

Clean Power Plan: Full Steam Ahead on Compliance

Developing a Flexible, Cost-Effective Regulatory Framework

Pam Kiely

Sr. Director of Regulatory Strategy

Climate & Energy

pkiely@edf.org



Clean Power Plan 101: Flexible Clean Air Act Framework

Background

- In 2007, the Supreme Court affirmed the U.S. Environmental Protection Agency's (EPA) **authority and responsibility** to regulate greenhouse gas emissions under the Clean Air Act; this duty has subsequently been reaffirmed twice.
- The Clean Power Plan is a set **of standards established by EPA to reduce carbon dioxide emissions from existing power plants**, America's largest source of carbon dioxide emissions.

What is the Clean Power Plan?



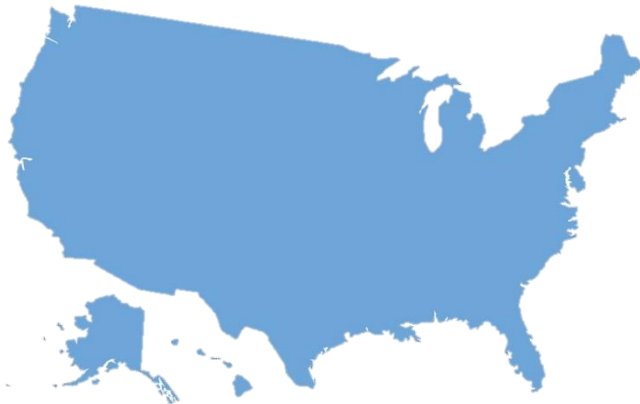
Cleaner
Energy



Energy
Reliability



Energy
Affordability



America's first national limits on CO₂ pollution from existing power plants



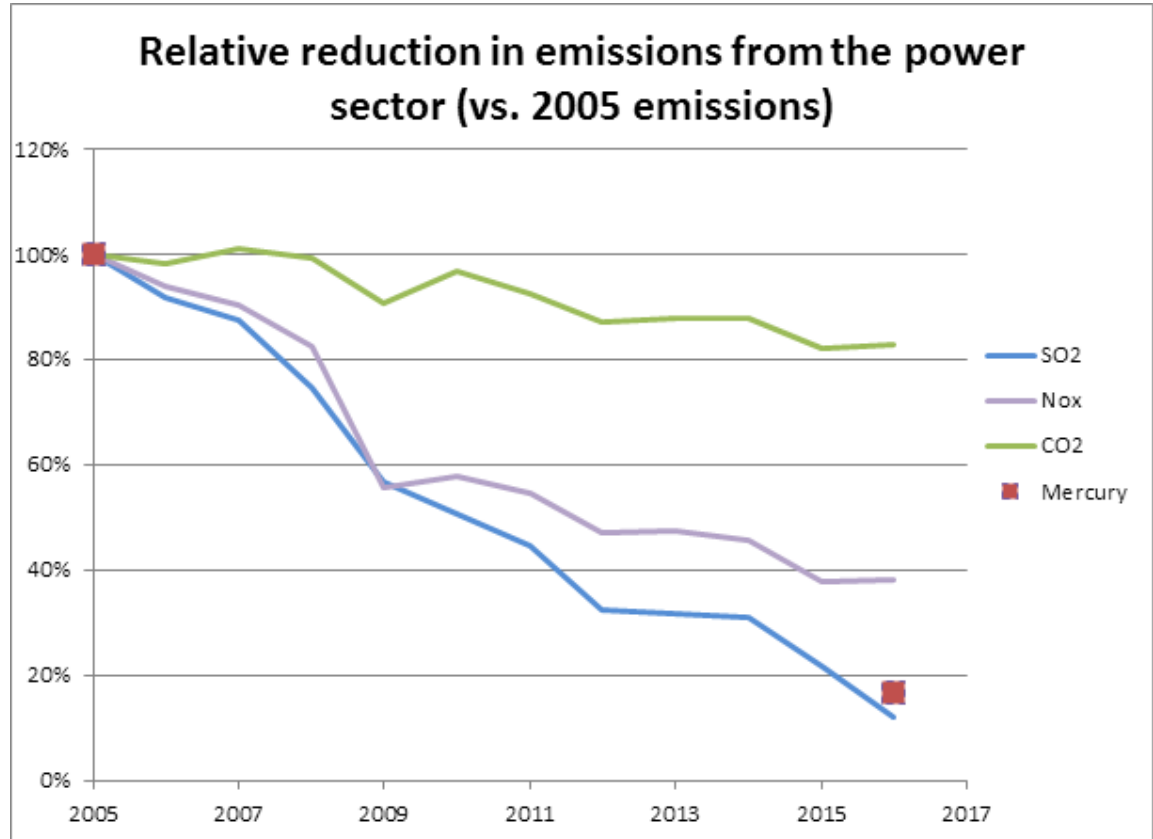
Provide flexibility for states to design cost-effective plans that meet those limits



