

**STATEMENT OF REGINA A. MCCARTHY**  
**ASSISTANT ADMINISTRATOR**  
**OFFICE OF AIR AND RADIATION**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
**COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS**  
**UNITED STATES SENATE**  
**March 24, 2010**

Chairman Boxer, Ranking Member Inhofe, and Members of the Committee, thank you for the opportunity to testify today on opportunities to improve energy security and the environment through transportation policy. I am pleased to offer this testimony together with Deputy Secretary Porcari from the Department of Transportation. Our two agencies have developed a strong partnership and we look forward working together to align our transportation, climate and air quality goals.

Today, transportation accounts for about 28% of all U.S. greenhouse gas emissions, and 57% of nitrogen oxide and 34% of volatile organic compound emissions, the major ozone forming pollutants. More than 126 million Americans—nearly half the population of the United States—live in areas where the air quality does not meet our national standards.

While stringent vehicle emission regulations have significantly reduced the emissions of traditional criteria air pollutants, from 1990 to 2007, transportation greenhouse gas emissions rose by 29 percent due, in large part, to increased demand for travel and the stagnation of fuel efficiency across the U.S. vehicle fleet. The number of vehicle miles traveled by light duty motor vehicles (passenger cars and light-duty trucks) increased 40 percent from 1990 to 2007. These numbers are indicative of the challenges we face in moving toward a low-carbon transportation sector.

This Administration is committed to moving forward on transportation policies that can address both energy security and the environment. In May 2009, President Obama set in motion a new National Program that would dramatically reduce greenhouse gas emissions and improve fuel economy for new cars and light trucks sold in the United States. In September 2009, EPA and the DOT announced the proposal for this National Program, which reflects unprecedented collaboration and consensus between the federal government, states, and private industry. This proposal would establish for the first time uniform federal standards to regulate both fuel economy and greenhouse gas emissions for these cars and light trucks.

The environmental and energy security benefits from the National Program will be significant. Together, the proposed EPA and DOT standards would cut carbon dioxide emissions by an estimated 950 million metric tons and about 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). We have been reviewing public comments on our joint proposal and expect to establish final standards by April 1st.

Progress can also be made to reduce greenhouse gas emissions from heavy duty trucks and buses and nonroad vehicles and engines. In addition to a petition regarding emissions from highway vehicles, EPA has received, and is currently evaluating, seven petitions from states and environmental organizations requesting that the Agency use existing Clean Air Act authorities to set GHG standards for locomotives, marine vessels, aircraft, and other nonroad engines. Together, heavy duty trucks and buses and nonroad sources comprise 42 percent of all transportation greenhouse gas emissions in the United States. We expect significant growth in this sector in the coming years.

In February of this year, EPA also established new requirements for the Renewable Fuel Standard, which is an important step for the environment, for energy policy, and the U.S. economy. The Energy

Independence and Security Act of 2007 mandates our transportation fuel include 36 billion gallons of renewable fuel by 2022. This volume includes a substantial increase in the volume of advanced cellulosic biofuels, which will reach 16 billion gallons by 2022. Based on the agency's final analysis we estimate that in 2022, the program should displace about 7 percent of our annual gasoline and diesel consumption, reduce our dependence on oil by 328 million barrels annually, and avoid greenhouse gas emissions equivalent to removing 27 million cars from the road. In addition, we estimate that it will increase farmers' income by \$13 billion annually by 2022.

While lower carbon fuels and more efficient vehicles and engines are crucial to reducing transportation emissions, we must also address emissions from the fleet of vehicles and engines already navigating America's highways, railways, and waterways.

In the past two years, EPA's National Clean Diesel Campaign has awarded close to \$350 million to help reduce exposure to harmful diesel exhaust. EPA estimates that for every \$1 spent on clean diesel projects, up to \$13 of public health benefits accrue. Reduction in emissions from highway construction equipment has been one of the program's priorities.

Through EPA's SmartWay Transport program, we have joined with 2,600 partners to reduce fuel consumption in the freight sector. The SmartWay Transport program has been able to assist the freight industry in adopting cost-effective technologies and practices that can significantly reduce GHG emissions and save money. Our innovative SmartWay Finance grants have provided lower cost loans and leases to help truck owners--especially smaller trucking firms and owner-operators--purchase cleaner and more fuel efficient vehicles and technologies.

