

# SUSTAINABILITY MASTER PLAN

*November 2019*









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# LETTER FROM THE SUSTAINABILITY ADVISORY BOARD



Dear Erie Community:

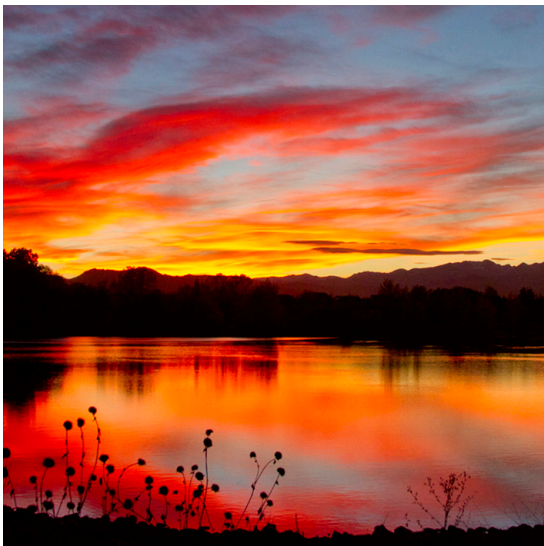
I am pleased to introduce the Sustainability Master Plan for the Town of Erie.

There are many different meanings of "Sustainability", however, like many concepts, the simplest definition might be the most meaningful. Sustainability is the capacity to endure. The Erie community has always been the reason for the endurance of our town, and the most critical contributions to sustainability in Erie have always come from the individuals and organizations throughout our community. Over the last year as we developed this Master Plan, the Sustainability Advisory Board worked hard to meet the community to not only hear ideas and requests, but also observe sustainable practices currently in place. This guidance became our foundation.

The Sustainability Advisory Board, teamed together with Lotus Engineering and Sustainability, and town staff to build on this foundation as we developed a Master Plan with a purpose of providing the town with focal points and direction to in order to implement, grow and optimize environmental, economic, and social sustainability within Erie.

The Sustainability Advisory Board realizes that progress in any of the directions laid out within our plan will require ongoing engagement from our town and decision makers at every level. We look forward to helping the Town meet these commitments and serving as an ongoing resource and advocates for the Sustainability Master Plan as it reflects our determination as well as our confidence in the continued endurance and sustainability of Erie.

J.P. Manza  
*Chairman of the Sustainability Advisory Board*



*Town of Erie Sustainability Advisory Board.  
In order (left to right)  
Back row: James Manza, Adam Jackson,  
Tom Doyle, Jeff Percell.  
Front row: Monali Mujumdar,  
Berenice Garcia Tellez, Anna Clark*



# ACKNOWLEDGMENTS

The development of this *Sustainability Master Plan* would not have been possible without the dedicated participation and support of Town staff, members of the Sustainability Advisory Board, and representatives of various partner organizations. The Town of Erie would like to acknowledge and thank the following people for their participation:

## TOWN OF ERIE SUSTAINABILITY ADVISORY BOARD

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Adam Jackson	James Manza
Anna Clark	Jeff Percell
Berenice Garcia Tellez	Monali Mujumdar
Christiaan Van Woudenberg <i>(Board of Trustees Liaison)</i>	Tom Doyle

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Cody Lillstrom, <i>Boulder County</i>	Perry Edman, <i>Regional Transportation District</i>
Gina Carnahan, <i>Xcel Energy</i>	Phil Brink, <i>Erie Open Space and Trails Advisory Board</i>
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## CONSULTANT TEAM

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## LAYOUT DESIGN

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Adrian Newman, *Creative Professional*



## EXECUTIVE SUMMARY

The Town of Erie is a beautiful community on the plains east of the Rocky Mountains in Colorado, and the community is fast becoming a national leader for providing a high quality of life for residents. The sweeping and majestic mountain vistas, beautiful open and natural spaces, abundant recreational opportunities, and small-town feel are rightful sources of pride for the community.

Erie is one of the fastest growing communities in the Front Range region and is recognized as one of the best places to raise a family. On the sustainability front, momentum is gaining, and in 2018 the Town Board of Trustees committed to creating a Sustainability Advisory Board that was tasked with the development of the Town's first community-driven **Sustainability Master Plan**; this Plan is the next step in the Town and community's work to secure a sustainable future and a high quality of life for everyone that calls Erie home.

### ERIE'S SUSTAINABLE FUTURE

As Erie continues to grow, sustainability has become an integral part of the Town's near- and long-term vision. The community has illustrated their commitment to sustainability through a citizen-led Sustainability Advisory Board, in the election of Board of Trustee leadership that is supportive of sustainability efforts, in feedback provided in recent community-wide surveys, and by their involvement in the development of this five-year **Sustainability Master Plan**. As Erie is a rapidly growing community that is anticipated to increase in population by four percent per year through 2035,<sup>1</sup> there is a critical need to ensure that sustainability is woven throughout the policies, decisions, and developments at support the community's growth.

This five-year plan provides a roadmap and approach through which the community can protect natural resources, support the local economy and culture, and promote a sustainable lifestyle for its residents and visitors. This plan builds off other community master plans (such as the Town's Transportation Master Plan and Water Conservation Master Plan) and is intended to serve as a guiding document, framework, and decision-making tool for future community sustainability planning and programming. The Plan does this by defining the sustainability strategies, actions, implementation timelines, and targets towards which the community will strive.

Erie's **Sustainability Master Plan** focuses on opportunities that directly enhance the Town's overall sustainability by leveraging resources, including those available at a state and county level, and supplementing those resources where necessary to ensure equitable access to sustainability measures across the whole community. One key component of this Plan includes the effort to provide sustainability resources and services equitably across the entire community, which crosses over two counties and two utility service territories, each of which provide varying levels of support and resources for sustainability.

#### ERIE'S SUSTAINABILITY VISION

As the Town of Erie grows and expands, we will become a leader in sustainability by providing outreach and leadership alongside inclusive and accessible opportunities that support the growth of our economy and engage the community while protecting our natural environment.

The Plan is split into four sectors: energy use; transportation; waste, recycling, and composting; and outreach and education. It should be noted that water was not addressed as a stand-alone sector in the **Sustainability Master Plan** due to the fact that the Town has an existing Water Conservation Master Plan. Each sector in the Plan has priorities, specific strategies, and potential action items, as well as targets that will be used to measure and gauge Erie's success over the coming years. Each priority and strategy were selected and vetted by Town staff, Erie's Sustainability Advisory Board, and the general public. The sustainability priorities for the Town of Erie are detailed below for each sector included in the Plan. The full Sustainability Master Plan document provides additional information about specific strategies and actions to implement by sector.

<sup>1</sup> For more information see: [www.erieco.gov/DocumentCenter/View/10412/Erie\\_Energy-Action-Plan\\_-FINAL-4-5-18?bidId=](http://www.erieco.gov/DocumentCenter/View/10412/Erie_Energy-Action-Plan_-FINAL-4-5-18?bidId=)



## ENERGY USE SECTOR

Erie's energy use sector is split into four sub-topics, each with a specific priority that Erie will work to accomplish in the coming years.



### **Codes and Policies Priority**

Use Erie's building codes to incentivize green building, energy efficiency, and the use of renewable energy in new construction.

### **Building Energy Use Priority**

Encourage new development and existing buildings to conserve the use of natural resources and actively utilize available incentives and rebates for green building and renewable energy.

### **Renewable Energy Empowerment and Innovation Priority**

Provide education and incentives to encourage the use of renewable energy and energy storage within the community.

### **Municipal Leadership Priority**

Illustrate the Town's commitment to sustainability by reducing energy and water use in municipal buildings and supplying Town buildings with renewable energy.

