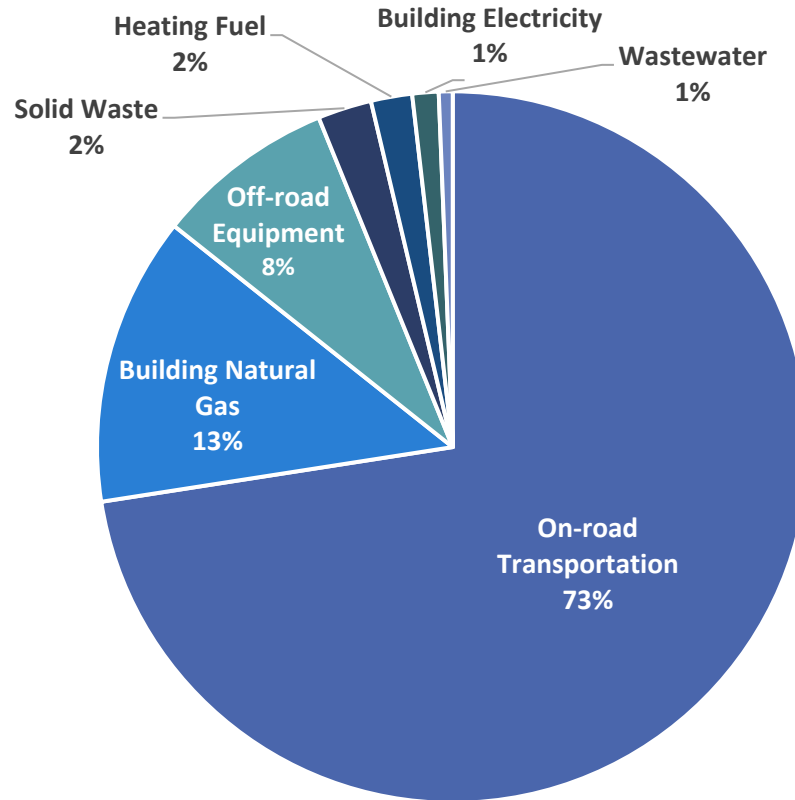

Humboldt RCAP Executive Summary

Recognizing the strength in collaboration, the County of Humboldt, City of Arcata, City of Blue Lake, City of Eureka, City of Ferndale, City of Fortuna, City of Rio Dell, and City of Trinidad, collectively referred to as Humboldt hereafter, have crafted a Regional Climate Action Plan (RCAP) to provide a framework to reduce regional greenhouse gas (GHG) emissions in alignment with the State's goal to reduce emissions by 40 percent below 1990 levels by 2030 (Senate Bill 32) and to reach carbon neutrality by 2045 (Assembly Bill 1279) . Through the development of a climate committee and the regional implementation of the measures and actions included in this RCAP, Humboldt will be able to maximize regional efficiencies, overcome challenges facing rural areas, attract funding, build a green economy, mitigate emissions, and increase resilience.

Humboldt GHG Emission Inventory

The 2022 Humboldt GHG emissions inventory encompasses regional community-wide activities from both incorporated and unincorporated jurisdictions within the boundary of Humboldt County. Pursuant to the International Council for Local Environmental Initiatives (ICLEI) methodologies, specifically, the United States Community Protocol for Accounting and Reporting Greenhouse Gas Emissions Version 1.2 (Community Protocol), the GHG inventory encompasses sectors associated with Humboldt's community activities and over which the local government has jurisdictional control or influence (Building energy, transportation, solid waste, water and wastewater) Note that water services to Humboldt occur fully within Humboldt county boundary and are therefore already encompassed within the energy sector. In 2022 Humboldt emitted 1,531,167 metric tons of carbon dioxide equivalents (MT CO₂e). Figure ES- 1 shows the share of total emissions for the community broken out by community-wide activity.

