Efficiency Improvements, Price Escalation, Neighborhood Displacement: Strategies to Ensure "Good" Market Transformation Does Not Create "Bad" Market Transformation

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ABSTRACT

The Inflation Reduction Act (IRA) energy efficiency rebate programs create a historic opportunity to transform the market for high-performing homes by supporting processes that ensure these homes will be recognized and properly valued at time of sale. The certification requirement in the legislation ensures that when homes that have been made more efficient or electrified with IRA rebates are sold, potential buyers will understand the features and benefits of these homes and pay a premium for them. This price premium will transform the market by providing another powerful motivation for homeowners to invest in efficiency. Given current overpriced real estate markets, however, some professionals have raised concerns that this same price premium may contribute both to housing unaffordability and gentrification in communities of color. The authors conducted a literature review and led interviews with six stakeholders with diverse backgrounds in environmental justice, housing justice, community development, and real estate. The following paper draws on this research to analyze: 1) the extent to which higher sale prices associated with an energy efficiency premium contribute to a cost burden for purchasers; 2) activists' perspectives on the social and economic impacts of the sale of high-performance homes in communities of color; 3) the potential for community-based real estate brokers to mitigate gentrification impacts; 4) the potential for creative mortgage finance solutions to ensure the affordability of high-performance homes.

The paper concludes with a discussion of strategies to promote affordability and mitigate gentrification that can be integrated into rebate program designs for home upgrades.

Introduction

The Inflation Reduction Act (IRA), the single largest investment in climate and energy in American history, allocates $9 billion for programs that offer rebates to facilitate homeowners' efficiency improvements. The implementation of the IRA will help homeowners cover the costs of energy efficient and electrification measures like insulation, efficient appliances, and heat pumps.

Beyond the short-term impact of spurring the installation of millions of energy efficiency improvements, the IRA is also designed to drive long-term market transformation by creating enduring consumer demand for energy efficiency. One key market transformation in the legislation is third-party energy efficiency certification, which will play a crucial role in making a home's energy-efficient and electric features visible. This will help home sellers advertise/communicate the benefits of these improvements and ensure that their homes are properly valued at the time of sale and/or refinance. Certifications provide third-party documentation of the home's energy and other high-performance features. They may also verify that the home meets specific standards for features that affect the home's comfort, health, energy efficiency, water efficiency, resilience, and/or energy generation and storage capacity. Research from property appraisers has shown that homes marketed as having a third-party certification that identifies energy efficiency improvements consistently sell for a premium (Fincham 2022).

President Biden's Justice40 Initiative prescribes that 40% of the benefits for certain federal funds, including those from the IRA, must be targeted to disadvantaged communities. The Federal Government identifies disadvantaged communities with its Climate and Economic Justice Screening Tool, which uses datasets to evaluate indicators of burdens in eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. Before rebate funds start flowing to these communities, it is important for policymakers to consider potential impacts, including unintended adverse consequences to the residents of these communities, and to design programs to mitigate the risks of negative impacts.

One significant concern raised by some public officials has been the potential for the IRA programs to drive gentrification and displacement. By improving the condition of housing stock in disadvantaged communities, and ensuring that these improvements are visible at time of sale, the rebate programs may contribute to excessive home sale price increases, which in turn results in long-term residents being forced to leave. Undoubtedly, gentrification is reshaping many communities in the U.S. and contributing to significant hardship for local residents. The question is whether the IRA programs will make a material contribution to these gentrification processes.

This paper explores the potential effects of the IRA rebate-funded improvements on the members of disadvantaged communities, including homeowners, home buyers, and the community at large. The primary source material for the study is interviews conducted with professionals from the fields of real estate, affordable housing preservation, and community activism who live and work in some of Chicago's disinvested communities. The paper concludes with recommendations for addressing unintended consequences like green gentrification and suggests avenues for coupling energy upgrades with energy justice.

Background

Benefits of High-Performing Homes

High-performing homes are built or renovated to be more healthy, comfortable, safe, and resource-efficient than average homes. Cost savings from lower energy bills can be an important motivator to invest in efficiency improvements. These savings are particularly important for low-income, Black, and Latino communities that spend a higher share of their income on energy bills. Research from the American Council for an Energy Efficient Economy (ACEEE) and Energy Efficiency for All (EEFA) showed that energy burden for low-income, Black, and Hispanic communities is over three times higher than the rest of the population (Drehobl and Ross 2016). Efficiency measures can help level the inequality in energy burden by improving the home's efficiency and lowering energy bills (Russell et al. 2015).

