

Collins

222 Laporte

WILLIAM

STANK COMPANY STA

2018-2022 **GREEN BUILDING** PROGRAM

### GREEN BUILDING PROGRAM (GBP) STRATEGY 2018-2022

In 2013, the City of Fort Collins prepared an update to the 2007 Roadmap for Coordinated and Enhanced Green Building Services. As a result of this update, the City established a formal Green Built Environment Program (GBEP) in 2015 to coordinate progress on priorities and overall strategy as described in this document. For simplicity and clarity, the program is now referred to as the Green Building Program (GBP)

To achieve the strategies and results outlined in this document requires significant coordination with other departments whose program's overlap with these goals. Similarly, many of the GBP initiatives work best in conjunction with other program elements – in simple terms, the whole is greater than the sum of the parts.

This program strategy document provides a general framework for how these elements will be pursued and implemented over the course of the next five years. The programs and policies below provide a snapshot of the more immediate efforts to implement the goals of the Roadmap. Activities in the GBP Strategy are broken into four categories based on the type of project. The categories used are as follows:

#### Local Codes and Ordinances

Work in this category is focused on the regulatory aspects of green building. While the GBP emphasizes educational and market-based mechanisms to promote green building, codes and regulations set the minimum standards for sustainability. As knowledge and technology improve, the minimum standards must also evolve to reflect current best practices and changes made to the reference codes over time. Primary activity in this category seeks steady development of these standards while protecting market viability and an increased focus on compliance with adopted requirements. The GBP will also work with Utilities Resource Conservation and Building Services to increase the accuracy and amount of resources available to the development community, particularly while they are in the field.

#### Incentives

This category seeks to identify and implement incentive tools that encourage green building practices. The intent of the incentives is to increase both the number of green building projects and the comprehensiveness of their approach. Incentives are defined in two ways: financial and process-based. Financial incentives may take the form of direct rebates, tax-increment financing, reduced development fees, reduced cost services (such as audits or design assistance), loan loss reserves, or a range of other financing options. These incentives can be very effective, but typically also have a commensurate cost. Process-based incentives, by contrast, do not involve direct transfer of funds or assistance in financing. Instead they aim to accelerate the development review or planning/permitting processes. Expedited review and permitting can often lead to substantial financial benefits for the project without significant direct costs to the City. However, process-based incentives may lose effectiveness if market participation exceeds certain levels, typically 40% to 50%.

### Education and Outreach

One of the most significant barriers to green development is limited knowledge and training among both the development community and the public. Results from the Green Building Website Survey indicated that many builders and contractors associate green building with compliance to the "green" code amendments, not to efforts that exceed code and reach for sustainability goals that are not covered by code. Similarly, some respondents stated that they didn't have knowledge of best construction practices or how to "sell" green building to a client. The Education and Outreach programs will seek to

increase technical skills and knowledge as applied construction; ability of builders, contractors and designers to communicate the performance and financial benefits of green building; use community-based social marketing and behavioral science to reduce the cognitive barriers to green investments; and increase general awareness and knowledge of the value of green building in the general public.

### **Policy Alignment**

The City engages in numerous activities related to a sustainable built environment. So many, in fact, that respondents indicated in the Green Building Website Survey that City programs can be difficult to navigate and participate in. Members of the development community and the general public have indicated their difficulty in navigating programs and finding the assistance they need. The work in the Policy Alignment category aims to facilitate coordination between departments on programs related to the green built environment.

