



Governor's Action Team on Energy and Climate Change *State of Florida*

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Sample Draft Policy Option Template

TLU-2A Increased Fuel Economy and GHG Emissions Standards for New Vehicles

**[FROM MONTANA CLIMATE CHANGE ACTION PLAN (NOVEMBER 2007)
<http://www.mtclimatechange.us/ewebeditpro/items/O127F14042.pdf>]**

Policy Description

Adopt the State Clean Car Program (also known as the "Pavley" standards or California GHG Emission Standards) in order to reduce greenhouse gas (GHG) emissions from new light-duty vehicles (LDVs). The standards, which must still be approved by the United States Environmental Protection Agency (US EPA), would take effect in model year 2011 (calendar year 2010). Other Clean Car Program elements include standards requiring reductions in smog and soot-forming pollutants and promoting introduction of very low-emitting technologies into new vehicles.

New cars and light trucks in all states must comply with federal emission standards and, generally speaking, states have the choice of adopting a stronger set of standards applicable in California. In 2005, California finalized a set of standards that would require reductions of GHG emissions of about 30% from new vehicles, phased in from 2009 to 2016, through a variety of means. Eleven states have already adopted the California Clean Car Program standards: California, Connecticut, Maine, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington.

Policy Design

This policy design is focused on achieving high levels of efficiency by requiring vehicles sold in Montana to meet higher levels of efficiency than is required nationally. This policy recognizes that Montana by itself would not have influence in setting standards, but by joining efforts of other states would ensure that efficient vehicles are sold in Montana, and that less efficient vehicles that could no longer be sold in other states are not sent to Montana because of lower standards there.

Goal Levels: Go beyond the federal emissions standards for cars and light trucks within the parameters of the California standards. (Note: States can choose between the federal standard or go with the more stringent California standards, in which Montana would need a bidding process or public involvement before or during legislative or regulatory process for transparency.)

Timing: A regulatory program could begin with vehicle model year 2011. To meet federal compliance, a rule-writing process would take place by the appropriate agencies so that Montana can implement the California standards.

Parties Involved: Applies to model year 2011 new cars and light trucks. The law would directly affect automobile manufacturers, car dealers, and consumers. Compliance concerns would affect manufacturers and dealers.

Other: The California standards currently are being litigated and have not been approved by the EPA. Timing will be affected by the date of enactment of legislation, likely litigation, and the regulatory process.

Implementation Mechanisms

Regulatory Program: Institute a regulatory program beginning with vehicle model year 2011.

Related Policies/Programs in Place

None.

Types(s) of GHG Reductions

TBD

Estimated GHG Reductions and Net Costs or Cost Savings

	2012	2020	2050	Units
GHG Emission Savings				MMtCO ₂ e
Net Present Value (2008-2050)				\$ Million
Cumulative Reductions (2008-2050)				MMtCO ₂ e
Cost-Effectiveness				\$/MtCO ₂ e

- **Data Sources:** [TBD by CCS on TWG approval]
- **Quantification Methods:** [e.g., Full life-cycle analysis with supply/demand equilibrium adjustments on TWG approval]
- **Key Assumptions:** [TBD, as needed on TWG approval]

Key Uncertainties

TBD – [as needed and approved by the TWGs]

Additional Benefits and Costs

TBD – [as needed and approved by the TWGs]

Feasibility Issues

TBD – [as needed and approved by the TWGs]

Status of Group Approval

Pending – [until Action Team moves to final agreement]

Level of Group Support

Pending – [until Action Team moves to final agreement]

Barriers to Consensus

TBD – [blank until final vote by the Action Team]

Sample Draft Policy Option Template

TLU-2B Add-on Technologies for Existing Vehicles and New Vehicles

[FROM NEW MEXICO CLIMATE CHANGE ADVISORY GROUP FINAL REPORT
(DECEMBER 2006)

<http://www.nmclimatechange.us/ewebeditpro/items/O117F10152.pdf>

Policy Description

Improve the fuel economy of the light duty vehicle (LDV) fleet by setting minimum energy efficiency standards for replacement tires and requiring that greater information about Low-Rolling Resistance (LRR) replacement tires be made available to consumers at the point of sale.

