US ERA ARCHIVE DOCUMENT





Briefing for Communities September 9, 2015



Summary

Climate change is a threat in the U.S. – We are already feeling the dangerous and costly effects. Vulnerable communities (including low-income, communities of color and indigenous communities) are more susceptible to the risks of climate change.

EPA is taking three actions that will significantly reduce carbon pollution from the power sector:

- Clean Power Plan (CPP) existing sources (the focus of the webinar today)
- Carbon Pollution Standards new, modified and reconstructed sources
- Federal Plan proposal and model rule

These actions:

- Achieve significant pollution reductions
- Give states and utilities time to preserve ample, reliable and affordable power
- Spur increased investment in clean, renewable energy (including increased energy efficiency and renewable energy in communities)



Climate Change is a Threat

Public health risks include:

- Increase in public health risks include:
- Heat stroke and heat-related deaths
 - Extreme heat events are the leading weather-related cause of death in the U.S.
- Worsening smog (also called ground-level ozone pollution) and, in some cases, particle pollution
- Increasing intensity of extreme events, like hurricanes, extreme precipitation and flooding
- Increasing the range of insects that spread diseases such as Lyme disease and West Nile virus
- Recent assessments indicate that low-income populations and some communities of color are especially vulnerable to the health effects of climate change



\$30 BILLION

U.S. DROUGHT/HEATWAVE
ESTIMATED ACROSS THE U.S.



\$11.1 BILLION
COMBINED SEVERE WEATHER

ESTIMATED FOR INCIDENTS ACROSS THE U.S.



