



Enhancing Competitiveness of the Auto Industry through Stronger Fuel Economy and CO₂ Standards

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National Program is Historic Accomplishment



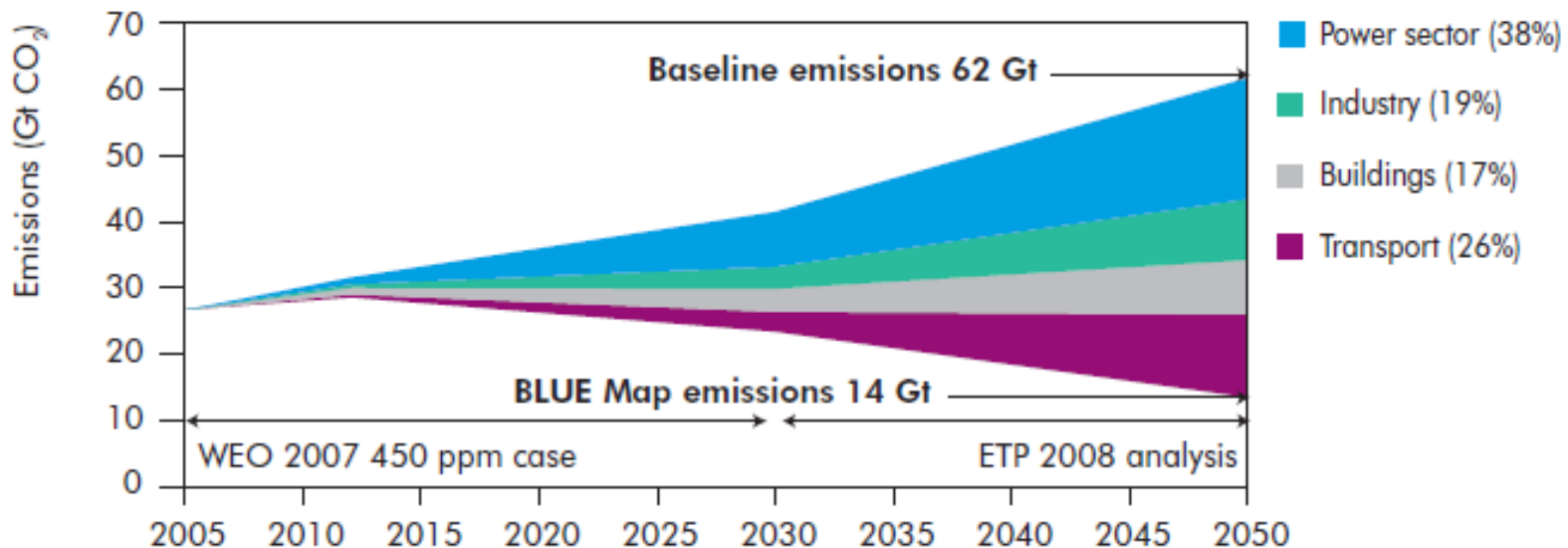
- Demonstrates the compatibility of CAFE and CO₂ programs
- Validates the historic leadership role of states

**Longer-Term Standards:
Solving Global Warming
Reducing Oil Dependency**

Big Picture: 450 ppm requires 50% reduction in global emissions by 2050



Figure 2.3 ► Reduction of energy-related CO₂ emissions from the Baseline scenario in the BLUE Map scenario by sector, 2005-2050

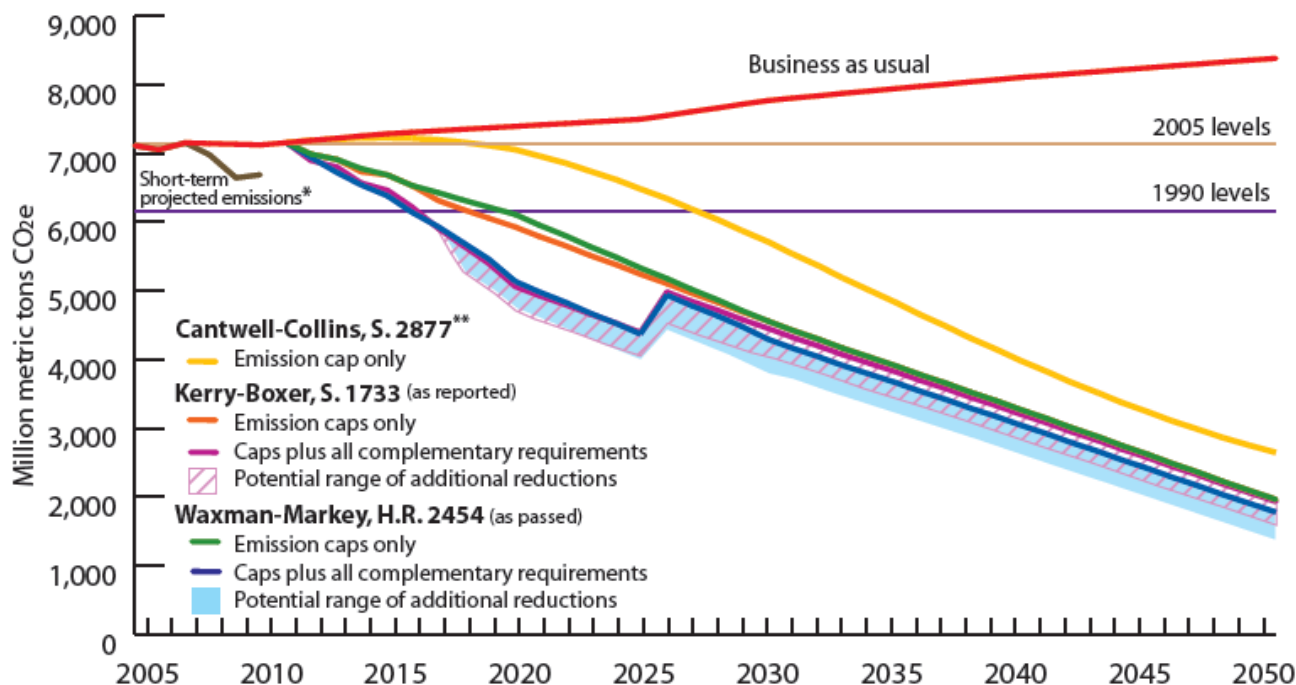


- OECD countries reduce emissions by 80%
- Global oil consumption cut by 27% by 2050 from today's level

