

Update on Clean Air Act Actions

U.S. Environmental Protection Agency

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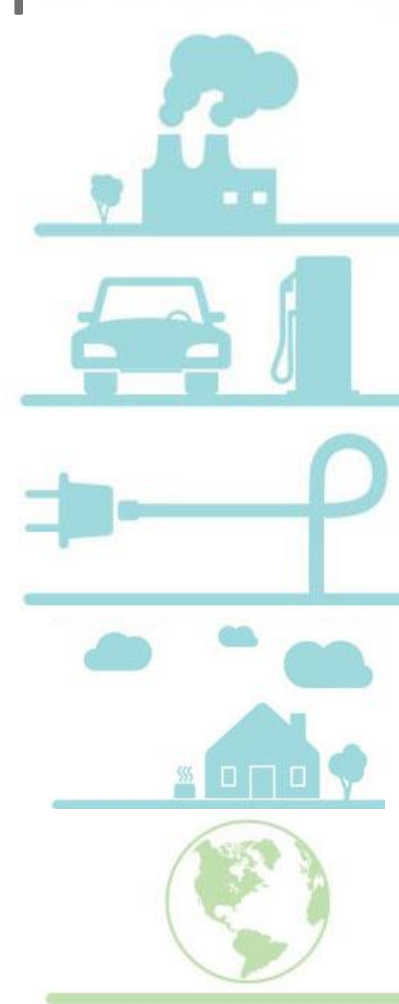
Topics for Discussion

- Climate Action Plan
 - Existing and New Power Plant Actions
- Cross-State Air Pollution Rule
- Implementing the Mercury and Air Toxics Standards
- Regional Haze
- Other Air Actions
- Q&A



EPA Mitigation Actions Under President Obama's Plan

- Reducing carbon emissions from power plants
- Building a 21st century transportation sector
- Cutting energy waste in homes, businesses, and factories
- Reducing methane and HFCs
- Leading international efforts to address global climate change





Clean Power Plan: Proposal and Outreach

- EPA's Proposed Clean Power Plan was issued on June 2, 2014
- Before putting pen to paper, EPA conducted a robust stakeholder engagement process, which included:
 - Meetings with over 300 utility, consumer, labor and environmental groups
 - 11 public listening sessions (3,300 attendees, 1,600 speakers)
 - Meetings, phone calls, etc. with all 50 states
- Common themes that emerged from this process included reliability, flexibility, affordability, time for plans and implementation, no one-size fits all approach



Clean Power Plan—How it Works

- The agency's proposal:
 - Relies on a strong federal-state partnership
 - Recognizes the progress states, cities and businesses have already made
 - Builds on ongoing efforts
- The proposal aims to cut energy waste and leverage cleaner energy sources by doing two things:
 - First, set achievable, enforceable state goals to cut carbon pollution per megawatt hour of electricity generated.
 - Second, layout a national framework that gives states the flexibility to chart their own, customized path to meet the goals in their state plans.



Clean Power Plan: State Goals

- EPA took an approach that viewed the Clean Air Act factors in determining Best System of Emission Reduction in light of the interconnected nature of power generation. BSER factors:
 - Costs
 - Size of reductions
 - Technology
 - Feasibility
- The Clean Power Plan proposes state-specific goals, which aim to reduce a state’s carbon intensity rate, or “pollution-to-power ratio.”
- To set the goals, EPA started with emissions data from 2012—the most current information available.
- Then we looked ahead to see what states could reasonably accomplish by 2030, using the four strategies we determined best meet the definition of BSER:
 1. Measures to make coal plants more efficient
 2. Increased use of high efficiency, natural gas combined cycle (NGCC) units
 3. Generating electricity from low- or zero-emitting facilities
 4. Demand-side energy efficiency

