

Southern States Energy Board

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American Coalition for Clean Coal Electricity

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Topics

- ❖ Coal Fleet
- ❖ Clean Power Plan
- ❖ What can you do?

ACCCE

- ❖ Represents coal-based electricity generation
- ❖ 30+ member companies
- ❖ Coal companies, railroads, electric utilities, equipment suppliers

Snapshot of the U.S. Coal Fleet

- ❖ Provided 39 percent of electricity in 2014
- ❖ At beginning of 2015 -- 1,236 coal units (300,000 MW)
- ❖ 251 units (45,000 MW) in 35 states have announced retirement 2015-2025
- ❖ Most retirements have been attributed to EPA policies

Sources: EIA (2015); individual company retirement announcements; Energy Ventures Analysis (2013); EPA Clean Air Markets Division (2013)

Snapshot of the U.S. Coal Fleet

- ❖ **\$143 billion invested by 2017 to reduce conventional emissions -- \$74 billion of that from 2001-2010**

- ❖ **SO₂, NO_x, PM have been reduced by 90% per kWh**

Sources: EIA (2015); individual company retirement announcements; Energy Ventures Analysis (2013); EPA Clean Air Markets Division (2013)

Clean Power Plan

- ❖ EPA proposal to reduce CO₂ (“carbon”) emissions from power plants
- ❖ EPA’s goal is a 30% reduction in power sector CO₂ emissions by 2030
- ❖ Mandates a fundamental change in electricity generation and use
- ❖ Proposed last summer; final rule this summer; state plans due 2016