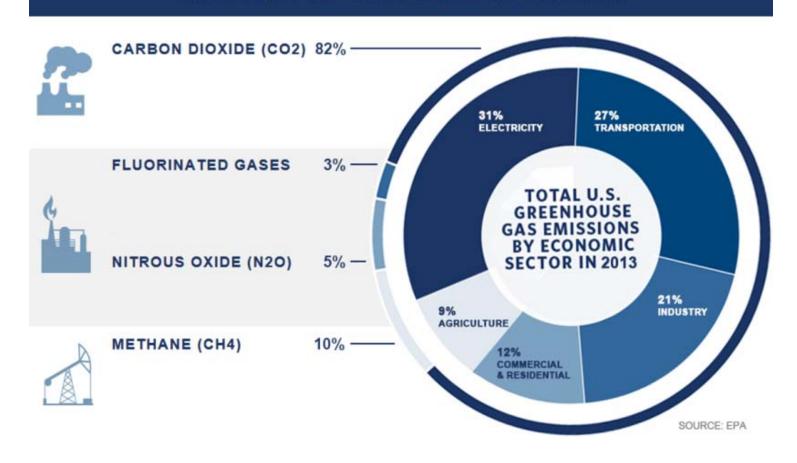
\$65 BILLION SUPERSTORM SANDY ESTIMATED



\$1 BILLION
WESTERN WILDFIRES
ESTIMATED

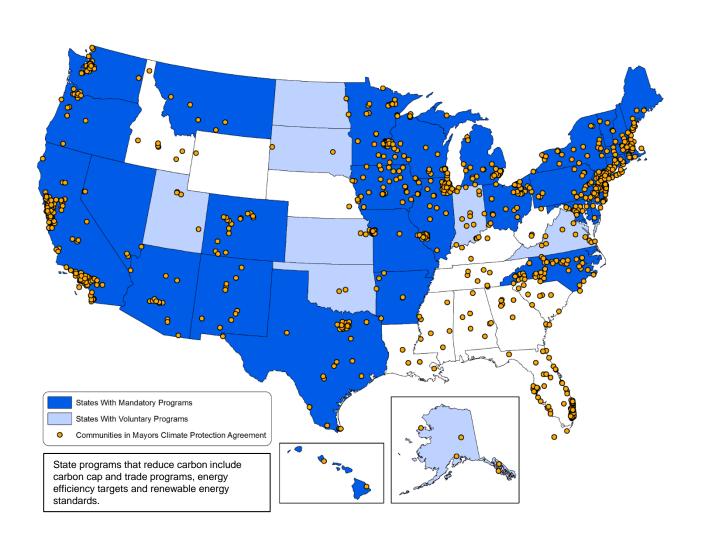


POWER PLANTS ARE THE SINGLE LARGEST SOURCE OF CARBON POLLUTION





States and Communities are Taking Action to Reduce Carbon Pollution





EPA is Taking Action: Legal Foundation

- Courts have held that greenhouse gases, including carbon dioxide (CO₂), are pollutants that EPA can regulate under the Clean Air Act
- Courts have also recognized EPA's authority to issue national rules limiting carbon pollution from sources such as power plants and industrial facilities
- EPA's finding that greenhouse gas concentrations in the atmosphere endanger public health and the environment has been upheld by the courts, and the courts have also affirmed EPA's rules limiting greenhouse gases from cars and trucks
- EPA's regulation of power plant mercury and air toxics pollution does not preclude EPA from regulating power plant carbon pollution

Clean Power Plan



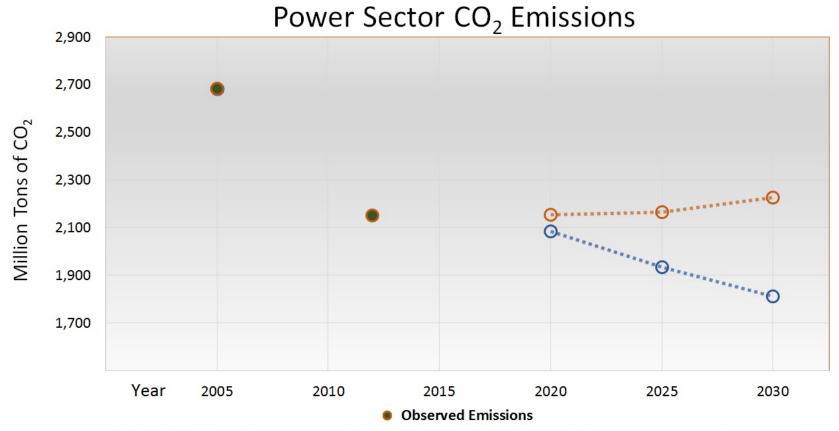
Outreach Shaped the Clean Power Plan

- More than two years of unprecedented outreach and public engagement
- The final Clean Power plan responds to many good ideas raised by stakeholders and states
 - More than 4 million public comments
 - Hundreds of meetings with stakeholders
- Public engagement was essential throughout the development of the Clean Power Plan, and outreach will continue during implementation





Transition to Clean Energy is Happening Faster than Anticipated



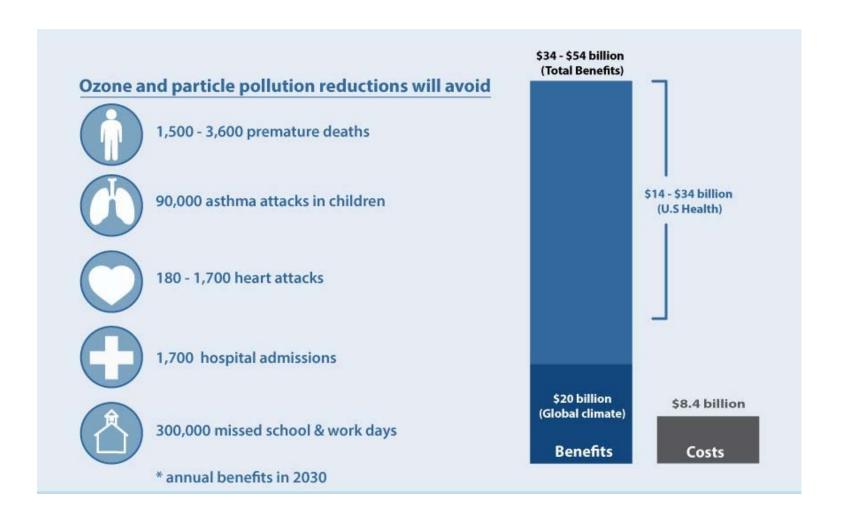
•O • Projected Emissions without the Clean Power Plan •O • Projected Emissions with the Clean Power Plan

Carbon and air pollution are already decreasing, improving public health each year. The Clean Power Plan accelerates this momentum.

