

Oregon DEQ Air Quality Division

Oregon Public Hearing EPA Proposed Actions Greenhouse Gas Emissions Guidelines Fuel Efficiency Standards

October 23, 2018
Multnomah County Board Room
501 SE Hawthorne Blvd, Portland, OR

Overview: EPA Proposed Rules

- Elements of two EPA proposed actions
 - Safer Affordable Fuel Efficient (SAFE) Vehicles Rule
 - Affordable Clean Energy (ACE) Rule
- Potential effects on Oregon's Greenhouse Gas (GHG) reduction goals

EPA Endangerment Finding

- Supreme Court ruled GHG are pollutants under the Clean Air Act (2007)
 - EPA determined GHG endanger the public health and welfare (2009)
 - Required EPA to take action to address GHG
- EPA issued standards limiting GHG from vehicles (2010) and fossil fueled power plants (2015)
- Proposed rules should be evaluated with the Endangerment Finding in mind

EPA-NHTSA SAFE Vehicle Proposed Rule

- Amend existing Corporate Average Fuel Economy (CAFE) and greenhouse gas emissions standards for passenger cars and light trucks; and
- Establish new standards, covering model years 2021 through 2026

EPA-NHTSA SAFE Vehicle Proposed Rule

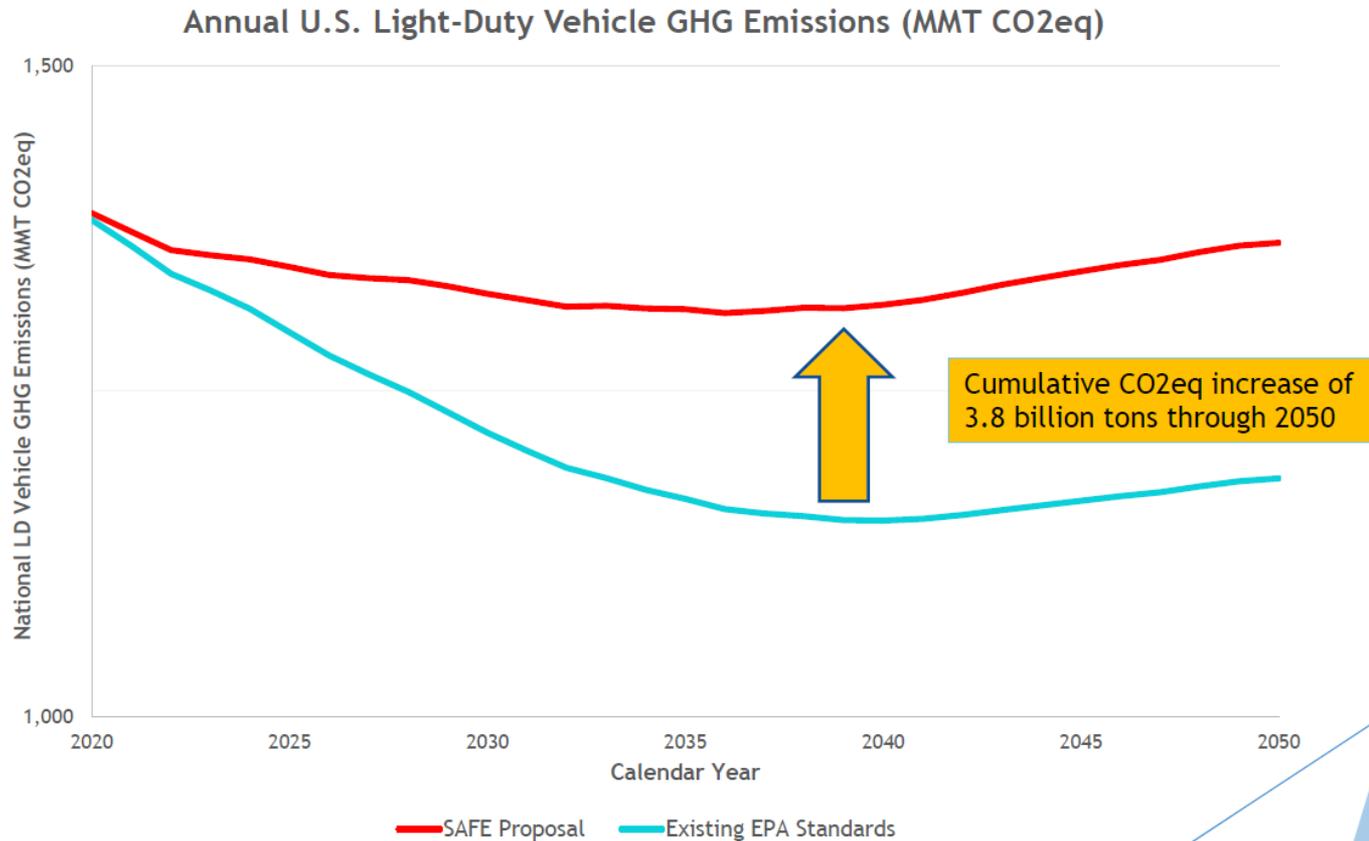
- Proposed 7 options, with one preferred alternative:
 - The proposal would lock in the 2020 standards through model year 2026
 - Existing rule requires increasingly stricter standards each subsequent year through model year 2026

