



# **Opportunities for affordable housing and energy efficiency in the Clean Power Plan final rule**

October 15, 2015

# Who Is NHC?

Since 1931, the National Housing Conference (NHC) has been dedicated to helping **ensure safe, decent and affordable housing for all in America.**

NHC actively **engages and convenes** its membership in nonpartisan advocacy for **effective housing policy solutions** at the local, state and national levels. Our **Center for Housing Policy** provides policy-relevant **research**, and we offer **communications** tools for using values-based messaging.

NHC draws its **membership** from **every housing industry segment**: developers, advocates, investors, managers, lenders, nonprofits, realtors, state and local housing agencies, associations, and more.



## About GAHC

The Green Affordable Housing Coalition is a national action network that fosters collaboration and advocates for the development and preservation of green affordable housing.



<http://greenaffordablehousingcoalition.org/>

# Agenda

- Introduction
- Overview of the Clean Power Plan Primer
- Discussion of the final rule
- Affordable Multifamily Programs for State Plans
- State level advocacy
- Discussion
- Q&A

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# Questions and technical details

- A link to view the presentation recording and download slides will be emailed to everyone who registered
- Ask us questions via the Questions box in your GoToWebinar module throughout the webinar
- Use the Help menu or visit <http://support.citrixonline.com/> for support



# **Clean Power Plan: Opportunities for Affordable Housing and Energy Efficiency**

15 October 2015

Elizabeth Beardsley, P.E.  
Senior Policy Counsel  
U.S. Green Building Council







# CLEAN POWER PLAN PRIMER

## Links on many websites

→ <http://www.energyefficiencyforall.org/resources>

## Purpose

- Explain connection of CPP with affordable housing
- Highlight key actions for advocates

## Intended Audience

- Affordable housing advocates including
  - Staff, board members, volunteers
  - Municipal officials

## HOW STATES SHOULD ENCOURAGE ENERGY EFFICIENCY IN 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.

# 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.**

## INTRODUCTION

and the Environmental Protection Agency (EPA), an effort to combat climate change by reducing power plant emissions. The CPP requires each state to reduce carbon emissions by a certain amount.<sup>1</sup> States can choose from a variety of strategies to meet the requirement. Energy efficiency lowers demand for electricity generation and is the most cost-effective way to meet their requirements.



### CHECKLIST FOR GETTING INVOLVED:

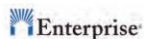
- ✓ Identify the implementing agency and find out about any upcoming comment periods or public hearings.
- ✓ Let the governor and key state legislators know that affordable housing should be a priority in the plan.
- ✓ Form alliances with other groups that share an interest in advancing energy efficiency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



ENERGY IN AFFORDABLE HOUSING

THIS BRIEF IS PRESENTED BY:







# CLEAN POWER PLAN

## Final rule issued August 2015

- Clean Air Act § 111(d)
- Proposes to regulate CO<sub>2</sub> emissions from existing fossil fuel power plants

## Many benefits and co-benefits



# STATES WILL HAVE KEY ROLE

## States develop Plans, with emission reduction measures

- EPA encourages end-user efficiency as a key measure
  - Mechanisms include emission allowances or “ERCs” (emission reduction credits)
- States have significant flexibility with efficiency – as long as electricity savings are measureable and verified

## Dates for State Plans

- September 2016:
  - States to submit Plan, OR
  - Request extension and inform EPA of intent
- September 2018:
  - Latest date for State submission



# OPPORTUNITY FOR INVESTMENT IN ENERGY EFFICIENCY IN AFFORDABLE HOUSING

## Clean Energy Incentive Program (CEIP)

- EPA providing extra credits to incentivize early action
  - Efficiency benefitting low income community = double credit
- Projects implemented after a state final plan is submitted (2016 to 2018)
- Credit for avoided emissions 2020-2021

## State Plans

- Credit can continue from early incentive projects, or accrue from new projects
- Credit for avoided emissions 2022 through compliance period