For many homeowners, the other benefits of energy upgrades can outweigh the value of cost savings. These include increased home comfort, better temperature control, and better indoor air quality as the result of a reduction in indoor air pollutants associated with respiratory conditions and other chronic illnesses (Antonopoulos et al. 2024). Efficiency upgrades may also increase community pride and satisfy homeowners' desire to be environmentally responsible.[1]

Sale Value of High Performing Homes

A wide range of appraiser-led paired-data analyses indicate that high-performing homes that are properly marketed sell for a premium at the time of sale. A paired-data analysis helps appraisers look at the sales of single-family homes with high-performing features and identify if high-performing home premiums were paid. Paired-data analyses are preferred method among appraisers as the results reveal a direct market reaction to a given feature. Elevate[2] partnered with an appraiser to find evidence of a premium for high-performing homes and assess the visibility of high-performing home verifications and features in local Multiple Listing Services (MLS) in four Midwestern metropolitan areas (Elevate 2020). Preliminary evidence suggests that properly marketed high-performing homes in the Minneapolis-St. Paul area sell for a premium (Elevate 2020). From the available data points, the research team found a sales price premium that ranges from 2% to 14% (Elevate 2020). A study by Pearl Certification in four U.S. cities found that Pearl certified homes[3] saw an average 4.75% premium across all four markets (Fincham 2022). Additionally, the Institute for Market Transformation and the District of Columbia's Department of Energy and Environment (2015) found that high-performance homes marketed with green features sell with an average premium of 3.46% compared to homes without green features.

Homeownership, Wealth Building, and Inequality

Homeownership has widely and historically been considered one of the best paths to building lasting wealth in the U.S. (Herbert, McCue, and Sanchez-Moyano 2013). A home provides a source of income, safety, and value that can be passed on to future generations. Over the 10-year period between 2012 and 2022, the value of a median-priced home in the U.S. increased by $190,000, or a gain of $19,000 per year on average (NAR 2023). A typical homeowner's net worth is 40 times higher than that of a renter (NAR 2023). These home value increases can be translated directly into wealth through sale or refinance.

These increases in home value are not evenly distributed throughout the population. NAR's research showed that although homeowner wealth increased across the board, there were disparities by income levels. Low-income households, defined as those that earn less than 80% of the area median income, gained $98,900 in net worth from home appreciation over the past 10

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[1] See for example Kahn and Kok's finding that some California homeowners derived value from a "green" home label beyond the financial value of energy savings: "Some homeowners seem to attribute non-financial utility to a green label (and its underlying features), which is in line with previous evidence on the private value of green product attributes." (Kahn and Kok 2014)

[2] Elevate is a 501(c)(3) nonprofit organization that works nationally and is headquartered in Chicago. Elevate designs and implements energy efficiency, solar, building decarbonization, clean water, and workforce development programs that lower costs, protect the environment, and ensure that program benefits reach those who need them most.

[3] A Pearl Certification Report is a comprehensive assessment of a home's high-performing features, providing detailed documentation that highlights these features' benefits and added value. Included in the report is an extensive marketing package homeowners and their real estate agents can leverage to articulate the enhanced value of their listing, ensuring that the home's performance improvements are recognized and properly valued during the sale or refinance process.

years while high-income households (earning more than 200% of the area median income) gained $150,800.

The disparities are even more stark in neighborhoods whose residents are primarily Black or Latino. Homes in these communities typically appreciate at a much slower rate than homes in other areas and lose value much more rapidly when downturns occur (Zonta 2019). This disparity is driven by a history of segregation, redlining, and underinvestment, and exacerbated by contemporary appraisal practices (Jackson 1985, Massey and Denton 1993, Rothwell and Perry 2022; Zonta 2019; Howell and Korver-Glenn 2020). One study showed that owner-occupied homes in Black neighborhoods are undervalued by $48,000 per home on average, amounting to $156 billion in cumulative losses (Perry et al. 2018). This undervaluation has a direct impact on wealth: one study found that: "in 2016, the mean net housing wealth of white homeowners was $215,800, compared with only $94,400 among black homeowners" (Zonta 2019).

