

Calculating Your Household's Carbon Footprint

The phrase "household carbon footprint" is frequently used to describe the total CO₂ emissions associated with a household's energy consumption, which includes transportation. The EPA has estimated that the average four person household in the US emits 83,000 pounds of CO₂ in a year. Ask your parent for your household's recent electric, gas, and/or oil bills so you can more accurately calculate your household's energy consumption. Since your energy bills vary by season, use an average of winter and summer values if you can. Ideally, complete this activity with your parent.

Go to: http://epa.gov/climatechange/emissions/ind_calculator2.html and complete this worksheet as you enter the information requested for **Section 1** (Current Emissions) of the online calculator.

Note: Use the Tab button to navigate through this online calculator.

<p>1. Transportation: According to the calculator, how many pounds of CO₂/year does your household generate from transportation? <i>If your household has two or more vehicles, add up the "pounds of CO₂ per year" amounts in the right-hand column of the worksheet.</i></p>	<p>_____ lbs CO₂/year</p>
<p>2. Home Energy: According to the calculator, how many pounds of CO₂/year does your home generate through the use of natural gas, electricity, or fuel oil (kerosene/propane)? <i>Add up the "pounds of CO₂ per year" amounts in the right-hand column of the worksheet.</i></p>	<p>_____ lbs CO₂/year</p>
<p>3. Home Waste: According to the calculator, how many pounds of CO₂/year does your household generate from waste before recycling is taken into account)?</p>	<p>_____ lbs CO₂/year</p>
<p>4. Recycling: After accounting for your household's recycling efforts, how many pounds of CO₂/year does your household generate from waste?</p>	<p>_____ lbs CO₂/year</p>
<p>5. Subtract your answer for step #4 from your answer for step #3 to determine how many pounds of CO₂ your family saves by recycling.</p>	<p>_____ lbs CO₂/year</p>
<p>6. The online calculator will estimate your household's annual total emissions (also known as your carbon footprint). How many TOTAL pounds of CO₂ does your household generate per year? <i>This amount will be indicated at the bottom of the screen after you have entered your recycling information (at the end of Section 1).</i></p>	<p>_____ lbs CO₂/year OR _____ lbs CO₂/year per household member</p>
<p>7. According to the online calculator, what is the average carbon footprint for a household of the same size?</p>	<p>_____ lbs CO₂/year</p>
<p>8. What Can You Do to Reduce Emissions? Now, proceed through Section 2 of the online calculator titled "Reduce Emissions" and with a parent review and discuss the list of actions you can take on the road, at home, and to reduce waste to determine if there are at least two actions you can take or have already taken to reduce your emissions. Use section 3 to answer the following questions.</p> <p>How much would your CO₂ emissions be reduced by if you took these actions? _____ lbs/year</p> <p>If you took these actions, how much money would you potentially save? \$ _____</p> <p>If you took these actions, what would your new total CO₂ emissions be? _____ lbs/year</p>	