



# 5 Ways the Obama Administration Revived the Auto Industry by Reducing Oil Use

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The Obama administration today promulgated fuel-economy and carbon-pollution limits for 2017 to 2025 model cars. These essential standards will reduce oil use, save families money from lower gasoline purchases, create jobs, and reduce emissions responsible for climate change.

Under these new standards U.S. companies will produce vehicles that employ modern fuel-saving technologies and ensure that their cars remain competitive with foreign models during future oil and gasoline price shocks. Recent events reemphasize the importance of reducing dependence on oil with its volatile price. Gasoline prices are rising again due to supply concerns related to sanctions on Iranian oil. In addition, the anticipation of economic growth that increases demand could enable speculators to bid up oil prices.<sup>1</sup>

The new fuel-economy standards are one of several actions the Obama administration has taken to revive and strengthen the U.S. auto industry. The most prominent, of course, was the bridge loans granted to General Motors and Chrysler in March 2009 that enabled them to remain in business long enough to restructure, begin to innovate again, and return back to profitability.

One of the bailout stipulations was that the companies had to develop aggressive plans to return to viability by reducing costs and investing in energy-efficient cars. Both companies agreed to move toward a more fuel-efficient fleet.<sup>2</sup> In a March 2009 press statement President Barack Obama described the bailout as a restructuring process that would create “a 21st century auto industry that is creating new jobs, unleashing new prosperity, and manufacturing the fuel-efficient cars and trucks that will carry us towards an energy-independent future.”<sup>3</sup>

Because credit markets were frozen and the two companies were teetering on bankruptcy, no private lender would have come to their rescue. Rep. Fred Upton (R-MI) noted that:

*There was no one that could have picked up those pieces other than the federal government.*<sup>4</sup>

In a just-published book, *The New New Deal*, *Time* magazine reporter Michael Grunwald concluded that the auto-assistance program saved GM and Chrysler and prevented these two companies from dragging down the rest of the U.S. industry, particularly suppliers. He determined that:

*His [Obama's] overhaul of the auto industry would become a stunning success, minimizing taxpayer losses, avoiding erasure of countless jobs, and restoring the Big Three [Ford, GM, and Chrysler] to profitability.*<sup>5</sup>

In addition to the successful bridge loans there are five other major Obama administration policies that helped the auto industry and the nation by creating jobs, reducing oil use, saving families money, and cutting pollution:

- Fuel-economy and carbon-pollution standards for 2012 to 2016 model cars sparked job growth in automobile manufacturing and increased automobile sales.
- Fuel-economy and carbon-pollution standards for 2017 to 2025 model cars will double their fuel economy and reduce oil use by 2 million barrels per day.
- The Recovery Act invested in fuel-efficient vehicle research and development to spur job growth and increase international competitiveness.
- Federal loans helped convert factories to the production of fuel-efficient vehicles.
- The “Cash for Clunkers” program increased vehicle efficiency and helped save the auto industry by jump starting demand during the depths of the Great Recession.

We review these below.

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### 1. Fuel-economy and carbon-pollution standards for 2012 to 2016 model cars sparked job growth in automobile manufacturing and increased automobile sales

In May 2010 President Obama finalized new, modern fuel-economy standards for the first time in two decades. Working with U.S. and foreign auto companies, the United Auto Workers, states, and other stakeholders, the administration developed a plan to improve fuel economy to 34.5 miles per gallon for model year 2016 vehicles. Implementation of these standards are one of the reasons that U.S. oil use and imports are lower.

U.S. gasoline consumption in the first three months of 2012 was down 124,000 barrels of oil per day compared with this time last year. The Energy Information Administration cites the improvements in fuel efficiency as one of these reasons, noting the standards “help reduce gasoline consumption, as more efficient vehicles use less fuel for each mile driven.”<sup>6</sup>

A 21st century auto industry that is creating new jobs, unleashing new prosperity, and manufacturing the fuel-efficient cars and trucks that will carry us towards an energy-independent future.

—President Barack Obama

A new report sponsored by the Natural Resources Defense Council, the National Wildlife Federation, and the Michigan League of Conservation Voters, “How Fuel Efficiency is Driving Growth in the U.S. Auto Industry,” found that a renewed focus on fuel efficiency also plays a critical role in reviving the auto industry.<sup>7</sup>

Model year 2012 is the first year that automakers are required to implement the new standards, but they began improving fuel economy before the standards took effect. Within the past year (2011-2012 year to date) fuel economy increased by 1.1 miles per gallon. Auto companies added jobs while they worked to comply with the fuel-efficiency standards. In fact, the auto industry added over a quarter-million jobs—236,000—since 2009.