#### Guide to the Program Table

- Goal The goals broadly reflect different categories in the Roadmap. Within each goal there may be multiple
  policies or programs aimed at advancing that goal. Programs and policies are listed under only one goal, but the
  effects of those programs or policies will often have impacts on other goals as well.
- Role This box identifies the position or department with lead responsibilities. The Green Building Coordinator is
  the lead for most of these projects, but in instances where another department is lead or co-lead it is noted.
- Priority Each policy or program has been ranked Low, Medium, or High priority depending on the importance of that effort in advancing green building, and if the project functions as a prerequisite for other projects.
- Timeframe Policies and projects may take varying degrees of time to research and implement. For the purposes of this table, "short" is assumed to be six months to one year, "medium" one to three years, and "long" three to five years. Some projects may have more than one timeline. For example, the base green building website should be up within three months, but we expect to continue adding considerable amounts to it over a few years.
- Target Sectors This box reflects whether the program or policy applies only to a specific sector (i.e., residential, commercial, etc.), or a target audience (tenants, small contractors, designers, etc.).
- Internal collaborators A list of any other departments or individuals where we expect regular interaction and input on a given program or policy.
- External collaborators A list of external community groups, non-profits, businesses, institutions where we expect regular interaction and input on a given program or policy.
- Key Activities A brief list of the most important steps to advancing the listed program or policy.
- **Key Metrics** A brief list of implemented or proposed mechanisms to assess the performance of a program or policy, and methods to improve that performance.

## GOAL 1 ► LOCAL CODES AND ORDINANCES

Develop and update codes for new construction and retrofits; work with other departments to identify areas where codes need to be strengthened or where opportunities may exist to advance a sustainable built environment.

#### **1.1 GREEN BUILDING WEBSITE**

ROLES	INTENT, ACTIVITIES & METRICS
<ul> <li>Lead: Green Building Coordinator</li> <li>Internal Collaborators: Building, Resource Conservation, Information Technology, Community Engagement</li> <li>External Collaborators: Institute for the Built Environment</li> <li>Target Sector(s): Development community, general public</li> </ul>	Intent: Existing data Google Analytics data shows that there is only minimal pageviews of the green building website and that those visits are generally very short. Additionally, survey data from the development community found a broad level of disappointment with site structure and content. Work with Resource Conservation and Building Services to improve the functionality, accessibility, and usefulness of the green building website and thereby foster greater adoption of green building practices by the development community. Assist in increasing the proportion of building questions, plan review, and permitting that can be achieved through online mechanisms to simplify the review process for the development community and Building Services.
TIMING Priority: High Timeframe: Short (base website) to Medium (full development)	<ul> <li>Key Activities:</li> <li>Develop and implement base green building website (introduction and code information).</li> <li>Work with Communications and Public Involvement Office to increase awareness and use of the website. Outreach may include paper and electronic marketing materials, events, and possibly training.</li> <li>Continue adding other components to the green building website, not limited to but including: the costs and benefits of green building, green financing resources, green leasing templates, case studies, information on best practices, etc.</li> </ul>
	<ul> <li>Key Metrics:</li> <li>Number of hits to webpages, length of time on each page</li> <li>Possibly another iteration of the survey in two years with corresponding data</li> <li>Work with Building Services to determine if there is a decrease in simple questions/permits at the Building counter</li> </ul>

## GOAL 1 ► LOCAL CODES AND ORDINANCES

#### **1.2 BUILDING CODE UPDATES**

ROLES	INTENT, ACTIVITIES & METRICS
Lead: Building Services	Intent: Collaborate with other departments to ensure that future code updates
<b>Participant:</b> Green Building Coordinator	advance sustainability in the built environment in a steady, meaningful progression of standards and best practices. The 2015 codes will be adopted in June 2017 and code updates are generally on a three-year
Internal Collaborators Resource Conservation, Environmental Services	cycle.
External Collaborators: Contractors, builders, designers	<ul> <li>Key Activities:</li> <li>Work with City departments, external stakeholders, and others to develop list of measures that should be included in the next code update. Develop draft text, goals, and strategies for proposed sections</li> </ul>
Target Sector(s): All	<ul> <li>ahead of next update to present possible solutions.</li> <li>Collaborate with other regional cities and national peer programs (such</li> </ul>
TIMING	<ul> <li>as USDN programs) to identify and share best practices.</li> <li>Work to foster the practice that codes should address <i>future</i> risks and</li> </ul>
Priority: Medium	<ul> <li>Work to foster the practice that codes should address <i>future</i> risks and conditions, not present conditions.</li> </ul>
Timeframe: Medium	<ul> <li>Continue to integrate the role of the Energy Code Compliance Specialist (ECCS) with Building Department staff (plan review and inspection) to identify key leverage points for optimizing the benefits of the ECCS role.</li> </ul>
	<ul> <li>In collaboration with the Energy Code Compliance Specialist, develop more robust training and outreach programs on energy codes to improve compliance in advance of construction and occupancy.</li> </ul>
	<ul> <li>Key Metrics:</li> <li>Metrics are to be determined based on the code area and enforcement mechanisms, if any.</li> </ul>

### GOAL 2► INCENTIVES

Research, design and implement incentive mechanisms to increase green building. This may include financial or voluntary incentives, fees, rebates, tax programs, and financing options. Examples of program or processbased incentives include accelerated plan review and permitting.

