

photo credit: Brett Weinstein

## The Clean Air Act and Vehicles

### Where the Rubber Meets the Road

*With the risks of oil dependence and climate change ever more apparent, America must act urgently to cut global warming pollution and our reliance on dirty fuels. 39% of US global warming pollution comes from petroleum – the most from any fuel – while hundreds of billions of dollars flow out of our economy to pay for foreign oil. Whether our first concern is protecting wildlife from the devastating impacts of climate change or getting our economy back on track, we need to act now.*

The Obama Administration is poised to set new standards for America's vehicles - both cars and trucks - in the coming year. NWF is calling on the Administration to set the strongest possible standards to reduce pollution and maximize both fuel economy and consumer savings. When fully implemented, strong vehicle standards will:

- save Americans over \$100 billion per year,<sup>i</sup>
- cut gasoline consumption by 1/3, and
- cut global warming pollution by 8% annually.<sup>ii</sup>

### Building on a successful track record of cost-effective public health protections

Since 1970, the Clean Air Act (CAA) has had a proven track record of protecting wildlife and public health from pollution while saving the nation tens of trillions dollars and providing benefits that hugely exceed costs.<sup>iii</sup>

In 2007, the Supreme Court ruled that the Clean Air Act requires the Environmental Protection Agency (EPA) to take action to reduce global warming pollution from vehicles. In March of 2010, the EPA and the National Highway Traffic Safety Administration (NHTSA) set standards for new cars and light trucks for model years 2012 to 2016. Under the standard, cars and trucks will reach an average of 35 miles per gallon by 2016. These first-ever federal standards for greenhouse gases will cut global warming pollution from vehicles 20% by 2030.<sup>iv</sup>

The new rules were welcomed by a diverse range of stakeholders - including auto and component manufacturers, labor groups, national security voices and environmental organizations - because they would save billions of barrels of oil and create critical regulatory certainty for industry, while helping to put the US manufacturing sector on a path toward growth, new jobs, and global competitiveness.



photo credit: Niranj Vaidyanathan

#### Views on the 2012-2016 standards

“Delivering innovation and solutions that will strengthen America's energy security, economy and competitiveness are a central part of GM's reinvention.”

–General Motors

“A new agreement on fuel economy and greenhouse gas standards is a major step forward for the U.S. auto industry.”

–United Auto Workers

“We welcome the Administration's leadership in developing a coordinated fuel efficiency and greenhouse gas standard. This is something we have encouraged and sought for a very long time.”

–Toyota



### Next Steps: New Standards for Cars and Trucks

For cars and light trucks, achieving 60 miles per gallon (mpg) by 2025 is feasible with technology we have today. On October 1, 2010, EPA and NHTSA released a "Notice of Intent for Proposed Rulemaking" (NOI) outlining options for the next phase of reducing global warming pollution from cars and trucks (model years 2017 – 2025).<sup>v</sup> In the NOI, EPA and NHTSA charted a path to reach a fleet average fuel economy rating of 62 miles per gallon in 2025. The framework outlines many different ways to achieve global warming pollution reductions that range from 3% to 6% per year across the vehicle fleet. The NOI shows that families save the most money – up to \$7,400 - and the nation saves the most oil, by pursuing the stronger 6% global warming pollution reduction path.

**Americans support action on vehicles**  
A poll by the Mellman Group found that 74% of likely voters favor having "the federal government require the auto industry to increase average fuel efficiency... to 60 miles per gallon by the year 2025."

This is just the first step in the process, and the new standards are not expected to be final until mid-2012. NWF welcomes the agencies' goals of continuing to improve the efficiency of cars sold in America, and strongly urges the Administration to move forward and finalize the strongest possible new standards. **By announcing plans for these new car rules, EPA has shown that action to cut global warming pollution under the CAA can increase our energy security, create new American jobs, and protect the environment.**

Today's vehicles are becoming more aerodynamic with high-strength, lightweight materials, transmission improvements, engineering changes that allow the engine to shut off while idling, hybrid and electric powertrains, advanced batteries, regenerative braking, and climate friendly air conditioning systems. These innovations are just some of the technologies that will allow cost-effective vehicles to hit a 60 mile per gallon standard by 2025. These new technologies are also fun – enabling improvements in fuel economy simultaneously with enhanced performance. These technologies will cut global warming pollution from our cars to 143 grams/mile of carbon dioxide equivalent on average by 2025 – cutting emissions by 465 million metric tons per year.<sup>vi</sup> Over the next decade, American ingenuity and American industry are up to the task of getting the best, most efficient vehicles in the world into every garage.

