

# Fort Collins Environmental Services



CLIMATE COMMITMENT • BE AIR AWARE  
ROAD TO ZERO WASTE • LEAD BY EXAMPLE  
COLLABORATE & ACT REGIONALLY

## Strategic Plan



Project Sponsor: Jacqueline Kozak Thiel  
Project Manager: Lucinda Smith  
Prepared: April 2016



# Table of Contents

|  |           |   |           |
|--|-----------|---|-----------|
| What is Environmental Sustainability? .....  | 4         | Our Vision .....  | 37        |
| Environmental Services Department's Role in Protecting<br>Fort Collins' Environmental Health ..... | 4         | Our Role .....  | 37        |
| Environmental Services Department Vision .....   | 4         | Goals.....  | 38        |
| Objectives of the Environmental Services Department<br>Strategic Plan .....                        | 5         | Alignment with the City of Fort Collins Strategic Plan..... | 42        |
| Plan Structure.....  | 5         | Integration of the Triple Bottom Line .....                 | 43        |
| City of Fort Collins Commitment to Sustainability .....  | 6         | <b>COLLABORATE &amp; ACT REGIONALLY .....</b>               | <b>44</b> |
| <b>CLIMATE COMMITMENT .....</b>  | <b>8</b>  | Challenges .....  | 45        |
| Challenges .....   | 9         | Our Vision .....  | 45        |
| Data Points .....  | 9         | Our Role .....  | 45        |
| Our Vision .....   | 9         | Goals.....  | 46        |
| Our Role .....   | 9         | Alignment with the City of Fort Collins Strategic Plan..... | 50        |
| Goals.....   | 10        | Integration of the Triple Bottom Line .....                 | 51        |
| Alignment with the City of Fort Collins Strategic Plan.....  | 16        | <b>Implementation .....</b>                                 | <b>53</b> |
| Integration of the Triple Bottom Line .....  | 17        | <b>Acknowledgements .....</b>                               | <b>54</b> |
| <b>BE AIR AWARE .....</b>  | <b>18</b> |   |           |
| Challenges .....   | 19        |   |           |
| Data Points .....  | 19        |   |           |
| Our Vision .....   | 19        |   |           |
| Our Role .....   | 19        |   |           |
| Goals.....   | 20        |   |           |
| Alignment with the City of Fort Collins Strategic Plan.....  | 26        |   |           |
| Integration of the Triple Bottom Line .....  | 27        |   |           |
| <b>ROAD TO ZERO WASTE. ....</b>  | <b>28</b> |   |           |
| Challenges .....   | 29        |   |           |
| Data Points .....  | 29        |   |           |
| Our Vision .....   | 29        |   |           |
| Our Role .....   | 29        |   |           |
| Goals .....  | 30        |   |           |
| Alignment with the City of Fort Collins Strategic Plan.....  | 34        |   |           |
| Integration of the Triple Bottom Line .....  | 35        |   |           |
| <b>LEAD BY EXAMPLE .....</b>   | <b>36</b> |   |           |
| Challenges .....   | 37        |   |           |
| Data Points .....  | 37        |   |           |

Fort Collins  
**Environmental Services**  
 Strategic Plan

# What is Environmental Sustainability?

Environmental sustainability focuses on protecting the natural environment for the benefit of both ecosystems and human health. The value of a healthy environment is recognized in many City of Fort Collins plans and policy documents. The 2011 City Plan has a strong focus on environmental health, recognizing that environmental health also bolsters economic health and is critical to a high quality of life. Recognizing this, City Plan and the City of Fort Collins Strategic Plan call for Fort Collins to promote, protect and enhance a healthy and sustainable environment.

## Environmental Services Department's Role in Protecting Fort Collins' Environmental Health

Many City departments work to support the environmental health of Fort Collins. The Environmental Services Department plays one of the leading roles in that effort.

The Environmental Services Department (ESD) provides programs and services to the community and City organization that efficiently pursue Council policies on sustainability, air quality, climate, waste reduction, citizen engagement and meaningful performance measurement. We work to deliver reductions in indoor and outdoor air emissions, increase waste diversion and recycling, reduce the environmental footprint of the community and municipal organization, and provide rigorous environmental data tracking/reporting.

Solid waste reduction and air quality programs have been implemented by the City of Fort Collins for years, starting in the 1980's. These programs were originally housed in the City's Natural Resources Department. The Environmental Services Department was formed in 2012, following a split of the Natural Resources Department into two separate departments; ESD and Natural Areas.

ESD is one of three departments, along with Economic Health and Social Sustainability, that were combined to form the Sustainability Services Area in 2012. This unique organizational structure was intentionally created to integrate considerations of the "triple bottom line" or People, Planet and Profit, and to develop policies and programs that heighten awareness of sustainability with the community.



### ENVIRONMENTAL SERVICES DEPARTMENT VISION:

**Promote, protect, and enhance a healthy and sustainable environment**



# Objectives of the Environmental Services Department Strategic Plan

The objectives of creating a unified Environmental Services Department Strategic Plan include:

- Increase interconnectedness of programs within ESD
- Deepen integration of the Triple Bottom Line
- Identify existing and potential future trends and/or gaps that must be considered when developing strategies to protect environmental health
- Integrate the ESD Strategic Plan with the strategic plans for Economic Health and Social Sustainability
- Identify potential gaps in City policies, programs, or services to protect environmental health and address, if needed
- Provide a strategic plan for departmental activities with a 10+ year planning horizon

The visions, goals and strategies identified in the ESD Strategic Plan are to be considered no more or less important than the City commitment to social well-being and economic health, and must be considered in the context of Plan Fort Collins, the Economic Health Strategic Plan, the Social Sustainability Strategic Plan, and other similar plans.

## Plan Structure

The ESD Strategic Plan is structured in five major themes that represent key areas of the department's work. Each theme includes challenges, our vision for the future, the role of Environmental Services, and goals. Each goal is accompanied by strategies intended to help meet the goal, and metrics with which to evaluate progress. While the goals are longer-term

(10+ years), the strategies are generally shorter-term (5 years). Work to refine the metrics into a limited set of meaningful metrics will be ongoing so it is expected the metrics will evolve over time.

Biennial work plans will be developed based on the ESD Strategic Plan's strategies and approved budget offers. It is important to note that the Plan includes some strategies and goals that are not currently funded within ESD's ongoing budget. As we work to implement the strategies and achieve the goals identified in this plan, we will look to the Budgeting for Outcomes (BFO) process and other sources of funding and resources to guide the pace of implementation. The Plan will evolve as City Council and community priorities evolve, and the Plan will be updated accordingly.

The Environmental Services Department serves four primary roles in the protection of environmental health. In this plan, the primary role of the Environmental Services Department will be noted after each strategy as one of the following:

1. **LEAD**—ESD has the lead role in implementing the goal or strategy (This could include implementation, education, policy development, regulation, coordination, facilitation, convening, advocating, or funding).
2. **CONSULT**—ESD will provide technical services, data, analyses, and input to other City departments and external stakeholders to implement the goal or strategy.
3. **PARTNER**—ESD will partner with other City departments and/or local agencies to implement the goal through the provision of support including funding support.
4. **COLLABORATE**—ESD will collaborate with other City departments and/or other agencies or organizations to implement the goal or strategy. (This could include advocacy.)

---

## THE FIVE THEMES OF THE ESD STRATEGIC PLAN ARE:

---



CLIMATE  
COMMITMENT



BE AIR  
AWARE



ROAD TO ZERO  
WASTE



LEAD  
BY EXAMPLE



COLLABORATE &  
ACT REGIONALLY

## ESD Foundational Documents

City Council and the Fort Collins community have a long history of commitment to environmental stewardship efforts and consequently, ESD has developed many policy documents and strategic plans to guide its efforts. Key existing ESD policy and planning documents are listed below.

- 2015 Climate Action Plan Framework
- 2013 Road to Zero Waste Plan
- 2013 Municipal Sustainability Management Plan
- 2013 Roadmap for Green Building
- 2012 Waste Characterization
- 2011 Air Quality Plan
- 2011 Air Quality and Recycling Citizen Survey

Additional References:

- **2014 City of Fort Collins Strategic Plan**
- **2011 City Plan and Transportation Master Plan**—City Plan is the comprehensive plan for the City of Fort Collins, and illustrates how the community envisions Fort Collins over the next 25 years and beyond. It shows us how to get there step by step. The Transportation Master Plan (TMP) serves to explain a bold vision for the long-term multimodal transportation system supporting the Fort Collins community well into the future. The TMP provides policy direction for decisions regarding the implementation of the transportation system to achieve the community's vision.

## City of Fort Collins Commitment to Sustainability

The City defines sustainability as:

“To systematically, creatively, and thoughtfully utilize environmental, human, and economic resources to meet our present needs and those of future generations without compromising the ecosystems on which we depend.”

The City's Sustainability Services Area (SSA) consists of Environmental Services, Economic Health, and Social Sustainability. The mission of SSA is to deliver on this definition of sustainability by:

- (1) encouraging the Triple Bottom Line (TBL) perspective be applied to all City projects; and
- (2) engaging in activities that support the TBL in our community.

