

# Idling Audit Data Sheet

Names: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Outdoor temperature: \_\_\_\_\_ Weather conditions: \_\_\_\_\_ Other special conditions: \_\_\_\_\_

Price of fuel on this date: regular unleaded: \_\_\_\_\_ diesel: \_\_\_\_\_ (see <http://tonto.eia.doe.gov/oog/info/gdu/gasdiesel.asp>)

A. Data collection					B. Vehicle characteristics		C. Fuel	D. Calculations		
Vehicle type (car, minivan, SUV, light truck, bus, or large truck)	Vehicle color	Idling start time	Idling stop time	Total time idling (min)	Idle fuel consumption rate (gal/hr)	Greenhouse gas emissions rate (lbs/gal)	Price of fuel for this vehicle (\$/gal)	Fuel consumed (gal/year)	Greenhouse gases emitted (lbs/year)	Money spent on idling (\$/year)
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
Totals-----						-----				

# Idling Audit Analysis Worksheet

## Vehicle characteristics

Different sized engines consume gas at different rates and produce different amounts of greenhouse gases (GHG) when they are idling. Insert the following values into **Section B** on your data sheet based on the type of vehicle that you timed idling.

Vehicle type	Idle fuel consumption rate (gal/hr)	GHG emissions rate (lbs/gal)
Car or minivan	0.37	19.4
SUV or light pick up truck	0.50	19.4
Bus or large truck	0.50	22.2

**Calculations:** Use the data in **Sections B and C** of your data sheet to complete these calculations and fill out **Section D**.

To calculate the fuel consumed per year during idling for each vehicle you timed, use the following formula:

$$\frac{\text{Total time idling (min)}}{\text{day}} \times \frac{1 \text{ hr}}{60 \text{ min}} \times \text{Idle fuel consumption} \frac{\text{gal}}{\text{hr}} \times \frac{365 \text{ days}}{1 \text{ year}} = \text{Fuel consumed} \frac{\text{gal}}{\text{year}}$$

To calculate the amount of greenhouse gases emitted during idling per year, use the following formula:

$$\text{Fuel consumed} \frac{\text{gal}}{\text{year}} \times \text{GHG emissions rate} \frac{\text{lbs}}{\text{gal}} = \text{Greenhouse gases emitted} \frac{\text{lbs}}{\text{year}}$$

To calculate the amount of money spent on idling per year, use the following calculation:

$$\text{Fuel consumed} \frac{\text{gal}}{\text{year}} \times \text{Current price of fuel} \frac{\$}{\text{gal}} = \text{Money spent on idling per year} \frac{\$}{\text{year}}$$

## **Totals Worksheet**

Compile your project team's data on this worksheet. If you conduct more than one audit, complete a separate worksheet for each. This will allow you to compare across audits – for example, to compare the amount of idling that occurs before and after school, if doing an audit at a school.

Date and time of audit: \_\_\_\_\_

	<b>Total</b>
Total time observed idling (minutes)	
Total fuel consumed (gal/year)	
Total greenhouse gasses emitted (lbs/year)	
Total money spent on idling (\$/year)	