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## A GREEN NEW DEAL FOR AMERICAN PUBLIC HOUSING COMMUNITIES

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## TABLE OF CONTENTS

- 4 Executive Summary
- 8 PART ONE: The Case for Comprehensive Green Retrofits to Public Housing
- 8 1.1 Core Principles: A Green New Deal for Public Housing
- 10 1.2 Public Housing Needs a Green New Deal
- 12 1.3 Summary of Benefits
- 13 PART TWO: The Economics of a Green New Deal for Public Housing Communities
- 14 2.1 Affordability of Fixing Public Housing
- 20 PART THREE: Locating Public Housing Communities: Exemplary Metro Areas and Rural Communities
- 31 PART FOUR: Indian Housing Needs a Green New Deal
- 34 PART FIVE: Tailor Retrofits Based on Individual Building Conditions
- 37 Conclusion
- 37 Appendices
- 39 Endnotes

## EXECUTIVE SUMMARY A Green New Deal for American Public Housing Communities

The Green New Deal for Public Housing Act, proposed by Rep. Alexandria Ocasio-Cortez and Sen. Bernie Sanders in November 2019, would undertake a decade of decarbonization and capital repairs to the country's public building stock (that is, homes managed by Public Housing Agencies (PHAs) as well as some tribal housing), tackling climate change and inequality at the same time.

Photo by Robert Bye on Unsplash

As articulated in House Resolution 109, introduced by Rep. Alexandria Ocasio-Cortez and sponsored in the Senate by Sen. Ed Markey, the Green New Deal's core priorities include aggressive cuts to greenhouse gas emissions, widespread green job creation, and addressing inequalities of race and class. The resolution explicitly calls for direct green investment in frontline communities as a way to achieve these goals in the short term. This targeted investment is often critiqued as an expensive and distracting add-on to decarbonization. But in fact, green social policy is a strategic lever to slash emissions directly by eliminating fossil fuel use and indirectly by growing the coalition for decarbonization.

The Green New Deal for Public Housing Act is a wise use of resources: the public sector already owns the buildings; they are in desperate need of maintenance already; green retrofits that slash carbon emissions, improve health and comfort, build community resiliency centers, and create jobs in neighborhoods with high unemployment, will together make huge improvements to people's everyday lives while building political support for more climate action. Indeed, we hope to soon develop legislation that extends these principles to other pieces of the low-income and affordable housing system. Following the broad contours of the Green New Deal for Public Housing Act, this report estimates that with \$119 to \$172 billion of federal investment over ten years it would be possible to decarbonize more than one million units of the country's public housing stock—the equivalent of taking 1.2 million cars off the road every year. These same retrofits would eliminate lead, mold, and other health hazards that plague the nearly 2 million people who live in America's public housing and backfill the massive existing and accrual needs that have plagued existing public housing for decades. All this would create over 240,000 jobs per year, including tens of thousands of high-paying construction and maintenance jobs for public housing residents and nearby low-income workers.

This investment would cover both all necessary shortterm and capital repairs *and* holistic building retrofits. Pairing green retrofits with immediate and deep capital repairs is the most efficient and cost-effective way to reach the twin goals of making public housing healthy, safe, and desirable for all residents and upgrading building systems to the highest 21st century green standards. Indeed, this investment will do even more—it will develop new labor skills and building upgrade techniques that will facilitate no-carbon green retrofits of other residences and commercial buildings across the country.

#### **Summary of Benefits**

- Invest \$119 to \$172 billion in green retrofits that include all needed capital repairs, vastly improved health, safety and comfort, and eliminate carbon emissions. This would hugely improve the living conditions of nearly two million people, living in roughly one million units.
- Create up to 240,723 jobs per year nationally across multiple sectors, thanks to the injection of billions of dollars into the 21st century green retrofit economy. (For all jobs and economic projections, see Appendix forthcoming in full report.)