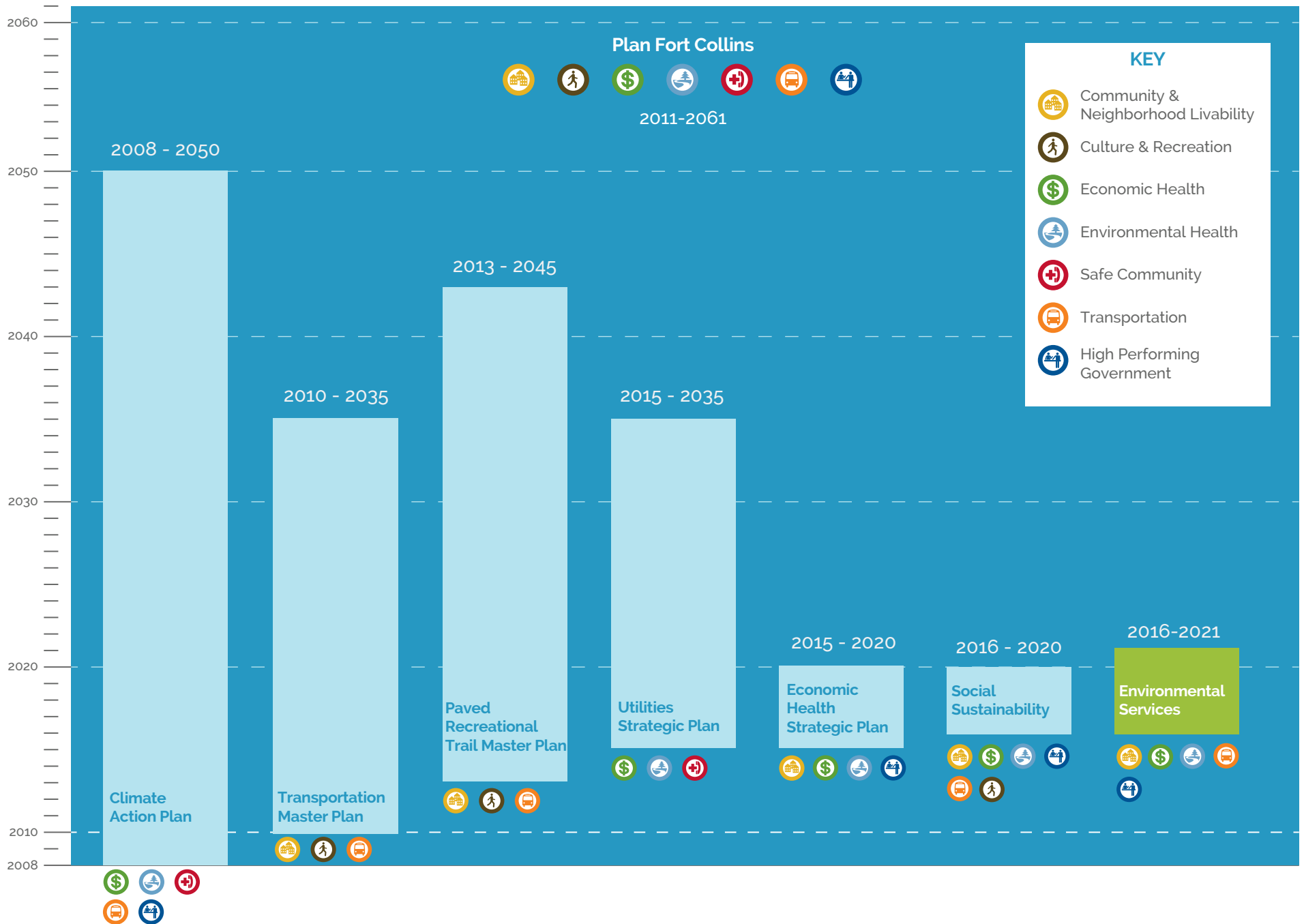
The City's commitment to sustainability is seen through:

- Continued expression of the community's resolve to act sustainably: to systematically, creatively, and thoughtfully utilize environmental, social, and economic resources to meet present needs and those of future generations without compromising the ecosystems on which we depend.
- Policies and actions that are not developed and implemented in isolation from one another; rather, the focus is on integration.
- Encouragement of systems thinking to recognize and emphasize interrelationships among all aspects of City operations.
- Recognition of the interdependent economic, social, and environmental implications of policies, decisions, and outcomes.
- Recognition of the benefits and tradeoffs across all three areas (social, economic, and environmental).



# Plan Fort Collins - How It All Fits Together

The Environmental Services Strategic Plan is but one part of an overarching plan, Plan Fort Collins. There are many plans throughout the City, but below are a few samples to show how every plan is developed to nest within and support Plan Fort Collins, and indicates what Strategic Outcomes are affected.





**climate  
commitment.**





# climate commitment. be air aware. road to zero waste. lead by example. collaborate and act regionally.



The science is clear - climate change is already occurring and is no longer a distant threat. The cost of inaction is unacceptable. Globally, the rise in temperatures has profound implications for natural resources, economic prosperity, health and human development. Fort Collins has long committed to reducing community greenhouse gas (GHG) emissions. Fort Collins increasingly monitors local vulnerability to higher temperatures, and water quality and supply issues, and is actively exploring ways to adapt and become more resilient. Since 1999, Fort Collins has pursued deliberate actions to reduce community GHG emissions and make a difference within our community that has global benefits. On March 3, 2015, the Fort Collins City Council unanimously adopted some of the most aggressive community carbon reduction goals in the nation, reinforcing the City's commitment to preserving what citizens value. With past actions, Fort Collins has a strong foundation from which to continue and expand efforts to reduce emission and prepare for climate change in order to protect our quality of life.

## Challenges

- Need to maintain and strengthen internal City organizational support and alignment
- Community growth and increasing vehicle miles of travel pose challenges to reducing the community carbon footprint
- Competing priorities within the City
- Business perception that this will only cost them money
- Setting goals or developing plans based on inaccurate assumptions (i.e., what if technology does not advance at the pace anticipated; what if it costs more than anticipated; what if we don't find a mechanism to fund these activities; what if our efforts have no effect on climate change?)
- Need for new financing approaches to buy down first costs and to fund large capital investments
- Need to address the electricity supply mix together with Platte River Power Authority member jurisdictions
- Adaptation and mitigation strategies aren't always aligned
- Lack of private sector resources to buy technologies
- Standardizing data quality
- Emerging science on climate change and environmental impacts may require changing responses, strategies, and priorities
- Developing metrics for qualitative data
- Maintaining data quality becomes difficult with larger data sets and more data collection
- Communicating uncertainty about climate change to the public
- Decision-making and planning based on incomplete data

## Data Points

- 2014 Climate Action Plan Status Report  
[http://www.fcgov.com/climateprotection/pdf/2014\\_CAPStatus\\_WebFinal.pdf](http://www.fcgov.com/climateprotection/pdf/2014_CAPStatus_WebFinal.pdf)
- 2013 Municipal Sustainability Annual Report  
<http://www.fcgov.com/sustainability/annualreports/2013-report.pdf>
- Fort Collins Climate Change Primer  
<http://www.fcgov.com/climateprotection/pdf/fortcollinsclimatechangeprimer2013.pdf>
- Fort Collins Extreme Heat Report  
<http://www.fcgov.com/climateprotection/pdf/heat-report-jan-2014.pdf>

## Our Vision

A healthy, safe, sustainable, and carbon-neutral community that innovates solutions to climate change.

## Our Role

The Environmental Services Department plays the following roles relative to "Climate Commitment":

- Lead, coordinate and track interdepartmental efforts to implement the 2015 CAP Framework
- Lead, coordinate and track interdepartmental efforts to reduce greenhouse gas emissions from the municipal organization
- Implement programs that reduce community and municipal greenhouse gas emissions
- Conduct community education and engagement that supports greenhouse gas reduction
- Lead and coordinate interdepartmental efforts to develop plans to prepare for and adapt to climate disruption
- Improve residents' preparedness to address climate challenges
- Collaborate with regional, state, and national peers and partners to advance carbon reduction and preparedness initiatives
- Provide state-of-the-art standardized methods for community carbon accounting and an accurate and timely annual community GHG emission inventory.
- Ensure high quality carbon data through implementing centralized quality assurance and quality control
- Report annually on community's progress toward adopted community carbon goals.



# Climate Commitment

GOALS:

## A.1 RAPIDLY ADVANCE THE GREEN BUILT ENVIRONMENT

STRATEGIES:

**1. Collaborate with all City service areas to promote regenerative and sustainable development principles (COLLABORATE)**

**2. Develop market-based initiatives to encourage efficiency and sustainable design in the built environment (LEAD & COLLABORATE)**

**3. Support the development and implementation of advanced building codes with special emphasis on energy efficiency in existing building stock (CONSULT)**

ACTIONS:

- a. Formalize a City Green Built Environment Program based on the 2013 Roadmap for Green Building to increase collaboration and provide a forum for review of major planning and development proposals.
- b. Engage in long-range planning with other City departments to ensure that existing and future green programs function well together and are easy for the public to navigate and participate in.
- c. Identify, address and resolve misalignments of existing City policies that create obstacles to a green built environment.
- d. Work with other departments to implement voluntary and eventually mandatory building energy performance disclosures.
- e. Work with representatives of the private sector to gather input on the development review process and other phases of the building process, and share findings with other City departments.
- f. Report progress on the 2013 Roadmap for Green Building.

- a. Research, document and promote best practices.
- b. Identify market mechanisms and financial instruments that either wholly fund sustainability projects or minimize City assistance and maximize the leverage of City funds.
- c. Increase awareness among area businesses of the availability and value of green financing.

- a. Participate on interdepartmental teams working on building code updates.

METRICS:

- Percent change over time in number of green-certified (E-Star, LEED, etc.) buildings in Fort Collins
- Building code compliance
- Number of builder trainings offered by the City
- Number of “point of sale” transactions (at time of permit, building upgrade, sale)



**GOALS:**

**STRATEGIES:**

**ACTIONS:**

**METRICS:**

**A.2 ENGAGE THE COMMUNITY AND PERSUADE AND EMPOWER TO ACT**

**4. Coordinate with other departments to develop public informational resources and engage builders, developers, designers, residents and City employees (LEAD & COLLABORATE)**

- a. Maintain a simple, effective online presence.
- b. Assist with basic education on green building for City staff that regularly work with the development community.
- c. Utilize a “point-of-sale” approach to reach designers, contractors, and members of the general public regarding green practices, codes and products, incentives, etc.
- d. Increase direct outreach to small and mid-size businesses to capture the greatest number of commercial utility customers.
- e. With other departments, develop education programs and resources for homeowners and businesses on the financial benefits of green design and construction.

**1. Provide project management for the “Lose-A-Watt” Campaign (2015-2016) (LEAD)**

- a. Coordinate and implement outreach, including alternative financing and other citizen engagement programs.
- b. Prepare monthly and quarterly status reports.

**2. Foster relationships and strategic partnerships to deepen involvement on climate action within the community (PARTNER)**

- a. Identify, highlight, and strategize about shared carbon reduction goals or other related goals.
- b. Increase collaboration with the academic sector for provision of information and service-learning opportunities.
- c. Partner with and support non-profit and faith-based community carbon reduction efforts.
- d. Provide information and engagement opportunities to businesses and their employees.
- e. Identify community leaders or prominent figures to become spokespeople for action.