Main U.S. climate proposals target ~80% reductions by 2050



Net Emission Reductions Under Cap-and-Trade Proposals in the 111th Congress, 2005-2050
December 17, 2009



 WORLD RESOURCES INSTITUTE

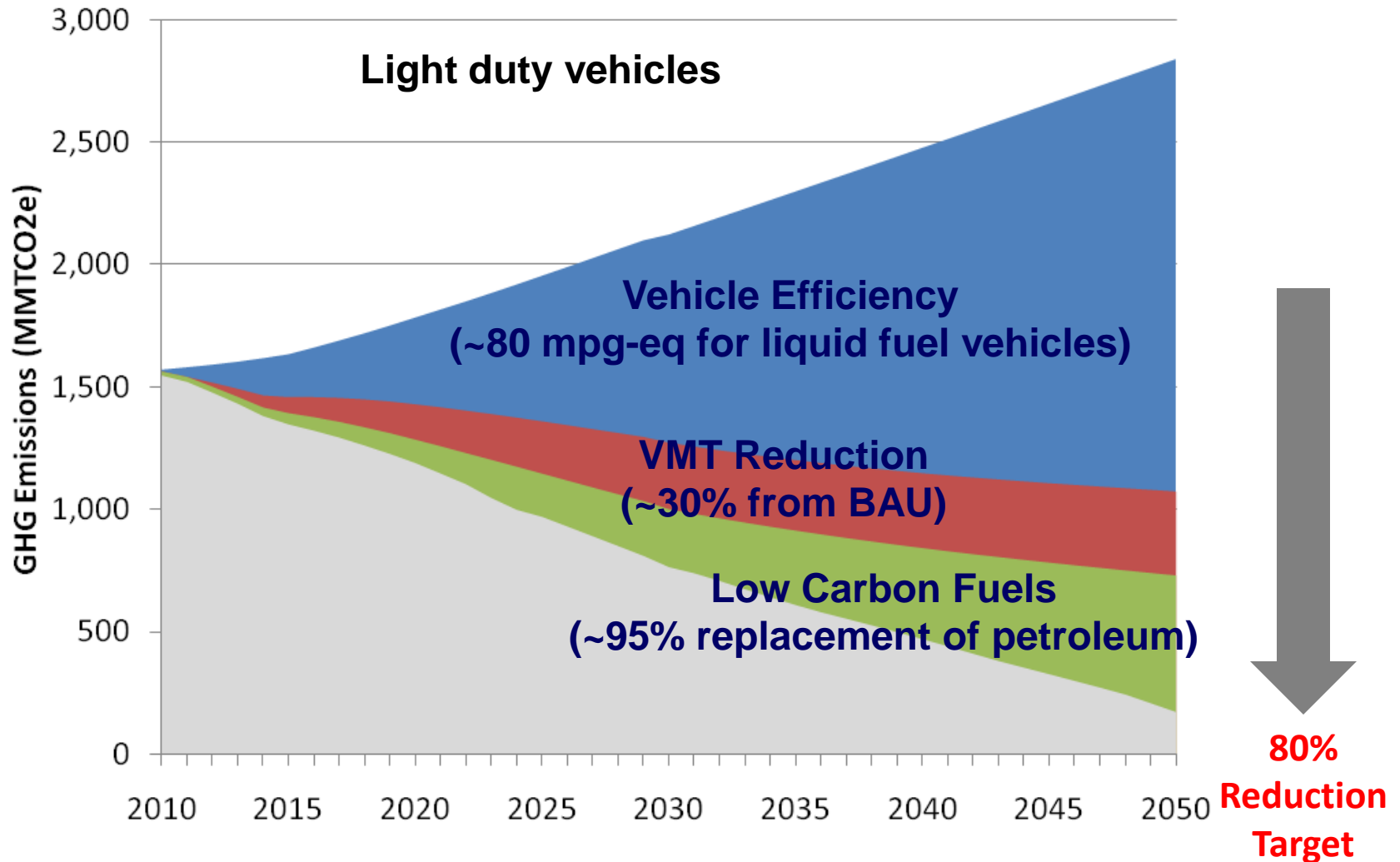
For a full discussion of underlying methodology, assumptions and references, please see <http://www.wri.org/usclimatetargets>.

*"Business as usual" emission projections are from EPA's reference case for its analysis of the Waxman-Markey bill. "Short-term projected emissions" represent EIA's most recent estimates of emissions for 2008-2010.

** Cantwell-Collins sets economy-wide reduction targets beginning with a 20 percent reduction from 2005 levels by 2020. However, additional action by Congress would be required before these targets could be met. Reduction estimates do not include emissions above the cap that could occur due to the safety-valve.