EPA-NHTSA SAFE Vehicle Proposed Rule

- Includes an option to **revoke California's waiver to set separate standards** for the GHG and Zero Emissions Vehicles (ZEV) components of its vehicle regulations

Potential Effects of SAFE Rule

Light-duty Vehicle GHG Emission Inventories



Note - includes upstream GHG emissions from petroleum extraction, refining, transportation

Elements of EPA ACE Proposed Actions

- Replace Clean Power Plan (CPP) with revised greenhouse gas emission guidelines (Affordable Clean Energy Rule)
- New regulations that direct states and EPA on implementation
- Revisions to New Source Review program

Plan Differences

ACE

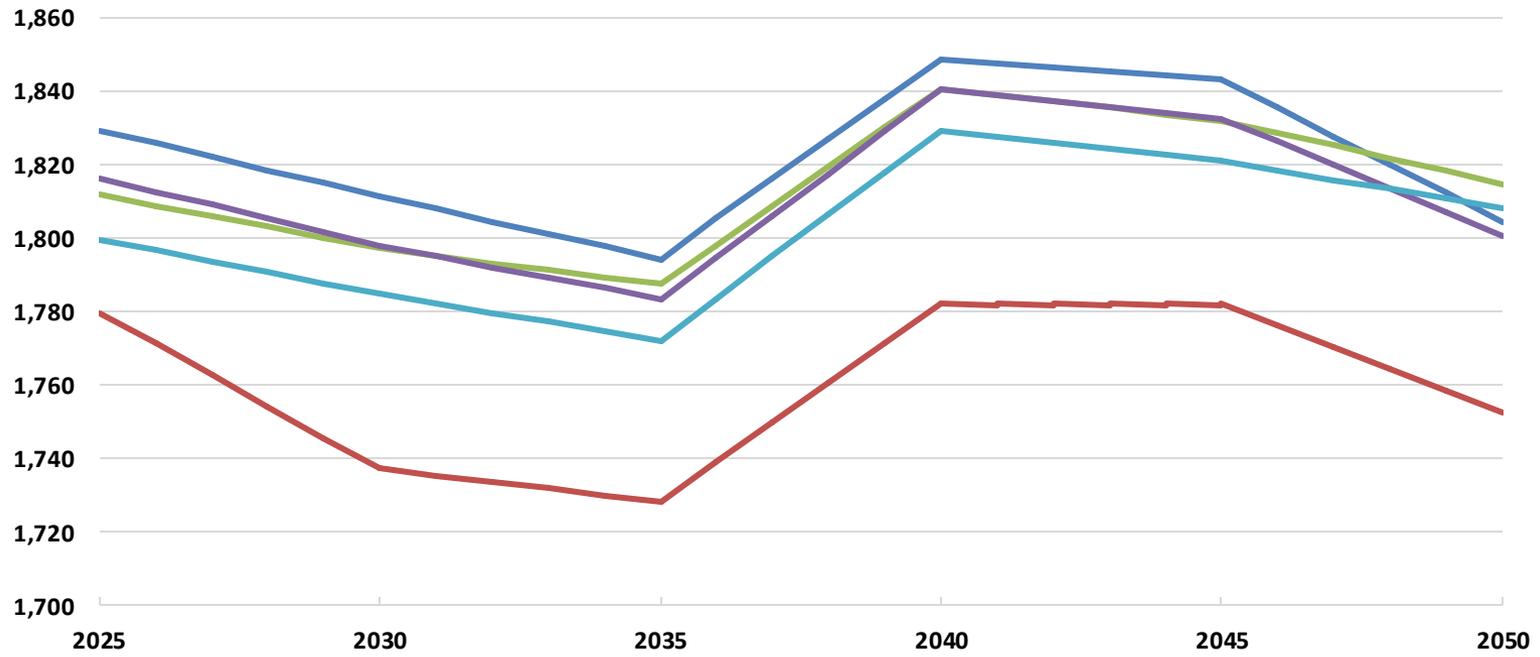
- **Heat rate improvements** as best system of emission reduction.
- Emission reduction limited to measures applied to or at a **single source**.
- States have **flexibility** in determining and enforcing **standards of performance**.
- New Source Review triggered by **hourly rate** emission increases.

