



# GREEN NEW DEAL SUPERSTUDIO

**PROJECT TITLE:** Low-Impact, Infill Housing (LIH)

**NAME(S) OF AUTHORS:** Jordan Duke, Stephen Parker

**STATEMENT:** 250-word maximum statement describing the project here.

**WEB LINKS:** <https://www.smithgroup.com/tackling-climate-justice-and-jobs-smithgroups-superstudio>

As we **combat the climate challenge**, the **Green New Deal** has the opportunity to substantially reduce greenhouse gases while addressing the nation's **housing crisis** and **disrupt the developmental disaster** that is sprawl through **Low-Impact Infill housing** strategies.

**Infill housing**, if treated as a holistic approach, by leveraging **financing, policy and design** policy and design to ensure the reduction in urban sprawl beyond city limits, can have the greatest impact for the lowest effort.

## **ADVOCACY: Policies at all levels through the Green New Deal**

First, by advocating for pro-infill housing policy in the Green New Deal at all levels of the government and we must reconsider the zoning restrictions that make many infill-housing options illegal or prohibitively expensive.

Evangelize the adoption of building codes that allow infill housing to overcome the construction hurdles.

## **AWARENESS: Flexible Financing in the Green New Deal**

Secondly, financing options are scarce. Several start-ups and non-profits are helping to finance ADUs (accessory dwelling units), infill density and affordable housing alternatives, giving local governments, non-profits, and incremental developers a lever to promote housing diversity and generate supply.

## **AGENCY: Design Agency can Disrupt Development with the Green New Deal**

Finally, we must disrupt development through design.

Most construction types do not allow for a spectrum of delivery methods, from DIY households building sweat equity to conventional construction crews to offsite builders who can use the same system and components to bring costs down. Our holistic approach leverages this design of kit of parts to scale sustainably.

