

Climate Corps Fellows Aid Implementation of the EBCI's Strategic Energy Program

Climate Corps Fellows Erin Evans and Daniel Brookshire (right) visited a solar farm in Haywood County with Damon Lambert, the chair of the Strategic Energy Committee, as they studied the feasibility of different types of renewable energy on the Qualla Boundary. In the effort to make the Qualla Boundary a greener community, collaboration has proven to be a beautiful thing. The EBCI Tribal Government, Cherokee Preservation Foundation, the Environmental Defense Fund's Climate Corps, the Land of Sky Regional Council and others have worked together to enable greater energy efficiency and the emergence of local renewable energy sources.



The story began several years ago, when Cherokee Preservation Foundation convened community members to set goals for being a green community and to take actions to implement the Qualla Environmental Resources Initiative proclaimed by Principal Chief Michell Hicks. Momentum began to build in 2008, when the Tribe received a grant from the U.S. Department of Energy to complete a strategic energy plan and Cherokee Preservation Foundation began funding energy audits of tribal and community buildings to identify energy and cost saving opportunities.

Over the past three years, 40 energy audits have been conducted by Waste Reduction Partners, a program of the Land of Sky Regional Council. The audits identified a range of energy improvements involving insulation, types of windows and roofs, HVAC (heating, ventilation and air conditioning) efficiency, lighting, water saving features in restrooms, and office equipment that could be made to reduce energy usage significantly in existing buildings.

Tribal departments formed a Strategic Energy Committee to create a strategic plan to implement the recommendations from the audits and determine the best renewable energy options available to the EBCI. The Committee, which also serves as the knowledge base and advocate for the plan, is comprised of representatives from the Transportation, Environment and Natural Resources, and Planning and Development departments and the Office of the Principal Chief.

The strategic energy plan targets at least a 30% energy reduction at seven tribal buildings. That requires a sizable amount of capital, and \$1,458,100 has been raised in grant monies and matching funds to retrofit buildings and implement energy efficiency projects. The funding has been provided by the EBCI, the federal government and Cherokee Preservation Foundation. Cherokee Preservation Foundation's most recent contribution to the effort was a \$374,000 grant awarded to the Strategic Energy Committee so it can create showcase projects that will demonstrate renewable energy and energy efficiency projects on the Qualla Boundary.

Two Fellows from the Energy Defense Fund's Climate Corps, Erin Evans and Daniel Brookshire, helped the Strategic Energy Committee accomplish a great deal over the summer of 2011. The Climate Corps Public Sector Program taps talented graduate students from top schools and matches them with public organizations that are developing practical energy efficiency investment plans.

Evans and Brookshire began by helping the Strategic Energy Committee determine which sources of renewable energy hold the greatest potential for the tribe. They worked with architects who are examining the feasibility of incorporating solar and micro-hydro features in the three EBCI visitor centers, and the architects' recommendations will be made soon. Micro-hydro power involves placing a turbine with propellers in moving water; the water turns the turbines, the turbines spin a generator and electricity is produced.

The Fellows also prioritized tribal buildings by energy efficiency potential to help the Strategic Energy Committee plan the order of implementation of the strategic plan. In other projects, they worked with Waste Reduction Partners to complete the last of the energy audits that were needed, and they developed a system that will enable the Tribe to track energy use now and after building retrofits have been completed. The system will also aid in the development of green building standards on the Qualla Boundary.

The Climate Corp Fellows helped the community prepare for the Christmas holiday, too, upgrading the snowflakes that decorate downtown Cherokee each holiday season to LED lights that use just 1 watt of energy instead of the seven watts consumed by the old lights. The new lights are sheathed in plastic rather than glass and will last much longer as a result. The cost savings from these efficient LED holiday lights is expected to be approximately \$5,800 per year. Evans also did the legwork to get rebates from Duke Power for the Tribe on the new LED streetlights that have recently been installed throughout downtown Cherokee.

Both Climate Corps Fellows enjoyed their experience in Cherokee. “The Tribe is taking a lot of big steps to make the Qualla Boundary more energy efficient and sustainable,” said Brookshire, who would like to work as a regional planner when he finishes graduate school in a year.

“It is exciting that the Tribe is the first in western North Carolina to do a lot of this work,” said Evans, “We feel lucky to have had the opportunity to help and to learn.” Evans has completed her Master’s in Public Administration and hopes to work for the U.S. Department of Energy or for a city as its energy management officer.