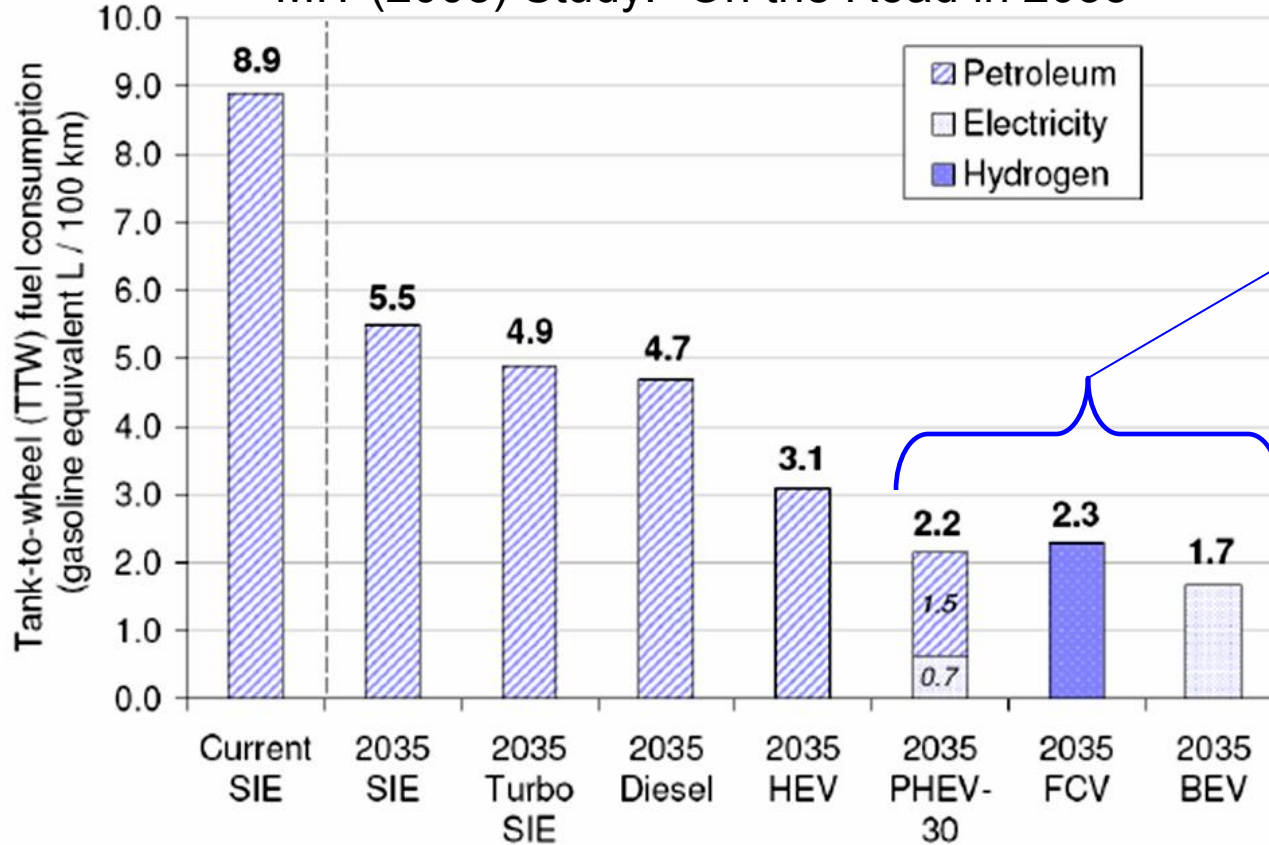
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80% GHG emission reductions requires comprehensive approach



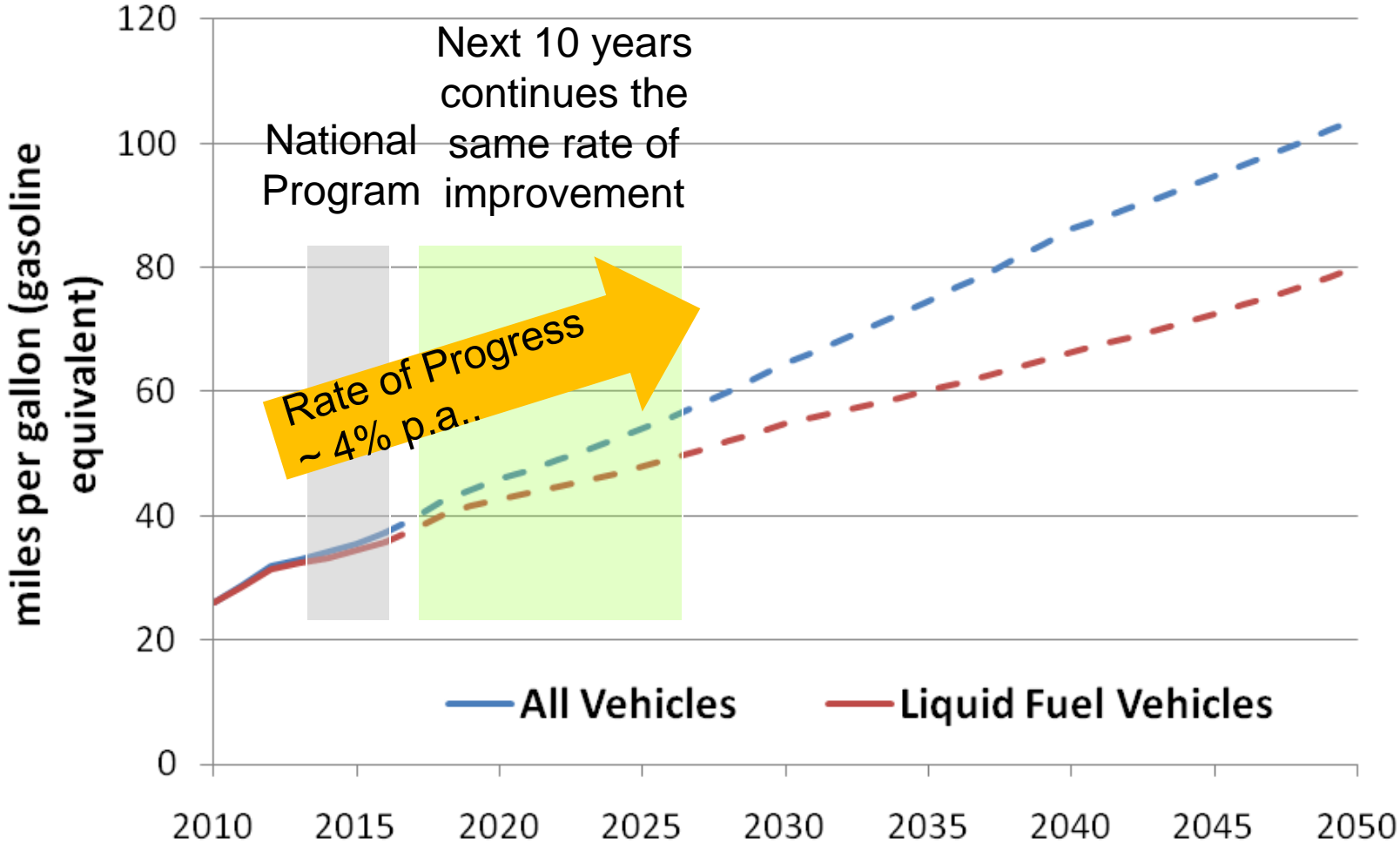
3x Gain in Conventional Vehicle Fuel Economy Technical Feasible

