

## Project Highlight



# Blue Lake Climate Action Plan

Blue Lake, a small town of 1,253 people, lies 300 miles north of San Francisco in Humboldt County’s Mad River Valley. While Blue Lake has a small downtown business district, the region’s transition away from logging has left the town with little industry of its own. Most residents commute to work in nearby towns like Arcata and Eureka.

The town borders 91 acres of land belonging to the Blue Lake Rancheria Tribe, which runs the Blue Lake Casino & Hotel. The Tribe also operates the Blue Lake Rancheria Transit System, a bus line that serves both the Casino and the City of Blue Lake, connecting them with Arcata, McKinleyville, and Eureka. Starting in 2008, the Tribe began actively reducing its carbon footprint. Projects included the construction of a highly energy efficient hotel and the installation of solar arrays and a biomass-to-electricity system. To date, the Tribe has reduced energy consumption by 35 percent from 2008 levels—work that earned it recognition as a 2015 Climate Action Champion from the Obama Administration.

Nestled amongst the North Coast redwoods, the City of Blue Lake recognized the likelihood of regional impacts of climate change, including decreased precipitation and loss of snowpack, increased vulnerability to extreme weather events, and a higher incidence of forest fires. City staff also anticipated that recent changes in State law would eventually require the City to plan for climate change in their General Plan and consider greenhouse gas emissions during California Environmental Quality Act review. However, because of its small size, Blue Lake operates on a very limited budget and has scant resources for planning. With the backing of a progressive community and the nearby example of the Tribe, the city seized the opportunity offered by the Grant Program to fund a comprehensive Climate Action Plan for Blue Lake.



### The Project

The overarching goals of the *Blue Lake Climate Action Plan* are: (1) to reduce the amount of carbon emissions caused by the community, (2) to increase the city’s energy security, and (3) to improve the local economy. The Plan provides a framework to reduce city emissions to 16% below 2005 baseline emissions.

*Aerial of Blue Lake, 2016. The Mad River curves past the city on the lower left. The Blue Lake Casino and Hotel is located on Blue Lake Rancheria Tribe land in the upper left. Source: Streamline Planning Consultants*



Source: City of Blue Lake

In partnership with the Redwood Coast Energy Authority, the City completed a greenhouse gas inventory to better understand the main sources of emissions. In Blue Lake, electricity, natural gas, and propane consumption contribute 46 percent of community emissions; transportation contributes 32 percent; industrial point sources contribute 11 percent; and solid waste decomposition makes up the remainder.

Based on this analysis, the Plan identifies six focus areas for emissions reductions and outlines specific actionable items to cut emissions. Options range from larger infrastructure investments to smaller behavioral changes. The City Council rigorously scrutinized these goals before accepting the Plan to ensure that they could be accomplished given available resources.

Listed below: the focus areas, the percent they contribute to the total reduction goal, and example actions:


- **Local Government Actions (1.3%):** LED streetlights; use of EPA Procurement Guide for purchases
- **Energy Efficient Homes (12%):** home weatherization; ordinance requiring home energy retrofit at time of sale; use of heat pumps
- **Energy Efficient Businesses and Community Spaces (8.8%):** green business certification; more stringent energy standards for new construction; a farmers market
- **Improved Alternative Transportation Options (65%):** expanded bus routes and stops; carpool and carshare programs; voluntary tire pressure checkpoints
- **Renewable Energy Sources (8.8%):** solar arrays; PG&E Green Option program
- **Solid Waste Reduction (4%):** local food waste anaerobic digester; curbside recycling

The Plan outlines each action and the steps to implementation, sets a target number of adopters, quantifies the emissions the action would eliminate, and calculates the action’s relative cost effectiveness (amount of emissions reduction per dollar spent). In addition, it also identifies potential lead and partner agencies and which groups will bear the burden of the cost.