Policy Design

Goal levels: Require that replacement tires be LRR tires achieving an average 4.5% gain in fuel economy.

Timing: The requirement would begin in 2008.

Parties: State government, industry

Implementation Mechanisms

Manufacturers currently use LRR tires on new vehicles, but they are not easily available to consumers as replacement tires. When installing original equipment tires, carmakers use low-rolling resistance tires as a way to contribute to meeting the federal automobile fuel economy (CAFE) standards. When replacing the original tires, consumers often purchase less efficient tires. Currently, tire manufacturers and retailers are not required to provide information about the fuel efficiency of replacement tires. In addition, there is no current minimum standard for fuel efficiency that all replacement tires must meet. The rolling resistance of the various tires consumers can purchase have significant variations depending on tread design, composition, cross-section geometry, and inflation pressure.

The program would include consideration of the technical feasibility and cost of such a program, the relationship between tire fuel efficiency and tire safety, potential effects upon tire life, and impacts on the potential for tire recycling. In addition, the program would exempt certain classes of tires that sell in low volumes, including specialty and high performance tires.

An appropriate State agency would initiate a fuel efficient tire replacement program. The program could include consumer education, product labeling, and minimum standards elements. These programs would be developed under a rule development process that would incorporate the best scientific information, including the results from tests of tires conducted by the tire manufacturers, the California Energy Commission, and other data reviewed by the National Academy of Sciences.

The minimum standard is likely to be less stringent than the energy efficiency of original tires provided by the automobile manufacturers on new purchase vehicles. Such a regulation would improve the fuel efficiency of the overall LDV fleet, but not necessarily the fuel efficiency of all tires since consumers would still make choices in the marketplace. The replacement tires in the future would be on average more fuel efficient than those historically purchased, but are likely to be on average not as fuel efficient as the tires included as original equipment by the automobile manufacturers.

Related Policies/Programs in Place

In October of 2003, California adopted the world’s first fuel-efficient replacement tire law. AB 844 is a “first-of-its-kind” law requiring energy efficient tires. AB 844 directed the California Energy Commission (CEC) to develop a State Efficient Tire Program. Specifically, AB 844 requires the CEC to: (1) develop a consumer education program, (2) require that retailers provide labeling information to consumers at the point of sale, and (3) promulgate through a rule development process a minimum standard for the fuel efficiency of replacement tires sold. The California rule development process is scheduled to begin in January 2007.

Types(s) of GHG Reductions

TBD

Estimated GHG Reductions and Net Costs or Cost Savings

	2012	2020	2050	Units
GHG Emission Savings				MMtCO ₂ e
Net Present Value (2008-2050)				\$ Million
Cumulative Reductions (2008-2050)				MMtCO ₂ e
Cost-Effectiveness				\$/MtCO ₂ e

- **Data Sources:** [TBD by CCS on TWG approval]
- **Quantification Methods:** [e.g., Full life-cycle analysis with supply/demand equilibrium adjustments on TWG approval]
- **Key Assumptions:** [TBD, as needed on TWG approval]

Key Uncertainties

TBD – [as needed and approved by the TWGs]

Additional Benefits and Costs

TBD – [as needed and approved by the TWGs]

Feasibility Issues

TBD – [as needed and approved by the TWGs]

Status of Group Approval

Pending – [until Action Team moves to final agreement]

Level of Group Support

Pending – [until Action Team moves to final agreement]

Barriers to Consensus

TBD – [blank until final vote by the Action Team]



Sample Draft Policy Option Template

TLU-7 Incentive Programs for Increased Vehicle Fleet Efficiency

[FROM MONTANA CLIMATE CHANGE ACTION PLAN (NOVEMBER 2007)
<http://www.mtclimatechange.us/ewebeditpro/items/O127F14042.pdf>]

Policy Description

Montana state and local government agencies could “lead by example” by enacting procurement policies and/or joining the EPA SmartWay program and utilizing the SmartWay Upgrade Kits that result in adoption of lower emitting vehicle fleets. There are three primary components of the EPA SmartWay program: creating partnerships, reducing all unnecessary engine idling, and increasing the efficiency of LDVs and HDVs, rail, and intermodal operations.