#### 2.1 GREEN BUILDING INCENTIVES

ROLES	INTENT, ACTIVITIES & METRICS
Lead: Green Building Coordinator Internal Collaborators Building Services, Planning, Resource Conservation, Climate Economy Team	Intent: Work with Planning, Building, and Resource Conservation to research and evaluate the viability of different green building incentives. Develop and implement an appropriate incentive that increases the number, comprehensiveness, and breadth of green building projects.
External Collaborators: Institute for the Built Environment, development community Target Sector(s): All	<ul> <li>Key Activities:</li> <li>Research green building incentives used by other communities to determine the range of options including structure (financial, process, etc.), buildings covered, program barriers, program depth, measures of success and other relevant factors</li> <li>Work with other departments to determine the resources (staff and</li> </ul>
TIMING	financial) necessary to ensure the effectiveness of the incentive options and create ranked list of incentive options.
Priority: High	<ul> <li>Budget depending, implement the incentive mechanism for a pilot</li> </ul>
Timeframe: Medium	<ul> <li>period and evaluate effectiveness.</li> <li>Facilitate discussion within City regarding the use of process incentives for green building (e.g., expedited plan review and permitting).</li> <li>Create report on mechanism and make recommendation to end the program, modify, or expand.</li> </ul>
	<ul> <li>Key Metrics:</li> <li>Increased number and depth of green buildings, particularly with more buildings achieving higher levels of certification</li> <li>Greenhouse gas (GHG) reductions</li> <li>Possibly additional occupant satisfaction surveys or similar measures of non-energy performance</li> </ul>

## GOAL 2► INCENTIVES

#### 2.2 CLIMATE ECONOMY AND FINANCING WORK

ROLES	INTENT, ACTIVITIES & METRICS
Leads: Climate Economy Advisor and Green Building Coordinator Internal Collaborators Economic Health Office, Resource Conservation, Utility Billing	<b>Intent:</b> Work with Climate Economy Advisor, City Energy Project Advisor, and Climate Economy team to develop and implement a menu of financing options for both the residential and commercial sectors. Continuously work to increase private sector investment in energy efficiency, green building and sustainability.
External Collaborators: Natural Capitalism Solutions, financial institutions, Larimer County, Institute for Market Transformation, Elevations Credit Union Target Sector(s): All TIMING Priority: Medium	<ul> <li>Key Activities:</li> <li>Work with other City staff to identify areas/programs in need of funding and develop "sales pitches" for use at conferences and events.</li> <li>Work with Climate Economy Advisor and Larimer County to implement and advance commercial property assessed clean energy (C-PACE) financing.</li> <li>Investigate possible alternative funding sources or mechanisms for onbill financing.</li> <li>Work with clean energy credit union team to help them advance the sustainable credit union model.</li> <li>Assist City Energy Project (CEP) Advisor in the development of green leasing resources, training and outreach.</li> </ul>
Timeframe: Medium	<ul> <li>Key Metrics:</li> <li>Metrics will be largely developed by the Climate Economy Advisor. However, the GBP will aid in determining mechanisms for green building benefits, such as occupant comfort and health.</li> </ul>

Develop outreach, education, and training programs that include information on topics such as code compliance, best practices in construction, behavior change for sustainable lifestyles, internal education, and programs on the financial benefits of green building.

