

LARIMER COUNTY INTERNAL CLIMATE AND SUSTAINABILITY ACTION PLAN

Larimer County 2022

OVERVIEW

1. Plan Background and Description

Larimer County is committed to demonstrating leadership on environmental sustainability that is reflective of the community's strong commitment to the environment while optimizing decisions that are inclusive of the economy and social equity. Larimer County, as a governmental body, has a unique role in building climate mitigation, adaptation, and overall sustainability capacity in our community through demonstrating how our internal operations and programs conserve our unique way of life as we confront our changing climate that is a significant contributing factor to extreme weather conditions such as drought, heat and wind.

This internal Climate and Sustainability Action Plan reflects the community-wide "Climate Smart and Future Ready" Larimer County initiative, in that the Priority Areas are aligned.



The actions identified herein demonstrate the County's commitment regarding the community-wide priorities. Actions identified in this plan engage all County departments and reflect what the County will do both for the benefit of County staff and operations which in turn benefits our community and to ease or permit action by others in the community. Actions within this plan are developed and regularly updated by incorporating emerging technologies and collaboration across County departments. This plan was developed through the

dedicated work of an Internal Climate and Sustainability Team comprising numerous County departments (see Appendix A). Short-term actions are expected to be complete by 2024, while long-term actions are expected to be complete by 2030.

2. Plan Focus

Each priority area in this plan includes the leadership goals of collaboration, education and equity, diversity, and inclusion. These values are captured in the vision of this Plan:

Abiding by Larimer County's Guiding Principles while providing a Climate and Sustainability lens to our daily work.

For example, **collaboration** entails close working relationships between County departments as well as active participation on the County's Internal Climate and Sustainability Team. **Information** includes an internal webpage that provides County employees with sustainability tips, opportunities for engagement, and tools for embedding sustainability into their work. **Equity, Diversity, and Inclusion** embeds the following intent into each discussion:

All work will be conducted with a community led and community driven focus, ensuring elevated community voice from under-resourced communities to avoid unintended consequences or inequitable impacts.

This Climate and Sustainability Action Plan focuses on short- and long-term goals that improve the following desired conditions. The desired condition each action is anticipated to impact (a.k.a., the Climate and Sustainability Connection) is identified to evaluate outcomes of this plan.



Environmental Quality = A set of properties and characteristics of the environment, either generalized or local, as fundamental to a healthy community environment. It is a measure of the condition of an environment (e.g., varied characteristics such as air and water purity or pollution, noise, access to open space, built environment, etc.) relative to the requirements of one or more species physical and mental health.



Social Equity = Social equity, a concept also known as environmental justice, is the fair treatment and involvement of all people and communities—regardless of race, gender, national origin, or income level—in the development, implementation, and enforcement of environmental laws, regulations, and policies.



Community Resiliency = The ability of a community to use its assets to strengthen systems and improve the community's ability to withstand, adapt to, and recover from adversity.



Economic Sustainability = The practices that support long-term and diverse economic growth while enhancing social, environmental, and cultural aspects of the community.

3. Plan Implementation

The first year of implementing this plan will emphasize development of baseline conditions if no measures yet exist. Goals and measures identified in the plan below will be informed and adjusted as necessary when baseline conditions have been established. **Unless otherwise noted, all goals will be tracked against a 2022 baseline.**

The level of County costs to implement mitigation and adaptation actions in this plan are identified via a sliding scale as follows (reflective of the total cost of each action):






\$ = nominal	<\$10,000
\$\$ = moderate expense	\$10,000 - \$100,000
\$\$\$ = high expense	\$100,000 - \$500,000
\$\$\$\$ = significant expense	>\$500,000

This plan will be reviewed annually to allow for adjustment and alignment with the “Climate Smart and Future Ready” Larimer County initiative as it unfolds and grows and as goals are realized or actions require adjustments. The Board of County Commissioners will receive mid-year and annual reports on outcomes toward the goals identified and will have the opportunity to continually approve plan adjustments as required.

As you consider the contents of this plan, please keep in mind the following terminology:

- ❖ Sustainability - Meeting the needs of the present without compromising the ability of future generations to meet theirs, through the three main pillars: environmental, social, and economic.
- ❖ Resilience - The capacity to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience.
- ❖ Mitigation - Efforts that people, communities and governments take to reduce or prevent the emission of greenhouse gasses.
- ❖ Climate Change - Any significant change in the metrics of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer.
- ❖ Adaptation - Altering our behavior, systems, and—in some cases—ways of life to protect our families, our economies, and the environment in which we live from the impacts of climate change.