Residents of undervalued communities recognize this problem and are very interested in solutions. Addressing these inequities should be an important policy objective. From this perspective, the IRA rebate programs provide an opportunity to reinvest in neighborhoods of color, and to support increases in home values. In other words, equipping energy insecure households with federal efficiency resources provides an opportunity to redress prior injustices and help families realize benefits of restorative justice through increased home value (Lewis, Hernández, and Geronimus 2019).

Gentrification and "Green Gentrification"

When investment has occurred in Black and Latino neighborhoods, it has often increased rather than reduced inequality. Previous efforts to reinvest in African American[4] and Latino communities through revitalization, development of housing stock, and other infrastructure have increased the cost of living and spurred demographic change. These efforts often result in displacement of the original community residents, who are forced to relocate to more affordable neighborhoods. (See for example Lewis, Hernández, and Geronimus 2019). As a result, there is concern that the IRA programs, by increasing home values, may increase gentrification and displacement risks among communities of color.

Gentrification is a process in which low-income neighborhoods where significant disinvestment has occurred experience catalytic investment, in the form of renovations and/or new development, that results in the displacement of current residents and an influx of new, substantially more affluent residents. The process often has a racial dimension: displaced neighborhood residents are more likely to be people of color, while the new affluent arrivals (the gentrifiers) are predominantly white.[5]

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[4] "African American" is used in reference to this source and its findings. In other areas of this paper "Black" is used as a more encompassing descriptor.

[5] Smith's early influential article on gentrification described the process as follows: "Ony when [a rent] gap emerges can redevelopment be expected since if the present use succeeded in capitalizing all or most of the ground rent, little economic benefit could be derived from redevelopment. As filtering and neighborhood decline proceed, the rent gap widens. Gentrification occurs when the gap is wide enough that developers can purchase shells cheaply, can pay the builders' costs and profit for rehabilitation, can pay interest on mortgage and construction loans, and can then sell the end product for a sale price that leaves a satisfactory return to the developer. The entire ground rent, or a large portion of it, is now capitalized; the neighborhood has been "recycled" and begins a new cycle of use." Smith 1979,

The academic literature on gentrification emphasizes that it is primarily driven not by newcomers moving into a neighborhood and fixing up homes, but by planned, large-scale investments made by investors and developers, often incentivized and/or enabled by governments. These capital investments typically take advantage of a "rent gap" -- the difference between the current value of buildings and land in their disinvested state, and the potential future value of the buildings and land once they have been renovated or developed. Government policies facilitate this via zoning and land use actions, by providing access to subsidized capital, and other mechanisms, which generate displacement pressure. As a result, long-standing residents, which are disparately Black and Brown, are removed from the neighborhood. Mele's study of gentrification in New York City's Lower East Side, for example, shows how investors bought up abandoned buildings long before renovations began, and long before the neighborhood's "gentrifiers" moved in, a process supported by the city, which once infamously brought in a tank to remove squatters who refused to leave an abandoned building (Mele 2000).

Building on the concept of gentrification, green gentrification (also referred to as "environmental gentrification") is a term used to describe the effects of increased green infrastructure or other investments that improve environmental quality that result in increased housing prices, property values, and displacement of working-class residents and racialized groups (Anguelovski et al. 2022). The green gentrification process typically involves the development of green commercial buildings, neighborhood-level redevelopment, and large green infrastructure development like parks, rails to trails conversions, and greenbelts, which, intentionally or not, result in the displacement of existing neighborhood residents (Anguelovski et al. 2022; Bouzarovski et al. 2018; Garcia-Lamarca et al. 2022; Rigolon and Németh 2018). For example, policymakers have stated that incentives that were intended to promote green development, like tax abatements for LEED certification, are sometimes used by more affluent residents and led to accelerated gentrification (Siddiqi et al. 2023). Specifically in Chicago, Rigolon and Németh (2018) analysis of changes in socioeconomic status, race and ethnicity, and property values along Chicago's 606 Trail found that the 606 Trail rails to trails development contributed to environmental gentrification. Copic, Schusler, and Krings (2020) study of environmental gentrification perceptions in Chicago found that environmental gentrification can harm neighborhoods by displacing residents and disrupting the social networks in the community. These examples suggest that green gentrification conforms to the process of gentrification generally, in that it is associated with large-scale capital investment.