## ENERGY SECTOR TARGETS

- Reduce average household electricity use by 3% by 2025 (with a stretch goal of a 5% reduction).
- Increase the number of green buildings that are tracked in the community annually.
- Source 25% of commercial electricity use from renewable resources by 2025.\*
- Reduce average household natural gas use by 3% by 2025 (with a stretch goal of a 5% reduction).
- Source 25% of community-wide electricity use from renewable resources by 2025.\*
- Source 20% of residential electricity use from renewable resources by 2025 (with a stretch goal of 30%)\*.

*\*Above and beyond what is already included in the utilities' fuel mix. All targets will be measured against a 2018 baseline.*



# TRANSPORTATION SECTOR



Erie's transportation sector has two subtopics and four related priorities that Erie will work to accomplish in the coming years.

### **Mode Shift Priorities:**

Provide access to transportation options and solutions that reduce community vehicle miles traveled, reduce congestion, enhance community connectivity, and increase the use of alternative modes of transportation.

Work with regional partners to identify regional solutions to congestion and single-occupancy vehicle use.

Support the development of the local economy to reduce commuting outside of Erie for work, errands, and play.

### **Electric Vehicle Priority:**

Encourage the use of electric vehicles by providing incentives to purchase vehicles and installing publicly available charging stations.

## ERIE'S TRANSPORTATION SECTOR TARGETS

- Determine a baseline and increase transit ridership by 10% by 2025.
- Increase transit serving the community by adding one additional daily bus route by 2025 (with a stretch goal of 2 additional daily bus routes).
- Increase the share of electric vehicles registered in the community by 25% by 2025 (with a stretch goal of 50%).

*All targets will be measured against a 2018 baseline, unless otherwise noted.*



# WASTE, RECYCLING, AND COMPOSTING SECTOR



Erie's waste, recycling, and composting sector is split into three subtopics and Erie has identified four priorities that the Town and community will work to accomplish in the coming years.

### *Recycling and Composting Priorities:*

Provide options to make diverting waste through reuse, recycling, and composting easy, accessible, and a viable option for all residents and business owners.

Be active participants in the Resource Conservation Advisory Board and support regional and state efforts to coordinate on policies and programs and encourage recycling and reuse.

### *Construction and Demolition Waste Priority:*

Ensure that all construction in Erie diverts construction and demolition waste to the greatest degree possible.

### *Town Facilities and Events Priority:*

Reduce waste at Town events and facilities by improving access to recycling and composting and implementing sustainable purchasing policies.

### **ERIE'S WASTE SECTOR TARGET**

- Currently, waste tonnage and diversion rates are not tracked by haulers in Erie. Therefore, Erie will establish a waste baseline and set a target for increased diversion by 2022.





# EDUCATION AND OUTREACH SECTOR



The education and outreach sector addresses how Erie will engage the broader community and its wide set of partners locally and across the region in order to ensure success of the Town's sustainability initiatives. All activities related to community engagement, marketing, and education (including events, workshops, and branding campaigns) fall under this cross-cutting sector, and the Town and community have identified two priorities that they will collaborate on accomplishing over the coming years. This sector supports the energy, transportation, and waste sectors.

### *Erie's Education and Outreach Sector Priorities:*

Use innovative and engaging techniques to educate all community members about the importance of and value of participating in the Town's sustainability efforts.

Build capacity internally by hiring dedicated staff and developing collaborative partnerships with local and regional organizations.



### ERIE'S EDUCATION AND OUTREACH SECTOR TARGET

- Double the number of businesses participating in the Erie Green Business Program by 2025 (compared to a 2020 baseline).
- Host or participate in a minimum of five community events annually to educate the community about sustainability.



# Erie, the *Best Place* To Raise A Family



As a growing community in the Front Range region, Erie recognizes its responsibility to provide the best possible quality of life for residents while ensuring long-term fiscal responsibility and environmental sustainability. The Town's Sustainability Master Plan will help Erie realize its vision of sustainability by providing a roadmap of strategies and actions that will enhance community sustainability and overall quality of life. Erie believes in the power of its entire community to work together to implement the strategies identified in this Plan for the benefit of all community members and looks forward to engaging residents, businesses, and visitors to the community in these efforts, in order to create a healthier and more sustainable future for all.





# ■ INTRODUCTION

In March 2018 the Town of Erie (the Town or Erie) Board of Trustees created the Erie Sustainability Advisory Board (SAB) and tasked the SAB with the creation of a **Sustainability Master Plan** (Plan) that would guide the Town towards the implementation of policies, programs, and projects that enhance sustainability throughout this community (Ordinance 14-2018).<sup>2</sup> To support this work, Erie hired Lotus Engineering and Sustainability, LLC. (Lotus), to conduct research, facilitate stakeholder engagement sessions, and guide the Town and SAB through the process of developing this plan. The result is a detailed and actionable Plan that identifies a vision for a sustainable Town of Erie, provides details on specific strategies the Town will pursue to achieve this vision, and sets measurable targets so that the Town can assess its success over the coming years.

## Erie's Sustainable Future

As Erie continues to grow, sustainability has become an integral part of the Town's vision for the future to ensure the protection of natural resources, support the local economy and culture, and to promote a healthy lifestyle for its residents and visitors.

Erie's SAB was established with the goal of defining what sustainability means for Erie, promoting awareness, and encouraging sustainable activities throughout the community. The duties bestowed upon the SAB by the Erie Town Board of Trustees also included creating the **Sustainability Master Plan** presented here. This Plan is intended to serve as a guiding document and decision-making tool for future community sustainability work by defining the sustainability strategies, implementation timelines, and targets towards which the community will strive. The strategies included in the Plan identify what the Town will do over the coming years, but do not specifically identify how the Town will implement these strategies; however, the Plan provides guiding principles for action that will ensure the Town can "hit the ground running" with strategy implementation. Erie will strive to implement the strategies identified within this Plan over the next five years.

The first step in the planning process for developing Erie's **Sustainability Master Plan** was to identify the vision for a sustainable Erie that the Town and the SAB wished to achieve through the implementation of the plan. In preliminary meetings with the SAB and Town staff, participants were asked to identify the most important aspects of sustainability for their community and to rank these in order of importance. What resulted was a list of community values and attributes Erie wished to enhance and support through the implementation of the Plan. The planning team, including the consultants, used this list of attributes to develop the vision for sustainability in Erie, which is seen in the box below. Identifying this vision allowed the stakeholders and planning team to focus on the specific strategies and actions that will ensure this future state is realized.

### ERIE'S SUSTAINABILITY VISION

As the Town of Erie grows and expands, we will become a leader in sustainability by providing outreach and leadership alongside inclusive and accessible opportunities that support the growth of our economy and engage the community while protecting our natural environment.

## DEVELOPING THE SUSTAINABILITY MASTER PLAN

The **Sustainability Master Plan** integrates research on current activities within the Town, identifies opportunities for sustainability, and includes feedback from a robust stakeholder engagement process.

The consultant team met with Town staff and the SAB to identify the primary goals and priorities for the Plan; consultants also conducted an existing conditions analysis on current and proposed initiatives in the Town related to sustainability. This Plan complements Erie's many existing master plans already in place and will help advance future Town planning processes.

<sup>2</sup> For more information see <https://erieco.gov/1422/Sustainability-Advisory-Board>.

Specifically, this Plan builds off the strategies and priorities identified in the following Town of Erie Plans:

- Erie Water Conservation Master Plan (2014)
- Erie Wastewater Utility Plan Update (2015)
- Erie Comprehensive Plan (2016)
- Erie Parks, Recreation, Open Space, and Trails Master Plan (2016)
- Erie Energy Action Plan (2018)
- Erie Transportation Master Plan (2018)

Because Erie already has a Water Conservation Master Plan<sup>3</sup> that identifies strategies to reduce water consumption and manage water issues, water use and conservation are not directly addressed in the **Sustainability Master Plan** other than in strategies in the outreach and education sector and where water use can also impact energy use in buildings.

