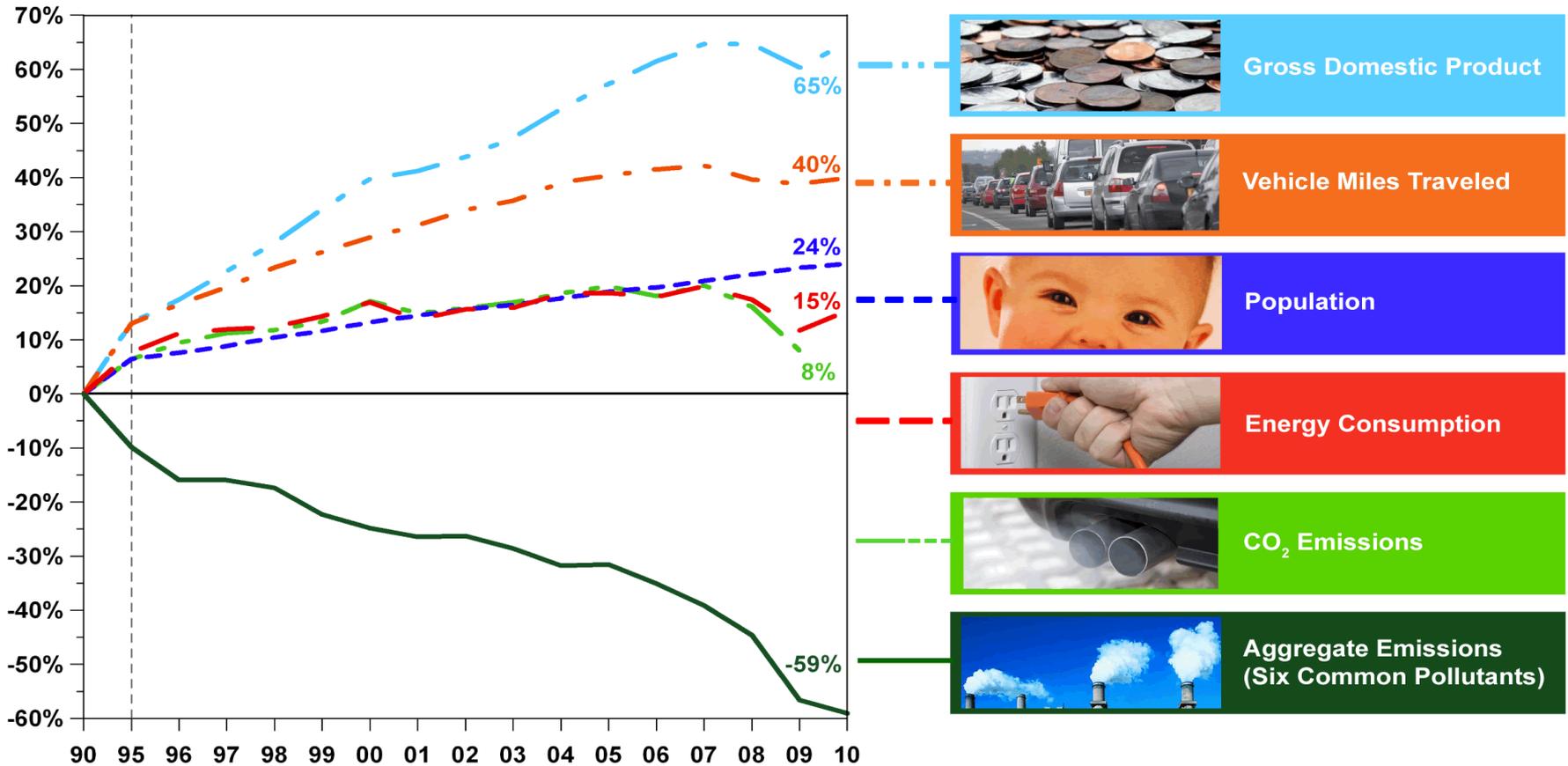


Climate Change

Howard J. Feldman
American Petroleum Institute
July 28, 2013

Progress has been tremendous



Big Picture Trend

- Carbon dioxide (CO₂) emissions in the US at nearly 20-year low
- Decline is being driven in part by fuel switching in the electric power sector
- Fuel switching is driven by plentiful and relatively inexpensive natural gas, which is a lower emission fuel