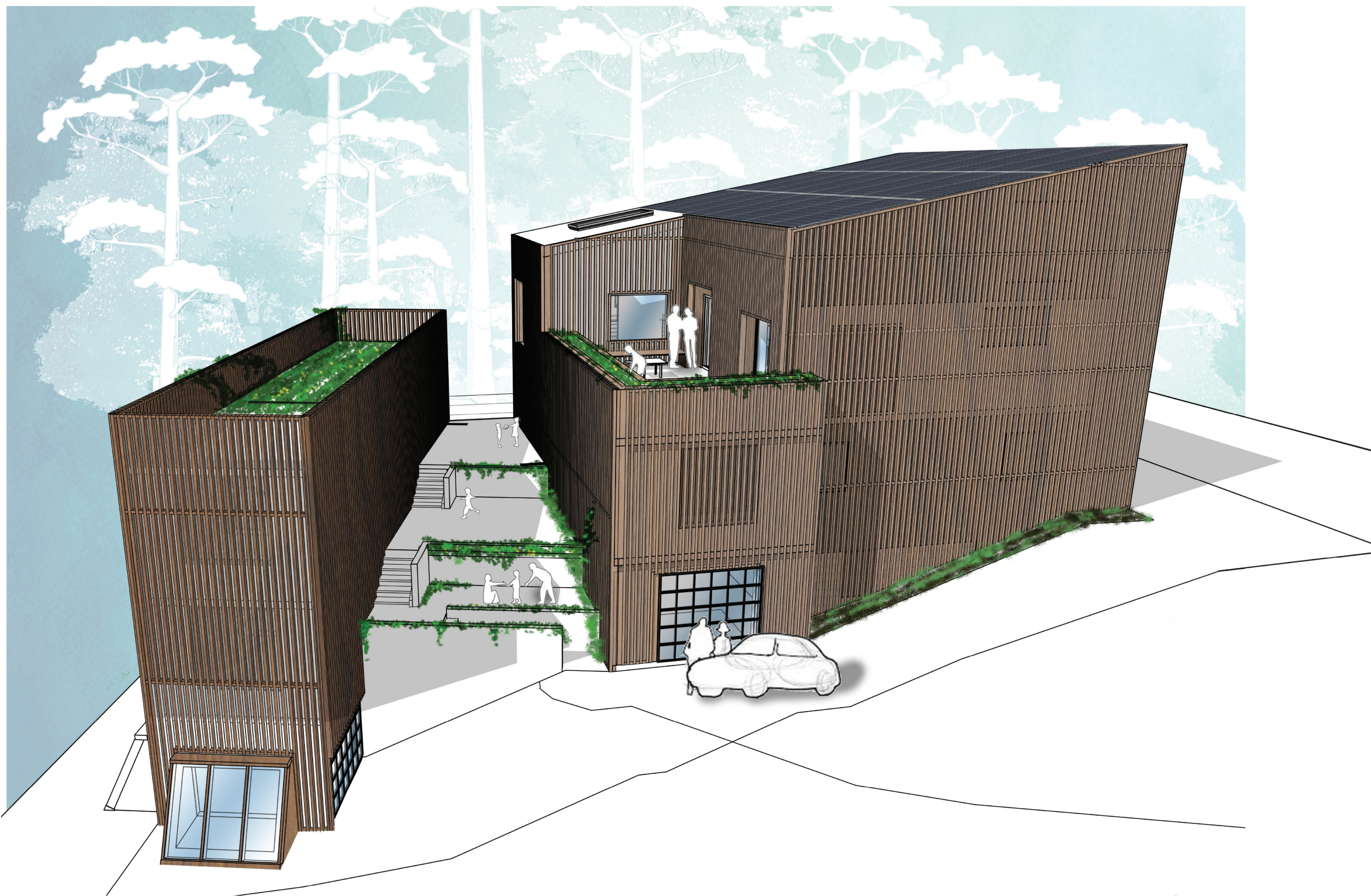


COMBAT THE **CLIMATE CHALLENGE**.  
ADDRESS THE **HOUSING CRISIS**.  
**DISRUPT DEVELOPMENT** WITH DESIGN.

WHAT IS LOW-IMPACT INFILL HOUSING?

As we **combat the climate challenge**, the **Green New Deal** has the opportunity to substantially reduce greenhouse gases while addressing the nation’s **housing crisis** and **disrupt the developmental disaster** that is sprawl through Low-Impact strategies.

