EPA/DOT Greenhouse Gas and Fuel Efficiency Phase II Standards for Medium- and Heavy-Duty Vehicles

Briefing for Mitigation Working Group August Meeting
Why is Phase II needed?

• Freight sector CO$_2$ emissions are projected to increase by nearly 200 million metric tons by 2040*

• More than what is expected in the commercial, industrial or residential sectors

• Transport already accounts for over 500 million tons of CO$_2$ annually*

*from US Energy Information Agency 2014
Background on the Phase II Standards

• Called for in President’s Climate Action Plan
• Produces benefits into the next decade
• Developed over 4 years with extensive testing and research
• Over 400 stakeholder meetings, public feedback and outreach to industry, environmental organizations, labor unions and others
• Encourages wider use of current technologies and development of more advanced, cost-effective technologies
Overview of the Phase II standards

• Finalized 8/16/2016 in joint EPA/DOT action

• Cover model years 2021-2027
  — semi-trucks
  — large pickups and vans
  — all types of buses and work trucks

• Significant benefits across all vehicle types

• 25% GHG reduction from a Phase I 2018 tractor vs. a Phase II 2027 tractor
Overview of the Phase II standards

• First time standards for trailers

• Trailer standards take effect in 2018 (DOT in 2021)
  – credits available for voluntary participation
  – provisions to accommodate small businesses

• Includes averaging, banking, and trading (ABT) credit provisions
  – advance introduction of new technologies
  – reduce compliance costs
  – address lead time challenges
What are the long term impacts over the lifetimes of the vehicles?

The Phase II standards are expected to:

- Lower CO$_2$ emissions by approximately 1.1 billion metric tons
- Save vehicle owners fuel costs of about $170 billion
- Reduce oil consumption by up to 2 billion barrels
What is the financial impact on the transportation sector?

- Fuel savings more than offset costs
- Favorable payback periods for truck owners
  - 2027 long-haul truck buyer could recoup extra technology cost in under two years by fuel savings
- Up to $230 billion in net benefits to society over the lifetime of vehicles sold under the program
  - fuel savings, carbon reductions, energy security
  - health, travel, refueling
A Balanced Plan to reduce GHGs from the freight sector

• 10% more GHG reductions than the originally proposed rule

• Improved compliance provisions
  — more repeatable and accurate test procedures
  — enhanced enforcement audits
  — protection against defeat devices

• Stronger diesel engine standards

• Improved vocational vehicle program

• Regulatory structure better tailored to match the right technology for the job
A Balanced Plan to reduce GHGs from the freight sector

- Increased flexibility to minimize impacts on small businesses
- Maintains the structure and gradual phase-in of proposed standards
- Allows manufacturers to choose their own technology mix
- Gives manufacturers lead time to ensure technologies are reliable and durable
For More Information

For details on DOT's and EPA's Phase II GHG emissions and fuel efficiency standards for medium- and heavy-duty vehicles, please visit:

www3.epa.gov/otaq/climate/regs-heavy-duty.htm

www.nhtsa.gov/fuel-economy
Questions?