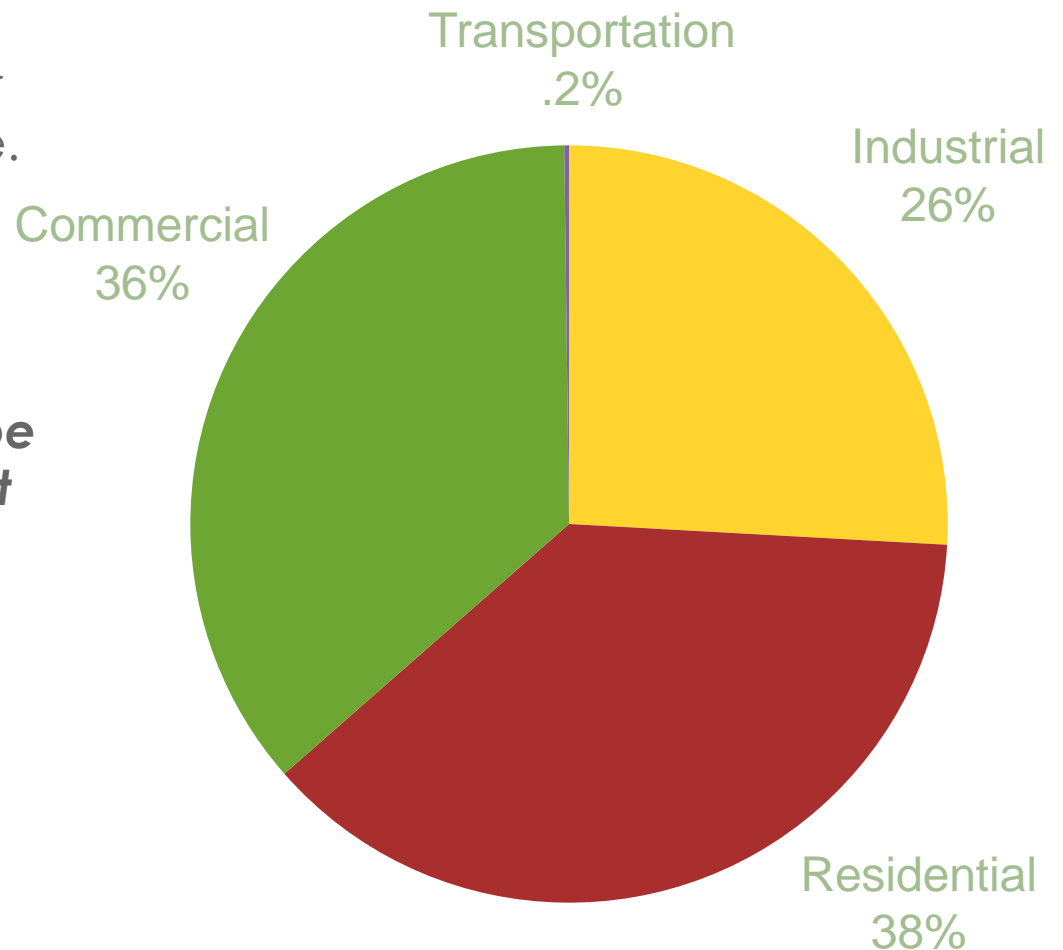


# RESIDENTIAL SECTOR IS KEY TO END USER EFFICIENCY GAINS

In the U.S., Residential Buildings account for over 38% of retail electricity use.

Source: EIA 2014

***Affordable housing must be part of the new investment***





# STATES WILL BENEFIT BY INCLUDING AFFORDABLE HOUSING EE IN STATE PLANS

## Lower household electricity bills

→ Increases spending in local economy

## Preserve affordable housing

→ Reduce operating costs / cash flow for owners

## Significant energy savings available

→ EEFA estimates the sector's electricity use could be cut by up to 26%

→ Double credit under CEIP

## Co-benefits to low income communities

→ Positive impact on occupants health by reduced risk of environmental contaminants (mold, etc.)