A New Proposal on Carbon Limits for New Power Plants

- Presidential Memorandum directs EPA to complete carbon emissions standards for new and existing power plants
- First clear statement that EPA will issue a new proposal
 - Original proposal issued in April 2012
 - EPA received more than 2.7 million comments
 - EPA needs to improve the legal defensibility of the original proposal
 - EPA is likely to propose distinct standards for coal, natural gas, and petcoke (proposal combined together)
- EPA directed to issue new proposal by September 20, 2013
- Final rule to be issued “in a timely fashion” following public comment; we anticipate final rule no later than June 1, 2014
- Takeaway: Administration is committed to finalizing NSPS for new power plant sources within the next 12 months

A Timeline for Controlling Carbon from Existing Power Plants

- Commitment to regulate existing sources is most significant announcement in CAP
- Clear timeline for regulation of existing power plant sources
 - June 1, 2014 – proposed “standards, regulations, guidelines”
 - June 1, 2015 – finalized standards
 - June 30, 2016 – deadline for submitting state implementation plans (SIPs); this is key date by which regulation of existing sources can begin
- EPA directed to consult with states, industry, and other leaders
- Standards may include “market-based instruments, performance standards, or other regulatory flexibilities”; preserves all options for 111(d) standards, including cap and trade
- EPA likely will need to engage in option selection in Fall 2013 to meet June 1 deadline
- Takeaway: CAP provides a clear schedule to regulation, but no substantive details on scope of standards; no margin of error for deadlines to slip before end of administration

NAM Coalition Comments on April 2012 NSPS Proposal



June 25, 2012

U.S. Environmental Protection Agency
Attention Docket ID No. EPA -HQ-OAR-2011-0660
Air and Radiation Docket and Information Center
Mailcode: 2822T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources:
Electric Utility Generating Units, Docket ID No. EPA -HQ-OAR-2011-0660; FRL-
9654-7, 77 Fed. Reg. 22,392 (April 13, 2012)

What Potential NSPS regulatory approaches are being considered for industries?

For New or Modified sources?

- Existing controls
- Traditional Work Practices
- Possible Regulatory Options?

For Existing sources?

- Existing controls
- Traditional Work Practices
- Possible Regulatory Options?
- Plans for equivalency of state programs?

API Principles on EPA Regulation of GHGs, particularly NSPS

- API opposes EPA regulation of stationary source emissions of GHGs under the Clean Air Act.
- Relative to EGUs, the US Refining industry is not a major contributor of GHGs emissions.
- The Refining industry is already incentivized for energy efficiency.
- The refining industry is an Energy Intensive Trade Exposed industry and EPA's regulations may lead to a leakage of refining production and emissions to other parts of the world.

API Principles on EPA Regulation of GHGs, particularly NSPS (cont'd)

- Tradeoffs may exist between GHG standards, cleaner fuels requirements and stationary source control of criteria and air toxic pollutants.
- Carbon Capture and Sequestration (CCS) is not demonstrated to be economic for refineries.
- Any regulatory approach should first be preceded by an industry-specific **Advanced Notice of Proposed Rulemaking** to more formally and fully gather information for this precedent-setting initiative.

Examples of Evaluation criteria that API will apply to any EPA regulatory proposal

- Do the standards recognize the complexity of refineries?
- How do the standards account for cogeneration and other facility emissions?
- What is the impact on refining flexibility and growth?
- What is the impact on facility safety and reliability?
- Do the standards recognize improvements already made?
- Do the standards provide compliance flexibility?
- Does the rule provide sufficient implementation time?
- Will the level of the standards change over time?

Examples of Evaluation criteria (cont'd)

- Are the costs associated with the standards reasonable?
- Does any cost estimate provided consider the appropriate retrofit and project development considerations?
- If the rule utilizes a return or payback concept, how are safety and reliability issues incorporated into decision criteria?
- Are there any monitoring requirements and are the costs reasonable/appropriate?

Examples of Evaluation criteria (cont'd)

- What precedents does the regulation establish for GHG controls?
- What precedents does the regulation establish for non-GHG programs?
- Will the regulation apply to just new/modified sources?
- If 111(d) standards are established, what is the process and timing for EPA's standards development, State equivalency determinations, and emission guideline implementation?
- Is the regulation consistent with statutory requirements for NSPS rules?

