

# Household Carbon Footprint Calculator



Dear Students,

In this activity, we will use a tool that calculates the amount of carbon generated by your household each year.



## Materials Required:

- Fossil fuel use for your home
- Electricity use for your home
- Miles driven by people in your home
- Miles flown by people in your home

# Carbon Footprint Calculator Worksheet

Use this worksheet to gather the information that you'll use to fill out the Seventh Generation Household Carbon Footprint Calculator at: [www.seventhgeneration.com/carbon-calculator](http://www.seventhgeneration.com/carbon-calculator)  
 This calculator works by assessing the largest factor for individual carbon footprints—energy use. Because of that, you'll need to ask your parents to review their utility bills with you.

## Household energy use

This section assesses the amount of fossil fuels your household uses directly by your household for heating. You can get this information from your utility bills or from your supplier's website.

### Fossil fuels

Consumption	Resource
	Propane ( <i>gallons</i> ) <input type="checkbox"/> per month <input type="checkbox"/> per year
	Gas ( <i>100 cubic feet (CCF)</i> ) <input type="checkbox"/> per month <input type="checkbox"/> per year
	Heating Oil ( <i>gallons</i> ) <input type="checkbox"/> per month <input type="checkbox"/> per year

**Electricity** (The amount of electricity that you use is converted based on the average use of fossil fuels.)

Consumption	Resource
	Electricity ( <i>kilowatt hours</i> ) <input type="checkbox"/> per month <input type="checkbox"/> per year

### Transportation

Miles Driven	Vehicle
	Vehicle 1 ( <i>miles</i> ) <input type="checkbox"/> per month <input type="checkbox"/> per year
	Vehicle 2 ( <i>miles</i> ) <input type="checkbox"/> per month <input type="checkbox"/> per year
	Vehicle 3 ( <i>miles</i> ) <input type="checkbox"/> per month <input type="checkbox"/> per year
	TOTAL ( <i>miles</i> ) <input type="checkbox"/> per month <input type="checkbox"/> per year

### Air miles

Miles Flown	Traveler
	Me ( <i>miles</i> ) <input type="checkbox"/> per month <input type="checkbox"/> per year
	Name: <input type="checkbox"/> per month <input type="checkbox"/> per year
	Name: <input type="checkbox"/> per month <input type="checkbox"/> per year
	Name: <input type="checkbox"/> per month <input type="checkbox"/> per year

For help in calculating these numbers, use:

- <http://www.savewealth.com/travel/airportdistance/>
- <http://www.webflyer.com/travel/milemarker/>

# My Impact Worksheet

According to the Carbon Calculator, I am responsible for \_\_\_\_\_ tons of carbon dioxide per year.

<b>Tons of CO<sub>2</sub> emissions per year</b>	<b>Rating</b>
Below 4.2 tons/year	Much less than average
Between 4.2 and 7.9 tons/year	Less than average
Between 7.9 and 13.9 tons/year	Average
Between 13.9 and 17.3 tons/year	More than average
Above 17.3 tons/year	Much more than average

Three things I can do to reduce my carbon footprint:

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# How Can You Reduce Your Carbon Footprint?

Here are some ideas of steps that you and your family can take to cut your energy use. To find out more about any of these ideas, check out: [www.seventhgeneration.com/carbon-calculator](http://www.seventhgeneration.com/carbon-calculator)

## Conserve Household Energy.

Turn off lights you're not using.

Make a pact with your family to be extra mindful about shutting off lights when they leave a room.

## Schedule an Energy Audit.

Get expert advice to help you identify ways you can use less electricity and plug energy leaks in your home.

## Let Your Dishwasher Breathe.

Skip the energy-intensive drying cycle on your dishwasher and choose the "air-dry" option, or open the door overnight for some zero-energy dish-drying action.

## Shift Your Load to Off-Peak Times.

Electricity demand goes down at night and begins rising in the morning, peaking at mid-day before falling back down at nightfall again. Try to wash laundry or run the dishwasher at nighttime and as far as possible from mid-day.

## Don't Heat or Cool Empty Rooms.

If there is a room in your home that is largely unused, close the vents to save on heating and cooling costs.

## Turn Off Your Electronics.

If you're going to be away from your computer or other appliance for more than an hour, turn it off as you leave the room.

## Eliminate "Phantom Load."

Many electronics use electricity even when they're turned off—so your best bet is to unplug electronic devices and appliances when they're not in use.

## Show Your Fridge a Little Love.

Every six months pull the fridge away from the wall and scrub down the grime that accumulates on the coils.

## Wash Clothes in Cold Water.

Turn the knob on your washing machine to "cold/cold" today, and leave it there.

## Give the Dryer a Rest.

Consider skipping the dryer and hanging your clothes to dry on a rack or a clothesline.

## Replace Your Light Bulbs.

Replace the incandescent light bulbs in your house with compact fluorescent light bulbs (CFLs).

## Reduce Your Water Use.

Save water by fixing any leaks around your house and replacing faucets and showerheads with low-flow alternatives.

# How Can You Reduce Your Carbon Footprint? (continued)

## Cut Waste Through Windows.

Make sure that the edges of your windows are sealed by filling gaps with caulk.

Cover windows with heavy curtains or drapes, or use storm window kits from your local hardware store to cut down the heat lost in winter.

When your AC is working to cool your home in the hot months, reduce solar heat gain by installing window coverings like drapes, blinds, or awnings.

## Transportation.

Drive Less: Replace at least one short car trip a week with a walk or bicycle ride.

Carpool and use public transportation.

Inflate tires to recommended air pressure to improve your fuel efficiency.

Fly Less: Try to go by train or other forms of mass transportation.

These websites can give you more ideas for saving energy in your home.

Conscious Living TV:

<http://www.consciouslivingtv.com/blog/2008/08/23-ways-to-save-energy-in-your-home.htm>

Co-op America: <http://www.coopamerica.org/programs/climate/cleanenergy/homeoffice.cfm>