- Annual number of people receiving sustainability education
- Percent of citizens responding very good/good to the City’s performance in encouraging sustainability in the community
- Percent decrease in ClimateWise partners Greenhouse Gas (GHG) emissions from 2005 baseline
- Quarterly residential and government energy usage from Lose-A-Watt
- Local investments in energy conservation and carbon reduction efforts



# Climate Commitment

GOALS:

## A.2 ENGAGE THE COMMUNITY AND PERSUADE AND EMPOWER TO ACT (CONTINUED)

STRATEGIES:

3. Identify and address barriers and opportunities presented by 2015 Climate Action Plan Framework strategies to businesses and citizens, with emphasis on vulnerable and under-served segments of the community  
**(COLLABORATE)**

4. Prioritize impactful strategies and implement best practices (Community-based social marketing, targeted messaging, social norming) to promote selected behavior change  
**(COLLABORATE)**

ACTIONS:

- a. Engage with affordable housing providers and Healthy Homes program to identify potential impacts of climate action strategies and develop solutions
- b. Participate and support the re-tooling of ClimateWise to encourage greater awareness, action and results by businesses
- c. Provide technical assistance to support the “Climate Economy” goals outlined in the Economic Health Strategic Plan
- d. Promote successful business practices and models that create or extract economic value from carbon reduction and climate adaptation activities

- a. Develop key messaging points and marketing materials in conjunction with Utilities’ Segmentation Study, Six America’s study, and other relevant research
- b. Strategically engage community members through social networks

METRICS:

## A.3 INCREASE CITY ORGANIZATION’S PREPAREDNESS AND RESILIENCY TO CLIMATE CHANGE IMPACTS

1. Support organization-wide and upper-level management’s commitment to develop and implement adaptation strategies that are integrated into routine City planning initiatives  
**(LEAD & CONSULT)**

- a. Develop a climate adaptation plan that addresses climate-related risks and hazards, in compliance with Compact of Mayors requirements.
- b. Develop plans to respond to high-risk climate-related events such as extreme heat and wildfire smoke
- c. Identify the adaptation co-benefits of climate mitigation actions

- Number of City strategic plans that explicitly reference future climate disruption and/or identify strategies to adapt, prepare, and/or stay abreast of evolving climate change science
- Future metrics will be developed for adaptation strategies



**GOALS:**

**A.4**

**SUPPORT INNOVATION TO ACCELERATE IMPLEMENTATION OF 2015 CLIMATE ACTION PLAN FRAMEWORK TO ACHIEVE 20% GREENHOUSE GAS REDUCTION BELOW 2005 BY 2020, 80% BY 2030, AND CARBON NEUTRALITY BY 2050**

**STRATEGIES:**

**1. Support and enhance “triple helix” partnerships (government, private sector, academia) such as FortZED and the Colorado Clean Energy Cluster (COLLABORATE & PARTNER)**

**2. Promote relevant national and global best practices and innovation solutions to more rapidly advance progress on 2015 Climate Action Plan Framework strategies (COLLABORATE)**

**3. Promote low-carbon intensity vehicles (more fuel efficient, alternative and electric vehicles) in the community (COLLABORATE)**

**ACTIONS:**

- a. Serve as liaison for potential FortZED pilot and demonstration projects within the City organization.
- b. Support targeted industry clusters that advance carbon reduction and support local jobs.
- c. Support educational and showcase events to increase sustainability innovation.
- d. Support the development of reliable, high speed internet services throughout the community to increase telecommuting and reduce emissions from driving.

- a. Evaluate lessons learned from Lose-A-Watt campaign and apply successes in future engagement.
- b. Support and collaborate on implementation of a district-scale pilot project.

- a. Support Drive Electric Northern Colorado including engaging citizens in electric vehicle test drives.
- b. Develop City policies for electric vehicle charging station use.
- c. Support Northern Colorado Clean Cities Coalition.

**METRICS:**

- Number of electric vehicles purchased by Fort Collins residents
- Job formation in “green” industries, businesses
- Community patent production (or other similar measure of relevant innovation)





# Climate Commitment

GOALS:

## A.5 CONTINUE RESPONSIBLE CLIMATE PLANNING AND PROGRESS REPORTING

STRATEGIES:

1. Organize and facilitate interdepartmental teams working on key strategic initiatives to implement the 2015 Climate Action Plan Framework **(LEAD)**

2. Engage the public and key stakeholders in development of future climate action policies, plans, and programs **(COLLABORATE)**

3. Track and report progress of major community carbon reduction programs, projects, and policies **(LEAD)**

ACTIONS:

- a. Prepare CAP 2020 Strategic Plan.
- b. Seek funding for projects that implement CAP strategies.

- a. Interactive Web site and social media
- b. Public forums
- c. Meetings with stakeholder groups
- d. Community Advisory Committee

- a. Provide up-to-date and centralized carbon accounting of community carbon emissions.
- b. Provide annual climate action progress report.

METRICS:

- Percent decrease in community GHG emissions from 2005 levels



**GOALS:**

# A.6

## SUPPORT CITY EFFORTS TO PRESERVE THE ECOSYSTEMS UPON WHICH WE DEPEND

**STRATEGIES:**

**1. Advance City efforts to protect and improve water quality and to conserve water (COLLABORATE & CONSULT)**

**2. Advance City efforts to protect and improve healthy ecosystems (COLLABORATE)**

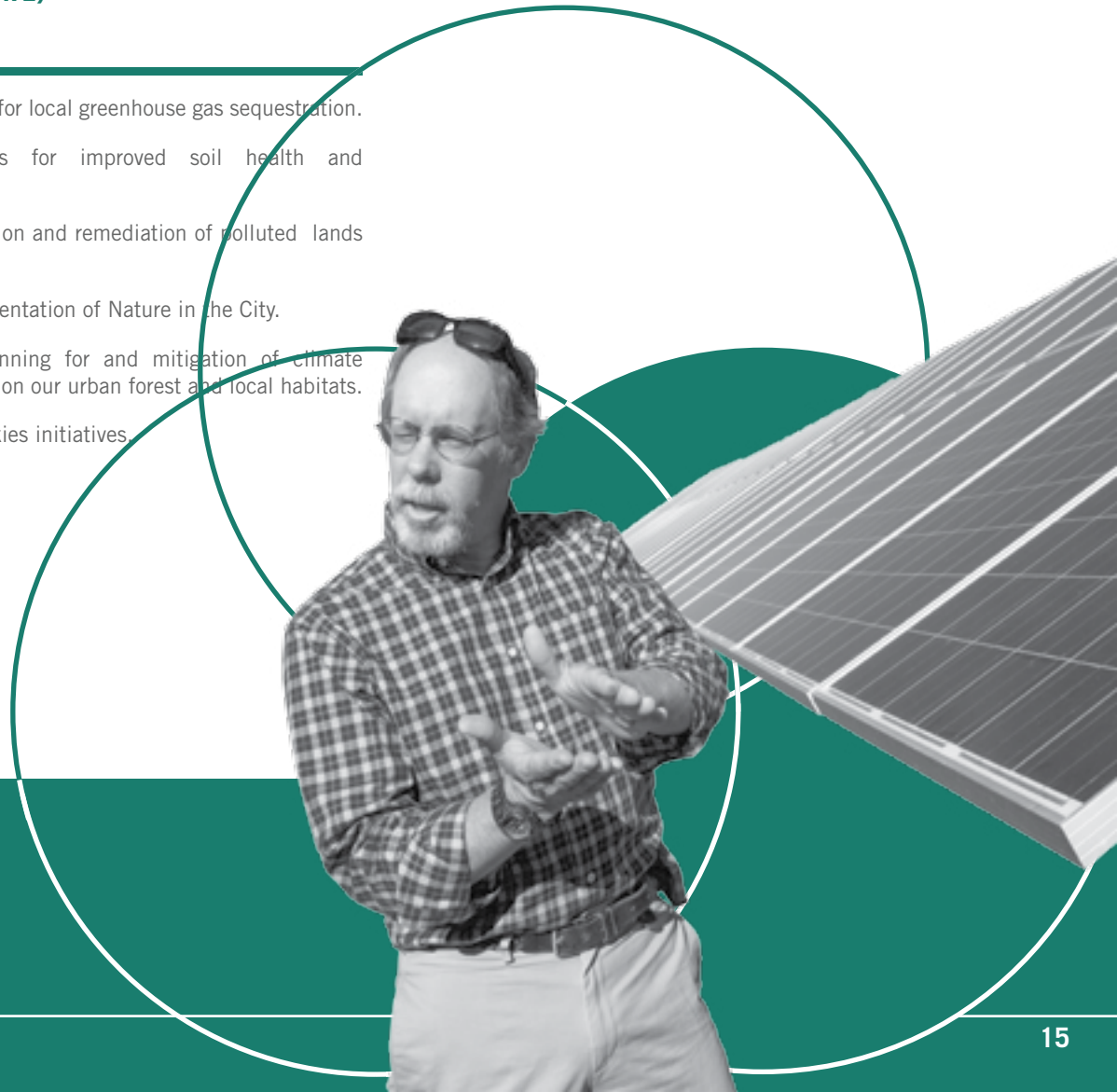
**ACTIONS:**

- a. Support indoor and outdoor water conservation and efficiency initiatives.
- b. Support implementation and enhancement of green infrastructure and low-impact stormwater design.
- c. Plan for climate changes and population pressures that impact water supply and quality, stormwater management, and aquatic/riparian habitats.
- d. Participate on interdepartmental teams to contribute to environmental analysis of projects (e.g., prioritize stormwater rehabilitation sites, evaluate environmental impacts of water storage projects, give input on Water Efficiency Plan, etc.).

- a. Explore options for local greenhouse gas sequestration.
- b. Explore options for improved soil health and conservation.
- c. Support evaluation and remediation of polluted lands in Fort Collins.
- d. Support implementation of Nature in the City.
- e. Assist with planning for and mitigation of climate change impacts on our urban forest and local habitats.
- f. Support Dark Skies initiatives.

**METRICS:**

- Restoration status of urban natural areas
- Overall water conservation program effectiveness





# Climate Commitment

## Alignment with the City of Fort Collins Strategic Plan

Working to reduce local greenhouse gas emissions and to prepare for a changing climate serves aspects of all seven outcome areas identified in City Plan and in the City of Fort Collins Strategic Plan. Key strategic objectives are listed below.

- Promote health and wellness within the community (CNL 1.6)
- Promote a healthy community and responsible access to nature (C&R 2.7)
- Support sustainable infill and redevelopment to meet climate action strategies (ECON 3.7)
- Reduce GHG emissions by creating a built environment focused on green building and mobile emissions reductions (ENV 4.4)
- Increase the community's resiliency and preparedness for changes in climate, weather and resource availability (ENV 4.7)
- Improve community involvement, education and regional partnerships to make our community safer and stronger (SAFE 5.8)
- Support efforts to achieve climate action goals by reducing mobile emissions and supporting multiple modes of transportation (TRANS 6.6)
- Proactively influence policy at other levels of government regulation (HPG 7.11)



## SOCIAL

### Integration of the Triple Bottom Line

- Reducing GHG emissions also reduces many other air pollution emissions that can harm human health. Climate mitigation actions such as expanded mobility choices and increased urban density will also increase citizen access to services and decrease cost of living. Anticipating and preparing for extreme heat and other climate disruptions will protect citizens' health and welfare. Environmental justice is a common concept in environmental science and encourages consideration of social impacts across many community groups.

## ENVIRONMENTAL

- Reducing greenhouse (GHG) emissions also reduces air pollution and its harmful impacts to ecosystems, reduces fossil fuel extraction impacts, and lessens waste sent to landfills, thereby delaying the need for building a new landfill. Climate adaptation strategies can preserve vital ecosystem services.



## ECONOMIC

- Reducing carbon emissions provides significant new business opportunities in areas that include building retrofits and new building construction, expansion of electric vehicle infrastructure, and research and technology development in clean energy and innovative financing solutions. The immediacy of the need for carbon reductions to avert a 2 degree Fahrenheit increase requires large cuts in emissions, so efforts must focus on finding feasible economic strategies to make these cuts possible without negatively impacting businesses or residents.