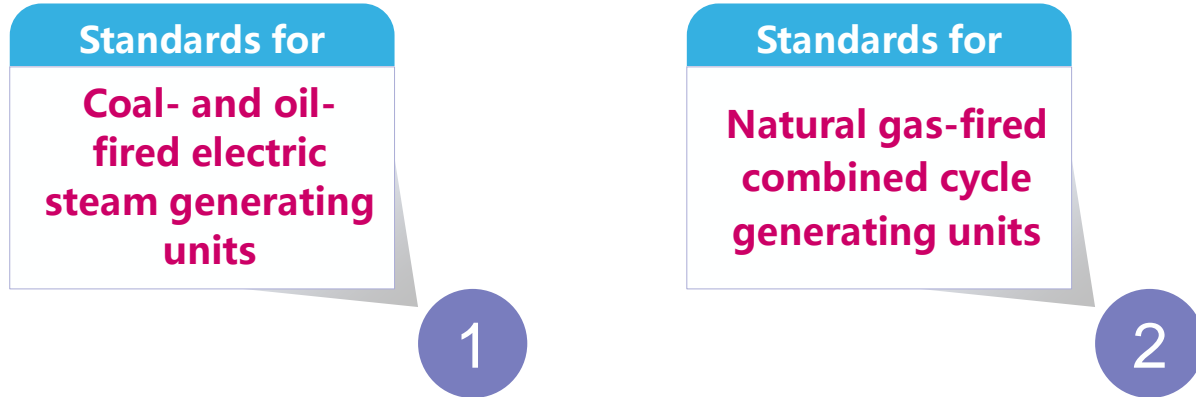
Separate standards were issued for new and modified power plants

Clean Air Act Emissions Limits

Build on success in reducing harmful power sector emissions including: sulfur dioxide, nitrogen oxides, carbon dioxide, and mercury.



How Does The Clean Power Plan Work?

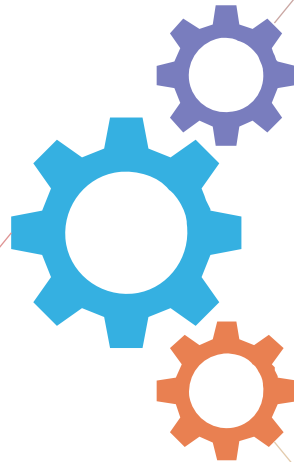


Under the Clean Air Act, EPA emission guidelines reflect the best system of emissions reduction that has been adequately demonstrated, considering costs, energy requirements and other factors.

How Does the Clean Power Plan Work?