Methods

What then, are the potential impacts of the IRA rebate programs on communities of color? Are they likely to support needed increases in home equity and support wealth building that has been historically denied to homeowners of color? Or will they instead drive up property values and result in neighborhood displacement through "green gentrification"?

To address this issue, six interviews were conducted with mainly Chicago-based individuals of diverse backgrounds who possess deep knowledge of environmental justice, housing justice, community development, and real estate. Interviewees were selected based on their professional and personal experience with energy efficiency, real estate, and gentrification. Semi-structured interviews were conducted in which the interviewees were asked about their

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p 545. As examples of an extensive literature on gentrification and race, see Hwang and Ding 2020, Mele 2000, and Squires 1994.

views on the social and economic impacts, both positive and negative, of implications from the IRA and certifying and selling high-performance homes in communities of color. Additionally, we discussed perspectives on potential gentrification and displacement effects in communities of color that result from increased home value from energy upgrades.

Findings

Finding 1: Energy Efficiency Investments and Certifications in Disadvantaged Communities Provide an Opportunity to Begin Redressing Legacies of Injustice.

Black homeowners in particular can benefit from energy efficiency upgrades as this population has endured substandard housing conditions as a result of unjust housing policies. Thus, the IRA and certified homes are critical for Black homeowners whose generational homes are often energy inefficient and undervalued (Lewis et al. 2019). Interviewees agreed that the tangible improvements and value added by upgrading and certifying homes can help start the process of correcting the issues of inequitable home quality and home value.

"Homeownership is not generating wealth for Black people because our homes are not appreciating. History has proven that they are not building generational wealth because our neighborhoods are devalued and maintaining the home actually depletes our savings. [The IRA] is an opportunity to get significant investment in our houses. The history has happened, and now we have opportunity to get it right. For example, with UnBlocked,[6] homes are getting efficiency improvements and it would take a lot more for that area to gentrify. We want their property values to increase, we want people to age in place and build equity. -community advocate

Interviewees mostly described positive impacts from home value increases. Homeowners can benefit from rising property values through various avenues. One option is for homeowners to sell the home so they can invest the proceeds in business, education, or retirement. Rising home values also offer homeowners the opportunity to acquire home equity loans or lines of credit which can be used for home improvements, education, and other opportunities for social advancement. Past and current policies and practices have limited a person of color's ability to access loans or build wealth through homeownership, and increased home values aid in addressing that gap. Additionally, several people commented on the ripple effects of energy efficiency upgrades that can include lower energy costs and improvements that are sustainable, rather than adding a burden to homeowners.

"If people can make their home more energy efficient and high-performing, that is good. They'll have lower operating costs and be more likely to hold on to the home. And if they do want to sell it, that could help them build wealth. People want their homes to sell for more money. That's why people invest in real estate, so that it can appreciate." - housing affordability professional

"[The IRA] will be a huge benefit for low-moderate income families because they'll get a much better home and it'll be sustainable." - real estate broker

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[6] Through "unBlocked Englewood," Tonika Lewis Johnson and the Chicago Bungalow Association are paying for home repairs along one block, which the organizer hopes can help reverse decades of discriminatory housing policies. https://www.chicagobungalow.org/unblocked

Recent findings from the National Renewable Energy Lab (NREL) (2024) support this finding that weatherization and heat pumps can reduce energy bills. NREL (2024) found that majority of Americans (62% to 95% of households, depending upon heat pump efficiency) would see decreased energy bills after installing a heat pump, and that range increased to 82% to 97% when paired with weatherization. A green real estate agent also commented on the benefits of efficiency and electrification in relation to home sellers and buyers:

"The seller deserves to be rewarded for the work that they put in because they've gone the extra mile and these upgrades are going to help the new owner in the long term. The new home owner has to understand why the seller went the extra mile and why that's important for them and their family. […] I think a lot of times we forget that we are in these buildings and homes with gas and we sleep every night hoping that nothing goes wrong. For me, knowing that a seller has gone the extra mile to not only protect their family and add more value to the home, that means I don't have to worry about that as much. I don't have to worry about my heat going out of the walls and to the ceiling. Those things are important, and we have to do a better job of communicating the value--not necessarily the features, but the value."