These stronger standards—first adopted in a bipartisan law passed by Congress and signed by President George W. Bush in 2007—provide certainty for automakers and suppliers, allowing them to invest in the technologies necessary to reach fuel-economy standards.

But job creation isn’t the only positive auto industry trend. Reuters reported that auto sales “have been one of the bright spots of the U.S. economy” over the past several months.<sup>8</sup> Baum and Associates’ recent fuel economy analysis found “sales increasing at a greater rate than the economy.”<sup>9</sup> The “seasonally adjusted annual rate” for July was 14.1 million units, up from 1.7 million from this time last year.<sup>10</sup> GM’s plug-in hybrid Chevy Volt sold 1,849 new models in July, bringing their year-to-date sales over 10,000.<sup>11</sup> Volt sales this year jumped 272 percent compared to the sales during the first seven months of 2011.<sup>12</sup>

Automotive News reported that new fuel-efficient vehicles are the key drivers of the 2012 increase in sales:<sup>13</sup>

*The changeover to high-mpg [miles per gallon] models, in all segments is the key market driver this year. Dealers say it has been the release valve on pent-up demand as fuel prices soared.*

The first phase of improved standards has helped the U.S. economy grow through increased vehicle sales. Dramatic fuel-cost savings make vehicles with high gas mileage more appealing, particularly when gasoline prices are high as they have been in 2011 and 2012.

These standards will help protect drivers from the impact of volatile gasoline prices on their budget. For instance, steep prices this winter were followed by a significant decline, with a subsequent uptick in prices occurring now. Higher fuel efficiency will shield consumers from these unpredictable gasoline price shifts.

A May 2012 poll by *Consumer Reports* found that fuel efficiency is the number one concern for prospective automobile buyers:<sup>14</sup>

*When it comes time to shop for their next new car, 37 percent of survey respondents said fuel economy is the leading consideration, trumping other important factors including quality, safety, and value.*

In response to the new standards and higher prices, the number of available fuel-efficient models doubled over the past few years, which has dramatically increased sales just in the past year. According to Baum and Associates, the “number of popular nameplates [models] with improved efficiency” available on the market has jumped from 28 models in 2009 to 60 models in 2012–2013. This increase has helped fuel-efficient models capture a higher percentage of the vehicle market.

Unlike past gains in fuel economy, this improvement is not driven by an increase in the purchase of smaller cars. Instead Baum found that:

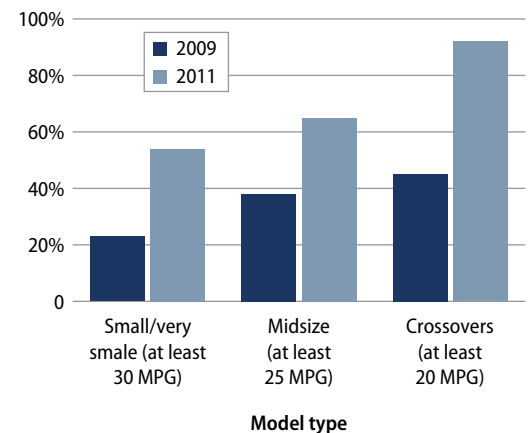
*The increase in fuel economy is not primarily driven by an increase in small car sales. This year, consumers have more choices across the product spectrum to obtain higher fuel efficiency.*

Companies are meeting fuel-economy standards using varying techniques. Ford is focused on the EcoBoost, an engine with direct fuel-injection technology that provides up to 20 percent better fuel economy.<sup>15</sup> Chrysler has added forward gears to its transmissions, which slows down the engines to consume less fuel.<sup>16</sup> On the other hand, Toyota has found great success in its hybrid models, such as the Prius.<sup>17</sup>

The fuel-efficiency rules are generally flexible enough so that companies can meet targets in a variety of ways. These approaches provide consumers with a number of options to suit their specific needs.

