

TOWN OF LYONS ENVIRONMENTAL SUSTAINABILITY ACTION PLAN (LESAP)

This document is an update to the original Environmental Sustainability Plan which was published in 2014. There are 6 major categories in this plan:

- 1. Buildings**
- 2. Energy**
- 3. Local Food and Agriculture**
- 4. Water Use and Wastewater**
- 5. Transportation**
- 6. Waste**

Each category contains different strategies with tactics that are contained in each strategy.

In the development of this plan, the following commissions were involved:

- Sustainable Future Commission**
- Housing and Human Services Commission**
- Ecology Commission**
- Parks Commission**
- Planning Community and Development Commission**

The LESAP is a working document that intends to be updated as business needs and priorities are determined. These strategies and tactics are local efforts to mitigate climate change.

BUILDINGS

OBJECTIVES

Adopt policies, programs, and design guidelines for resilient and efficient buildings and community infrastructure to enhance the quality of life, reduce building costs, and complement the natural environment.

TARGETS

Reduce energy use through energy efficiency programs.

****IMMEDIATE STRATEGIES****

B-1: INCREASE TOWN OF LYONS BUILDING ENERGY EFFICIENCY

How

- Determine current building energy consumption, develop energy baseline and target goals for programs
- Aim for all eligible existing Town buildings to be benchmarked using Energy Star performance standards and develop strategies to apply energy efficiency improvements
- Accelerate the adoption of advanced metering infrastructure or smart meters to allow for more responsive demand response strategies and time-of-use billing.
- Ensure building codes match the most recent International Energy Conservation Code
- Continue to increase building codes to require net-zero energy consumption for new buildings and to be significantly more stringent for existing buildings, through policy or ordinance
- Revise and update the design standards and construction specifications

Who

- **Lead:** Sustainability department
- **Support:**
 - Sustainable futures commission
 - Community development department
 - Planning and community development commission
 - Utilities department
 - Utilities engineering board

ENERGY

OBJECTIVES

Achieve energy efficiency and increase reliance on clean renewable energy sources.

TARGETS

Transition to 60% renewable energy by 2035

****IMMEDIATE STRATEGIES****

E-1: ASSESS CARBON EMISSIONS AND MOVE TOWARDS CARBON NEUTRALITY FOR ALL CITY OPERATIONS

This strategy focuses on analyzing the internal Town of Lyons operations and determining possible solutions that will increase energy efficiency and save the Town of Lyons money.

HOW:

- Complete ASHRAE Level II energy audit of town facilities to determine energy-saving opportunities
- Interview and investigate Town operations to determine energy-saving opportunities
- Update inventory of greenhouse gas (GHG) production and set new goals for GHG reductions
- Complete National Renewable Energy Lab (NREL) photovoltaic watts GPS estimation tool to determine the photovoltaic and thermal potential for Town-owned buildings.
- Analyze the feasibility of replacing natural gas combustion appliances in town-owned buildings with air source space and heating technologies

WHO:

- **Lead:** Sustainability department
- **Support:**
 - Sustainable futures commission
 - Utilities department
 - Utilities engineer board

****NEAR TERM STRATEGIES****

E-2: BUILD AN ENERGY TRANSITION PLAN THAT PROMOTES THE USE OF RENEWABLE ENERGY

This strategy focuses on determining a roadmap that enables Lyons, CO to utilize renewable energy. Currently, Lyons, CO receives its energy from the Municipal Energy Agency of Nebraska (MEAN). The deliverable of this strategy would be to determine the cost of transitioning to renewable energy.

HOW

- Collaborate with other electric wholesalers (MEAN) members to compel MEAN to invest in renewable energy, increase the distribution generation allowance for each community (currently held at 2% of total commercial capacity), and seek to divest in the coal-fired electricity assets
- Investigate ways to renegotiate the contract with the electric wholesaler (MEAN) and pursue any alternative partnerships that may better serve the town's utility and sustainability objectives.
- Determine feasibility for the development of a community solar garden.

WHO

- **Lead:** Utilities department
- **Support**
 - Utilities engineering board
 - Sustainability department
 - Sustainable future commission

****MIDTERM STRATEGIES****

E-3: MAXIMIZE ENERGY EFFICIENCY AND RENEWABLE ENERGY OPPORTUNITIES IN THE COMMERCIAL AND RESIDENTIAL SECTORS

There are many incentives and opportunities for renewable energy within Boulder County. The purpose of the strategy is to determine the proper mechanisms which inform and enable Lyons residents to participate in these programs.