Providing incentives to reduce the number of miles we drive should also be part of the solution. A recent report, titled *Moving Cooler*, which EPA, DOT and others helped to support, provides new evidence that travel efficiency strategies like public transit, Smart Growth, congestion pricing, carpools and intermodal freight can reduce emissions in 2050, according to the report's "Low Cost Scenario," by 15 percent to 18 percent below projected levels.

This Committee outlined in the *Clean Energy Jobs and American Power Act* an approach to promote these travel efficiency strategies, assess the impact of transportation infrastructure investments, and encourage the development of integrated transportation and land-use plans, standardized models and state and MPO transportation greenhouse gas reduction targets.

In July of 2009, President Obama said, "For too long, federal policy has actually encouraged sprawl and congestion and pollution, rather than quality public transportation and smart, sustainable development." EPA has been working over the past year with DOT and HUD in a partnership focused on providing our communities the tools they need to make these smart development decisions. The Partnership for Sustainable Communities announced on June 16th by Secretaries LaHood and Donovan, and Administrator Jackson is designed to fully coordinate our actions to overcome the significant challenges we face together. Through this partnership, we have been working with stakeholders to identify barriers within our agencies that limit state and local efforts to build more sustainable neighborhoods and regions.

I would like to acknowledge Secretary LaHood and Deputy Secretary Porcari for their leadership on this effort. Their strong voice for better coordination of land-use, transportation investments and air quality planning represents a bold new vision for the transportation system in this country and the relationships between our agencies. We look forward to continuing our work with DOT and HUD and to sharing EPA's experience in transportation and air quality planning in our work together to make sure that investments by any one of our agencies will meet our shared goals.

In response to a request from Senator Kerry, EPA recently released an analysis of the potential greenhouse gas emissions and oil savings across the transportation sector through 2030. I want to emphasize that this was not part of a regulatory plan, but was rather a broad scoping exercise based on the application of known technologies, operational improvements, and travel efficiency measures in all key transportation subsectors, identified and analyzed by EPA experts. For example, in the light-duty sector, we assumed that the annual rate of improvement in greenhouse gas emissions and fuel economy from 2017 to 2030 would be equal to or slightly greater than the rate that will be required by the Administration's National Program discussed above. One way to achieve these levels would be for new technologies such as plug-in hybrid electric vehicles and other types of electric vehicles to account for one-third to one-half of all new personal vehicles in 2030, and for conventional hybrid vehicles to account for the majority of the remaining new vehicles sales in 2030. We also assumed that the fuel economy of new freight trucks could increase by 60 percent by 2030. We looked at travel efficiency strategies for passenger transportation analyzed in the *Moving Cooler* report, such as public transit, smart growth and carpools. Improvements were also identified for aviation, marine, rail, and nonroad engines and equipment.

Our technical experts projected that, by 2030, greenhouse gas emissions from the transportation sector could be reduced by 600 to 1000 million metric tons annually, which would be the equivalent of taking 120 to 200 million cars off the road. The projected oil savings are 4 to 7 million barrels per day, representing one-third to over one-half of our current oil imports. These greenhouse gas emissions and oil savings represent a 25 to 40 percent reduction in the transportation sector relative to the Energy Information Administration's 2009 Annual Energy Outlook baseline.

It is important to note what this scoping exercise in response to Senator Kerry's request did not do—it did not account for changes in emissions or oil consumption in transportation fuel production or distribution (such as upstream greenhouse gas emissions from power plants used to power electric vehicles), it did not assess the costs or other impacts of these measures, nor did it address the policy drivers that might be necessary to promote these changes. This analysis makes no distinction between different policy drivers nor does it reflect a regulatory plan or budget proposal. We make no assessment of the relative merits, costs, or impacts of various approaches.

In closing, I believe that Congress and the Administration have a tremendous opportunity and responsibility to move forward on policies in the transportation sector that can improve our environment, reduce dependence on oil, and create long-term economic prosperity for our nation. I am encouraged that this Committee is dedicated to keeping transportation a part of the solution, both in the context of pending climate and energy legislation, as well as the upcoming transportation bill reauthorization. EPA looks forward to working with DOT and this Committee. I would be pleased to answer any questions that you may have.