Combating Global Warming One Car at a Time

CO_2 EMISSIONS LABELS FOR NEW MOTOR VEHICLES

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As Americans become increasingly concerned about global warming, carbon dioxide (CO_2) emissions labels on new cars could be an effective and relatively painless way to inform them that the cars they drive are a major source of CO_2 and contribute to the buildup of greenhouse gases in the atmosphere. Putting a CO_2 emissions label on all new cars and light trucks would make this clear for all to see.

Each new car and truck sold in the United States is required to bear a label on its window that indicates the vehicle's fuel economy, in terms of miles per gallon (mpg) for city and highway driving. Every word and inch of this sticker is determined by federal regulation.

On January 10, 2006, U.S. Environmental Protection Agency (EPA) Administrator Stephen Johnson announced the agency's proposed new approach for calculating these fuel economy estimates, along with four proposed designs for the required window label. What is most notable about the proposed label designs is the information that is not included: estimated annual CO_2 emissions.

For every gallon of gas burned, a car produces roughly 20 pounds of CO_2. The average car (in terms of fuel economy) driven the average number of miles per year (15,000) produces approximately 13,000 pounds of CO_2 annually.

Few consumers are likely to think about their impact on global warming when deciding which new car or truck to buy. Prominently displaying a "global warming performance" label on the window of each new vehicle could help educate consumers about the fact that fuel economy relates not just to the cost of operating their vehicle, but also to the environment.

The global warming performance label we have designed includes the estimated amount of CO_2 (in pounds) produced annually for each vehicle make and model and also places cars and light trucks into five distinct groupings based on different categories of estimated annual CO_2 emissions from "best" to "worst." This would allow a prospective purchaser to view information about CO_2 emissions for each vehicle and easily make comparisons among alternatives.

The goals of requiring a CO_2 emissions label are twofold: First, a label would help consumers make the link between their cars and increased CO_2 in the atmosphere. Second, a label would make it easier for those consumers who are already concerned about global warming to identify cars with lower CO_2 emissions.

Behind the Curve

Sharing CO_2 information with consumers is not a new idea. Beginning in January 2001, countries in the European Union (EU) were required to display information on estimated CO_2 emissions on all new cars. The EU directive also required that member states subsequently evaluate the effectiveness of the directive. In the United Kingdom, the initial approach was deemed ineffective as the way the information was presented was too complicated for consumers to understand. As a result, car manufacturers in the United Kingdom voluntarily agreed to put a more "consumer-friendly," color-coded label displaying CO_2 emissions on all new cars beginning in September 2005. The goal of the new "green label" is to give consumers clear information about the environmental performance of different vehicles. Other EU member countries are also in the process of introducing consumer-friendly labels.

Within the United States, a California law enacted in October 2005 requires that information on CO_2 emissions be displayed beginning with 2009 model-year cars sold in the state. The law mandates that the new car label include a global warming index that contains quantitative information in an easy-to-read scale, such as the one on our proposed label.

EPA could get ahead of the curve by requiring a uniform CO_2 emissions label on all cars and light trucks sold in the United States. Or, automobile manufacturers could decide to voluntarily display this information.

Cars and Global Warming

Carbon dioxide is the most ubiquitous of the six greenhouse gases. It is produced by burning fossil fuels—coal, petroleum, and natural gas. The rising concentration of CO_2 in the atmosphere contributes to climate change. As a result, reducing CO_2 emissions is the major focus of most countries seeking to combat climate change and stave off possible global warming.

The United States is the world's largest emitter of greenhouse gases in general, and of CO_2 in particular. We are responsible for a whopping 23 percent of all CO_2 emissions worldwide, even though the United States is home to less than 5 percent of the world's total population.

A third of national CO_2 emissions comes from the transportation sector. Within this sector, passenger cars and light trucks (a category that includes pickups, minivans, and sport

