CHEAPER AND CLEANER:
Using the Clean Air Act to Sharply Reduce Carbon Pollution from Existing Power Plants, Delivering Health, Environmental and Economic Benefits
We limit the amount of toxic chemicals like mercury and sulfur and arsenic in our air or our water, but power plants can still dump unlimited amounts of carbon pollution into the air for free. That’s not right, that’s not safe, and it needs to stop.

-President Obama, June 25th, 2013
## THE TIMELINE

<table>
<thead>
<tr>
<th>Year</th>
<th>Date(s)</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>January 20&lt;sup&gt;th&lt;/sup&gt;&lt;br&gt;June 25&lt;sup&gt;th&lt;/sup&gt;&lt;br&gt;September 20&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Start of President Obama's second term. President Obama announces Climate Action Plan. EPA proposes carbon pollution standards for future power plants.</td>
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<tr>
<td>2014</td>
<td>May 9&lt;sup&gt;th&lt;/sup&gt;&lt;br&gt;June 1&lt;sup&gt;st&lt;/sup&gt;&lt;br&gt;June-September</td>
<td>End of public comment period for future power plant proposal. EPA to propose guideline for carbon pollution standards for existing power plants. Public comment period on existing power plant proposal.</td>
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<tr>
<td>2015</td>
<td>June 1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>EPA to finalize power plant carbon pollution standards.</td>
</tr>
<tr>
<td>2016</td>
<td>June 30&lt;sup&gt;th&lt;/sup&gt;&lt;br&gt;July-December</td>
<td>States to submit implementation plans for existing power plants to EPA. EPA reviews state plans for compliance with its guideline.</td>
</tr>
<tr>
<td>2017</td>
<td>January 20&lt;sup&gt;th&lt;/sup&gt;</td>
<td>End of President Obama's second term.</td>
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</table>
EPA CO2 Emissions Guideline & State Plans

- Guideline includes performance standard and compliance provisions.
- States have until June 2016 to adopt and submit state plans. If a state submits no plan, or one EPA cannot approve, EPA must issue a federal plan.

“Best System of Emission Reduction”

- “Source-based” approach limited to options plants can do “within the fenceline” (e.g. heat-rate improvements) – yields limited reductions, higher costs
- “System-based” approach includes all options that reduce emissions – yields deeper reductions, lower costs
  - Heat-rate improvements
  - Shifting generation from coal to gas
  - Increasing zero-emission power (renewables and nuclear)
  - Increasing energy efficiency
FLEXIBLE COMPLIANCE OPTIONS

- Heat rate reductions
- Cleaner power sources
- More renewables
- Investments in efficiency
NRDC PROPOSAL
SYSTEM-BASED, STATE SPECIFIC STANDARDS

**State-specific** fossil-fleet average CO2 emission rates (lbs/MWh) for 2020 and 2025

**Calculated** by applying benchmark coal and gas rates to each state’s baseline (2008-2010) fossil generation mix

**Averaging** allowed among all fossil units in state (including new units subject to the 111(b) standard)

**Credit for incremental** renewables and energy efficiency (equivalent to adding MWhs to denominator in calculating emission rate for compliance purposes)

States may opt in to **interstate averaging** or credit trading

**Air Agency** oversees emissions totals and averaging, and applies RE and EE credits, in consultation with utility regulatory agency
• Individual plant emissions standards applied to all fossil generators to achieve state emissions limits
• Such “inside the fenceline” measures likely the costliest method for meeting federal emissions guidelines, especially if guidelines based on system-wide approach
• Air agency provides permits for plants/units, based on an emission rate
• EE and RE would not count as emission reductions for the state
A State or region allocates finite number or allowances that grant the right to emit one ton of CO2

Allowances obtained at auction and invested in EE/RE programs to lower emissions, or distributed directly to utilities

Higher emitters require more allowances and become less competitive, resulting in an open market and demand for allowances at market prices

Incentivizes RE and EE stimulated by the market as a lower-cost investment than additional allowances

Additional RE and EE requires less oversight, so long as the cap is met

Air Agency oversees traded allowances, akin to SOX and NOX programs
PORTFOLIO APPROACH: RELY ON PRE-EXISTING OR IMPROVED EFFICIENCY, RENEWABLES, AND OTHER POLICIES

• **Existing EERS and RPS standards** utilized to achieve state emissions limits
• **Additional legislation** to make such measures mandatory would be required
• **Air Agency** provides oversight of RE and EE resources in collaboration with utility regulatory agency
• **Subgroup of States** applies carbon cost to all fossil generators, based on each unit’s emissions rate

• **Higher emitters** dispatched later than lower emitters

• **Incentivizes RE and EE** by increasing their competitiveness as zero-emitting resources

• **Carbon costs** could be returned to states, pro rata, for reinvestment in energy efficiency, or to consumers

• **RGGI’s cost of carbon could be utilized as a “shadow cost”**

• **Air Agency** enforces adherence to a regional plan as an enforceable condition of generators’ air permits
Presidential Memorandum issued on December 5th, 2013 requires that no less than 20% of the energy consumed by each agency of the federal government come from renewable energy by the year 2020.

Sets a timeline by which federal agencies must meet target

- **10% in fiscal year 2015**
- **15% in fiscal year 2016 and 2017**
- **17.5% in fiscal year 2018 and 2019**
- **20% in fiscal year 2020 and thereafter**

Updates previous mandate of 7.5% by 2013 set by the Energy Policy Act of 2005