**be air  
aware.**





## climate commitment. **be air aware.** road to zero waste. lead by example. collaborate and act regionally.



City residents have high expectations for a clean environment, and the City has demonstrated leadership by investing in air quality staff and programs for several decades. The City has had a long-standing policy to “continually improve air quality”. Residents have identified the Air Quality Program as being the single most important program for protecting their future quality of life in past surveys. The air pollutants of greatest concern in Fort Collins are ozone, indoor air quality, greenhouse gases and fine particles. The City’s air quality program supports the following principles, as identified in the 2011 Air Quality Plan:

- responds to a strong citizen mandate for the City to protect and continually improve air quality
- recognizes that certain air quality problems and opportunities are most effectively handled at the local level
- complements and fills gaps left by federal, state and county efforts
- provides a long-term planning framework for air quality protection and improvements
- recognizes and coordinates the efforts of City Departments assisting with this process.

The City has developed initiatives that focus on reducing both outdoor and indoor air pollution, and implements policies and programs, provides education and incentives, and enacts regulation.

### Challenges

- Continued ozone non-attainment in Fort Collins and the Front Range
- Making air quality programs, initiatives, and plan, an essential part of all City planning, decision making and enforcement
- Increasing growth and development that results in increased air emissions
- Lack of understanding and appreciation for health impacts of indoor and outdoor air quality
- Addressing the air quality impacts of regional transportation issues
- More frequent occurrences of climate-related impacts on air quality such as extreme heat and wildfire smoke
- New social trends and fads that affect air quality such as increases in preferred cooking over wood fire, natural gas fire pits and heaters for “atmosphere”, and rolling coal (intentionally emitting sooty exhaust from diesel vehicles that visibly pollutes the air)

### Data Points

- 2013 Fort Collins Annual Air Quality Report

[http://www.fcgov.com/airquality/pdf/2014\\_AirQuality\\_Plan.pdf](http://www.fcgov.com/airquality/pdf/2014_AirQuality_Plan.pdf)

### Our Vision

A community that is vigilant about protecting the quality of the air we breathe and continually strives to improve it.

### Our Role

The Environmental Services Department plays the following roles relative to “Be Air Aware”:

- Provide community information and education about air quality issues
- Provide engagement programs and incentives to promote air pollution reduction
- Develop and implement air quality policies and regulations
- Track and report air pollution data
- Participate in regulatory rule-makings to advance the City’s air quality objectives
- Develop and implement air monitoring programs



# Be Air Aware

GOALS:

## **B.1** FOCUS ON LOCAL ACTIONS THAT WILL REDUCE AIR POLLUTANTS OF CONCERN INCLUDING OZONE AND RADON

ACTIONS: STRATEGIES:

### 1. Improve Ozone Action Programs (LEAD)

- a. Implement Clean Lawn and Garden Equipment Program.
- b. Implement Breathe Easy (no idling) campaign.
- c. Develop new ozone action and awareness initiatives.
- d. Participate in the Electrify Your Summer event.

### 2. Enhance Air Quality Zero Interest Loan program (LEAD)

- a. Increase outreach about the program.
- b. Review program periodically and update if necessary.

### 3. Improve radon outreach (LEAD)

- a. Utilize research results to design a radon mitigation strategy.
- b. Design a personalized response plan for residents with high radon exposure risk.
- c. Increase program potential through additional grant opportunities.
- d. Improve test kit awareness and sales.

METRICS:

- Outdoor air quality index (PM2.5 and ozone)
- Air pollution avoided and number of participants in Lawn and Garden Equipment Rebate Program
- Number of wood smoke complaints made to City
- Percent of annual Air Quality Loan fund awarded
- Visibility data



**GOALS:**

**STRATEGIES:**

**ACTIONS:**

**4. Use local regulations as needed to improve air quality (LEAD)**

- a. Support local regulations on radon mitigation, tailpipe emissions, and woodsmoke opacity.
- b. Develop new regulations to respond to citizen concerns about air pollution.

**5. Continue to address air quality impacts from regional oil and gas development (LEAD)**

- a. Participate in development of City policy.
- b. Conduct air monitoring and analysis.
- c. Support and participate in regional studies.
- d. Participate in legislative and regulatory processes.

**6. Plan for action, inform citizens, and report air quality information to the public (LEAD)**

- a. Prepare an annual air quality report and update community dashboard metrics.
- b. Conduct periodic citizen surveys to understand actions, motivations, and interests.
- c. Periodically update the City's air quality policies and Air Quality Plan.

**METRICS:**



GOALS:

## B.2 CONTINUALLY IMPROVE INDOOR AND OUTDOOR AIR QUALITY TO ENHANCE THE COMMUNITY'S HEALTH

ACTIONS: STRATEGIES:

### 1. Continue to grow and develop indoor air quality initiatives, including the Healthy Homes program (LEAD)

- a. Recruit, train, support, and recognize Master Home Educators.
- b. Provide free home health assessments to residents.
- c. Conduct community outreach and education.
- d. Collaborate with local, regional, and national indoor air quality programs.
- e. Communicate about emerging health impacts of climate change.
- f. Help residents, especially lower-income and aging adults to create healthier, safer homes.

### 2. Address fugitive dust issues (COLLABORATE)

- a. Develop new ordinance.
- b. Provide guidance and training for developers, community, and staff.

### 3. Determine the primary issues and concerns of community members through the air quality survey (LEAD)

- a. Conduct a statistically valid air quality survey periodically to evaluate citizens' awareness, beliefs, and actions.

METRICS:

- Annual cumulative number of Healthy Homes assessed, number of volunteer hours
- Decreased number of air quality complaints (woodsmoke, dust)
- Future methods to measure decreased asthma rates in Fort Collins



**GOALS:**

**B.3** SUPPORT AND LEVERAGE AIR QUALITY CO-BENEFITS OF CLIMATE ACTION INITIATIVES

**STRATEGIES:**

**4. Address air quality issues from smoke (COLLABORATE)**

**5. Promote active modes of transportation (walking, bicycling) (COLLABORATE)**

**1. Identify and communicate reductions in air pollutants from climate action strategies (LEAD)**

**ACTIONS:**

- a. Develop wildfire smoke response plan.
- b. Address air quality issues from outdoor burning.
- c. Enhance woodstove education and replacement program.

- a. Support development of bike/car/ride share programs.
- b. Engage in City planning processes to promote infill development, transit-oriented development.
- c. Support community research on exposure to commuter pollutants.
- d. Support efforts to increase access to active modes of transportation for all segments of the population.

- a. Identify air quality co-benefits of strategies proposed for future climate action.
- b. Identify air quality co-benefits of completed actions under the 2015 Climate Action Plan Framework implementation.

**METRICS:**

- Quantified air pollutant reductions from climate action strategies





**GOALS:**

## **B.4** PROMOTE AIR QUALITY PROTECTION WITHIN THE CITY ORGANIZATION

**STRATEGIES:**

**1. Communicate the City's air quality policies and the technical services and capabilities of the ESDS air program to City departments (LEAD)**

**2. Support other City departments with air quality needs (CONSULT)**

**3. Develop a methodology for assessing air quality impacts of major transportation and development projects and City planning (LEAD)**

**ACTIONS:**

- a. Consider road shows to other departments.
- b. Maintain and update air quality website and Citynet presence.
- c. Participate in the development review process for proposals that will have a major impact on air quality.
- d. Link air quality programs to climate action strategies.

- a. Assist with air pollution and emissions assessments and mitigation strategies.
- b. Be responsive to inquiries from City staff on air quality issues.
- c. Serve on interdepartmental teams to support City initiatives with air quality expertise.

- a. Oversee project to develop a Guidance Manual for City staff to assess air quality impacts.
- b. Support staff training and use of the Guidance Manual.

**METRICS:**

- Percent of City plans that evaluated air quality implications



climate commitment. **be air aware.** road to zero waste. lead by example. collaborate and act regionally.

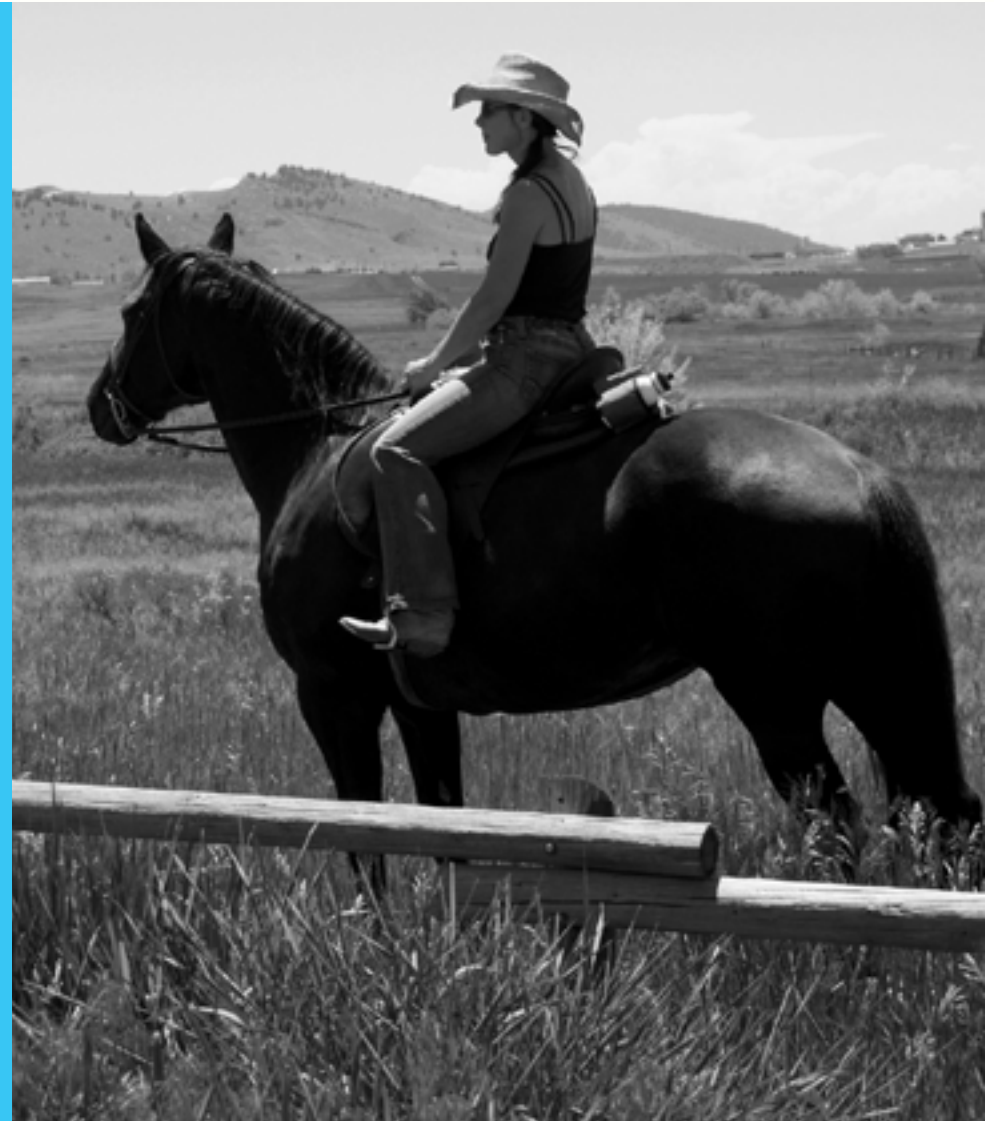




## Alignment with the City of Fort Collins Strategic Plan

The City's Air Quality Program works to improve community health by engaging citizens in ways that educate and encourage behavior change toward more sustainable living practices. The program also works to increase community involvement and regional partnerships to make our community safer and stronger.

