

# CLEAN POWER PLAN OPPORTUNITIES FOR ENERGY EFFICIENCY IN AFFORDABLE HOUSING

SEPTEMBER 2015

## A Primer for the Affordable Housing Community

A new federal rule requires states to reduce certain carbon emissions. The Clean Power Plan creates an historic opportunity to increase energy efficiency in affordable rental housing, because those investments will provide a cost-effective way to meet the new requirements. The plan each state adopts should include energy efficiency investments in affordable housing. **The affordable housing community needs to get involved now with state officials as planning is already well underway.**



THIS BRIEF IS PRESENTED BY:





# INTRODUCTION

**On August 3, 2015 President Obama and the Environmental Protection Agency (EPA) finalized the Clean Power Plan (CPP), an effort to combat climate change by reducing carbon pollution from existing power plants. The CPP requires each state to reduce carbon emissions by a prescribed amount.<sup>1</sup> States can choose from a variety of strategies to meet their emission reduction requirement. Energy efficiency lowers carbon emissions by reducing the demand for electricity generation and is the most affordable option states have to meet their requirements.**

The CPP provides an opportunity to secure new funding sources for energy efficiency investments in affordable housing, which will benefit residents, building owners, and low-income communities. There are several ways the CPP could lead to investments in affordable housing. For example, utilities can directly invest in energy efficiency in affordable multifamily housing as a means to cut carbon emissions or purchase pollution allowances or emission rate credits (ERCs) from an entity, public or private (e.g., state agency, utility, energy performance contractor, etc.), that achieves measurable energy savings in affordable housing.

States have a range of options to reduce carbon emissions and will need encouragement to prioritize energy efficiency in their CPP compliance plans. Options for reducing carbon emissions beyond energy efficiency include improving the operational efficiency of power plants, shifting electricity generation from coal-fired plants to lower emitting natural gas-fired power plants, and increasing generation from renewable energy sources such as solar and wind.<sup>2</sup> While these strategies may have an important



## CHECKLIST FOR GETTING INVOLVED:

- ✓ Identify the implementing agency and find out about any upcoming comment periods or public hearings.
- ✓ Let the governor and key state legislators know that affordable housing should be a priority in the plan.
- ✓ Form alliances with other groups that share an interest in advancing energy efficiency in low-income communities.
- ✓ Identify specific proposals to advance energy efficiency in affordable housing that are tailored to the circumstances in your state.

*See page 6 of this brief for more detailed information about how to get engaged in CPP planning.*

role to play in state plans, energy efficiency is the least costly way for states to meet their pollution reduction targets. According to the EPA, "Demand-side EE [energy efficiency] is an important, cost-effective, proven strategy that states are already widely using and which can substantially and cost-effectively lower CO<sub>2</sub> emissions from the power sector."<sup>3</sup>

## THE BENEFITS OF INCLUDING ENERGY EFFICIENCY IN AFFORDABLE HOUSING

As states and utilities determine how to comply with the CPP, the affordable housing community should stress the advantages of prioritizing energy efficiency improvements in affordable housing in state implementation plans. The advantages include:

### Energy efficiency investments will lower household energy bills and preserve affordable housing.

According to the American Council for an Energy-Efficient Economy (ACEEE), reducing energy use is generally two to three times cheaper to implement than generating power from traditional sources.<sup>4</sup> The cost effectiveness of energy efficiency translates into lower utility bills for customers and businesses. Lowering operating expenses will help to preserve



affordable housing, an important policy goal in many states. Utility costs are the largest variable operating expense in affordable housing.<sup>5</sup> Reducing operating costs in low-income affordable housing frees up capital that owners can use for maintenance, repairs, and other necessary improvements while keeping rents affordable. Moreover, according to the EPA's own analysis, electricity costs are likely to rise as a result of the CPP unless states make investments in energy efficiency.<sup>6</sup>



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### **There are significant energy savings and carbon reduction opportunities in affordable rental housing.**

Residential energy efficiency programs administered by states and utilities have historically focused on single-family, owner-occupied housing. Efficiency measures are far less likely to be installed in multifamily rentals than in any other type of housing, leaving significant unrealized energy savings.<sup>8</sup> A recent study issued by Energy Efficiency for All estimates that energy efficiency in multifamily affordable housing could realistically cut the sector's electricity usage by as much as 26 percent, based on data from a sample of states.<sup>9</sup>

### **Energy efficiency investments in affordable rental housing deliver broader multiple benefits to low income communities.**

Energy efficiency improves housing affordability and produces a positive impact on occupants' health and well-being. Affordable housing in poor condition increases residents' risk of exposure to several environmental health threats. Inadequate insulation, obsolete HVAC systems, indoor mold growth or malfunctioning combustion appliances (i.e. furnaces) are prevalent environmental complaints. These hazards increase residents' risk for developing serious negative health conditions, such as respiratory symptoms, asthma, cancer, and cardiovascular disease.<sup>10</sup> Asthma alone is responsible for over 700,000 emergency department visits annually,

with higher rates seen among poor racial/ethnic minorities.<sup>11</sup> Improving energy efficiency in affordable multifamily housing through insulation, sealing air leaks and installing HVAC systems significantly improves indoor air quality.<sup>12</sup> Improved indoor quality can reduce residents' exposure to asthma allergens, along with other indoor contaminants.

