

# EPA's Final Clean Power Plan Rule









111(d) Greenhouse Gas Emissions  
Standards of Performance for Existing  
Fossil Fuel Electric Generating Units

# Clean Power Plan Rule Overview

- Overall goal
  - Reduce the carbon intensity of existing fossil fuel power plants
- Applies a “Best System of Emission Reductions”
  - Minnesota recognized for our system
- Allows flexibility for compliance
- Result
  - Utility-sector CO<sub>2</sub> emissions reduced by 32% by 2030 (2005 baseline)



# Changes that helped Minnesota

1. Corrects for SHERCO 3 being off-line in 2012 
2. Recognizes Minnesota's early action 
3. Makes Minnesota's targets equitable with neighboring states 
4. Relaxes interim compliance period 
5. Allows for Minnesota's out-of-state renewable energy 
6. Allows for new international hydro power 
7. Creates nationally consistent standards for fuel types (coal & natural gas) 
8. Addresses Environmental Justice 



# Treatment of Early Action

Pre-2012	2012-2021	2020 & 2021
<p>States that started early defined BSER and have less to do to reach their goals</p> <ul style="list-style-type: none"><li>• Final goal setting didn't penalize early actors</li><li>• Minnesota's wind, electric efficiency, and natural gas conversions reduced emissions</li><li>• Minnesota is well on our way to meet our goals</li><li>• Minnesota utilities know how to plan to reduce carbon emissions</li></ul>	<p>The wind, solar, and electric efficiency we've paid for will count</p> <ul style="list-style-type: none"><li>• Under a mass-based approach, anything that reduces emissions from the baseline counts.</li><li>• Under a rate-based approach, added renewable capacity and efficiency generate credits in 2022</li></ul>	<p><b>Clean Energy Incentive Program</b></p> <ul style="list-style-type: none"><li>• awards tons or credits to (1) low-income electric efficiency projects and (2) certain renewables projects</li><li>• EPA matching tons or credits provide "extra credit" to the state for qualifying projects</li></ul>



# Compliance Timeline

Year	Milestone
2015	Clean Power Plan final rule
2016	Initial State plan submittal/request for extension
2017	State plan progress report due
2018	Final State plan due
2020-2021	Clean Energy Incentive Program (generates credits/earns allowances)
2022-2029	Interim goal with multi-year “steps” downward: states have some flexibility in setting the steps
2030 and beyond	Final goal compliance