Guidelines based on three Building Blocks:
2022-2030

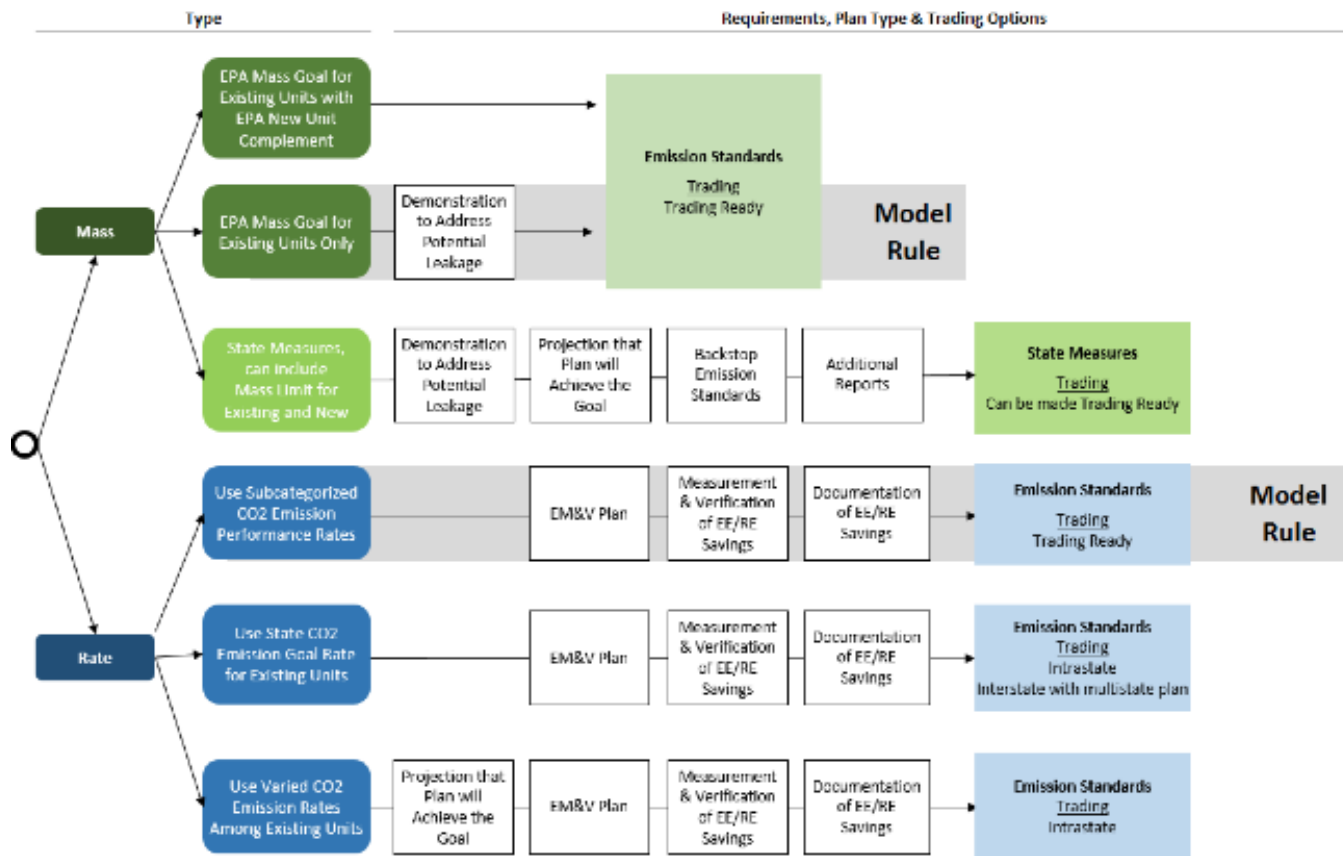
Shift from high-emitting coal-fired power plants to existing natural gas-fired power plants