Targets are listed under the Policy Design section and will be based on availability of energy saving technologies and overall efficiency of the life of the vehicle.

This policy option strengthens Montana’s commitment to reduce GHG emissions through fuel - efficiency in vehicles owned by the state while also encouraging private and public agency fleets with the potential to develop incentive programs for local governments to help with the initial costs of purchasing such vehicles.

Policy Design

This is an enabling option that would have the state government lead by example, ensuring that its own fleet of vehicles meets or exceeds the targets set for the state as a whole while providing available means for all public and private vehicles to also exceed these standards on a voluntary basis.

Goals: Where the fuel and vehicle-type requirements of TLU-1, TLU-6, TLU-7, and TLU-8 are higher, the state vehicle fleet would conform to the higher requirements.

Timing: By 2020.

- The state will set a goal where at least 70% of all HDVs and at least 90% of all light-duty passenger vehicles are “fuel efficient,” meeting on average, a higher MPG, for the state’s HDV and LDV fleets.

Parties Involved: Montana state and local government agencies, private industries and fleets, trucking industry.

Implementation Mechanisms

Executive Order: This order would establish that the state or appropriate agency will immediately

- Identify barriers to purchasing hybrid vehicles and research and develop solutions to procure hybrid or other lower GHG emitting vehicles in the state,

- Ensure that the overall state of Montana fleet considers EPA fuel efficiency rating calculated over the life cycle of the vehicles purchased for the fleet, and
- Ensure that LCFs are purchased for the state motor pool fleet wherever they are available and if applicable for the vehicle type.

State and local agencies with vehicle fleets could sign on as SmartWay carrier partners. They would then measure their environmental performance with the fleet model and come up with a plan to improve that performance. The partnership provides information and suggested strategies to improve fuel economy and environmental performance of vehicle fleets.

EPA SmartWay Shippers: State or local agencies that buy transportation services or ship goods could sign on as SmartWay shippers. As shipper partners, state agencies would seek to select SmartWay partners when they purchased the services of carriers. One way that the state could help would be to add SmartWay certification to the list of factors that they may consider when selecting carriers. Alternatively, they could encourage the carriers that they do business with to join the partnership. Shippers can also implement direct strategies, for instance, developing no-idle policies for their loading areas.

SmartWay Affiliates: State and local agencies could sign on to SmartWay as affiliates. As affiliates, they would help to distribute information on the program to interested parties. This could be as easy as putting a link on their Web site, or it could involve a more active role.

EPA SmartWay Loan Initiative: Incentives to reduce emissions in the trucking industry are also available through the EPA SmartWay Loan Initiative. The US EPA is partnering with the Small Business Administration (SBA) to make loans available to purchase SmartWay Upgrade Kits. This loan initiative uses SBA Express Loans and partners with Bank of America, Business Loan Express, Superior Financial Group, and other SBA lenders to help small trucking companies finance the purchase of SmartWay Upgrade Kits. Participating lenders will provide quick approval and affordable monthly payments. Small trucking firms can borrow from \$5,000 to \$25,000 with no collateral, an easy online or telephone application, and flexible loan terms.

SmartWay Upgrade Kits: A variety of fuel- and emissions-saving technologies, typically consisting of engine idle reduction technology, LRR tires, improved aerodynamics, and exhaust after-treatment devices. In tests, these kits can reduce fuel consumption by 10% to 15%, saving more than \$8,000 in fuel costs annually. They also reduce pollution: carbon dioxide and nitrogen oxide emissions are cut 10% to 15%, and when a kit includes an exhaust after-treatment device, PM emissions are reduced by 25% to 90%.