Additionally, research on Erie’s peer and neighboring communities and the consultant team’s experience working in the industry informed the development of the initial list of potential strategies for Erie to consider in regard to sustainability. Lotus held numerous informational interviews with Town staff, SAB members, and potential partner agencies, hosted four in-depth meetings with the SAB, and facilitated two workshops with Town staff, the SAB, and potential partners. These activities provided insight into how Erie can build off of existing efforts in this space, opportunities for partnerships, and potential challenges along the path to sustainability. Ultimately, the feedback from these meetings and workshops allowed the consultant team to narrow the list of suggested strategies to those that are most relevant and actionable for Erie.

Input and feedback from the community was vital to the planning process, and the planning team attended two Farmers Markets and hosted a community open house to provide multiple forums and avenues for the community to review and provide feedback on the Plan. Additionally, feedback that the community previously provided through the biannual Town survey<sup>4</sup> and in surveys conducted by the Sustainability Ad Hoc Committee (prior to the creation of the SAB) in past years was also used to understand the community’s goals and aspirations in terms of sustainability. Based on the results from the most recent community survey (completed in 2019), there is broad support for Town-led sustainability initiatives by Erie’s residents, with the greatest interest in recycling and composting programs, followed by an interest in municipal energy and water conservation programs. See Figure 2 for details on the survey results. Additionally, ninety-two percent of survey respondents indicated that “encouraging sustainability for both residential or commercial properties” was a somewhat important, very important, or essential funding priority for the Town, with over one-third of respondents ranking this in their top three funding priorities.<sup>5</sup>

Erie’s **Sustainability Master Plan** focuses on opportunities that directly enhance the Town’s overall sustainability by leveraging available resources, including those available at a state and county level, and supplementing those resources where necessary to ensure equitable access to sustainability measures across the whole community.

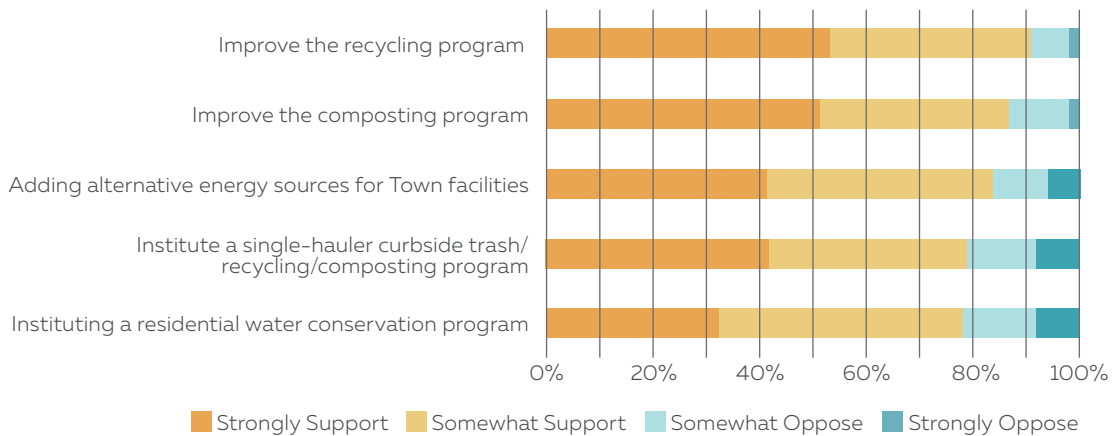


Figure 1: Community support for sustainability initiatives as indicated through results to the 2019 biannual Town Survey.

<sup>3</sup> For more information see <https://www.erieco.gov/1062/Water-Conservation-Master-Plan>.

<sup>4</sup> For more information see <https://erieco.gov/970/Community-Survey>.

<sup>5</sup> For more information see <https://www.erieco.gov/DocumentCenter/View/12222/2019-Community-Survey-Results?bidId=>



# SUSTAINABILITY MASTER PLAN STRUCTURE

The **Sustainability Master Plan** includes strategies within the following sectors: energy use in buildings, transportation, waste and recycling, and outreach and education. These sectors present the areas where sustainable measures have the largest potential to benefit Erie and where Erie has the greatest opportunity to act in the near term. The strategies in the education and outreach sector are cross-cutting across all of the other sectors and will ensure that the community is broadly engaged in and informed of the Town's work in the other sectors. Each strategy has been assigned a priority level that was discussed and agreed to by Town staff and the SAB. The priority level assigned to strategies represents how aggressively the Town will work on a given strategy over the coming five years, and was assigned based on the following criteria: potential to reduce greenhouse gas emissions; alignment with the identified community co-benefits (see below); cost of implementation; cost of on-going maintenance; difficulty of implementation; time required for implementation; and time required for on-going maintenance.

*Based on the results from the most recent community survey (completed in 2019), there is broad support for Town-led sustainability initiatives by Erie's residents, with the greatest interest in recycling and composting programs, followed by interest in municipal energy and water conservation programs.*

While the goal of the plan is to lay the foundations for a sustainable community in the future, the starting block is to create an understanding of current conditions. For each sector in the Plan, a high-level view of the current conditions and trends is provided, along with sector priority goals and specific strategies vetted

against sustainability "co-benefits" for the community. Sustainability "co-benefits" are the specific attributes, values, and characteristics in the community that Erie hopes to enhance through the implementation of the selected sustainability

strategies; see the box to the left for more information. Unless specifically noted, the strategies will be on-going once started.

It is important to note that the education and outreach sector is a cross-cutting one that addresses how Erie will engage the broader community and its local and regional partners to ensure success of the Town's sustainability initiatives. All activities related to community engagement, marketing, developing new and strengthening existing partnerships, and building internal capacity fall under this sector.

Two topics not addressed in the Plan include 1) oil and gas operations in the community; and 2) greenhouse gas emissions created by activities in the community. Based on the changing nature of oil and gas operations and regulations within the State of Colorado, the decision was made that it would be best to omit oil and gas considerations from the Plan to allow Erie and the State to address oil and gas in a targeted and focused manner. Erie's Board of Trustees and Town leadership will continue to address oil and gas operations and their impact on Erie outside of the creation of this Plan.

Evaluating greenhouse gas emissions as a result of activities within a community is one of the primary ways to measure environmental impacts; however, a greenhouse gas emissions inventory has not yet been completed for the Town. Therefore, a greenhouse gas emissions-specific lens could not be used to analyze the potential strategies available to Erie. However, the Plan includes a strategy that the Town develop a greenhouse gas emissions inventory in the coming years to better understand and mitigate the environmental impacts of community-based activities.

## Sustainability Co-Benefits

Sustainability can have broad benefits ('co-benefits', or 'triple-bottom line benefits') to a community outside of environmental impacts alone. Erie's stakeholders identified a number of co-benefits that they were interested in enhancing through the implementation of strategies within this Plan. Potential strategies for the community were vetted against these co-benefits to ensure that the selected strategies would have the greatest overall impact on the community. Erie's sustainability co-benefits are:

- Improved air quality and community health.
- Reduced congestion.
- Increased community resilience.
- Reduced energy use and expenditures.
- Protection of wildlife and biodiversity.
- Reduced consumption of natural resources.
- Reduced greenhouse gas emissions.
- Engaged community organizations.
- Support for a strong local economy.
- Making sustainability inclusive and equitable for the whole community.



# ENERGY USE SECTOR

Energy consumption in buildings (i.e., electricity and natural gas use in buildings) typically represents the largest share of emissions across a community. This sector also often represents an area in which there is ample opportunity to create meaningful beneficial impacts in terms of emission reductions, energy use reductions, and supporting equity across the entire community.