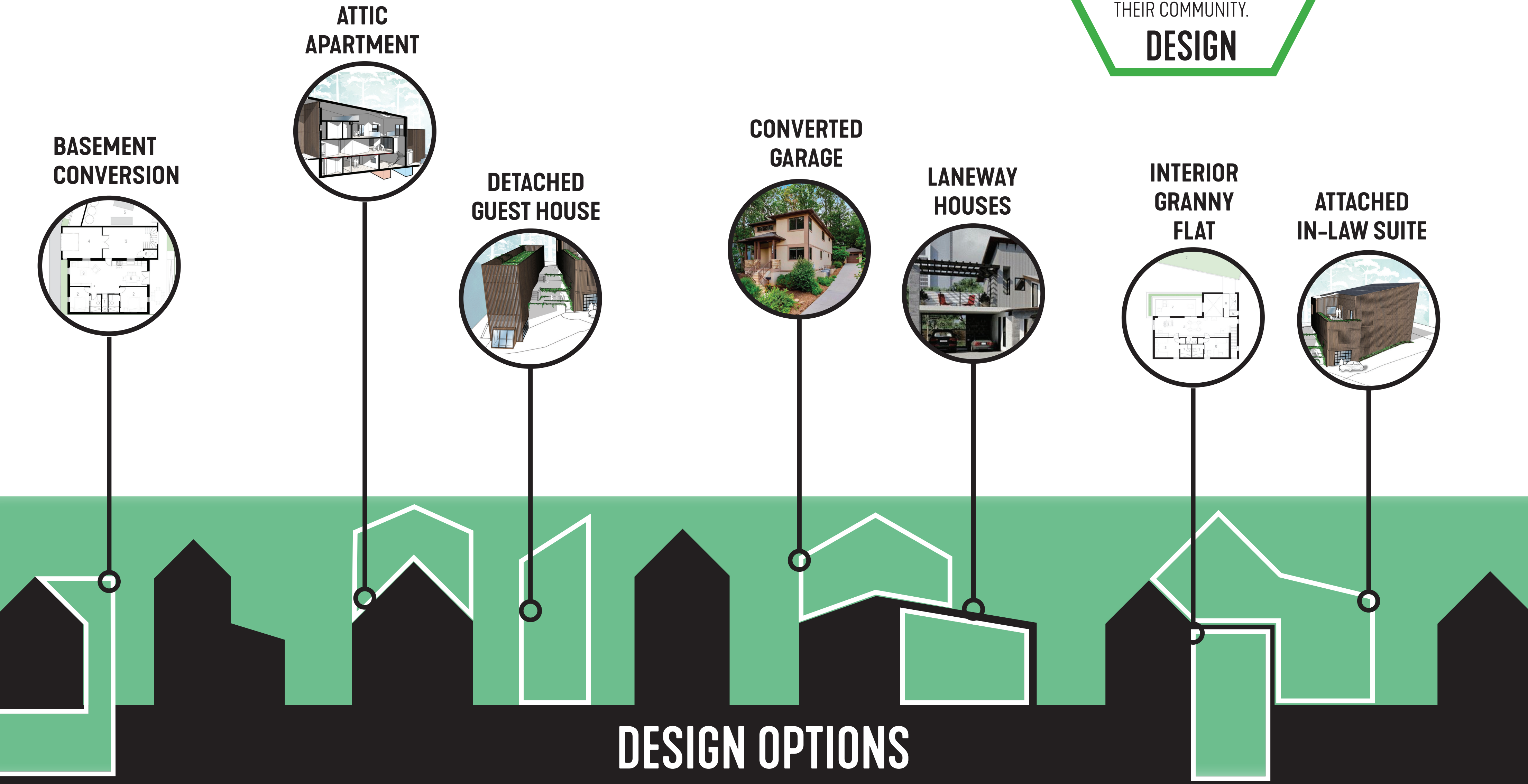
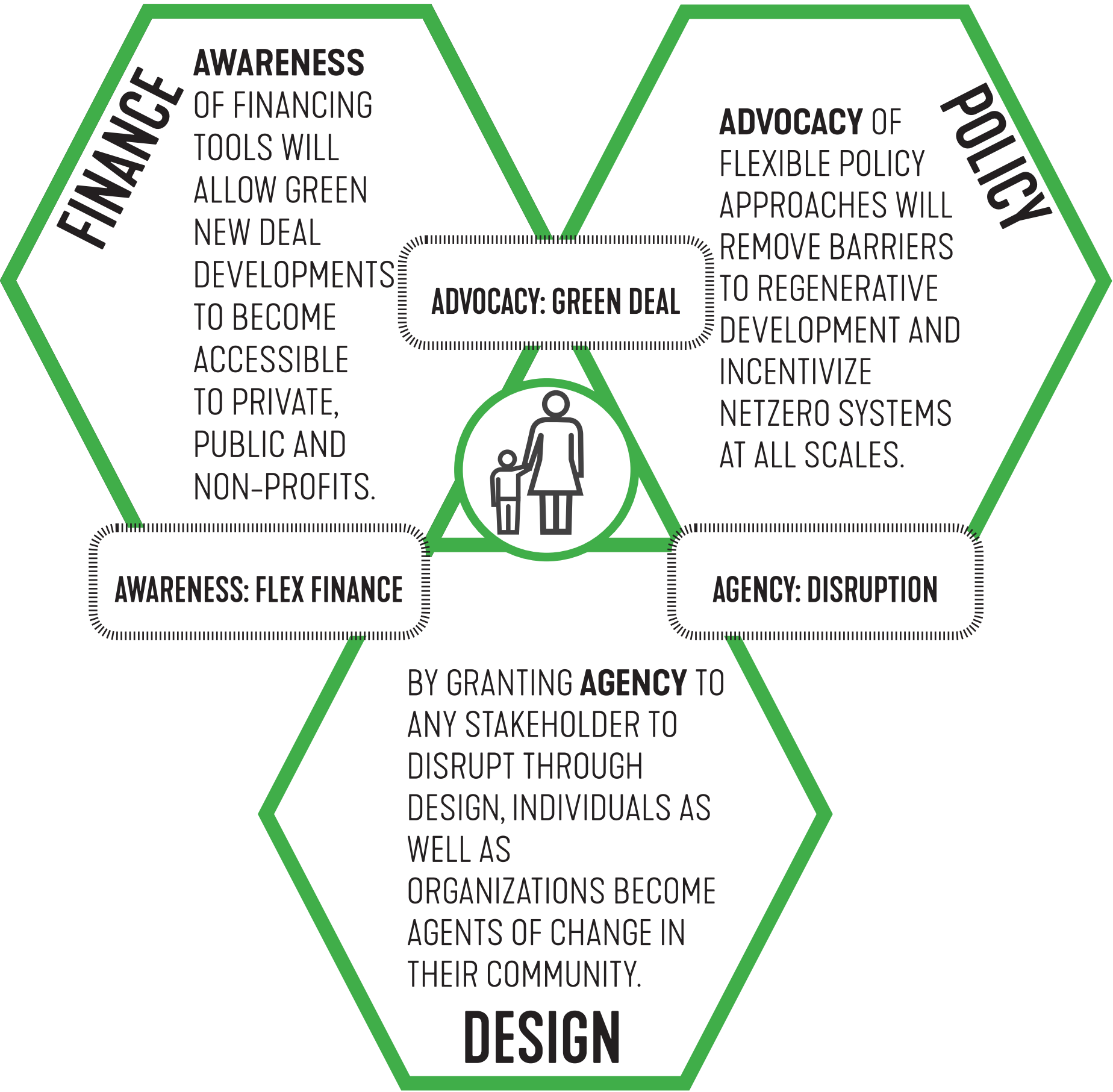
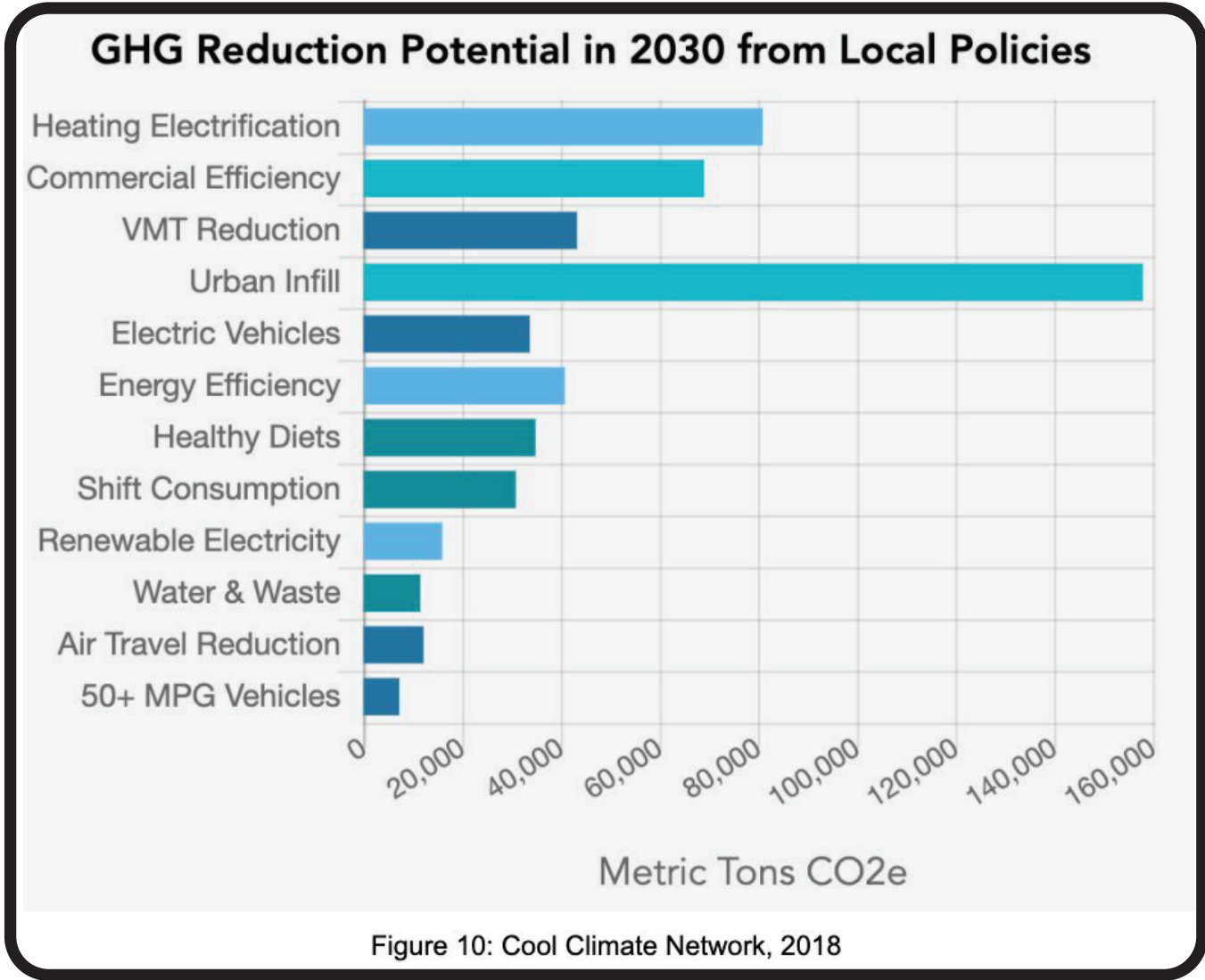
**Infill housing** can holistically leverage **financing, policy and design** to limit GHG emissions. These emission efficiencies are the benefit urban areas enjoy with dense systems of transportation, infrastructure and commercial activity. In this way, infill housing combats inefficient sprawl. **It can have the greatest impact for the lowest effort.**