MIT (2008) Study: "On the Road in 2035"

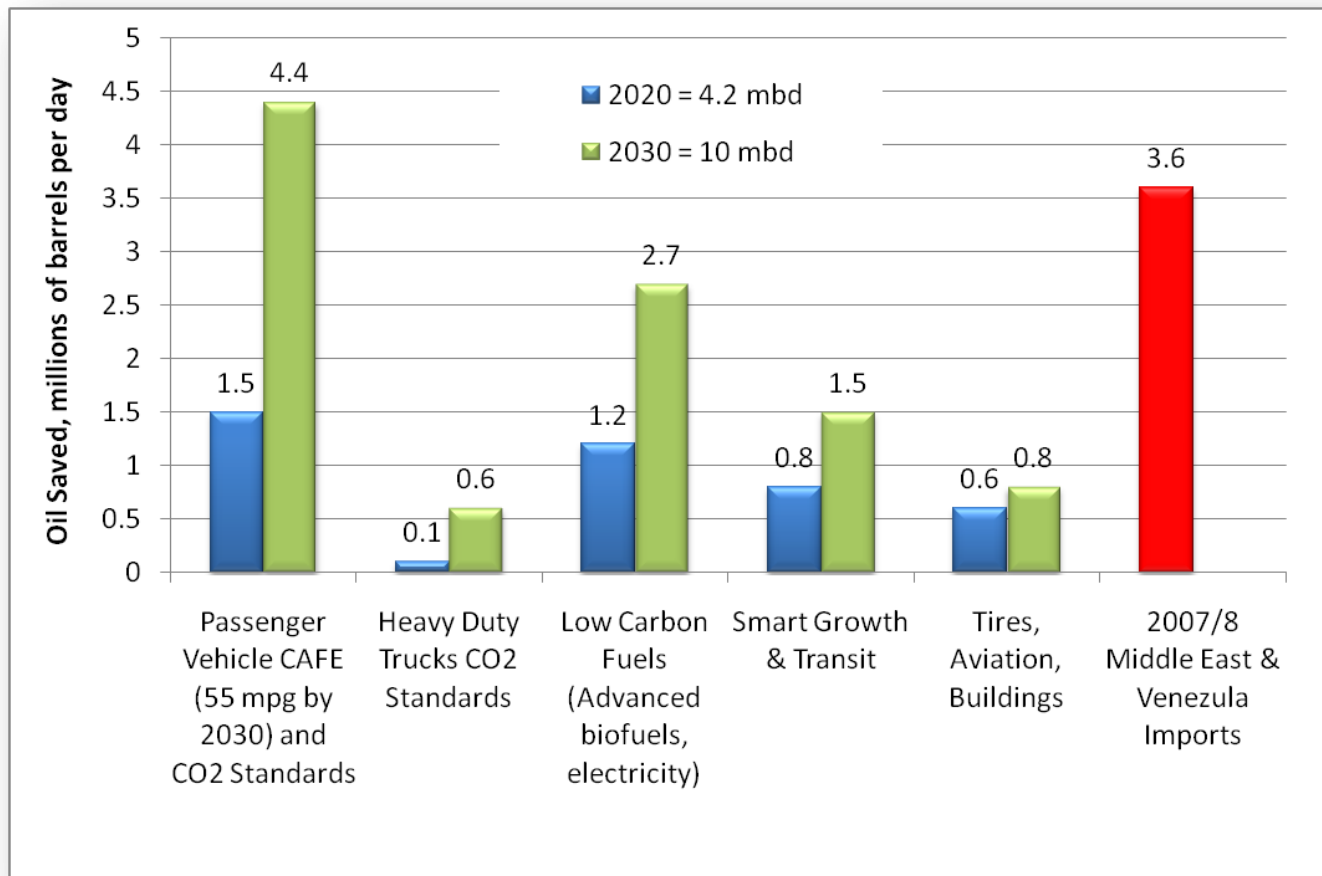


Benefits of advanced technologies largely due to the electric drivetrain and conversion efficiency of electrochemical devices

Achieving 2050 target will require continuous rate of improvement



Strengthened standards also needed to meet oil savings goals



“Within 10 years save more oil than we currently import from the Middle East and Venezuela combined”