Xcel Energy (Xcel) and United Power provide electricity and natural gas to Erie, with nearly an equal split of the Erie market. In 2017, Erie participated in the Xcel Partners in Energy program, which resulted in the development of an Energy Action Plan. Based on the Energy Action Plan, Erie's vision regarding energy use and energy efficiency is to be "...an engaged community that creates awareness, builds partnerships, and invests in energy strategies that responsibly pursue conservation, renewable energy generation, innovation, equity, and economic prosperity for the benefit of present and future generations."<sup>6</sup>

## CURRENT CONDITIONS

### Electricity and Natural Gas Use and Cost

Residential buildings represent the largest share of Erie's community-wide energy consumption. In 2016, residential buildings comprised 76 percent of community electricity consumption and 90 percent of community natural gas consumption.<sup>7</sup> In 2018, residential energy use represented 73 percent of total community electricity use and 89 percent of community natural gas use (See Figure 2). This data indicates that the community continues to be primarily a 'bedroom community' of residential homes, but it is also evident that the commercial sector in Erie is slowly growing. Moving forward, Erie's population is expected to increase by roughly four percent annually through 2035.<sup>8</sup> Similarly, the number of households is expected to more than double by 2032 (7,436 households in 2018 to 20,000 households by 2032).<sup>9</sup> Although residential buildings in Erie dominate the community's energy use, the anticipated community growth presents the need

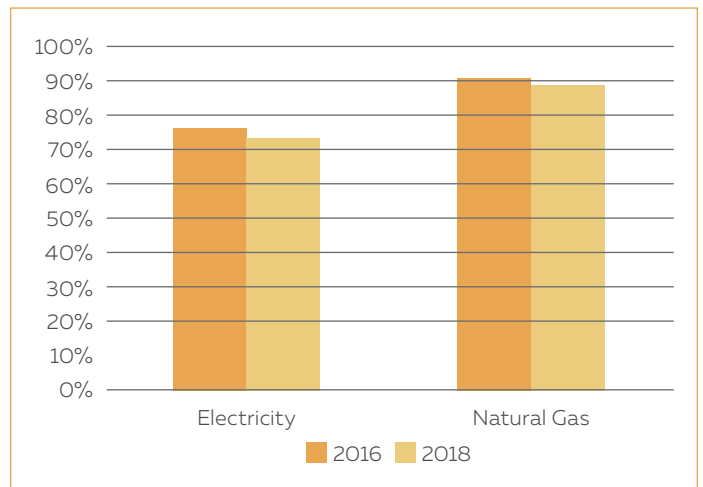


Figure 2: Share of community energy use that is from residential buildings in 2016 and 2018.

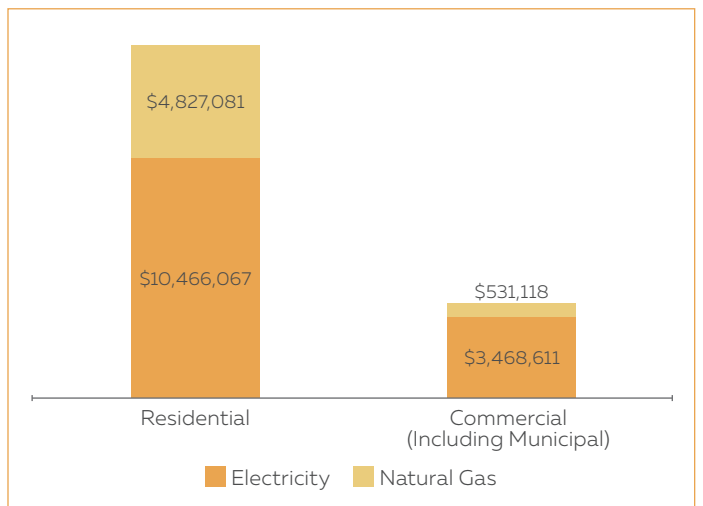


Figure 3: Dollars spent on building energy use in Erie in 2018.

<sup>6</sup> For more information see: [https://www.erieco.gov/DocumentCenter/View/10412/Erie\\_Energy-Action-Plan\\_-FINAL-4-5-18?bidId=](https://www.erieco.gov/DocumentCenter/View/10412/Erie_Energy-Action-Plan_-FINAL-4-5-18?bidId=)  
<sup>7</sup> Ibid

<sup>8</sup> Ibid

<sup>9</sup> For more information, see video: <https://www.erieco.gov/606/Economic-Development>



for strategies and measures aimed toward reducing overall energy consumption, including in the commercial building sector. If unabated through effective policies and programs, it is likely that community energy use will grow in pace with population growth; the strategies below are structured to ensure that overall community population growth does not lead to a same level of growth in community energy use.

In 2018, residents of Erie paid over \$15,000,000 for electricity and natural gas in their homes; total household average expenditures on utility bills were \$2,057. Commercial and industrial customers in the community (including the Town's municipal buildings) spent nearly \$4,000,000 for these services in 2018 (See Figure 3).<sup>10</sup>

### Renewable Energy Use

Xcel provides several renewable energy programs and offerings in which residential and commercial customers in Erie can participate; as only roughly half of the Town are Xcel customers, only those customers can participate in these programs. On-site solar installations are the most common way that customers in Erie access renewable energy, followed closely by purchased Renewable Energy Credits (RECs). All the renewable energy that United Power customers opt to consume in Erie is from on-site solar installations.

Of total community electricity use, almost seven percent is sourced from renewable energy above and beyond that which is included in each utility's fuel mix (i.e., customers opted in for renewable generation either through on-site systems or subscription programs for RECs). Residential customers in Erie opted into renewable programs for just over eight percent of their



Figure 4: Solar panels being installed at the Leon A. Wurl Service Center.

### Erie's Commercial Sector

Erie's commercial sector is comprised of approximately 2,200 businesses. Primary areas of business include professional, scientific, technical services, health care, and retail trade.

Because of the growth that Erie is anticipated to experience over the coming years (four percent annual growth in population through 2035), there is opportunity to ensure that new buildings are designed to be more energy efficient, take advantage of renewable energy resources, and improve occupant health.

By implementing sustainability measures, the community's energy use profile will not increase in pace with overall community growth.

electricity use, while commercial customers opted to source nearly four percent of their electricity use from renewable programs.

Though community solar programs are available to Erie customers of Xcel Energy, very few customers in Erie subscribe to community solar systems; no commercial customers in Erie utilize community solar programs, and very few residential customers do. Total subscriptions to community solar in 2018 equaled less than one-tenth of one percent of total community energy use.

## ENERGY USE SECTOR PRIORITIES AND STRATEGIES

Based on conversations with Town staff, SAB members, and community partners, including representatives of the local utilities, as well as additional research on peer communities, four sub-topics within the energy use sector were identified including:

1. Codes and Policies.
2. Building Energy Use.
3. Energy Empowerment and Innovation.
4. Municipal Leadership.

Each sub-topic, and its associated priority goal and strategies, are provided below. The strategies provided complement existing efforts already undertaken by the Town. All the strategies for each energy sub-topic were selected with careful consideration to ensure the

<sup>10</sup> Based on data provided by Xcel Energy and United Power.

chosen strategies are realistic, economically viable, and will have a beneficial return in terms of a sustainable path forward for Erie.

### Codes and Policies Strategies

As Erie is a rapidly growing community with an impressive amount of new construction occurring at any given time, one of the most impactful ways that Erie can mitigate future energy use is through the thoughtful application of building and energy codes that ensure that new construction is built to high-efficiency standards and encourages efficiency during major renovations of existing buildings. It is estimated that between 2010 and 2040 a nationwide savings of \$126 billion can be saved via energy codes for residential and commercial buildings.<sup>11</sup>

Erie will use building codes to incentivize green building, energy efficiency, and the use of renewable energy in new construction. Specific strategies and their priority level for the Town are provided in Table 1 below.

### Erie's Codes and Policies Priority

Use Erie's building codes to incentivize green building, energy efficiency, and the use of renewable energy in new construction.