Prior research aligns with these interview findings—research indicates that energy efficiency upgrades can lessen the harmful effects of chronic energy insecurity and housing stressors, and these improvements provide an effective pathway for redressing historic racial injustice (Lewis, Hernández, and Geronimus 2019).

Finding 2: Implementation of energy efficiency upgrades should aim to ensure benefits can be realized by community residents, working class and racialized communities, without perpetuating inequitable outcomes.

In order to work towards restorative justice, which aims to redress and repair past injustices,[7] interviewees concurred that the benefits of upgrades must be accessible and tangible to low- and moderate-income residents of the community and must avoid displacement. A Chicago housing affordability professional spoke about their experience with their own neighborhood gentrifying and the displacement that occurred once the City invested in public transit there:

"The sad part is, you want to see that people are able to make some money when they sell. Like you came here with nothing but the shirt on your back and you managed to raise your kids and keep your block safe. You did all the hard things. Your kids are grown and moved on. But you can't maintain the house all by yourself, plus property taxes are through the roof so no matter how much heart you have in it, you can't stay. It's not a choice you have. And at the very least you want to see that they made their money. But what I often saw was that the building was in such disrepair, so who's going to buy it for top dollar? You get all these fliers saying "We'll buy your home for cash" but they pay so low. And these folks are so desperate. Anybody who shows up waving cash, they're like okay. So the investor buys it for nothing, rehabs it, triples the rent so A) you lose homeownership from the block so there's less [local community wealth building and] investment in your neighborhood and B) they'll sell it for 2-3x whatever it had been renting for previously."

[7] Energy Equity Project Report: https://energyequityproject.com/wp-content/uploads/2022/08/220174_EEP_Report_8302022.pdf

Another community advocate also commented on how it often seems that neighborhoods must reach total decline before any help arrives: *"The neighborhood goes down and down, then it crashes. There are no interventions. If anything, there are things that accelerate that descent. Then new forces come in and say they're going to redevelop, pour in lots of money, and bring in experts from downtown and change the community. And they do. The interventions that could actually help the neighborhood appear to be on hold until the neighborhood collapses. Money comes in and they build all this wonderful new stuff and the people that lived there can no longer afford to live there. We see this happen over and over again."* One real estate professional posited that these upgrades would lead to further benefits and investment but not displacement, stating that *"Displacement can be avoided for current homeowners if we work hard to make sure that they take advantage of the resources and benefit from the increase in home value…We also have to continue to work towards making sure we provide for folks who are not homeowners by having balanced housing and homes for middle income people."* Similarly, a real estate agent well versed in energy efficiency spoke to the importance of marketing the rebates and certification to all generations. She and another real estate professional noted concerns about investments not reaching Black and Brown communities, especially older homeowners who may not be reached through modern marketing tactics and those who haven't received education on the long-term value of these upgrades.

"I'm very careful of looking at different strategies and different ways for our communities to be redlined. We know that appraisers and appraisals have been the new version of redlining in our communities. I'm concerned that [IRA programs and certifications] could be turned into something that's used negatively in our communities if the education isn't there, and if there aren't people to oversee and hold accountable all the players involved." –real estate agent

The main concern of interviewees was increased property taxes, which is a critical factor in displacement. This is similar to the findings from Siddiqi et al. analysis of interviews with community organizers who expressed concerns that the benefits of Justice40 environmental justice policies would lead to current residents being displaced by changes in property taxes or rents after improvements (2023). This concern over property tax increase is especially important for Black homeowners since research shows that their property tax burden is 10-13% higher than for White homeowners, even though Black-owned homes are undervalued by an average of 21% to 23% (Fields et al. 2023).

One community activist noted that home value increase is a positive thing, as long as it is paired with financial education and wealth isn't cut off from the community: *"If we are providing people with good financial education, then it's a good thing if my house value goes up and it's not going to immediately trigger me with taxes that are going to push me out of the house. That's a good thing, and that's part of what we want to happen. The idea is to help the homeowner and community build wealth, we don't want to cut that off and tell them you can't have the wealth"*. Interviewees agreed on the importance of making sure the benefits of the IRA reach the original community members who withstood years of substandard housing and disinvestment. As the IRA seeks to improve the efficiency and quality of housing for disadvantaged communities, there must be clear guidance on how they can benefit from these investments long term. A real estate professional stated that it's important to make sure homeowners have the right people working with them to maximize their benefits, for instance local real estate professionals, vetted contractors, or trusted community-based organizations. If that doesn't happen, he fears that there's "a danger in the homeowner getting cut short [and not fully taking advantage of the wealth building opportunities] in the process."