#### Fuel Saving and Pollution Reduction Technology Available for Passenger Vehicles by 2025

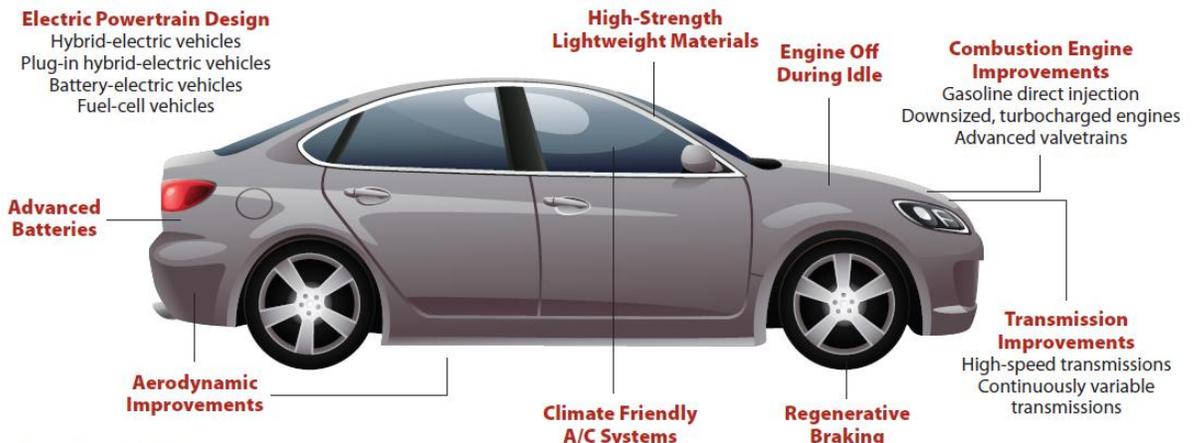


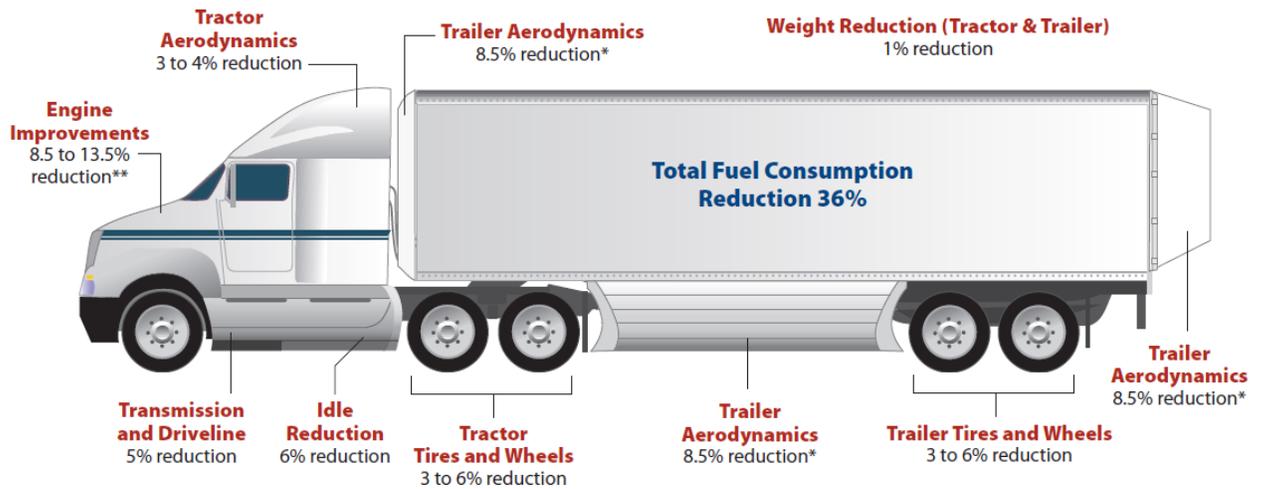
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**New strong standards for large trucks are also essential for reducing greenhouse gas emissions and lowering costs.** EPA and NHTSA proposed the first-ever emission standards for medium and heavy duty trucks on October 25, 2010. The new standards would cut global warming pollution from different types of trucks from 7 to 20% by 2018.<sup>vii</sup> The standards would save 500 million barrels of oil, cut global warming pollution by 250 million metric tons and save the nation \$41 billion. While even greater reductions - cutting fuel use from new long haul tractor trailers 35% by 2017 and other trucks by 20% is possible using cost-effective technology – the new rules are a critical first step. NWF will continue to work with EPA and DOT to ensure that the rules take advantage of all new technologies available to maximize oil savings from our trucks and bring down the cost of freight – a boon for the environment, for American businesses, and for consumers at the checkout line.

**Savings for truck owners**  
 In addition to 18 wheelers, and trucks such as utility trucks and concrete mixers, the rule covers the largest work pick-up trucks. The rule would save around a billion gallons of oil from work pick-up trucks and vans alone in 2030. For our members who use these large pick-ups to haul boats and trailers, that means savings of over \$3 billion on fuel in that year alone.