→ Improved temperature control and comfort







# IMPROVING EFFICIENCY IN AFFORDABLE HOUSING

## Commissioning/Retrocommissioning

→ Includes maintenance, load reduction, education

## Lighting

→ Bulbs, fixtures, controls

## Appliances

## Building Envelope

→ Insulation, doors, windows

## HVAC

→ Equipment, loads, ventilation rates

## Water Use

→ Fixtures, irrigation



# STATE POLICIES (EXAMPLES)

## Optimize trading programs, registry

## Low Income Housing Tax Credits – Qualified Allocation Plans

→ Add or enhance energy efficiency requirements

## State housing trust funds

→ Provide increased / dedicated funds for energy efficiency

## Private sector incentives

→ Financing: grants, loan loss reserves, interest rate, etc.

→ Tax incentives

## State programs

→ Encourage local government incentives (zoning, expedited permitting)

→ Technical assistance, clearinghouse, Pre qualification of contractors



# UTILITY PROGRAMS (EXAMPLES)

## New Construction incentives

- Based on documented kWhr saved
- Could offer added incentive for low income

## Whole building retrofit incentives

- Based on documented kWhr saved
- Could offer added incentive for low income

## Component programs

- Weatherization
- insulation
- Windows and doors
- Appliances
- Lighting



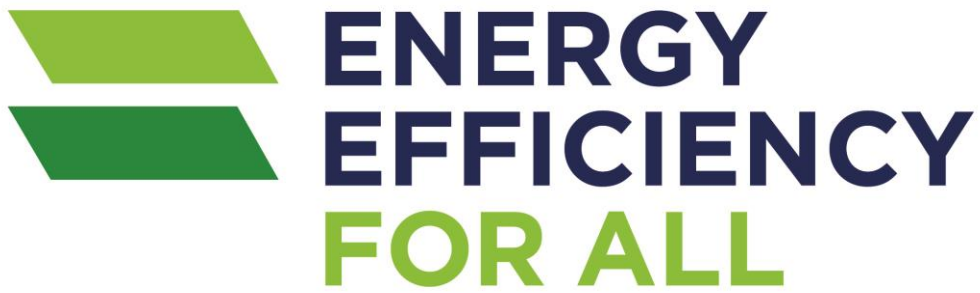


# PRIMER “HOW TO”

## Checklist for getting involved (page 2)

1. Contact implementing agency; participate in public sessions
2. Tell Governor and state legislators that affordable housing should be a priority in the Plan
3. Connect with other groups
4. Identify and/or support specific policy proposals that make sense in your state

## “How to” (page 6)



# **THE CLEAN POWER PLAN Potential Benefits for Affordable Housing**

Khalil Shahyd – Natural Resources  
Defense Council

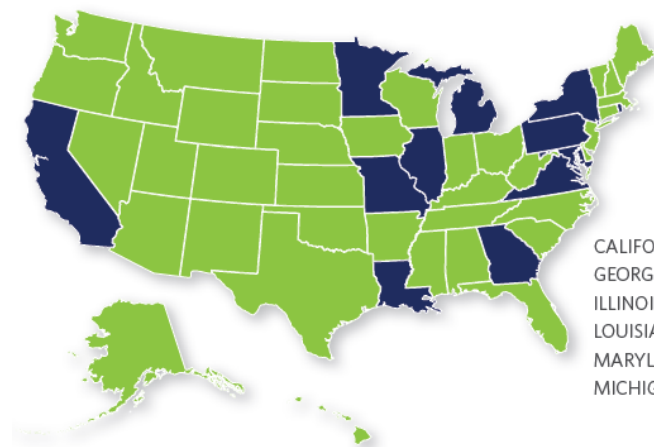
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Oct. 2015

# About EEFA

**EEFA is making multifamily homes healthy and affordable through energy efficiency by:**

- Building an effective national network among energy efficiency and affordable housing professionals.
- Supporting the work of state and local stakeholders in 12 states to expand energy efficiency programs.
- Improving utility energy efficiency programs so they provide the necessary tools, financial incentives, and administrative ease to drive investments in affordable multifamily buildings.
- Supporting building owners and operators looking for opportunities for energy efficiency upgrades or navigating the retrofit process.



