

November 13, 2015

Mary Nichols, Chairperson California Air Resources Board 1001 I Street Sacramento, CA 95814

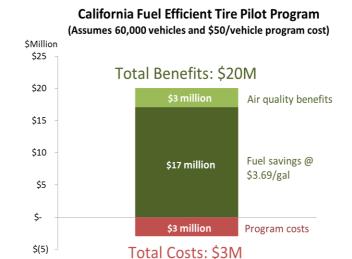
Subject: Fuel Efficient Passenger Vehicle Replacement Tire Program; Comments Responding to Draft Cap-and-Trade Auction Proceeds Second Investment Plan

Dear Chairperson Nichols,

Energy Solutions' core mission is to contribute to market-based solutions that achieve large-scale environmental impacts. A fuel-efficient passenger vehicle tire replacement program can achieve this goal; thus, we recommend including funding for a pilot project in the Cap-and-Trade Auction Proceeds Second Investment Plan ("Investment Plan").

Fuel-efficient replacement tires have been effective in reducing the greenhouse gas (GHG) impacts of heavy-duty vehicles and were a key strategy in improving tractor-trailer fuel efficiency to meet the Heavy-Duty Tractor-Trailer Greenhouse Gas Regulation of 2008<sup>1</sup>. The expansion of fuel efficient tire technology within the existing passenger vehicles fleet would similarly achieve GHG reductions and co-benefits in disadvantaged communities, while contributing to the state goal of 50% reduction in vehicle petroleum reduction by 2030.

As described the "Passenger Vehicle Replacement Tire Efficiency Study" (October 2013), funded by the South Coast Air Quality Management District, a fuel-efficient tire incentive program can achieve fuel savings and air quality benefits that exceed costs by a factor of six or greater. A \$3 million pilot would achieve net benefits of about \$20 million, as shown in the figure on the right. A customer in the program could save about \$1,000 from the use of fuel efficient



passenger vehicle replacement tires over the vehicle lifetime.

<sup>&</sup>lt;sup>1</sup>California Air Resource Board. Mobile Source Strategy Discussion Draft (October 2015). Retrieved from ARB website http://www.arb.ca.gov/planning/sip/2016sip/2016mobsrc\_dd.pdf

A fuel-efficient replacement tire program would have large benefits to disadvantaged communities. Disadvantaged communities with higher reliance on used and older cars are more likely to be actors in the low-cost replacement tire market. However, higher fuel economy tires are largely only available in mid-to-high price tires. A program that provide access to fuel-efficient tires at a lower cost level would economically benefit disadvantaged communities and would provide localized improvements in air quality.

Such a program would help realize the strategy that ARB outlined in the First Update to the Climate Change Scoping Plan. It noted that: "commercially available technologies, such as fuel efficient passenger vehicle tires, can be utilized by both new and in-use vehicles in the near-term to achieve GHG emission reductions. Deployment of fuel efficient vehicle tires for in-use vehicles could include limited incentives, followed by ratings and then standard setting to permanently shift the market." A scaled-up statewide program following a pilot could save customers approximately \$900 million annually while avoiding 2.7 million metric tons of GHGs per year annually as noted by the CEC. These reductions would equal 12% of the Scoping Plan Update long-term transportation-related emission reduction goals.<sup>2</sup>

This opportunity will also benefit California businesses. We found strong retailer support for a potential incentive program during the market research component of our study for the South Coast Air Quality Management District.

We appreciate your consideration of our comments and have attached specific recommended revisions to the Investment Plan to highlight the programs potential. Please contact me or have your staff contact me at <a href="mailto:epike@energy-solution.com">epike@energy-solution.com</a> or (510) 482-4420 x239 if you have any questions.

Sincerely,

Ed Pike, P.E. Senior Engineer

Attachment

cc: Richard Corey, Executive Officer, California Air Resources Board Cliff Rechtschaffen, Senior Advisor, Office of Governor Edmund G. Brown, Jr.

<sup>&</sup>lt;sup>2</sup>Table 5 of the "First Update to the Climate Change Scoping Plan" (May 2014) lists Transportation-related targets at 23 MMTCO₂e.

## Attachment: Recommended Additions to Cap-and-Trade Auction Proceeds Draft Second Investment Plan: Fiscal Years 2016-17 through 2018-19

We recommend adding the following language to the draft plan, with suggested additions underlined:

Figure ES-1. Summary of Draft Investment Concepts for 2016-17 through 2018-19 (p.ES-5) "Innovative efficiency strategies for freight and passenger transportation (e.g., connected vehicles, <u>in-use passenger vehicle efficiency technology</u>, information technology solutions for logistics, biofuels, efficiency reduction of nonproductive moves, etc.)."

**Figure 10. Summary of Investment Concepts (2016-17 to 2018-19)** (p.28) "Innovative efficiency strategies for freight and passenger transportation (e.g., connected vehicles, <u>in-use passenger vehicle efficiency technology</u>, information technology solutions for logistics, biofuels, efficiency reduction of nonproductive moves, etc.)".

## **Gaps and Needs Assessment** (p.32)

Furthermore, commercially available technologies, such as low-rolling resistant tires for light-duty vehicles, can be utilized by in-use vehicles to achieve GHG emission reductions called for in the original Climate Change Scoping Plan and the First Update to the Climate Change Scoping Plan. In the short-term, improvements can be made to the efficiency of in-use vehicles including deployment of fuel efficient passenger vehicle replacement tires. Deployment could initially occur through limited incentives, which could pave the way for complementary policies such as ratings and then standard setting to permanently shift the market.

## Figure 12: Support demonstration and implementation of passenger and freight (p.33)

"...efficiency measures to reduce the carbon footprint while increasing capacity and competitiveness (e.g., connected vehicles, <u>in-use passenger vehicle efficiency</u> technology, information technology, collaborative logistics, etc.)."