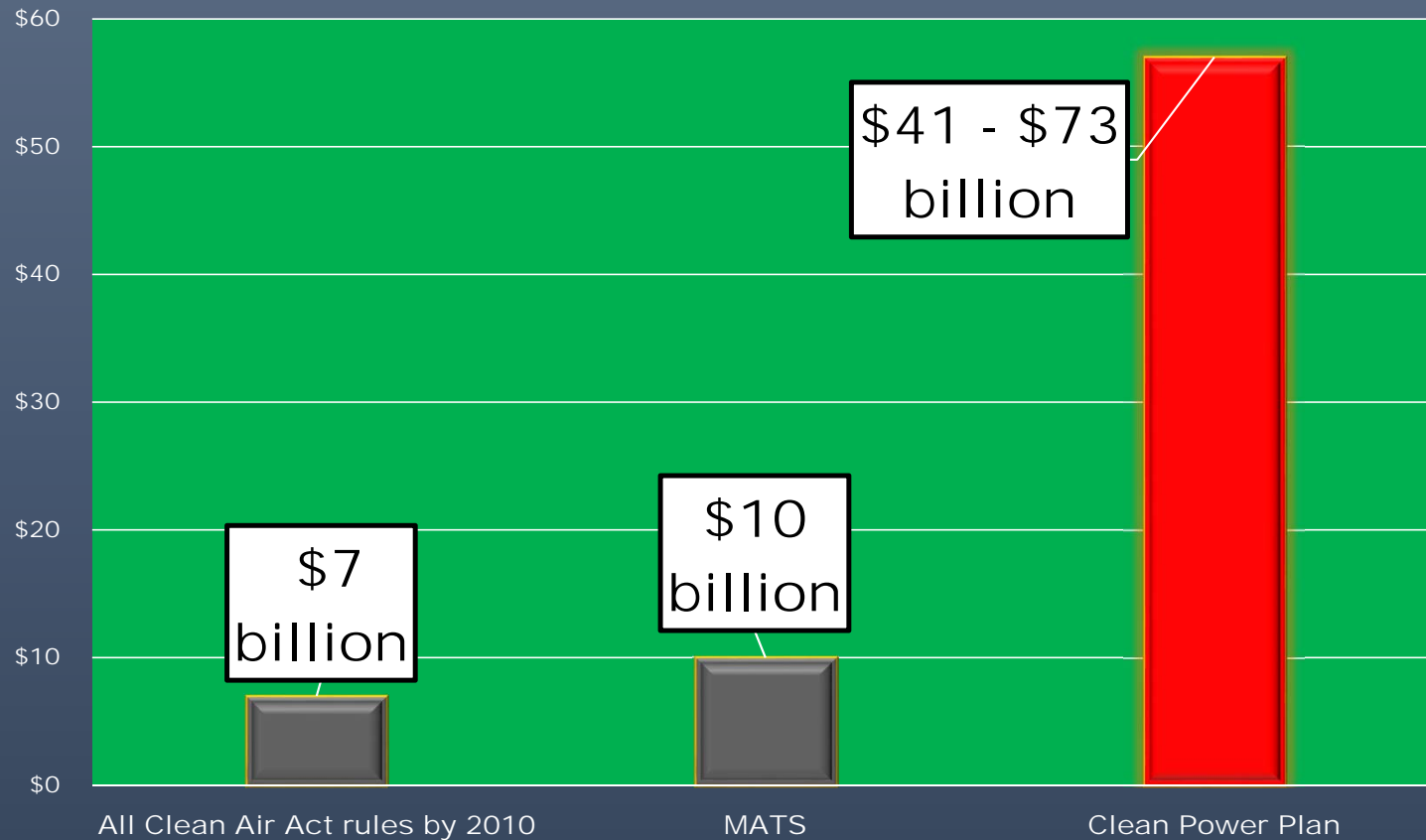
NERA Analysis

- ❖ 43 states will have double digit electricity price increases
- ❖ 14 states will have peak-year increases that exceed 20%
- ❖ Annual cost of \$41 to 73 billion
- ❖ Compliance costs will total \$366 billion to \$479 billion over 15 years

