



CO₂: How Much Do You Spew?

Answers:

The table below gives the pounds of CO₂ per year for each category in the worksheet calculation for each scenario. Negative numbers are given in situations where the household is producing more energy from photovoltaic panels than they use.

	Jetsetter Family	The Retireanos	Farmer Family	Snow Family	Conservatorias	Ursula Urbanite	Harriett Homeless	The Demos	Des Moines Family	Median Family
Driving	88,000	733	73,229	4,620	3,667	733	0	0	44,000	25,680
Flying	234,000	14,400	0	3,600	140,400	1,800	0	0	7,200	0
Mass Transit	0	750	0	0	10,400	500	250	0	0	0
Taxi/Limo	750	150	0	150	3,900	750	0	0	150	0
Electricity	72,000	-1800	34,200	0	14,400	5,250	3,600	-3,600	21,000	18,000
Heating Oil	0	0	17,600	0	8,800	0	0	0	0	0
Natural Gas	0	0	0	0	11,000	0	0	0	13,002	4,400
Propane	0	195	0	26,000	0	0	0	0	0	0
TOTAL	394,750	14,428	125,029	34,370	192,567	9,033	3,850	-3,600	85,352	48,080
Per person	98,687.5	7,214	10,419	8,592.5	96,283.5	9,033	3,850	-1,800	21,338	16,027

Questions to discuss:

Talk about the following questions in groups or as a class.

- The Kyoto Protocol recommended that emissions be reduced to at or below 1990 levels. That means less than 11,000 pounds of CO₂ per person per year. *Is the family you analyzed meeting that goal?*
- *What activities emitted the most CO₂ for the family you examined?*
- *Could those activities be changed to emit less CO₂? How?*
- *How would you change your scenario to reduce CO₂?*

For more information about this activity, including a teacher's guide, visit: <https://scied.ucar.edu/activity/co2-how-much-do-you-spew>