

# NHTSA and EPA to Propose Greenhouse Gas and Fuel Efficiency Standards for Medium- and Heavy-Duty Trucks; Begin Process for Further Light-Duty Standards: Fact Sheet

NHTSA, May 2010

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At the direction of President Obama, the National Highway Traffic Safety Administration (NHTSA), on behalf of the U.S. Department of Transportation (DOT) and the U.S. Environmental Protection Agency (EPA), are taking the next steps to improve fuel efficiency and reduce greenhouse gas (GHG) emissions from mobile sources. This fact sheet contains an overview of President Obama's Memorandum on "Improving Energy Security, American Competitiveness and Job Creation, and Environmental Protection through a Transformation of our Nation's Fleet of Cars and Trucks", announced on May 21, 2010.

## Overview

Pursuant to the Presidential Memorandum and consistent with their respective statutory authorities, NHTSA and EPA will propose joint regulations to improve fuel efficiency and reduce GHG emissions for medium- and heavy-duty commercial trucks, and begin stakeholder outreach to inform a second-phase joint rulemaking for light-duty vehicles. Through these efforts, the United States has the opportunity to lead the world in the development of innovative technologies and manufacturing, enhance energy security, and improve the environment through the development of a new generation of cleaner, more efficient cars and trucks.

NHTSA and EPA's April 1, 2010 final rule set the first-ever harmonized fuel economy and greenhouse gas standards for light-duty vehicles for model years 2012 through 2016 -- an historic step in addressing the transportation segment's largest contributor to oil consumption and GHG emissions. Light-duty vehicles are responsible for about 60 percent of U.S. transportation petroleum consumption and GHG emissions.

Building on this success, NHTSA and EPA will next address medium- and heavy-duty trucks, which are the transportation segment's second largest contributor to oil consumption and GHG emissions. This sector, from the largest pickups to 18-wheelers, is responsible for about 20 percent of U.S. transportation petroleum consumption and GHG emissions. As with the light-duty program, the medium- and heavy-duty program will be developed with input and comment from manufacturers, California and other key states, environmental organizations, labor unions, and many other parties. The agencies will work together to put standards in place by 2014.

The President also directed NHTSA and EPA to begin a process for evaluating and setting standards to improve fuel efficiency and reduce greenhouse gas emissions for passenger cars and light duty trucks built in model years 2017 and later. To this end, NHTSA and EPA are seeking input on the development of a second-phase joint rule for this segment from an array of stakeholders, including automobile manufacturers, labor unions, environmental organizations, and others. The agencies also will work closely with the State of California and other key states in this process.

Additionally, the President requested that EPA assess the need for new regulations governing emissions of conventional pollutants (*e.g.*, nitrogen oxides, particulate matter) from motor vehicles and the pollutant content of fuels; and that the Department of Energy (DOE) promote the development and deployment of infrastructure and standards to support the more widespread use of advanced vehicle technologies.

## **Need to Improve Fuel Economy and Reduce Greenhouse Gases and from Vehicles**

Two of our country's critically important and intertwined needs are to reduce oil consumption and to address global climate change. By promulgating stringent, joint GHG and fuel economy standards through a coordinated national program for light-duty vehicles, NHTSA and EPA already have made significant strides to address these needs. With this latest announcement, NHTSA and EPA will continue their joint effort to reduce GHG emissions, improve energy security, increase fuel savings, and provide regulatory certainty for motor vehicle manufacturers.

Reducing total petroleum use decreases our economy's vulnerability to oil price shocks. Reducing dependence on oil imports from regions with uncertain conditions enhances our energy security. Net petroleum imports now account for approximately 57 percent of U.S. domestic petroleum consumption, and the share of U.S. oil consumption for transportation is approximately 71 percent. Moreover, world crude oil production continues to be highly concentrated, exacerbating the risks of supply disruptions and their negative effects on both the U.S. and global economies.

Transportation sources emitted 28 percent of all U.S. GHG emissions in 2007 and have been the fastest-growing source of U.S. GHG emissions since 1990.<sup>1</sup> ([footnotes](#)) The mobile sources addressed

in this regulatory announcement – light-duty vehicles and medium- and heavy-duty vehicles – accounted for 23 percent of all U.S. GHG in 2007.<sup>2</sup> ([footnotes](#))

## **Standards for Medium- and Heavy-Duty Engines and Vehicles**

Building on NHTSA's and EPA's successful collaboration and the overwhelming stakeholder support for establishing harmonized fuel economy and GHG emission standards for light-duty vehicles built in model years 2012-2016, NHTSA and EPA will work to develop strong, coordinated national fuel efficiency and GHG standards for heavy-duty vehicles in a future regulatory program beginning in 2014. While the medium- and heavy-duty truck sector is very diverse and opportunities to reduce GHGs and increase fuel economy vary, preliminary estimates indicate that large tractor trailers – representing half of all GHG emissions from this sector – could reduce GHG emissions by as much as 20% and increase fuel efficiency by as much as 25% by 2018 through the use of existing technologies.