Related Policies/Programs in Place

Arizona and New Mexico have programs that could be used as models.

Types(s) of GHG Reductions

TBD

Estimated GHG Reductions and Net Costs or Cost Savings

	2012	2020	2050	Units
GHG Emission Savings				MMtCO ₂ e
Net Present Value (2008-2050)				\$ Million
Cumulative Reductions (2008-2050)				MMtCO ₂ e
Cost-Effectiveness				\$/MtCO ₂ e

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- **Key Assumptions:** [TBD, as needed on TWG approval]

Key Uncertainties

TBD – [as needed and approved by the TWGs]

Additional Benefits and Costs

TBD – [as needed and approved by the TWGs]

Feasibility Issues

TBD – [as needed and approved by the TWGs]

Status of Group Approval

Pending – [until Action Team moves to final agreement]

Level of Group Support

Pending – [until Action Team moves to final agreement]

Barriers to Consensus

TBD – [blank until final vote by the Action Team]

Sample Draft Policy Option Template

TLU-9 Consider Transportation System Pricing Options

[FROM MINNESOTA CLIMATE CHANGE ADVISORY GROUP FINAL REPORT (APRIL 2008)
<http://www.mnclimatechange.us/ewebeditpro/items/O3F16760.pdf>]

Policy Description

This policy recommends that the State of Minnesota institute requirements and policies ensuring that drivers more fully pay the total costs of driving. This policy would encourage drivers to choose transportation alternatives, purchase more efficient vehicles, drive less, and/or drive more efficiently (combining trips). This option generally reduces VMT and GHG emissions. (This strategy accounts for part of the VMT reduction goal, along with TLU-1, -5, -7, -9, and -14.)

Policy Design

The University of Minnesota's *Full Costs of Transportation in the Twin Cities Region* report concluded that the total cost of a mile of automobile travel in the region was between \$0.84 and \$1.62, with a mid-range estimate of \$1.14. Drivers do not see all of those costs, for three general reasons:

1. A substantial portion of the costs is not variable, meaning that driving less does not save the person money. A good example of this is insurance, paid every 3 or 6 months. One goal of this policy is to increase the proportion of that cost that drivers and society can save by driving less.
2. A substantial portion is paid for by revenue streams that are not necessarily directly related to automobile use. For example, property taxes pay for a large portion of the costs of local roads. That nexus may be appropriate for various reasons, but one result is that the cost of vehicle mobility (of all kinds) is not borne by those vehicles.
3. Driving (of all kinds) produces substantial externalities, both positive and negative. Drivers do not see all of them. The impacts of the emitted CO₂ are the externality most central to the MCCAG process.

As a result, this set of policies recommends that Minnesota take action in four areas:

1. Implement a system to encourage the purchase and operation of low-GHG-emitting passenger vehicles.
2. Provide an incentive for auto insurance companies to institute a "pay-as-you-drive" (PAYD) system for policyholders.
3. Implement policies and strategies that make more of the fixed costs of driving into variable costs related to VMT and emissions. Possibilities include CO₂-based registration fees, a VMT tax, congestion pricing, and a fuel tax.
4. Use new revenue streams for less GHG-intensive travel options (e.g., public transit, vanpooling, commuter benefits, and commuter options).

In all cases, the state should design and implement policies with an explicit consideration of equity impacts on both low-income and rural drivers.

Goals: For PAYD insurance, assume market penetration of 25% in 2015 and 50% in 2025.

Timing: Passage of a comprehensive transportation funding package with some or all of these strategies during the 2008 legislative session, effective July 1, 2008.

Parties involved: Highway and transit users; automobile manufacturers and retailers; insurance companies, Minnesota state Departments of Commerce, Public Safety, Revenue, Finance, and Pollution Control; MC, MnDOT.