#### 3.1 HOMEWISE

ROLES	INTENT, ACTIVITIES & METRICS
Lead: Green Building Coordinator	Intent:
Internal Collaborators Resource	HomeWise is an employee sustainability benefit program that connects employees to City services that can improve the efficiency and
Conservation, Healthy Homes, Human	healthfulness of their homes. In partnership with Vermont Energy
Resources, Communications and Public Involvement	Investment Corporation, evaluate the pilot HomeWise program operated internally and in coordination with New Belgium Brewing and Odell Brewing in 2016 and 2017. In 2018 and beyond, develop, pilot, and expand
External Collaborators: Clinton	an employee sustainability benefit program with other local businesses.
Climate Initiative, Vermont Energy	Increase participation in City sustainability programs while increasing the
Investment Corporation, Odell Brewing, New Belgium Brewing	comfort, healthy, and efficiency of employees of our business partners.
	Key Activities:
Target Sector(s): Residential	<ul> <li>Conduct full roll-out of program at Odell Brewing and New Belgium Brewing in coordination with their sustainability staff.</li> </ul>
	<ul> <li>Begin roll-out of HomeWise to City staff, with a goal of at least 10</li> </ul>
TIMING	presentations in 2017 and 2018.
Priority: High	<ul> <li>Obtain data from survey of City employees and use it to target</li> </ul>
Timeframe: Medium	modification to the program.
	<ul> <li>Evaluate program effectiveness in increasing participation in Efficiency Works and Healthy Homes and relative cost/effectiveness as compared to other outreach mechanisms.</li> </ul>
	<ul> <li>Seek funding and other resources to support expanding the program</li> </ul>
	to other business partners. Resources may be required by Green Building Program, Resource Conservation, and Healthy Homes. However, those resources may allow the programs to reach
	unprecedented numbers of residents.
	Key Metrics:
	<ul> <li>Number of employees completing the survey, a Healthy Homes assessment, an energy audit, and an energy upgrade, with comparison in cost and effectiveness to other outrooch mechanisme</li> </ul>
	<ul> <li>comparison in cost and effectiveness to other outreach mechanisms.</li> <li>Proportion of energy upgrades that are "deep" retrofits versus single measures.</li> </ul>
	GHG reductions
	<ul> <li>Qualitative data, such as testimonials, to determine the non-</li> </ul>
	<ul> <li>quantifiable benefits of program participation.</li> <li>Possibly a follow up survey for participants to obtain feedback</li> </ul>
	<ul> <li>Possibly a follow up survey for participants to obtain feedback.</li> </ul>

#### 3.2 BUILDING PERFORMANCE PROJECT

ROLES	INTENT, ACTIVITIES & METRICS
<ul> <li>Lead: Green Building Coordinator</li> <li>Internal Collaborators Operations Services, Resource Conservation, Human Resources, Finance, Economic Health Office</li> <li>External Collaborators: Institute for the Built Environment, possibly also</li> </ul>	<b>Intent:</b> Begin to track and monitor green building performance, with emphasis on gaining greater evidence for the non-energy benefits of green building, such as lower maintenance costs, reduced construction risk, employee retention, increased productivity, lower health care costs, etc. Enroll other institutional and private sector partners in the process. Work with partners to improve metrics, share design and operations experiences, and disseminate the results broadly.
Platte River Power Authority and Colorado State University's facilities staff <b>Target Sector(s):</b> Internal	<ul> <li>Key Activities:</li> <li>In coordination with CSU, complete the Building Performance Survey of 222 Laporte and compile results. Seek other opportunities to conduct similar research on other City buildings.</li> <li>Work with Sustainability Financial Analyst to assess non-energy financial benefits of 222 Laporte.</li> </ul>
TIMING	<ul> <li>Distribute results of Building Performance Survey and financial analysis to other departments, such as Human Resources; Safety</li> </ul>
Priority: High Timeframe: Short	<ul> <li>Security and Risk Management, Operations Services, and Resource Conservation.</li> <li>Look for opportunities to expand analysis of the non-energy benefits of green building in other projects throughout the city. Aggregate or compile the results to provide stronger evidence of these benefits.</li> </ul>
	<ul> <li>Key Metrics:</li> <li>IBE completed analysis of the results in June 2017 and the Green Building Coordinator and IBE gave City staff a presentation on the results in August 2017.</li> <li>Work with Sustainability Financial Analyst to develop estimates of financial measures of the non-energy benefits of green building. Expected completion is January 2018.</li> <li>If CSU and PRPA follow suit, work with them to develop comparison and shared "lessons learned" for wider distribution.</li> </ul>