NERA Analysis

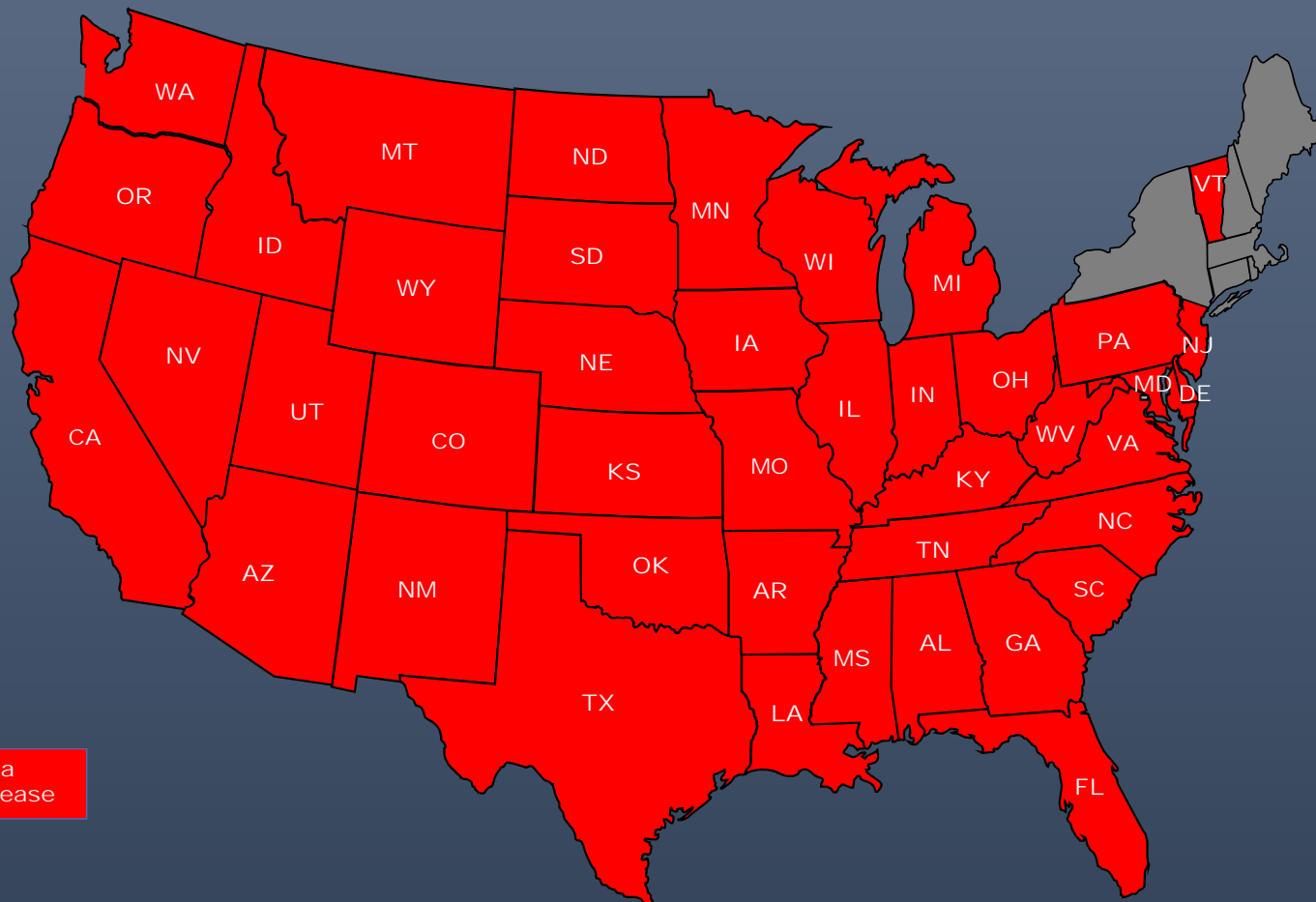
- ❖ Consumers pay a total of \$560 billion to reduce electricity use
- ❖ Additional coal retirements range from 45,000 - 169,000 MW
- ❖ Coal generation declines by 29% - 71%
- ❖ Natural gas prices increase by 2% - 29%

