Bellevue College Carbon Audit

As a part of the ACUPCC, Bellevue College EAC uses the <u>Clean Air Cool Planet Campus</u> <u>Carbon Calculator</u> to conduct an internal Carbon Emissions Audit. The Carbon Audit Report is an internal audit and inventory of greenhouse gas emissions attributed to Bellevue College campuses.

Bellevue College's net emissions of metric tones of carbon dioxide (mTCO2) equivalent is was 29,051.4 in 2011-2012. This total includes both direct and indirect emissions by the college from energy use, transportation, waste production, and refrigerant use. In addition, we receive "carbon credit" for any energy credits and forest preservation (a relatively minor component for BC at this time). There was a steady rise in the total emissions (MT eCO₂) from FY05/06 – FY10/11, but data from FY11/12 show the ship is beginning to turn. Emissions declined from the previous fiscal year by 1,278 MT eCO₂ or around 4%, a small, but important step towards climate neutrality. The major contributor to this decline in emissions can be directly attributed to transportation management programs launched in Fall 2011, which reduced single occupancy vehicle trips and a dip in student population. Overall Scope 3 emissions, tied to transportation, and declined 7%. Scope 1, on campus GHG emissions also declined 2% from the previous year, while purchased electricity from owning North Campus drove a 4% increase in emissions derived from campus consumption.

BC's emissions are comparable to other community colleges when number of students (2.0 mTCO2 per student) and campus size (42.1 kgCO2 per square foot) are considered. Compared to 4-year universities, BC's emissions per student are significantly lower, and our emissions per square footage are higher. This is almost certainly a result of the large number of students we serve, and the fact that we are a commuter college.

It is clear from this data that efforts to reduce carbon emissions must be focused on the areas of transportation and energy consumption. In addition, BC currently has very few carbon offsets, providing another area for major gains in reducing our net carbon output. Although there are many challenges associated with these reductions, as well as short-term costs, the benefits in the form of cost savings should be significant (reduced energy bills, reduced parking/road maintenance, prevention of the cost of a new parking structure, etc.). In addition, reductions

now will help offset costs and emissions from future growth (in enrollment and campus buildings). New buildings, such as the ground sourced heated and cooling T building breaking ground in July, and new students provide excellent opportunities to phase in changes that help to reduce our emissions.

As an institute of higher learning and a model for our community, it is the Bellevue College's role to help set the standard for a sustainable future. This carbon audit provides us with a baseline to start creating a campus that is a model of sustainability.