

US EPA ARCHIVE DOCUMENT



# Pathways, Options, and Opportunities for Energy Efficiency and Renewable Energy

Presentation at US EPA Workshop for Environmental Justice Communities on the Clean Power Plan

November 4, 2015



# How Energy Efficiency and Renewable Energy Can Benefit Communities

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- Economic Benefits
  - Reduce energy bills and/or provide pricing stability
  - Create local, high-quality jobs for a variety of skill/education levels
  - Forestall foreclosures/evictions, raise home values, and may assist in neighborhood stabilization
- Health and Safety
  - Improve indoor air quality (mold, pollen, dust)
  - Improve comfort levels (drafts, cold floors, etc)
  - Reduce carbon monoxide and fire risks from space heaters, ovens, and other heating substitutes
- Environmental Benefits
  - Reduce greenhouse gas emissions
  - Reduce smog, acid rain, and airborne particulates



## The CPP Provides Many Opportunities for Energy Efficiency and Renewable Energy

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- EPA is committed to helping communities benefit from clean energy, including energy efficiency and renewable energy (EE/RE).
- The CPP recognizes EE/RE as a key compliance option for affected EGUs, and includes incentives to stimulate early investment in these technologies in low-income communities.
- EE and RE are well-understood means of achieving less-polluting energy that is still reliable and affordable.
- EE is an important, proven strategy widely used by states that can substantially and cost-effectively lower CO<sub>2</sub> emissions from the power sector.
- RE will serve a critical role in lowering CO<sub>2</sub> emissions in the long run



## EE and RE Measures Discussed in the CPP

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### Energy Efficiency:

- Lowering electricity use in buildings and facilities
- Changing consumer behavior to save energy
  - appliance replacement and recycling programs, behavioral programs
- Imposing requirements that result in energy savings
  - building energy codes, energy efficiency resource standards (EERS), appliance/equipment standards
- Measures may provided by a variety of parties
  - Owners or operators of affected EGUs, electric distribution companies, independent power producers, energy service companies, administrators of state EE programs, among others
- Renewable Energy:
  - Requirements for renewable generation
    - Renewable portfolio standards
  - Combined heat and power (CHP) at industrial facilities
  - Utility and state-administered incentive programs for RE technologies



## Incentives for Early Action and the Clean Energy Incentive Program

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- All EE/RE that achieves energy savings or clean generation helps states meet their CPP goals for affected EGUs.
  - Efforts in place today are already working to help states achieve their goals for affected EGUs
- The final CPP also includes a Clean Energy Incentive Program (CEIP) to provide additional incentives for early investments that generate wind and solar power or reduce end-use energy demand during 2020 and/or 2021.
  - Many of these investments will continue to achieve results in 2022 and beyond
- The CEIP is an optional, “matching fund” program that states may choose to use to incentivize:
  - Wind or solar power generation in all communities, and
  - Energy efficiency measures in low-income communities
- In their September 6, 2016 submittal, states that wish to participate in the CEIP must indicate their (non-binding) intent.
- EPA is also proposing to implement the CEIP for federal plan states.



## How Does the CEIP Work?

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- A state that chooses to participate in the CEIP may award early action credits (either allowances or ERCs) to qualifying CEIP projects. The EPA will **match** these awards up to a limit equal to 300 M tons of CO<sub>2</sub>.
  - The 300 M matching tons will be divided among the states according to their emission reduction goals.
  - A portion of the matching tons will be reserved for wind and solar projects, and a portion will be reserved for low-income EE projects.
  - The EPA match will be double for low-income EE projects
- Example for a mass-based state plan (using allowances):
  - State opts in to the CEIP; sets aside a portion of its allowance budget to award to CEIP projects
  - An eligible low-income project is approved by the state, demonstrates 100 MWh of savings
  - State awards **early action** allowances to the project, equal to 100Mwh
  - State approaches EPA for the match; EPA awards **matching** allowances to the project, equal to 100 MWh
  - Project can then sell the allowances to affected EGUs, who may use them to comply with the CPP