STRATEGIES	Priority Level
E1. Adopt the most recent International Energy Conservation Code (IECC) every three years, starting with the 2015 IECC in 2020.	High
E2. Ensure ongoing education for planners, plan reviewers, building inspectors, developers, and builders on updates to building and energy codes, available design and green building resources, and enforcement mechanisms and incentives.	High
E3. Incentivize and educate on renewable energy (e.g., solar-ready homes) for new construction.	High
E4. Adopt an 'above' building code with incentives for increasing energy efficiency above and beyond standard code requirements.	Medium
E5. Explore incentivizing building energy benchmarking and reporting on green building certification for all commercial properties and residential properties over a certain size threshold.	Low
E6. Explore requiring or incentivizing reporting on energy efficiency in owner-occupied housing to meet a certain threshold at the time-of-sale.	Low
E7. Educate on and incentivize dark sky compliant and/or LED outdoor light fixtures.	Low

Table 1. Codes and Policies Strategies.

<sup>11</sup> For more information, see: [www.energycodes.gov/program-impact-analysis](http://www.energycodes.gov/program-impact-analysis)



## Guiding Principles for Implementing Codes and Policies Strategies

Successful implementation will rely upon Erie building off current work happening in the community, collaborating with potential partnering agencies and organizations, and working to educate staff and the broader community. The details provided on each strategy below include guiding principles for implementation that will ensure the Town's efforts are met with success.

> **STRATEGY E1. Adopt the most recent International Energy Conservation Code (IECC) every three years, starting with the 2015 IECC in 2020.**

The Town is already in the process of adopting the 2015 IECC, and this is expected to be finalized in 2020. This will move the Town up from the 2006 codes. IECC codes are released every three years, and research shows that buildings built to 2012 codes use approximately 19 to 24 percent less energy than buildings that comply with the 2006 codes.<sup>12</sup> Energy savings from the 2012 to 2015 codes are near 11% for commercial buildings; residential savings are generally slightly smaller.<sup>13</sup> By adopting the most recent building codes, Erie can ensure that all new construction in the community is built to the strongest current code related to energy efficiency, therefore ensuring that community energy use does not rise in pace with overall community growth.

> **STRATEGY E2. Ensure ongoing education for planners, plan reviewers, building inspectors, developers, and builders on updates to building and energy codes, available design and green building resources, and enforcement mechanisms and incentives.**

In order for the other compliance and incentive-based strategies in this sector to be effective they must be well-communicated and understood by Town staff, developers and builders working in the community, and the general public. Erie can identify and secure funding to educate staff and provide technical assistance to developers. By partnering with other organizations to provide outreach, education, and training on green building, codes, and incentives, Erie can ensure these policies are adhered to and incentives are utilized. Training Town staff involved in

### COMMUNITY VOICES

*When the community was asked what they believe should be prioritized, one respondent said: "Incentivizing solar roofs"*

the development review process will ensure that any variance requests from developers are balanced with energy efficiency benefits to the community.

> **STRATEGY E3. Incentivize and educate on renewable energy (e.g., solar-ready homes) for new construction.**

To ensure that all new homes already include or have the appropriate infrastructure to support renewable energy, Erie may revise current building codes and the development review process to be more 'solar-friendly'; elements of these types of code updates include streamlining solar permitting processes, addressing setback requirements in coordination with fire districts, collaborating with neighboring jurisdictions on consistent approaches, incentivizing solar ready-homes, and reducing the soft costs for solar system installs. This will help ensure that businesses, residents, and contractors have convenient, low-cost, and accessible solar options. Erie may also apply to receive state or national recognition for being a solar-friendly community.

### COMMUNITY VOICES

*When the community was asked what they believe should be prioritized, one respondent said: "Incentivize (or just require) highly energy and water efficient homes (i.e., through HERS, HES, Water Sense)."*

<sup>12</sup> For more information see <https://www.energycodes.gov/sites/default/files/documents/PNNL-22760.pdf>.

<sup>13</sup> For more information see [https://www.energycodes.gov/sites/default/files/documents/2015\\_IECC\\_Commercial\\_Analysis.pdf](https://www.energycodes.gov/sites/default/files/documents/2015_IECC_Commercial_Analysis.pdf).

> **STRATEGY E4.** *Adopt an 'above' building code with incentives for increasing energy efficiency above and beyond standard code requirements.*

Layering the existing compliance-based building code with incentives that encourage even greater levels of energy efficiency will further ensure that the community's energy use does not increase in pace with population growth. Erie may consider the following guidelines when implementing this strategy:

- Consider utilizing national programs such as the Energy Rating Index (ERI), ENERGY STAR, and the Department of Energy's (DOE) Zero Energy Ready Homes program to identify and recognize buildings that are designed and built using green building standards.
- Prioritize offsetting developer's variance requests with benefits to the community regarding energy efficiency, green building, and/or renewable energy (i.e., if a developer requests a variance for setbacks or other similar requirements in the design and permitting process, encourage the use of efficiency or green building design to offset these requests).
- Develop incentive-based codes for new construction that tie elements such as net-zero energy construction to incentives such as expedited permitting.
- Implement residential energy efficiency requirements for rental housing to ensure all community members benefit from energy efficiency (the City of Boulder SmartRegs program provides a good example).



### **Erie's Energy Sector Targets**

**Increase the number of green buildings**  
that are tracked in the community annually.

- Consider incentivizing or requiring electric heat in new buildings and during major renovations to existing buildings so that this energy load can be made carbon-free through the application of renewable energy (this is also known as 'building electrification').
- Consider opportunities to develop one or more new all-electric neighborhoods utilizing solar or district heating systems in Erie. These neighborhoods would have a lower environmental impact due to using solar or geo-thermal technology to power and heat homes, and would reduce costs for developers and the Town due to the lack of natural gas infrastructure needed in the community.

> **STRATEGY E5.** *Explore incentivizing building energy benchmarking and reporting on green building certification for all commercial properties and residential properties over a certain size threshold.*

Celebrating successes in the community and helping community members understand how energy is being used across Erie, and which businesses prioritize sustainability by following green building guidelines, can be an important way to raise awareness about efficiency efforts and make energy efficiency a social norm in Erie. Erie can engage businesses and building owners through the Erie Green Business program and utilize this tool to create value around saving energy, investing in green technology, and communicating those values to constituents. Erie can encourage and incentivize building energy benchmarking, where building owners analyze and report on annual energy use in buildings, and track the designation and certification of green buildings in order to ensure all community members understand how energy is used in the community and which building owners are being good stewards of the environment.

## **Help Erie Go Green!**

If you own a home in Erie, consider getting a home energy assessment that may include an analysis and score for your home's energy efficiency attributes. Follow the recommendations in the audit to increase your home's efficiency.

Xcel customers can learn more about obtaining a home energy audit on Xcel's website. United Power customers can find more information on rebates and support at United Power's website.

If you are in the market for a house, consider asking sellers about the energy efficiency attributes of the homes you are looking at. Make it clear that energy efficiency is important to you!





> **STRATEGY E6. Explore requiring or incentivizing reporting on energy efficiency in owner-occupied housing to meet a certain threshold at the time-of-sale.**

In a booming housing market like Erie’s, there is ample opportunity to enhance awareness around efficiency and ensure that home energy use is a part of the conversation around home sales. Some communities across the country require or encourage disclosure of a home’s energy efficiency information at the time of sale, either through a normalizing tool like the DOE’s Home Energy Score or through a localized measuring tool like a home energy yardstick. By making efficiency part of the information provided to potential home buyers during the transaction process there is an opportunity to increase homeowners’ awareness around the long-term costs of energy associated with homeownership and the market value of an efficient home; this may aid in pushing the market towards greater energy efficiency across all homes. Erie may look to develop a pilot program in the coming years to explore the impact of this strategy.

> **STRATEGY E7. Educate on and incentivize dark sky compliant and/or LED outdoor light fixtures.**

Community surveys indicate that Erie residents value the dark night sky and wish to ensure that the asset remains a part of the community even as Erie grows. The Town is already actively switching most Town-owned outdoor fixtures to light-emitting diodes (LEDs), and Erie may consider incentivizing dark-sky compliant and LED outdoor light fixtures. The Town can educate residents and business owners about this effort through a ‘Lights out for Erie’ dark sky campaign.

