Union of Concerned Scientists

Protecting California Consumers at the Gas Pump

CLEAN CAR STANDARDS HELP PROTECT CONSUMERS FROM RISING GAS PRICES

The recent spike in oil prices and the ongoing turmoil in the Middle East are vivid reminders of America's continued dependence on oil. While options for short-term relief from high pump prices are limited, we can protect ourselves from future oil price spikes.

The California Air Resources Board (ARB), the U.S. Environmental Protection Agency (EPA), and the U.S. Department of Transportation (DOT) are considering standards that would cut new vehicle global warming emissions up to 60 percent versus the typical vehicle on the road today (45 percent versus the average new vehicle in 2016 under existing standards). These standards are essential for meeting California's climate change goals since the transportation sector accounts for more than one third of the state's global warming emissions. In addition, these standards would deliver the added benefit of significantly lowering the fuel consumption of our vehicles, delivering cost savings at the pump and reducing our nation's oil dependency.

Strong Clean Car Standards Protect Californians from Spiking Gas Prices

Spiking gas prices hit Americans directly in the pocket book. The typical vehicles on the road today average 26 miles per gallon (mpg) on government tests (21 mpg on the road) and will consume 7,000 gallons of fuel over their life. A clean car standard that delivered a 60 percent reduction in global warming emissions could be met in part by new vehicles that average about 60 mpg on government tests (about 40 mpg on road). These vehicles would save their owners $8,900 over the life of the vehicle at a gas price of $4 per gallon, even after paying for the additional cost of the cleaner technology. That's the equivalent of a gasoline price cut of more than a $1.30 per gallon compared to filling up today's vehicles.[1]

Savings FromStrong Clean Car Standards

Fuel Price ($/gal)	Net Consumer Savings	Payback (years)	$ per gallon savings
$3.50	$7,500	4.0	$1.10
$4.00	$8,900	3.5	$1.30
$5.00	$11,600	3.0	$1.70

Note: Based on a 60 percent reduction in global warming emissions from today's on-road fleet average.

If gas prices rise to $5 per gallon, consumers would see a net savings of more than $11,500, the equivalent of a gasoline price cut of at least $1.70 per gallon compared to filling up today's vehicles.

Savings as Soon as You Drive Off the Lot

You may have heard before, "you need to spend money to save money" and it's true that reducing the global warming emissions from our cars by 60 percent will increase the price of a vehicle. However, the fuel savings vastly outweigh the additional costs. At $4 per gallon, consumers would recoup their investment in about 3.5 years.

For many consumers, the savings can happen as soon as they drive off the lot. Consumers often take out a loan to finance their vehicle purchase rather than paying the full price of the vehicle up front. A vehicle meeting a strong clean car standard would increase a car buyer's monthly payment compared to today's average new vehicle, but the monthly fuel savings would more than offset the additional cost. After the loan is paid, the extra fuel savings will go right in to the consumer's pocket.[2]

Strong vehicle standards that cut global warming emissions are critical to meeting California's climate change goals offer consumers the best protection against future gas price spikes.

[1] Fuel savings calculation based on the following assumptions: base vehicle fuel economy of 26 mpg on government tests and 21 mpg during actual operation with lifetime mileage of more than 170,000 miles. The strongest standard under consideration would achieve a 60 percent reduction in global warming emissions compared to today. Vehicles could meet this standard in part by achieving a fuel economy average of about 56 mpg on government tests, or about 40 mpg during actual operation. Under the new standards, additional improvements to air conditioning systems and the use of alternative fuels such as electricity also would be required. Future fuel costs and savings are discounted at an annual rate of 3% and a 10% rebound effect is used for mileage under increased fuel economy.

[2] Assumes a 5-year loan at a 5% interest rate and an average incremental cost of $3,400 compared to today's vehicles and $2,400 compared to a vehicle meeting the 2016 standards. Incremental cost includes sales tax of 5.3% and a 2% incremental insurance premium.

The Union of Concerned Scientists is the leading science-based nonprofit working for a healthy environment and a safer world.

Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions

National Headquarters
Two Brattle Square
Cambridge, MA 02138-3780
Phone: (617) 547-5552
Fax: (617) 864-9405

West Coast Office
2397 Shattuck Ave., Ste. 203
Berkeley, CA 94704-1567
Phone: (510) 843-1872
Fax: (510) 843-3785