



Your Car and Clean Air: What YOU Can Do to Reduce Pollution

The U.S. Environmental Protection Agency has prepared this fact sheet to answer some of the most common questions about reducing emissions from private vehicles. This is an important concern, as cars are a major source of air pollution in the United States. Vehicle emissions contribute to health and environmental problems such as urban smog, air toxics, and global warming. Yet individual driving habits make a big difference in the amount of pollution a car produces. Three easy things you can do to help keep emissions as low as possible are:

- Avoid unnecessary driving
- Maintain your car properly
- Drive your car wisely

By combining these strategies, you can very effectively reduce the amount your car pollutes. And there are additional benefits — your car will last longer and you will save money.

Avoid Unnecessary Driving

The most effective way to reduce emissions from your vehicle is to use it less. Vehicle travel in this country is doubling every 20 years. Traffic trends that see more and more cars driving more and more miles will soon begin to outpace technological progress in vehicle emission control.

Several options are available to help you reduce the amount you drive. These include consolidating trips, telecommuting, carpooling, using public transit, and choosing clean transportation alternatives such as biking or walking.

By planning errands, you will get the most out of time you do spend behind the wheel. For example, call ahead to confirm that the product you need is in stock before you drive to the store. Plan to do several tasks when you go somewhere. Drive to a central location and park. Then walk between nearby destinations.

Ridesharing can be an ideal way to reduce your personal contribution to pollution. Every time you share a ride and eliminate a trip, you help the environment. Try pairing up for trips to work or to social events — even an occasional carpool or ride on public transportation will make a difference.

Biking or walking to your destination creates no pollution at all. And you'll increase your fitness level at the same time.

Maintain Your Car Properly

You will reduce your car's emissions and enhance its performance if you follow the manufacturer's recommended maintenance guidelines. By taking proper care of your car, you will also extend its life, increase its resale value, and optimize its "gas mileage" or fuel economy.

The owner's manual that comes with your car contains a wealth of information. It outlines recommended maintenance intervals, product specifications, and operating procedures. The manual also explains the manufacturer's warranty of the emission control system. Contact the manufacturer or a nearby dealer to obtain a copy of the owner's manual if you do not have one.

Every car has some items that need to be checked on a regular basis and others that need to be replaced periodically. These include the air filter, vacuum and coolant hoses, oil, oil filter, fluids, belts, and so on. It's also important to keep the tires inflated to the recommended pressure. This will minimize tire wear and help your car get the best possible fuel economy.

Be sure to have your car serviced by a skilled technician who understands modern emission control systems. If a modern car has high emissions, it is usually due to a defined malfunction that needs to be fixed. The type of simple adjustments that once occurred during tune-ups will no longer correct the problem.

Finally, be aware that pollution will increase dramatically if you tamper with your car's emission control system or use leaded gasoline in a vehicle designed for unleaded gasoline. These activities are illegal — for individual vehicle owners as well as for fleet operators and auto technicians. Today's vehicles are designed with emission controls as integral components of the powertrain. Any tampering with this system will not only drastically increase emissions but is likely to have a negative effect on vehicle performance and durability.

Use of leaded gasoline in a vehicle designed for unleaded gasoline can irrevocably damage the emission control system. Fortunately, such fuel-switching practices are becoming increasingly rare as leaded gasoline becomes harder to find. It is now illegal to manufacture or sell new vehicles requiring leaded gasoline. Sale of motor vehicle gasoline containing lead or lead additives will be prohibited in the United States beginning January 1, 1996.

Many drivers ask about use of "premium" or "super" grade gasolines. These fuels contain additives to increase octane. Octane is a measure of how much a fuel can be compressed in an engine before it spontaneously combusts. It is not a

measure of fuel power or quality. Only a small percentage of vehicles require high-octane gasoline for optimum performance (these are generally turbo-charged or high-performance vehicles). Check your owner's manual to see what type of fuel is recommended for your car. Unless your car needs high-octane gasoline, use of "premium" will not improve performance or emissions — it will just cost you more.

Drive Wisely: Helpful Habits to Reduce Pollution

Even a perfectly maintained car will pollute more than necessary if it is driven carelessly. Your car's emissions will be lower if you apply common sense to your driving and follow basic rules of the road. Driving situations likely to increase pollution include:

IDLING: You will save gas by turning the engine off and restarting it again if you expect to idle for more than 30 seconds. You will also prevent pollution by avoiding long idles. Try parking your car and going into restaurants, banks, and the like instead of idling in drive-up lanes.

STOP-and-GO DRIVING: Driving in traffic is not always avoidable. But whenever possible, plan trips outside rush hour and peak traffic periods. Try to "smooth" your driving by accelerating and decelerating gradually, anticipating stops and starts for traffic lights, changing traffic speeds, and so on.

AIR CONDITIONING: Use of a vehicle air conditioner increases load on the engine. This can increase emissions and decrease fuel economy. Try opening the window or the fresh air vent to cool the inside of your vehicle. Also, park in the shade if you can to prevent the car from heating up in the sun. Besides keeping the interior temperature of your car more comfortable, you will lessen the pollution and waste that occurs when gasoline evaporates from the engine and gas tank.

HIGH ENGINE LOADS: Your car burns more gas and emits more pollution when the engine is operating under high load; that is, when it is working especially hard. Extra load is created by running the air conditioner, quick accelerations, high-speed driving, climbing grades, revving the engine, and carrying extra weight.

COLD TEMPERATURES: Emission control systems take longer to warm up and become fully operational in cold weather. However, idling will not help. Modern vehicles need little warmup; they're most efficient when being driven. Idling for long periods in cold weather can actually cause excessive engine wear.

REFUELING: Spilled gasoline pollutes the air when it evaporates. Watch what you do at the gas station to prevent spills and overfills. It's best to avoid "topping off," especially in hot weather. Apply the same precautions against sloppy handling when refueling outdoor power equipment such as lawnmowers and outboard motors.

For More Information:

The Office of Mobile Sources is the national center for research and policy on air pollution from highway and off-highway motor vehicles and equipment. You can write to us at the EPA National Vehicle and Fuel Emissions Laboratory, 2565 Plymouth Road, Ann Arbor, MI 48105. Our phone number is (313) 668-4333.