Larimer County Internal Climate and Sustainability Goals

Goal	Desired Condition
Built Environment, Waste, and Economy	
Reduce Greenhouse Gas Emissions from County energy use by 30% through enhancing energy efficiency and use of renewable energy sources by 2030.	
Build the infrastructure required to recycle, reuse and divert waste to achieve 40% waste diversion from the landfill by 2025 and 80% diversion by 2030.	
Establish guidance for the procurement of goods and services which are consistent with the strategies and goals outlined in this plan.	
Increase share of industry mix to include more renewable energy, energy efficiency and greenhouse gas reduction firms in the region.	
Mobility, Delivery of Goods, and Internet Services	
Increase the addition of bike lanes/ wide shoulders / commuter trails / multi-modal miles and EV Infrastructure in unincorporated Larimer County.	
Increase average miles per gallon of the County light-duty fleet by 20% through transition to alternative fuel vehicles, adoption of an idling policy and more fuel efficient vehicles by 2030.	
Reduce County employee vehicle miles traveled 20% by 2030 and increase the number of services that reduce resident vehicle miles traveled.	
Natural Environment, Water and Agriculture	
Develop an internal water conservation plan for county facilities and landscape use.	
Conserve 24,000 acres of open space properties within Larimer County to protect habitats and preserve biodiversity by 2043.	
Wellbeing and Resilience	
Work with local food producers and distributors to increase access to sustainable and locally produced food sources.	
Increase employee and resident resilience by informing and incentivizing actions that promote improved air quality.	
Streamline incentives, encourage, and lead proactive hazard mitigation and disaster avoidance related to changing climate conditions that contribute to wildfires, floods, drought and higher temperatures.	

a. Built Environment, Waste and Economy

Objective: Reduce our impact on the environment while improving comfort and efficiency, particularly within our use of energy and water, and generation of waste, while demonstrating the highest and best use of taxpayer dollars and improving the County’s economic sustainability.

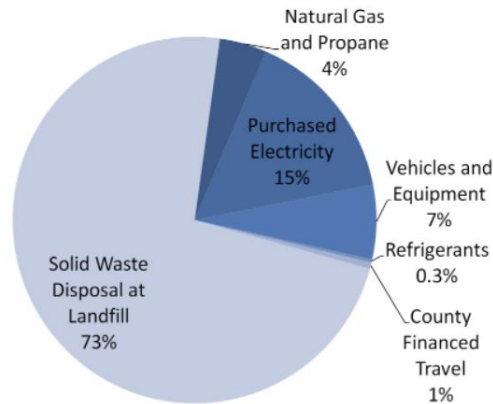


Figure 3. 2010 GHG Emissions by Source


Energy Production and Use

Departments Engaged: Facilities, Community Development

Energy Production Goal -

Reduce Greenhouse Gas Emissions from County energy use by 30% through enhancing energy efficiency and use of renewable energy sources by 2030.

#	Action Description	Timeframe	Climate & Sustainability Connection	Costs
EPU 1	Continue to improve County facility Energy Star performance by increasing system efficiencies within component replacement plan	Short		\$\$\$
EPU 2	Develop a building retrofit checklist for applicability to County facilities and review for applicability to businesses and residents	Short		\$
EPU 3	Update County Facility Design Criteria to include alternative energy source evaluation for all new facilities	Short		\$-\$\$\$\$




#	Action Description	Timeframe	Climate & Sustainability Connection	Costs
EPU 4	On-site Renewable Energy Production added to County resources and facilities to reduce greenhouse gas emissions	Long		\$\$\$\$

Waste and Materials Handling

Departments Engaged: Solid Waste, Assessor, Information Technology

Waste and Materials Handling Goal -

Build the infrastructure required to recycle, reuse, and divert waste to achieve 40% waste diversion from the landfill by 2025 and 80% diversion by 2030.



#	Action Description	Timeframe	Climate & Sustainability Connection	Cost
WM 1	Implement infrastructure and diversion projects in the Solid Waste Master Plan with the Regional Wasteshed Partners, by 2027	Short-Long		\$\$\$\$
WM 2	Study Biochar technology as a waste management tool to divert forest waste and dimensional lumber from the landfill	Short		\$
WM 3	Continue to move County offices to digitize old and new records to eliminate storage requirements, such as OnBase on a county-wide level, and encourage more paperless workflow between departments	Long		\$\$\$

Purchasing and Procurement

Departments Engaged: Purchasing

Purchasing and Procurement Goal -

Establish guidance for the procurement of goods and services which are consistent with the strategies and goals outlined in this plan.