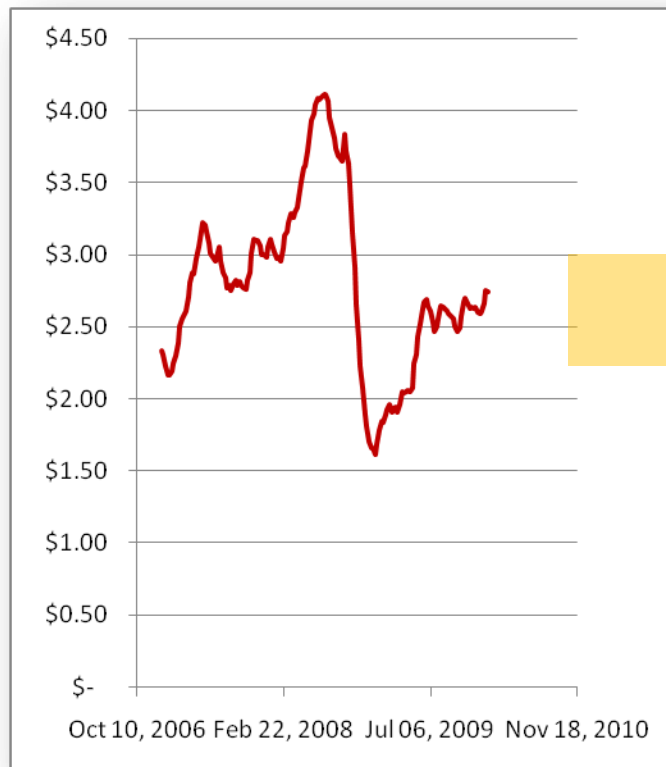
-Obama /Biden Campaign Energy Platform

- Reduced oil dependency will also protect jobs and our economy from high oil prices

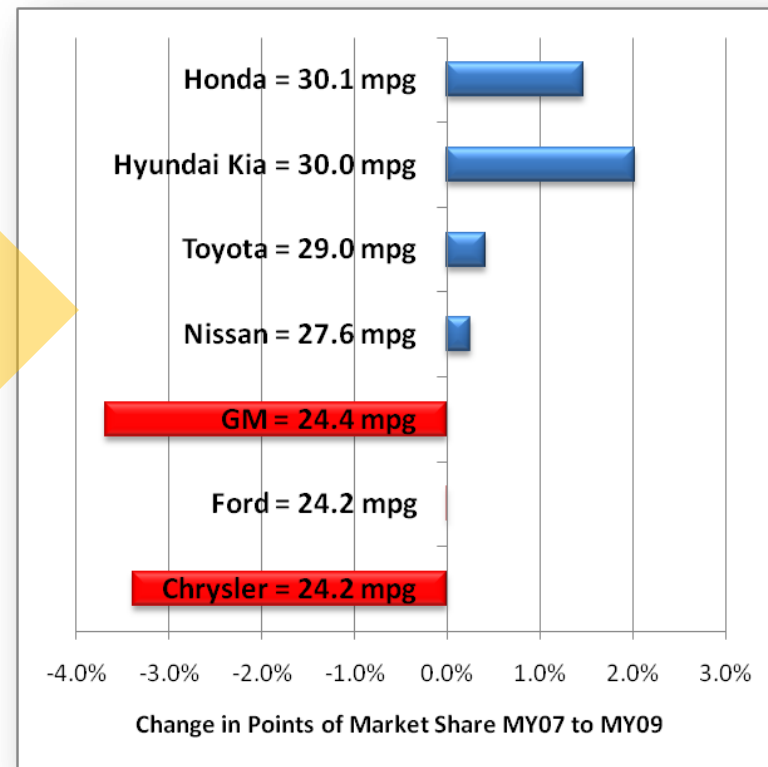
Three Reasons Why Setting Longer-term, Stronger Standards is Good for Auto Industry

1. Fuel efficiency critical to competitiveness ...

Automakers with highest fuel economy have gained market share due to two years of high, volatile fuel prices

