

The Florida Clean Car Emission Rule Will Reduce Greenhouse Gases from Cars and Trucks

Why does Florida need rules to reduce greenhouse gas emissions from cars and trucks?

Greenhouse gases (GHG), primarily carbon dioxide (CO₂), impact global climate change, which is one of the most important issues facing Florida this century. Florida has outlined aggressive goals for reducing greenhouse gas emissions. To help Florida meet its goals, Governor Crist's Executive Order 07-127 required the adoption of the California motor vehicle emission standards for GHG. These rules will reduce GHG emissions from cars and trucks by the maximum amount allowed under federal law. Regulating cars and trucks is important, because about 27 percent of Florida's GHG come from passenger cars and light-duty trucks. (Transportation as a whole represents about 40 percent of Florida's total, second only to the electric utility sector.)

Why adopt California's rules instead of enacting our own?

To avoid a state-to-state patchwork of regulations, the Clean Air Act forbids every state (except California) from enacting emission limits for new motor vehicles. Section 177 of the Clean Air Act, however, allows other states to adopt standards identical to those in California.

Why not just rely on federal rules?

There are currently no federal regulations to reduce GHG emissions from new motor vehicles. The U.S. Environmental Protection Agency is considering whether to take action regarding GHG, and the National Highway Traffic Safety Administration has proposed Corporate Average Fuel Economy (CAFE) standards that would achieve GHG reductions, indirectly, through raising the federal standard for minimum miles per gallon (mpg). Once enacted, the CAFE standards will apply in Florida. But CAFE plus the California GHG rules will result in greater GHG reductions compared to relying on the federal CAFE rules alone.

Will the California GHG rules solve Florida's GHG problem?

Governor Crist is committed to making Florida a leader in addressing the climate change threat. This will require action on multiple fronts; the final Phase II report from the Governor's Action Team on Energy and Climate Change identified 50 recommended actions. Many of these actions will have relatively small incremental benefits by themselves but, taken together, they will add up to a substantial reduction in Florida's GHG emissions. And, like many other initiatives to reduce GHG, the additional reductions obtained through the California GHG rules, though modest on a year-to-year basis, will accumulate over time to reduce the rate of CO₂ build-up in the atmosphere.

What will this rule cost Floridians?

This particular action will save money for Florida's consumers. New vehicles in the future, to meet the CAFE and GHG rules, will necessarily have higher mpg. The fuel savings from new, more fuel-efficient cars and trucks will offset the expected increases in vehicle purchase price. As manufacturers pass along the costs of implementing new technologies, new vehicles may initially cost more under CAFE—and they may cost incrementally more under CAFE plus the GHG rules.

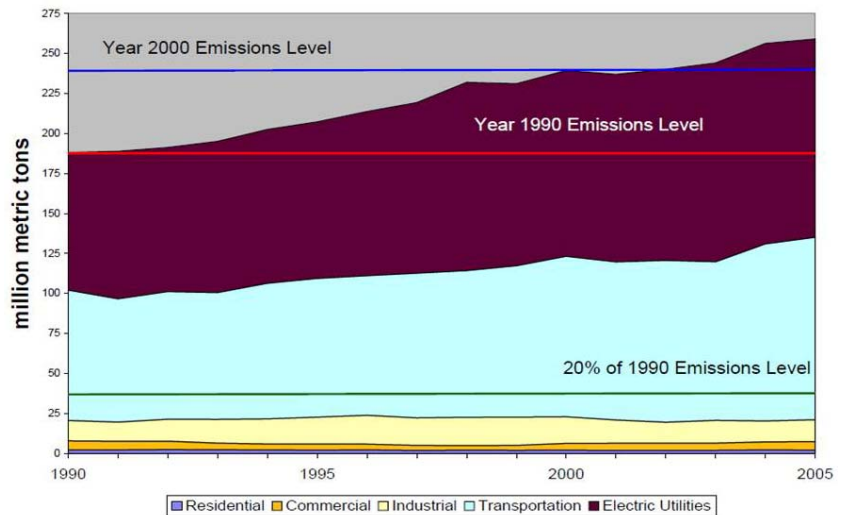
Florida's consumers should experience a net savings, because the greenhouse gas rule is based on expanding the use of existing, cost-effective technologies, like continuously variable transmission, low-rolling-resistance tires, aerodynamic improvements, and cylinder deactivation. The rules do not assume widespread availability of more esoteric and expensive technologies like battery electric or fuel cell vehicles.

