



EPA Climate Initiatives: Update and Next Steps

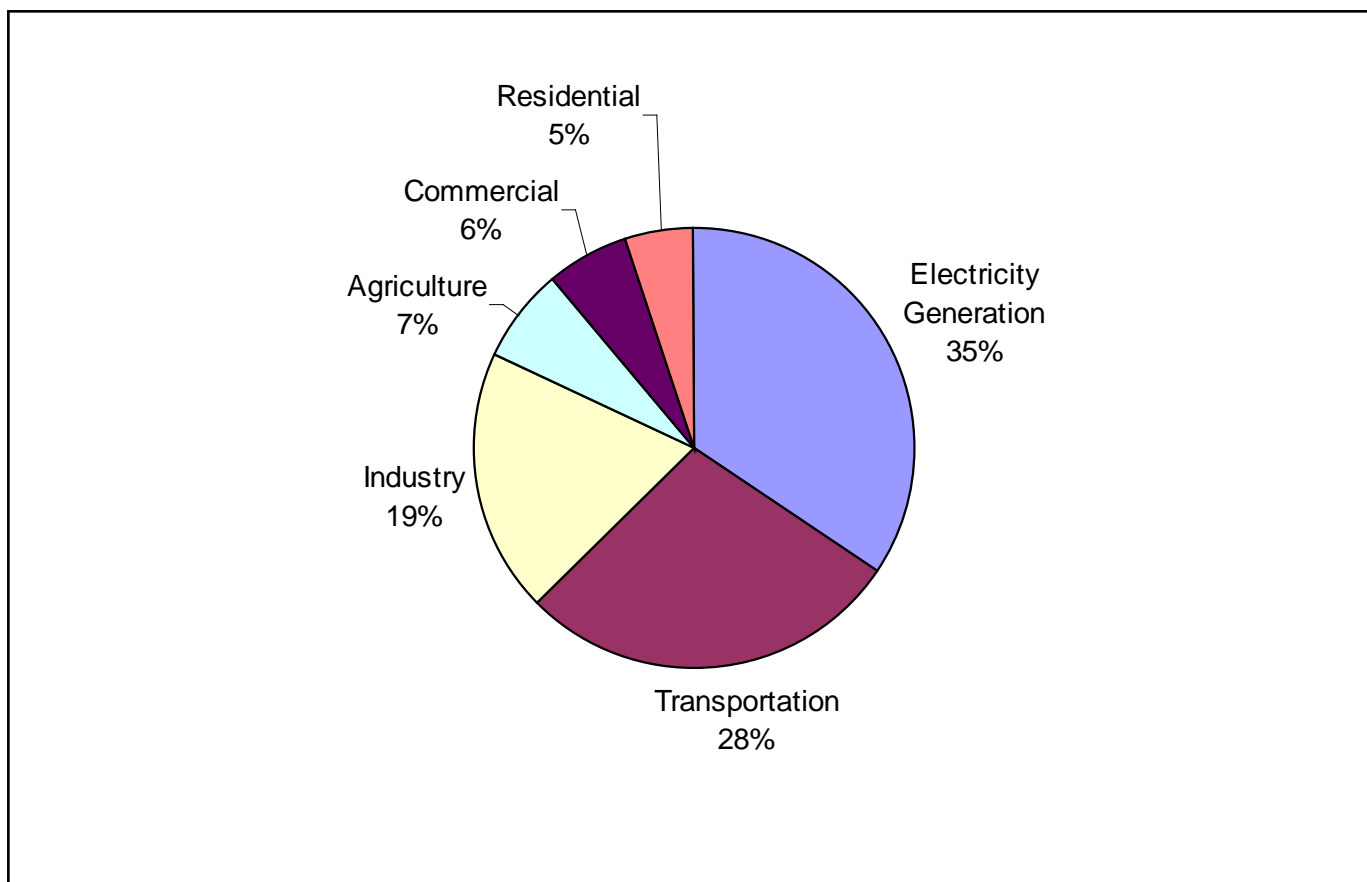
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Assistant Administrator