Finding 3: Efforts to avoid gentrification should not limit or delay needed investments in underserved communities.

Interviewees spoke of larger systemic issues that need to be addressed in underserved communities that are more pressing than gentrification. Moreover, they agreed that massive investment from outside sources is more likely to lead to gentrification than individual homeowners making upgrades to their home. As one community activist who works in energy efficiency described,

"Gentrification happens because of developers who take up real estate, not from energy efficiency upgrades. Gentrification doesn't occur from individual investment in homes, it comes from collective investment and city investment. This is especially true for Black and Brown neighborhoods because the disinvestment is so deep. Individual homeowners making energy improvements are not going to spur developers—it's literally just doing good for the homeowner so they can possibly get a bit more than they spent."

Some argue that the concern of gentrification from IRA rebates and accompanying third-party certification is misplaced, especially if it leads to a lack of investment that will help community members: *"This mindset is contributing to the problem, to not invest in Black and Brown homeowners. It's contributing to the cycle of disinvestment."* With regard to Black communities in particular, one housing affordability professional commented, *"Majority Black neighborhoods—we know their homes don't appreciate like they do in White neighborhoods. In Black and Brown communities, I don't see people being pushed out because of rising home values. I see people being pushed out because their homes are falling down around them.* ***The desperation to have investment is much greater than the risk of gentrification.****"* While another interviewee agreed that when investments are made in Black-owned homes, that investment doesn't add the same value because these homes are not appraised fairly. The interviewee argued that Black-owned homes do not appreciate as much and therefore the neighborhood will not be gentrified because there is a huge value gap that would take many years to undo. This undervaluing of homes with a Black owner is a result of systemic racism.

"When you move and buy a home in a Black neighborhood, older homeowners, they move there to stay. Knowing that their home wasn't going to increase in value. We're not making this home purchase for appreciation value. Gentrification just doesn't happen in Black neighborhoods in Chicago--that's the truth that we know. People don't want to move into Black neighborhoods because of stereotypes. Any gentrification that's being imagined, is being made up. It's a fear and argument that isn't rooted in data." - community activist

"The mom-and-pop owners are truly the people that are bringing housing to the South and West sides of Chicago. They have been doing this for several decades through the gentrification, through the redlining, and through some of the other policies that have kept a lot of our communities in the review mirror. While other communities have continued to prosper and succeed and appreciate, our communities have to continue to fight depreciation." – real estate agent

Regarding the effects of an increased home value, multiple interviewees stated that even if efficiency upgrades increase home value, gentrification is unlikely to occur in Black neighborhoods because they never get the amenities or resources they need.

As mentioned, all interviewees agreed on the positive benefits of efficiency upgrades and home certification. They believe that such investments should not be delayed because of gentrification concerns. The goal is for neighborhoods to have investments and necessary development without displacement. Collective efforts should focus on avoiding displacement rather than avoiding development.

"We feel like we have to choose between development and gentrification. There needs to be development and it has to include conversations to prevent tax increases plus investment in long-standing homeowners in Black neighborhoods. I understand the fear, but I want people to take advantage of all the resources and increase the value of their home. Advocate for something other than less development. Advocate for appropriate home assessment. We need to hold elected officials and developers accountable because dollars follow young white professionals, that's a fact. ***If we view gentrifiers as the sole problem, this is going to be an ongoing problem. It doesn't mean you should avoid development. Avoiding development to prevent gentrification is backwards.*** *[People who believe that] don't know the power of connecting with your new neighbors." - community activist*

Finding 4: Displacement can be avoided through active community engagement and investment.

The importance of a shared vision and open dialogue with a community, rather than assumptions or impositions, cannot be overstated. In our discussions, interviewees from disinvested neighborhoods called for increased investment, particularly in the community's residents through training and education.

