



VEHICLE IDLING FACTS

Ten seconds of idling uses more fuel than turning off the engine and restarting it. If your vehicle is stopped for more than 10 seconds – except in traffic – turn off the engine.

What's the best way to warm up a vehicle?

With computer-controlled, fuel-injected engines, you need no more than 30 seconds of idling on winter days before driving away. Contrary to popular belief, the best way to warm up your vehicle is to drive it.

- Warming up the vehicle means more than warming the engine. The tires, transmission, wheel bearings and other moving parts also need to be warm for the vehicle to perform well. Most of these parts don't begin to warm up until you drive the vehicle.
- The catalytic converter – the device that cleans pollutants from the vehicle's exhaust – doesn't function at its peak until it reaches between 400°C and 800°C. The best way to warm the converter is to drive the vehicle. Driving a vehicle cuts warm-up times in half. This reduces fuel consumption and greenhouse gas emissions.
- If your vehicle has a diesel engine, idling actually lowers the coolant temperature faster than shutting off the engine. In other words, switching off the engine keeps the engine warm longer.

Vehicle Wear and Tear

- Excessive idling can be hard on your engine, and damage engine components, including your vehicle's cylinders, spark plugs and exhaust system.
- When idling, the engine isn't working at peak operating temperature, and fuel doesn't undergo complete combustion. This leaves fuel residues that can contaminate engine oil and make spark plugs dirty.
- Restarting a car many times has little impact on engine components such as the battery and the starter motor. The wear on parts that restarting the engine causes adds about \$10 a year to the cost of driving – money you can recover several times over in fuel savings.

Emissions from Idling

- An idling vehicle emits 20 times more pollution than one traveling 32 miles per

hour. By turning off your engine, you can help reduce global warming, acid rain, and smog.

- Idling produces more emissions per minute than driving because the vehicle's engine is working below its peak temperature and does not combust fuel completely. Winter emissions from an idling vehicle are more than double those of a cold start.
- A vehicle's catalytic converter needs to be hot (400 to 800 degrees Celsius) before it can effectively clean pollutants from its exhaust. The best way to warm the converter is to drive the vehicle.
- Engine exhaust (diesel and gas) contains more than 40 hazardous air pollutants.
- Contaminants in vehicle emissions have been directly linked to significant respiratory health effects.
- Traffic areas around schools – where vehicles are often left idling – often have significantly higher pollution levels inside and outside their buildings.

Source: Office of Energy Efficiency, Natural Resources Canada
<http://oee.nrcan.gc.ca/english/index.cfm?attr=16>