



DENR Carbon Footprint Calculation: A Path to Reducing Our Energy Consumption

DENR is the first state agency to commit to voluntary reporting of greenhouse gas emissions for all of its operations. As a reporter and founding member of the Climate Registry, DENR has been calculating, independently verifying and publicly reporting its carbon footprint.

This commitment is consistent with DENR's Climate Change Strategic Goal - taking voluntary actions to mitigate GHGs. The process of developing an annual emissions inventory is a key step toward understanding and reducing our environmental impact and becoming leaders in sustainable actions. Through this effort, our department has been able to identify where our energy dollars are going, and bring attention to potential actions that can be taken to reduce energy usage and save money in all divisions.

The Division of Air Quality is coordinating the effort, with representatives from each division forming the DENR Climate Change Work Group. The work group assists in the collection of electricity consumption records and fuel usage from combustion equipment, vehicles and off-road equipment.

DENR's 2008 carbon footprint is estimated to be 50,000 metric tons carbon dioxide equivalent, with 56 percent coming from electricity consumption and 35 percent coming from vehicles and off-road equipment. The remaining emissions are due to combustion equipment used to heat our buildings. Our annual GHG emissions are equal to those released from:

- Powering approximately 4,600 homes or 9,200 passenger vehicles, or
- Burning 100,000 tons coal or five million gallons distillate oil.

Our 2008 electricity and heating costs were \$4.5 million. Our vehicles traveled 23 million miles in 2008, and consumed about 1.6 million gallons of fuel. The average fuel economy for the department's 2,500 vehicles was about 14 miles/gallon.

The team is working with other DENR staff and management to develop a five year Strategic Energy Plan, which must demonstrate how DENR will comply with a 30 percent reduction in energy use in DENR-owned buildings by 2015 (per General Statute 143-64.10-12). As we work toward meeting this goal, our carbon footprint will decrease, as will our electricity/heating costs, enabling us to become more environmentally sustainable.