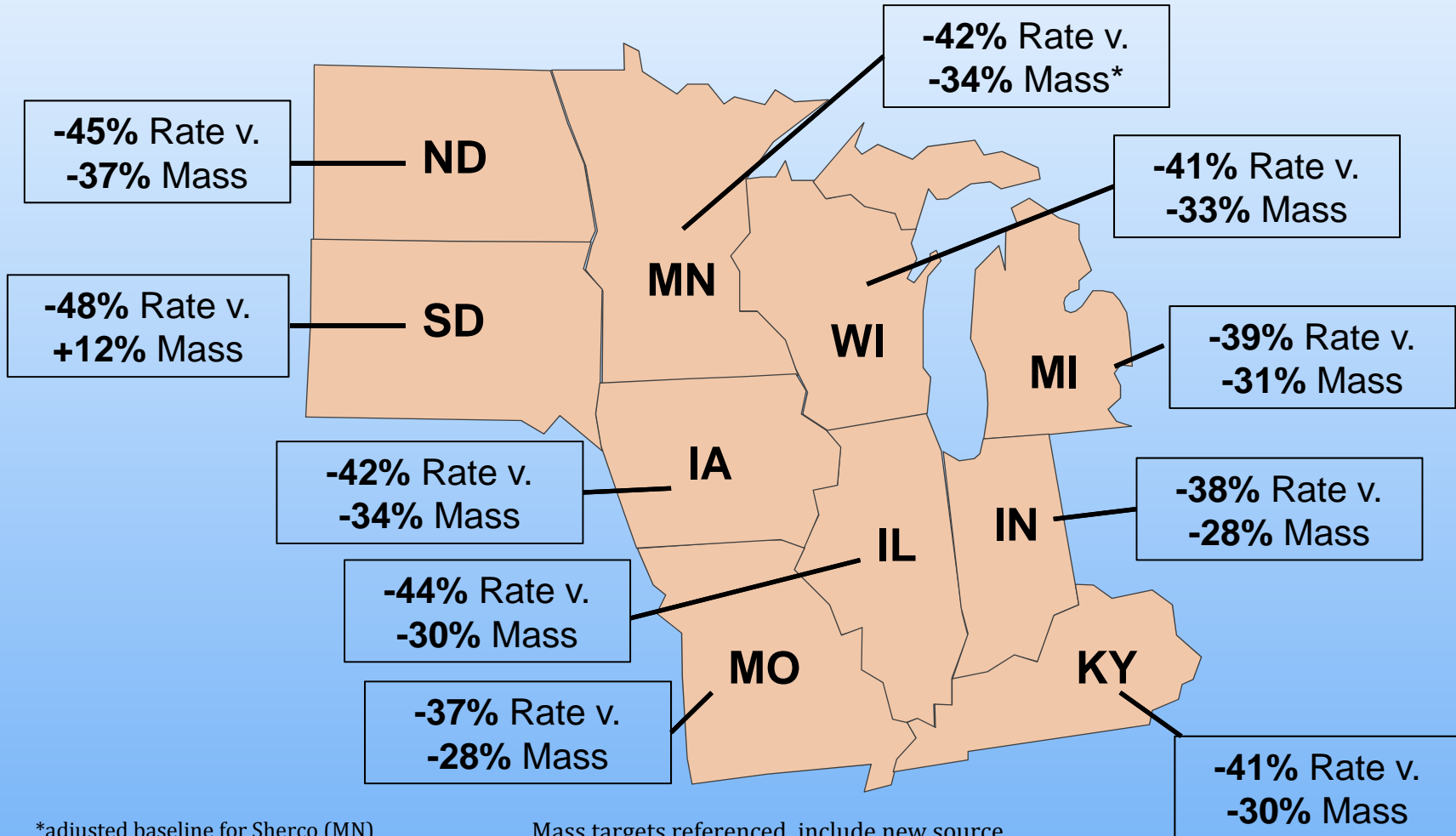
# Out-of-State Renewables Count

- Minnesota's out-of-state renewables will support compliance under both rate and mass targets
- Mass approach: out-of-state renewables reduce in-state carbon emissions
- Rate approach: out-of-state renewables generate a tradeable credit
  - Power generator manages the credit



# Final Goals Level the Playing Field Across States

*Mass Goals Appear Easier Than Rate*



\*adjusted baseline for Sherco (MN)

Mass targets referenced include new source complements.

# Compliance – State Plans

- States must choose between a rate or a mass approach
- States have flexibility to meet the goals
  - Trading encouraged
  - Trading ready system described
- EPA provided a Draft Federal Plan
  - Provides guidance to State Plans
  - Applies to states that don't submit a State Plan
- State Plan must be permanent, verifiable, and enforceable





# The State Plan Process



\* Federal plan trigger



# Clean Power Plan: Projected Benefits

- EPA estimates significant pollution reductions and benefits
  - Climate benefits: \$20 billion
  - Health benefits: \$14-34 billion
    - 90% reduction in sulfur dioxide
    - 72% reduction in nitrogen oxides
- Minnesota will also assess costs and benefits during state plan development



# What's Next

- State Request for Comment
- Comment on Draft Federal Plan
- Seek Stakeholder input and decisions
  - Mass versus Rate
  - State Plan Approach
  - Allocation
  - Trading
  - Analysis needed
  - Incentives / Interagency efforts