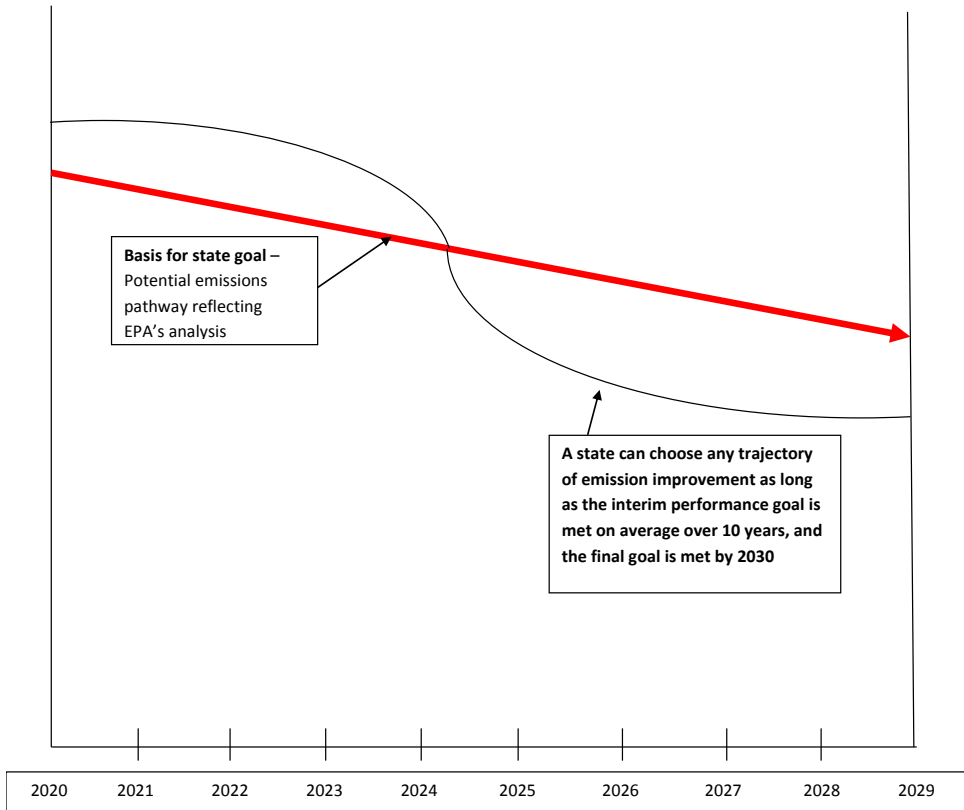


Clean Power Plan: State Plans

- States have the flexibility to determine how they are going to meet their goals. They could look at:
 - Options to reduce emissions through changes at existing fossil plants
 - Options to reduce emissions through the use of low- or non-emitting generation
 - Options to reduce emissions through demand-side energy efficiency measures
 - Regulatory mechanisms
 - States can consider a variety of approaches to ensure that limits on carbon pollution are addressed in the course of normal power sector planning and operation – just as limits on other air pollutants already are. (For example, existing NO_x and SO₂ emission limits and related trading programs change the cost of generation of individual units and thus affect EGU dispatch.)
 - Other opportunities



Clean Power Plan: Timing Flexibilities



- Responding to input from stakeholders, EPA proposed a flexible compliance timeline
 - 2030 compliance date—giving states 10-15 years to meet the goals
 - 2020-2029 glidepath, giving states time to ramp up programs and to be sensitive to reliability and enforceability issues
- Individual & multi-state plans are due June 30, 2016
- EPA recognizes states’ concerns regarding timing for submission of plans
 - Opportunity for phased plan submittals:
 - Individual state plans: a one-year extension (June 30, 2017)
 - Multi-state plans: a two-year extension (June 30, 2018); would submit a progress report on June 30, 2017



Clean Power Plan: Public Comment Period and What We've Heard So Far

- We are continuing our public outreach, working closely with the states
 - 120-day public comment period open through October 16, 2014
 - Four public hearings (3,000 attendees, more than 1,300 speakers)
 - Meetings with states, utilities and other stakeholders to answer questions and get input
 - Dialogue within, between and among states
- Common issues:
 - State goals
 - 2012 as a “baseline”
 - Credit for early action
 - Rate-based vs. mass-based goals
 - Stringency of the building blocks
 - Biomass
 - Renewable energy
 - Dispatch
 - Enforceability
 - Regional plans



Carbon Pollution Standards for New Power Plants—111(b)

- Standards for new power plants under 111(b)
 - Proposal issued on September 20, 2013, published January 8, 2014
 - Follows usual approach to setting New Source Performance Standards
 - Reflects more than 2.5 million public comments on a 2012 proposal and recent trends in the electric power sector
 - Sets separate standards for different types of new power plants
 - Defines Best System of Emission Reduction that is based on adequately demonstrated technologies
 - Public comment period closed on May 9, 2014
 - The agency received more than 2 million comments.



Carbon Pollution Standards for Modified and Reconstructed Plants—111(b)

- Standards for modified and reconstructed power plants under 111(b)
 - Proposal issued on June 2, 2014, published on June 18, 2014
 - Only applies to units that meet certain, specific conditions as defined by the Clean Air Act
 - A modification is any physical or operational change to an existing source that increases the source's maximum achievable hourly rate of air pollutant emissions.
 - A reconstructed source is a unit that replaces components to such an extent that the capital cost of the new components exceeds 50 percent of the capital cost of an entirely new comparable facility.
 - EPA is proposing emissions limits for these sources that are based on the performance of available and demonstrated technology.
 - EPA is proposing separate numeric standards for different types of units:
 - Affected modified fossil fuel-fired electric utility steam generating units
 - Affected modified natural gas-fired stationary combustion turbines
 - Affected reconstructed fossil fuel-fire electric utility steam generating units and affected reconstructed natural gas-fired stationary combustion turbines.
 - Comment period closes on October 16, 2014.