#### **3.3 GREEN BUILDING LECTURE SERIES**

ROLES	INTENT, ACTIVITIES & METRICS
<b>Co-Lead:</b> Green Building Coordinator Internal Collaborators: Energy Code Compliance Specialist – Co-Lead, Building Services, Resource	<b>Intent:</b> Increase participation in green building by providing inspirational and educational presentations on green building best practices, new technologies and techniques, and innovative solutions.
Conservation <b>External Collaborators:</b> Development community, possibly also Colorado Green Building Guild, the School of Global Environmental Systems at CSU, CAP Citizens' Advisory Committee, and other groups	<ul> <li>Key Activities:</li> <li>Work with Energy Code Compliance Specialist and other staff to draft basic goals, criteria, and parameters for a lecture series.</li> <li>Collaborate with internal and external partners to identify knowledge gaps, areas of particular interest, and list of potential speakers.</li> <li>Develop calendar of events and work with Communications and Public Involvement to create outreach plan.</li> <li>Conduct lectures and obtain feedback to improve the series.</li> </ul>
Target Sector(s): Residential and CommercialTIMINGPriority: MediumTimeframe: Short/Ongoing	<ul> <li>Key Metrics:</li> <li>Number of attendees and course evaluations to determine satisfaction with lecture series.</li> <li>Possibly also a measure of uptake of or compliance with best practices that are presented in the series.</li> </ul>

#### **3.4 GREEN BUILDING EDUCATIONAL RESOURCES**

ROLES	INTENT, ACTIVITIES & METRICS
<b>Co-Lead:</b> Green Building Coordinator Internal Collaborators: Building Services, Resource Conservation, Planning, Communications and Public Involvement	Intent: Increase participation in green building by creating easy-to-use, quick green building checklists for basic projects, both in commercial and residential. If applicable, develop comprehensive green building design guidelines. Key Activities:
External Collaborators: Possibly the Institute for the Built Environment, local environmental groups, the development community, and possibly other jurisdictions in the Front Range Target Sector(s): Residential and Commercial	<ul> <li>Research the feasibility of developing and distributing green building educational resources and reference materials, such as green building checklists, design guidelines, and other items. Assess the effectiveness of each tool/option.</li> <li>Collaborate with Building Services, Resource Conservation, Communications and Public Involvement to determine most critical knowledge gaps and the most effective education tools to bridge them.</li> <li>For each educational resource, as needed determine the information that it need to contain, the best mechanisms for distribution (for</li> </ul>
TIMING Priority: Low Timeframe: Medium	<ul> <li>example, if print or electronic documents, where and how the place, what size, etc.), and the staff resources required to produce it.</li> <li>As applicable, contact other regional jurisdictions to assess interest in compiling resources to develop regional documents and identify any additional opportunities for cost-sharing or cost cutting.</li> <li>Create mechanisms for on-going accuracy of the information and periodic updates.</li> <li>Create evaluation protocol and complete as appropriate.</li> </ul>
	<ul> <li>Key Metrics:</li> <li>To be determined based on the educational tool, audience, and goal of that tool.</li> </ul>

#### 3.5 GREEN BUILDING RECOGNITION SYSTEM

ROLES	INTENT, ACTIVITIES & METRICS
Lead: Green Building Coordinator	Intent:
Internal Collaborators: Building Services, Resource Conservation	Encourage best practices in green design through recognition of completed green building projects.
	Key Activities:
<b>External Collaborators:</b> Development community, possibly also Colorado Green Building Guild, and other environmental groups	<ul> <li>Support existing City efforts, such as the Urban Design Awards.</li> <li>Research viability, effectiveness, and resource requirements of green building recognition programs in other jurisdictions. Recognition programs may range from simple website lists to formal recognition ceremonies.</li> </ul>
Target Sector(s): Residential and Commercial	<ul> <li>Other steps pending evaluation of research.</li> </ul>
	Key Metrics:
TIMING	<ul> <li>Research viability, effectiveness, and resource requirements of green building recognition programs in other invited strong. Decognition</li> </ul>
Priority: Medium	building recognition programs in other jurisdictions. Recognition programs may range from simple website lists to formal recognition
Timeframe: Long	<ul><li>ceremonies.</li><li>Other steps pending evaluation of research.</li></ul>

