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30 SECOND RULE

Drivers of NREL vehicles should turn off their engines when parked for more than 30 seconds. Employees, visitors, and vendors are encouraged to do the same in their own vehicles.

Exceptions:

- If the outdoor temperature is lower than 20° F, drivers may idle for the first hour of operation, until the cabin reaches a comfortable temperature. At this point, return to the 30 Second Rule.
- If the outdoor temperature is lower than 15° F, or higher than 85° F, drivers may idle to maintain cabin comfort.
- Idling may be unavoidable in certain circumstances for emergency vehicles, vehicles engaged in traffic operations, vehicles being serviced, vehicles operating auxiliary equipment, and vehicles waiting at traffic lights or caught in traffic congestion.

SUSTAINABLE NREL

Sustainable NREL is a program that helps make the laboratory a global model for sustainability. Through Sustainable NREL, we “lead the way” by minimizing our use of resources — like energy, water, and materials — and maximizing value from the resources we do use.

As a sustainable organization, NREL manages:

- **Economic viability:** efficient operations, prudent investments, and maximum value
- **Environmental stewardship:** minimal resource use, minimal waste and pollution, natural processes, renewable resources, and restoration
- **Public responsibility:** a safe working environment, education, and being a good neighbor.

NREL’s Pollution Prevention Initiative seeks to limit idling in NREL and employee-owned vehicles by educating drivers about the health, environmental, and financial benefits of idle reduction.



National Renewable Energy Laboratory
1617 Cole Boulevard, Golden, Colorado 80401
303-275-3000 • www.nrel.gov

NREL is a national laboratory of the U.S. Department of Energy
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Put a Stop to Idling

To reduce emissions and save fuel, NREL requires drivers to shut off vehicle engines as soon as possible when parked. You can help NREL lead the way by following the 30 Second Rule: Don’t idle company or personal vehicles if you are parked for longer than 30 seconds.

Sustainable NREL

Pollution Prevention Initiative

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3 REASONS NOT TO IDLE

IDLING WASTES FUEL

Research estimates that vehicle idling in this country wastes about 6 billion gallons¹ of fuel each year, with cars and light trucks responsible for about half the total. The larger a vehicle's engine, the more fuel is wasted during idling.

IDLING WASTES MONEY

A typical vehicle can consume up to 0.8 gallons of fuel per hour while idling. Eliminating just 30 minutes of idling per day results in annual fuel savings of \$575 per vehicle, assuming a fuel cost of \$3.75 per gallon.

IDLING HARMS THE ENVIRONMENT

Idling vehicles contribute to climate change and air quality problems. In the Denver Metro Area, idling is responsible for an estimated 40,000 tons of air pollution and 400,000 tons of carbon dioxide emissions each year.² If all that idling were eliminated, it would be like taking 61,000 light-duty vehicles off the road.³



MYTHS & FACTS

MYTH

Turning my engine off and on to avoid idling will shorten the life of my battery and starter.

FACT

Advances in engines, lubricants, fuels, and computer engine controls have alleviated problems associated with more frequent starts. Idling actually does more damage to the engine than restarting does.

MYTH

Restarting the engine wastes more fuel and produces more emissions than idling does.

FACT

In today's vehicles, a hot start usually requires only one or two revolutions of the engine, keeping fuel use and emissions to a minimum. A recent study by the U.S. Environmental Protection Agency (EPA) found that diesel buses produce an initial "pulse" of emissions upon starting, but the pulse lasts less than five seconds and isn't substantial enough to negate the benefits of idle reduction.⁴

MYTH

It's important to warm up a vehicle engine before driving, especially in cold weather.

FACT

Diesel bus manufacturers routinely suggest a warm-up time of less than five minutes. Light-duty vehicles only need to warm up for about 30 seconds on cold days.⁵ Also, remember to keep an ice scraper handy: Idling is a very inefficient and expensive way to defrost your windshield.

MYTH

If the engine is off, I run the risk of not being able to start in an emergency.

FACT

Modern engine controls and fuel injection make starting a quick and repeatable operation.

For more information about idling, visit http://thesource.nrel.gov/sustainable_nrel/preventing_pollution.html

¹Idling: Cruising the Fuel Inefficiency Expressway, www.afdc.energy.gov/afdc/pdfs/idling_reduction_primer.pdf

²City and County of Denver, www.greenprintdenver.org/air-and-emissions/idling

³Derived using the AFDC Vehicle Emissions Comparison Tool, www.afdc.energy.gov/afdc/vehicles/electric_emissions.php

⁴EPA, <http://epa.gov/Region2/cleanschoolbus/study.htm>

⁵City and County of Denver, <http://enginesoff.com/index.html>