Cross-State Air Pollution Rule

- EPA issued CSAPR in July 2011 to address interstate transport of ozone and PM in the eastern half of the country
- Final rule stayed and invalidated by the D.C. Circuit in August 2012
- The U.S. Supreme Court reversed the D.C. Circuit Court opinion in May 2014
 - The decision confirmed EPA’s interpretation of key CAA provisions relating to transported pollution.
- EPA has asked the court to lift the stay
- All parties filed Motions to Govern on July 3rd
- At this time, CAIR remains in place and CSAPR remains stayed
- EPA continues to work on post-CSAPR transport
 - We have been reviewing the Supreme Court decision and discussing how best to move forward in light of the opinion



MATS Implementation

- MATS was issued in March 2012 establishing limits on emissions of mercury and other air toxics from fossil fuel-fired power plants, upheld by the DC Circuit on April 15th.
- Utilities are making substantial progress in complying with MATS.
- Existing sources generally will have up to 4 years if they need it to comply with MATS
 - 3-year compliance date: April 16, 2015
 - 4-year compliance date: April 16, 2016
- MATS has put in motion planning and investment that is leading to the installation of pollution control technologies and adoption of emissions reduction measures across the existing fleet of power plants.
- EPA has talked to state permitting agencies to assure that the fourth year, when needed, would be generally available.
- NACAA survey from May 2014 shows states addressing compliance extension requests
 - 107 extension requests
 - 98 have been granted
 - Others are either under consideration (5), have been returned (2) or denied (2)



Regional Haze

- EPA is nearing completion of our actions on state regional haze plans for the first 10-year implementation period, which ends in 2018
- EPA has approved or partially approved 45 state plans
- There are three full federal plans and one federal tribal plan in place
- The agency has two final actions remaining:
 - Oklahoma (Proposal November 2014, Final September 2015)
 - Texas (Proposal November 2014, Final September 2015)
- Implications of Supreme Court Decision on CSAPR
- Planning for the next steps of the haze program is underway



2015 Ozone NAAQS Review

- On April 29, 2014, EPA received a court-ordered ruling on the schedule
 - Proposal – December 1, 2014
 - Final – October 1, 2015
- On August 29, 2014, EPA published final ozone assessment documents
 - Health Risk and Exposure Assessment for Ozone
 - Welfare Risk and Exposure Assessment for Ozone
 - Policy Assessment for the Review of the Ozone NAAQS
- EPA staff conclusions for the primary and secondary standards are based on:
 - The scientific evidence discussed in the Integrated Science Assessment
 - Estimates of Ozone exposures and risks estimated in the Health Risk and Exposure Assessment
 - Advice received from CASAC
 - Consideration of public comments received as CASAC meetings



Urban Air Toxics Report to Congress

- On August 21, 2014, EPA published the Second Integrated Urban Air Toxics Report to Congress.
 - 97 MACT standards covering all 174 major source categories
 - Rules for 68 area source categories, representing 90 percent of the worst urban HAPs
 - 2007 Mobile Source Air Toxics Rule and recently finalized Tier 3 vehicle and fuel standards
- Federal, state, tribal and local actions have significantly reduced air toxics
 - 66% reduction in benzene since 1994
 - 84% decrease in ambient lead levels between 2003 and 2010
 - NATTS monitoring network shows average concentrations for arsenic, benzene, lead and nickel have decreased in many urban areas.
- Despite progress, there is still more work to be done
 - National rules and voluntary programs where appropriate
 - Research and outreach to overburdened communities
 - Partnerships to address air toxics at the local level



Key MACT Rules

- Petroleum refineries - proposed updates to emissions standards
 - Published in the FR June 30, 2014
 - The proposal would require – for the first time – fence-line monitoring for benzene
 - Emission controls for storage tanks, performance requirements for flares, and emissions standards for delayed coking units
- Boilers/CISWI – reconsideration
 - Final reconsiderations published in the FR:
 - Major Sources – January 31, 2013
 - Area Sources – February 1, 2013
 - CISWI Sources – February 7, 2013
 - Reconsidered to incorporate additional data provided after final publication, conduct additional analyses, and make clarifications to ease implementation
 - In August 2013, EPA decided to reconsider certain aspects of the amendments to provide greater opportunity for public comment



Key MACT Rules cont.

- Ferroalloys NESHAP – supplemental proposal
 - Signed on September 4, 2014
 - Considered public comment and new data to conduct a more thorough risk analysis
 - Would be the first regulation to speak to the small dataset issue
 - If implemented would reduce metal air toxics by 77 tons per year
 - Would protect public health without posing economic burden on industry



Thank you!

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