

Conservation *Wise*

Energy Conservation: You CAN Make a Difference!

Saving Energy: Driving and Car Maintenance

*Nda-Agyima Addae-Mensah and Natalie Carroll,
Department of Agricultural and Biological Engineering*

**EXPERT
REVIEWED**



*These publications were developed
with assistance from the
Purdue Extension Energy
Conservation Team*

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Introduction

Gasoline use for transportation accounts for about 67% of U.S. oil consumption. Increasing your fuel economy can save you money, reduce carbon dioxide (CO₂) emissions and increase our country's energy sustainability.

How Can I Increase My Fuel Economy?

- **Avoid driving at high speeds.** Mileage rates (miles per gallon, or mpg) drop rapidly when driving more than 60 miles per hour.
- **Avoid aggressive driving.** Accelerating and braking in stop-and-go traffic lowers your fuel economy by approximately 33% for highway driving and by 5% for city driving.
- **Do not idle a vehicle for longer than 30 seconds.** Idling wastes fuel and increases emissions. Driving is the most efficient way to warm a vehicle.
- **Minimize unnecessary loads.** Extra weight decreases gas mileage by 1–2% for every 100 pounds of weight. Roof-rack loading and towing a trailer generally reduce fuel economy by 5% or more.
- **Minimize driving on hilly or mountainous terrain.**
- **Use cruise control and automatic overdrive.** Cruise control maintains a constant speed, and overdrive gears lower



engine speed. Constant and lowered engine speed reduces engine wear and saves gas.

- **Plan ahead.** Minimize shopping trips and plan your route to avoid backtracking. Carpool or work at home if possible.
- **Walk or bike** for work or shopping, if possible.
- **When purchasing a new car, look for excellent gas mileage** (30–50 mpg).

Auto Maintenance

- **Tune up your vehicle engine regularly.**
- **Align tires and inflate to the recommended pressure** to improve gasoline mileage by more than 3%.
- **Replace clogged air filters** to improve gas mileage by as much as 10%.

- **Fix a faulty oxygen sensor** to improve a vehicle's mileage by as much as 40%.
- **Use the recommended grade of motor oil.** Other grades can lower your vehicle's gasoline mileage by 1–2%.

What's New?

- *Hybrid-electric vehicles* utilize the benefits of both gasoline engines and electric motors. They have regenerative braking, electric motor drive capabilities, and the ability to automatically start and shut off.
- *Electric vehicles* run on electric motors powered by rechargeable battery packs. They are typically energy efficient and environmentally friendly.
- *Hydrogen fuel cell vehicles* run on hydrogen gas rather than gasoline and emit no harmful emissions.

Where Can I Learn More?

- *Fuel Economy Guide*, U.S. Department of Energy and Environmental Protection Agency, www.fueleconomy.gov/feg/printGuides.shtml
- Your Vehicle, Energy Savers website, U.S. Department of Energy Office of Energy Efficiency and Renewable Energy, www.energysavers.gov/your_vehicle/
- ENERGY STAR website, U.S. Department of Energy, www.energystar.gov



References

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- Fuel Economy Guide*, U.S. Department of Energy and Environmental Protection Agency, <http://www.fueleconomy.gov/feg/printGuides.shtml> (accessed 07/21/2010).
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