U.S. EPA, Office of Air and Radiation

April 13, 2010

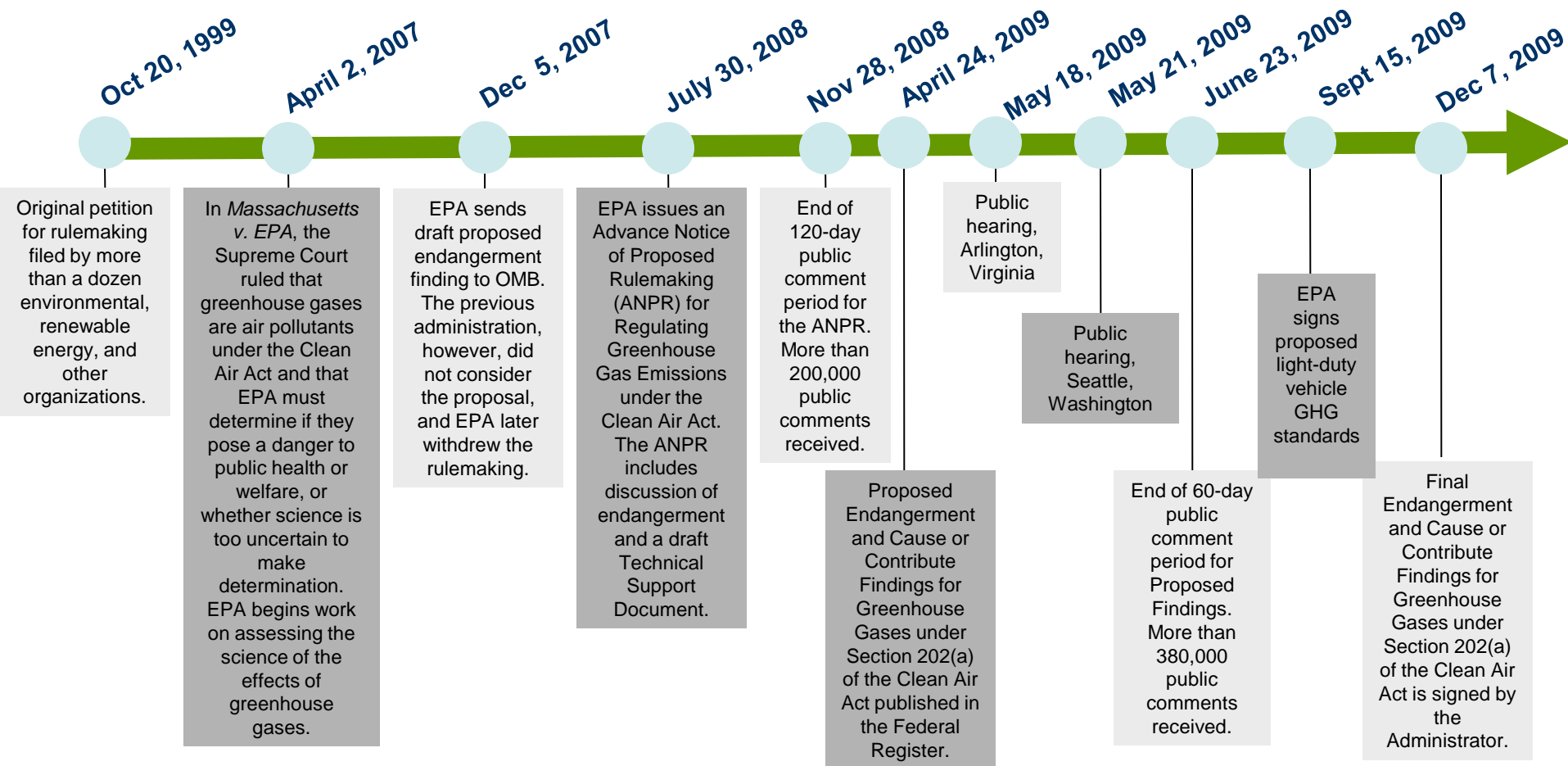
U.S. GHG Emissions Allocated to Economic Sectors (2007)



EPA Climate Regulatory Actions

- **Endangerment Finding**
 - GHG emissions endanger public health and welfare
 - Provides the legal basis for the Light-Duty Vehicle Rule
 - Issued December 7, 2009

Timeline of EPA's Endangerment Finding



Section 202(a) of the Clean Air Act

4 “Cause or contribute” test for emissions analyzed in context of prior determinations and unique attributes of GHGs

3 Scope and definition of “air pollutant” that causes or contributes to air pollution

The Administrator shall by regulation prescribe... standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in her judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.

