



**Testimony of Greg Dotson**  
**Vice President for Energy Policy, Center for American Progress**  
**Hearing on “Examining Ways to Improve Vehicle and Roadway Safety”**  
**Subcommittee on Commerce, Manufacturing, and Trade**  
**Committee on Energy and Commerce**  
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Chairman Burgess, Ranking Member Schakowsky, and members of the subcommittee, thank you for the opportunity to testify today. My name is Greg Dotson, and I am Vice President for Energy Policy at the Center for American Progress, or CAP, a nonprofit think tank dedicated to improving the lives of Americans through progressive ideas and actions.

The auto manufacturing industry touches the lives of all of us. By the industry’s own account, it directly employs more than 1.5 million people, and, according to the Bureau of Economic Analysis, adds more than \$100 billion to the nation’s gross domestic product.<sup>1</sup> Many Americans rely on automakers’ products daily to get to work, to do their jobs, and to transport their families safely.

For these very reasons, the industry is regulated in a number of vitally important ways – to minimize the risk to passengers in the event of accidents, to maximize the safety of our roadways, to minimize our dependence on oil, and to prevent pollution from choking our communities. The result is that today’s vehicles have attributes once believed to be incompatible – they are safer, more efficient, and less polluting. The Obama Administration has put us on a path to continue and enhance this trend.

Today, I am going to focus my testimony on sections 502 and 503 of the discussion draft. These provisions would unfortunately take us in the wrong direction by promoting a false policy tradeoff. The principle behind these sections is that in order to encourage automakers to introduce advanced technology – some of which is safety related and some of which is not – Congress must allow them to pollute more. This will punch new loopholes into the Clean Air Act and undermine the efforts of federal and state governments to clean up pollution from vehicle tailpipes.

**Background: Recent Federal Action to Cut Greenhouse Gas Tailpipe Emissions**

To achieve the carbon pollution reductions we need to avert the worst impacts of climate change, the United States must continue to identify ways to make our cars and trucks cleaner and more efficient. The Obama Administration has demonstrated tremendous leadership in cutting pollution from the transportation sector.

In May 2010, the Environmental Protection Agency (EPA) and National Highway Transportation Safety Administration (NHTSA) issued greenhouse gas (GHG) emissions

standards and corporate average fuel economy standards for model years 2012 through 2016 for light-duty vehicles.<sup>2</sup> These were the first-ever national greenhouse gas emission standards issued under the Clean Air Act. On October 15, 2012, the EPA and NHTSA issued the second phase of these standards for model years 2017 through 2025.<sup>3</sup> At the time of the rulemaking, light-duty vehicles accounted for nearly 60 percent of U.S. transportation-related petroleum use and greenhouse gas emissions.<sup>4</sup>

These standards are the most important federal action ever taken to reduce greenhouse gas pollution from the transportation sector while making cars more fuel efficient for consumers. In model year 2025, the EPA estimates that the standards will achieve an average fleetwide level of 163 grams of carbon dioxide per mile, which is the equivalent of 54.5 miles per gallon if achieved through fuel economy improvements. Model year 2025 vehicles will emit one half of the greenhouse gas emissions of a model year 2010 vehicle. When combined, the standards for model years 2012-2016 and 2017-2025 will cut 6 billion metric tons of greenhouse gases over the lifetimes of the vehicles, which is more carbon dioxide than the United States released in 2010.<sup>5</sup>

Consumers also benefit at the gasoline pump. The combined standards are projected to save consumers more than \$1.7 trillion in fuel costs by 2025. Consumers who purchase a new model year 2025 vehicle will save more than \$8,000 at the gasoline pump over that vehicle's lifetime.<sup>6</sup>

The EPA greenhouse gas standards for light-duty vehicles are based on carbon emissions footprint curves; meaning, each vehicle must meet a different emissions compliance target adjusted for the footprint or size of the vehicle. For example, a vehicle with a model footprint of 40 square feet, such as today's Honda Fit, would have a 2025 emissions target of 131 grams per mile, whereas a vehicle with a model footprint of 67 square feet, such as today's Chevy Silverado pickup truck, would have a 2025 emissions target of 252 grams per mile.<sup>7</sup>

### **Concerns Raised by the Discussion Draft**

Sections 502 of the discussion draft gives automakers greenhouse gas "credits" for installing certain vehicle technology. Section 503 ensures that federal fuel economy requirements change to reflect the new, weaker emissions standards set under section 502.