HOW

- Promote the use of Boulder County's Energy Smart services
- Promote the use of Boulder County's Partners for a Clean Environment (PACE)
- Ensure building and energy codes (IIBC and IECC) are no more than two cycles behind the most recent code
- Push towards net-zero energy consumption for new residential buildings
- Refrain from including natural gas infrastructure and instead install high-efficiency electric-powered space and water heating appliances and distributed solar energy systems. Water efficiency measures and xeriscaping shall also be valued during the planning process.
- Determine the feasibility of residential co-op for solar energy use

WHO

- **Lead:** Sustainability department
- **Support**
 - Sustainable futures commission
 - Utilities department
 - Utilities engineering board
 - Planning department
 - Planning and community development commission

Local Food & Agriculture

OBJECTIVES

Promote an affordable, sustainable, local, and healthy food supply that is accessible to all and supported by our community.

TARGETS

Increase the accessibility of local food for all residents including the most vulnerable populations.

****IMMEDIATE STRATEGIES****

Ag 1 – CREATE A COMMUNITY GARDEN

Following the approval of the deed-restricted buy-out property plan, establish a working group of interested residents to create the community gardens on appropriate buy-out properties. The deliverable of this strategy would be a recommendation to the Board of Trustees on where the community garden(s) would be located, how they are to be developed and funded.

HOW:

- Explore models that best promote the viable development, operation, and maintenance of these community gardens.
- Use community gardens to deliver educational opportunities that demonstrate sustainable gardening methods and appropriate plant selection.
- Support the donation of locally grown food to organizations like the local food bank.

WHO:

- **Lead:** Sustainability department
- **Support:**
 - Sustainable futures commission
 - Ecology board commission
 - Parks and recreation department
 - Parks commission
 - Housing and Human Service Commission
 - Community development department

****NEAR TERM STRATEGIES****

Ag 2 – LYONS EMERGENCY AND ASSISTANCE FUND FOOD PANTRY

Encourage the collection and distribution of locally grown and organically produced food at the Food Pantry.

HOW:

- Develop a campaign to encourage residents to donate a portion of their grown fruits and vegetables to the Food Pantry and other organizations helping to feed those in need. “Plant a Seed for Others” can be the message to gardeners in the spring to plan vegetable(s) to be harvested for the food pantry. Another strategy might be to encourage volunteers to help harvest fruit trees in the fall for the same purpose as well as to help keep bears safer.

WHO:

- **Lead:** Sustainability department
- **Support:**
 - Sustainable future commission
 - Ecology Board Commission
 - Parks and public works department
 - Parks commission
 - Housing and Human Services Commissions

WATER USE & WASTEWATER

As a part of the St. Vrain watershed, the water Lyons receives impacts many communities. Responsible use of water the town has access to and protecting that water from storm-water runoff, non-point source pollution, and human septic waste will allow for communities in the lower part of the watershed to enjoy the same water quality that Lyons does.

OBJECTIVES

Climate change, population growth, and rapidly increasing demand for already over-allocated water supplies threaten Colorado with a potentially serious water crisis in the future. For this reason, conserving water helps to avoid scarce and expensive water supplies in the future.

TARGETS

Expand water conservation education efforts.

****IMMEDIATE STRATEGIES****

Ww-1: DEVELOP AUDIT PROGRAM TO UNDERSTAND WATER USAGE FOR RESIDENTIAL, COMMERCIAL, AND TOWN OF LYONS BUILDINGS

HOW

- Collect, analyze, and report water usage data for residential, commercial, and Town of Lyons buildings. Make this data available publicly.
- Develop baseline and targeted goals for water programs. Targeted goals will be determined by sector (Ex: Residential, Commercial, Town of Lyons buildings, etc.).
- Develop a water rate structure to incentivize low water usage
- Determine water efficiency resources and incentives for residents and businesses

WHO

- **Lead:** Utilities department
- **Support:**
 - Utilities engineering commission
 - Sustainability department
 - Sustainable futures commission
 - Parks and public works department
 - Parks commission

Ww-2: REDUCE WATER USAGE AND IMPROVE EFFICIENCY WITHIN TOWN BUILDINGS AND PARKS

HOW

- Perform water assessments on all town-owned buildings to identify water conservation opportunities.
- Develop strategies to reduce water usage
- Replace or retrofit city building plumbing fixtures to meet or exceed current code requirements
- Encourage quality drought-resistant landscaping through the development review process
- Use non-drinking water systems to meet residential, industrial, and agricultural needs when feasible