### **States earn extra credit for energy efficiency investments in low-income communities through CPP's Clean Energy Incentive Program (CEIP).**

The EPA is providing extra incentives to encourage energy efficiency investments in low-income communities through its voluntary Clean Energy Incentive Program (CEIP).<sup>13</sup> States that choose to participate in the CEIP will earn twice as many credits than otherwise would have been available and will be able to apply those credits toward their emission-reduction target. Energy efficiency projects that begin after the state submits a final plan are eligible to receive credits for savings that occur in 2020 and/or 2021.<sup>14</sup> EPA expects these incentives to help spur energy efficiency investments in low-income communities that are constrained by economic barriers.<sup>15</sup> Such economic barriers in affordable housing include limited access to upfront capital to pay for improvements and a lack of alignment of who pays for and who benefits from the improvements.

## HOW STATES SHOULD ENCOURAGE ENERGY EFFICIENCY IN AFFORDABLE HOUSING

States have different options for how they can structure their state plans. This presents both challenges and opportunities for increasing resources for energy efficiency in affordable housing.<sup>16</sup> States can choose from several strategies that would encourage energy efficiency in affordable housing in their CPP implementation plans. The right mix of approaches will depend on the existing policies and circumstances that are unique to each state. Depending on how the state is approaching its plan, one or more of the following approaches may be possible, so long as they result in verified energy savings:

- Incorporate new energy efficiency requirements in state Low Income Housing Tax Credit (LIHTC) Qualified Allocation Plans (QAP) or strengthen existing requirements.
- Develop utility-sponsored or state-sponsored energy efficiency programs aimed at affordable housing.

- Provide additional resources for energy efficiency in state housing trust funds.
- Create incentives to leverage private financing such as grants, loan loss reserves, interest rate buy-downs, or other types of credit enhancements.
- Encourage or empower localities to adopt density bonuses, expedited permitting, or other incentives for energy efficient affordable housing.
- Use the state tax code to incentivize energy efficiency improvements in affordable housing, and consider establishing or refining state and local Property Assessed Clean Energy (PACE) financing programs to cater to the affordable housing sector.

As this process develops, look for more detailed ideas and examples of state actions to come.



# HOW TO GET INVOLVED

## Now is the time for the affordable housing community to act.

States and utilities have begun determining how to comply with the CPP. The EPA requires that this process include public outreach and involvement. The affordable housing community should engage early in this process with state officials, including clean air and utility regulators, and utilities so that energy efficiency in affordable housing becomes part of their carbon emission reduction strategies.

Here's what the affordable housing community should know about how to engage in their state's planning process:



### Planning is already underway.

States have until September 6, 2016 to submit a final plan or, at a minimum, to submit an initial plan that identifies carbon reduction strategies that are under consideration. States already have begun the planning process to meet this September 2016 deadline.



### State clean air agencies are responsible for developing their state's compliance plan.

These agencies are typically the state department of environment or state environmental protection agency. Affordable housing stakeholders should meet with their state's clean air agency (a directory of state clean air agencies is located on the website of the National Association of Clean Air Agencies (<http://www.4cleanair.org/agencies>)). The affordable housing community should learn the dates of any upcoming public comment periods and hearings and plan to attend or participate. Air regulators will be interested in hearing specific ideas about how energy efficiency in affordable housing can help their states meet their emissions reduction targets. Other state agencies that are likely to play a prominent role in the planning process are state energy offices and public utility commissions.



### Governors and state legislatures can have a significant impact on the direction of their state's implementation plan.

Governors have an impact on the development of the state implementation plan by setting state energy policies and priorities and ultimately approving the final state plan. Often, these policies and priorities are laid out in a state's comprehensive energy

plan, which may provide helpful guidance and "hooks" for the affordable housing community to engage energy planning agencies as they develop their CPP implementation strategy. Several state legislatures have chosen to take an active role in the plan development process and may need to pass enabling legislation for the plan to be implemented. The affordable housing community should educate governors and key state legislators about the need to reduce energy use in affordable housing. Identifying existing state energy policies or principles that advance energy efficiency in housing can help make this case.



### The EPA requires states to engage low-income communities and communities of color during the planning process, providing an opportunity to form alliances with new partners.

States are required to demonstrate that they have meaningfully engaged with members of the public, and communities that have been deemed "vulnerable" and "overburdened" because they are least resilient to climate change impacts, during the plan development process.<sup>17</sup> The affordable housing community is ideally suited to meet this requirement. Affordable housing and resident advocates can participate in this engagement process to ensure that implementation plans provide positive benefits to low-income communities through investments in energy efficiency. Additionally, organizations that work on social and environmental justice issues will deeply engage in their state's planning process. Such groups are usually supportive of energy efficiency investments in low-income communities. The affordable housing community should find common ground with such groups to further shared goals.