Cost of Clean Power Plan Compared to Other Power Sector Rules



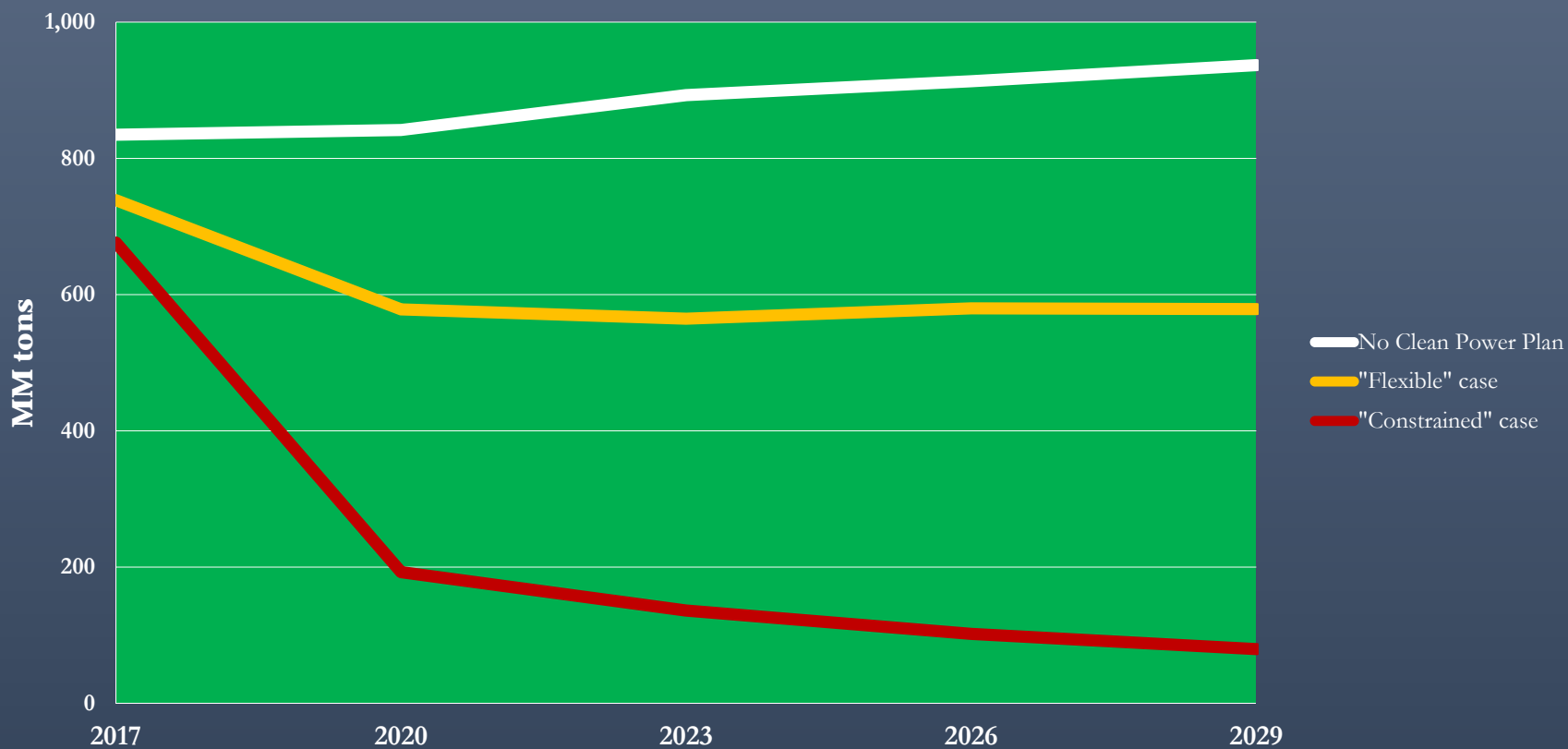
Annual cost of all Clean Air Act rules for the electric power sector promulgated by 2010 from U.S. EPA, *The Benefits and Costs of the Clean Air Act from 1990 to 2020* (2011) at Table 3-2 (electric utility direct annual compliance costs were \$6.6 billion (2006\$) in 2010; this converts to \$7.1 billion in 2010\$). MATS annual cost from U.S. EPA, *Regulatory Impact Analysis for the Final Mercury and Air Toxics Standards*, December 2011 (\$9.6 billion compliance cost in 2006\$ converted to 2010\$.) Cost of proposed Clean Power Plan from NERA analysis (2013\$). 9