Because of the small size of the City government and the fact that the main sources of emissions result from residents’ homes and transportation choices, the *Climate Action Plan* places a heavy emphasis on the role of the average citizen in implementing climate conscious

## Locally-Driven Solutions

- Providing a tailored “Citizen’s Guide” to residents outlining the steps they can take to reduce their carbon footprint.
- Devising strategies that both bolster the local economy and cut emissions, like a Green Business Certification program and a Farmers Market.
- Supporting regional pilot projects like the RePower heat pump installation program: residents get new energy efficient heating at low prices, and the City benefits from project analysis about performance and economic viability for the rest of their residents.
- Collaborating with the Blue Lake Rancheria Tribe to build upon the Tribe’s expertise in climate action and to provide expanded transit options for both City and Tribe residents.

AT1.c	Carpool and Carshare Programs	27 MT CO <sub>2</sub> e	
The goal of this action is to discourage single occupant driving and reduce the number of vehicles on the road. This action accomplishes this through two different programs: <ul style="list-style-type: none"> <li>• a carpool program that helps to facilitate carpool options for commuters,</li> <li>• a carshare program such as ZipCar.</li> </ul>			
Potential Lead and Partner Agencies	Suggested First Implementation Steps	Target	
<ul style="list-style-type: none"> <li>• Blue Lake City Hall</li> <li>• HCAOG</li> </ul>	1. Organize a planning group to coordinate implementation of actions 2. Design a city-supported carpool program <ul style="list-style-type: none"> <li>○ Secure funding</li> <li>○ Establish a community accessible calendar of participants</li> <li>○ Market and promote</li> </ul> 3. Reach out to private carshare companies and solicit their services	50 carpool participants and 5 carshare participants	
Incremental Upfront Cost	Incremental Cost Payback	Burden of Cost	
\$50,000 for City to develop parking area for carshare program <sup>3</sup> and \$3,000 to setup carpool organizing tools	< 1 year	City for program development and support	

Example of plan action, which quantifies avoided emissions and cost effectiveness in the upper right hand corner. Source: Blue Lake Climate Action Plan

practices. The Plan includes a “Citizen’s Guide to Greenhouse Gas Reduction,” providing residents ten easy actions to cut their carbon footprint at home and at work as well as other lifestyle changes they may take to make a difference. The City largely takes the role of advocate by providing information to residents on opportunities to cut emissions and venues where they can access further information and/or funding.

Since the Plan was accepted in late 2014, the Blue Lake community has made significant strides in implementation. These include collaborating with the Tribe to add bus stops to the Blue Lake Rancheria Transit System; improving trails and downtown recreation areas; facilitating residents’ access to Redwood Coast Energy Authority and Redwood Community Action Agency programs that give rebates for energy efficiency and weatherization investments;

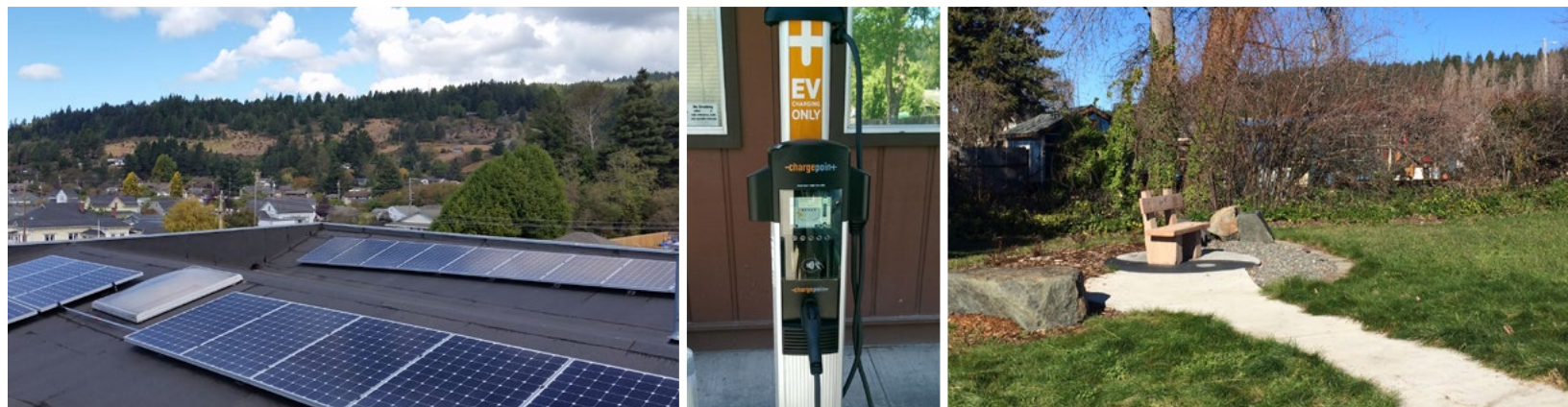
Below, left to right: Solar panels were recently installed with the assistance of Redwood Coast Energy Authority (RCEA) at the Dell’Arte International School of Physical Theatre in the City’s Downtown. An Electric Vehicle Charging Station was installed at City Hall, also with the RCEA’s assistance. Source: RCEA. The Mad River Old Crows, a community group, coordinated with the City to develop a small pocket park on City-owned property. Source: City of Blue Lake.