# CONCLUSION

**The Clean Power Plan presents a unique opportunity to increase energy efficiency investments in affordable housing. The affordable housing community should have a seat at the table as states begin to develop their implementation plans. Outreach should begin immediately to governors' offices, state clean air agencies, and environmental and social justice advocates that share an interest in seeing low-income communities benefit from the CPP.**

**Outreach should include encouraging states to include energy efficiency in affordable housing in the state's overall plan, as well as to participate in the voluntary CEIP. The CEIP provides extra credits for early investments in efficiency in low-income communities. Participating in the CEIP will help overcome the economic barriers to serving low-income communities and help the state achieve its carbon emissions target.**

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- 1 Vermont and the District of Columbia are not required to submit a state plan because they do not have affected existing fossil fuel-fired electric generating units. U.S. EPA, *The Clean Power Plan Final Rule*, pg. 11
- 2 U.S. EPA, Fact Sheet: Components of the Clean Power Plan Setting State Goals to Cut Carbon Pollution, <http://www.epa.gov/airquality/cpp/fs-cpp-state-goals.pdf>
- 3 U.S. EPA, The Clean Power Plan Key Topics, <http://www.epa.gov/airquality/cpp/cpp-key-topics.pdf>
- 4 American Council for an Energy-Efficient Economy, <http://aceee.org/press/2015/08/energy-efficiency-key-compliance>
- 5 Christopher Lee, “2012 Survey of Operating Income & Expenses in Rental Apartment Communities” [Executive Summary] (Arlington, VA: National Apartment Association, 2012)
- 6 U.S. EPA, *Regulatory Impact Analysis for the Clean Power Plan Final Rule*
- 7 See: McKibben, Anne, et al., *Engaging as Partners in Energy Efficiency: Multifamily Housing and Utilities* (CNT Energy and American Council for an Energy Efficient Economy, 2012); Harak, Charlie, *Up the Chimney: How HUD’s Inaction Costs Taxpayers Millions and Drives Up Utility Bills for Low-Income Families* (Boston MA: National Consumer Law Center, 2010); Johnson, Kate and Erik Mackres, *Scaling up Multifamily Energy Efficiency Programs: A Metropolitan Area Assessment* (Washington, DC: American Council for an Energy Efficient Economy, 2013)
- 8 Gary Pivo (2014) Unequal access to energy efficiency in US multifamily rental housing: opportunities to improve, *Building Research & Information*, 42:5, 551-573, DOI: 10.1080/09613218.2014.905395
- 9 Maximum achievable potential is savings that can be realized if all cost-effective efficiency measures are implemented given existing market barriers. See <http://www.energyefficiencyforall.org/potential-energy-savings>. Energy Efficiency for All is a project of the Natural Resources Defense Council, National Housing Trust, Energy Foundation, and Elevate Energy.
- 10 Hilary Thomson, Sian Thomas, Eva Sellström, and Mark Petticrew, “Housing Improvements for Health and Associated Socio-Economic Outcomes: *Cochrane Database of Systematic Reviews* (2010) DOI: 10.1002/14651858.CD008657.pub2
- 12 R. Grant and A. Brito. “Chronic Illness and School Performance: A Literature Review Focusing on Asthma and Mental Health Conditions”. *A Children’s Health Fund Monograph* (2010)
- 13 U.S. EPA “Energy Efficiency in Affordable Housing: A Guide to Developing and Implementing Greenhouse Gas Reduction Programs. Local government climate and energy strategy series” *US Environmental Protection Agency* (2011)
- 14 The U.S. EPA has not yet defined “low-income communities” for project eligibility purposes. U.S. EPA, *The Clean Power Plan Final Rule*, pg. 869. EPA is expected to develop additional information concerning the scope of demand-side energy efficiency programs implemented in low income communities that will be eligible for crediting under the CEIP.
- 15 U.S. EPA, *The Clean Power Plan Final Rule*, pg. 1453. Conversely, other types of demand-side efficiency would receive credit for savings that occur in 2022 or later. U.S. EPA, Fact Sheet: Clean Energy Incentive Program, <http://www.epa.gov/airquality/cpp/fs-cpp-ceip.pdf>
- 16 For a summary of the various state plan approaches, see U.S. EPA Fact Sheet: Clean Power Plan and the Role of States, <http://www2.epa.gov/cleanpowerplan/fact-sheet-clean-power-plan-and-role-states>
- 17 EPA uses the terms “vulnerable” and “overburdened” in referring to low-income communities, communities of color, and indigenous populations that are most affected by, and least resilient to, the impacts of climate change. These communities are central to community and environmental justice considerations. U.S. EPA, *The Clean Power Plan Final Rule*, pg. 45