WHO

- **Lead:** Parks and public works department
- **Support:**
 - Parks commission
 - Sustainability department
 - Sustainable futures commission
 - Utilities department
 - Utilities engineering commission

****NEAR TERM****

Ww-3: ENCOURAGE GRAY WATER USAGE AND OTHER WATER CONSERVATION EFFORTS

HOW

- Determine feasibility of gray-water city ordinance
- Use non-drinking water systems to meet residential, industrial, and agricultural needs when feasible.
- Promote and support rain barrel water collection by residents
- Promote and continue to use local water quality programs including: Keep it Clean; Boulder Area Sustainability Information Network (BASIN); Partners for a Clean Environment (PACE); Resource Central, Slow the Flow; and Energy Smart

WHO

- **Lead:** Sustainability department
- **Support:**
 - Sustainable futures commission
 - Utilities department
 - Utilities engineering commission

****MIDTERM****

Ww-4: IMPROVE WATER INFRASTRUCTURE

HOW

- Ensure all new building prioritizes green infrastructure practices to capture and infiltrate rain. Examples include but are not limited to, practices such as rain gardens, bio-retention, vegetated/dry swales, and green roofs.
- Consider permeable and high recycled content pavement for new parking lots, roads and repairs.
- Seek funding to incorporate a natural wastewater treatment component into the new wastewater facility that treats the end-product and turns it into useful byproducts.

WHO

- **Lead:** Sustainability department
- **Support:**
 - Sustainability futures commission
 - Utilities department
 - Utilities engineering commission
 - Planning department
 - Planning and community development commission

TRANSPORTATION

Lyons has and always will have a percentage of the population working in the larger hubs of Boulder and Denver. Additionally, there is a high volume of vehicles that drive through Lyons to visit the Rocky Mountain National Park. On a busy summer day in Lyons, the impact of vehicles is notable. This is one of the many reasons for looking into alternative transportation solutions is important.

OBJECTIVES

Invest in an efficient transportation system that enhances mobility, reduces environmental impacts, and supports a healthier community.

TARGETS

Improve air quality related to transportation systems.

****IMMEDIATE STRATEGIES****

Tr-1: INCREASE ELECTRIC VEHICLES INCENTIVES AND INFRASTRUCTURE

HOW

- Determine transportation and air quality measures and identify target goals for transportation programs
- Research and implement best practices for promoting electric vehicle adoption
- Residential, multi-family complexes, and commercial buildings to install EV charging stations
- Education communicating EV benefits, tax incentives, and other eco-transportation news

WHO

- **Lead:** Sustainability department
- **Support:**
 - Sustainable futures commission
 - Planning department
 - Planning and community development commission

Tr-2: ASSESS MOBILITY OPTIONS

HOW

- Collaborate with Boulder County and Regional Transportation District (RTD) to analyze transportation data (EV vehicle usage, RTD ridership usage, etc.)
- Review transportation options for local and regional transportation and determine transportation needs, potential solutions, and funding sources

WHO

- **Lead:** Sustainability department
- **Support:**
 - Sustainable futures commission
 - Community development department
 - Planning and Community Development Commission

****NEAR TERM STRATEGIES****

Tr-3: DEVELOP CAR/VAN POOLING REGIONAL PARTNERS

HOW

- Collaborate with mountain communities in the development of senior mobility options
- Collaborate with regional communities in the development of commuter options
- Strategize in creating efficient mediums for traveling commuters
- Work with regional partners to reduce traffic going through the Town of Lyons to Rocky Mountain National Park

WHO

- **Lead:** Recreation department
- **Support:**
 - Sustainability department
 - Sustainable futures commission
 - Housing and Human Services Commission

Tr-4: REDUCE SINGLE OCCUPANT VEHICLES AND GREENHOUSE GAS EMISSIONS

HOW

- Collaborate with neighboring communities in creating efficient connections for regional transit
- Develop bike maps and wayfinding signage around Town to encourage and make alternative transportation easier for residents
- Determine feasibility of a program designed to enable Town staff to carpool/bike-to-work day

WHO

- **Lead:** Sustainability department
- **Support:**
 - Parks and public works department
 - Parks commission
 - Planning department
 - Planning community

WASTE

Lyons' intimate relationship with natural beauty is in direct opposition to sending commercial and residential waste to a landfill. Around 2010, the Town of Lyons adopted a Zero Waste Resolution. Zero Waste practices have been adopted by several high-profile community entities include Planet Bluegrass, the Lyons Chamber of Commerce, the Lyons Dairy Bar and the Stone Cup. The Town of Lyons facilitates zero-waste events at the Sandstone Summer Concert, Good Old Days, Lyons Art Festival, and Burning Can music festival.