- Promote health and wellness within the community (CNL 1.6)
- Implement indoor and outdoor air quality improvement initiatives (ENV 4.3)
- Reduce greenhouse gas emissions by creating a built environment focused on green building and mobile emissions reductions (ENV 4.4)
- Engage citizens in ways to educate and change behavior toward more sustainable living practices (ENV 4.6)
- Improve community involvement, education and regional partnerships to make our community safer and stronger (SAFE 5.8)
- Support efforts to achieve climate action goals by reducing mobile emissions and supporting multiple modes of transportation (TRANS 6.6)
- Proactively influence policy at all other levels of government regulation (HPG 7.11)



## SOCIAL

### Integration of the Triple Bottom Line

- The air quality program provides opportunities for all residents to learn strategies to improve the air they breathe regardless of socioeconomic status. Air Quality programs and projects improve the general health of the community and individuals while promoting more sustainable living practices. Reduction in air pollution emissions can also improve visual quality. The air quality program works with citizens, especially residents with asthmatic children, older residents, and underserved populations, to help them create safer and healthier homes.

## ENVIRONMENTAL

- The air quality program informs citizens about air quality issues, inspires behavior change in residents to improve air quality, and implements strategies that reduce air pollutant emissions. Reducing air pollution may reduce its harmful impacts to the natural environment.



## ECONOMIC

- Working to continually improve air quality and to achieve national air quality health standards will make Fort Collins attractive to current and future employers. Serious violations of national air quality standards could potentially restrict the flow of federal transportation dollars to our region and place stricter emission controls on industry.

**road to zero  
waste.**

**NEWSPAPERS  
ONLY**

PLEASE DEPOSIT YOUR CLEAN LOADS (RINSED, DRY, AND FREE OF ADHESIVE) HERE TO HELP US RECYCLE. PLEASE DO NOT MIX WITH OTHER WASTE. THANK YOU FOR YOUR COOPERATION.

**GLASS ONLY**

Please deposit your **clean** loads (rinsed, dry, and free of adhesive) of **intact** glass here (minimize breakage). Recycle glass lids. Help us ensure that nearly 100% of the glass is recycled by following these guidelines on what is and what is not:

**YES** Glass bottles (all colors: label on) and jars

**NO** Ceramics, tableware, Pyrex, drinking glasses, light bulbs, fish tanks, non-glass containers, and mirrors. These materials are contaminants and may damage the recycling process.

For more information go to [www.fcgov.com](http://www.fcgov.com)



# climate commitment. be air aware. road to zero waste. lead by example. collaborate and act regionally.



In 2013, Fort Collins City Council adopted goals to achieve 75 percent waste diversion by 2020, 90 percent by 2025, and zero waste by 2030. The associated Road to Zero Waste Plan aligns closely with triple-bottom-line principles of economic, environmental and social sustainability for the community. The plan contains a toolbox of strategies and ideas, including proposals to make recycling universally available and adding compostable materials to the curbside collection system. Funding tools may be developed to award economic incentives for local recycling entrepreneurs. Additionally, expanded requirements for construction and demolition recycling, landfill disposal bans (adding to Fort Collins' current prohibitions on electronics and cardboard), and other regulations will be explored.

Fort Collins' Road to Zero Waste Plan calls for consciously investing in new ways to manage its 'discards'. Charting the course for Zero Waste will steer the community away from traditional landfill technology and toward new opportunities that create jobs, conserve resources and reduce greenhouse gases that would otherwise be emitted from manufacturers and landfills - ultimately saving taxpayers' money.

## Challenges

- Difficult to obtain good quality and comparable data
- Difficult to quantify and track source reduction
- Market volatility for recyclables, e.g., China's Green Fence
- Low landfill prices (local and nominal state surcharge)
- Ongoing need for education, as people move to Fort Collins or change residences, etc.
- Complexity of issues inherent in waste reduction/recycling systems
- Relationships that must be developed and retained with private sector and regional agencies
- Need for collaboration to achieve regional-scale materials management systems
- The need to adapt to changing contents in recycling stream, e.g., packaging
- Lack of local markets for recyclables and distance (high transportation costs) to end markets
- Lack of a state policy/goal for waste reduction and recycling (one of only 12 such states)
- State compost regulations are too restrictive; prevents expansion of the composting industry

## Data Points

- 2014 Fort Collins Waste Reduction and Recycling Report  
<http://www.fcgov.com/common/pdfs/spotlight-pdf.php?id=1161>
- 2013 Zero Waste goal resolution and Road to Zero Waste Plan  
[http://www.fcgov.com/recycling/pdf/RoadtoZeroWasteReport\\_FINAL.pdf](http://www.fcgov.com/recycling/pdf/RoadtoZeroWasteReport_FINAL.pdf)  
-75% waste diversion by 2020; 90% diversion and 2.8 pounds of trash/person/day by 2025; zero waste by 2030
- 2015 U.S. Conference of Mayors' Hierarchy of Materials Management:
  - Extended Producer Responsibility and Product Redesign
  - Reduce Waste, Toxicity, Consumption, and Packaging
  - Repair, Reuse and Donate
  - Recycle
  - Compost
  - Down-cycle and Beneficial Reuse
  - Waste-Based Energy as Disposal
  - Landfill Waste as Disposal

## Our Vision

A community of minimal waste where discarded resources are diverted from the waste stream as efficiently as possible and are put to beneficial secondary use as locally as possible.

## Our Role

The Environmental Services Department plays the following roles relative to the "Road To Zero Waste":

- Support the development of market activities by acting as a convener and catalyst
- Educate about waste diversion
- Provide technical expertise and incentives such as the WRAP program (Waste Reduction and Recycling Program) that facilitates businesses in reducing waste
- Implement regulations, such as Fort Collins' Pay-As-You-Throw ordinance, that establish operational requirements for private trash and recycling companies, and enforce those regulations
- Ensure actions are complementary and based upon guiding documents, such as City Plan and the Road to Zero Waste Plan



# Road to Zero Waste

GOALS:

## C.1

INCREASE THE FOCUS ON PREVENTING HIGH-VALUE MATERIAL FROM BEING SENT TO LANDFILLS THAT COULD INSTEAD SUPPORT THE RECYCLING AND MATERIALS RECOVERY INDUSTRY

STRATEGIES:

1. Leverage the City’s economic development capability to create more local commercial recycling activities  
**(CONSULT & COLLABORATE)**

2. Balance the needs/desires of the community with the fiscal realities of waste/recycling businesses, such as fluctuating market values for recyclables  
**(LEAD)**

3. Emphasize the importance of a “clean” recycling stream (uncontaminated)  
**(LEAD)**

ACTIONS:

- a. Develop a Materials Recovery Economics Cluster that will help create jobs through waste diversion activities and reinvest in the local economy.
- b. Support local processing and re-manufacturing opportunities that enable Fort Collins to become more independent (for instance by relying less on long-distance freight, dependence on foreign oil).
- c. Seek to attract other desirable businesses to Fort Collins that make use of materials that are retained/captured and that want to be associated with a community that successfully diverts its waste.
- d. Evaluate and promote new waste-reduction business opportunities for underserved populations (e.g. veterans, individuals with disabilities).

- a. Solicit participation from all stakeholders in developing local policies and ordinances.
- b. Follow US Conference of Mayors’ hierarchy of waste management: develop a local evaluation for highest and best use.

- a. Increase education and outreach on this topic.

METRICS:

- Tons of community recycled or composted materials, including cardboard
- Number of jobs created in new waste reduction and recycling services and infrastructure
- Productive, open channels of communication maintained with stakeholders
- Public forums held to solicit community input





GOALS:

**C.2** REDUCE THE FLOW OF MATERIALS SENT FOR LANDFILL DISPOSAL AND FOSTER GREATER RESILIENCE IN MANAGING WASTE MATERIALS TO LOWER GREENHOUSE GAS EMISSIONS AND ACHIEVE 75% WASTE DIVERSION BY 2020, 90% BY 2025 AND ZERO WASTE BY 2030

STRATEGIES:

1. Fill gaps in the infrastructure for processing large-volume types of waste to be diverted from landfills **(LEAD, PARTNER & COLLABORATE)**
2. Apply the City's policy tools to achieve greater levels of waste diversion **(LEAD)**

ACTIONS:

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>a. Foster pragmatic innovation that reflects local/unique waste streams, distance to markets, and viable technology.</li> <li>b. Partner with Colorado Department of Public Health and Environment, Larimer County, City of Loveland, Colorado State University, Poudre School District etc. on regional planning.</li> <li>c. Prioritize development of regional compost facility/transfer station.</li> <li>d. Prioritize development of a C&amp;D (construction, deconstruction and demolition) facility.</li> <li>e. Explore opportunities for local use/applications/programs to recover hard-to-recycle materials (e.g., Styrofoam).</li> <li>f. Investigate and implement new source-separated organics (SSO) composting measures and potential waste-to-clean-energy facilities.</li> </ol> | <ol style="list-style-type: none"> <li>a. Provide support/consulting/expertise to develop guidelines and best management practices for, and help implement recycling at, construction, demolition, and deconstruction projects (e.g., Foothills Mall).</li> <li>b. Prohibit materials from landfill disposal (e.g., C&amp;D, yard waste).</li> <li>c. Continue to work closely with Planning department to update building codes and land use codes to allow for recycling and composting in new development.</li> <li>d. Support state and local regulatory approaches to remove obstacles for composting industry and improve compost markets.</li> </ol> |
|--|---|

METRICS:

- Community solid waste diversion rate
- Adoption of progressively stronger ordinances and regulations in pursuit of Zero Waste goals
- Updates to land and building codes adopted in pursuit of Zero Waste goals
- Enhanced working relationship with developers / contractors





# Road to Zero Waste

GOALS:

**C.3** EXPAND THE CULTURE OF ENVIRONMENTAL STEWARDSHIP THAT FIRST AND FOREMOST SEEKS TO REDUCE WASTE AT THE SOURCE TO SUPPORT THE ADOPTED 2025 GOAL OF 2.8 POUNDS OF TRASH PER PERSON PER DAY

STRATEGIES:

**1. Implement Road to Zero Waste Plan recommendations (LEAD)**

**2. Apply and institute principles of Sustainable Materials Management (SMM) to achieve greater efficiencies using a systems-based approach (LEAD)**

ACTIONS:

- a. Advance responsible purchasing policies.
- b. Promote product stewardship.
- c. Explore extended-producer-responsibility ordinances.