## Building Energy Use Strategies

Residential and commercial building energy use comprised roughly 40 percent of total nationwide energy consumption in 2018.<sup>14</sup> In Erie in 2018, expenditures on electricity and natural gas in residential and commercial buildings amounted to nearly \$20 million. For residents and business owners on the Boulder County side of County Line Road, Erie currently promotes the use of EnergySmart and Partners for a Cleaner Environment (PACE) to increase energy efficiency in homes and businesses, respectively. As similar programs are not currently available to residents and business owners on the Weld County side of the dividing line, Erie’s goals for building energy use include encouraging new development and existing buildings

to conserve the use of natural resources in a way that is equitable for the whole community, regardless of geography, income, or any other factor. The Town will seek out and promote available incentives and rebates for green building and renewable energy initiatives for the whole community. Specific strategies and their priority level are provided in Table 2 below.

### Erie’s Building Energy Use Priority

Encourage new development and existing buildings to conserve the use of natural resources and actively utilize available incentives and rebates for green building and renewable energy.

STRATEGIES	Priority Level
E8. Promote existing energy efficiency programs for commercial and residential users.	High
E9. Encourage building owners to utilize water-conserving landscaping practices and implement other measures that will reduce water use and align with the goals of Erie’s Water Conservation Master Plan.	High
E10. Promote existing weatherization services and solar incentives to qualifying low- and moderate-income residents by working with partners, and work to fill gaps in resources.	High
E11. Educate on and incentivize commercial building retro-commissioning.	Medium

Table 2. Building Energy Use Strategies.



### Erie’s Energy Sector Targets

- Reduce average household electricity use by **3% by 2025** (with a stretch goal of a 5% reduction).
- Reduce average household natural gas use by **3% by 2025** (with a stretch goal of a 5% reduction).

<sup>14</sup> For more information see [www.eia.gov/tools/faqs/faq.php?id=86&t=1](http://www.eia.gov/tools/faqs/faq.php?id=86&t=1)

## Guiding Principles for Implementation of Building Energy Use Strategies

Each of the building energy use strategies is designed to result in an overall reduction of energy use by buildings in the community. Success will depend upon working with a variety of partner organizations and enhancing the benefits available through existing programs and policies. Details on how these strategies may be implemented are provided below.

### > **STRATEGY E8. Promote existing energy efficiency programs for commercial and residential users.**

There are a multitude of existing energy efficiency programs available to support residents and business owners in reducing their energy use. Erie may partner with Boulder County, Xcel, and United Power to increase awareness of existing programs. If funding is located, Erie may consider providing support to Weld County residents and business owners that is similar to the support available through Boulder County's PACE and EnergySmart programs. Additionally, Erie may consider working with Weld County to ensure that similar incentives and services are provided to residents living on the Weld County side of the Town. Erie can also provide incentives and education on building energy audits available through local utilities and provide residential rebates for some common energy efficient upgrades. Finally, hosting engaging and fun informational sessions and providing giveaways like LED lightbulbs can help encourage people to look at their own energy use and how to reduce it.

### > **STRATEGY E9. Encourage building owners to utilize water-conserving landscaping practices and implement other measures that will reduce water use and align with the goals of Erie's Water Conservation Master Plan.**

Water conservation efforts directly align with energy savings in many ways, and reducing the amount of water used in turn reduces the amount of energy needed to heat and pump water and reduces overall energy demand.<sup>15</sup> Erie's Water Conservation Master Plan, currently being implemented, identifies many opportunities to address water conservation and reduce indoor and outdoor water use in the community.

<sup>15</sup> For more information see: [www.energystar.gov/products/saving\\_water\\_helps\\_protect\\_our\\_nations\\_water\\_supplies](http://www.energystar.gov/products/saving_water_helps_protect_our_nations_water_supplies)

<sup>16</sup> For more information see: <http://cx.lbl.gov/documents/2009-assessment/lbnl-cx-cost-benefit.pdf>

Within its own operations, Erie is working to reduce water use and specifically reduce the use of potable water; in 2016 Erie began a 10-year plan to replace all water meters with Smart Meters that allow users to monitor water use and identify problem areas. Erie prioritizes the use of irrigation systems in open spaces and common areas that reduce potable water use.

Erie can work to educate builders on water conservation opportunities and work with Home-Owner Associations (HOAs) to ensure that homeowners have the option to install water-conserving landscaping. The Erie Board of Trustees recently passed a resolution that encourages the use of native plants and water-conserving landscaping (e.g., xeriscape) on Town properties and throughout the community, and there is clear interest in ensuring that both water and energy use are conserved through these efforts.

### > **STRATEGY E10. Promote existing weatherization services and solar incentives to qualifying low- and moderate-income residents by working with partners, and work to fill gaps in resources.**

Currently there are multiple programs in Colorado that provide weatherization services for moderate- and low-income households. Erie will focus on ensuring that these programs are accessible to residents that live in mobile home parks and that these free services are communicated clearly to residents. In the near term, Erie may promote existing programs through Energy Outreach Colorado, Energy Smart Colorado, and other partners, such as the Colorado Affordable Residential Energy program (CARE) and look to fill in gaps in services in future years. Supporting such a program may be a natural fit for the SAB.

### > **STRATEGY E11. Educate on and incentivize commercial building retro-commissioning.**

Retro-commissioning (i.e., the process of evaluating and, as needed, upgrading, repairing, or replacing mechanical systems in buildings) can provide significant energy savings for building owners. Studies show that retro-commissioning projects can range in cost from \$0.13 to \$2.00 per building square foot with payback periods of 0.2 to 2.1 years; overall annual energy savings from these projects hover around 16 percent for existing buildings.<sup>16</sup> Erie may communicate the opportunity to realize these savings to commercial property owners in the community and provide incentives or other encouragement (such as recognition through the Erie Green Business Program) to ensure that commercial building owners consider this money- and energy-saving option.

# RENEWABLE ENERGY EMPOWERMENT AND INNOVATION STRATEGIES

Many opportunities exist to increase the amount of renewable energy used in the Erie community, identify creative financing mechanisms for funding energy efficiency and renewable energy projects, and make use of innovative technology to advance Erie’s sustainability goals. The goal of this sub-topic is to provide education and incentives to encourage the use of renewable energy and energy storage within the community, to capitalize on the opportunities to enhance renewable energy use in the community, and to locate funding sources to support strategies identified in other sub-topics. Specific strategies and their priority level are provided in Table 3 below.

STRATEGIES	Priority Level
E12. Identify creative and innovative opportunities to fund energy efficiency and renewable energy projects and programs in commercial and residential sectors and consider other innovative technologies, as they become available, for reducing energy use and increasing the amount of renewable energy powering the community.	High
E13. Develop ongoing Town-supported renewable energy projects that benefit the whole community (e.g., community solar, etc.).	High
E14. Identify equitable programs to market and incentivize solar through cost savings and communication campaigns (e.g., bulk purchase programs, etc.).	High

Table 3. Renewable Energy Empowerment and Innovation Strategies

## Erie’s Energy Empowerment and Innovation Priority

Provide education and incentives to encourage the use of renewable energy and energy storage within the community.

## Guiding Principles for Implementation of Renewable Energy Empowerment and Innovation Strategies

Transitioning to a greater share of renewable energy use in the community, exploring and developing innovative solutions, including energy storage, and identifying and leveraging funding opportunities available through utility partnerships and creative financing will ensure that Erie can successfully make significant progress towards sustainability in the near term. Details on the guiding principles for implementing these strategies are provided below.