These technologies are not only cost-effective, but also currently available, and they can yield cars and trucks that match current performance (acceleration, towing capacity, passenger seating) but use less fuel. Fuel savings will offset the initial investment, with a payback period estimated to be between one and three years. The payback period could be longer or shorter depending on the price of fuel and on the actual cost of the technologies.

Why is this rule coming before the Florida Legislature for ratification?

As per the 2008 Energy Bill, Section 316.2937, F.S., now provides that if the Department of Environmental Protection (DEP) adopts the California GHG rules for new motor vehicles, those rules must be ratified by the Florida Legislature before going into effect. Additionally, when DEP adopts any future modifications to the California GHG rules, the Florida Legislature will likewise have to ratify the modifications before they become effective.

Florida Greenhouse Gas Emissions



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Are the rules set at realistic levels?

The California Air Resources Board has been evaluating vehicle technology and setting standards for cars and trucks since the mid-1960s. The California standards have been proven time and time again to be set at achievable levels. The new GHG rules, like California's past emission standards, phase-in over time and are based on projections of gradually increasing availability of newer technologies.

The standard setting process in California is performed by reasonable experts setting reasonable rules; the underlying analysis is transparent and the supporting data is publicly available. The California GHG rules contain much flexibility, and they recognize the inherent difference between cars and trucks. There is one GHG standard for passenger cars, and a separate, less stringent standard for light-duty trucks. This means that trucks will not have to be as fuel efficient as passenger cars, so manufacturers

should not be forced by the rules to limit truck availability.

In addition, California finalized the standards in 2005. Given the built in lead time and phase-in period, the first subject model year was to have been 2009.

Examining current model year 2009 vehicles, it appears that California did a good job in 2005 when anticipating what vehicles would be capable of achieving in 2009. For example, of the 140 model year 2009 pickup trucks and listed on the U.S. Environmental Protection Agency's web page, there are 62 models (44%) with CO₂ emissions below the target for 2009. Another 46 models (33%) are less than 6 percent over the 2009 target. Since the targets are fleet averages, not requirements for individual vehicles, DEP remains convinced that the GHG rules are set at realistic, achievable emission control levels that can be met without limiting truck availability.

Ford F-150 Redesigned for 2009

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| <ul style="list-style-type: none">• 2008 models<ul style="list-style-type: none">• MSRP: \$17,900 - \$40,205• Invoice: \$16,818 - \$36,203• Engines:<ul style="list-style-type: none">• 4.2L V-6 202 HP• 4.6L V-8 248 HP• 5.4L V-8 300 HP• Miles Per Gallon<ul style="list-style-type: none">• City: 13 MPG - 14 MPG• Highway: 17 MPG - 20 MPG | <ul style="list-style-type: none">• 2009 models<ul style="list-style-type: none">• MSRP: \$21,095 - \$38,290• Invoice: \$19,633 - \$34,428• Engines:<ul style="list-style-type: none">• 4.6L V-8 248 HP• 4.6L V-8 292 HP• 5.4L V-8 310 HP• Miles Per Gallon<ul style="list-style-type: none">• City: 14 MPG - 15 MPG• Highway: 18 MPG - 20 MPG• "Average 8% improvement" |
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When would the rules take effect?