- a. Implement education / information campaign on Culture Change, underscoring the importance of source reduction and Life Cycle Analysis (e.g., promote move-in/move-out waste diversion programs at student housing complexes).
- b. Explore opportunities to pilot/implement SMM practices.
- c. Develop local resource sharing opportunities (e.g., leaf exchange, tool library) and social networks that substitute services for goods (circular economy).
- d. Incorporate measurements (from emerging SMM methodology) for quantifying GHG emissions that reflect transportation, manufacturing, etc.

METRICS:

- Pounds per capita of municipal solid waste
- Adoption of responsible purchasing practices
- GHG emissions associated with full lifecycle footprint of products and food



GOALS:

# C.4

PROVIDE EDUCATION AND INFORMATION ABOUT WASTE REDUCTION AND RECYCLING OPPORTUNITIES, EMPOWERING INCREASED PERSONAL AND COLLECTIVE ACTION

STRATEGIES:

1. Foster a culture of environmental stewardship (**LEAD & PARTNER**)

2. Create and enhance opportunities and programs for citizens to divert waste from landfills (**LEAD & PARTNER**)

ACTIONS:

- a. Serve as a model for other communities whereby Fort Collins can take pride in its identity as a waste diversion leader and the local culture of resource stewardship.
- b. Update Pay-As-You-Throw regulations (Community Recycling Ordinance).
- c. Apply social science research to campaigns implementing Culture Change.
- d. Develop and promote programs that lead residents to reduce waste at the source.

- a. Encourage equal opportunity for alternatives to landfill disposal.
- b. Provide recycling drop-off centers and services for residents.

METRICS:

- Cumulative number of individuals with new or improved access to recycling through WRAP and other programs
- Number of recycling drop-off sites
- Adopted Community Recycling Ordinance update, with community input

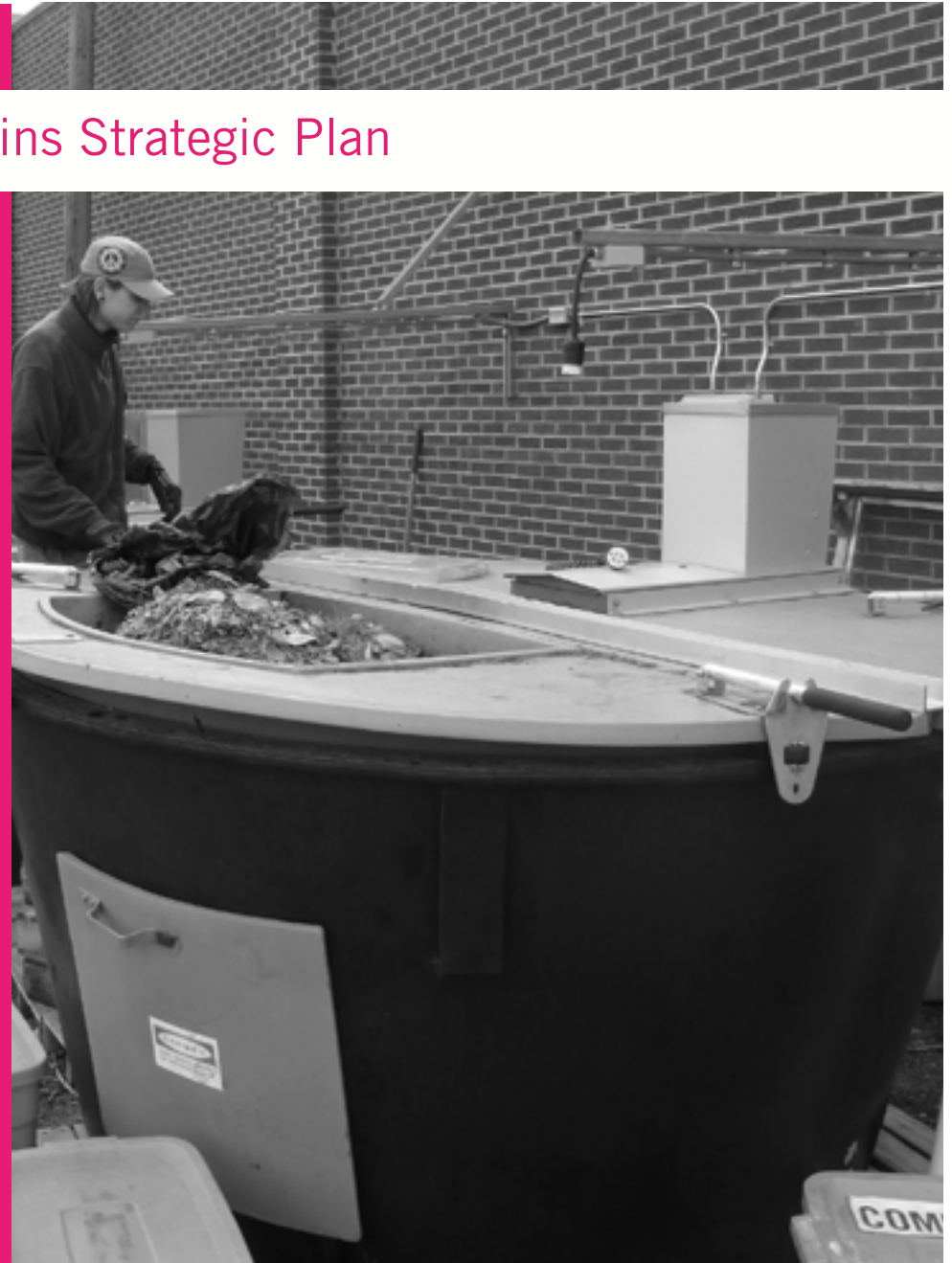




# Road to Zero Waste

## Alignment with the City of Fort Collins Strategic Plan

- Promote health and wellness within the community (CNL 1.6); with objectives to:
  - Engage citizens in ways that educate and change behavior toward more sustainable living practices (ENV 4.6)
  - Improve community involvement, education, and regional partnerships to make our community safer and stronger (SAFE 5.8)
- Expand organizational and community knowledge about diversity and embrace cultural differences (CNL 1.8); with objectives to:
  - Improve access to, and participation in, City programs and facilities for disadvantaged, underrepresented, minority, and culturally diverse populations
- Align economic health goals and strategy across all levels of the organization and refine and agree upon the economic tools the City uses (ECON 3.1)
- Improve policies and programs to retain, expand, incubate and attract primary employers where consistent with City goals (ECON 3.2)
- Improve effectiveness through collaboration with economic health-oriented regional partners (ECON 3.4)
- Demonstrate progress toward achieving net zero energy in the community and the City organization using a systems approach (ENV 4.5)
- Demonstrate progress toward achieving zero waste within the community and the City organization (ENV 4.11)



## SOCIAL

### Integration of the Triple Bottom Line

- The City efforts strive for parity in the provision of recycling and waste reduction programs to all citizens and works to ensure all residents have equal access to recycling/diversion options, regardless of where they live. Robust reuse and recovery programs for goods and food are particularly beneficial to low-income residents.

## ENVIRONMENTAL

- Reducing waste conserves natural resources and energy used to produce goods and packaging; avoids construction of new landfills; prevents emissions of pollutants to groundwater, greenhouse gases from landfills (methane) and manufacturing activities; and prevents degradation of natural ecosystems caused by mineral and resource extraction.



## ECONOMIC

- Procuring required resources locally supports a healthy and resilient economy. Recycling and reuse industries create jobs across the income and educational spectrum and generate revenue for the local and state economy. Waste diversion postpones or prevents having to make public investment in new, costly landfills.



**lead by  
example.**



# climate commitment. be air aware. road to zero waste. lead by example. collaborate and act regionally.



The City of Fort Collins aspires to provide world-class services to the community while cultivating a world class organizational culture for its employees. In order to achieve this vision, both internal and external services are data-driven and implemented according to organizational values. The City develops resiliency and sustainability through organization-wide systems and processes that ensure consistent employee work practices and alignment across service areas.

The City has adopted eleven municipal sustainability goals, several of which focus on environmental sustainability. As a Platinum ClimateWise Partner, the City of Fort Collins is committed to reducing greenhouse gas emissions 20% below 2005 levels by 2020. The organization is equally committed to systematically addressing all aspects of sustainability through a triple bottom line lens for projects, policies and purchases by implementing numerous projects that address each of the eleven municipal sustainability goals.

Fort Collins' success at taking decisive action and implementing innovative solutions in the face of a range of social and economic challenges, and the uncertainties of climate change, has contributed to the vibrant, livable city that is Fort Collins. The City's role in leading by example will empower businesses and residents to take an active role in addressing climate mitigation and adaptation strategies.

## Challenges

- Setting specific accountability targets for individuals and departmental goals
- Planning for unquantified risks, including those related to water; increased federal and state water regulations; and increased water and energy rates
- Limited staff capacity to implement internal sustainability projects and policies
- Adjusting buildings hours for coincident peak energy use
- Sometimes competing objectives of user needs and energy efficiency
- Continue funding to implement efficient, innovative improvements to the City's physical plant and operational procedures that are not otherwise funded
- Standardizing data quality
- Developing metrics for qualitative data
- Communicating complex concepts

## Data Points

- 2014 Municipal Sustainability Annual Report

<http://www.fcgov.com/climateprotection/pdf/2014-Municipal-Greenhouse-Gas-Report-web.pdf>

## Our Vision

A community-wide and organizational culture of sustainability in which the City plays a leadership role.

## Our Role

The Environmental Services Department plays the following roles relative to "Lead By Example":

- Coordinate the interdepartmental Municipal Sustainability Team
- Provide technical advice and support to City departments' efforts to advance municipal sustainability goals and community climate action goals
- Track and report annual progress on municipal sustainability goals
- Provide programs such as challenges, movies, and community discussions intended to educate and empower the community to take action to advance sustainability
- Provide technical expertise in the areas of air quality, waste diversion, and climate mitigation and adaptation
- Facilitate the organization in developing climate adaptation plans
- Educate about and advocate for sustainability best practices, internally and externally
- Support triple bottom line thinking and the City's Sustainability Assessment process
- Provide recognition to others for innovation and adoption of sustainability measures





# Lead by Example

GOALS:

## D.1

ADVANCE THE CITY ORGANIZATION'S PROGRESS ON COMPREHENSIVE SUSTAINABILITY PRINCIPLES AND GOALS

STRATEGIES:

**1. Design, initiate, and evaluate pilot projects and operations through a triple bottom line approach (LEAD & COLLABORATE)**

**2. Collaborate and partner with other City departments to advance progress on the municipal sustainability goals (LEAD, CONSULT & COLLABORATE)**

**3. Initiate opportunities for staff, businesses and contractors to maintain and obtain professional credentials (i.e., LEED, Green Globes etc.) and learn about climate mitigation activities (LEAD)**

ACTIONS:

- a. Coordinate review of proposals and awards of the City's Innovation Fund.
- b. Highlight Innovation Fund recipients and Innovation Team Projects.
- c. Highlight Sustainability Innovation through BIZED and other community programs.
- d. Support Municipal Energy Efficiency Fund activities.