- Directly create from 22,297 to 35,755 career-track, high-paying jobs per year in skilled maintenance and construction for public housing residents, with average wages depending on state. As examples, average wages in construction are \$69,992 in California, \$61,828 in Colorado, and \$61,620 in Georgia. These are comparable to early-career union rates.
- Create jobs throughout the national economy, with construction jobs concentrated in areas with a significant number of public housing units. Based on our estimates, this program will bring up to 222 on-site construction jobs per year to IL-07 (Chicago), 256 to MA-07 (Boston), 123 to MI-13 (Detroit), 179 to MN-05 (Minneapolis), and due to its large concentration of public housing, 4,406 on-site maintenance and construction jobs per year to Puerto Rico.
- Create constructions jobs that cross partisan divides. Because public housing is widespread across the country's political divides, these investments would create more skilled construction and maintenance jobs per year for public housing residents in red states (up to 17,489) than blue states (up to 9,428), with party affiliation based on which party won the most votes in the 2016 presidential election. At the congressional district level, however, there would be more jobs for public housing residents in blue districts (up to 14,224) than red (up to 12,168), with party affiliation based on the 2018 midterm congressional election.
- Reduce annual carbon emissions by roughly 5.6 million metric tons annually compared to recent years, the equivalent of taking over 1.2 million cars off the road. We achieve this through electrification, increased energy efficiency, renewable energy purchase and solar panel installation, and the removal of fossil fuels from building systems.
- Reduce public housing water bills by up to 30% per year, or \$97 million.
- Reduce public housing energy bills by up to 70% per year, or \$613 million dollars.

### Why America's Public Housing Needs a Green New Deal

Public housing is found all over the country and is managd by local authorities. As there is a lack of comprehensive, national level data on public housing conditions countrywide, this report is largely concerned with outlining likely costs, likely economic and environmental benefits, mapping where the work would be done, and explaining some of the core tasks of green retrofits in different contexts. A more detailed analysis of a Green New Deal for NYCHA—New York's public housing authority, by far the largest in the country—can be found in our companion report, "A Green New Deal for NYCHA Communities."

The current situation of national public housing is desperate. A Department of Housing and Urban Development (HUD) 2010 study estimated the capital needs deficit of the country's roughly 1.1 million public housing units. It estimated that at that time, the nation's public housing stock required \$25.6 billion in capital repairs to address endemic conditions of ill repair, from peeling lead paint, to molding or rotting subflooring, to failing HVAC systems. **HUD estimated that there would be a total need for \$89 billion worth of repairs and ongoing accrual costs in public housing over the 20 year timeframe to 2030**—assuming that the original repair needs were filled in an orderly fashion starting the same year of the study.

Meanwhile, public housing, like all housing, is a major contributor to greenhouse gas emissions that are causing the climate emergency. We estimate that nationally public housing is responsible for about 5.6 million metric tons annually, the equivalent of 1.2 million cars used throughout each year. Through energy efficiency measures, electrification of building systems, and acquisition of energy from clean sources, these emissions would be brought to zero.

And residents of public housing suffer health harms caused by mold, lead contamination, poor indoor air quality, and unsafe temperatures. Studies have indicated that certain health conditions, such as asthma, are more prevalent in public housing compared to other households.<sup>1</sup> Substandard housing conditions can additionally contribute to mental health problems, engendering symptoms of chronic stress, depression, and hostility.

What should be done? How can we make the needed repairs while also transforming the country's public housing into comfortable, healthy, safe, zero-carbon, green housing? With constantly improving 21st century green technology, we can decarbonize and repair residential buildings currently managed by public housing agencies (PHAs). All over North America and Europe, public housing is being modernized with deep energy retrofits that slash carbon emissions and massively improve residents' quality of life. As tens of millions of Americans struggle with housing costs, especially young people, women, and people of color, and as carbon emissions threaten the very foundations of both the economy and our society, we face a generational opportunity and duty to tackle these problems in tandem. We estimate that for \$119 to \$172 billion in green retrofits and capital repairs over ten years (roughly 1% of the cost of the Tax Cuts and Jobs Act of 2017, also known as the Trump Tax cut), it will be possible to conduct green upgrades of every public housing unit in the country, ramping up the pace of retrofits over the course of the decade as techniques and skills spread, in order to:

- Massively improve residents' health and comfort
- Cut public housing buildings' carbon footprint to zero
- Make public housing buildings resilient to extreme weather events
- Ensure each major public housing complex has community spaces to serve everyday needs and to be used as shelters during extreme weather like heat waves
- Upgrade community facilities on public housing land—like playgrounds—to serve public housing communities

*Note:* See the full report for all sources.