Ozone NAAQS

Clean Air Act

- Requires EPA to set standards for principal or “criteria” pollutants that:
 - Cause or contribute to air pollution which may be anticipated to endanger public health or welfare and
 - Presence of which in the ambient air results from numerous or diverse mobile or stationary sources
- Pollutants: ozone, particulate matter, sulfur dioxide, carbon monoxide, nitrogen dioxide and lead
- Statute also requires five-year review

Ozone NAAQS

2010

- EPA – out of cycle – proposed more stringent revisions to 2008 Ozone standard – reduction from .075 ppm to 0.060-0.070 ppm
 - Extremely controversial
 - Industry filed strong comments in opposition and took action to challenge EPA’s actions

2011

- White House forced EPA Administrator to withdraw almost final standard with “reconsideration of ozone standard in 2013”

Ozone NAAQS

Previous EPA Schedule

- Proposal – December 2013
- Final – late 2014

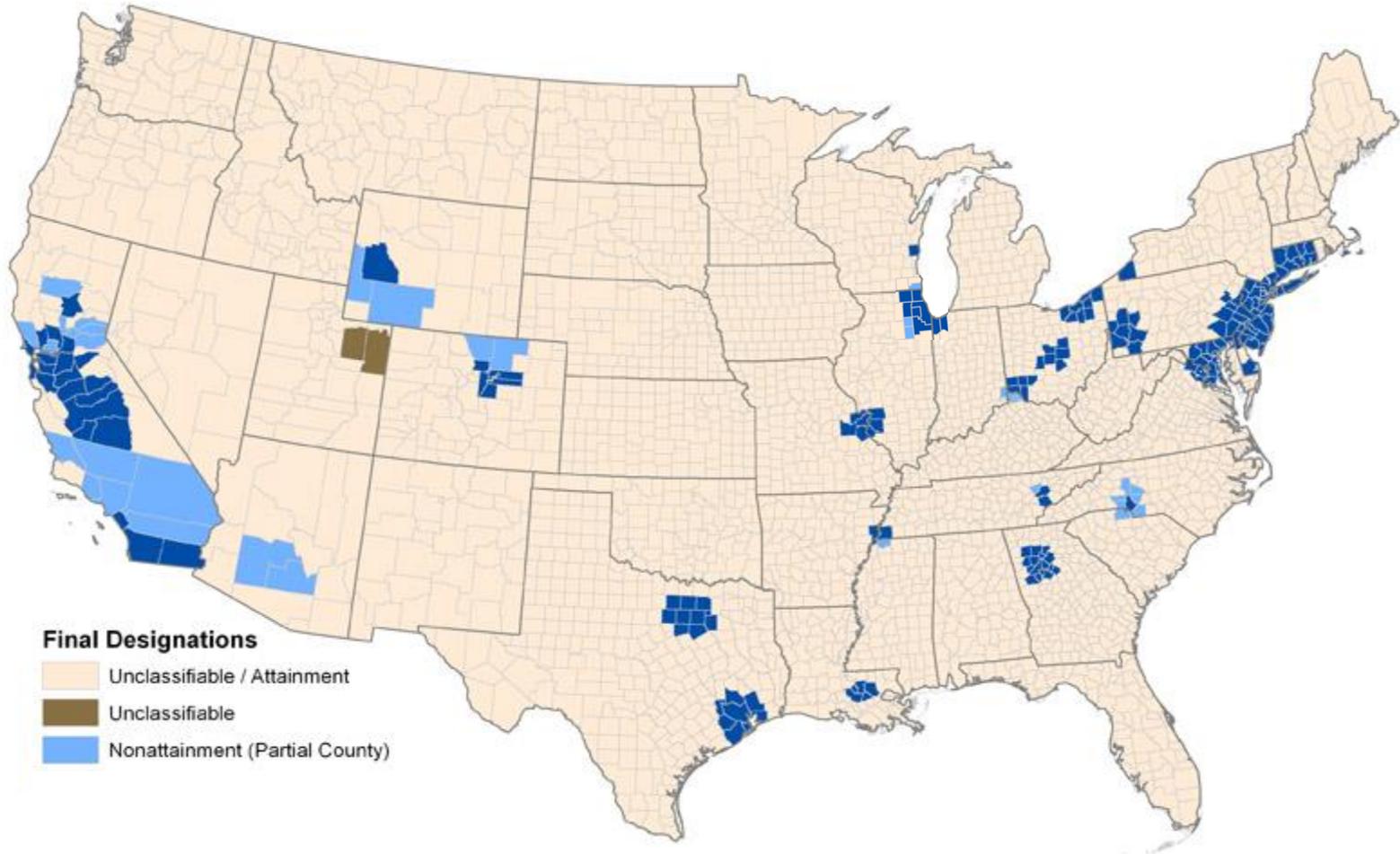
June 2013 Memo

- 2nd Science Advisors Review – March 2014
- Proposal – ?
- Final – ?