California is still involved in the process of obtaining a "waiver" from the U.S. Environmental Protection Agency. The waiver, if and when it is granted, will allow California to begin enforcing the rules. In Florida, the rules will not be effective unless and until the U.S. Environmental Protection Agency grants the waiver to California. In addition, the Florida Legislature must ratify Florida's adoption of the California GHG rules before they become effective. To provide lead time for manufacturers, the rules will not be effective for a full two model years following their adoption. Given the various activities that must occur, this means the rules will first be effective in Florida no sooner than the 2013 model year.

Summary

To summarize, every million tons of GHG that we can eliminate counts towards meeting the state's ambitious goals. We have to address every significant sector, and adopting the California rules is the only option federal law provides for going after additional GHG reductions from new cars and trucks. CAFE plus the GHG rules will result in a net savings for Florida consumers, and it is important to focus on GHG projects with a net negative cost per ton of reduction. Adopting the GHG rules adds an environmental standard to the fuel economy standard inherent in CAFE, and, in doing so, achieves incremental GHG benefits, saves Floridians money, maintains current truck availability, and promotes ethanol and Florida's agricultural sector.

The following page lists these and other reasons to ratify the GHG standards for cars and trucks, and it provides responses to some common objections and detractions.

For additional information, visit the DEP web page:

<http://www.dep.state.fl.us/air/rules/ghg/california.htm>

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Reasons to Ratify the Greenhouse Gas Standards for Cars and Trucks

Supplements national CAFE mpg standard

New federal fuel economy standards (CAFE) will raise the average mpg for cars and trucks in the future, which will make it easier for industry to comply with the GHG rules.

Achieves greater greenhouse gas reduction

The GHG rules go beyond the new CAFE standards; they will achieve an incremental GHG benefit over the federal standards.

Achieves maximum greenhouse gas reduction

Implementing the California GHG rules will achieve the most GHG reductions allowed by federal law. Federal law prohibits Florida (and every state other than California) from creating its own, more stringent rule to regulate emissions from new cars and trucks. States can, however, adopt standards that are identical to those in California.

Saves money for Florida's drivers

To reduce CO₂ from cars and trucks, manufacturers must primarily increase mpg; new vehicles will therefore use less fuel and be cheaper to operate.

Has a negative cost per ton of greenhouse gas reduction

Vehicle prices may increase, but owners are expected to save \$1000 to \$2300 over the lifetime of a vehicle that complies with the new CAFE rules plus the GHG rules. Most of the price increase is expected to be driven by CAFE, not by the incremental addition of the GHG rules. Regardless, the payback period on the initial price increase will be one to three years, depending on the price of fuel and the costs of implementing new technologies.

Improves vehicle choice for Florida's drivers

The new technologies to meet the rule are currently available and cost-effective; new options for cars and trucks will get better mpg and match current performance (in areas like acceleration, towing capacity, and passenger seating).

Promotes production and use of ethanol

The California GHG rules provide credit for vehicles that actually use E85; again, this supplements the federal CAFE rules, which provide a credit only for producing flex fuel vehicles (FFV). Florida is committed to increasing ethanol through investments in commercial cellulosic production, and the GHG rules are consistent with this commitment.

Applies to passenger cars and light-duty trucks only

Heavier trucks (comparable to the Ford F-250 class or larger) are exempt from the GHG rules, as are emergency vehicles, ambulances, kit cars, etc.

Applies to new passenger cars and light-duty trucks only

The GHG rules apply only to new cars and trucks; the rules will not involve the re-introduction of vehicle emissions testing in Florida.

Applies to vehicle manufacturers only

The GHG rules apply to manufacturers and require that cars and trucks delivered to Florida for sale, lease, or rent meet certain emission standards, included limits on GHG emissions; compliance is determined through manufacturer reporting. The rules will not be enforced at the consumer or dealer level.

Does not impact vehicle titling or registration

DEP, manufacturers, and dealers believe the program can be implemented without a vehicle titling or registration component. DEP will discuss compliance options with the Department of Highway Safety and Motor Vehicles.