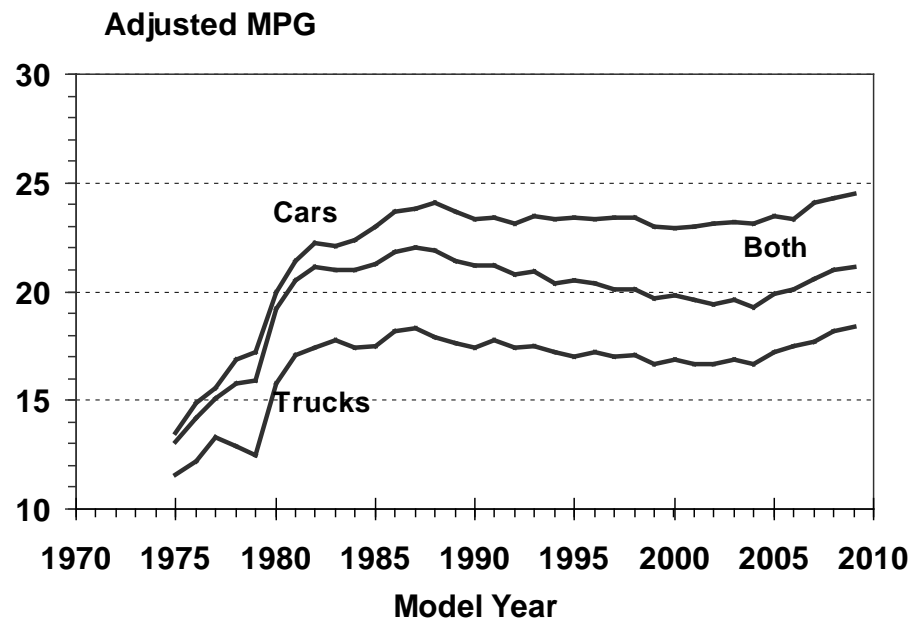
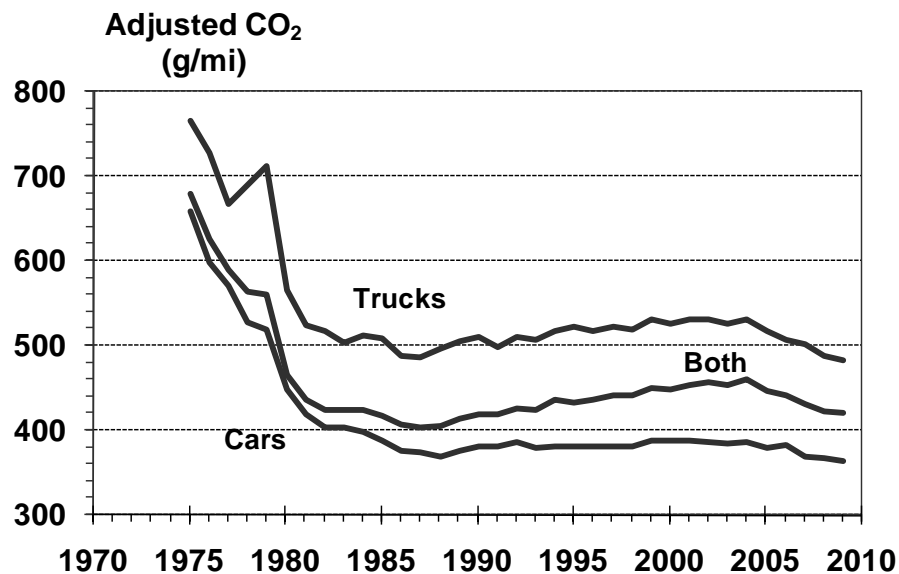
1 Scope and definition of “air pollution”

2 Endangerment to public health, welfare or both

Light Duty Vehicle GHG Rule

- Close cooperation with DOT and NHTSA
- Applies to MY 2012-2016 cars, SUVs, minivans, pickups
- Increases fuel economy by about 5 percent every year
- Reduces greenhouse gas emissions by nearly 950 million metric tons
- Conserves 1.8 billion barrels of oil
- Compliance costs for industry of less than \$60 billion
- Total benefits of \$250 billion and \$190 billion net benefits
- Projected to save model year 2016 car-buyers \$3000 over the vehicle's life