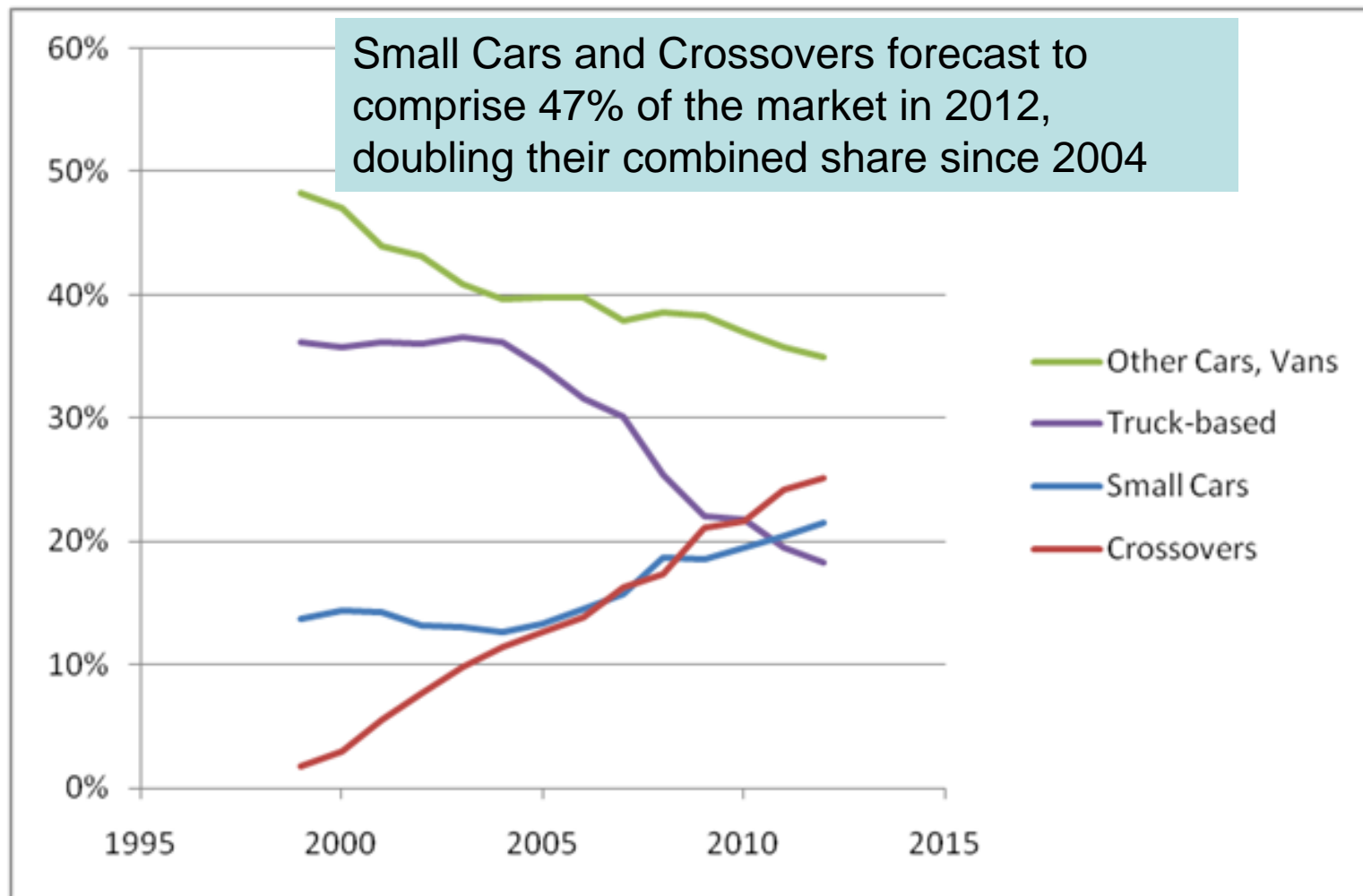


Source: DOE EIA



Source: The Planning Edge

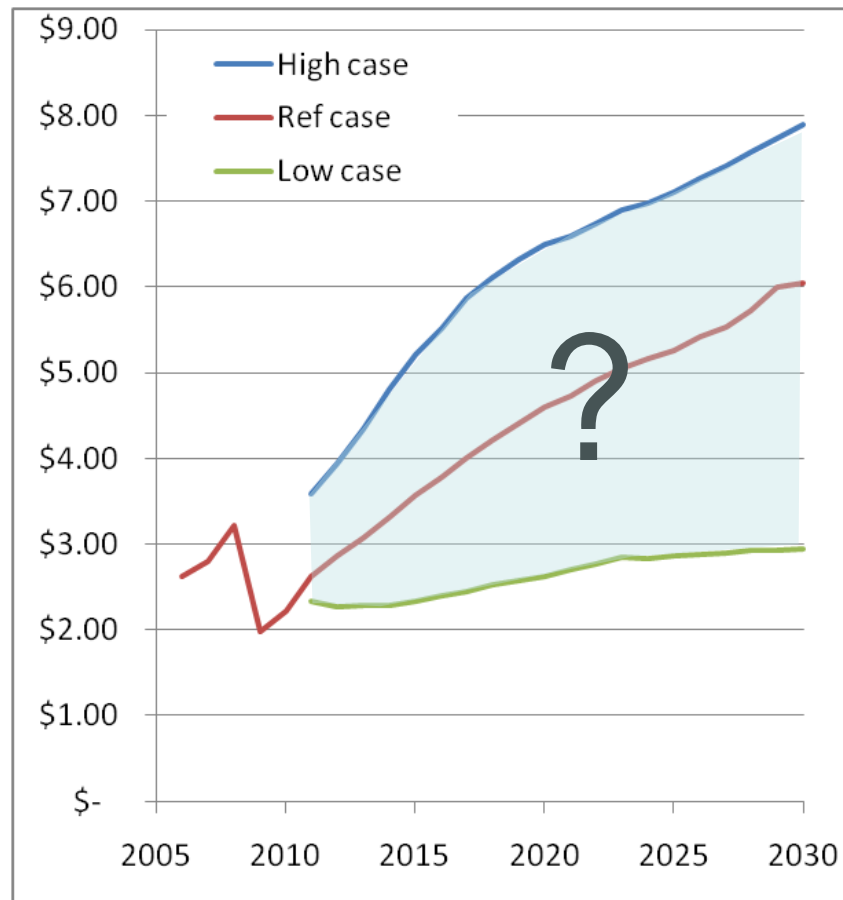
...because consumers are demanding fuel-efficient small cars and crossovers



Source: The Planning Edge

2. “Hedge” against fuel prices

Insulates industry from uncertainty & volatility



Source: DOE EIA, AEO 2009

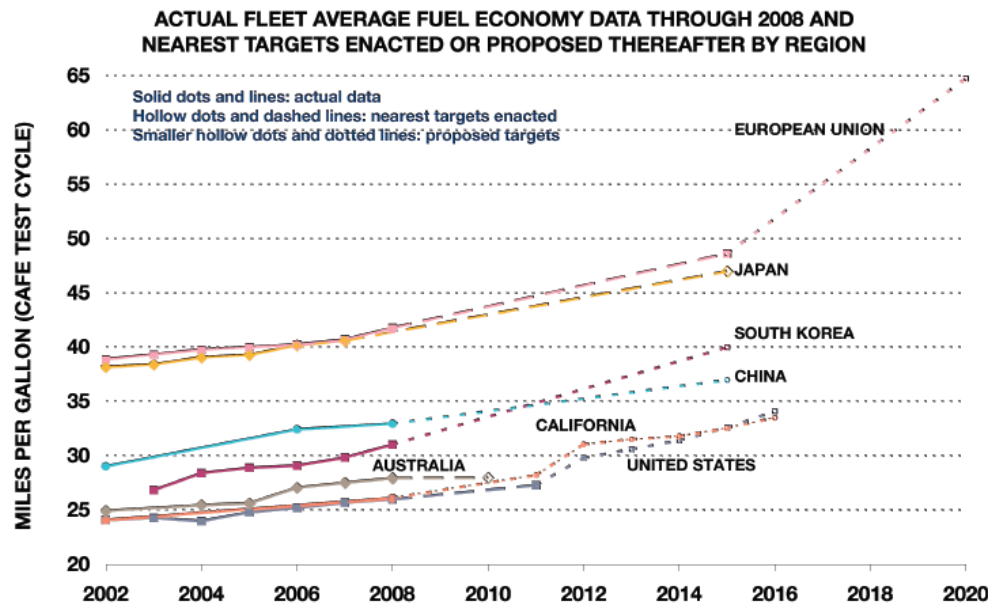
- By requiring investments in fuel efficiency, stronger standards acts as an industry-wide “hedge” against uncertainties in oil market
- Automakers will no longer have to make risky bets about oil markets and the fuel efficiency strategy of their competitors