For additional information, visit the DEP web page:

<http://www.dep.state.fl.us/air/rules/ghg/california.htm>

CAFE—corporate average fuel economy

CO₂—carbon dioxide, the predominant GHG

DEP—Department of Environmental Protection

E85—blend of gasoline with 85 percent ethanol

FFV—flex fuel vehicle, one capable of using E85

GHG—greenhouse gas

mpg—miles per gallon (fuel economy)

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Responses to Common Objections and Detractions

Florida is ceding its rulemaking authority to California

This is simply not true—as per Section 316.2937, F.S., the final decision on whether to implement the California GHG rules resides with the Florida Legislature.

Florida will be held hostage to the California rules

The California rules change over time, as do many of the federal rules that DEP adopts by reference; DEP will monitor and comment on the California rules, but the Florida Legislature will ultimately decide whether to stick with the California program as it changes in the future.

Industry prefers a single, national standard

Federal law provides for one of two emission control programs, either the federal or the California program. Only the California program contains limits on GHG emissions from new cars and trucks. Taken together, the states that have implemented or plan to implement the California rules, including Florida, account for more than 40 percent of the national market, so manufacturers may end up choosing to meet California standards fleet wide.

New CAFE will be as good as the greenhouse gas rules

The new CAFE rules will apply in Florida regardless, but they will regulate fuel economy (mpg), not GHG; if CAFE plus the California GHG rules were in place in Florida, there would be an incremental benefit in terms of GHG reductions.

Greenhouse gas reductions will be insignificant

The final Phase II report from the Governor's Action Team on Energy and Climate Change identified 50 separate recommendations to address GHG emissions, and none of them solves the problem individually. The GHG reductions achieved from the California rule are important because every timely reduction is important, because it is the maximum reduction Florida can achieve from new cars and trucks, and because it is one of the recommendations that will save Floridians money (negative cost per ton of reduction).

Vehicle costs will increase by \$3000, \$4000, \$6000, or more

Based on reviewing several studies, DEP believes the cost increases will be less than \$2000 in the mid-term (and less than \$1000 in the near-term). And, if nationwide CAFE standards are finalized at levels similar to the proposal, the incremental cost of also meeting Florida's Clean Car Emission Rule will be much less than the above, perhaps as low as zero for many makes and models.

Florida dealers will lose sales to Alabama and Georgia

Cross-border impacts will only occur if there is a price differential for models in demand that is sufficient to shift consumer purchases to one side or the other of the state border. This assumes that manufacturers will produce and market two versions of the same model. If there is not a large price differential, there will be a reduced impact. Given that most of the technologies available to reduce GHG emissions are integral to the vehicle's drive, it is not clear that manufacturers will elect to produce two versions of the same model.

Averaging only those vehicles delivered to Florida makes compliance more difficult

Without being able to average vehicles across the entire nation, industry has noted that they may have difficulty meeting the standards; DEP is responding by working with industry to determine initial credits at phase-in, by providing adequate lead-in time (the rules will not be implemented until the model year 2013), and by noting that the GHG rule is extremely flexible and has many compliance options.

Manufacturers will have to limit how many trucks they sell

DEP has examined this issue and is convinced that the GHG rules are set at realistic levels achievable without limiting truck availability. In fact, almost half of the model year 2009 pickup trucks are already below the fleet average standard in the GHG rules. (In other words, the standards appear to be set at reasonable levels.) In addition, there are different targets for cars and trucks, because trucks have inherently poorer fuel economy compared to cars. The California GHG rules, instead of limiting the number of trucks for sale, permits trucks to emit more CO₂ than cars.

California tailpipe standards will limit FFV availability

There is a minor problem in the California tailpipe standards (for smog-forming pollutants) that currently makes it difficult for some manufacturers to certify some FFV; DEP has discussed this with representatives from California, and by the time the rules are effective in Florida, the problem will be resolved through rule modifications or the advancement of necessary technology.