Adjusted CO₂ and Fuel Economy, MY1975-2009



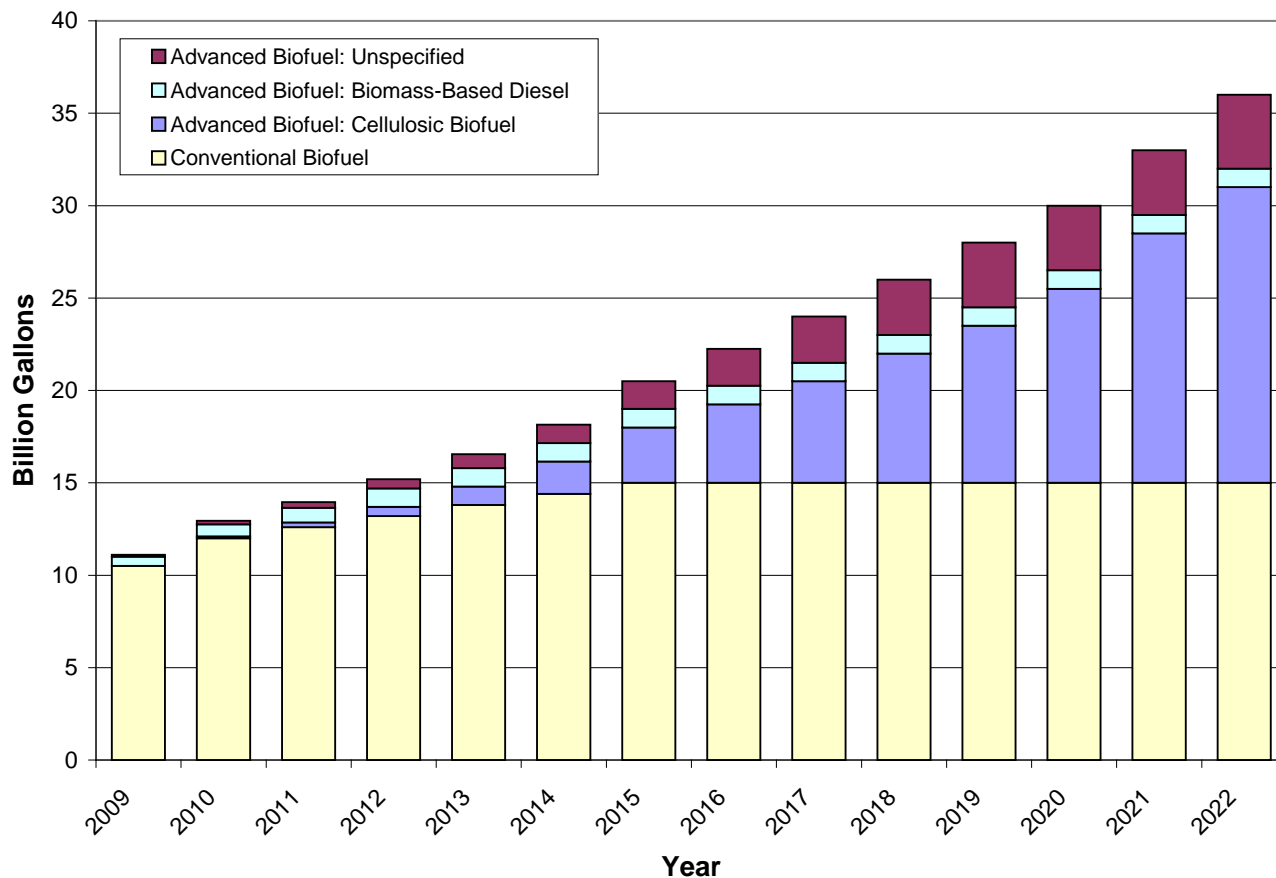
Renewable Fuel Standard

- Increased required volumes from 7.5 billion gallons per year in 2012 to 36 billion gallons per year in 2022
- New renewable categories with GHG reduction thresholds from 20-60%

• GHG emissions reduced 138 million metric tons/year when fully phased in

• Market certainty will expand production of advanced biofuels

• Completed February 3, 2010



Transportation: Potential Greenhouse Gas Reductions

- Recent Analysis Requested by Sen. Kerry
- Considered 2030 Tailpipe GHG and Oil Reductions from
 - Known Technologies
 - Operational Improvements
 - Travel Efficiency
- All Key Transportation Subsectors – Highway, Off-Road, Aviation, Marine, and Rail
- No cost analysis