EPA's Proposal Will Cause Double Digit Electricity Price Increases in 43 States (2020 - 2029 Average)

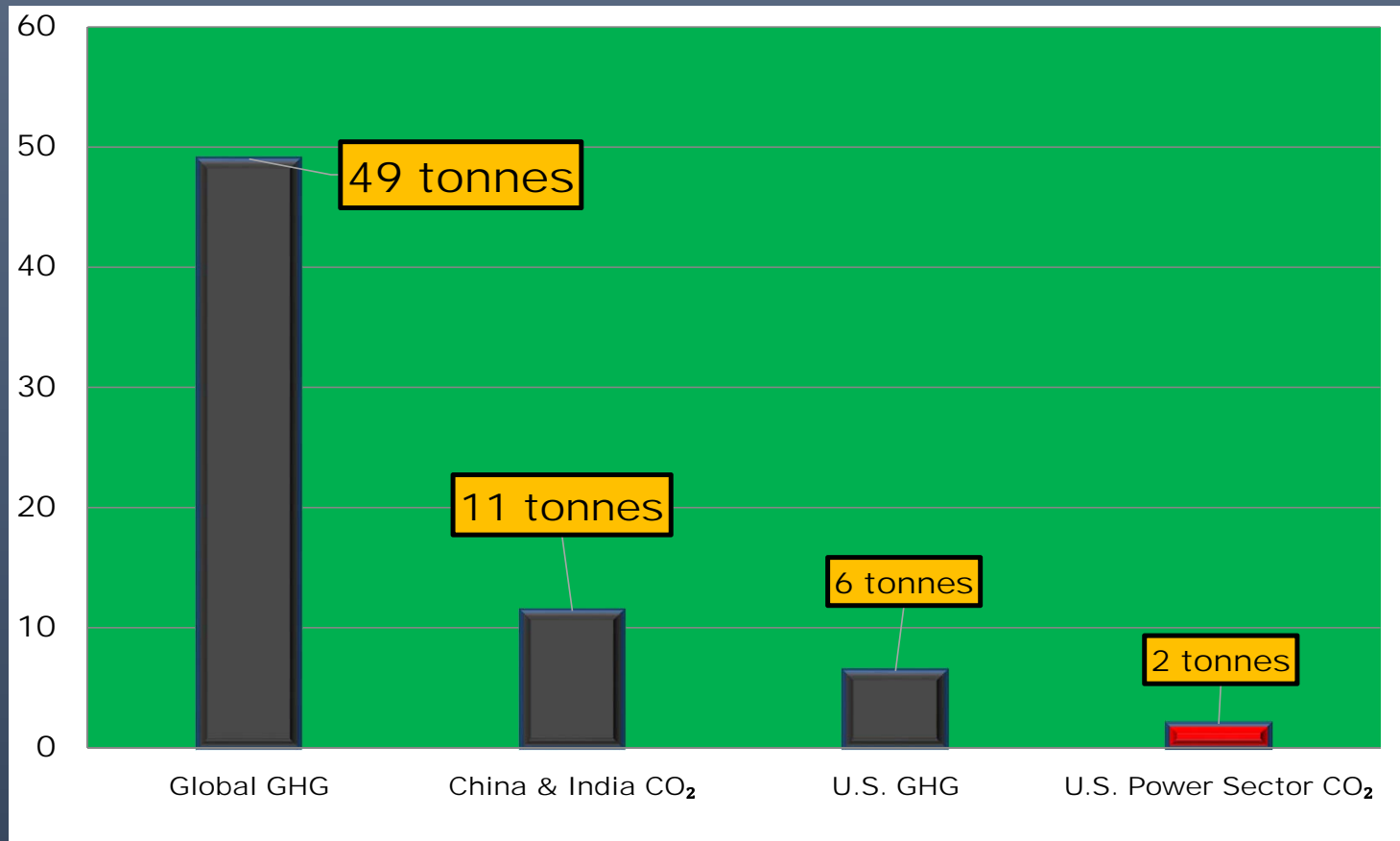


Alaska also has a double digit increase

The proposed Clean Power Plan is projected to reduce coal use for electricity generation by 29% (best case) to 71% (worst case)