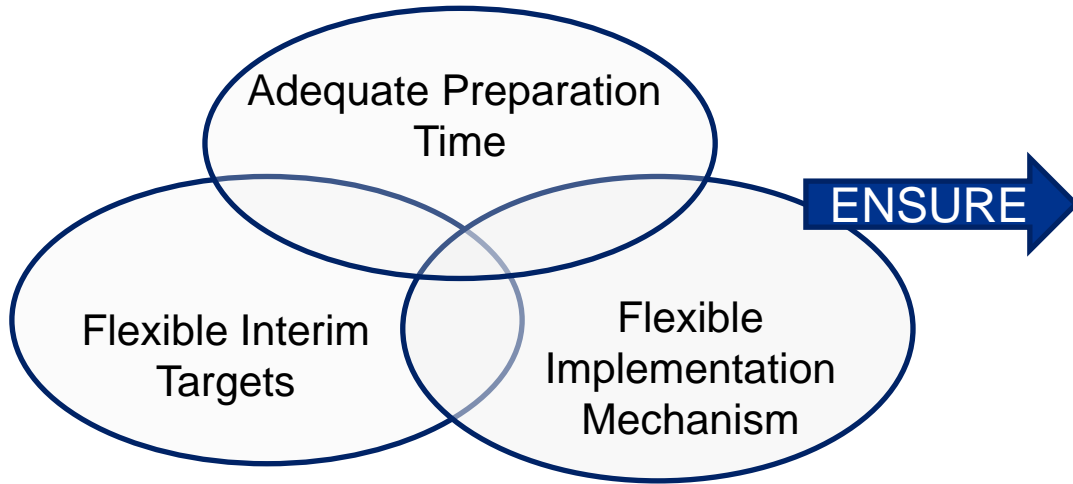
Improve the heat rate of coal-fired power plants

Substitute zero-emitting renewable energy sources for coal-fired power plants.

EPA's MAPPING OF THE STATE PLAN APPROACH OPTIONS



Ensuring Reliability and Affordability



- Achievement of carbon reductions
- Continued electricity reliability
- States and power companies can decide how to achieve the goals



Flexible, Compatible Regulatory Design

01

Reduce the cost of compliance

02

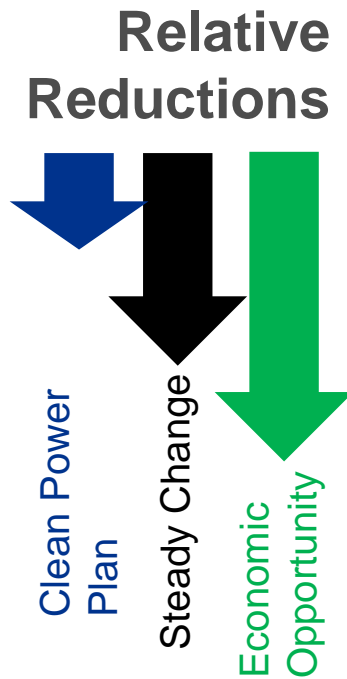
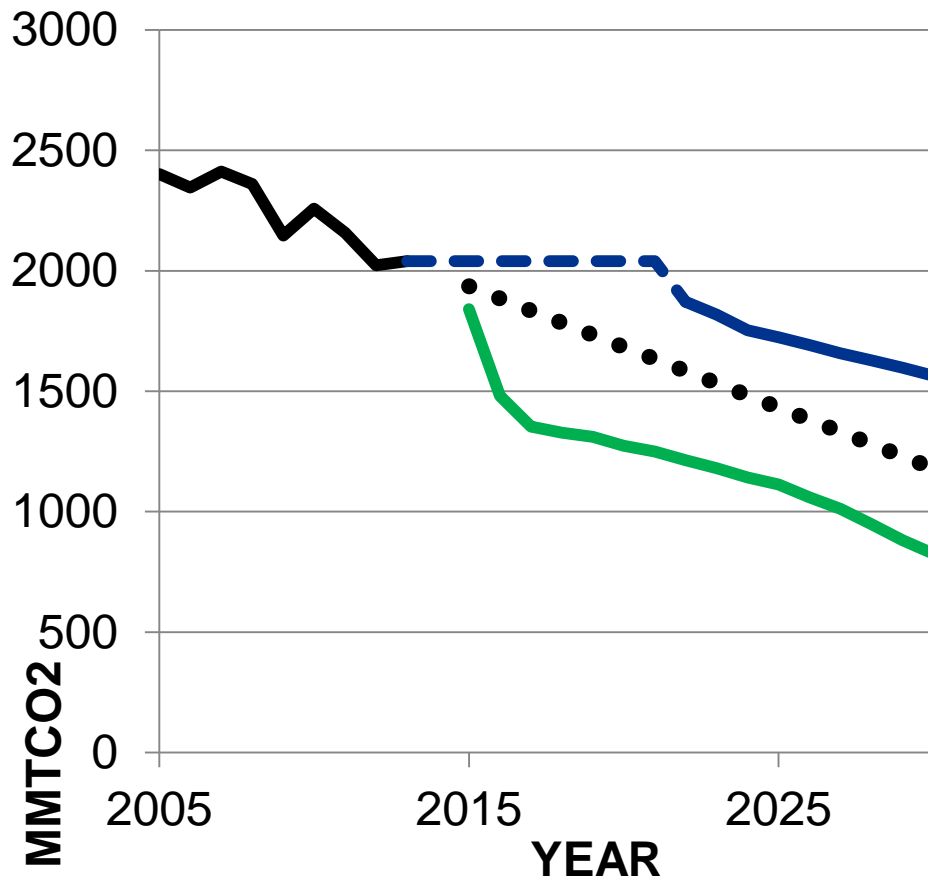
Create market-based incentives for emissions reduction