When the Clean Power Plan is fully in place in 2030, carbon pollution from the power sector will be 32 percent below 2005 levels.



Benefits of the Clean Power Plan





The Clean Power Plan

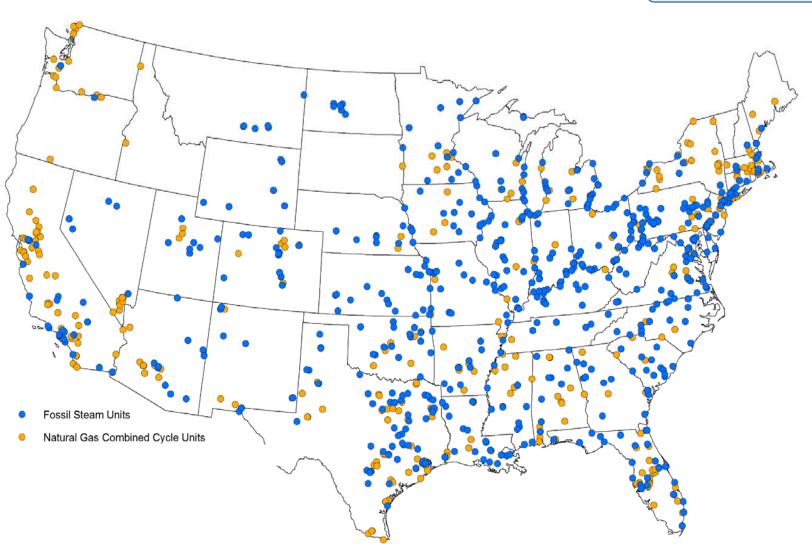
Overview

- Relies on a federal-state partnership under the Clean Air Act
- Sets carbon dioxide emissions performance rates that reflect the "best system of emission reduction" (BSER)
 - Power plants are subject to the same standards no matter where they are located. In general, a standard for:
 - Power plants fueled by natural gas
 - Power plants fueled by coal
 - Based on 3 "building blocks"
- Each state assigned a "state goal" based on the state's unique mix of power plants; energy efficiency is a key part of achieving the goals
- Allows states to develop their own plans for power plants to achieve either the performance rate or the state goal



The Clean Power Plan

What facilities?





Each state has a Goal: Measured as a rate or short tons

Georgia's Interim (2022-2029) and Final Goals (2030)

GEORGIA			
	CO ₂ Rate (lbs/Net MWh)	CO ₂ Emissions (short tons)	
2012 Historic ¹	1,600	62,851,752	
2020 Projections (without CPP)	1,135	61,305,697	
	Rate-based Goal	Mass-based Goal (annual average CO ₂ emissions in short tons)	Mass Goal (Existing) & New Source Complement
Interim Period 2022-2029	1,198	50,926,084	51,603,368
Interim Step 1 Period 2022-2024 ²	1,290	54,257,931	54,535,858
Interim Step 2 Period 2025-2027 ³	1,173	49,855,082	50,792,677
Interim Step 3 Period 2028-2029 4	1,094	47,534,817	48,420,669
Final Goal 2030 and Beyond	1,049	46,346,846	46,944,404

State Plans

Clean Power Plan Timeline

Summer 2015

• August 3, 2015 - Final Clean Power Plan

1 Year

 September 6, 2016 – States make initial submittal with extension request or submit Final Plan

3 Years

 September 6, 2018 - States with extensions submit Final Plan

7 Years

• January 1, 2022 - Compliance period begins

15 Years

January 1, 2030 - CO₂ Emission Goals met



Two State Plans Designs

States can choose a plan type:

Emission Standards Plan – state places federally enforceable emission standards on affected electric generating units (EGUs) that fully meet the emission guidelines

State Measures Plan – state includes, at least in part, measures implemented by the state that are not included as federally enforceable emission standards, along with backstop measures that would be federally enforceable if they are needed