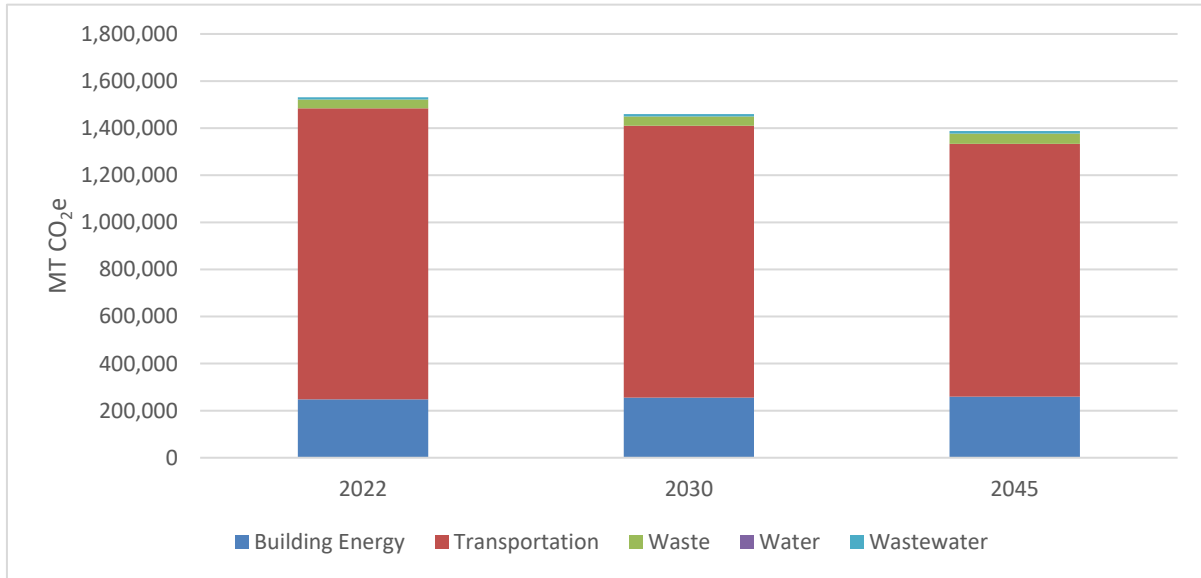
Figure ES- 1 Humboldt GHG Emissions for 2022



Humboldt Projected GHG Emission Forecast

Based on current community activity rates from the 2022 inventory and projected population and employment change in the region, future Humboldt GHG emissions were projected through 2045. Two scenarios were forecast to estimate the future emissions for Humboldt in the years 2030, 2035, 2040 and 2045. This includes a *business-as-usual scenario* (BAU) forecast that estimates how future GHG emissions would change if consumption trends continued as they did in 2022 without consideration of any local or state regulations. Additionally, a *legislative adjusted scenario* (adjusted) forecast was developed that accounts for how currently adopted state legislation, such as the California Renewable Portfolio Standards, Title 24 building energy efficiency standards, and transportation legislation, would reduce GHG emissions from the *business-as-usual scenario*. Humboldt’s adjusted forecast projects emissions to be 1,459,598 MT CO₂e in 2030 and 1,387,943 MT CO₂e in 2045. Forecasted emissions by community sector for both the 2030 and 2045 target years are shown in Figure ES-2.

