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Equivalency Calculators

EPA GHG Equivalency Calculator

<http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

This calculator will translate rather difficult to understand statements into more commonplace terms, such as "is equivalent to avoiding the carbon dioxide emissions of X number of cars annually." Also includes coal fired power plants, acres of pine forests, electricity use for X homes.

American Forests Personal/Household Carbon Footprint Calc in Tree Equivalents

<http://www.americanforests.org/resources/ccc/index.php>

The Personal Climate Change Calculator is an easy to use tool which will help you measure your climate-affecting carbon dioxide (CO₂) emissions. After calculating your carbon footprint, you will be presented with a convenient option for offsetting these emissions by making a donation to plant trees in one of AMERICAN FORESTS Global ReLeaf forest restoration projects. Each tree costs just \$1 and is "planted" with the click of a mouse on a secure page of the website.

Personal Emission Calculators

Nature Conservancy's Personal/Household Carbon Footprint Calc

<http://www.nature.org/initiatives/climatechange/calculator/>

Use The Nature Conservancy's **carbon footprint calculator** to measure your impact on our climate. Our carbon footprint calculator estimates how many tons of carbon dioxide and other greenhouse gases your choices create each year. Includes home energy, transportation, food, recycling and waste.

Carbon Counter Personal CO₂ Footprint Calculator

<http://www.carboncounter.org/offset-your-emissions/personal-calculator.aspx>

Complete the questions below and estimate how much *annual* carbon dioxide results from your day-to-day activities. Choose to offset all of your emissions or just your home, auto or air emissions. If you'd prefer to simply offset the carbon footprint of an average American, click on the "One-click Offset!"

Individual Emissions – Many Other Calculators

<http://www.epa.gov/climatechange/emissions/individual.html>

Includes: AOL Personal Impact calculator, ICLEI's personal CO₂ calculator, and CarbonCounter

Appliance and Home Energy Savings Calculators

Energy guide's Individual Appliance Calculator

<http://www.energyguide.com/>

This allows you to calculate energy from appliances such as fridge, washer, dryer, water heater, room AC, etc. based on model age, style, energy star rated, and location. It provides dollars and energy saved by moving to a similar energy efficient appliance.

Lawrence Berkeley Labs Home Energy Saver Energy Use Estimator

<http://hes.lbl.gov/>

Allows you to enter in your house information and compare to your neighbors who have also entered to see if you are above or below average. It also gives you recommendations on how you can decrease your consumption with energy efficient appliances, etc.

List of Calculators

http://www.recyclingcenters.org/ecological_footprint_calculators.php

Other Calculators

EPA's Electricity Sources by Zip Code

<http://www.epa.gov/cleanenergy/energy-and-you/how-clean.html>

Compares fuel mixes used to generate electricity in region, and emissions of NOx, Sox and CO2. Compares region with National Average.

International Civil aviation Organization – Carbon Emissions Calc

http://www2.icao.int/public/cfmapps/carbonoffset/carbon_calculator.cfm

ICAO has developed a methodology to calculate the carbon dioxide emissions from air travel for use in offset programmes. The ICAO Carbon Emissions Calculator allows passengers to estimate the emissions attributed to their air travel. It is simple to use and requires only a limited amount of information from the user. The methodology applies the best publicly available industry data to account for various factors such as aircraft types, route specific data, passenger load factors and cargo carried.

NREL's Calculator for Grid-Connected Photovoltaic Systems

http://rredc.nrel.gov/solar/codes_algs/PVWATTS/

PVWATTS calculates electrical energy produced by a grid-connected photovoltaic (PV) system. Researchers at the National Renewable Energy Laboratory developed PVWATTS to permit non-experts to quickly obtain performance estimates for grid-connected PV systems within the United States and its territories. Includes solar radiation, AC energy (kWh), and energy value.

US DOE's Fuel Economy Site

<http://www.fueleconomy.gov/>

Compare different models of vehicles for fuel efficiency, CO2 emissions, and estimated fuel costs.

Waste Toolkit

<http://www.epa.gov/climatechange/wycd/waste/tools.html>

Farm Calculators

NCAT ATTRA Farm Energy Calculators

http://attra.ncat.org/energy_calculators.html

Martindale's Agriculture Calculators

http://www.martindalecenter.com/Calculators1_2_A.html

A large collection of on-line calculators and design tools, including many with relevance to farm energy usage.

USDA NRCS Energy Estimator: Nitrogen

<http://nfat.sc.egov.usda.gov/>

Energy Estimator for Nitrogen is the second of several tools from Natural Resources Conservation Service (NRCS) developed to increase energy awareness in agriculture. This NRCS energy consumption tool enables you to calculate the cost of nitrogen product use on your farm or ranch. NRCS agronomists have developed these cost estimates based on nitrogen fertilizer management methods for the predominant crops in your state. *This tool does not provide field-specific recommendations.* It evaluates options based on user input. Click on the link for additional information on [fertilizer materials](#).

USDA NRCS Energy Estimator: Irrigation

<http://ipat.sc.egov.usda.gov/>

Energy Estimator for Irrigation is the third of several tools from Natural Resources Conservation Service (NRCS) developed to increase energy awareness in agriculture. This NRCS energy consumption tool enables you to estimate energy cost of pumping water in the irrigation operations on your farm or ranch. NRCS technical specialists have developed these cost estimates based on irrigation methods for predominant crops in your state. This tool does not provide field-specific recommendations. It evaluates options based on user input.

USDA NRCS Energy Estimator: Irrigation

<http://ecat.sc.egov.usda.gov/>

Energy Estimator for Tillage is the first of several tools from Natural Resources Conservation Service (NRCS) developed to increase energy awareness in agriculture. The tool estimates diesel fuel use and costs in the production of key

crops in your area and compares potential energy savings between conventional tillage and alternative tillage systems. The crops covered are limited to the most predominant crops in 74 Crop Management Zones (CMZ's). NRCS agronomists have identified these crops and estimated the fuel use associated with common tillage systems. Without including every crop and tillage system, the Energy Estimator gives you an idea of the magnitude of diesel fuel savings under different levels of tillage.

USDA NRCS Energy Estimator: Animal Housing

<http://ahat.sc.egov.usda.gov/>

Energy Estimator: Animal Housing is the fourth tool in the suite of awareness tools the Natural Resources Conservation Service (NRCS) has developed to increase energy awareness in agriculture.

This NRCS energy awareness tool is designed to inform you of the energy cost centers and help you estimate the energy costs for three animal housing operations on your farm or ranch. NRCS technical specialists have developed energy cost models for housing dairy cows, swine, and poultry. This tool does not provide operation-specific recommendations; it provides an idea of the type of energy cost savings that a producer might expect from making simple changes to the operation. Results should not be construed as actual savings, but only as estimates. The tool evaluates options based on user input.

Wisconsin Public Service Corporation

<http://www.wisconsinpublicservice.com/farm/calculators.aspx>

These calculators help determine estimated savings by using energy efficient equipment for specific applications: Tractor Heater Timers, Vacuum Pump, Ventilation Systems, and Milk Precooler.

Central Iowa Power Cooperative Average Farm Energy Calculator

<http://www.cipco.org/energyFarm.asp>

This calculator allows the producer to input different types of electrical equipment on a farm and provides a typical usage total for comparison, as well as suggestions on how to save energy.

Farm Assessment Toolkit

<http://www.soils.wisc.edu/foe/login>

Developed jointly by the University of Wisconsin Extension and Focus on Energy, this on-line toolkit assesses your farm operation's energy efficiency, identifies areas for improvement and suggests energy efficient equipment options.