# 3.6 ADVANCE KNOWLEDGE AND IMPLEMENTATION OF BUILT ENVIRONMENTS THAT IMPROVE OCCUPANT HEALTH AND WELL-BEING

ROLES	INTENT, ACTIVITIES & METRICS
Lead: Green Building Coordinator	Intent:
Internal Collaborators: Operation	Encourage best practices in healthy building design, construction, operation and maintenance.
Services, Purchasing, Resource	operation and maintenance.
Conservation, and other staff based on	Key Activities:
measures considered	<ul> <li>Research viability and effectiveness of different health-related building</li> </ul>
	rating systems, such as WELL, Fitwel, etc.
<b>External Collaborators:</b> Development community, business community,	<ul> <li>Determine viability of various measures to include in City design criteria for new construction and major renovations.</li> </ul>
residents	<ul> <li>Work with Utilities, Operations Services, Purchasing and other</li> </ul>
	departments to identify areas where City buildings can improve the
Target Sector(s): Municipal,	health and well-being of the built environment for occupants. Share
Residential and Commercial	<ul> <li>accumulated knowledge and experience with the community.</li> <li>As applicable, work to develop resources and programs that will</li> </ul>
	facilitate greater adoption of healthy building practices among the
TIMING	development community and business community.
Priority: Medium	
Timeframe: Long	Key Metrics:
	<ul> <li>Metrics in this category will fall broadly into two categories: level of adoption and effectiveness. Level of adoption may be measured by</li> </ul>
	rating system certifications achieved or similar criteria. Measures of
	effectiveness on health may be very complex and only accumulated
	over long time frames (i.e., ten years or more). However, the program
	will work with HR, Payroll, Operations Services and others to collect data wherever feasible and identify techniques to gather most
	information possible. The 222 Laporte Building Occupant Survey may
	be used as a baseline for survey development.

## GOAL 4► POLICY ALIGNMENT

Collaborate with other departments to ensure that green building acts as a mechanism to bring together disparate sustainability technologies and strategies. Ensure that City programs are well-integrated, complement one another, and do not result in contradictory intents or effects.

#### 4.1 CITY ENERGY PROJECT

ROLES	INTENT, ACTIVITIES & METRICS
Lead: City Energy Project Advisor, Utilities Participant: Green Building Coordinator Internal Collaborators: Resource	Intent: City Energy Project is a program of the Institute for Market Transformation (IMT), Natural Resources Defense Council (NRDC), to rapidly advance energy efficiency in medium to large commercial buildings. The Green Building Program provides general assistance as needed and coordinates with CEP on choice architecture, green financing, and green leasing efforts.
Conservation, Community Engagement, Key Accounts, Communications and Public Involvement, Economic Health Office <b>External Collaborators:</b> Institute for Market Transformation, Natural Resources Defense Council, business community	<ul> <li>Key Activities:</li> <li>Advance building energy scoring, green leasing, and other mechanisms that support commercial energy efficiency (Leads: City Energy Project Advisor and Building Energy Scoring Planner) The Green Building Program will provide support specifically in:         <ul> <li>Lead the Choice Architecture team to foster greater insights into cognitive and behavioral barriers to energy efficiency investment. Develop and implement solutions based on those insights.</li> </ul> </li> </ul>
Target Sector(s): Commercial	<ul> <li>Work with CEP Advisor and Climate Economy Advisor to develop outreach and training on green finance, green leasing, and the benefits of green building.</li> </ul>
Priority: High Timeframe: Medium	<ul> <li>Key Metrics:</li> <li>Metrics will be developed by the City Energy Project Advisor and Benchmarking Planner, but the GBP will provide additional support.</li> </ul>