CPP

- Establishes state-based **CO₂ emission reductions goals** for fossil fuel-fired power plants.
- Emission reduction may be achieved by heat rate improvements and **beyond the source** through fuel substitution and renewable energy.
- New Source Review unchanged and triggered by **annual emission increase**.

Projected National Power Sector CO₂ Emissions

Million short tons

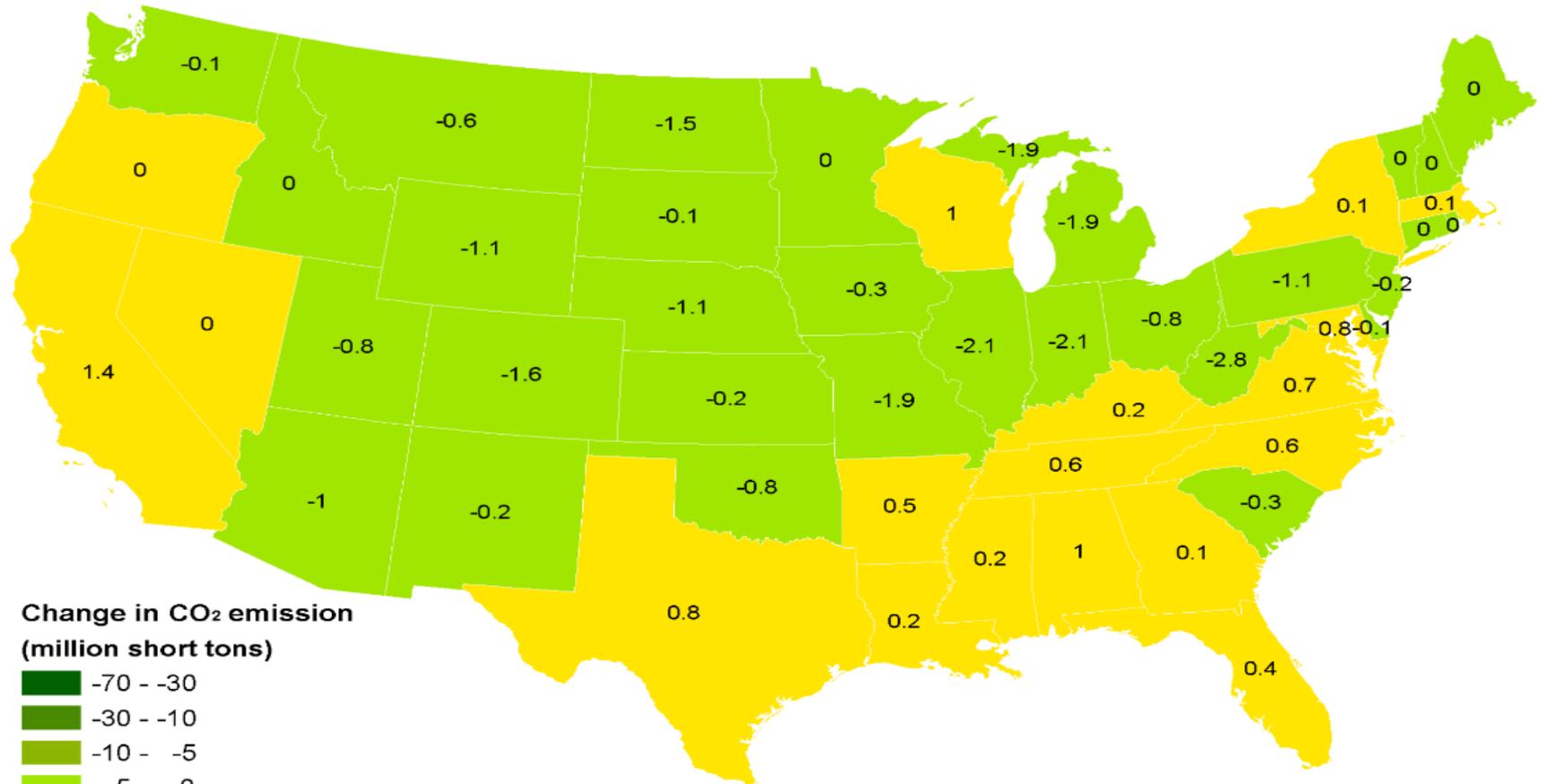


- No Policy
- 4.5% HRI at \$50/kW (Central ACE Case)
- 4.5% HRI at \$100/kW
- CPP
- 2% HRI at \$50/kW

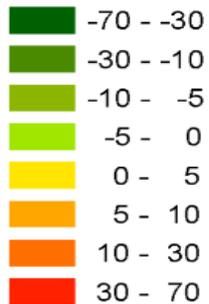
From Keyes, et al., October 15, 2018, Proposed Affordable Clean Energy Rule: Emissions Consequences Fact Sheet, Resources for the Future.



2030 Projected CO₂ Emissions Change ACE "Middle" Scenario and No Policy Comparison



Change in CO₂ emission
(million short tons)



