



**Global Cooling™ Program
Carbon Emissions Audit**

ANNUAL ELECTRICITY USE

xxxxxxx kWh * 1.55 lbs CO2/kWh = xxxxxx lbs CO2
1 kWh = 1.55 lbs CO2/ kWh

FOSSIL FUEL CONSUMPTION

xxxxx gallons diesel (and “heating oil”) * 22.38 lbs CO2/gal = xxxx lbs CO2
1 gal diesel (heating oil) = 22.38 lbs CO2/ gal
xxxxx gallons gasoline (car) * 19.56 lbs CO2/gal = xxxx lbs CO2
1 gal gas (car) = 19.56 lbs CO2/ gal
xxxxx gallons gasoline (airplane) * 21 lbs CO2/gal = xxxx lbs CO2
1 gal gas (jet) = 21 lbs CO2/ gal
xxxxx gallons of propane * 12.67 lbs CO2/gal = xxxx lbs CO2
1 gal propane = 12.67 lbs CO2/ gal
xxxxx cubic ft natural gas * 0.12 lbs CO2/ ft3 = xxxx lbs CO2
1 ft3 of natural gas = 0.12 lbs CO2/ft3
xxxxx therm (natural gas) * 11.7 lbs CO2/ Btu = xxxx lbs CO2
1 therm of natural gas = 11.7 lbs CO2/ therm = 100,000 Btu

For conversions go to: http://www.climatetrust.org/solicitations_2007_Metrics.php

TRANSPORTATION

1 gal unleaded gas = 19.56 lbs CO2/ gal
1 gal diesel fuel = 22.38 lbs CO2/ gal

Business Flights

~ 2.4 air miles = 1 lb CO2 (<http://www.terrapass.com/flight/flightcalc.html>)

Employee Commuting (unleaded gas)

xxxxxxx miles in small cars (30 mpg estimate)	= xxxxxxxx lbs CO2
xxxxxxx miles in medium cars (23 mpg estimate)	= xxxxxxxx lbs CO2
xxxxxxx miles in vans/ trucks/ SUVs (15 mpg estimate)	= xxxxxxxx lbs CO2
xxxxxxx miles in large trucks/ tractor trailer (7.5 mpg)	= xxxxxxxx lbs CO2

Metro/ Subway/ Amtrack (diesel)

xxxxx miles on Amtrack (83 mpg estimate) = xxxxxxxx lbs CO2
(ranges from 39 passenger miles per gallon (Amtrak) to 1400 (high efficiency light rail).
Essentially the Co2 per passenger mile is 0)

Past carbon audits showed us how to calculate these other useful #s:

- Ton/mile via ships = refer to Café Imports carbon audit
- Lawn mower (For each hour of use a gasoline powered lawn mower is 11 times more polluting than a car 18.666/50 hours = .373 gallons per hour = 2.678 hours per gallon)