CALIFORNIA	MINNESOTA
GEORGIA	MISSOURI
ILLINOIS	NEW YORK
LOUISIANA	PENNSYLVANIA
MARYLAND	RHODE ISLAND
MICHIGAN	VIRGINIA

**WORKING TO REACH 5 MILLION  
HOMES IN TWELVE STATES**



# UNDERSTANDING THE EPA'S CLEAN POWER PLAN



The EPA adopted the Clean Power Plan under the Clean Air Act, which the Supreme Court ruled in 2011 provides the legal authority to control carbon pollution from fossil-fueled power plants.

## **Clean Power Plan will reduce our electric sector's carbon pollution by 32 percent**

- By incentivizing the shift of our electric power system toward cleaner energy sources and lower overall demand for energy
- It will also cut other power plant pollutants that cause asthma attacks and respiratory illnesses
- Will prevent thousands of premature deaths, 90,000 fewer asthma attacks in children, and 300,000 missed work and school days in 2030
- Increasing energy efficiency will reduce electric bills for American families with savings that will total \$155 billion by 2030

# The Stakes: Key Decisions for States

Key questions for states when developing initial state plans

- 1) Will the state pursue an “existing only” or “existing + new” compliance standard?
- 2) Whether to develop a Rate Based or Mass Based Compliance plan
- 3) Whether to implement the Clean Energy Incentive Program (CEIP)
- 4) How to ensure meaningful engagement of low income communities and communities of color in planning, implementation and monitoring

**EPA sets state-specific CO<sub>2</sub> goals, but does not prescribe how a state should meet its goal.**

# WHAT'S IN THE CPP FINAL RULE?



The Clean Power Plan will move America toward a cleaner, healthier environment for future generations while ensuring an ongoing supply of the reliable, affordable power needed for economic growth.

# EPA Establishes Standards: States Submit Plans

- Sets flexible and achievable standards that give each state the opportunity to design its own most cost effective pathway toward a cleaner electricity system
- Extends the time to begin implementation from 2020 to 2022 to give states more time to prepare
- 3 Building Blocks targets
  1. Improved efficiency at power plants
  2. Shifting generation from higher-emitting steam EGUS to lower-emitting natural gas power plants
  3. Shifting generation to clean energy renewables

# Demand-Side Energy Efficiency as a Compliance Option

Although no longer a Building Block – due to its low costs and large savings potential in every state, demand-side energy efficiency remains a significant component of state compliance plans under the CPP

- Energy Efficiency is about reducing demand whereas the prior three blocks address energy production/generation
- By investing in energy efficiency, utilities can lower demand for energy, thereby reducing the amount allowances (mass based) or credits (rate based) they have to purchase
- The CPP offers an additional incentive for energy efficiency through the Clean Energy Incentive Plan (CEIP)

## The Clean Energy Incentive Program (CEIP) (Source: EPA)

- CEIP incentivizes early investments in wind or solar power, as well as demand-side energy efficiency measures that are implemented in low-income communities
- EPA will provide matching allowances or Emission Rate Credits (ERCs) to states that participate in the CEIP
- Demand-side EE projects implemented in low-income communities will receive 2 credits for 1 MWh of avoided generation
- Helps to level the playing field for implementing energy efficiency in low-income communities, placing them at the front of the line for implementation
- EPA will engage with stakeholders in the coming months to gather feedback on specific elements of the program and finalize implementation details

# Federal Implementation Plan (Source: EPA)

The Clean Power Plan gives states the option of adopting a state plan to reduce carbon emissions from power plants.

