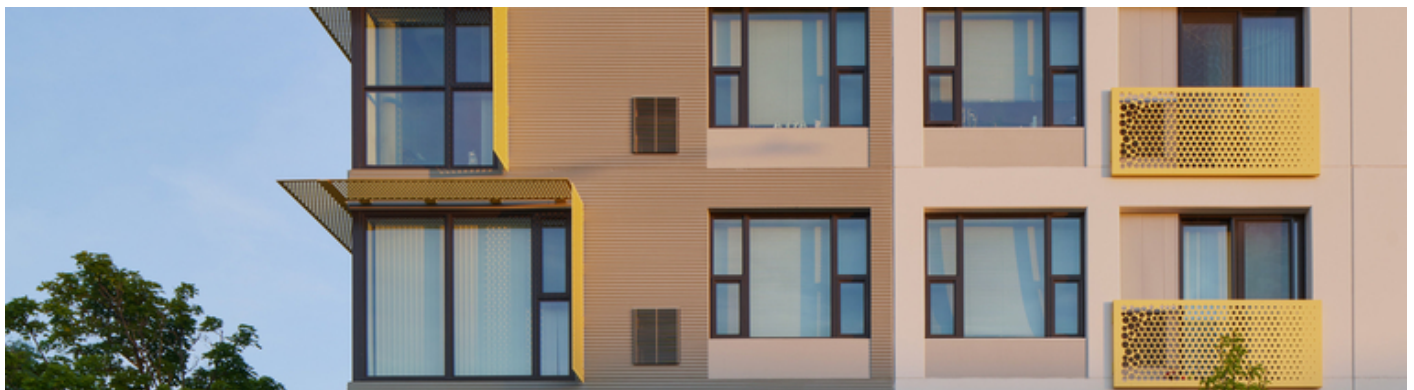


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Oso Apartments in Albany Park is a Canopy / architecture + design project.



Jaime Torres Carmona
is founder and principal of Canopy / architecture + design, a social-impact architecture firm based in Chicago. The firm recently released a new publication, "Between the Leaves: On Housing."

As housing affordability continues its uphill climb against living wages and aging housing stock, architecture has surfaced as the reimagined superhero to combat the housing crisis.

From new development programs like Chicago's Invest South/West to the [C40 Reinventing Cities](#) competition, architecture has once again become the protagonist to address housing inequities and other neighborhood challenges, as it was in the modernist era.

Buildings account for nearly 40% of all greenhouse gas emissions globally, according to the U.S. Green Building Council. The impact of greenhouse gases is continuing to show clear signs on the environment. From colossal hurricanes pummeling the South and East to unyielding forest fires burning through the West, our aging buildings and civil infrastructure are being tested by climate change year to year with increased intensity. As architects, we have arrived at an opportunity to readapt existing building stock and generate new housing that is responsive to our rapidly changing climate.

While we seek to activate our city neighborhoods with vibrant housing and other amenities, we can also look at climate response to help us address resiliency in buildings. Modernist pioneer Ludwig Mies van der Rohe suggested "less is more" when guiding aesthetics and functionality. More than 50 years later, we can apply that same phrase to imagine buildings designed for "less" carbon emissions, embodied energy, and

more regional sourcing of materials and systems.

At the turn of the 20th century, Chicago architect Louis Sullivan coined the term "form follows function" as a touchstone for the steel-frame practicality of skyscrapers as Chicago rebounded after the Great Fire and became a global leader in design. Now, in the 21st century, the city's growth and practicality should be focused on addressing the affordable housing gap and climate crisis jointly. I challenge developers and design professionals to consider a derivative phrase instead:

Form follows context.

Using this logic, buildings can work in better harmony with their local contexts, instead of adding to the climate crisis.

In the Midwest, for example, a building can rely on the strength of seasonal temperature changes to absorb solar heat gain in the winter and relieve solar gain in the summer, adjusting to climate like an oak tree shedding leaves as it approaches winter and regaining them in the spring. Similarly, if a project site lies near high water tables, we can design substructures to allow for high waters to pass below while a building sits on stilts like a boat dock. In this way, we can use design innovation to advance our housing stock for the next decades to come.

According to 2018 estimates by the Institute for Housing Studies at DePaul University, Chicago needs 119,000 units of affordable housing to meet demand. As we address housing inequities through policy and action, the simple truth is that to reduce housing costs, we must build more of it. Architects are challenged with designing spaces that can be not only affordable but also contextual to the environment in which we live.

While the city continues to make strides in addressing the affordable housing gap in Chicago, we must prioritize sustainable building of multifamily housing. Margaret Garascia of Elevate Energy writes in our firm's publication "On Housing": "The added benefits of improved health outcomes for low-income residents and greater investment in disadvantaged neighborhoods further makes the case for prioritizing the multi-family market for energy efficiency."

Can architecture rise again in our cities and be a catalyst for a more resilient, climate-driven future through housing? As architects, we are ready for the new sequel to combat climate change and our housing crisis in one sweep, with continued support from housing advocates and policymakers to help us get there. Are you ready?

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