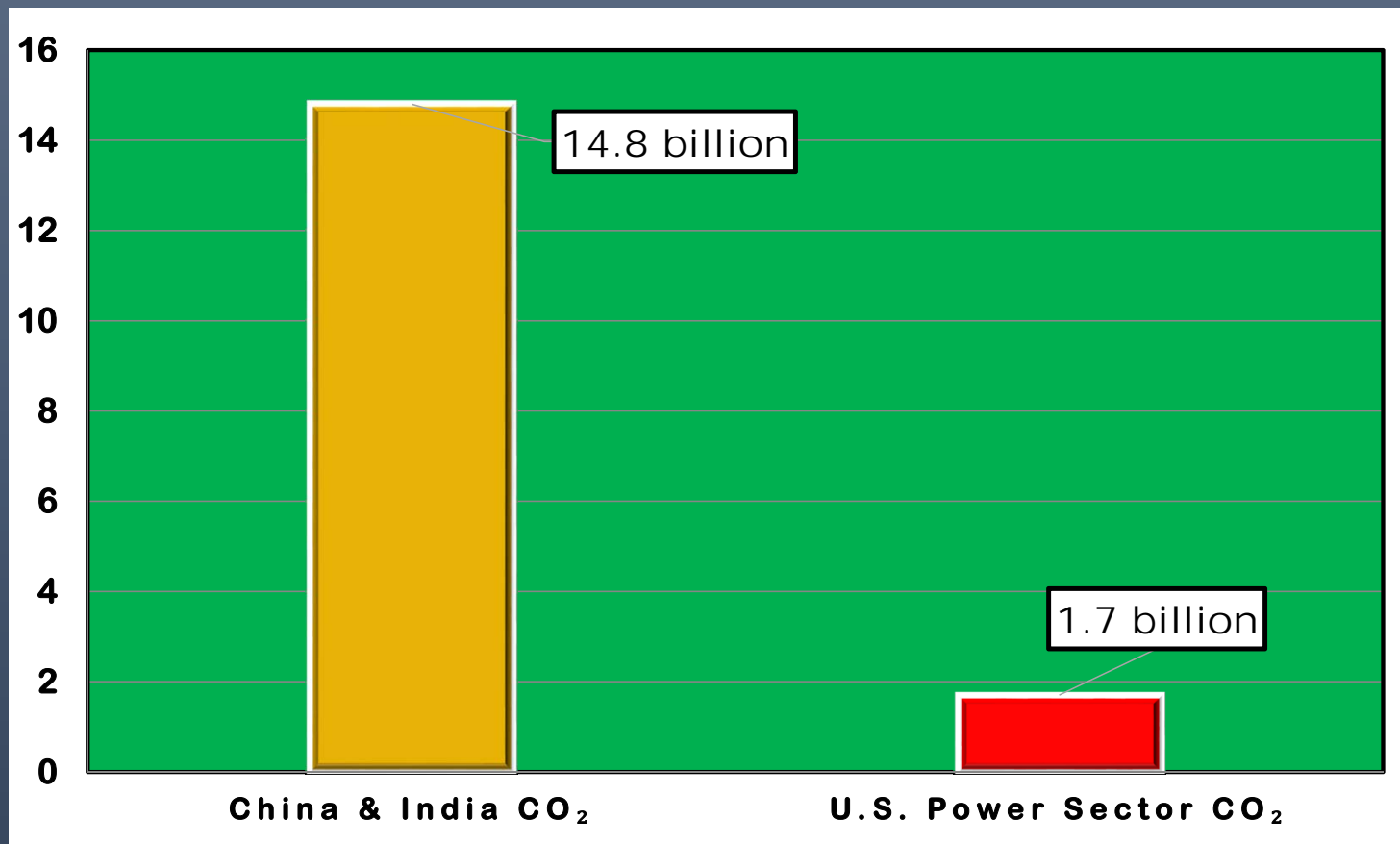


U.S. Power Sector Emissions Represent Only 4% of World GHG Emissions (Billions of Metric Tons)



Sources: IPCC WGIII report, "Climate Change 2014: Mitigation of Climate Change;" U.S. EPA, Inventory of Greenhouse Gas Emissions and Sinks 1990-2011, April, 2013; U.S. EIA Monthly Energy Review, April 2014; Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory.

U.S. Power Sector CO₂ Emissions with CPP vs China and India in 2030 (metric tons)



Sources: U.S. EIA International Energy Outlook, April 2013; China 2030 modified to reflect 2009 and 2014 pledges using projections from *Climate Action Tracker, China*, December 2014; U.S. EPA, Regulatory Impact Analysis for the Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants, June 2014.

EPA's Proposal Will Have No Real Effect on Climate Change

- ❖ CO₂ concentrations will be reduced by less than 0.5%
- ❖ Global average temperature rise will be reduced by 0.016 degree F (less than 2/100^{ths} of a degree)
- ❖ Sea level rise will be reduced by 0.3 millimeter (1/100th of an inch or the thickness of three sheets of paper)