03

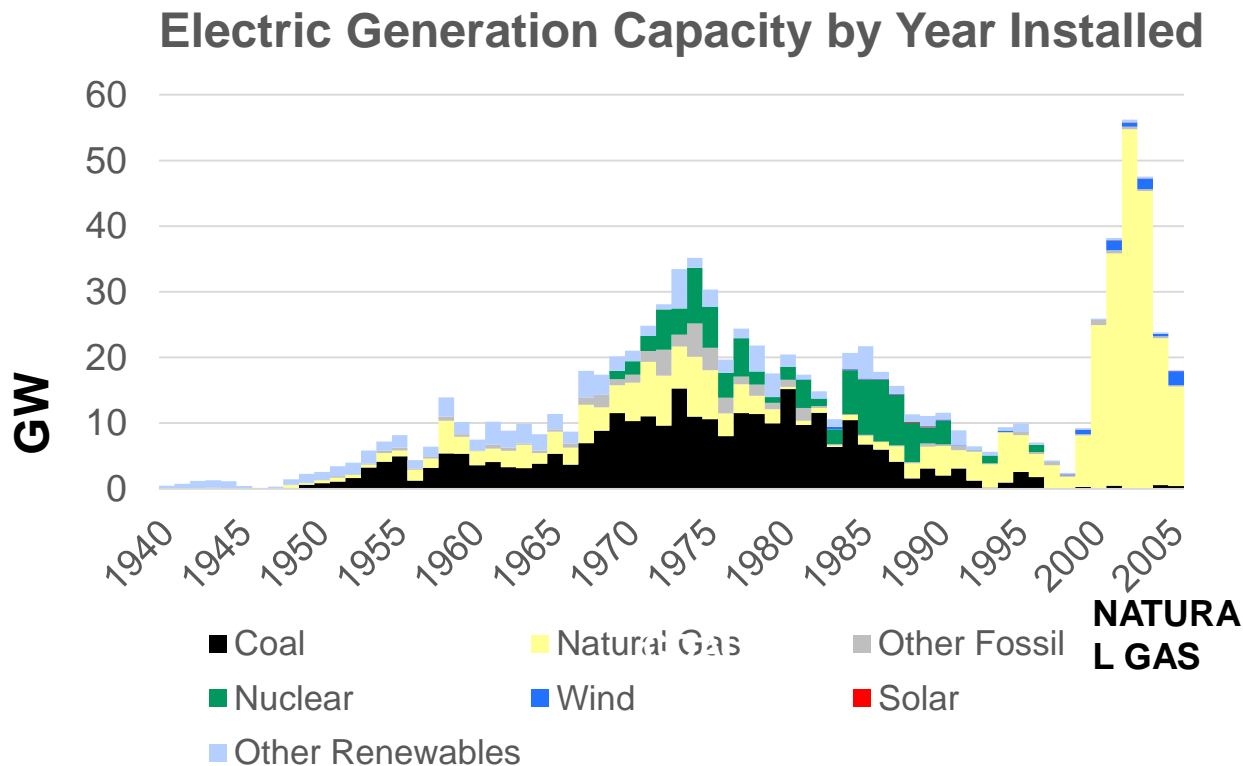
Promote innovation, flexibility, and reliability