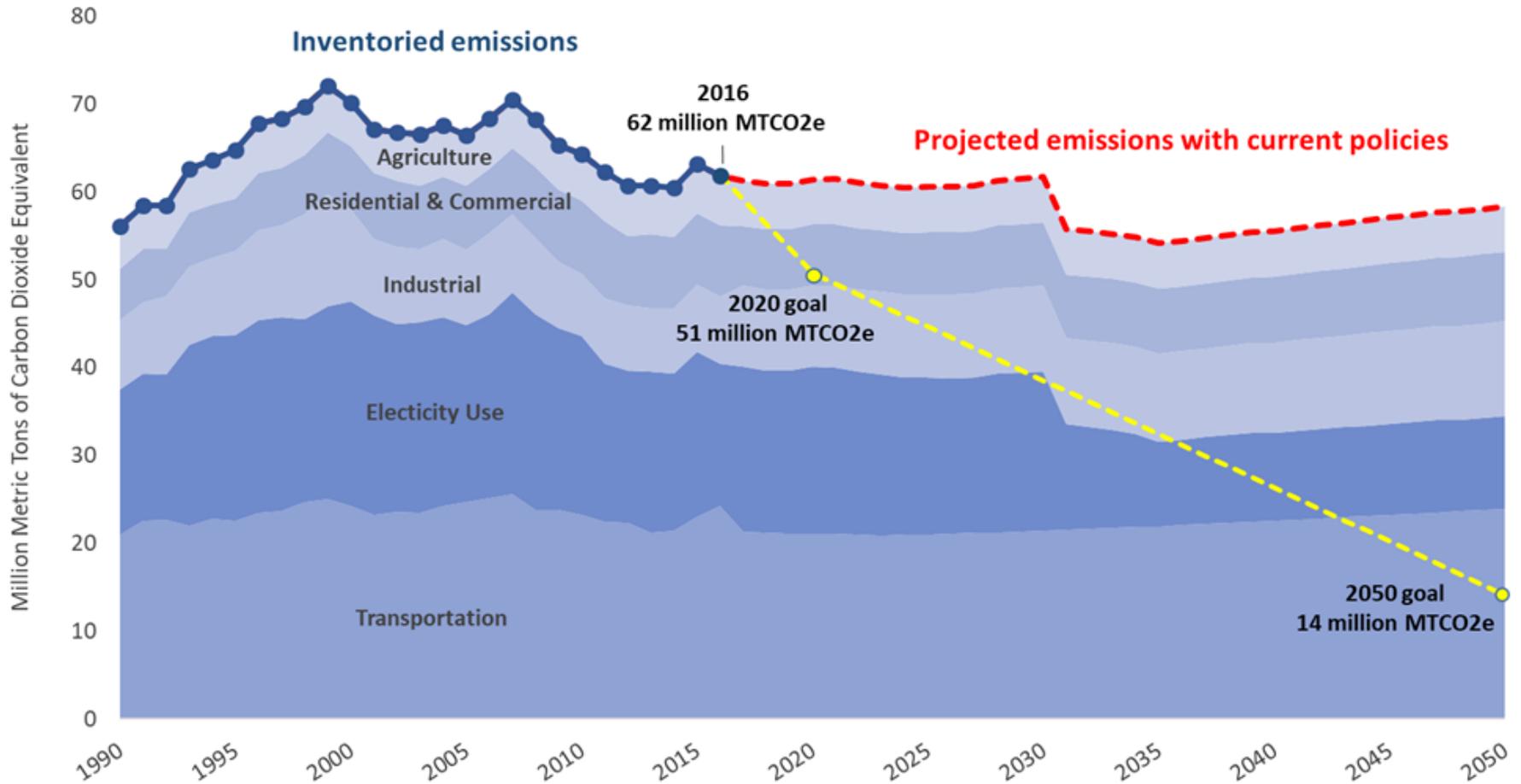
From Keyes, et al., October 15, 2018, Proposed Affordable Clean Energy Rule: Emissions Consequences Fact Sheet, Resources for the Future.

Middle Scenario = 4.5% HRI and \$50/kW

Why Are the Rules Significant to Oregon?

- Global warming has had a serious impact in Oregon
 - Increased forest fires, drought, flooding, disease and health impacts, sea level rise, erosion of Oregon's coastline, and damage to ecosystems.
 - In 2017, 2,000 wildfires burned roughly 665,000 acres of forest and rangeland.
- Oregon's long-term GHG emission reduction goal: 75% below 1990 levels by 2050.

Oregon's Progress on Meeting Its GHG Goals



SAFE: Comments Due October 26, 2018

Safer Affordable Fuel Efficient (SAFE) Vehicles Proposed Rule

Information: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/safer-affordable-fuel-efficient-safe-vehicles-proposed>

Comment: <https://www.regulations.gov/docket?D=EP-A-HQ-OAR-2018-0283>

ACE: Comments Due October 31, 2018

Affordable Clean Energy (ACE) Rule

Information: <https://www.epa.gov/stationary-sources-air-pollution/proposal-affordable-clean-energy-ace-rule>

Comment: <https://www.regulations.gov/docket?D=EPA-HQ-OAR-2017-0355>