> **STRATEGY E12.** *Identify creative and innovative opportunities to fund energy efficiency and renewable energy projects and programs in commercial and residential sectors and consider other innovative technologies, as they become available, for reducing energy use and increasing the amount of renewable energy powering the community.*

There is significant interest on the part of Town staff and SAB members to support further development and procurement of renewable energy in the community, and this work may require one (or more) innovative funding sources to ensure success. Erie will work to identify opportunities to fund energy efficiency and renewable energy projects and programs; this may include developing an energy impact offset



## Erie’s Energy Sector Targets

- Source 25% of community-wide electricity use from renewable resources by 2025.\*
  - Source 20% of residential electricity use from renewable resources by 2025 (with a stretch goal of 30%).\*
  - Source 25% of commercial electricity use from renewable resources by 2025.\*
- \*Above and beyond what is already included in the utilities’ fuel mix.

16 For more information see: <http://cx.lbl.gov/documents/2009-assessment/lbnl-cx-cost-benefit.pdf>



fund or utilizing increased revenues from utility franchise agreements to support sustainability work. Additionally, grant funding for projects and programs in Erie may be available through the Boulder County Carbon Tax program, for which Erie is eligible to apply.

Erie may also identify opportunities to take advantage of recent enhancements in technology by partnering with a local utility to develop a Town-supported energy storage project that utilizes battery storage to shave peak at Town facilities; this would also help to reduce demand-related energy costs for the Town. Erie could consider the applicability of public-private partnerships and other investment vehicles (such as increasing outreach and awareness regarding the Colorado Commercial Property Assessed Clean Energy program [C-PACE]) to support investments in renewable energy and innovative technologies. Projects could include a district-scale renewable energy project, such as combined heat and power or geothermal heating and cooling, in greenfield developments in the community. Pursuing these projects could also allow Erie to provide commercial businesses in Erie the opportunity to take advantage of these clean energy and storage solutions and reduce their own costs of doing business in the long term. There may be an opportunity for renewable energy and innovative energy storage projects at the municipal airport, which is part of the Urban Renewal Authority, and at the landfill.

> **STRATEGY E13.** *Develop ongoing Town-supported renewable energy projects that benefit the whole community (e.g., community solar, etc.).*

Community solar is a unique way to procure renewable energy in which any individual homeowner, renter, or business can purchase electricity produced in a large solar array that serves many customers at once. Erie is interested in exploring opportunities to develop a community solar garden in partnership with the local utilities; capacity at this garden would be equitably available to all Erie residents and, ideally, provide cost savings on residential electricity in combination with providing the solar power. Erie may look into the opportunity to use various financial vehicles to utilize innovative technologies and implementation efforts, such as a floating solar array (i.e., a solar installation on a water source such as at the Town's water-treatment plant), partnering with HOAs for an HOA-owned array, or installing solar on covered parking lots.

> **STRATEGY E14.** *Identify equitable programs to market and incentivize solar through cost savings and communication campaigns (e.g., bulk purchase programs, etc.).*

By providing all residents and business owners with the information and education on available solar programs and supporting programs that will reduce solar costs for customers who choose to install on-site, Erie may be able to increase the amount of renewable energy that residents and businesses choose to consume by a significant amount. Bulk purchase programs, which can be administered by the Town or local partners, and educational campaigns on solar can be very impactful in providing the incentives and information needed for residents and businesses to choose to go solar. Many of Erie's neighbors are developing or have implemented bulk purchase programs, some in collaboration with the non-profit organizations Solar United Neighbors, which helps to organize and market the programs. Erie will ensure that these programs and information campaigns are equitably available to all members of the community, and, by combining this work with Strategy E13, Erie can ensure that access to renewable energy is available to all Erie residents and businesses.

#### COMMUNITY VOICES

*When the community was asked what they would like prioritized, one respondent said: "A municipally-support solar farm on Town-owned open space with agriculture under the panels."*

## ♻️ Help Erie Go Green!

Regardless of whether you own your home or rent in Erie, you always have the option of powering your home or business with renewable energy. Xcel Energy provides customers the option to subscribe to a community solar system or purchase RECs to offset your energy use. United Power also has community solar gardens, although currently they are at capacity, and have wait lists available. United Power customers can also purchase blocks of renewable energy (in the form of RECs) through the utility's Green Power Partners program.

## MUNICIPAL LEADERSHIP STRATEGIES

Erie strives to be sustainable within Town operations, and the Town has already made many strides towards sustainability.

Many of Erie’s Town-owned buildings and facilities are only powered with electricity; the environmental impact of this electricity can be offset with renewable resources, such as on-site or utility-scale solar. Currently, the Town uses automatic lighting controls and occupancy sensors in facilities and is upgrading all lighting in Town facilities (including streetlights in selected areas) to LED versus traditional lighting. The Town also has installed a solar array at the Leon A. Wurl Service Center and uses a solar thermal system to pre-heat water and reduce natural gas use at the Community Center. Further, multiple upgrades at Erie’s Lynn R. Morgan Water Treatment Facility (including variable frequency drive installations and process control changes in pump operation programming) have resulted in the 2013–2018 annual costs to operate the facility being lower than the 2010 costs, even with significant increases in production to account for population increase. These upgrades have resulted in a reduction of the cost to produce a thousand gallons of clean water from \$0.25 per thousand gallons in 2011 to \$0.17 per thousand gallons in 2018. The cumulative savings from reduced costs due to plant upgrades over 2010 costs result in total saving to the Town of over \$360,000; this does not factor in inflation, the consideration of which would result in even greater savings.<sup>17</sup> Erie is already pursuing upgrades at the wastewater treatment plant that are likely to result in similar energy and cost savings.

Through increased municipal leadership, Erie can further demonstrate a commitment to sustainability by reducing energy and water use in municipal buildings and supplying Town buildings with renewable energy. Specific strategies regarding municipal leadership in this space and their priority level are provided in Table 4.

### Erie’s Municipal Leadership Priority

Illustrate the Town’s commitment to sustainability by reducing energy and water use in municipal buildings and supplying Town buildings with renewable energy.

STRATEGIES	Priority Level
E15. Supply municipal buildings with 100% renewable electricity (both through on-site installations and procurement decisions).	High
E16. Perform energy assessments on all existing municipal buildings and, when feasible, implement assessment recommendations for energy efficiency soon after.	High
E17. Implement benchmarking for municipal buildings.	Medium
E18. Require that all new government buildings and major renovations be ENERGY STAR certified.	Medium

Table 4. Municipal Leadership Strategies.

### Guiding Principles for Implementation of Municipal Leadership Strategies

In order to engage the whole community and inspire residents and businesses in Erie to support the Town’s sustainability goals and efforts, it remains important for the Town itself to lead by example. Details on the guiding principles for implementing these strategies to support municipal leadership in this space are provided below.

> **STRATEGY E15. Supply municipal buildings with 100% renewable electricity (both through on-site installations and procurement decisions).**

As Erie’s Town-owned facilities are powered predominantly with electricity, the Town can make a significant environmental impact quickly by powering all town-owned facilities with renewable energy. As the Town showing leadership in this space can motivate change across the community, Erie may want to focus on visible on-site solar projects that illustrate

<sup>17</sup> Data provided by Town of Erie’s Public Works Department.



community leadership, such as a solar installation at the Community Center. Erie's Town-owned facilities also include historic structures such as the Town Hall; in this case, purchasing renewable energy through a REC program such as Xcel's Renewable Connects program may be the most feasible way to source renewable energy for that location. Additionally, Town-owned infrastructure other than buildings can also be addressed in this strategy, such as through continuing to upgrade streetlights with smart-control LEDs and installing solar-powered flashing pedestrian crossing signals in recreational areas and downtown. Erie may be able to receive logistical and financial support for this strategy from Boulder County.