NHTSA and EPA recognize the unique market structure of the trucking industry and the diverse demands of medium- and heavy-duty vehicle applications. In light of these important considerations, the agencies will propose and take comment on an approach designed to maximize the use of existing technologies to achieve substantial annual progress in reducing transportation sector GHG emissions and fossil fuel consumption from the truck sector, consistent with the Administration's energy and climate security goals. Also in accordance with the Presidential Memorandum, DOT/NHTSA and EPA and will coordinate with the Department of Energy in seeking comments on ways to promote the early deployment of advanced technologies for heavy-duty fleets, including hybrid and electric vehicles and encourage the development of infrastructure needed to support these advanced technologies

To inform their work, NHTSA and EPA will seek input from an array of stakeholders, including, but not limited to, vehicle and engine manufacturers, fleet owners and operators, and environmental organizations. The agencies also will work with the State of California and other states in this process.

In addition, the National Academies of Science (NAS) recently issued a report of medium- and heavy-duty vehicle fuel efficiency regulation. The agencies respect NAS' input as a valuable technical resource and will consider its findings and recommendations in developing proposed standards and in future GHG and fuel efficiency rulemakings.

## **Further Standards for Light-Duty Vehicles**

Building on NHTSA's and EPA's successful collaboration and the strong stakeholder support for establishing harmonized light-duty fuel economy and GHG standards for vehicles built in model years 2012-2016, the agencies will work to develop strong, coordinated national standards for light-duty vehicles manufactured in model years 2017 and beyond in a future rulemaking. The agencies will seek input from a wide array of stakeholders, including automobile manufacturers, infrastructure

providers, labor unions, environmental organizations, and other interested groups. The agencies will also work with the State of California and other key states in this process.

NHTSA and EPA, working with the California Air Resources Board, will meet with these stakeholders between now and September 2010 to gather information to develop a technical assessment that will inform the rulemaking process. The agencies will: 1) evaluate emerging technologies to further improve fuel economy and reduce GHG emissions; 2) identify the capabilities to commercialize new and existing technologies, including potential costs and market barriers of such technologies; and 3) with the Department of Energy, evaluate possible approaches to help establish in the marketplace an increased use of advanced technologies, such as plug-in hybrids, battery electric vehicles, and fuel cell vehicles.

By September 30, 2010, NHTSA and EPA will issue a Notice of Intent announcing their plans for setting aggressive light-duty vehicle standards for model year 2017 and beyond. The Notice will describe key elements of the program that EPA and NHTSA intend to propose in a future joint rulemaking, and identify potential standards that could be practically implemented nationally for the 2017-2025 model years and a schedule for setting standards as expeditiously as possible to provide sufficient lead time. This program will achieve substantial annual progress in reducing transportation sector emissions and fossil fuel consumption, consistent with the Administration's energy and climate security goals. The program will deliver harmonized federal standards with the goal of ensuring that automakers will be able to build a single light-duty fleet that satisfies all requirements, while ensuring that consumers continue to have a full range of vehicle choices. Further, the program will encourage continuous technological innovation through performance-based standards, and will stimulate increases in the use of advanced technology vehicles, such as hybrid electric vehicles, plug-in hybrids, electric vehicles, and other cutting edge technologies.

## **Vehicle Descriptions**

For purposes of these future regulatory actions, the light-duty fleet covered by the second-phase joint NHTSA/EPA rulemaking includes passenger cars, light-duty trucks, and medium-duty passenger vehicles. The light-duty vehicle class collectively includes smaller vehicles ranging from subcompact cars and sedans to minivans, sport utility vehicles (SUVs), and smaller pickup trucks. Light-duty trucks include smaller (1/2 ton) pickup trucks, sport utility vehicles, minivans and similar vehicles with a gross vehicle weight rating (GVWR) of less than 8,500 pounds. Medium-duty passenger vehicles are those between 8,500 and 10,000 lbs GVWR if they are designed and used primarily for transporting persons.<sup>3</sup> (footnote).

