

NORTHWEST EARTH INSTITUTE ECO-TIPS

REDUCING YOUR CAR'S IMPACT ON THE PLANET

Cars are the biggest oil consumers and air polluters in our lives. They are the largest contributors to global warming, their emissions contribute to asthma and other respiratory diseases, and they fuel international conflicts. The US currently imports 60 percent of its oil, the highest rate ever. What can ordinary citizens do about these concerns?

REDUCE MILES DRIVEN.

Estimate how many miles you drive each year and set a goal of reducing that by a certain percentage. There are a number of ways to accomplish this objective:

- Move closer to work. Daily commutes put the most miles on our cars.
- Sell a car. Ideally we would have one car per household.
- Explore mass transit, carpooling, biking, and walking options. Start by doing this once a week.
- Combine trips. Planning and patience are required to keep you from making a trip for one or two items.

BUY A USED CAR.

This action preserves resources required to manufacture a new car and saves money. The car loses a significant portion of its value as soon as you drive off the lot. Check out *Consumer Reports Used Car Guide*, www.consumerreports.org.

CHOOSE A FUEL-EFFICIENT CAR.

The car you buy is one of the most important environmental choices you will ever make. Before you look at cars, commit to getting 30-50 miles per gallon. If you are drawn to a large car, evaluate your reasons. How many times per year do you actually need that much space? Small cars that allow the seats to go down can haul more than you would think. Renting a car or a trailer are other options for special occasions. A 5000-pound car will get about half the mileage of a 2,500-pound car. Other features that hurt fuel efficiency are a big engine,

automatic transmission, air conditioning, and power windows and doors. See the *EPA Gas Mileage Guide*, www.fueleconomy.gov, for a comparison of current-year or past-year models.



Currently, hybrid models show the highest gas mileage. The Toyota Prius tops the list for a midsize car. Hybrids combine a highly efficient gas engine with a battery-powered motor. David Friedman with the Union of Concerned Scientists says, "If every new car and truck purchased in America used Prius-like technology, we could more than double fuel economy of our vehicles and save nearly three times more oil than we currently import from the Persian

Gulf by 2020.” A hybrid will cost more up front, but fuel savings will more than offset that initial cost differential over time. The federal government also provides a tax deduction.

CHOOSE A LOW-EMISSION CAR.

Diesel engines surpass gas engines for fuel efficiency, but they emit at least ten times more particulate matter. Therefore, they pose a risk to human health. However, if you already have a diesel car, you may be able to purchase biodiesel fuel, which is typically made from soybeans. A 20 percent blend will reduce particulates about 12 percent, and 100 percent biodiesel, about 55 percent. Check www.biodiesel.org for nationwide purchasing locations. Another choice in some parts of the country is ethanol, produced from grain crops. Even though it is not as fuel efficient as gasoline, it has a lesser global warming impact.

The Union of Concerned Scientists undertook an environmental analysis of the top car companies based on the performance of their vehicles, focusing on global warming emissions and air pollution. After estimating the emissions by each company's average new vehicle in 2004, it ranked the automakers from cleanest to dirtiest: Honda, Nissan, Toyota, Ford, DaimlerChrysler, and General Motors. Vehicles sold by Honda emitted 21 percent less global warming gasses and 31 percent less smog-producing pollution than the overall average of the Big Six automakers. The trucks emitted almost twice as much pollution as cars. For emission information for specific models, see EPA's Web site, www.epa.gov/greenvehicles.

OTHER THINGS YOU CAN DO

- Have regular tune-ups and oil changes. A minor tune-up could increase gas mileage by 6 percent.
- Drive moderately at a steady pace. Cars get their best gas mileage at steady speeds of 45 mph. Driving 75 mph instead of 65 will lower fuel efficiency by ten percent.
- Avoid cold starts for short trips. On trips of five miles or less, a car cannot reach its economy potential.