- If states choose not to adopt a state plan, the EPA has the responsibility to regulate carbon pollution directly to protect our health and national wellbeing.
- Even where a federal plan is put in place, a state will have an opportunity to review and submit a state plan, which if approved , will allow the state and its sources to exit the federal plan
- States operating under a federal plan may also adopt complementary measures outside of that plan to facilitate compliance and lower costs to the benefit of power generators and consumers
- EPA invites comment on the Federal Plan and Model Rules



# OPTIONS FOR ENERGY EFFICIENCY IN AFFORDABLE MULTI-FAMILY HOUSING



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.

# States Have Two Primary Compliance Options

The final rule gives states considerable flexibility to design a state plan that reflects their unique circumstances.

- **Mass-based Approach:** The state goal is expressed as a **maximum number of tons of carbon dioxide** that may be **emitted by covered plants** for each time period. As long as the covered plants emit at or less than that number, the state goal is achieved for that time period.
- **Rate-based Approach:** The state goal is expressed as a **number of pounds of CO<sub>2</sub> per megawatt hour of generation from covered plants**. As long as the covered plants produce electricity at or below the prescribed rate—after adjusting for energy efficiency, renewables and other allowed credit—the state goal is achieved.

**Affordable housing groups can be a powerful voice to bolster energy efficiency as a federal and state implementation priority.**

# How Energy Efficiency Investments Can Reach Affordable Housing

(Source: NRDC OnEarth Magazine)

## I. Mass Based

1. EPA places a cap on how much carbon a state's power plants can emit in one year
2. States issue, set a price for, and auction "allowances" to utilities—basically licenses to emit a pound of carbon into the atmosphere
3. **Utilities invest in energy efficiency in affordable housing** to lower demand for energy, thereby reducing the amount of fossil fuels they have to burn, the carbon they emit, and the allowances they have to purchase
4. By auctioning allowances, **States also generate revenue that can be reinvested in energy efficiency affordable housing**
5. Under this mass-based approach, there's no need for a special accounting system for the energy-efficiency programs

## II. Rate Based

1. EPA sets a cap on how much carbon a power plant may emit per unit of energy produced
2. **Utility invests in energy efficiency in affordable housing.** An independent party would verify how much energy the investment saves.
3. The utility would then take that verified savings account to the state regulator, who issues credits to offset power plant emissions based on that amount
4. Each "verified" megawatt-hour of energy saved by an energy efficiency program receives a credit from EPA
5. Remember; EPA will give extra credit for energy-efficiency investment aimed at low-income communities!

THANK-YOU  
FOR MORE INFORMATION VISIT

WWW.ENERGYEFFICIENCYFORALL.ORG/ISS  
UES/CLEAN-POWER-PLAN



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American Council for an Energy-Efficient Economy