The lightest class of heavy-duty trucks is "class 2b," which includes heavy pickup trucks and vans used primarily for commercial purposes, weighing more than 8,500 lbs GVWR. This class would be embodied by a Dodge Ram 2500, for example. Medium-duty vehicles regulated by the State of California can be as heavy as 14,000 lbs GVWR. NHTSA and EPA would regulate these under the

Clean Air Act and the Energy Independence and Security Act of 2007 as heavy-duty vehicles. Other classes potentially covered by the national heavy-duty program include vocational work trucks, such as new concrete mixers, refuse trucks, urban buses, and utility trucks, as well as combination tractor-trailers, commonly known as "18-wheelers." For a complete listing of vehicle weight classifications, please visit EPA's web page at <http://www.epa.gov/otaq/standards/weights.htm>.

## **NHTSA and EPA's Rulemaking Process**

NHTSA and EPA currently anticipate that the joint rulemaking for new heavy-duty engines and vehicles will be proposed this fall, finalized by July 2011. EPA would consider promulgating harmonized binding greenhouse gas emissions standards under the CAA beginning with Model Year 2014 vehicles and NHTSA consider promulgating under EISA harmonized voluntary fuel efficiency standards beginning with Model Year 2014 vehicles and binding fuel efficiency standards beginning with Model Year 2016 vehicles. When published, the proposal will include full details on the proposed heavy-duty program and supporting analyses, including the costs and benefits of the proposal and its effects on the economy, manufacturers, and consumers. Once the proposed joint rulemaking is published in the Federal Register, there will be an opportunity for public comment and public hearings.

To address further standards for light-duty vehicles, NHTSA and EPA will issue a Notice of Intent by September 30, 2010, announcing our plans for setting aggressive light-duty vehicle standards for model year 2017 and beyond. The Notice will announce the agencies' plans to initiate a joint notice and comment rulemaking, consistent with the respective statutory authorities. The Notice will include a schedule for setting standards as expeditiously as possible to provide sufficient lead time. The agencies also will gather any additional information needed to support regulatory action. The future proposed rulemaking would provide an opportunity for public notice and comment, including public hearings.

While the proposed and planned regulations will be issued jointly and harmonized federally, NHTSA establishes fuel economy standards under the Energy Independence and Security Act (EISA) and the Energy Policy and Conservation Act (EPCA), whereas the EPA establishes GHG emissions standards under the Clean Air Act.

## **Enabling Infrastructure**

Finally, the President calls on DOE, in coordination with DOT and EPA, to work with stakeholders to promote the deployment of advanced technology vehicles by providing technical assistance to cities preparing for the deployment of electric vehicles and to develop voluntary standards to facilitate the robust deployment of advanced vehicles. DOT/NHTSA looks forward to working with our stakeholders to ensure the development of the infrastructure necessary to support the next generation of advanced technology vehicles.

## For More Information

You can access the May 2010 White House press release and President Obama's Memorandum to DOT/NHTSA and EPA at:

<http://www.whitehouse.gov/the-press-office/president-obama-directs-administration-create-first-ever-national-efficiency-and-em>

and

<http://www.whitehouse.gov/the-press-office/presidential-memorandum-regarding-fuel-efficiency-standards>

You can learn more about the current regulations for fuel economy on NHTSA's web site at:

<http://www.nhtsa.gov/fuel-economy>

You can learn more about the federal program to reduce GHG emissions and improve fuel efficiency from mobile sources on EPA's web site at:

<http://www.epa.gov/otaq/climate/regulations.htm>

For additional information, please contact NHTSA's Media Office at 202-366-9550

(footnotes)

<sup>1</sup> U.S. Environmental Protection Agency. 2009. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2007. EPA 430-R-09-004. Available at

[http://epa.gov/climatechange/emissions/downloads09/GHG2007entire\\_report-508.pdf](http://epa.gov/climatechange/emissions/downloads09/GHG2007entire_report-508.pdf)

<sup>2</sup> U.S. EPA. 2009 Technical Support Document for Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. Washington, DC. pp. 180-194. Available at <http://epa.gov/climatechange/endangerment/downloads/Endangerment%20TSD.pdf>

<sup>3</sup> Medium-duty passenger vehicles are generally complete vehicles between 8,500 and 10,000 pounds GVWR designed primarily for the transportation of persons. For the complete definition with exclusions, see the Tier 2 final rulemaking, 65 FR 6698, February 10, 2000.