## GOAL 4 ► POLICY ALIGNMENT

# 4.2 INCREASE INTERDEPARTMENTAL ALIGNMENT AND COORDINATION ON ISSUES RELATED TO GREEN BUILDING

ROLES	INTENT, ACTIVITIES & METRICS
Participant: Green Building Coordinator	Intent: Improve the coordination and integration of City codes, plans, programs and services that help produce a sustainable built environment. Streamline
Internal Collaborators: Multiple External Collaborators: Multiple	participation and compliance for the array of environmental initiatives so the processes are easier for residents and the business community.
Target Sector(s): All	<ul> <li>Key Activities:</li> <li>Coordination with Climate Action Plan (CAP) Strategic Initiative teams, City Plan, Urban Lab and other internal and public-private committees</li> </ul>
TIMING Drieniten Madium	<ul> <li>and teams to facilitate deeper integration of green building efforts.</li> <li>Act as liaison for other departments and service areas that have an</li> </ul>
Priority: Medium Timeframe: Medium	<ul> <li>interest in the work of the above Climate Action Plan teams. Provide information and collect feedback.</li> <li>As requested or needed, review documents, presentations, and other sources to ensure green building programmatic issues are covered in a manner aimed at simplicity, technical feasibility, cost effectiveness, and environmental efficiency and effectiveness.</li> </ul>
	<ul> <li>Key Metrics:</li> <li>Not applicable since activities in this area support other programs and/or departments.</li> </ul>

#### 4.3 GREEN INFRASTRUCTURE RATING OR COMPREHENSIVE REPORTING MECHANISM(S)

ROLES	INTENT, ACTIVITIES & METRICS
Participate/Co-lead: Green Building Coordinator Internal Collaborators: Multiple External Collaborators: Multiple Target Sector(s): Infrastructure	<ul> <li>Intent: Improve the sustainability of City-owned infrastructure through application of a green infrastructure rating system or standard.</li> <li>Key Activities: <ul> <li>Conduct industry scan to determine rating systems available to develop a short list of systems that would be most pragmatic and effective for Fort Collins.</li> <li>Collaborate with other departments to evaluate the short list and pilot the selected system(s)</li> <li>As applicable, implement the standard across City projects in that category.</li> </ul> </li> <li>Key Metrics: <ul> <li>To be determined in coordination with other City departments.</li> </ul> </li> </ul>
TIMING Priority: Low Timeframe: Long	

### ALIGNMENT WITH CITY STRATEGIC PLAN

KEY STRATEGIC OUTCOMES	STRATEGIC OBJECTIVES
Community & Neighborhood Livability Provide a high quality built environment and support quality, diverse neighborhoods	<ul> <li>1.1. Improve access to a broad range of quality housing that is safe, accessible and affordable.</li> <li>1.4. Preserve and provide responsible access to nature.</li> <li>1.6. Promote health and wellness within the community.</li> </ul>
Economic Health Promote a healthy, sustainable economy reflecting community values	<ul><li>3.5. Sustain high water quality to support the community and water-dependent businesses.</li><li>3.7. Support sustainable infill and redevelopment to meet climate action strategies.</li></ul>
<b>Environmental Health</b> Promote, protect and enhance a healthy & sustainable environment	<ul> <li>4.3. Implement indoor and outdoor air quality improvement initiatives.</li> <li>4.4. Reduce Greenhouse Gas (GHG) emissions by creating a built environment focused on green building and mobile emission reductions.</li> <li>4.5. Demonstrate progress toward achieving net zero energy within the community and the City organization using a systems approach.</li> <li>4.6. Engage citizens in ways to educate and change behavior toward more sustainable living practices.</li> <li>4.9. Meet or exceed all environmental regulations.</li> </ul>
<b>Transportation</b> Provide for safe and reliable multi- modal travel to, from and throughout the city	6.6. Support efforts to achieve climate action goals by reducing mobile emissions and supporting multiple modes of transportation.

## ► KEY ACCOMPLISHMENTS

### City Energy Project

The GBP was the lead on the City's successful application to the City Energy Project (CEP), a program run by the Institute for Market Transformation (IMT) and Natural Resources Defense Council (NRDC). The application team included representatives from Resource Conservation, Key Accounts, Community Engagement, Economic Health, CPIO, and others. CEP strives to help cities rapidly advance energy efficiency in the commercial sector. As a result of the City being accepted into CEP, IMT has provided a full-time staff person for two years to assist the City. The City also receives access to IMT and NRDC hub staff, and support on issues ranging from green leasing, building energy scoring, code compliance, and other issues.