Emission trading is a market-based policy tool that creates a financial incentive to reduce emissions where the costs of doing so are the lowest and clean energy investment enjoys the highest leverage. Clean Power Plan has high flexibility for emission trading and takes advantage of market-based approaches to help minimize costs and ensure electric reliability.

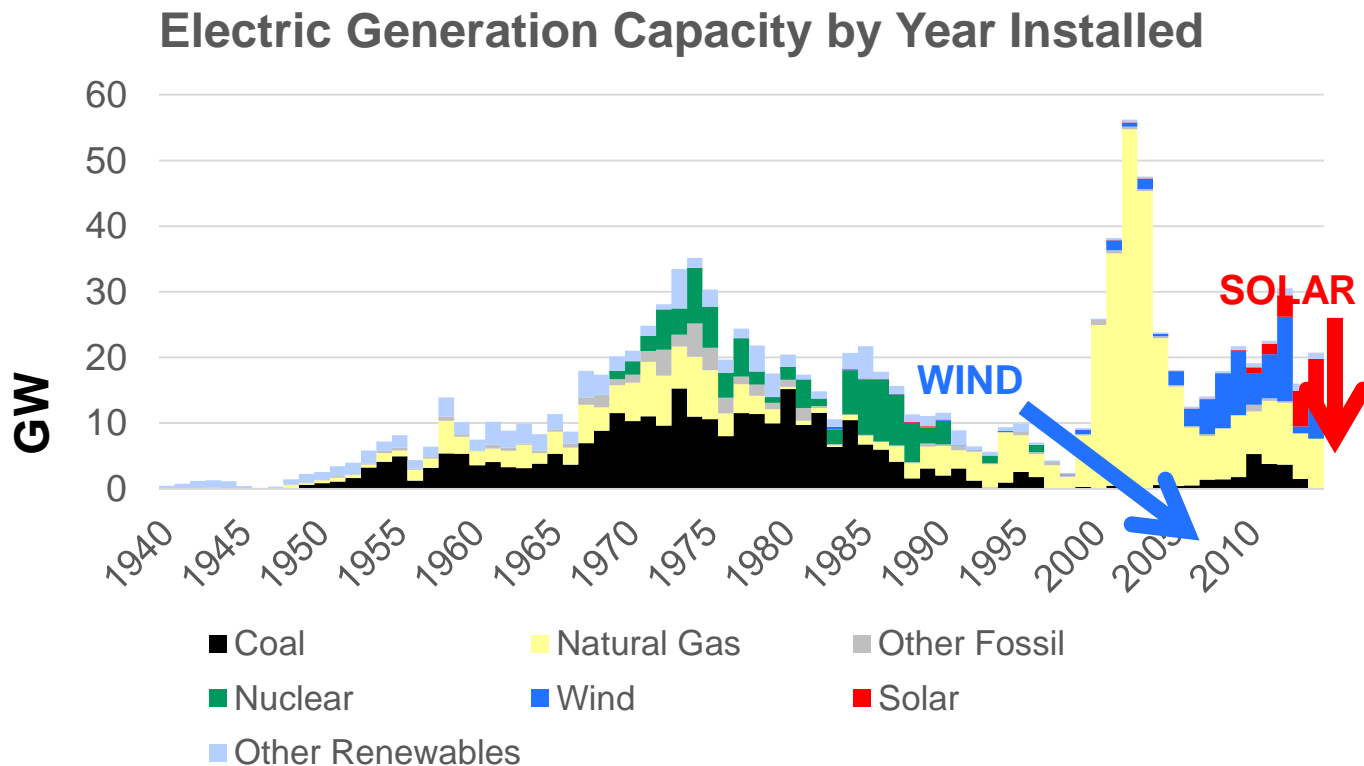
Clean Power Plan: Full Steam Ahead on Compliance Planning



