

Delta College performs inventory on greenhouse gas emissions, moves to cut output

by Patti Brandt | The Bay City Times
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Dan Staudacher | Times Photo 1

Delta College student Kathleen Martin of East Tawas works on a paper in a computer lab at the Delta library. Full-time Delta students emit an average of four units of carbon each year while on campus, something that the college hopes to minimize by implementing energy-efficiency programs.

Each full-time student at Delta College emitted an average of four units of carbon while on campus in the 2007-08 academic year, a number that includes their commute to and from school.

Said another way, every 1,000 square feet of space at Delta emitted an average of 28.8 units of carbon in the 2007-08 year.

Those gases contribute to the greenhouse effect, which increases global warming.

Now the college is moving to offset that use by saving an equal amount of carbon output somewhere else. Ways to do that include recycling, using energy efficient light bulbs and using alternative energy.

Linda Petee, Delta's sustainability and risk management coordinator, said the goal is to get the footprint to zero.

"In some form we're trying to equalize that," Petee said.

The college spent seven months doing an inventory to determine its "carbon footprint," which is a measure of the amount of greenhouse gases people produce by burning fossil fuels for things like electricity, heating and transportation.

The inventory is part of the American College & University Presidents Climate Commitment that Delta signed in September 2007.

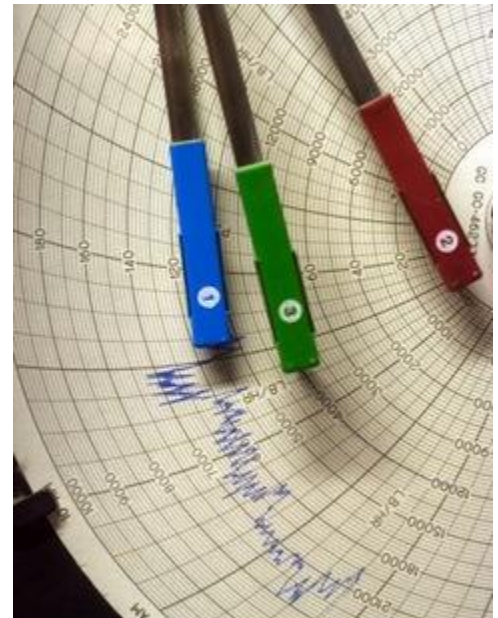
Enrolled colleges commit to setting an example in their communities by minimizing global warming emissions and by giving their students the knowledge to do the same throughout their lives.

As part of the commitment, Delta agreed to do the greenhouse gas inventory, which will be updated every other year, and to implement a plan to become "carbon neutral," or reduce its carbon emissions.

Delta also implemented some short-term actions, such as purchasing environmentally conscious goods - like cleaning products that don't contain harsh chemicals and organic foods that were grown without pesticides.

The study was headed up by Petee, an avid outdoorswoman who said she's always had a passion for the environment and conservation.

"So to be a part of something that's going to make a difference is really exciting to me," she said.



Dan Staudacher | Times Photo 2

This steam chart recorder allows Delta maintenance workers to monitor the energy efficiency in the boilers.



Dan Staudacher | Times Photo 3

LEDs in the south parking lot lights use 45 percent less energy than traditional bulbs.

The inventory looked at data from as far back as the 1999-00 school year, gathering information on utility usage, solid waste and wastewater, as well as the number of students and staff and Delta's square footage.

The largest contributor to the carbon footprint is the commute to and from Delta by students, staff members and faculty, Petee said.

Data was collected on how students got to school, how far they traveled to get there and how many school credits they took.

Delta worked with the Bay Metropolitan Transportation Authority to figure out where students who rode the bus to college got on and got off. It looked at how much gas Delta used in its lawnmowers and tractors, and things like student field trips, athletic travel and faculty conferences. And it did a survey of students and staff members on their driving habits.

"It was like a big puzzle, but it was really interesting to look at the patterns," Petee said.

So how does Delta stack up to other institutions? Petee said it's too early to compare Delta's footprint to other colleges because most are still in the process of gathering their data.

But it can compare itself to its own carbon emissions from about eight years ago. Square footage has increased since then, as well as the student population.

"But our emissions are remaining pretty close to what they were in 2000," Petee said.

The next step for Delta is to analyze the data for trends and to look for ways to curb emissions, such as promoting carpooling, recycling materials used in building renovations and managing storm water. Delta recently spent nearly \$5 million building parking lots that filter rainwater in an environmentally friendly way.