"Ninety-five percent of all wealth is in real estate. If we can prime our community with a path to do affordable housing and deep retrofits, if we can train our folks to put in new solar developments and all these wonderful things in their own community where they're benefiting— then they're getting rent money, they're getting rebates, they're not just a hired hand. Working as a hired hand doesn't get us equity, ownership, or power--doesn't get us anything but the cycle continuing". – community advocate

Similarly, interviewees said that people of color can learn trades associated with high-performing upgrades (e.g. residential solar installation, weatherization upgrades, electrification upgrades), become a resource, and have the ability to afford some of the homes. A real estate professional also commented on how people of color leave neighborhoods when those neighborhoods don't have the amenities and infrastructure that people want--people don't want to stay in underserved communities. He adds, *"There is a movement to get people of color to try to become more vested in their communities by becoming developers. As we look at workforce development, there's a huge opportunity for trades and why not have people of color that learn those trades? They can then become a resource to the community and be able to buy these homes."*

One interviewee leads a clean energy workforce program and explained that they're training people in the community, creating income, giving them a connection to their community, and a sense of pride and ownership. Because of this program, the residents can actually afford to stay there instead of having someone else come in to improve the neighborhood and they have to leave. They recommended:

"Be intentional about bringing in as many of the resident workers and businesses from the community into development and production. Because that's how we start to change our communities. It's not just to put a pretty building there that somebody else owns, it's a pretty building I own and I can afford to stay here and take care of it…I have the skills to do the work and the financial skills. ***This has to be something where we find ways to engage people over time to make those changes. Poverty has been with us forever, it's not a flip the switch kind of thing.****" - community advocate*

In order to keep existing residents from being pushed out, it's important to engage with community members and trusted local organizations. A housing affordability professional noted, *"[To avoid displacement], different neighborhoods need different tools. Even different populations within one neighborhood need different tools."* A real estate agent agreed on the need for trusted, local residents and community-based organizations to bring awareness to opportunities, suggesting *"energy efficient ambassadors could help people understand the impact of this program and drive awareness to the Inflation Reduction Act."*

Another interviewee offered real estate agents as key liaisons and resources for community connectedness, stating:

*"****When you look at real estate people, the perception is that we just make money and don't care about our community. And all we care about is making the sale. That's not the truth… The role of a real estate professional is to value the neighborhoods you support.*** *As we value those neighborhoods, then others will value them too because we can tell the story. A story about why it's important to live here or what's the value of this neighborhood versus other neighborhoods. We can help make sure people have the ability to make an informed choice. A lot of times, people don't know about the changes that have come to the neighborhood. People have to make the determination if they want to be a pioneer or not."*

Recommendations

Our analysis of these discussions and previous research suggest that the following recommendations would be helpful in ensuring the benefits of efficiency investments lead to positive outcomes for disadvantaged communities across the United States.

Recommendation 1: Make sure IRA funding gets to Black and Brown neighborhoods. The goal of the IRA residential efficiency and electrification programs to reach J40 communities is necessary, and efficiency advocates and government officials should do everything they can to ensure these funds get to Black and Brown homeowners. Interviewees agreed on the positive effects, both direct and indirect, that these investments would have in their communities. It is essential that homeowners have the awareness, education, and resources needed to take advantage of the efficiency programs and the certifications that will help them increase their home value.

Recommendation 2: Community engagement through advisory groups, U.S. Housing and Urban Development (HUD) -certified Housing Centers, and real estate agents provides valuable local insight and connections. Real estate agents have deep involvement in the neighborhoods, towns, and cities in which they live and work. They are invested in their communities, often have excellent relational skills, and they have pre-existing communication networks to reach others in their community. Implementation of the IRA should involve real estate professionals as they are trusted advisors and local housing experts who can help distribute rebate information to homeowners. Real estate agents have established marketing channels to reach out to their "sphere of influence," a list that includes friends and family, previous clients, and leads encountered through marketing efforts and purchased leads. Agents are consistently reaching out to this list to keep themselves top of mind with different types of information. Additionally, many agents host community events ranging from first time home buying to food drives for local food pantries. Information about the IRA would be a natural fit. Moreover, the real estate agents we interviewed want to help build the communities they serve and enhance the quality of life for everyone. They also emphasized that they are willing to explain the value of IRA programs and encourage people to take advantage of this opportunity to improve their home. Additionally, community advisory groups made up of local stakeholders can oversee local development and be vigilant of potential gentrification or displacement effects. For example, development and revitalization efforts in Weinland Park,[8] a neighborhood in Columbus, Ohio, is overseen by the Weinland Park Collaborative. The Collaborative coordinates investments and programs that have resulted in increased neighborhood stabilization without displacing residents.