Figure ES- 2 Humboldt Forecasted GHG Emissions by Sector for 2022, 2030 and 2045



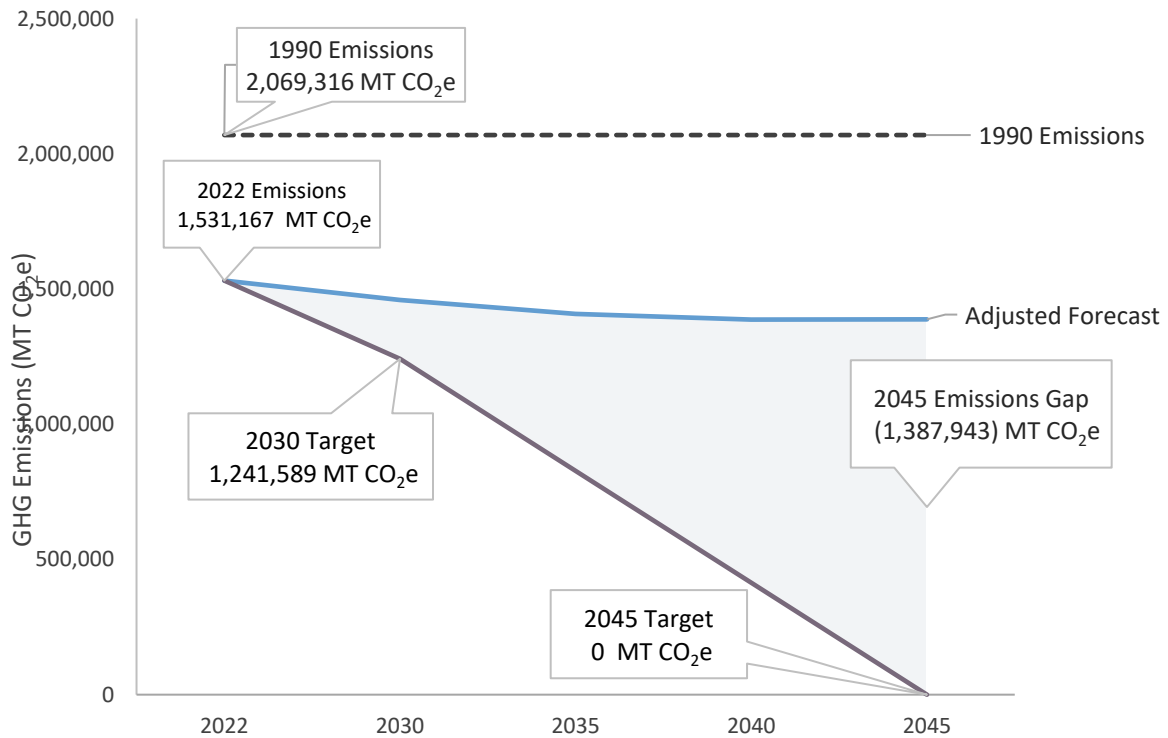
Humboldt GHG Emissions Targets

California has established Statewide GHG reduction goals for 2030 and 2045 that are relative to a 1990 baseline emissions level. The State has encouraged communities to adopt their own plans consistent with the goals included in the California Air Resources Board (CARB) 2022 Scoping Plan. Humboldt does not have a 1990 GHG emissions inventory from which to develop GHG reduction targets consistent with SB 32, however, 1990 GHG emissions can be estimated for the community relative to Humboldt’s updated 2022 inventory using a state-level emissions change metric. As part of the RCAP, 1990 emission levels for Humboldt were calculated following the State-recommended procedure. In 1990, it is estimated that Humboldt GHG emission levels were 2,069,316 MT CO₂e. In support of State climate goals, Humboldt has adopted the following GHG emission reduction targets:

- Reduce GHG emissions to 40% below 1990 levels by 2030 (SB 32 target year)
- Carbon neutrality by 2045 (AB 1279 target year)

This results in an emission target of 1,241,589 MT CO₂e by 2030 and 0 MT CO₂e by 2045. The corresponding GHG emissions target pathway over the coming decades is illustrated in Figure ES- 3. The emissions gap between Humboldt GHG emission forecast and the emission targets is the quantity of GHG emissions that Humboldt is responsible for reducing with regional actions.

Figure ES- 3 Humboldt GHG Emission Reduction Targets



The measures and actions in the RCAP and the establishment and emphasis of the climate committee will provide Humboldt with the GHG reduction necessary to achieve Humboldt’s 2030 climate action target and substantial progress towards the 2045 target, as shown in Table ES- 1. However, the 2045 GHG emissions reductions quantified for their longer-term measures are not yet enough to meet Humboldt’s 2045 climate action target of carbon neutrality. This RCAP strives to institute equitable and resilient systems and make substantial progress towards eventual carbon neutrality. Further updates to the Humboldt RCAP beyond 2030 will also delineate new technologies, legislation, and additional measures and actions that Humboldt will implement to close the remaining gap to achieve the carbon neutrality target.

Table ES- 1 Humboldt GHG Emission Reduction Pathway

Target/Forecast	2030 GHG Emissions (MT CO ₂ e)	2045 GHG Emissions (MT CO ₂ e)
Adjusted Forecast	1,459,598	1,387,943
Reductions from Full Implementation of Measures	219,446	1,228,128
GHG Emissions after Measure Reductions	1,240,151	159,815
Climate Action Targets	1,241,589	0
Target Anticipated to be Met?	Yes	Substantial progress demonstrated