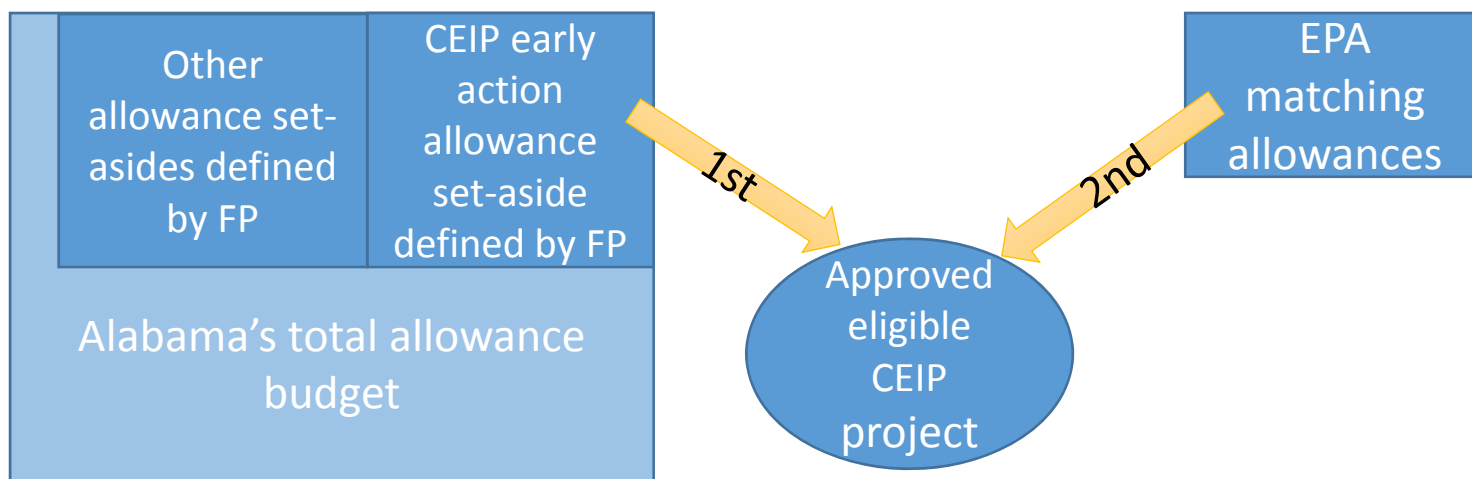


## Example: CEIP matching in the Proposed Federal Plan

- In the proposed federal plan, Table 10 lists that, if all states were subject to a mass-based federal plan, Alabama’s **early action** allowance set-aside would be 3.1 M tons of CO<sub>2</sub>.
- In this case, AL would be eligible to receive 3.1 M **matching** allowances from the EPA.

TABLE 10—PROPOSED CLEAN ENERGY INCENTIVE PROGRAM EARLY ACTION ALLOWANCE SET-ASIDE IN THE MASS-BASED FEDERAL PLAN [Short tons]

<u>State</u>	<u>Set-aside 2022 through 2024</u>
Alabama .....	<b>3,122,306</b>







## CEIP Design and Implementation: Next Steps

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- The final CPP stated that the EPA intends to solicit input from stakeholders in preparation for a future action to finalize implementation details of the CEIP.
- We are in the process of scheduling stakeholder outreach calls on the CEIP in Nov/Dec 2015 to gather feedback. We encourage all interested groups to register.
- We are interested in hearing from communities on a variety of issues, including:
  - The definition of low-income community
  - Criteria states may use to evaluate an eligible low-income EE project
  - The portion of the 300M ton matching pool that should be reserved for low-income EE projects vs. wind and solar projects.
- In addition to the stakeholder calls, we will also be establishing a CEIP non-regulatory docket to which stakeholders may submit written comments.
- Stakeholders may also submit comments on the CEIP's inclusion in the proposed Federal Plan and Model Rules. The EPA is taking comment on that proposal through January 21, 2016, and is conducting a series of public hearings on the proposal in November 2015.



## Moving Ahead: EPA assistance for communities

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- Offering webcast series: *Bringing EE and RE to Low-Income Households: What's Working*. First webcast, November 19, 2 pm EST. Register at: <https://attendee.gotowebinar.com/register/7475586524357611778>
- Providing communities and states with resources to help them engage with one another through the CPP Community Portal: <http://www2.epa.gov/cleanpowerplan/clean-power-plan-community-page>
- Offering resources to assist states in conducting
  - proximity analyses as they develop their plans
  - assessments as they implement their plans
- Developing information regarding federal programs that help low-income communities access renewable energy, energy efficiency, and related financial assistance programs
- Developing catalog to highlight some current or recent state/local/utility programs that have successfully helped low-income communities adopt energy efficiency and renewable energy measures



## Information and Resources

After two years of unprecedented outreach, the EPA remains committed to engaging with all stakeholders as states implement the final Clean Power Plan.

- Webcast series: *Bringing EE and RE to Low-Income Households: What's Working*. First webcast, November 19, 2 pm EST. Register at: <https://attendee.gotowebinar.com/register/7475586524357611778>
- The CEIP next steps document provides a detailed list of CEIP provisions on which the EPA is seeking stakeholder input: [http://www2.epa.gov/sites/production/files/201510/documents/ceip\\_next\\_steps\\_10\\_21\\_15.pdf](http://www2.epa.gov/sites/production/files/201510/documents/ceip_next_steps_10_21_15.pdf)
- For community-specific information and engagement opportunities, see the **Community Portal**: <http://www2.epa.gov/cleanpowerplan/clean-power-plan-community-page>
- For more information on the CPP and to access a copy of the rule, visit the **Clean Power Plan website**: <http://www2.epa.gov/carbon-pollution-standards>
- Through graphics and interactive maps, the **Story Map** presents key information about the final Clean Power Plan. See: <http://www2.epa.gov/cleanpowerplan>
- For additional resources to help states develop plans, visit the **CPP Toolbox for States**: <http://www2.epa.gov/cleanpowerplantoolbox>
- For a graphical and detailed walk through of the EGU category-specific CO<sub>2</sub> emission performance rate and state goals, see **State Goal Visualizer**: <http://www2.epa.gov/cleanpowerplantoolbox>
- EPA provides **webinars** and **training** on CPP related topics at the air pollution control learning website. See: <http://www.apti-learn.net/lms/cpp/plan/>
- **Federal programs and activities** to support renewable energy and energy efficiency in low- and moderate-income communities: [https://www.whitehouse.gov/sites/default/files/low-income\\_and\\_energy\\_efficiency\\_programs.pdf](https://www.whitehouse.gov/sites/default/files/low-income_and_energy_efficiency_programs.pdf)
- Federal initiative to **increase solar access** for all Americans: <https://www.whitehouse.gov/the-press-office/2015/07/07/fact-sheet-administration-announces-new-initiative-increase-solar-access>



## CEIP Contacts

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