working with PG&E to install LED streetlights; installing a solar array at Dell’Arte International School of Physical Theatre; and working to establish a local farmers market and cooperative.

### Local/Regional Connection

Prior to Blue Lake’s *Climate Action Plan*, the City of Arcata produced a greenhouse gas emissions reduction plan and the County of Humboldt adopted an Energy Element for its *General Plan*. No analysis of this kind had been done in any of the smallest communities in the County. As a result, good data—particularly on traffic patterns—for use in the greenhouse gas inventory analysis was hard to find. The City of Blue Lake worked closely with Caltrans and the County of Humboldt to obtain more complete data, which provided them with a more accurate carbon footprint and also facilitated better emissions tracking on a county level.

The City’s partner, Redwood Coast Energy Authority, has since used the Blue Lake framework to create a template climate action plan to simplify the process for other rural communities. They are now sharing that document with other jurisdictions in Northern California and are spearheading climate action plans for Humboldt County as a whole and for individual cities in the area.





Left to right: Citizens' Committee meets at Mad River Brewery to discuss energy efficiency programs for residents. Jerome Carman of RCEA presents at Town Hall. Source: RCEA

### Agency Collaboration for Action

The planning team broadly engaged City government, specifically the Department of Public Works, the City Engineer, the Building Official, the Planning Commission, and City Council. Perhaps more importantly, they actively looked for outside partners with the capacity to share knowledge or spearhead implementation of some aspect of the plan. These partners included the Blue Lake Rancheria Tribe, the Chamber of Commerce, the Redwood Community Action Agency, and local businesses. Early collaboration helped the City secure community buy-in and facilitated smoother implementation of new regulations born out of the Plan.

Given their own active participation in climate mitigation, Tribe members served as valued advisors. They reviewed the City's initial grant documents and suggested how the City's plan could be used to address water quality in the Mad River and the protection of cultural resources. Furthermore, the Tribe, as the operator of the town's only public transit system, was deeply involved in negotiating additional stops and expanded the hours of service, crucial aspects to the implementation of the *Climate Action Plan*.

### Effective Community Engagement

Two town hall meetings were held during the planning period to give community members the opportunity to discuss topics in more detail. Residents came prepared with ideas in hand. One group of attendees was so galvanized by the first town hall that formed their own Citizens' Informal Working Committee. This Citizens' Committee met regularly during the

grant period and continues to meet intermittently to assist implementation. To generate community interest, the Committee identified community members who had invested in energy efficiency improvements and planned an open house tour where the public could visit their homes to learn about options and their cost. The committee and other community groups did much of the work to disseminate information about the plan throughout the community.

### Sustainability Benefits for California

Implementation of the *Blue Lake Climate Action Plan* will help to advance many of California's sustainability objectives, particularly in the areas of:

- Energy efficiency and conservation
- Improved infrastructure systems
- Reduced automobile usage and fuel consumption
- Reduced greenhouse gas emissions

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