This can be tackled by focusing on raising **awareness of financing** options to make low-impact infill housing more accessible to all stakeholders.

**Advocating for policies** that incentivize this type of low-impact development to limit sprawl.

Finally, **design agency** for any stakeholder to create low-impact buildings with NetZero standards as a baseline. These strategies and tactics allow any individual to disrupt the status quo at each phase of development.



LOW-IMPACT INFILL HOUSING (LIIH)



COMBAT THE **CLIMATE CHALLENGE**.  
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“The road to success is always under construction”

The average home, using conventional construction, generates 98.7 kg of carbon while a low-impact/netzero design can generate a third of that.

Iterations of construction methods have evolved with the needs of each era and society’s material and technological limitations. The Green New Deal provides an opportunity to jumpstart more innovative and efficient building systems that are low-impact with regard to **embodied carbon and operational energy usage**, raising awareness of these systems is the first step in scaling them to the wider market.

“The same old thinking yields the same old results”

As the chart shows, different regions have different emission rates, with state-wide policies making California and the Pacific Northwest more efficient than other regions through strategic policy. Rural and suburban regions are far more carbon intensive compared to the relevant efficiency of urban areas given their density and infrastructure efficiency. We must reconsider the zoning restrictions that make many infill-housing options illegal or prohibitively expensive.

In the process, we must address historic redlining by providing more diverse and affordable housing options that were previously allowed but have since been made illegal through exclusionary zoning.

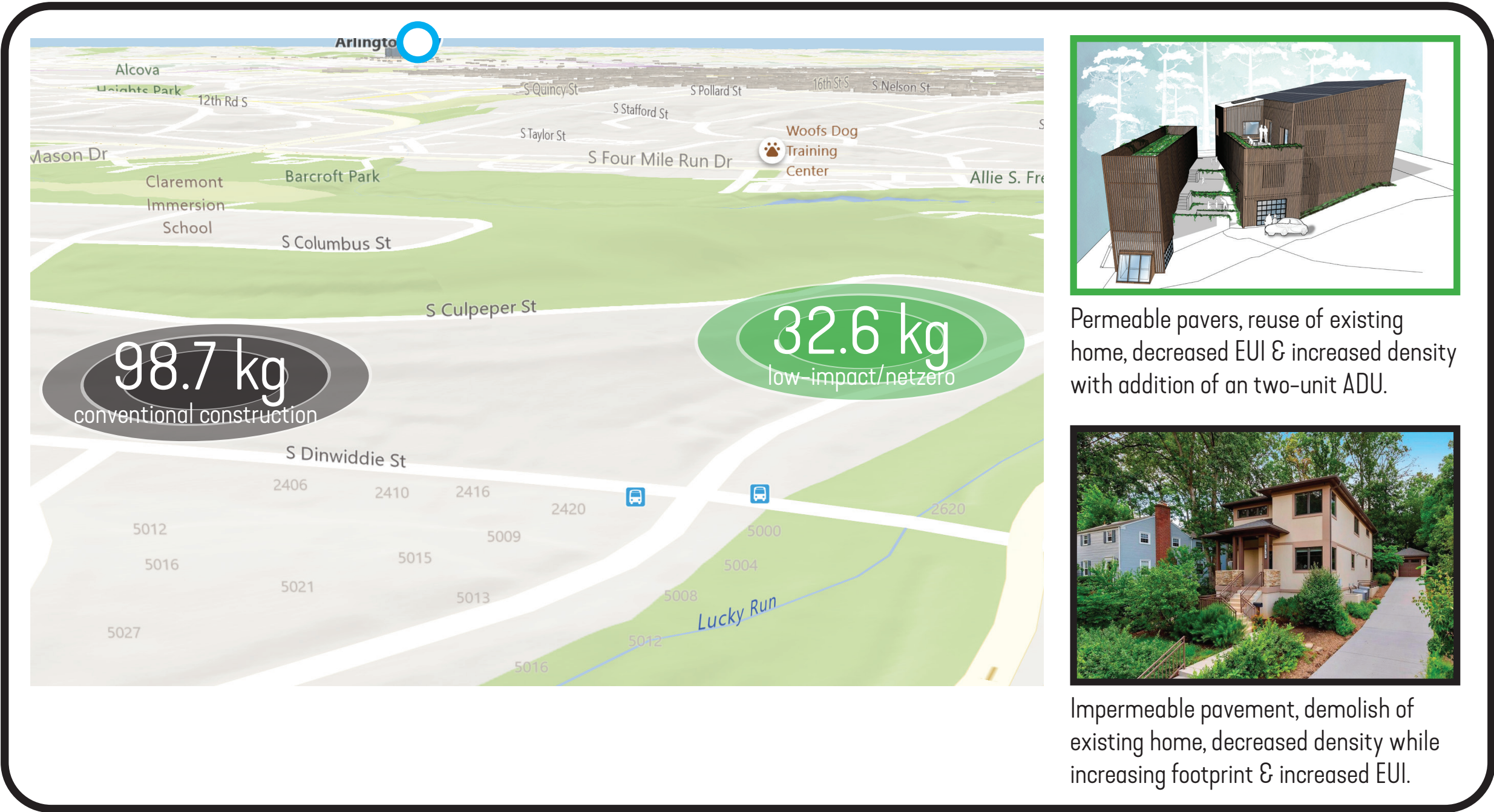
“We shape our buildings; thereafter they shape us”