#	Action Descriptions	Timeframe	Climate & Sustainability Connection	Costs
P 1	Explore options, actions and costs of developing a sustainability purchasing program, that may include criteria for vendor selections, consider product life cycle analysis, and buying products with sustainability certifications	Short		\$
P 2	Develop a sustainability purchasing guide or policy that supports the County's climate and sustainability goals, while also meeting economic realities and service needs of the community.	Long		\$\$

Economy

Departments Engaged: Economic & Workforce Development

Economy Goal -

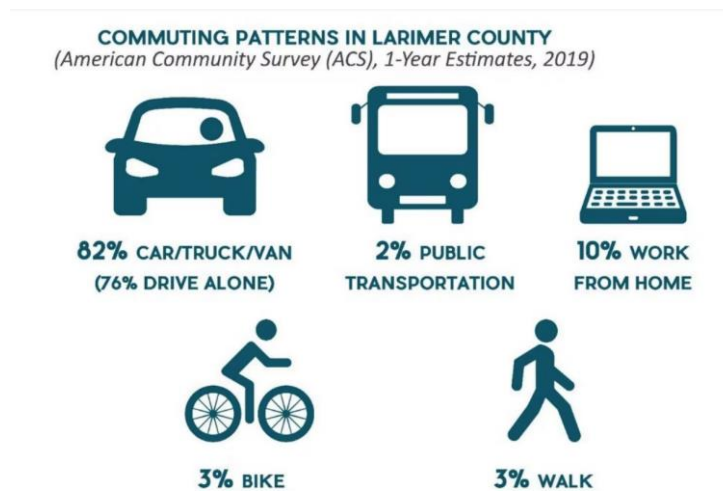
Increase share of industry mix* to include more renewable energy, energy efficiency and greenhouse gas reduction firms in the region.

#	Action Description	Timeframe	Climate & Sustainability Connection	Costs
Econ 1	Participate in the "Reimagining Climate Wise" sustainable business effort and evaluate for Countywide support	Short		\$
Econ 2	Update Business Incentive Policy to include more specific language around environmental stewardship and sustainability and workforce development.	Short		\$

* https://www.bls.gov/green/industry_by_naics.pdf

b. Mobility, Delivery of Goods and Internet Services

Objective: Finding sustainable ways to improve how we move people and goods including considerations for the costs, accessibility, impact, and quality of our transportation options.



Infrastructure

Departments Engaged: Fleet, Facilities, Natural Resources, Engineering

Infrastructure Goal -

Increase the addition of bike lanes/ wide shoulders / commuter trails / multi-modal miles and EV infrastructure in unincorporated Larimer County.



#	Action Description	Timeframe	Climate & Sustainability Connection	Costs
Infra 1	Identify needs in terms of Electric Vehicle (EV) charging infrastructure for County operations - number of stations, types of stations, locations of stations and costs.	Short		\$
Infra 2	Identify and explore opportunities at County facilities that support alternative modes of transportation, such as bicycling, walking, and transit. Consider dedicating more indoor space for secure bicycle storage and e-bike charging.	Short		\$
Infra 3	Achieve key, feasible, priority regional trail connections with regional partners, outlined in the Larimer County Open Lands Master Plan	Long		\$\$\$\$

Fleet

Departments Engaged: Fleet

Fleet Goal -

Increase average miles per gallon of the County light-duty fleet by 20% through transition to alternative fuel vehicles, adoption of an idling policy, and fuel efficient vehicles by 2030.



#	Action Description	Timeframe	Climate & Sustainability Connection	Cost
F 1	Create awareness campaigns regarding emission reduction benefits from increased fuel economy and transition to alternative fuels for County fleet	Short		\$
F 2	Establish a Sustainable Fleet workgroup of the Customer Advocacy Board that will create a roadmap for County fleet transition to alternative fuel sources and fuel efficient vehicles, including hybrids and electric vehicles.	Short		\$

Services

Departments Engaged: Human Resources, Human Services, Information Technology

Services Goal -

Reduce County employee vehicle miles traveled 20% by 2030 over the 2019 baseline and increase the number of services that reduce resident vehicle miles traveled.

#	Action Description	Timeframe	Climate & Sustainability Connection	Cost
S 1	Create a baseline for County employee remote workers and impact to GHG emissions, comparing pre-COVID to current practices. Promote alternative commuting options for County employees	Short		\$
S 2	Explore options to decrease County staff miles traveled and resident vehicles miles traveled by providing virtual and community level access to services	Long		\$

c. Natural Environment, Water and Agriculture

Objective: Improve how we care for and use nature and the land to positively impact our water quality, water availability and our natural resources.



Water Quantity and Quality

Departments Engaged: Engineering, Health & Environment, Natural Resources, Community Development

Water Quantity and Quality Goal -

Develop an internal water conservation plan for county facilities and landscape use.