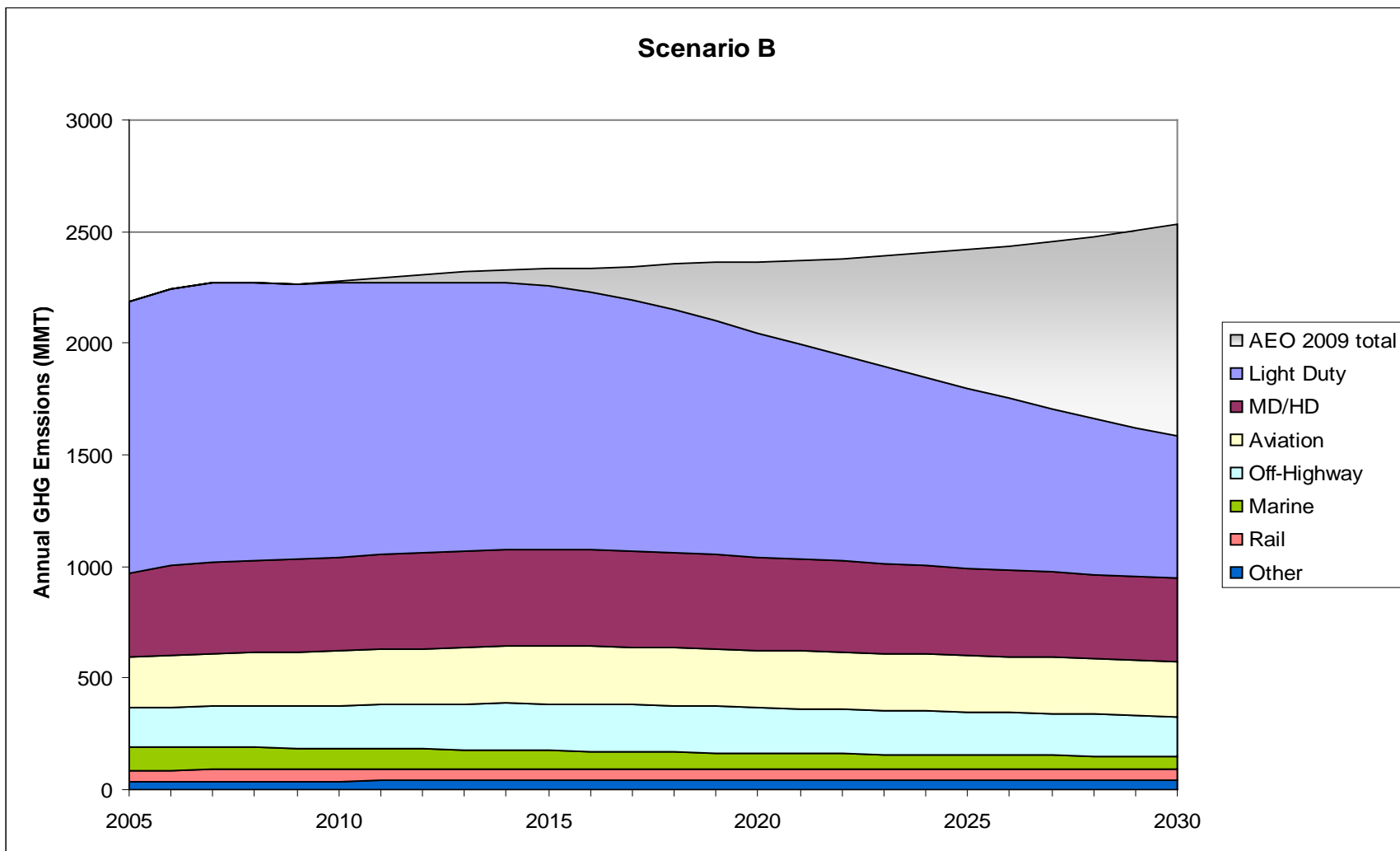
Transportation: Potential Greenhouse Gas Reductions

Results of Kerry Analysis:

- 2030 GHG Reductions – estimated
 - 600 million - 1 billion metric tons per year
 - Equivalent to 120-200 million cars' emissions
- 2030 Oil Savings – estimated
 - 4-7 million barrels per day
 - $\frac{1}{3}$ to $\frac{1}{2}$ current oil imports
- Total potential reductions: 25-40% GHG and Oil

Potential Tailpipe GHG Reductions

Scenario B



Further GHG Regulations

- **Greenhouse Gas Monitoring and Reporting Rule**
 - Applies to direct emitters of GHGs generally equal or greater to 25,000 metric tons/year
 - Covers an estimated 85 percent of total U.S. GHG emissions
 - Issued September 22, 2009
 - Facilities begin collecting data January 2010

Looking Forward: Clean Energy

Integrating air quality and climate protection

Multi-pollutant strategy for utility sector

- Coordinating sulfur oxides, nitrogen oxides, and toxics controls

Climate co-benefits

- Incentives for Efficiency
- Reducing Electricity Demand
- Clean Energy Technologies

International Efforts on Climate Change