### Cars that get more miles to the gallon are capturing more of the market

Increase in high-mileage vehicle sales as a percentage of total vehicle sales in 2009 and 2011, by category



Source: Data provided by Baum and Associates

## 2. The final fuel-economy and carbon-pollution standards for 2017 to 2025 model cars will double their fuel economy and reduce oil use by 2 million barrels per day

The new round of fuel-efficiency standards, for models sold between 2017 and 2025, will increase fuel efficiency to 54.5 mpg by 2025, building upon the first round of standards finalized in 2010. These were developed in close consultation with U.S. and most foreign auto companies, the United Auto Workers, states, and other stakeholders.

The National Highway Transportation Safety Administration estimates that the new standards will save approximately 4 billion barrels of oil and 2 billion metric tons of carbon pollution over the lifetime of new vehicles sold between 2017 and 2025.

The typical driver will experience up to \$4,400 in net savings from lower gasoline bills over the lifetime of their vehicle compared to a 2010 car. And this assumes that increasingly unpredictable gasoline prices remain at current levels.<sup>18</sup> The savings will increase with higher gasoline prices.

The two rounds of standards combined will save 3.1 million barrels of oil per day in 2030.<sup>19</sup> That's equal to the amount of oil we currently import from the Persian Gulf, Colombia, and Venezuela.<sup>20</sup> Combined standards will also cut carbon pollution by 10 percent.

The new standards will also increase U.S. manufacturing jobs by 570,000 by 2030, according to an analysis by the BlueGreen Alliance.<sup>21</sup>

In addition to more than a half a million new jobs, the BlueGreen Alliance also estimates that the new standards will lead to a net increase of \$75 billion in gross domestic product due to investments in new fuel-economy technologies, steadier car sales, and the reduction in money sent to other nations to buy oil.

The National Highway Traffic Safety Administration concludes that new standards will further help save billions of dollars in health costs due to tailpipe pollution reductions that will significantly cut soot and smog pollution. These cost savings have huge implications for the U.S. economy.<sup>22</sup>

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### 3. The Recovery Act invested in fuel-efficient vehicle research and development to spur job growth and increase international competitiveness

In 2009 the United States produced just 2 percent of the advanced vehicle batteries made worldwide. Advanced batteries are essential for advanced clean vehicles that domestic and foreign auto companies produce. The batteries are also used for a variety of clean-energy industries and smart-grid storage.

That same year, as a part of the American Recovery and Reinvestment Act, the federal government provided \$2.4 billion for increased advanced battery manufacturing.<sup>23</sup> These investments created tens of thousands of jobs and the Department of Energy estimates that the U.S. share of worldwide advanced battery production could reach 40 percent by 2016.<sup>24</sup>

The Department of Energy recently announced two new innovative projects that should also reap similar benefits. On August 2 the Advanced Research Projects Agency-Energy program announced that it would invest a total of \$43 million for 19 new R&D projects.<sup>25</sup> They plan to improve existing batteries, helping to “reduce costs and improve the performance of next generation storage technologies, which could be applied to both plug-in electric and hybrid electric vehicles.”

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This research should foster technological breakthroughs to increase the affordability and reliability of electric vehicles. Success would increase demand by drivers for electric vehicles, and increase manufacturing jobs too.

Arun Majumdar, the former head of the Advanced Research Projects Agency-Energy, told *The New York Times* that whichever country figures out how to lead in the production of lithium-ion batteries will be well-positioned to capture “a large piece of the world’s future economic prosperity.”<sup>26</sup> The batteries, he stressed, are essential to the future of the global transportation business and a variety of clean energy industries.

On August 13 another Department of Energy project was announced to accelerate the development and deployment of lighter materials for cars and trucks.<sup>27</sup> A part of the Materials Genome Initiative, awards to laboratories and companies to develop lighter materials could increase vehicle efficiency, saving drivers money at the pump. According to the Department of Energy, “Reducing a vehicle’s weight by just 10 percent can improve the fuel economy by 5 to 8 percent.”

Despite these gains, congressional action is essential to help increase the deployment of plug-in hybrid and electric vehicles. These cars, while growing in popularity, lack the public availability of recharging infrastructure to increase their desirability. Without such infrastructure, demand growth is limited and some advanced battery companies have struggled recently. As with other emerging advanced technologies, driving market demand certainty for the product would help provide these companies with more confidence.