A Power Shift in the United States



A Power Shift in the United States



Timely Development of Compliance Framework

Advantages
for power
companies



“Rules of the Road” / regulatory framework delineated



Increase lead time to plan investments; optimize resource decisions



Maximize compliance flexibility



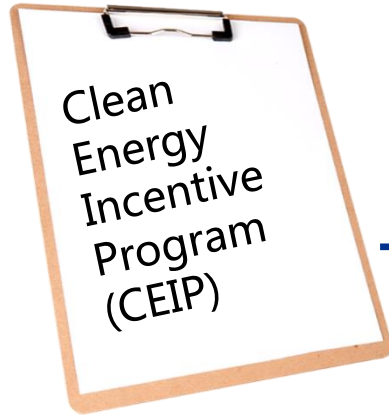
Early Action: Clean Energy Incentive Program (CEIP)

Advantages from
timely submission
of State Plans

Clean Energy Incentive Program

- Renewable Energy

- Energy efficiency programs implemented in low-income communities



- ✓ Earn early emission credits
- ✓ Use for plan compliance from 2022 to 2029



Planning In Context: Near-Term Timeline

23 Oct. 2015

States and industry begin filing legal challenges against Clean Power Plan, motions for “stay”

21 Jan. 2016

U.S. Court of Appeals unanimously denies motions for stay

Spring 2016

Expedited litigation on merits continues in U.S. Court of Appeals

19 Dec. 2015

President Obama Vetoes Congressional Attempt to Overturn CPP

9 Feb. 2016

Supreme Court Votes 5-4 to Put CPP on Pause

2017

Supreme Court expected to review legal merits

Litigation expected to conclude well before 2022 start date

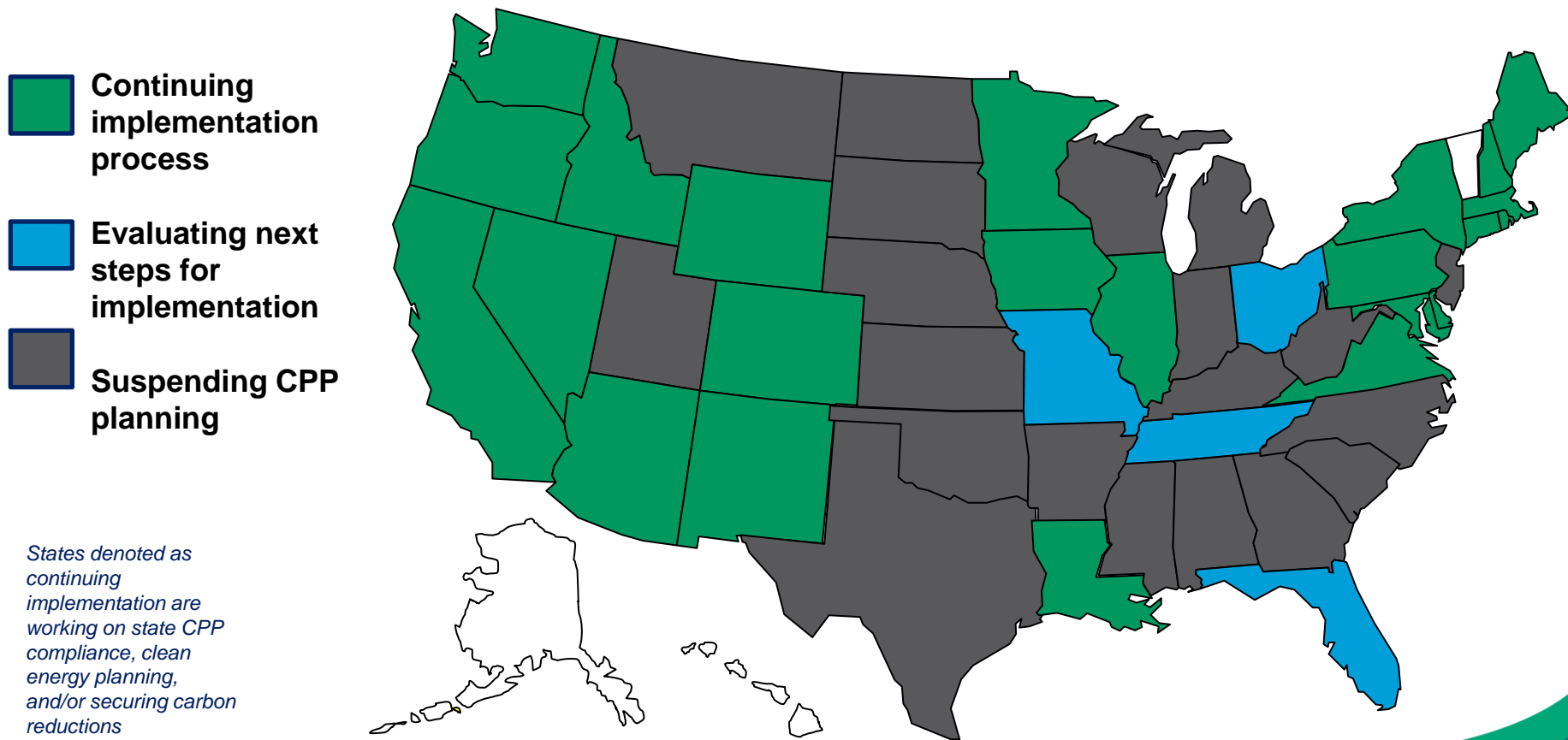
States Moving Forward

“It is prudent for Colorado to move forward during the litigation to ensure that the state is not left at a disadvantage if the courts uphold all or part of the Clean Power Plan. Because the Supreme Court did not say whether the stay would change the rule’s compliance deadlines, Colorado could lose valuable time if it delays its work on the state plan.” – **Colorado Department of Public Health & Environment**

