

Policy Brief Simulation: Ensuring Just Transitions to Clean Energy

Introduction: As the wheels of progress turn, some communities are left behind in the shadow of industrialization and infrastructure development. For instance, take the city of Flint, Michigan, where the legacy of environmental injustice casts a pall over generations. Ten years after its [infamous catastrophe](#) involving inept water treatment, engineering, and subsequent widespread lead poisoning, property values in Flint have drastically declined (Figure 1). With the transition to cleaner energy sources, also known as “energy decarbonization,” on the rise, the need to heed history’s mistakes and empower just energy transitions for marginalized communities becomes more urgent.

Historically marginalized communities bear the brunt of climate crises and adverse impacts of energy infrastructure. Compounding evidence from Flint, historic data reveals that property located within proximity to energy, power, and environmental infrastructure – including turbines and transmission lines – experienced real estate investor divestment and property value decreases upwards of 10%^{2,3}. These stark statistics underscore the pressing need to address the detrimental effects of energy infrastructure on property values and local economies, which in turn perpetuate social and economic inequalities.

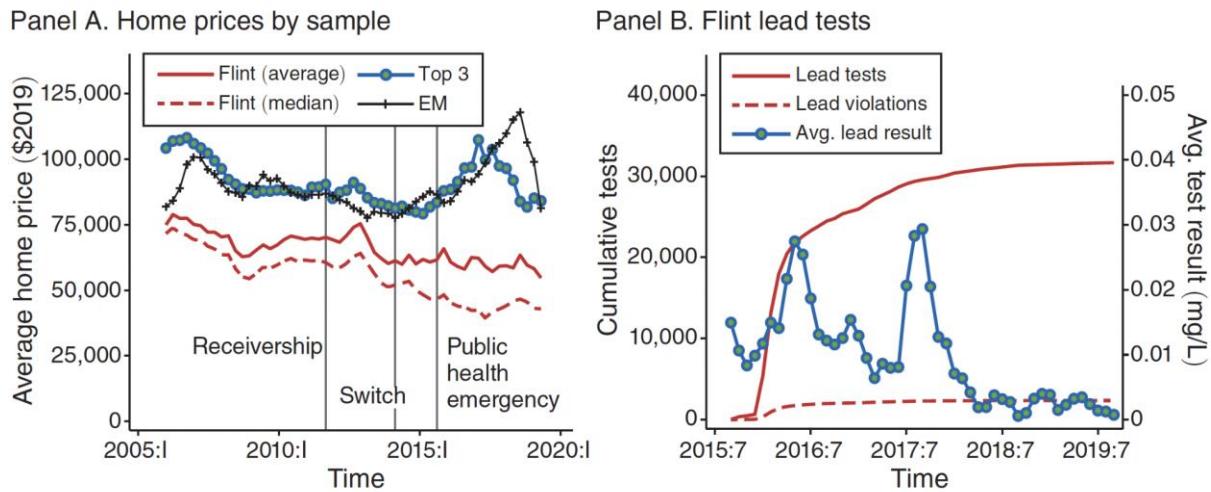


Figure 1: Impact of Environmental Crisis on Flint, MI Home Prices - Smoothed average housing prices in Flint compared to the top three matched control cities and the emergency manager (EM) control cities in Panel A. Panel B displays the cumulative number of lead tests, the number of tests where lead levels exceeded EPA health standards (left axis), and the average lead test results in homes (right axis) over time. Source: Christensen et al. (2023)

Assessing the Status Quo: The Bipartisan Infrastructure Deal⁴ emerges as a beacon of hope, promising a transformative federal investment in clean energy transmission and grid modernization. This deal was passed in November 2021, proposing a 10-part strategic plan with detailed indicators to improve, not just energy, but United States infrastructure as a collective. With a historic \$65 billion allocation, it heralds a new era of infrastructure upgrades, innovation,

and job creation. However, amid the optimism, concerns linger regarding the equitable distribution of resources and protection for vulnerable communities.

Pros and Cons: On one hand, the Bipartisan Infrastructure Deal signifies a monumental investment in America's clean energy future. It offers a lifeline to communities grappling with outdated infrastructure, by promising pathways to building resilience and improving sustainability. The creation of thousands of miles of resilient transmission lines and the promotion of innovative technologies hold the potential to revolutionize our energy landscape. Moreover, the emphasis on job creation and environmental justice underscores a commitment to equitable progress.

Despite this, it is necessary to note that societal and technological advances often leave marginalized communities behind by failing to account for how the tangible footprint required for this progress impacts said communities. The exorbitant costs associated with the infrastructure deal raise questions about affordability and the burden on taxpayers. Furthermore, the specter of community displacement looms large, particularly for historically marginalized and tribal communities. While the deal mentions environmental justice, specific measures to protect these communities and preserve property values remain elusive.

Constructing Alternate Policies: In response to these challenges, alternative policy proposals emerge as avenues for change. We propose the *Infrastructure-Adjacent Community Protection Plan (IACPP)*, which would holistically categorize communities based on resilience to energy infrastructure changes. By investing in community engagement, education, and decision-making power, it aims to uplift and empower vulnerable communities.

Here's what we propose:

- **Property Value Assurance Programs**
 - **Property Value Protection Fund:** Establish a fund to compensate homeowners for any reduction in property values due to proximity to new energy infrastructure projects, such as transmission lines or wind turbines.
 - **Property Improvement Grants:** Provide grants for property improvements or energy efficiency upgrades to increase the value of homes affected by nearby energy infrastructure.
 - **Impact Assessments:** Conduct regular assessments to monitor and quantify the impact of energy infrastructure on property values and develop mitigation strategies.
- **Community Investment Initiatives**
 - **Community Benefit Agreements:** Require energy companies to negotiate community benefit agreements that include financial contributions to local housing development or improvement projects.
 - **Real Estate Tax Relief:** Offer temporary real estate tax relief to homeowners impacted by the proximity of new energy projects to offset any decrease in property value.
 - **Affordable Housing Development:** Mandate the development of affordable housing within affected areas to counteract potential increases in housing costs and to support displaced residents.
- **Equity for Clean Energy-Deprived Communities**

- **Prioritized Investment:** Direct additional funding and resources to historically clean energy-deprived communities for renewable energy projects and infrastructure improvements.
- **Energy Access Programs:** Implement programs to enhance access to clean energy technologies, such as solar panels and energy-efficient appliances, in underserved communities.
- **Community Resilience Hubs:** Establish resilience hubs that provide emergency resources and clean energy access, focusing on areas that have historically been bypassed by clean energy developments.

Simultaneously, we propose an **amendment to the Bipartisan Infrastructure Deal** that seeks to augment existing measures with a focus on community benefit agreements and property value preservation. This amendment aims to:

- **Enforce Community Benefit Contributions:** Require private companies to give back to impacted communities through investments in local infrastructure and public services.
- **Ensure Equitable Distribution of Resources:** Ensure that resources from infrastructure projects are distributed equitably, prioritizing vulnerable and historically underserved communities.
- **Create Property Value Safeguards:** Implement safeguards to prevent significant reductions in property values due to energy infrastructure projects, including compensation and improvement grants.

By incorporating these comprehensive measures into policy, we strive to address the gaps in the current framework, ensuring that progress in energy infrastructure development does not come at the expense of property values or the well-being of historically marginalized communities.

Conclusion: As we navigate the complex terrain of energy transition and infrastructure development, the imperative to prioritize social equity and environmental justice cannot be overstated. By leveraging existing policies, such as the Bipartisan Infrastructure Deal, and embracing innovative solutions like the IACPP and policy amendments, we can chart a course towards a more equitable and sustainable future for all.