We must design space for both now and into the future. The ability for the proposed **low-impact** construction to disrupt the development disaster of sprawl and addressing the housing crisis is critical. Starting with NetZero design strategies as a baseline is the cornerstone of low-impact infill housing. This is especially true for decreasing the **Energy Unit Intensity** or EUI of existing buildings and new construction to lessen the energy consumption over time.

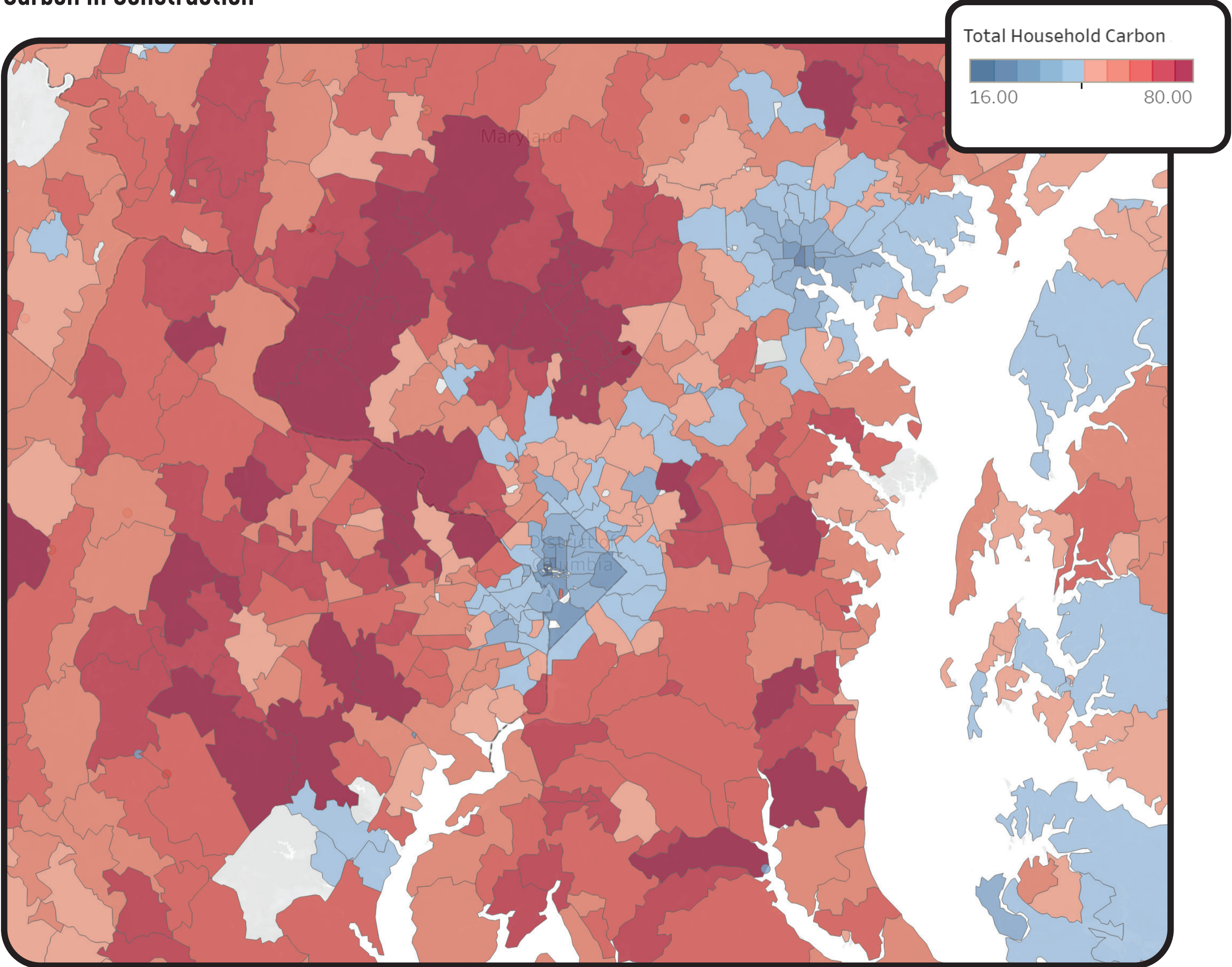
## WHY IT MATTERS

We currently only have one habitable planet and are in control of our decisions to **design a better future**.