#### HomeWise

In coordination with the Clinton Climate Initiative (CCI) and Vermont Energy Investment Corporation, the GBP along with Efficiency Works and Healthy Homes developed an employee sustainability benefit program. Between New Belgium Brewing, Odell Brewing (two external business partners) and internally at the City, the program has reached more than 100 participants, with over 40 enrollments for Healthy Homes and 28 for Efficiency Works. These numbers will also likely increase since participants delay assessments for various reasons (vacations, recently moved, family issues, etc.). The internal carbon foot print survey of City employees gathered over 350 responses and will provide data useful to the GBP, CAP, Well Days, HR, and others.

### **Building Performance Project**

The GBP worked with Utilities, EHO, Operations Services and the Institute for the Built Environment (IBE) at CSU to conduct pre- and post-occupancy surveys of the building occupants of 222 Laporte, along with a control group at 215 Mason. The survey collected 85 pre-move and 79 post-move responses, representing 66% and 67% response rates, respectively. Results from the final report will be presented to any City staff interested in attending. Staff is also currently working with the Sustainability Services Financial Analyst to quantify the non-energy financial benefits of green building.

#### Climate Economy Work

The Green Building Program Coordinator has been working closely with the Climate Economy Advisor to identify potential financing mechanisms and institutions for various initiatives. These efforts have included attending sustainability financing conferences and events. The results have included at least ten meetings with different financial institutions to find appropriate financial tools for Fort Collins. Staff now believes we will be able reestablish the on-bill financing mechanism using private sector capital.

## ► RELATED PROGRAMS

The Green Building Program coordinates with a variety of other City programs to magnify the effectiveness of City services and incentives. Below is a list of some of the City's most used services, ranging from energy and water to waste recycling and air quality. Note that this list is not all inclusive and also does not address code-required actions.

PROGRAM NAME	DESCRIPTION	SECTOR
Climate Action Plan (CAP)	The City's integrated plan to achieve carbon neutrality by 2050. CAP includes many specific activities and goals in	R, C, MF, I
	areas such as energy, transportation, waste, land use, etc.	
ClimateWise	Business outreach program to reduce their greenhouse	C, I
	gases through waste reduction, energy efficiency, water	
	conservation and transportation reduction.	
Integrated Design	Financial incentives and free technical assistance for	C, MF, I
Assistance Program	buildings that perform higher than energy code. Options for	
	whole building and prescriptive incentives.	
Solar Rebate Program	Incentive program for installing PV systems	R, C, MF, I
Solar Power Purchase Program	Incentivizes the installation of new, local solar systems on commercial customer facilities. Commercial customers may enter agreements with solar developers for installation of the systems, which may include financing, lease-purchase and rooftop property leasing	C, I
Green Energy Purchase Program	Allows Fort Collins residents and businesses to purchase clean, renewable energy for an additional fee on top of their normal utility bill	R, C, MF, I
Efficiency Works for Business	Services including building assessments, tune-ups, financing, rebates, incentives for project which save electric energy and/or peak demand through equipment upgrades	C, MF, I
Efficiency Works Contractor	Environmental series that includes contractor training on a	R, C, MF, I
Education and Training	range of design and technical topics	
Efficiency Works for Homes	Services including home efficiency assessments, financing, and rebates	R
Consumer Product Rebates	Incentives for the purchase of energy and water efficient clothes washers, dishwashers, toilets, refrigerators, and showerheads	R, C, MF, I
Xeriscape Incentive Program	Rebate program for installing a qualifying xeriscape design – includes a streamlined process, free education workshops and online resources	R
Sprinkler Audits	Free sprinkler audit ensure effective use of a sprinkler system, includes system evaluation and watering schedule, and education on leaks and keeping vegetation healthy	R
WRAP (Waste Reduction and	Free on-site waste assessment, rebates for starting a new	С
Recycling Assistance Program)	recycling or composting program, free communication tools, and educational programs for staff	
Healthy Homes	Free program designed to help families within the City limits improve the indoor air quality in their homes	R
Peak Partners	Demand response program for residential thermostats, electric water heaters and commercial customer notification.	R, C, I

R = residential; C = commercial; MF = multifamily; I = institutional