ENGOS

- Sued EPA – seek final rule by September 30, 2014

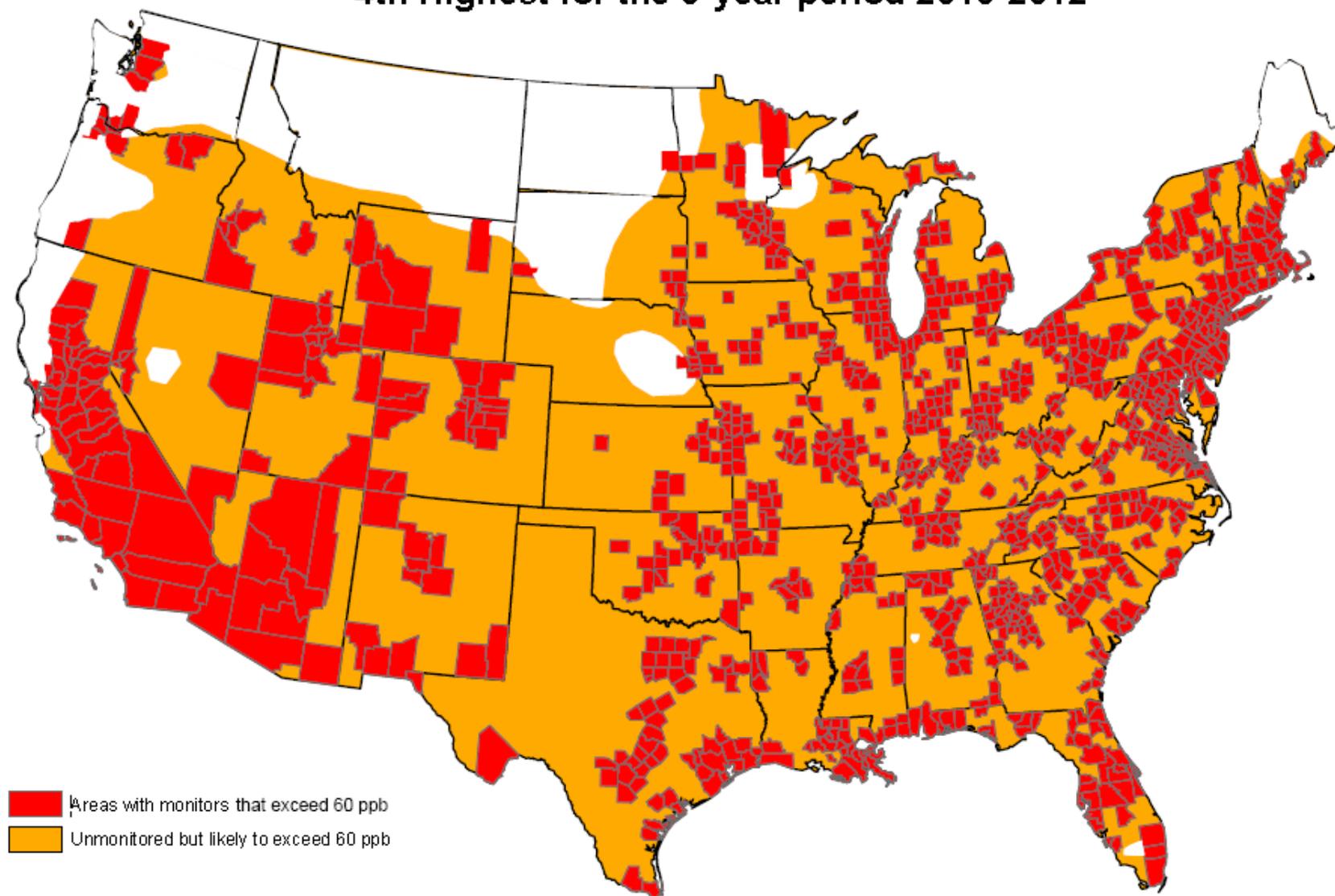
75 ppb 8-hour Ozone NAAQS



Notes:

EPA does not intend to designate as nonattainment any areas outside the Continental US.

NAAQS Ozone 8-hr Design Values 4th Highest for the 3-year period 2010-2012



Source: URS, June 4, 2013