#	Action Description	Timeframe	Climate & Sustainability Connection	Cost
WQQ 1	Adopt County ordinance allowing greywater reuse for residential and commercial buildings and provide a model for implementation in other jurisdictions.	Long		\$
WQQ 2	Reduce use of potable water through conservation practices at County facilities and through the use of greywater for subsurface irrigation.	Long		\$\$
WQQ 3	Integrate Water Master Plan, if adopted, into Land Use Code	Long		\$\$\$

Land Conservation and Restoration

Departments Engaged: Natural Resources, Facilities, Extension

Land Conservation, Restoration and Land Stewardship Goal -

Conserve 24,000 acres of open space properties within Larimer County to protect habitats and preserve biodiversity by 2043.

#	Action Description	Timeframe	Climate & Sustainability Connection	Cost
LCR 1	Assess and establish native intact vegetation conversion maximum / limit plan and goals for County property to protect habitats and preserve the biodiversity of our native plants and animals	Short		\$
LCR 2	Update the Larimer County Open Space Master Plan to include climate change and resilient ecosystem service considerations (by 2026)	Short		\$\$

d. Wellbeing and Resilience

Objective: Increase equitable and local access to food, improved air quality, and natural disaster avoidance, preparation, and response.

SINCE 1953, LARIMER COUNTY HAS EXPERIENCED THE FOLLOWING DISASTER DECLARATIONS:

(fema.gov, 2021)



13 WILDFIRES



1 TORNADO



7 FLOODS



2 SEVERE SNOW FALLS






2 SEVERE STORMS

Food Systems

Departments Engaged: Human Services, Extension, Assessor, Natural Resources

Food Sustainability Goal -

Work with local food producers and distributors to increase access to sustainable and locally produced food sources.





#	Action Description	Timeframe	Climate & Sustainability Connection	Cost
FS 1	Continue to partner with local producers and land trusts to conserve farms and ranches with easements in Larimer County.	Short		\$\$\$
FS 2	Expand access to nutritious food for underserved community members, via the Market Days Program and other County programs. Develop an information campaign regarding food preparation for local farm produced foods.	Long		\$\$
FS 3	Explore a rebate program for vertical farming / greenhouses per HB22-1301	Long		\$

Air Quality

Departments Engaged: Health and Environment, Facilities

Air Quality Goal -

Increase employee and resident resilience by informing and incentivizing actions that promote improved air quality.


#	Action Description	Timeframe	Climate & Sustainability Connection	Cost
AQ 1	Enhanced air quality monitoring for GHG, air toxics and ozone precursors, particulates, etc.	Short		\$\$
AQ 2	Provide accurate and timely public health data about the health impacts associated with poor air quality.	Short		\$M
AQ 3	Partner with CO RAQC Mow Down Pollution low-emission engine buy-back program and use low-emission engines in County landscaping activities	Short		\$
AQ 4	Maintain a county operations and county-wide GHG inventory and associated mitigation and adaptation strategy program.	Long		\$\$





Disaster Avoidance, Response and Recovery

Departments Engaged: Office of Emergency Management, Engineering, Community Development, Sheriff Wildland Fire Emergency Services

Disaster Avoidance, Response and Recovery Goal -

Streamline incentives and encourage and lead proactive hazard mitigation and disaster avoidance related to changing climate conditions that contribute to wildfires, floods, drought and higher temperatures.

#	Action Description	Timeframe	Climate & Sustainability Connection	Cost
D 1	Explore the development of Larimer County Wildfire Partners program for Wildland Urban Interface (WUI) residents	Short		\$

#	Action Description	Timeframe	Climate & Sustainability Connection	Cost
D 2	Extend the reach of current emergency management programs to incorporate equity and inclusion of formal and informal community leaders and members	Short		\$
D 3	Identify any County properties that are at risk of flooding during a 0.2% chance annual flood and develop mitigation strategies to reduce or eliminate the risk	Short		\$\$\$
D 4	Examine potential policies that would go above and beyond the current County codes and set an example for climate resilient infrastructure.	Long		\$
D 5	Establish Larimer Connects Hub locations in every rural community. Identify key citizens to lead the effort and physical locations for community information sharing in a disaster.	Long		\$

NEXT STEPS

- Establish Baselines as necessary
- Begin Short-term and Long-term actions
- Align with Climate Smart as necessary
- Semiannual progress reports to the Board of County Commissioners

Appendix A: Larimer County Internal Climate and Sustainability Team

Department / Division	Representative
Community Development	Eric Fried, Alyssa Martin, Samantha Lasher
Economic and Workforce Development	Jacob Castillo
Office of Emergency Management	Stephen Decatur
Engineering	Shelly Bayard de Volo
Health and Environment	Chris Manley, Kelsey Lyon
Natural Resources	Casey Cisneros
Community Planning, Infrastructure & Resources	Laurie Kadrach
Support Services	Matt Townsend, Mark Pfaffinger
Solid Waste Services	Linda Hammet
Finance	Carol Block
Human Services	Lori Metz
Extension	Karen Crumbaker