If this bill becomes law, automakers will be allowed to emit more greenhouse gas emissions from vehicle tailpipes than allowed under current law. This bill suggests, falsely, that to ensure cars employ the latest in vehicle safety technology, we must concede the safety of our climate. Although this legislation is characterized as promoting safety, the Committee should be aware that this legislation also promotes technology that may not have any auto safety benefit.

### ***The Bill Undermines the Integrity of the Vehicle Emissions Reduction Program***

This bill allows automakers to emit more greenhouse gas pollution in exchange for installing certain vehicle technology. Specifically, section 502(a) provides a credit of "3 or more" grams

of carbon dioxide per mile to any light-duty vehicle, light-duty truck, or medium-duty passenger vehicle that is equipped with at least three advanced vehicle technologies. The bill also offers a credit of “6 or more” grams of carbon dioxide per mile to any vehicle that is equipped with connected vehicle technology.

Under this bill, a single vehicle could emit at least 9 grams per mile more pollution than allowed under current law. To put that figure in context, between the 2012 and 2013 model years, automakers reported reducing their fleetwide carbon dioxide emissions by 9 grams per mile. The credits contemplated by this bill could wipe out the tailpipe emissions reductions benefit of an entire year’s worth of technological development and deployment.<sup>8</sup>

I would like to note that the majority’s background memo for this bill suggests that the intent of this section is to provide “3 or more grams per mile for an advanced automotive technology;” meaning, each installed technology, rather than each vehicle, could earn the 3 gram per mile credit.<sup>9</sup> If the bill’s language is adjusted to be consistent with this policy, then credits would be offered of at least 9 grams per mile for advanced vehicle technologies and another 6 grams for connected vehicle technology. That would open a gaping loophole in the greenhouse gas emissions program and further erode the progress we have made in putting cleaner cars on the road.

Automakers already have the ability to apply to obtain greenhouse gas credits from so-called off-cycle technologies—that is, technologies that reduce emissions and lower fuel consumption on the road but may not demonstrate that benefit during emissions testing. For example, in September of this year, the EPA approved several automakers’ requests for off-cycle technology credits for high efficiency exterior lighting, air conditioning improvements, engine and transmission warm-up technologies, and others.<sup>10</sup> To earn these off-cycle credits, the automakers have to prove that the technology will actually reduce emissions. They must use modeling, on-road testing, or other approved analytical or engineering methods to demonstrate the emissions benefit over a wide range of driving conditions. Stakeholders also have an opportunity to provide comment on proposed credits.<sup>11</sup>

In contrast, the credits proposed by this bill are arbitrary and are not supported by adequate data. Instead, the bill creates a pathway for automakers to do an end run around the existing rigorous and transparent process.

An example may help to show how arbitrary the bill’s proposed credits are and how some automakers may choose to employ them.

During the EPA rulemaking for the 2017-2025 model year light-duty vehicle greenhouse gas emission standards, the auto manufacturer Daimler submitted comments saying that EPA and NHTSA “should provide ‘congestion mitigation credits based on crash avoidance technologies,’ because crash avoidance technologies can potentially reduce traffic congestion associated with motor vehicle collisions and thus, ‘similar to off-cycle technologies,’ provide ‘significant CO<sub>2</sub> and fuel consumption benefits.’”<sup>12</sup> Daimler suggested that a technology package of forward

collision warning and adaptive brake assist should receive a credit of 1.0 gram of carbon dioxide per mile. The company suggested adding a 0.5 gram credit for installing autonomous emergency braking and adaptive cruise control.<sup>13</sup>

Notably, the bill we are discussing today would offer a 3-gram credit for installing advanced vehicle technologies. The size of the credit contemplated by this bill does not appear rooted in evidence.