Humboldt RCAP Measures to be Implemented by 2030

The RCAP's overarching approach emphasizes leveraging a formal climate coalition to implement region-wide measures for impactful reduction of GHG emissions. Effective strategies are those that are specific, measurable, feasible, relevant, and time-bound. The RCAP strategies are organized by sector where measures establish specific goals measurable through a discrete performance metric to reduce GHG emissions by a quantifiable level within a specific time period. Measures are supported by actions, the discrete steps Humboldt will take to achieve the measure goal. The measures and actions are supported by substantial evidence and have been designed using principles called key attributes that support changes that are robust, effective, and inclusive. Key attributes include structural change, engagement, equity, feasibility studies, funding, and partnerships. Further, the measures and actions have been developed to account for strategy differences in rural (i.e., dispersed population with limited access to energy and transportation infrastructure) versus urbanized areas (i.e., more densely developed areas with greater access to energy and transportation infrastructure). Through full implementation of the RCAP suite of measures summarized in Table ES- 2, Humboldt will achieve the regions 2030 target of 1,241,589 MT CO₂e and make substantial progress towards the 2045 target.

Table ES- 2 Humboldt RCAP GHG Emission Reduction Measures Overview

Measure ID	Measure Text	GHG Emission Reduction Potential (MT CO ₂ e)
Measure C-1	Establish a Regional Climate Committee comprised of elected officials from each jurisdiction, HTA, HCAOG, HWMA, and RCEA.	Supportive/Critical
Measure BE-1	By 2030, source 90% of grid-supplied electricity from renewable and carbon-free sources.	2030: 15,403 2045: 0
Measure BE-2	Increase the development of micro-grids and storage across the region to support RCEA's RePower Humboldt goals of enhancing grid capacity and facilitating the electrification of buildings and transportation.	Supportive
Measure BE-3 Urban	Reduce existing residential building natural gas consumption by 4% by 2030 and 74% by 2045.	2030: 2,603 2045: 55,866
Measure BE-3 Rural	Reduce existing residential fossil-fuel consumption in households not connected to natural gas infrastructure by 2% by 2030.	Supportive
Measure BE-4	Reduce existing nonresidential building natural gas consumption by 5% by 2030 and 79% by 2045.	2030: 3,821 2045: 42,887

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Measure ID	Measure Text	GHG Emission Reduction Potential (MT CO ₂ e)
Measure BE-5	Decarbonize 95% of new residential building construction by 2027.	2030: 2,252 2045: 13,907
Measure BE-6	Decarbonize 95% of new nonresidential building construction by 2027.	2030: 1,374 2045: 8,492
Measure BE-7	Decarbonize 30% municipal buildings and facilities by 2030.	Supportive
Measure BE-8	Lobby Off-shore Wind developers and PG&E to build electrical infrastructure to supply Humboldt with energy produced by the off-shore wind project which will increase supply and resilience.	Supportive
Measure TR-1 Urban	Implement programs, such as those identified in HCAOG’s RTP, to increase the mode share of active transportation in urbanized areas from 9% to 12% by 2030, thereby achieving a regional active transportation mode share of 8%.	2030: 1,147 2045: 2,594
Measure TR-1 Rural	Implement programs, such as those identified in HCAOG’s RTP, that increase access to safe active transportation, to increase the mode share of active transportation in rural areas from 5% to 6% by 2030 thereby achieving a regional active transportation mode share of 9%.	2030: 1,080 2045: 4,405
Measure TR-2 Urban	Expand the public transit network in support of HCAOG’s Regional Transportation Plan to increase public transit mode share from 2% to 20% public transit mode share in urbanized areas to achieve a regional 13% public transit mode share by 2030.	2030: 18,055 2045: 26,482
Measure TR-2 Rural	Develop a robust public transit network in support of HCAOG’s Regional Transportation Plan to increase public transit mode share from 1% to 10% in rural areas and achieve a regional 13% public transit mode share by 2030.	2030: 20,180 2045: 29,703
Measure TR-3	Reduce regional VMT by increasing promotion of mixed-use development in infill priority areas in alignment with HCAOG’s baseline connectivity score included in the RTP.	Supportive
Measure TR-4	Develop and implement regional mobility hubs and ZEV car-share programs to support mode shift from single occupancy vehicles.	Supportive
Measure TR-5	Require commercial and industrial employers with 25 employees or more to develop a Transportation Demand Management plan.	Supportive
Measure TR-6	Decarbonize 15% of passenger vehicle miles traveled by 2030 and 100% by 2045 through increased adoption of low and zero-emission vehicles and development of a regional electric vehicle charging and hydrogen fueling network.	2030: 55,726 2045: 590,124
Measure TR-7	Increase commercial zero-emission vehicle use and adoption to 10% by 2030 and 100% by 2045 through a regional charging network and development of hydrogen hubs.	2030: 17,441 2045: 279,775
Measure TR-8	Electrify or otherwise decarbonize 12% of applicable SORE off-road equipment by 2030 and 100% by 2045 and replace fossil diesel consumption with renewable diesel in 55% of applicable large diesel in alignment with EO N-79-20 by 2030.	2030: 49,143 2045: 139,645
Measure TR-9	Establish Humboldt as a pilot program for the decarbonization of the transportation sector to help drive state and philanthropic investment throughout Humboldt.	Supportive