- a. Lead and participate in cross-functional teams to coordinate and encourage municipal sustainability.
- b. Assist departments in identifying and addressing sustainability policies and practices, gaps and barriers.
- c. Collaborate with departments to set departmental or personal goals in alignment with municipal sustainability goals and provide routine progress reports.
- d. Promote and implement sustainable procurement best practices.
- e. Implement and advance local food use for City functions.
- f. Assist City departments in hosting zero waste events.
- g. Publish Annual Municipal Sustainability Report in collaboration with City departments and publish Sustainability Management Plan on a five year cycle.

- a. Offer LEED-related education opportunities.
- b. Offer municipal sustainability scholarships.
- c. Provide information on innovative best practices.

METRICS:

- Percent decrease in municipal greenhouse gas (GHG) emissions from 2005 baseline
- Progress towards the quantified sustainability goals
- Amendments to Land-Use, Building codes and Administrative Policies



**GOALS:**

**D.2 ADVANCE CONSIDERATION OF THE TRIPLE BOTTOM LINE IN CITY-WIDE DECISION-MAKING**

**STRATEGIES:**

4. Increase accountability for climate action and other sustainability goals at City Service Area level (**COLLABORATE**)

1. Implement and encourage others to build departmental capacity to conduct Sustainability Assessments of projects that consider environmental, economic and social implications and ways to mitigate potential negative impacts (**LEAD & CONSULT**)

2. Evaluate and update the Sustainability Assessment process (**LEAD**)

**ACTIONS:**

- a. Promote integration of City sustainability goals into Service Area goals and plans.
- b. Encourage adoption of performance goals that support progress on municipal goals.

- a. Provide trainings to implement sustainability assessments.
- b. Promote development of expanded on-line resources.
- c. Elevate the principles of environmental justice and equity.

- a. Collect and report user feedback from pilot test year (2015).
- b. Incorporate changes and ensure continuous improvement.

**METRICS:**

- Survey results on user (e.g., project manager) feedback on the Sustainability Assessment process and tools
- Feedback from City leadership on whether they are satisfied that the Sustainability Assessment process accomplishes the goal of integrating sustainability considerations into City decision-making
- Updated Sustainability Assessment framework document and forms
- Updated Sustainability Assessment CityNet website



# Lead by Example

GOALS:

## D.3 EDUCATE AND INSPIRE THE COMMUNITY, CITY LEADERSHIP, AND STAFF ABOUT ENVIRONMENTAL SUSTAINABILITY

STRATEGIES:

1. Provide expert consultation to assist departments on specific areas such as data management, zero waste practices, air quality, alternative fuels and fleets, etc. **(CONSULT)**

2. Utilize community-based social marketing and other behavioral techniques that promote positive change, reduce barriers, and focus on the benefits of making changes **(LEAD & PARTNER)**

3. Interpret complex data to make it understandable and relevant to a non-technical audience **(LEAD & PARTNER)**

ACTIONS:

- a. Assist City staff in becoming Climate Action Plan ambassadors.
- b. Be responsive to requests for assistance from other departments.

- a. Centralize information about City-offered programs and resources for all community members, with a special emphasis on reaching low-income citizens.
- b. Promote resource conservation.
- c. Assist City staff in becoming Climate Action Plan ambassadors.

- a. Develop case studies that showcase City best practices and progress.

METRICS:

- Annual number of people receiving sustainability education



GOALS:

# D.4

ENSURE HIGH-QUALITY DATA IS USED IN DECISION-MAKING

STRATEGIES:

1. Standardize data, information, quality assurance, and quality control procedures (**LEAD & COLLABORATE**)
2. Provide centralized carbon accounting for municipal operations (**LEAD**)

ACTIONS:

- a. Ensure published data, information, and documents have undergone appropriate review.
- a. Collect and archive municipal GHG activity data and emissions calculations in a centralized database.

METRICS:

- Centralized document review process for ESD
- Annually updated data documentation to the GHG Emissions Management System (GEMS) database for estimates of carbon reduction policies, projects, and programs





# Lead by Example

## Alignment with the City of Fort Collins Strategic Plan

- Support workforce development and community amenities initiatives that meet the needs of primary and innovative employers (ECON 3.3)
- Improve organizational capability and effectiveness – professional development, leadership, change management, strategic thinking, fiscal literacy and staff engagement (HPG 7.1)
- Improve productivity, efficiency, effectiveness, customer service and citizen satisfaction in all areas of the municipal organization (HPG 7.9)
- Implement leading-edge and innovative practices that drive performance excellence and quality improvements across all Service Areas (HPG 7.10)
- Reduce GHG emissions by creating a built environment focused on green building and mobile emission reductions (ENV 4.4)
- Demonstrate progress towards achieving net zero energy and waste (ENV 4.5)



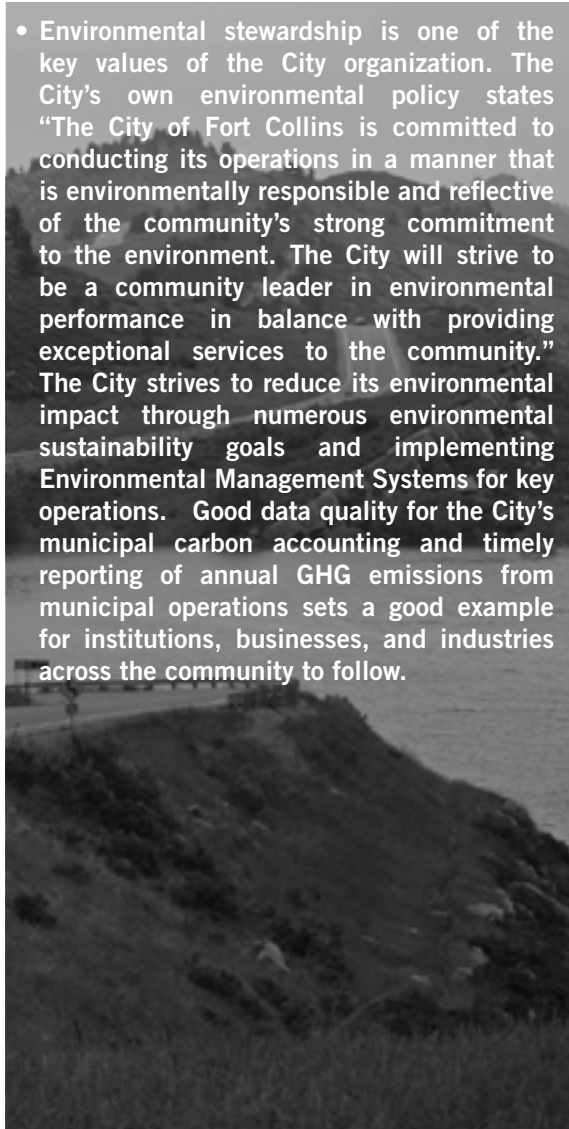
## **SOCIAL**

### Integration of the Triple Bottom Line

- Many of the City's services, policies, and programs affect residents and businesses across the community, so we must consider social equity as a standard practice. This is good customer service. The municipal government's local food goals improve the availability and accessibility to healthy food for staff and residents.

## **ENVIRONMENTAL**

- Environmental stewardship is one of the key values of the City organization. The City's own environmental policy states "The City of Fort Collins is committed to conducting its operations in a manner that is environmentally responsible and reflective of the community's strong commitment to the environment. The City will strive to be a community leader in environmental performance in balance with providing exceptional services to the community." The City strives to reduce its environmental impact through numerous environmental sustainability goals and implementing Environmental Management Systems for key operations. Good data quality for the City's municipal carbon accounting and timely reporting of annual GHG emissions from municipal operations sets a good example for institutions, businesses, and industries across the community to follow.



## **ECONOMIC**

- The City has a responsibility to manage taxpayer dollars efficiently and can reduce the cost of municipal operations to taxpayers by using resources, including energy, efficiently. The City tracks and reports its own energy use, costs, and carbon emissions, and strives to reduce use and costs. Innovative sustainability projects and financing approaches implemented by the municipal organization can pave the way for increased economic opportunities in the community. These include local distributed renewable energy projects such as the Community Solar Garden that support the workforce and expanded community amenities.





**collaborate  
and act  
regionally.**





# climate commitment. be air aware. road to zero waste. lead by example. collaborate and act regionally.



Many issues, including environmental issues such as climate change impacts, air pollution, and waste management, do not respect geopolitical boundaries. Therefore, in pursuit of environmental protection, it is very important to collaborate regionally and with other levels of government. This theme focuses on strategically leveraging partnerships beyond our community boundaries to advance community sustainability goals and objectives.

## Challenges

- Redundancy with other agencies
- Staff capacity limits ability to participate with regional groups
- Public perception/potential concern about City taxpayer funds being used to help others
- Resolving diverse objectives and sensitive political issues
- Goal timelines may not be in alignment
- Divergent regional goals regarding growth and transportation solutions
- Technology availability, accessibility, and affordability to regional citizens
- Public confusion regarding ESD role

## Our Vision

A region that partners to address environmental issues that extend beyond municipal boundaries.

## Our Role

The Environmental Services Department plays the following roles relative to “Collaborate and Act Regionally”:

- Network to share best practices
- Participate in regional networks
- Facilitate regional conversations
- Evaluate and advocate for state legislation
- Participate in rule-makings
- Provide educational opportunities
- Leverage resources with regional partners that also helps Fort Collins citizens
- Partner on regional infrastructure projects





# Collaborate and Act Regionally

GOALS:

## E.1

ACT WITH OTHERS TO PROMOTE AND IMPLEMENT DEEP CARBON REDUCTION MEASURES

STRATEGIES:

1. Partner with Platte River Power Authority and its owner communities to find common ground that advances carbon reduction (**COLLABORATE**)

2. Participate in regional, state and national networks working to advance carbon reduction (**COLLABORATE & PARTNER**)

3. Evaluate, promote and support participation in national and global coalitions that support deep carbon reductions (**COLLABORATE**)

ACTIONS:

a. Participate in planning processes.

a. Drive Electric Northern Colorado

b. Colorado Climate Network

c. Colorado Clean Energy Cluster

d. Colorado Association for Recycling

e. Urban Sustainability Directors Network

f. Colorado Green Building Guild

g. US Green Building Council

h. Solid Waste Association of North America

i. Colorado Healthy Housing Coalition

j. Northern Colorado Regional Wasteshed Planning Group

k. Colorado Communities for Climate Action

a. Mayors National Climate Action Agenda

b. Compact of Mayors

METRICS:

- Attendance and participation in regional and other networks and organizations



**GOALS:**

**E.2 INCREASE AWARENESS OF AND ENGAGEMENT IN CLIMATE ADAPTATION**

**STRATEGIES:**

4. Seek relationships to develop and leverage financial solutions **(COLLABORATE)**

1. Work with key regional partners and others to plan for impacts of climate change and extreme weather events, including partnership with Larimer County and Western Adaptation Alliance **(COLLABORATE)**

2. Work with Larimer County, other local governments, CSU, state and federal government, and health agencies to raise community awareness about how to prepare for and increase resiliency to climate change impacts **(COLLABORATE)**

**ACTIONS:**

- a. Identify and pursue grant opportunities that would be enhanced by a regional scope or partnerships.
- b. Investigate options for creating a regional solid waste authority.