**Fuel Saving Improvements for Long-Haul Tractors Pulling Van Trailers Available by 2017**  
 (Fuel Consumption Reduction by Technology Area)



Source: Adapted from *Technologies and Approaches to Reducing Fuel Consumption of Medium- and Heavy-Duty Vehicles*, National Research Council, 2010  
 Note: Fuel consumption reductions are multiplicative.

\* Percentage reflects cumulative reductions from all trailer aerodynamic improvements  
 \*\* Adjustments made to reflect a 2010 engine as baseline

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## Rapid Action is Critical to Economic Recovery

Strong new car and truck standards will help us put American dollars back to work building the US economy instead of flowing out of the country for oil. Saving at the pump puts money back into family budgets, while building the latest fuel saving technologies in America boosts jobs and helps reverse our massive trade deficit.

**New vehicle standards bring big household savings**  
 A consumer savings report released in September shows that the implementation of a 60mpg fuel economy standard would lead to an annual average fuel bill net savings of \$750 per household.

**The US can lead.** Strong standards together with American innovation and public-private investments in advanced manufacturing have begun bringing high quality jobs back to communities across the country and positioning American auto and auto components manufacturers as leaders in cutting edge technology. For example, while the US had just two factories making advanced batteries in 2009, by 2012 US manufacturers are expected to supply 20% of the world’s advanced vehicle batteries.<sup>viii</sup>

But as any family or community can attest – the job isn’t done. Our competitors in China and Europe are moving fast to set stringent goals and invest heavily in advanced vehicles. To lead in the 21st century, America needs a comprehensive approach that includes strong vehicle standards, a program to rapidly bring electric vehicles to market, investment in the next generation of technology and infrastructure, and pollution limits across the economy. Producing the next generation of vehicles can help anchor America’s economic recovery.



photo credit: James Lauritz

*Utilizing the tools the Clean Air Act has provided for decades, strong rules for cars and trucks provide a win-win-win for the nation, the economy and the environment. They demonstrate that climate progress can benefit everyone, reduce harmful carbon emissions, unleash innovation, and start America well down the road towards a secure, prosperous clean energy future.*

**For more information:** [www.nwf.org/CleanAirAct](http://www.nwf.org/CleanAirAct)

**To take action:** [www.nwf.org/Action](http://www.nwf.org/Action)

- <sup>i</sup> “Saving Money at the Gas Pump: State-by-state consumer savings from stronger fuel efficiency and carbon pollution standards” September 2010( [http://docs.nrdc.org/energy/ene\\_10092301.asp](http://docs.nrdc.org/energy/ene_10092301.asp)).
- <sup>ii</sup> According to [www.eia.doe.gov](http://www.eia.doe.gov), the CO<sub>2</sub>e emissions in 2008 amounted to 7,053MMT. A standard of fleets averaging 60 mpg would lead to savings of 535MMT of CO<sub>2</sub>e emissions—or the equivalent of 8% of 2008 U.S. greenhouse gas emissions.
- <sup>iii</sup> “[B]etween 1970 and 1990 alone, cleaner air saved the nation an estimated \$22 trillion in health care expenses and lost productivity at a cost of \$523 billion—a remarkable 40-1 benefit-cost ratio.” National Association of Clean Air Agencies, “Don’t Take Away a State’s Right to Protect Its Citizens from Dirty Air,” April 2005 (<http://www.4cleanair.org/FinalBrochure-April05.pdf>).
- <sup>iv</sup> “Interim Joint Technical Assessment Report: Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards for Model Years 2017-2025” September 2010 ([www.epa.gov/otaq/climate/regulations/ldv-ghg-tar.pdf](http://www.epa.gov/otaq/climate/regulations/ldv-ghg-tar.pdf)).
- <sup>v</sup> “Environmental Protection Agency’s News Release on Notice of Intent for Proposed Rulemaking in Model Years 2017-2025 Light-duty Vehicles” October 2010 (<http://yosemite.epa.gov/opa/admpress.nsf/6424ac1caa800aab85257359003f5337/f130fbd4409e4978852577af005746ef!OpenDocument>). For more information on EPA transportation standards: <http://www.nhtsa.gov/fuel-economy>.
- <sup>vi</sup> “Saving Money at the Gas Pump: State-by-state consumer savings from stronger fuel efficiency and carbon pollution standards” September 2010( [http://docs.nrdc.org/energy/ene\\_10092301.asp](http://docs.nrdc.org/energy/ene_10092301.asp)).
- <sup>vii</sup> “CAFE – Fuel Economy” National Highway Traffic Safety Administration. October 2010. (<http://www.nhtsa.gov/fuel-economy>).
- <sup>viii</sup> “The Recovery Act: Transforming America’s Transportation Sector; Batteries and Electric Vehicles” Department of Energy. July 2010 (<http://www.whitehouse.gov/files/documents/Battery-and-Electric-Vehicle-Report-FINAL.pdf>).