For its part, the EPA and Department of Transportation rejected Daimler's suggestions. The agencies note that the EPA offers off-cycle credits for technologies when "the amount of GHG emission reduction and fuel economy improvement attributable to the technology being credited can be reliably determined, and those improvements can be directly attributed to the improved fuel economy performance of the vehicle on which the technology is installed."<sup>14</sup> They acknowledged that preventing traffic accidents can reduce congestion and associated emissions but argued that it would be impossible to attribute emissions savings to one particular make and model of a vehicle to which the credit would be applied. The agencies stated that "credits should be available only for technologies providing real-world improvements" that are "verifiable" through a transparent process.<sup>15</sup> According to the agencies, "none of these factors would be satisfied for credits for these types of indirect technologies used for crash avoidance systems, safety-critical systems, or other technologies that may reduce the frequency of vehicle crashes."<sup>16</sup>

Daimler told the EPA that emissions of 6 grams of carbon dioxide per mile could be averted "if all accidents were avoided."<sup>17</sup> I think we can all agree that elimination of all traffic accidents is an unrealistic standard. But today's bill suggests that an automaker should receive a 6 gram per mile credit for installing just one connected vehicle technology.

### ***The Bill Opens the Door to Unlimited Loopholes***

The bill defines the qualifying technology quite broadly; in fact, the technology does not even have to provide any safety benefit to qualify for these greenhouse gas credits.

Section 503 of the bill provides a broad definition of the types of technology that could qualify as "advanced automotive technology," including any "vehicle information system, unit, device, or technology that meets any applicable performance metric and demonstrates crash avoidance or congestion mitigation benefits." Under this definition, for example, one could argue that a car equipped with GPS would qualify for the credit, as the GPS can help the driver avoid a traffic jam on the way to the grocery store. The EPA and Department of Transportation have stated quite clearly that it is nearly impossible to quantify the per-vehicle emissions reductions benefits of GPS and other "driver interactive technologies."<sup>18</sup> According to the agencies, these technologies "do not improve the fuel efficiency of the vehicle under any given operating condition."<sup>19</sup> Instead, these technologies provide drivers with information that may or may not be accurate, that drivers may or may not use, or that may or may not actually reduce emissions. The agencies specifically cite evidence that drivers most often use GPS and other navigations systems to find the shortest route to their destination, which may or may not be the route that is

the most fuel efficient or least polluting.<sup>20</sup>

The discussion draft also opens a window of opportunity for the Department of Transportation to significantly expand the type of technologies that qualify for these greenhouse gas credits. Section 503 of the bill states that any interested person can petition the Department of Transportation to promulgate a rule to add an advanced automotive technology to the definition. If the Department decides to expand the definition, the Transportation Secretary then has the authority to determine the appropriate level of greenhouse gas and fuel economy credits “necessary to incentivize the implementation of the additional advanced automotive technology.”

Again, this is incredibly broad and subjective and essentially gives the Transportation Secretary unlimited discretion to increase the number of credits to the extent necessary to “incentivize” automakers to install certain technology. Moreover, it has the effect of giving the Department of Transportation, rather than the EPA, the authority to determine how much pollution the nation’s cars will be allowed to emit.

On top of all of that, the amount of the credits offered to automakers can increase without bounds. Section 502(a) of the discussion draft directs the EPA Administrator to review the greenhouse gas credits every other year, starting in 2026, to determine whether to change the size of the credit. But the bill ties the Administrator’s hands by specifying that the credits must be “3 or more” and “6 or more” grams of carbon dioxide per mile. It appears the Administrator has authority under this bill to increase the credit and allow more pollution indefinitely but has no authority to reduce it or get rid of it entirely.

### ***The Bill Disregards the Leadership of the States***

Section 502(b) of the discussion draft threatens to upend the successful federal-state balance relating to vehicle tailpipe emissions that has worked to get cleaner, more efficient cars on the market.

The Clean Air Act preempts states from setting their own vehicle emission standards, with one important exception. The EPA can grant a waiver to California to allow it to establish its own vehicle emission standards if those standards are at least as stringent as federal standards and necessary to meet “compelling and extraordinary conditions.”<sup>21</sup> Section 502(b) of the discussion draft adds a condition for obtaining this waiver: applying the greenhouse gas emission credits “to the full extent.” Moreover, the discussion draft gives California only 30 days to revise its vehicle emissions standards should the Department of Transportation add another qualifying vehicle technology to the list of those generating credits. If California fails to meet that unfair and unrealistic timeline, the state loses its waiver and right to impose its own vehicle emissions standards.

California is not the only state affected by this provision. Under section 177 of the Clean Air Act, other states can adopt California’s vehicle emissions standards providing that “such standards are identical to the California standards for which a waiver has been granted.”<sup>22</sup> As a

result, states that have adopted the California standard would have to modify their state programs as well to match California's, assuming California was even able to modify it within the 30 day timeframe.