Measure ID	Measure Text	GHG Emission Reduction Potential (MT CO ₂ e)
Measure TR-10	Work with the state and biofuel industry to establish a biofuel network within Humboldt thereby funding new green industry and job growth to support the decarbonization of the transportation sector.	Supportive
Measure TR-11	Lead by example and electrify or otherwise decarbonize 50% of the municipal fleet by 2030 in alignment with the state’s Advanced Clean Fleet Rule.	Supportive
Measure SW-1	Establish a local waste separation facility and organics management to be able to reduce waste sent to landfills by 75% by 2030. Reduce GHG emissions by limiting truck trips required to ship waste out of the county and import compost from out of the county.	2030: 29,689 2045: 32,568
Measure WW-1	Expand regional opportunities for implementation of wastewater decarbonization technologies such as anaerobic digesters to reduce GHG and produce renewable fuel sources.	Supportive
Measure WW-2	Reduce per capita potable water consumption by 15% by 2030.	Supportive
Measure CS-1	Research and implement feasible carbon sequestration technology opportunities to support growth and expansion of green jobs industry within the region.	Supportive
Measure CS-2	Offset fossil-based emissions and increase carbon sequestration in the community by achieving SB 1383 procurement requirements (0.08 tons recovered organic waste per person) by 2030.	2030: 1,532 2045: 1,681
Measure CS-3	Develop a County-wide Natural and Working Lands GHG Inventory baseline by 2027 to better understand the existing and future GHG sequestration and help obtain resources to protect and increase natural carbon sequestration occurring in the region as well as promote biodiverse forests and wetlands resistant to wildfire.	Supportive
Total GHG Emission Reduction Potential		2030: 219,446 2045: 1,228,128

* Measures and actions marked as “supportive” may also be quantifiable and have substantial evidence to support their overall contribution to GHG reduction, but they are not quantified for one of several factors. Refer to RCAP Appendix C for more information.

Humboldt RCAP Implementation and Monitoring

The RCAP has established an implementation plan and schedule to achieve the 2030 GHG emissions reductions goals and make substantial progress to the 2045 goals. As part of the RCAP, Measures will be implemented using a phased approach with progress reports prepared on a bi-annual basis starting in 2026. The bi-annual progress reports will include the preparation of a regional community-wide GHG emissions inventory, as well as status update on implementation of RCAP Measures and Actions. Tracking implementation of the plan in conjunction with the inventory updates will demonstrate the progress the region is making in reducing GHG emissions and achieving its 2030 goal. If the actions identified in the RCAP to meet

the 2030 GHG emissions reduction milestone goal are not implemented or if the bi-annual inventory and progress report indicates that the region is off-track from achieving the 2030 goal, the RCAP will be updated to include additional actions or revised actions necessary to meet the 2030 goals.

The RCAP is a long-term programmatic plan consistent with California Environmental Quality Act (CEQA) Guidelines Section 15183.5(b) that will be implemented through regular monitoring and updates to meet the State’s SB 32 GHG emission reduction goals and demonstrate substantial progress towards the State’s AB 1279 carbon-neutrality goals. The RCAP is currently undergoing CEQA environmental review. Following environmental review and adoption in a public process, the RCAP will fulfill the CEQA requirements to be considered a “qualified” GHG reduction plan. Meeting these requirements means that if projects and plans within the Humboldt region in jurisdictions that have adopted the RCAP are consistent with the RCAP, CEQA analysis can be streamlined for projects by establishing consistency with the RCAP such that project GHG emissions may be considered to have a less than significant impact.