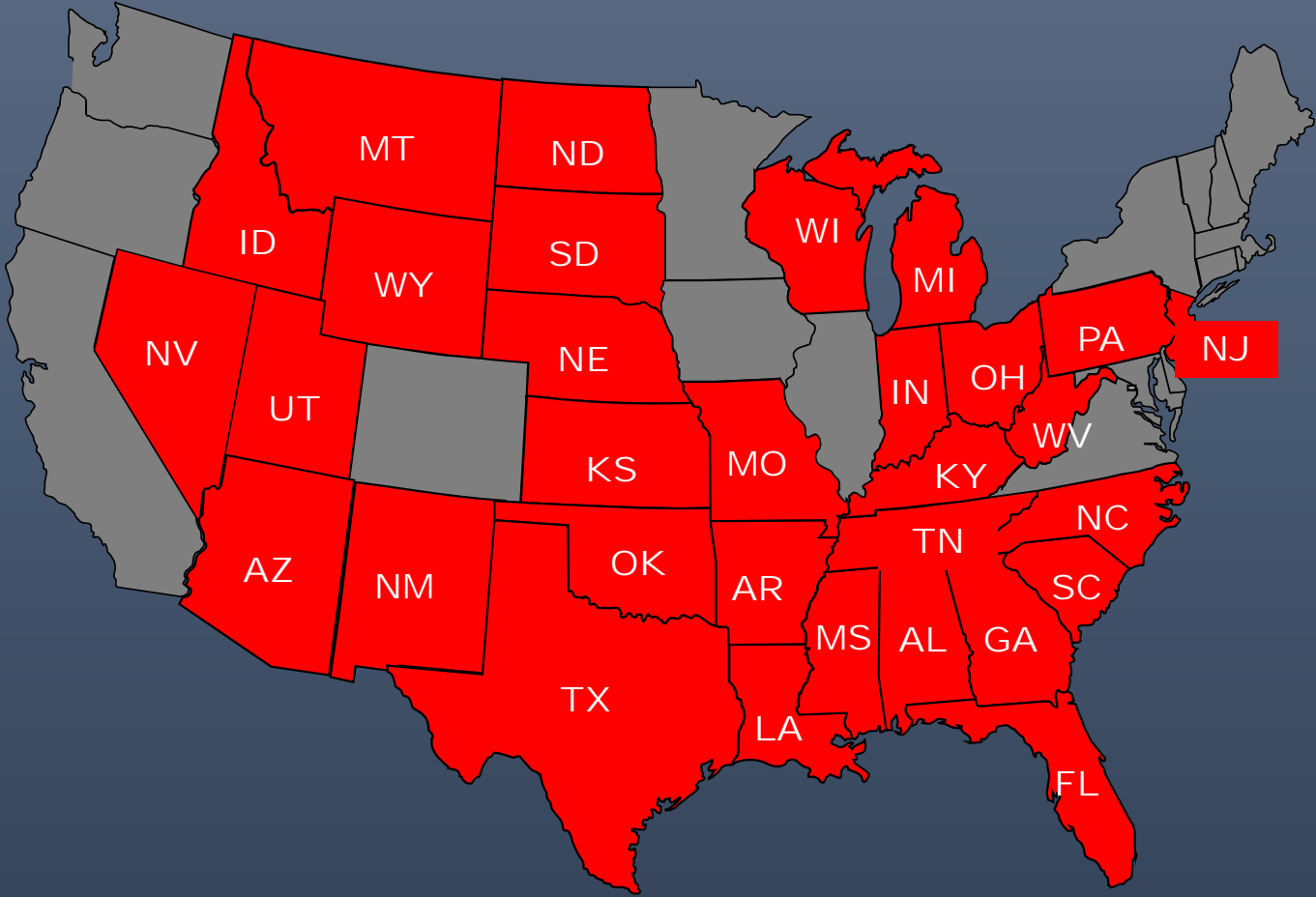
Emission reductions from EPA's proposal and AEO 2014 are accumulated and scaled to projected emissions reductions and resulting climate effects from EPA's *Regulatory Impact Analysis: Final Rulemaking for 2017-2025 Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards*, August 2012, page 4-134 and 6-112.

Opposition to the Clean Power Plan

- ❖ Officials from 32 states have expressed opposition
- ❖ Grid operators and officials have expressed concern about negative impacts on grid reliability
- ❖ Two lawsuits are pending over the proposed Clean Power Plan in the D.C. Circuit (15 states have sued)
- ❖ Many more lawsuits will be filed when the rule goes final
- ❖ Whitfield and Capito bills, H.R. 2042 and S. 1324

32 States Oppose EPA's Clean Power Plan

Alaska



What you can do

- ❖ Support opposition and litigation by your state
- ❖ Ask your Representatives and Senators to support the Whitfield and Capito bills
- ❖ Resources: www.americaspower.org