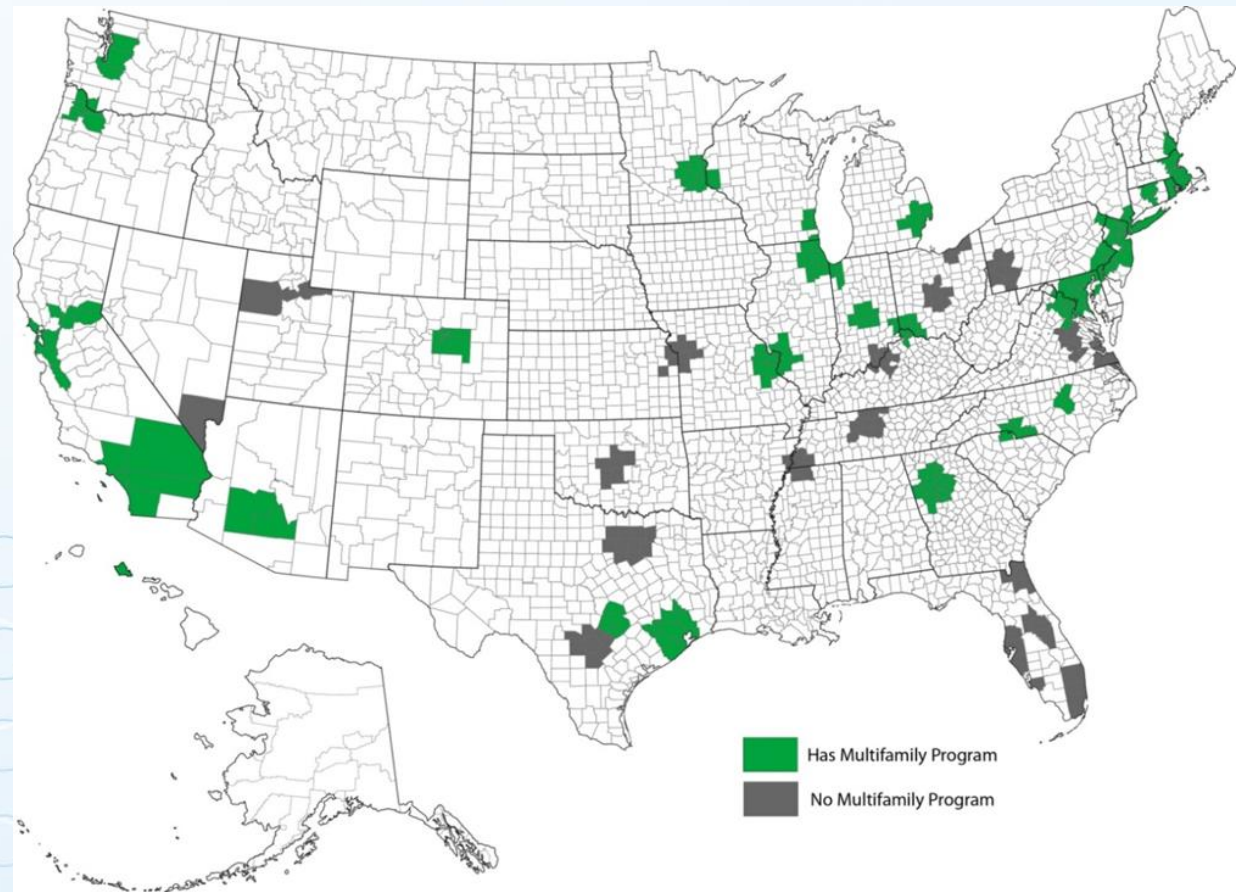
# **Strategies that Work Utility-led Multifamily Energy Efficiency Programs**

Presented by Lauren Ross  
Manager, Local Policy

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# Utility Ratepayer-Funded Multifamily Energy Efficiency Programs

- Room to significantly expand or create new programs to better reach building owners and achieve greater savings
- Successful programs can help to overcome traditional barriers by providing:
  - technical assistance
  - financing
  - qualified contractors
  - financial incentives



Source: ACEEE, *Scaling Up Multifamily Energy Efficiency Programs: A Metropolitan Area Assessment* (2013).

# The Potential

## Multifamily programs and the Clean Power Plan

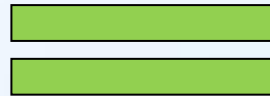
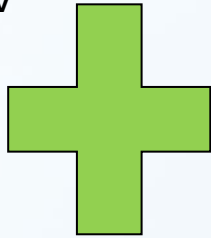
- Could lead to additional financial support for utility-led multifamily programs
- Helps create permanence for programs
- Could improve existing programs by increasing rigor and oversight
- Momentum could lead to new projects and programs
- Creates a link to broader state goals, such as economic development, public health, job creation, and environmental issues



# Collaborative Program Models

## Utilities *can* offer:

- Financial incentives
- Audits
- Technical assistance
- Quality assurance
- Financing
- EM&V



## Housing Finance Agencies *can* offer:

- Program design assistance
- A pipeline of projects
- Building owner engagement
- Leverage additional financing

