MELISSA BLOCK, host:
cash for clunkers is not only supposed to boost the auto industry and the economy, it's also supposed to benefit the environment. All this month, we'll be examining some of the things Americans are doing or buying to preserve the environment and curb global warming.

Today, in the first of our series, NPR's Christopher Joyce takes on this question: Is trading in your old car for a new one as helpful to the planet as it might seem?

CHRISTOPHER JOYCE: Robert Hemsley was one of the first customers to take advantage of the cash for clunkers deals offered at Sheehy Auto Stores in Annapolis, Maryland. Hemsley says he wasn't thinking about the environment when he went into the showroom.

Mr. ROBERT HEMSLEY: I'm just saving money, staying alive, making a buck, paying my bills. I had a Chevy van, '97, I guess 12 years old, 224,000 miles and it got 14 miles to the gallon.

JOYCE: Hemsley used his government voucher to buy a Nissan Cube which gets about 30 highway miles on a gallon of regular. He says he'll cut his gas costs by almost two-
thirds. But even before Hemsley drove out of the lot, his new car had actually added carbon dioxide or CO2 to the atmosphere. That's because it takes electricity to make a new car and fuel to ship it.

Mr. WILLIAM CHAMEIDES (Dean, Nicholas School of the Environment, Duke University): The estimates vary, but it's somewhere between 3 and, say, 12 tons of CO2 are produced for every car you make.

JOYCE: William Chameides runs the Nicholas School of the Environment at Duke University. He says you have to drive a while before you save enough fuel to offset that new car carbon.

Mr. CHAMEIDES: Our estimates are - depending on how much you drive of course - that it's going to take you years or so.

JOYCE: For example, he calculates that if you trade in an 18-mile-per-gallon clunker for a 22-mile-per-gallon new car, it would take about five-and-a-half years of typical driving to offset the new car's carbon footprint.

Mr. CHAMEIDES: On the other hand, the cash for clunkers deal for trucks, you're really beginning to talk something like eight years to make it up.

JOYCE: Engineer Chris Hendrickson at Carnegie Mellon University pioneered the calculation for the carbon costs of a new car. It's called a life cycle analysis. He says you have to cast a wide net to capture the true footprint.

Professor CHRIS HENDRICKSON (Engineer, Carnegie Mellon University): That includes both the manufacturer, the assembly itself, but also the supply chain associated. Things like manufacturing the batteries, manufacturing the tires, transporting all those components around.

JOYCE: Of course, the bigger the mileage improvement from your old car to the new one, the more gas you save and the faster you work off the new car's carbon footprint. If you trade in a 20-mile-per-gallon car for a Prius, for example, that gets about 50
miles per gallon, it saves so much gas that you can offset the Prius’ footprint in about a year and a half. But a 20-mile-per-gallon car does not qualify as a clunker. So, no government voucher.

And people with big cars tend to be buying new cars that are still pretty big. According to an executive at Sheehy Auto, he says more of their customers are opting for modest trade-ups, close to the four-mile-per-gallon minimum improvement that’s allowed for cars in cash for clunkers. Other auto analysts say they’re seeing plenty of deals for new cars that get 10 miles a gallon more. But either way, it’s not enough for Dan Becker of the Safe Climate Campaign.

Mr. DAN BECKER (Safe Climate Campaign): The problem is the auto industry hijacked this law, so it doesn't get the better ones on the road. All it does is replace old clunkers with new clunkers.

JOYCE: Becker says the cash for clunkers program is not creating a market for the most fuel-efficient cars. He notes that the original legislation had tougher mileage requirements. And he says the government would have done better by subsidizing people who buy cars that are 25 percent more fuel efficient than the kind they’re driving now. Even SUVs would qualify.

Mr. BECKER: So you could, for example, buy a Ford Escape Hybrid, not something to sneeze at. And you trade in a clunker and drive off with a much more efficient vehicle.

JOYCE: Environmental analysts point out that only two years from now, new cars are supposed to get an average of 27 miles per gallon. That’s five more than required by the cash-for-clunker program.

Christopher Joyce, NPR News.
how green is it?

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