3. Advanced, fuel-efficient technologies critical to global competitiveness

Standards requiring annual rates of improvement in other countries of ~2-4% p.a. will drive investments in clean vehicle technologies

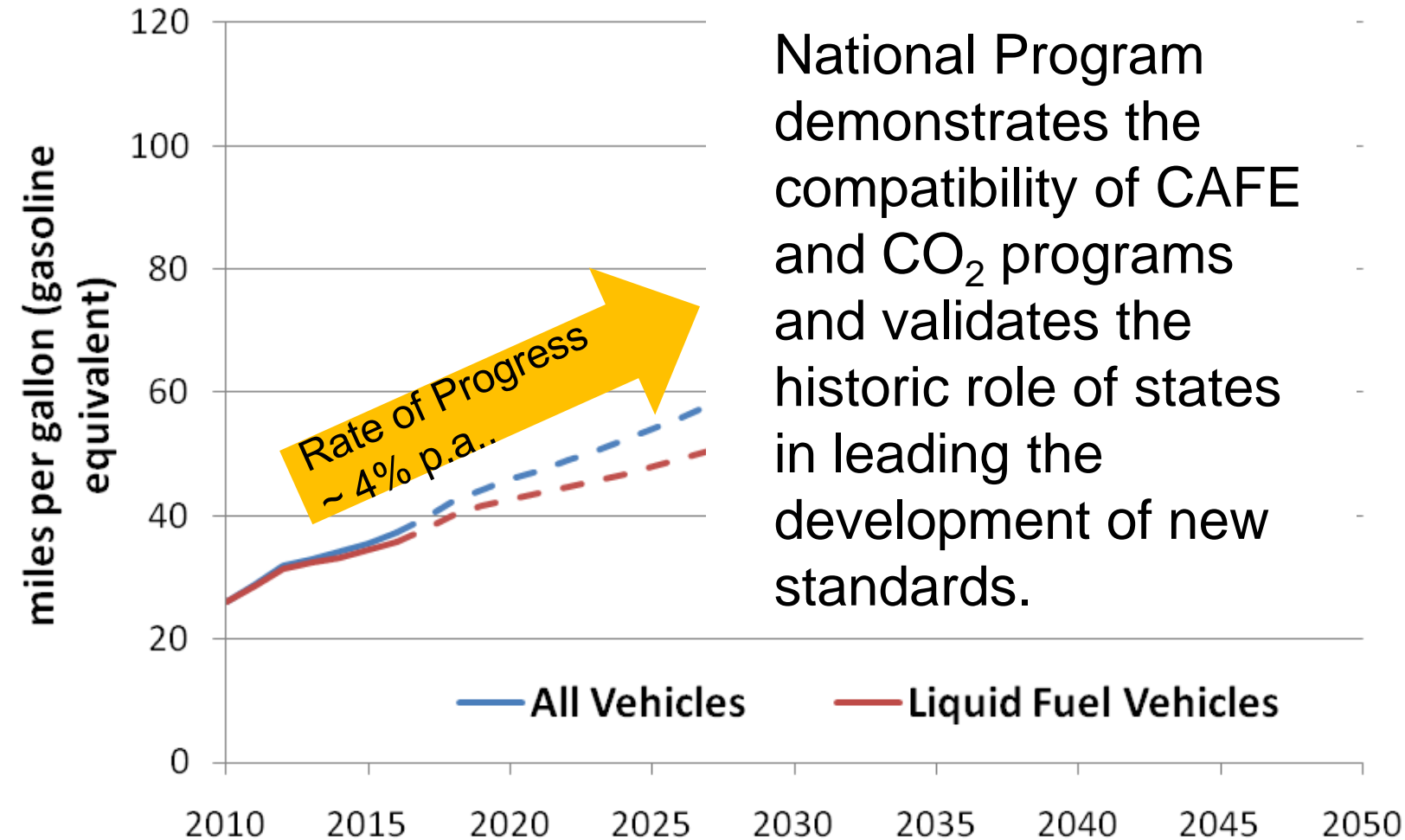


China has designated “new energy vehicles” as a national strategy in priority development.