OBJECTIVES

Implement zero waste strategies and manage resources responsibly and effectively.

TARGETS

Divert 50% of Lyons waste stream from landfill by 2035

*****IMMEDIATE STRATEGIES****

Wa-1: IMPROVE RESIDENTIAL WASTE DIVERSION BY IMPLEMENTING SINGLE HAULER PAY AS YOU THROW PROGRAM

The two biggest drivers for a Pay as You Throw (PAYT) program is to find ways to maximize diversion from landfills while simultaneously trying to reduce the cost to residents through better economies of scale. This program intends to provide a comprehensive waste, recycling, and compost program for all single-family residences.

HOW

- Partner with Homeowners Associations to ensure participation in Pay as You Throw program
- Provide public education meetings and ongoing education plan that supports the program
- Develop residential compost and recycle ordinance

WHO

- **Lead:** Sustainability department
- **Support:**
 - Sustainable future commission
 - Utilities department
 - Utilities engineer commission
 - Communications department
 - Parks and public works department

Wa-2: IMPROVE WASTE DIVERSION AT TOWN BUILDING AND TOWN SPONSORED EVENTS

The Town of Lyons recently purchased a composting bin that is picked up weekly. The purpose of this strategy is to increase waste diversion within town buildings and town-sponsored events. Staff will need to be trained and bins will need to purchase for Town to participate in improved waste diversion.

HOW

- Develop a policy to enforce waste diversion at Town of Lyons owned properties
- Install triple-bin (recyclables, compostable, trash) waste collection at Town facilities
- Establish purchasing guidelines that consider the impact of product lifecycles
- Provide appropriate signage at town events

WHO

- **Lead:** Sustainability Department
- **Support:**
 - Sustainable futures commission
 - All Town departments

****NEAR TERM****

Wa-3: IMPROVE COMMERCIAL WASTE DIVERSION

The Town of Lyons desires that restaurants and other businesses, where applicable, to improve waste diversion. This strategy aims to improve waste diversion by providing business with tools to implement zero waste strategies as well as to recognize businesses making strides on zero waste practices.

HOW

- Provide waste audits for businesses by promoting the services of Partners for a Clean Environment (PACE) program
- Investigate and determine commercial food composting solutions
- Reduce single-use foodservice and point of sale items, such as plastic straws, styrofoam takeout containers, and plastic bags.
- Determine the feasibility of commercial recycling incentives (compostable bags, paper straws, dumpster fees)

WHO

- **Lead:** Sustainability department
- **Support:**
 - Sustainable futures commission

****MIDTERM****

Wa-4: IMPROVE CONSTRUCTION AND DEMOLITION WASTE DIVERSION

Boulder County has recognized the growing need for a construction and demolition waste diversion facility. This strategy is contingent on Boulder County's acquisition of a construction and demolition facility.

HOW

- Modify purchasing and contracting guidelines to include responsibly handled waste diversion
- Encourage construction and demolition recycling as a compliance condition for building permit

WHO

- **Lead:** Sustainability department
- **Support:**
 - Sustainable futures commission
 - Planning department
 - Planning and community development commission
 - Parks and public works department
 - Parks commission

Wa-5: INCREASE HAZARDOUS MATERIALS AWARENESS

Household hazardous wastes are often common products used in the home and need to be disposed of safely. Warning words on product containers such as poison, toxic, corrosive, volatile, flammable, inflammable, combustible, explosive, danger, caution, warning, and harmful will alert users to the hazardous nature of the product. This strategy aims to provide the Town of Lyons residents with more opportunities to dispose of hazardous materials.

HOW

- Provide hazardous materials disposal information to residents
- Document, analyze, and publicize waste diversion data
- Work with local partners like CHARM/Eco-cycle to come to Lyons for an educational/waste collection event

WHO

- **Lead:** Sustainability department
- **Support:**
 - Parks and public works department
 - Parks commission