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# **EPA's Proposed Clean Power Plan**

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# Overview: Clean Power Plan

Biggest Opportunity we've had on Climate and Clean Energy! Strengthen and Defend the Clean Power Plan!

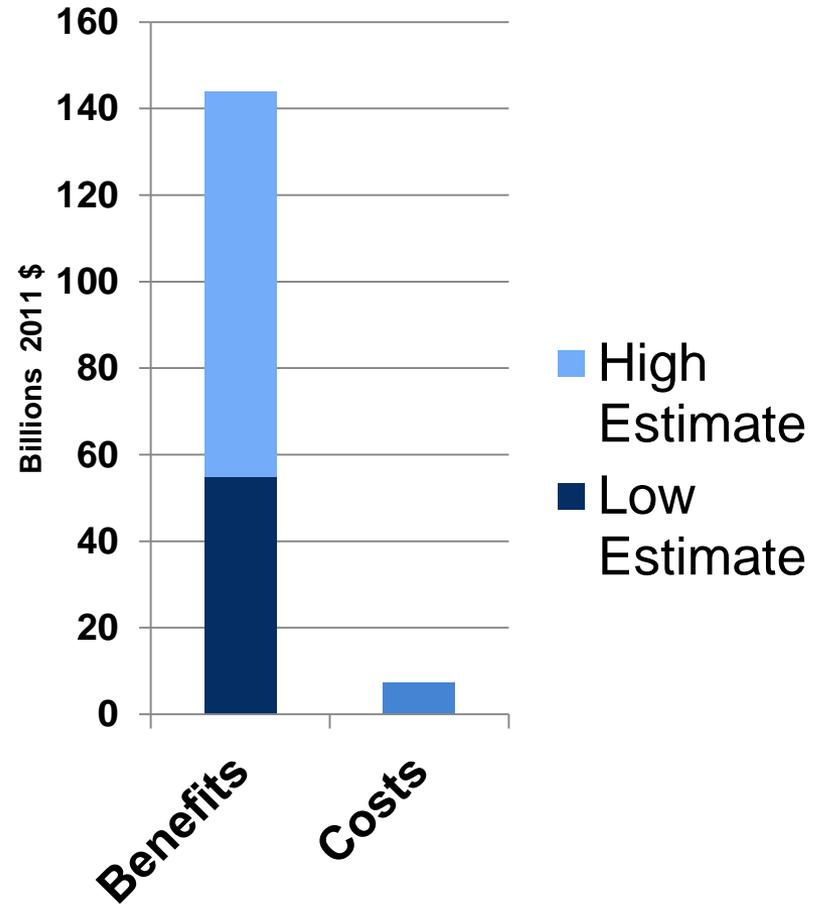
The proposed rule, announced June 2014:

- is projected to achieve **30% reductions** from power sector **by 2030 from 2005 levels**;
- establishes **state-specific carbon intensity targets** through the application of four building blocks to a **2012** emission rate;
- provides **flexibility to states** to develop plans, using measures within and beyond the building blocks;

# Overall Outcomes

- \$93 billion in climate and public health benefits
- 8% decrease in electricity bills
- 25% less NO<sub>x</sub> and SO<sub>2</sub>
- Major decrease in health impacts associated with air pollution

2030 Costs and Benefits





# Best System of Emission Reduction

Building Block	Value Allocated in Goal-Setting Formula
<b>Power plant efficiency improvements</b>	Average heat rate improvement of 6% for coal steam electric generating units (EGUs)
<b>Move away from high-emitting power sources</b>	Dispatch existing and under-construction natural gas combined cycle (NGCC) units to up to 70% capacity factor, proxy for retirements of coal plants
<b>Use more zero- and low-emitting power</b>	Dispatch to new clean generation, EPA's approach is to include new nuclear generation under construction, moderate deployment of new renewable generation, and continued use of existing nuclear generation
<b>Use electricity more efficiently</b>	Increase demand-side energy efficiency to 1.5% annually



# States Lead the Way!

- **States do not have to follow EPA's use of specific building blocks, and we don't want them to.**
- **Beyond the building blocks:** EPA is taking comment on whether states could also include in their plans other measures not included in the building blocks
- **Multi-state plans:** States can submit a multi-state plans. Existing programs not necessarily plug-and-play though (e.g., 111(d) treats offsets differently than RGGI).