## Program models:

**New Jersey:** PSE&G's Residential Multifamily Housing Program

**Maryland:** Department of Housing and Community Development's Multifamily Energy Efficiency and Housing Affordability



# Where to start:

## Question/background to consider when engaging with state officials:

- What energy efficiency programs that serve the multifamily sector exist in your state? If none, what utilities are poised to deliver such programs?
- What policies support (or could support) the development and expansion of these programs?
- For existing programs, what are the details of those policies and programs in terms of implementation dates, stringency, financial commitments, historic investments in energy efficiency, and important enforcement features?
- Is there any information on the energy impacts (projected and/or historical) of those energy efficiency programs in terms of energy saved and air emission impacts?
- Which organization or agency does or could monitor and evaluate the energy impacts of those energy efficiency programs?
- What additional funding sources could ratepayer energy efficiency policies and programs leverage to better serve multifamily buildings?

# Thank you!

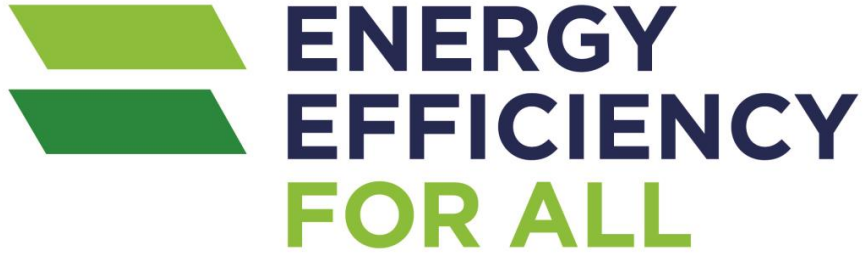
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**CLEAN POWER PLAN:**  
**Opportunities for Energy Efficiency in**  
**Affordable Housing**



## EPA requires states to engage low-income communities and communities of color during the planning process.

The final rule requires that states include a description of how they engaged with vulnerable communities.

*"It is important to ensure that all communities share in the benefits of this program. And while we estimate that its benefits will greatly exceed its costs, it is also important to ensure that to the extent there are increases in electricity costs, that those do not fall disproportionately on those least able to afford them."*

*--U.S. EPA, The Clean Power Plan Final Rule, pg 1,317*



**Initial  
Plans are  
due Sept.  
2016**

**There are opportunities to engage right now.**

- Meet with state air agency about the development of the CPP plan to stress the importance of prioritizing energy efficiency
- Identify energy efficiency opportunities that could work in your state and your communities
- Educate governors and key state legislators; Identify existing state energy policies or principles that advance energy efficiency
- Reach out to environmental justice/health/equity organizations in your state
- Participate in upcoming discussions about the CEIP



## States will need encouragement to invest in energy efficiency.

Advantages of prioritizing energy efficiency improvements:

- **Lower costs.** *"Energy efficiency is the least costly way for states to meet their pollution reduction targets."* -EPA
- **Reduced cost burdens.** Reducing energy consumption in low-income households will mitigate any potential utility rate increases.
- **Significant energy savings potential.** Efficiency measures are far less likely to be installed in MF rentals than any other type of housing.
- **Broader benefits.** Reduced exposure to environmental health threats.





## Resources

**Link to Clean Power Plan primer for affordable housing:**

<http://www.energyefficiencyforall.org/sites/default/files/CPPBrief.pdf>

### **Contact information:**

Liz Beardsley, USGBC at [EBeardsley@usgbc.org](mailto:EBeardsley@usgbc.org)

Khalil Shahyd, NRDC at [kshahyd@nrdc.org](mailto:kshahyd@nrdc.org)

Lauren Ross, ACEEE at [LRoss@aceee.org](mailto:LRoss@aceee.org)

Todd Nedwick, NHT at [tnedwick@nhtinc.org](mailto:tnedwick@nhtinc.org)

**EPA's Clean Power Plan website:**

<http://www2.epa.gov/cleanpowerplan>