- a. Coordinate response plans with other agencies and experts.
- b. Participate in regional hazard mitigation planning.

- a. Provide information through Healthy Homes program.
- b. Raise awareness through public events such as forums and movies.

**METRICS:**

- Metrics to evaluate progress in climate adaptation will be developed



# Collaborate and Act Regionally

GOALS:

## E.3 IMPROVE ENVIRONMENTAL QUALITY THROUGH COLLABORATION WITH REGIONAL PARTNERS AND ORGANIZATIONS

STRATEGIES:

- |   |   |   |
|---|---|---|
| <p>1. Partner with Colorado Department of Public Health and Environment, Larimer County, City of Loveland, Colorado State University, Front Range Community College, Poudre School District, etc. on regional planning to address environmental issues <b>(COLLABORATE &amp; PARTNER)</b></p> | <p>2. Partner with national and regional housing, health, and educational organizations to promote indoor environmental health <b>(COLLABORATE)</b></p> | <p>3. Provide environmental technical expertise to support regional efforts <b>(LEAD &amp; CONSULT)</b></p> |
|---|---|---|

ACTIONS:

- |  |  |  |
|--|--|--|
| <p>a. Initiate opportunities to share best practices with regional partners.</p> <p>b. Participate in air quality State Implementation Plan processes.</p> | <p>a. Colorado Healthy Housing Coalition</p> <p>b. Colorado State University</p> | <p>a. Participate in regional committees with an environmental protection focus.</p> <p>b. Conduct groundwater and other environmental sampling , including oil and gas- related activity.</p> |
|--|--|--|

METRICS:

- Influence /Successful development of programs and infrastructure on core issues
- Provided replicable models that were embraced by others
- Compliance with regional plans/ regional aspects of City plans



GOALS:

**E.4** ADVANCE COMMUNITY ENVIRONMENTAL OBJECTIVES THROUGH PARTICIPATION IN LEGISLATIVE AND REGULATORY PROCESSES, WHILE CONSIDERING THE TRIPLE BOTTOM LINE

STRATEGIES:

1. Participate in national and state legislative processes and rulemakings on environmental issues such as air quality, energy, oil and gas, and sustainable materials/waste management issues (**LEAD & COLLABORATE**)

ACTIONS:

- a. Actively monitor key proceedings.
- b. Provide input to City's Legislative Policy Agenda and provide comments on bills.
- c. Participate in air quality State Implementation Plan processes.
- d. Partner with others to promote policy actions at state and national level.

METRICS:

- Number of positive outcomes and positive partnerships





# Collaborate and Act Regionally

## Alignment with the City of Fort Collins Strategic Plan

- Increase the community's resiliency and preparedness for changes in climate, weather and resource availability (ENV 4.7)
- Demonstrate progress toward achieving net zero energy within the community and the City organization (ENV 4.5)
- Proactively influence policy at other levels of government regulation (HPG7.11)
- Improve community involvement, education, and regional partnerships to make our community safer and stronger (SAFE 5.8)
- Improve effectiveness through collaboration with economic health-oriented regional partners (ECON 3.4)



## SOCIAL

### Integration of the Triple Bottom Line

- Many social issues such as poverty and homelessness do not respect political boundaries. Actions taken in Fort Collins to promote a healthy environment must be done while guarding against potential negative social impacts such as significantly increasing the cost of living in Fort Collins and causing a higher percent of the work force to live outside the City with consequent increases in commuting costs and other impacts.

## ENVIRONMENTAL

- Environmental stewardship is implemented at many levels of government. Local action often complements state or nation regulation. Finding alignment and promoting environmental protection with regional or other partners can leverage greater action at higher levels of government.



## ECONOMIC

- Regional solutions that improve environmental stewardship may also increase availability of local jobs such as creation of local processing/recycling capability for materials of value in the waste stream.



| TABLE 1. ESD Strategic Plan Roles Matrix (R=Responsible; C=Consulted; I-Informed)   | City Departments        |     |     |      |       |      |
|---|-------------------------|-----|-----|------|-------|------|
|   | ESD                     | EHO | SSD | Util | Trans | CDNS |
| <b>Goals</b>  |                         |     |     |      |       |      |
| <b>Climate Commitment</b>   |                         |     |     |      |       |      |
| A.1: Rapidly advance green built environment  | Lead                    | C   | C   | R    | C     | R    |
| A.2: Engage the community and persuade and empower to act   | Collaborate             | C   | C   | R    | C     | R    |
| A.3: Increase City organization preparedness and resiliency to climate change impacts   | Lead                    | R   | R   | R    | R     | R    |
| A.4: Support innovation to accelerate implementation of 2015 CAP Framework  | Collaborate             | R   | C   | R    | R     | R    |
| A.5: Support City efforts to “preserve the ecosystem upon which we depend”  | Collaborate             | --  | C   | R    | C     | R    |
| A.6: Continue responsible climate planning and progress reporting   | Lead                    | C   | C   | R    | R     | C    |
| <b>Be Air Aware</b>   |                         |     |     |      |       |      |
| B.1: Focus on local actions to reduce air pollutants of concern including ozone & radon   | Lead                    | --  | I   | --   | C     | C    |
| B.2: Improve indoor and outdoor air quality to enhance the community's health   | Lead                    | I   | C   | I    | R     | R    |
| B.3: Promote air quality protection within the City organization  | Lead                    | R   | R   | R    | R     | R    |
| B.4: Support and leverage air quality co-benefits of climate action initiatives   | Lead                    | I   | I   | I    | C     | I    |
| <b>Road to Zero Waste</b>   |                         |     |     |      |       |      |
| C.1: Reduce the flow of materials sent for landfill disposal and foster greater resiliency in managing waste to lower greenhouse gas emissions                  | Lead/<br>Collaborate    | I   | I   | C    | I     | I    |
| C.2: Increase the focus on preventing high-value material from being sent to landfills that could instead support the recycling and materials recovery industry | Lead                    | C   | I   | C    | I     | C    |
| C.3: Expand the culture of environmental stewardship that seeks to reduce waste at the source   | Lead                    | I   | C   | R    | I     | C    |
| C.4: Educate/inform and enhance equal opportunities for participating in waste management to empower residents' personal actions                                | Lead                    | C   | C   | R    | I     | C    |
| <b>Lead by Example</b>  |                         |     |     |      |       |      |
| D.1: Advance City organization progress on comprehensive sustainability principles/goals  | Collaborate/<br>Partner | I   | C   | C    | C     | C    |
| D.2: Educate and inspire the community, City leadership, staff about environmental sustainability   | Lead/<br>Collaborate    | I   | I   | C    | C     | C    |
| D.3: Advance consideration of the triple bottom line in City-wide decision-making   | Lead/<br>Collaborate    | C   | C   | C    | C     | C    |
| D.4: Ensure high-quality data is used in decision-making  | Lead/<br>Collaborate    | I   | I   | C    | C     | I    |
| <b>Collaborate and Act Regionally</b>   |                         |     |     |      |       |      |
| E.1: Act with others to implement deep carbon reduction measures  | Collaborate             | R   | R   | R    | R     | R    |
| E.2: Increase awareness and engagement in climate adaptation  | Lead                    | I   | C   | I    | I/C   | C    |
| E.3: Advance community environmental objectives through participation in legislative and regulatory processes, while considering the triple bottom line         | Lead/<br>Collaborate    | C   | C   | R    | R     | R    |
| E.4: Improve environmental quality through collaboration with regional partners   | Lead/<br>Collaborate    | R   | R   | R    | R     | R    |



# Implementation

To successfully promote, protect and enhance a healthy and sustainable environment, the Environmental Services Department provides leadership in policy and program development and implementation, and reporting, in certain areas of environmental stewardship (air quality, waste reduction and recycling, and climate planning). It works collaboratively with City departments, agencies, stakeholders and partners in other areas (water and land protection, energy, and transportation). Table 1 provides a matrix that outlines the roles of ESD and others relative to the goals laid out in this plan.

Staff will use the Plan in the following ways:

- Coordinate with the Economic Health Office and the Social Sustainability Department to create a synthesized summary of the three Sustainability Services departmental strategic plans
- Use as guidance to provide input to the periodic update of the City's Strategic Plan
- Prioritize strategies and resource needs, and use as guidance to develop budget requests
- Convene a departmental implementation team to refine metrics and develop a routine progress reporting structure that leverages existing reporting processes
- Review progress and update the Plan periodically.



# Acknowledgements

## Mayor and City Council

Wade Troxell.....Mayor  
Gerry Horak.....Mayor Pro Tem, District 6  
Bob Overbeck.....District 1  
Kristin Stephens.....District 2  
Gino Campana.....District 3  
Ray Martinez.....District 4  
Ross Cunniff.....District 5

## Staff

Darin Atteberry.....City Manager  
Jeff Mihelich.....Deputy City Manager  
Jacqueline Kozak Thiel.....Chief Sustainability Officer  
Lucinda Smith.....Environmental Services Director  
Lindsay Ex.....Environmental Program Manager  
Susie Gordon.....Sr. Environmental Planner, Waste Reduction and Recycling  
Rosemarie Russo.....Sr. Environmental Planner, Sustainability Coordinator  
Caroline Mitchell.....Environmental Planner, Waste Reduction and Recycling  
Cassie Archuleta.....Environmental Planner, Data Management and Sustainability Assessment  
Mary Pat Aardrup.....Environmental Planner, Healthy Homes Program Manager  
Katy Bigner.....Environmental Planner, FortZED Coordinator  
Honore Depew.....Environmental Planner, Waste Reduction and Recycling  
Tony Raeker.....Environmental Planner, Green Built Environment Program  
Selina Lujan.....Healthy Homes Program Assistant  
Alexis Hmielak.....Administrative Assistant





**Environmental Services Department | 215 N. Mason Street | P.O. Box 580 | Fort Collins, CO 80522-0580**  
Lucinda Smith | Director of Environmental Services | [ismith@fcgov.com](mailto:ismith@fcgov.com) | 970.221.6600