Other:

1. Increasing the price of driving reduces the number of miles driven and can be accomplished in a variety of ways. Among the possible strategies is increasing the gas tax, which is likely to both reduce the number of miles driven and provide additional transportation revenue to the state. The TWG discussed various issues raised by a gas tax increase, including the economic and personal impact of higher taxes and the constitutional issues that exist around the use of gas tax revenues. In light of these issues and concerns expressed by the current administration, the TWG is making no recommendation on the gas tax to the MCCAG. However, the group believes the MCCAG should seriously consider financial strategies that would make the full (including environmental) cost of driving more apparent to drivers.
2. Significant policy innovation and development are occurring in this area. In the future, additional options may exist that would accomplish the goals of reducing VMT and providing additional revenues to support lower GHG transportation options, including transit. The fact that these ideas, such as cordon pricing, are not analyzed here means only that they are not yet ripe for analysis, not that they are without merit.

Implementation Mechanisms

Increase the Consumer Cost of Driving

Increasing the cost of automobile use can reduce fuel consumption and travel while encouraging the use of alternative fuels and public transit.

Encourage the Purchase of Low-GHG Vehicles

The state could adopt a variety of programs to increase purchase of fuel-efficient or low- GHG vehicles (including pure electric, hybrid, plug-in hybrid, and other alternative-fuel vehicles). State incentives could include lower registration fees, feebates, and/or tax credits. Higher vehicle registration fees could be charged for vehicles that have lower fuel economy and higher GHG emissions. Vehicle licensing fees could be based upon vehicle weight and/or emissions, for example, with use of a dollar per vehicle-ton multiplier instead of the present broad categories of vehicle weight.

Support PAYD Automobile Insurance

The state would encourage and support the provision of PAYD auto insurance, possibly including state support for additional pilot programs. This would also require the state Insurance Commission to conduct an active review of possibilities.

Related Policies/Programs in Place

MnDOT pilot underway to test VMT fees (no results are yet available), and PAYD insurance.

GMAC and OnStar Low-Mileage Discount Rates

Since mid-2004, the General Motors Acceptance Corporation Insurance has offered mileage-based discounts to OnStar subscribers located in certain states. The system automatically reports vehicle odometer reading at the beginning and end of the policy term to verify vehicle mileage. Motorist who drive less than the specified annual mileage receive insurance premium discounts of up to 40%:

- 1–2,500 miles: 40% discount
- 2,501–5,000 miles: 33% discount
- 5,001–7,500 miles: 28% discount
- 7,501–10,000 miles: 20% discount
- 10,001–12,500 miles: 11% discount
- 12,501–15,000 miles: 5% discount
- 15,001–99,999 miles: 0% discount

This Federal Highway Administration’s Value Pricing Pilot Program²¹ is now providing funding for PAYD insurance simulation projects in Georgia and Massachusetts.

Distance-Based Program

Progressive Insurance offers distance-based insurance in Oregon, Michigan, and Minnesota. The program uses Global Positioning System technology to track vehicle location and use.

TripSense^(SM)

In August 2004, the Progressive Direct Group of Insurance Companies introduced TripSense, a usage-based auto insurance discount. The group notes:

“Safer drivers and people who drive less than average should pay less for auto insurance. That’s why we created the revolutionary TripSense^(SM) discount program, which measures your actual driving habits and allows you to earn discounts on your insurance by showing us how much, how fast and what times of day you drive. TripSense gives you more control over what you pay for insurance, as your driving habits determine your discount.”

Types(s) of GHG Reductions

TBD

Estimated GHG Reductions and Net Costs or Cost Savings

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Key Uncertainties

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Additional Benefits and Costs

TBD – [as needed and approved by the TWGs]

Feasibility Issues

TBD – [as needed and approved by the TWGs]

Status of Group Approval

Pending – [until Action Team moves to final agreement]

Level of Group Support

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Barriers to Consensus

TBD – [blank until final vote by the Action Team]