Recommendation 3: Federal, state, and local governments should utilize anti-displacement tools and policies to avoid any negative impacts of home value increases. For example, the Department of Energy precludes landlords of low-income rental buildings who get IRA rebates from evicting tenants or increasing their rent for at least two years. Even if the building is sold within two years, this is still required for the new owner and has to be built into the purchase agreement. States implementing IRA rebate programs will be required to enforce this consumer protection, but also have the option to extend beyond the two-year minimum. The people we interviewed agreed that efficiency improvements are needed, yet it is important to be cognizant of the ripple effects of increased home values, such as increased property taxes. Upgrading to energy-efficient appliances won't increase property taxes, and air-sealing and insulation also have no visible indicators that would lead to a higher tax assessment. However, if homes in the neighborhood sell for more money, property taxes may increase. Therefore, property tax relief is critical for low- and moderate-income homeowners, especially Black and Brown owners. Without these tools in place, it is difficult to ensure that negative impacts will be completely avoided. Also, such policies and tools are essential for the restorative justice to right past wrongs that depressed the opportunity for homeownership. Anti-displacement policies and initiatives that are specifically related to efficiency upgrades are listed below. These recommendations were informed by the interviews and our research on anti-displacement tools.

Mortgage finance solutions

- Make energy efficiency mortgages widely available and easy to obtain. For example, the Alaska Housing Finance Corporation offers interest rate reductions when financing new or existing energy-efficient homes or when borrowers make energy improvements to an existing home. Any property that can be energy rated, and otherwise eligible for Alaska Housing financing, may qualify for this program.
- High-performance mortgage product giving lower interest rates for homes with efficiency certification. Funds for income-qualified buyers to help with mortgage payment for efficient homes.

[8] https://www.weinlandparkcivic.org/full-report-greater-ohio-policy-center-report-achieving-healthy-neighborhoods/

- Reform the housing taxation system to eliminate tax burden inequities and facilitate wealth-building among Black and Brown communities. These inequities can undermine a household's hard work and lifelong efforts to build assets and create intergenerational wealth; thus, collective efforts are needed to both correct the current and past impacts of these injustices as well as protect households for the future.
    - Develop tax exemptions for efficiency upgrades, in line with existing exemptions for solar and wind energy devices. This kind of exemption would exempt the amount of appraised value associated with efficiency upgrades like heat pumps from property taxes.
    - Focus on Homeowner Preservation: Focus on diverting properties from annual tax sales. Help people create a monthly payment plan so they are ready for expenses. The ultimate goal is to minimize displacement and to help owners stay in their homes.
    - Reducing monthly total cost of homeownership will put more money into the homeowners' pocket which could alleviate financial burden and allow for additional wealth-building.

Recommendation 4: Work with real estate agents and HUD-certified housing counselors to properly market efficiency upgrades so that sellers realize benefits. Previous research from Elevate (2020) discusses how to transform the high-performing homes market by showcasing clean and efficient energy improvements at the time a home is listed to be sold, noting it is crucial to market energy efficiency improvements in a way that is exciting and engaging to homebuyers. Improvements must be reflected through certification and listed in the MLS—as one interviewee stated, "As we get better about reflecting improvements, they are in the MLS and then they are validated. I think that's necessary. [Without that], we've robbed or stripped the community of that equity."

Conclusion

The findings of our interviews offer critical reflections about the impacts of IRA investments and efficiency certifications, particularly about benefits like home appreciation and wealth building that homeowners in disinvested communities could realize as a result of these investments. While energy efficiency retrofits are not the main driver of gentrification, without dedicated planning, targeted investments, public education, anti-displacement tools, and direct community engagement, the IRA's rebate programs could further contribute to this problem. In light of this, we conclude with four main recommendations on how these programs and policies can be designed to effectively maximize wealth building opportunities, and minimize and/or prevent displacement in communities of color.

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