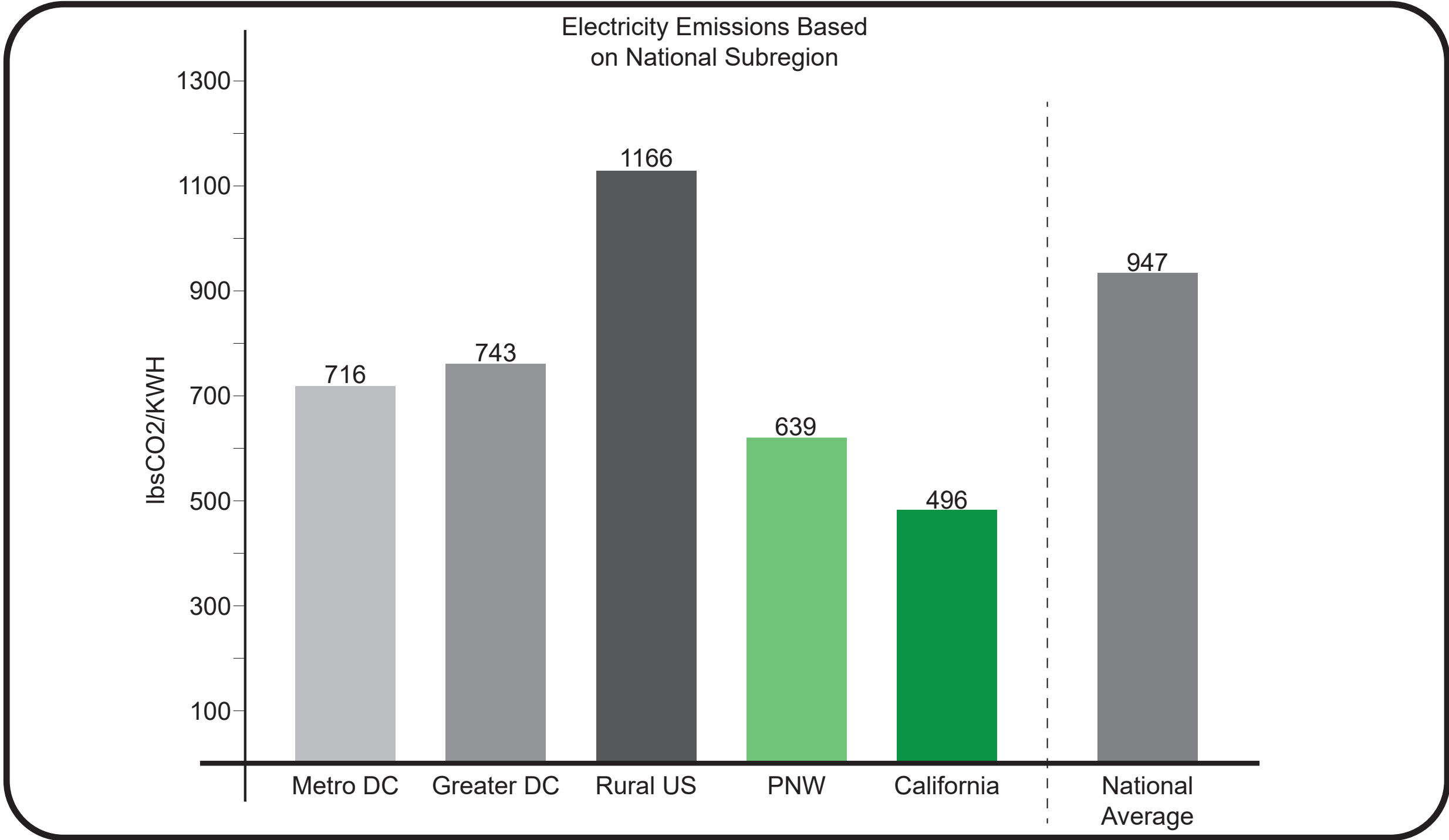
## GREEN NEW DEAL SUPERSTUDIO



Carbon in Construction



Household Carbon by Zip Code



Electric Emissions By Sub Region

# LOW-IMPACT INFILL HOUSING (LIIH)



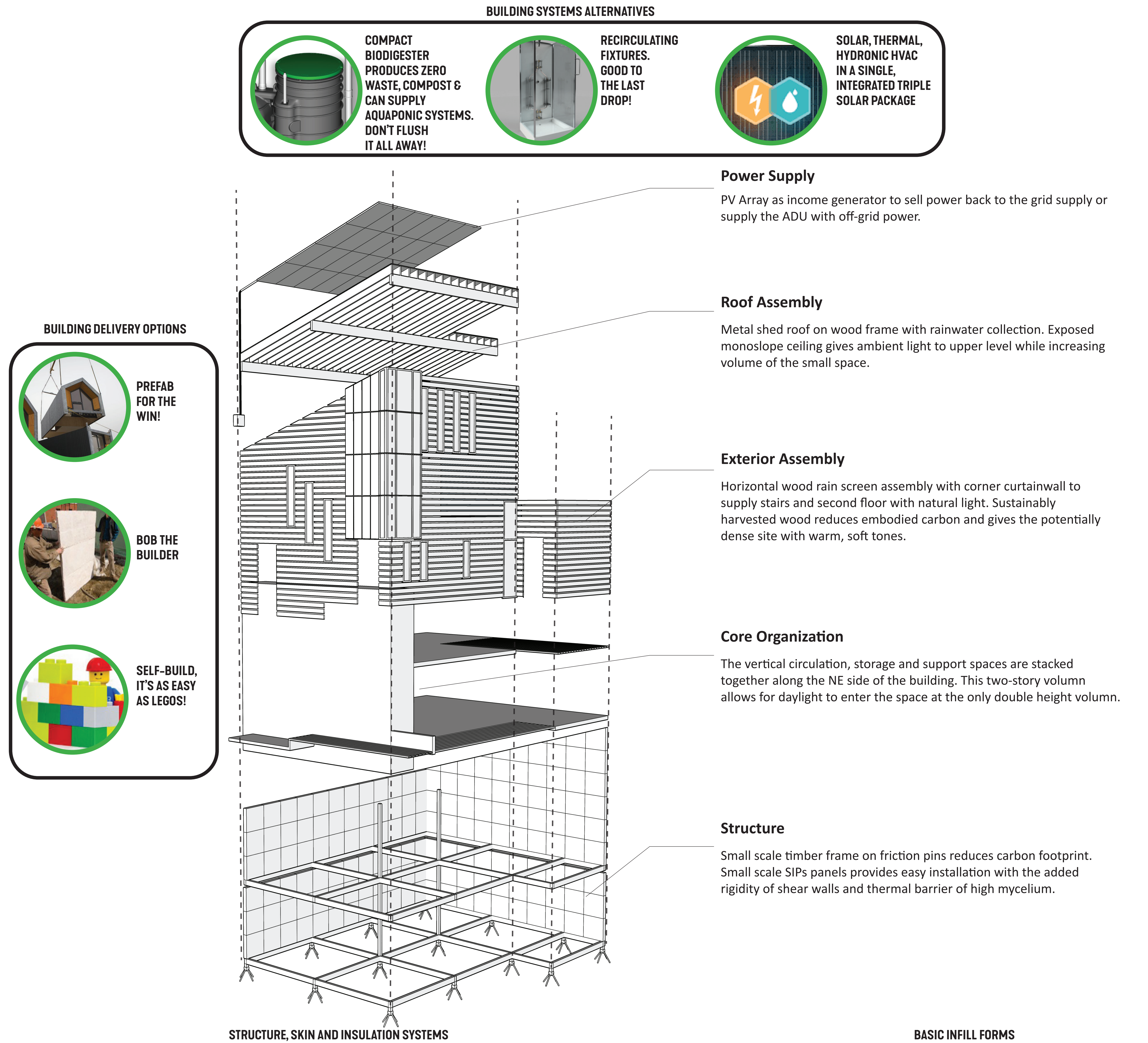
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## THE HOLISTIC HOUSING APPROACH

Housing is increasingly tied with solving the **economic, social and climate issues** facing communities across the country. There have been numerous piece-meal solutions. What is lacking are a succinct set of accessible, affordable, and environmentally-friendly design tools to address these housing issues for a variety of stakeholders. From **non-profits, to local governments to homeowners** and everyone in-between, we hope our scalable approach to sustainable infill housing will elevate the marketplace to find more accessible ways to densify urban areas.



## A LOW-IMPACT DESIGN APPROACH

Low-impact, infill housing can bring an innovative solution to the increasingly difficult policy, financing and design issues that plague our fractured housing market. Using forward-thinking policy, widely inclusive financing and sustainable materials and methods, these housing solutions create equitable dwelling units that create a sense of place, ownership, and identity.

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