“My administration has been... to develop a strong, viable path forward to comply with the Clean Power Plan. . . we will stay on course and continue to develop the elements for a Virginia plan to reduce carbon emissions and stimulate our clean energy economy.” – **Virginia Governor McAuliffe**

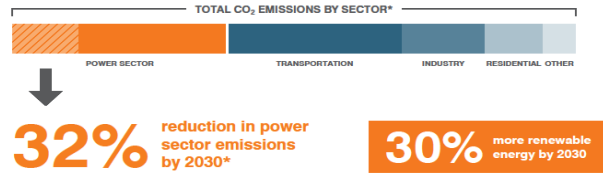
“Minnesota will “keep moving forward on clean energy initiatives, including the development of our state’s Clean Power Plan.” - **Minnesota Governor Dayton**

States Moving Forward



The U.S. Clean Power Plan

2030 IMPACT: BY THE NUMBERS



*2005 BASELINE

ECONOMIC STRENGTHS

\$155 billion in consumer savings between 2020-2030

\$1 invested in clean energy creates 3x as many jobs as \$1 invested in fossil fuels

Tens of thousands of renewable energy jobs added by 2040

HEALTH BENEFITS

UP TO
\$54 BILLION
in public health and climate benefits

90,000
childhood asthma attacks prevented

UP TO
3,600
premature deaths avoided in 2030 due to cleaner air

Sources:
PERI Center for American Progress
U.S. Energy Administration
U.S. EPA

Figures based on EPA's estimated projections



CPP Benefits

- **32% decline in CO₂ emissions by 2030**
- **\$4 in health benefits for every \$1 spent on compliance**
- **\$155 billion in consumer savings between 2020-2030**



Pam Kiely

Sr. Director of Regulatory Strategy

Climate & Energy

pkiely@edf.org