State Plan Development

- Many states are considering collaborating with other states on their planning efforts; ideas include:
 - Multi-state plans
 - Linking plans through common administrative provisions (i.e., "trading ready")
- CPP includes pathways for existing programs to reduce carbon emissions, individual state plans, and multi-state trading approaches
- Federal plan proposes a model trading program
- States will need to engage with all stakeholders including vulnerable communities – throughout the state plan development process

Community and Environmental Justice Considerations



Community and Environmental Justice Considerations

In developing the Clean Power Plan, EPA took steps to help ensure that vulnerable communities (low-income, communities of color and indigenous populations) benefit from this rulemaking and are not disproportionately impacted by this rulemaking

These actions include:

- Conducting a proximity analysis that provides demographic information on the communities living near affected power plants
- Recommending states conduct an analysis of their own to identify vulnerable communities; EPA will provide resources to assist states
- Requiring that states engage with all stakeholders throughout the state plan development process, including vulnerable communities; EPA will provide resources to assist communities and states with engaging with one another
- Encouraging consideration of multi-pollutant approaches
- Enabling communities to benefit from clean energy



Enabling Communities to Benefit from Clean Energy

In developing the Clean Power Plan, EPA also took steps to help ensure that communities benefit from clean energy

These actions include:

- Designing the Clean Energy Incentive Program to incentivize energy efficiency programs in low-income communities
- Providing information on extensive federal resources that help low-income communities access renewable energy and energy efficiency
- Cataloguing state and local programs that have successfully delivered energy efficiency and renewable energy to communities



Clean Energy Incentive Program

- The Clean Power Plan includes a Clean Energy Incentive Program (CEIP) to encourage early (2020-2021) investments in clean energy generation and energy efficiency
- CEIP is an optional program that states may use to incentivize:
 - Wind or solar power in all communities, and
 - Energy efficiency measures in low-income communities
- EPA will engage with stakeholders on the CEIP in the coming months
- CEIP will help continue the momentum toward no-carbon energy and will give states a jump start on their compliance programs



Moving Ahead: Communities can engage right now

- Meeting with state, local and tribal agencies about the development of the CPP plan
- Commenting on the proposed federal plan; participating in the public hearings for the proposed federal plan
- Participating in upcoming discussions about the CEIP
- Commenting on the draft EM&V guidance
- Starting to identify clean energy opportunities that could work in your state and your communities



Moving Ahead: EPA assistance for communities

- Providing communities and states with resources to help them engage with one another
- Offering resources to assist states in conducting proximity analyses as they develop their plans
- Supplying states with resources to help them conduct assessments as they implement their plans
- Developing information regarding federal programs that help lowincome communities access renewable energy, energy efficiency, and related financial assistance programs
- Cataloguing current or recent state and local programs that have successfully helped communities adopt energy efficiency and renewable energy measures
- Offering training (more detail provided on the next slide)



Moving Ahead: Training for Communities

- Two in-person training sessions in the coming months
- Ideas for additional webinars:
 - More in-depth information about the Clean Power Plan
 - How communities can engage in state plan development
 - Proposed Federal Plan
 - Clean Energy Incentive Program
 - Tools and resources for communities



Current Information for Communities

- For more information and to access a copy of the rule, visit the Clean Power Plan website: http://www2.epa.gov/cleanpowerplan
- For each states goal, visit: http://www2.epa.gov/cleanpowerplantoolbox/clean-power-plan-state-specific-fact-sheets
- The Story Map presents key information about the final Clean Power Plan through graphics and interactive maps: http://www2.epa.gov/cleanpowerplan
- For community-specific information and engagement opportunities, see the CPP Community Page: http://www2.epa.gov/cleanpowerplan/clean-power-plan-community-page
- 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
- 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

How can I learn more?

If you have questions about how the EPA will be engaging with communities as we implement the Clean Power Plan, you may contact:

- Laura McKelvey: <u>mckelvey.laura@epa.gov</u> or 919-541-5497
- Tina Ndoh: ndoh.tina@epa.gov or 919-541-2750
- Holly Wilson: wilson.holly@epa.gov or 919-541-5624

Thank you for your interest in the Clean Power Plan!