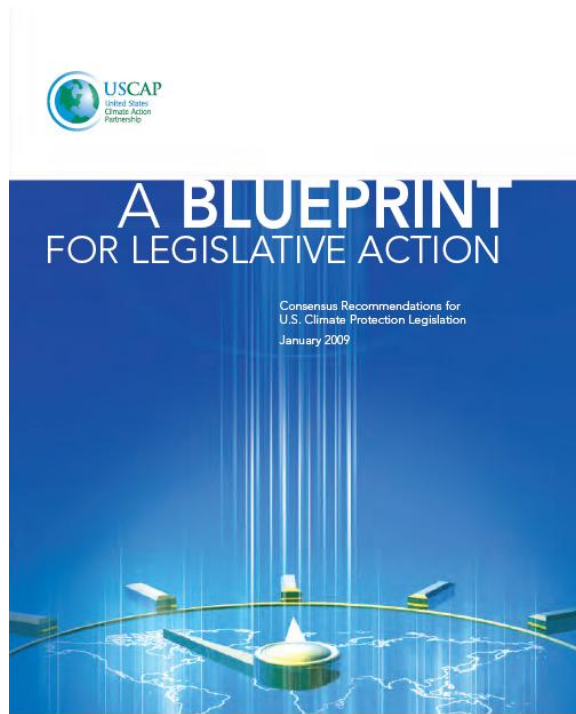
Role of Public Policy

1. Address automakers need for regulatory certainty by setting tough, but achievable longer-term standards

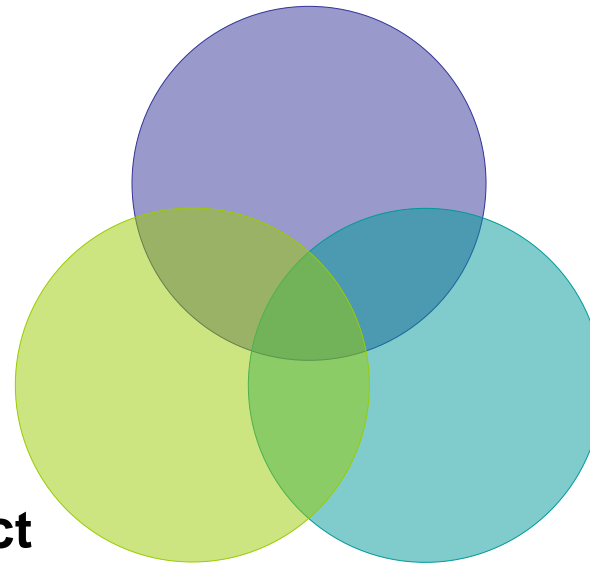


National Program demonstrates the compatibility of CAFE and CO₂ programs and validates the historic role of states in leading the development of new standards.

2. Adopt an economy-wide climate and clean energy plan



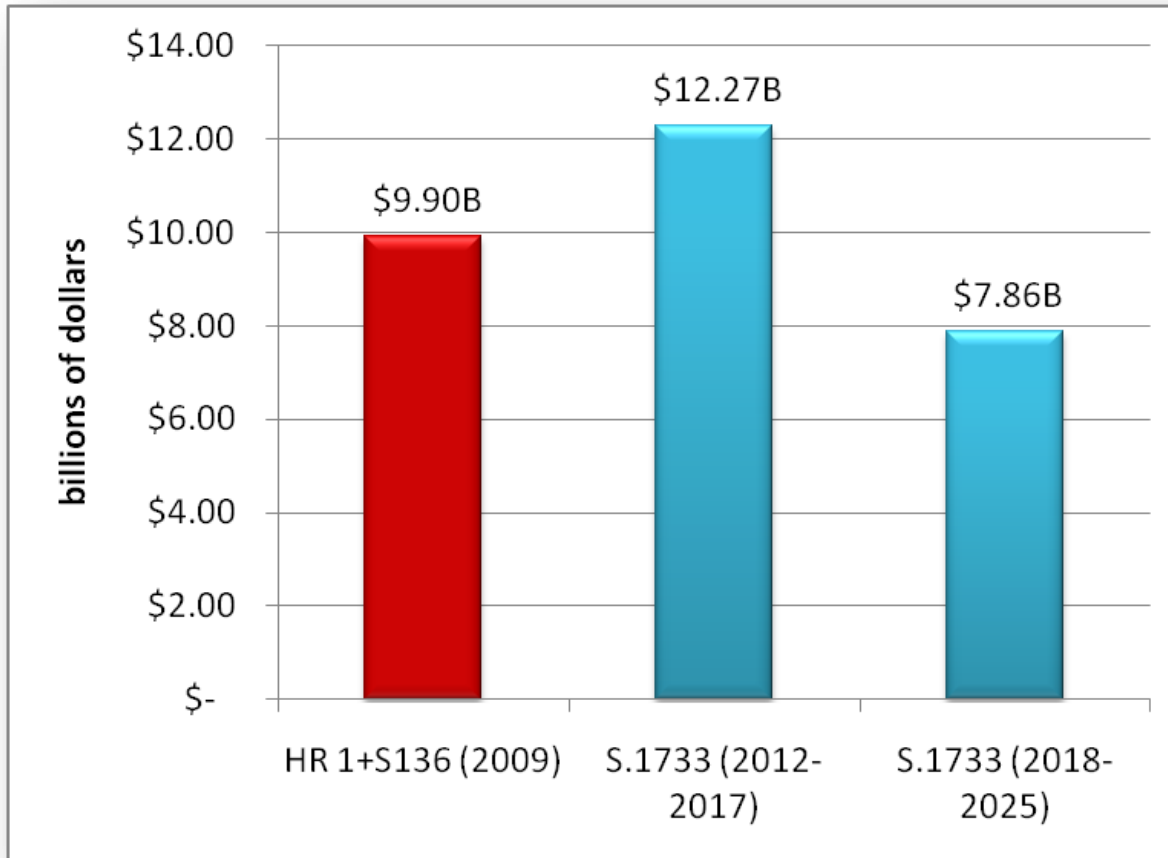
Cap on Carbon Pollution
Provides carbon price signal



**Direct
Measures & Standards**
*Vehicle emission standards
Low-Carbon Fuel Standard
Smart Growth policies*

Incentives
*Consumer incentives
Retooling funds for auto
factories, cellulosic ethanol,
smart growth projects*

3. Provide funding to accelerate investments in advanced, fuel-efficient technologies



S. 1733, Section 771(a)(8) provides allowances to automakers for the manufacturing of advanced technology vehicles defined as 115% of the fuel economy of model 4 years prior

- HR 1 American Investment and Recovery Act = \$2.4B batteries & electrification
- FY 2009 CR (Continuing Resolution) = \$7.5B for retooling, S.136 of EISA 2007
- S.1733, Section 771(a)(8) Retooling Grants = \$20.1B (NRDC estimate)

Thank You

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For more information regarding NRDC

<http://www.nrdc.org/>