To maximize your vehicle’s fuel consumption, follow the manufacturer’s recommended maintenance schedule and practice NRCan’s fuel-efficient driving techniques.

**Cold weather causes higher fuel consumption.**
- A drop in temperature from 24°C to 7°C can increase fuel consumption by 12 to 28%.
- Winter air is 11% denser than summer air.

**Aerodynamic resistance is greater in the winter.**
- Wind resistance increases highway fuel consumption by approximately 1.3%.
- Cold, dry winter air is 11% denser than warm, humid summer air, which increases wind resistance. Consequently, highway fuel consumption increases by approximately 1.3%.

**Winter driving taxes the vehicle’s electrical system.**
- The vehicle’s electrical loads are normally higher in cold weather due to greater demands from heating, defrosting, and other accessories drawing more power from the engine which increases energy use.

**Winter gas normally has lower energy density.**
- Winter gas has 1.5 to 3% less energy than summer gas.
- Gasoline composition is seasonally and geographically adjusted based on historical temperature data. A litre of winter gas has less energy than a litre of summer gas, typically in the range of 1.5 to 3%. Diesel fuel is affected similarly.

**Winter weather creates difficult driving conditions.**
- Roads are rougher in the winter, with increased asphalt deterioration and a mix of snow, ice, slush, water, salt, gravel, and sand. The engine works harder to offset the increased rolling resistance. Data shows that fuel consumption can increase 7 to 35% because of poor road conditions.