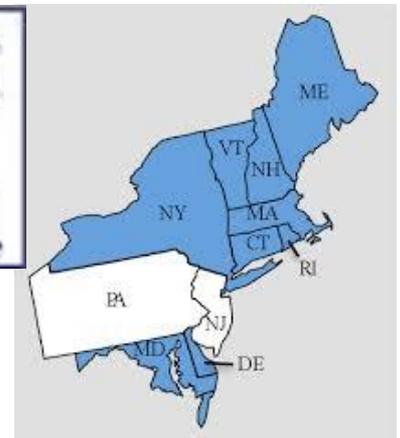
# Suggested Improvements

- 1. Increase Carbon Pollution Reduction Goals**
- 2. Promote Renewables and Energy Efficiency**
- 3. Avoid Use of Natural Gas and Nuclear**
- 4. Empower Affected Workers & Communities**



# Increase Carbon Reduction Goals

- RGGI does not yet have 2030 target, but Environment Northeast projected 2030 caps for RGGI states and found that a likely targets of 54.6 to 50.7 million metric tons in 2030 are both lower than the EPA regional target of 61.8 million metric tons in the CPP.
- States including California, Colorado, Connecticut, Minnesota, New Mexico, New York and Washington are likely to extend RPSs beyond 2020.
- Washington and Illinois both are working on possible climate legislation and Maryland and PA are working to increase their renewables standards.



# Renewables can do a lot more!

- EPA presented two options for evaluating new RE – one based on average RPS and one on resource availability. Plus their modeling showed no new wind or solar after 2016 because of modeling limitations
- The Base Case used by EPA has 8 GW of solar installed in the US in 2025, for comparisons purposes the DOE SunShot goal is 302 GW in 2030.
- The wind BAU from EIA is 76 GW, while the WindVision goal is 225. It is possible that 76 GW of wind will be installed by the end of 2015.
- Sierra Club is working closely with Union of Concerned Scientists on an alternative proposal for RE under the CPP



# Efficiency can do more!

- EPA set the annual state efficiency targets at 1.5% (some state programs have shown more than 2% annual energy savings)
- EPA assumed efficiency saving from utility programs decline far more quickly than actual experience from these programs demonstrates
- Evaluation, Monitoring and Verification of savings will be important



# Avoid Natural Gas and Nuclear

- EPA should not incentivize the construction of new fossil fuel-fired generation, including new natural gas
- EPA should consider the full lifecycle emissions and environmental impacts of natural gas use (methane NSPS)
- EPA should not encourage states to keep “at risk” nuclear plants running, this is the most dangerous point in the lifetime of a nuclear plant
- Nuclear power is far from carbon-free. Fossil fuels are used for uranium mining, processing, conversion, enrichment, transportation, construction of reactors and trying to handle radioactive waste.



# Environmental and Economic Justice Concerns

- EPA must give workers and affected communities the opportunity to engage throughout the process.
- The standard must protect low-income and communities disproportionately impacted by pollution. Further, the standard should prioritize pollution reductions where they are needed most, in pollution hotspots.
- Sierra Club will advocate for public resources to help workers and affected communities as we transition to a clean energy economy free of pollution hotspots.



# Next Steps...

- **Mid-Summer** - Final Standard Released for all three power plant standards and Draft Model Federal Plan released
- **Fall 2015** – Comment period and hearings on Model Federal Plan
- **June 30, 2016** – State Plans Due!
- **June 30, 2017** – Individual plan due if state is eligible for a one-year extension

**How you can get involved!!**



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