CO_2 Emissions Label: Proposed Design

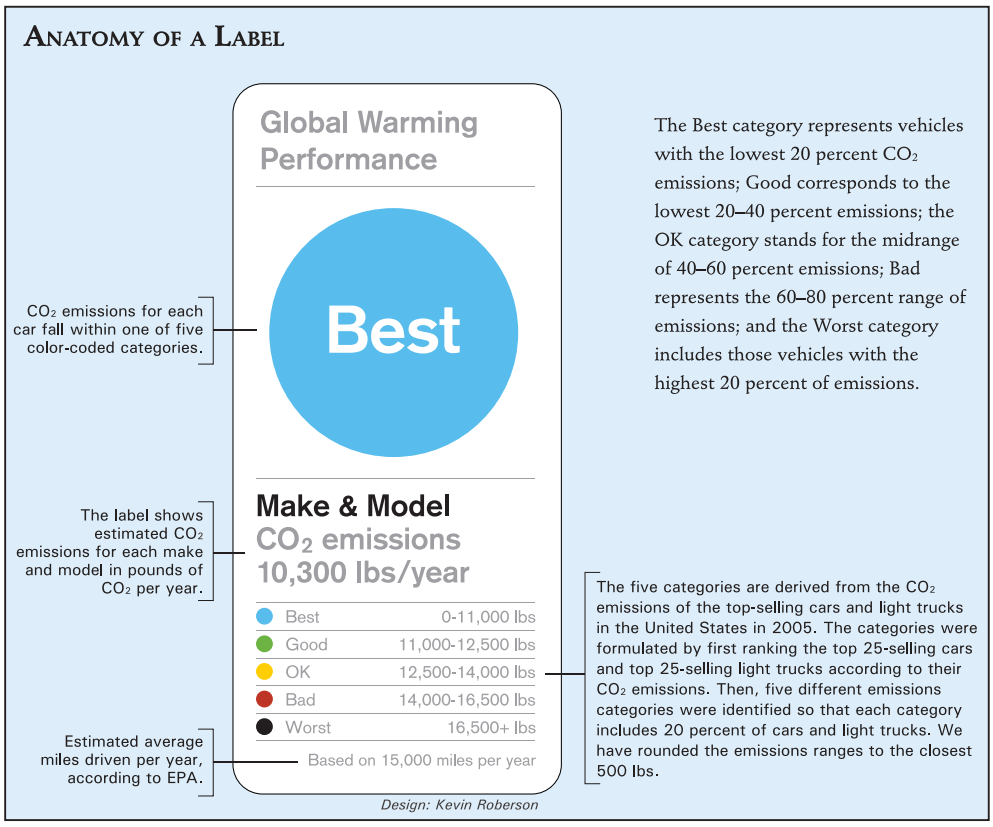
DESIGN: KEVIN ROBERSON

utility vehicles) account for almost two-thirds of CO_2 emissions.

The choice of a new motor vehicle is one of the few opportunities Americans have to make a personal decision that can reduce CO_2 emissions. For every 100 gallons of gas saved, one less ton of CO_2 is emitted.

If you are an intrepid consumer, you can find information on CO_2 emissions on a car-by-car basis on two government Web sites, one maintained by EPA (www.epa.gov/greenvehicles) and the other maintained by EPA and the U.S. Department of Energy (www.fueleconomy.gov).

Why not make it easier for consumers to understand the link between the cars they drive and global warming? The cost of implementing this approach is minimal. Calculating annual CO_2 emissions for new cars requires only information that is already available: the estimated fuel economy of each car make and model, and the average number of miles traveled annually.



For maximum scope and impact, this information needs to be clearly displayed directly on the vehicle where hundreds of thousands of people choose their new cars each year: in the showroom. In 2005 alone, more than 16 million new cars and light trucks were sold in America. If a label is implemented, as in the EU directive, follow-up evaluation to assess whether it is effective—and how it could be improved—should be required.

What is the downside to providing consumers with this kind of information? Some argue that people don't care, that information on CO_2 emissions will not change buying habits. Others argue that labels are inefficient as a mechanism for educating consumers.

Yet in recent years, consumer labels have become more popular as an important means for educating the public and helping them make informed choices. In February 2006, the National Highway Traffic Safety Administration announced a proposal to require a safety-rating information label on all new cars beginning with the 2008 model year. The Honda Motor Company is already voluntarily displaying the results of its crash ratings on 2006-model window stickers.

Certainly, requiring CO_2 labels on every new car will not change consumer behavior tomorrow. The goal of the label is to educate American consumers about the link between the cars they drive and global warming—with an eye toward ultimately encouraging them to drive more fuel-efficient cars and to drive them less. A global warming performance label is only one component of what must be a multi-pronged approach. Still, it is a place to start.

Requiring a global warming performance label on all new cars and light trucks sold in the United States is an inexpensive and important first step in educating the public about something they can do to combat global warming. The information is already available online from two government agencies. Why not make it visible to all car buyers? ■