Interfering with the right of California and other states to exercise leadership in vehicle pollution control would have real-world consequences. California's pollution standards have helped drive development of technology that we see in cars on roads across the country. California's authority to set and enforce standards also played a key role in the discovery of the Volkswagen pollution scandal. It was the California Air Resources Board that launched the initial investigation into the company's alleged use of defeat devices to pass emissions tests.

### ***The Bill Offers Companies Credit for Actions Already Underway***

Sections 502 and 503 of the bill would give pollution credits to automakers to incentivize them to install technologies they already have committed to installing. For example, just last month, ten major vehicle manufacturers publicly committed to making automatic emergency braking a standard feature in all new vehicles.<sup>23</sup> It makes no sense to give these companies a permit to pollute more, especially in exchange for little to no real-world safety benefit.

### **Conclusion**

Under today's policy framework, state and federal regulators have the tools they need to make continued progress on safety, efficiency, and public health protection. Unfortunately, the legislation the Committee is considering today would upend this framework by curbing the important role of states and creating new loopholes in the Clean Air Act to allow more pollution.

### **End Notes**

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<sup>1</sup> U.S. Dept. of Commerce, Bureau of Economic Analysis (online at <http://www.bea.gov/iTable/iTable.cfm?ReqID=51&step=1#reqid=51&step=51&isuri=1&5114=a&5102=1>) (accessed on Oct. 19, 2015).

<sup>2</sup> U.S. Environmental Protection Agency and U.S. Department of Transportation, "Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule," 75 Fed. Reg. 25324-25725 (May 7, 2010).

<sup>3</sup> U.S. Environmental Protection Agency and U.S. Department of Transportation, "2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards; Final Rule," 77 Fed. Reg. 62624-63200 (October 15, 2012) (hereinafter "2017 Light-Duty Vehicle GHG Rule").

<sup>4</sup> U.S. Environmental Protection Agency, "Fact Sheet: EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks," August 2012, available at <http://www3.epa.gov/otaq/climate/documents/420f12051.pdf>.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> U.S. Environmental Protection Agency, "Greenhouse Gas Emission Standards for Light-Duty Vehicles" Manufacturer Performance Report for the 2013 Model Year," March 2015, p. 40, available at <http://www3.epa.gov/otaq/climate/documents/420r15008a.pdf>.

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<sup>9</sup> U.S. House of Representatives, Committee on Energy and Commerce, Memorandum to Members of the Subcommittee on Commerce, Trade, and Manufacturing (October 19, 2015), available at <http://docs.house.gov/meetings/IF/IF17/20151021/104070/HHRG-114-IF17-20151021-SD002.pdf>.

<sup>10</sup> U.S. Environmental Protection Agency, “EPA Decision Document: Off-cycle Credits for Fiat, Chrysler Automobiles, Ford Motor Company, and General Motors Corporation” (September 2015).

<sup>11</sup> Ibid.

<sup>12</sup> 2017 Light-Duty Vehicle GHG Rule at 62732.

<sup>13</sup> 2017 Light-Duty Vehicle GHG Rule at 62732.

<sup>14</sup> 2017 Light-Duty Vehicle GHG Rule at 62733.

<sup>15</sup> 2017 Light-Duty Vehicle GHG Rule at 62733.

<sup>16</sup> 2017 Light-Duty Vehicle GHG Rule at 62733.

<sup>17</sup> 2017 Light-Duty Vehicle GHG Rule at 62732.

<sup>18</sup> 2017 Light-Duty Vehicle GHG Rule at 62734.

<sup>19</sup> 2017 Light-Duty Vehicle GHG Rule at 62734.

<sup>20</sup> 2017 Light-Duty Vehicle GHG Rule at 62734.

<sup>21</sup> 42 U.S. Code § 7543.

<sup>22</sup> 42 U.S. Code § 7507.

<sup>23</sup> National Highway Traffic Safety Administration, “DOT and IIHS announce historic commitment from 10 automakers to include automatic emergency braking on all new vehicles,” press release, September 11, 2015, available at <http://www.nhtsa.gov/About+NHTSA/Press+Releases/nhtsa-iihs-commitment-on-aeb-09112015>.