Both the Senate and House plan to install public recharging stations for electric vehicles driven by legislators and their staff.<sup>28</sup> Americans should have the same access to such recharging infrastructure. There is bipartisan legislation in Congress that would help increase demand for plug-in hybrid and electric vehicles that use advanced batteries by establishing a “race to the top” for communities to receive federal investment to develop public recharging infrastructure. This would increase accessibility for drivers and therefore the attractiveness of these vehicles. The bills are sponsored by Sens. Lamar Alexander (R-TN) and Jeff Merkley (D-OR), and Reps. Judy Biggert (R-IL) and Ed Markey (D-MA).<sup>29</sup>

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#### 4. Federal loans helped convert factories to the production of fuel-efficient vehicles

In 2007 Congress passed and President Bush signed into law the Advanced Technology Vehicles Manufacturing program.<sup>30</sup> It provides direct loans to auto companies to convert their factories to the production of fuel-efficient vehicles and associated components such as advanced batteries.

The Obama administration has distributed loans to five U.S. companies to fund 20 different projects. These projects will lead to almost 40,000 jobs in 11 states.<sup>31</sup> These loans also help leverage private capital to produce energy-efficient vehicles at a time when many private investors aren't putting as much money into the auto industry.

Ford, the second-largest U.S. auto company and one of the loan recipients, spent \$135 million to produce parts for its new wave of electric vehicles, Reuters reported on August 15.<sup>32</sup> These efforts include promises to double battery testing capability by next year.

Ford's ability to use parts from a Detroit-based plant, instead of its previous Japanese supplier, "allowed Ford to shave 20 percent from development costs, partly by saving on shipping and component costs." The company said that its hybrid system now costs "30 percent less than the previous version."

Supply-chain changes like this have significant impacts on profitability and job creation.

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## 5. The "Cash for Clunkers" program increased vehicle fuel efficiency and helped save the auto industry

The Obama administration's 2009 "Cash for Clunkers" program provided incentives for drivers to trade in their old gas-guzzling vehicles for new, fuel efficient models. This Department of Transportation program simultaneously lifted sales of new cars and reduced gasoline use and pollution, resulting in a dual benefit for the economy and the environment. The Department of Transportation reported that the program created or saved 42,000 auto-industry-related jobs in the second half of 2009.<sup>32</sup>

This program jumpstarted auto sales during the depths of the Great Recession. Ford's retail sales increased by 9 percent compared to the previous year, the first positive growth it had seen since 2007.<sup>34</sup> Ford hybrid sales grew 323 percent. In fact, Ford recognized that it was this program that "enabled" its growth.

Although less positive than Ford, both Chrysler and GM saw their sales boosted by the program.<sup>35</sup> Hyundai said that the program represented almost a quarter of their sales during one month of the program.

The program helped the liquidity problem characteristic of recessions by encouraging customers to spend money. In fact, almost \$15 billion in private spending and more than \$17 billion of economic activity can be directly attributed to the program.<sup>36</sup> Cash-strapped state governments earned \$875 million in sales-tax revenue.

With this economic benefit came an equally important energy-security benefit. The program resulted in a 61 percent fuel-efficiency improvement from the cars traded in



compared to the new cars purchased, which means gasoline use was 72 million gallons less annually. The health benefits of reducing carbon dioxide and other pollutants from “Cash for Clunkers” were estimated at \$330 million.<sup>37</sup>

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## Conclusion

The Obama administration’s successful efforts to revive General Motors, Chrysler, and the rest of the auto industry benefited the nation’s economy as a whole, but particularly in Indiana, Michigan, and Ohio. These three states added over 60,000 auto industry jobs since 2009.<sup>38</sup>

The first and second phases of modern fuel-economy standards are critical elements of this revival and they will significantly reduce our dependency on oil. Oil imports cost the United States an estimated \$450 billion in 2011.<sup>39</sup> Even though imports are dropping thanks to fuel efficiency and other innovative developments, we must continue to reduce our dependence on oil and invest in cleaner, more secure fuel options.

Lt. Gen. Richard Zilmer, a former U.S. Marine Corps member, told *The Detroit Free Press*:

*We send a billion dollars a day to other countries for oil, and some of the money ends up in the pockets of unfriendly regimes, and even finances terrorism. By boosting fuel economy for passenger cars and trucks to an average of 54.5 miles per gallon by the year 2025, the new national standard will keep more American dollars working here at home.*<sup>40</sup>

To continue increasing our energy independence, cut emissions, and strengthen national security, we must continue government support for fuel efficiency and for innovative vehicles.

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*Thanks to Alan Baum of Baum and Associates, an independent auto industry analyst and Susannah Marshall, former intern with the Center for American Progress.*



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