> **STRATEGY E16. Perform energy assessments on all existing municipal buildings and, when feasible, implement assessment recommendations for energy efficiency soon after.**

Erie has made strides over the past several years to ensure that Town-owned facilities are reducing energy use where feasible, and this strategy addresses the need to assess and update the energy efficiency of Town facilities in a more structured manner. Erie will complete energy audits on all municipal buildings and also will implement efforts to track building energy intensity and perform retro-commissioning and upgrades to mechanical equipment, lighting, and plug loads in order to reduce overall energy use. Erie may consider utilizing creative financing mechanisms, such as Energy Performance Contracting, in order to ensure this strategy is successful and Town-owned facilities are made as efficient as possible.

> **STRATEGY E17. Implement benchmarking for municipal buildings.**

In order to track progress on efficiency gains and ensure that Erie's Town-owned facilities reduce energy use and costs, Erie will begin benchmarking municipal buildings in the coming five years. Erie will focus on electricity use first, as that is the prominent energy source for most of the Town's facilities based on data from the utilities serving the Town. Benchmarking will allow Erie to understand how the Town's facilities are performing next to each other, as well as next to regional and national building energy benchmarking data.

*For over a decade, the Town has embarked on renewable energy initiatives to help reduce the energy impact from community buildings.*

*The Erie Community Center has a 70-panel thermal solar system, which preheats water before reaching the gas-fired water heaters thereby reducing the amount of natural gas used. The solar system was installed in 2008 and produces approximately 928 million British thermal units of energy.*

*In December 2010, the Town activated a 95.2-kilowatt photovoltaic solar array atop the Leon A. Wurl Service Center. The array produces approximately 127,000 kilowatt hours of electricity annually (between 20 and 30 percent of the electricity needs for the center).*

> **STRATEGY E18. Require all new government buildings and major renovations be ENERGY STAR certified.**

As Erie continues to grow, it is likely that at some point new Town-owned facilities may need to be built or existing facilities may need to be renovated. The Town will continue to illustrate leadership by ensuring that all new buildings and major renovations abide by green building standards and can be certified as an ENERGY STAR compliant building. ENERGY STAR building certification was selected over other green building certification options (e.g., LEED) because it is more cost effective to obtain and allows for more customization in certifying an existing building. As Erie's Town Hall is a designated historic site, some exceptions may be made to this policy where needed in order to honor the historic character of the building.





# TRANSPORTATION SECTOR

The transportation sector typically comprises approximately one-third to one-half of a community’s total greenhouse gas emissions. According to the Environmental Protection Agency (EPA), passenger cars and light-duty trucks, including sport utility vehicles, pickup trucks, and minivans, are the largest source of transportation emissions and account for over half of the emissions from the transportation sector.<sup>18</sup>

## CURRENT CONDITIONS

Erie is unique in that it is largely a “bedroom community” where most people commute to a nearby city for work. Erie is home to roughly 25,000 people and passenger vehicles are the most prevalent mode of transportation (85 percent).<sup>19</sup> Figure 5 depicts the percentage of each mode of travel Erie’s residents use for commuting to work; the vast majority of individuals drive to work in single occupancy vehicles. Erie’s residents on average travel approximately 27.5 minutes each way to work and drive approximately 26,000 miles per household, per year.<sup>20</sup>

Erie is a community that prides itself on having access to many community amenities, including open space and recreational amenities; as such, the community is home to an impressive number of trails and related bicycle infrastructure for a community of its size. Erie boasts over 40 miles of multi-use trails, including five miles of on-street bike facilities and six miles of other types of trails (i.e., neighborhood connector

paths and cul-de-sac links). One of the main trail networks in Erie, the Spine Trail connects the Town to multiple communities to the south and west, including Lafayette, Louisville, and Broomfield.

The community currently has limited options for public transportation service, with the Regional Transportation District’s (RTD) JUMP and L/LX/LSX lines serving the Erie Community Center during limited peak weekday hours. Outside of these limited times, the closest public transit access with regular stops is in the neighboring communities of Lafayette and Niwot (roughly six to seven miles away).

Based on available data from Boulder County, roughly 1.1% of vehicles (or 40 total vehicles) registered to Erie residents in Boulder County are electric vehicles. No data was available from Weld County on the share of vehicles registered to Erie residents that are electric.

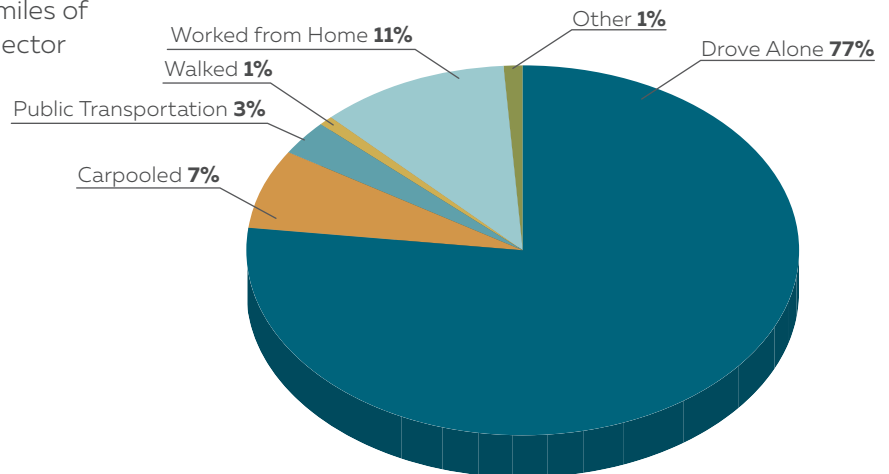


Figure 5: Means of travel to work for Erie residents.

<sup>18</sup> For more information see: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

<sup>19</sup> For more information see pages 1 and 4: <https://www.erieco.gov/DocumentCenter/View/293/Transportation-Master-Plan-2018?bidId=>

<sup>20</sup> For more information see <https://www.erieco.gov/DocumentCenter/View/293/Transportation-Master-Plan-2018?bidId=>.

## TRANSPORTATION SECTOR PRIORITIES AND STRATEGIES

Erie’s recently completed Transportation Master Plan identifies multiple projects to enhance bicycle infrastructure and other relevant roadway improvement projects. As such, the transportation strategies in the **Sustainability Master Plan** focus more on enhancing multi-modal connectivity, supporting an economic shift that will ensure that more trips can occur to destinations in the community (i.e., ensuing more residents of the community can also work in the community), and enhancing infrastructure and support for electric vehicles in the community. The two subtopics within the transportation sector include Transportation Mode Shift and Electric Vehicles, which are detailed in the sections below.

### Transportation Mode Shift Strategies

The most common form of transportation used in Erie belongs to passenger vehicles at 85 percent, and opportunities exist for mode shifts to increase multi-modal options and encourage fewer trips to occur in single occupancy vehicles. Erie’s priorities for a transportation mode shift are to provide safe and equitable access to multi-modal options, work with regional partners to implement transportation strategies, and support the development of the local economy to reduce overall community vehicle miles traveled. Specific strategies related to encouraging a mode shift and their priority level are provided in Table 5.

### Erie’s Transportation Mode Shift Priorities:

1. Provide access to transportation options and solutions that reduce transportation vehicle miles traveled, reduce congestion, enhance community connectivity, and increase the use of alternative modes of transportation.
2. Work with regional partners to identify regional solutions to congestion and single-occupancy vehicle use.
3. Support the development of the local economy to reduce commuting outside of Erie for work, errands, and play.

STRATEGIES	Priority Level
T1. Collaborate with regional agencies to develop approaches to provide safe and sustainable transportation management services and transit access within the community, in alignment with Erie’s Transportation Master Plan.	High
T2. Ensure that all community members have safe and well-maintained access to sidewalks, bike lanes, and walking paths within current and new development.	Medium
T3. Require multi-modal connectivity and transit-oriented development principles at all new commercial developments to address first and last mile connections.	Medium
T4. Develop multi-lingual wayfinding and signage on trails, roads, and paths to support greater use of alternative forms of transportation.	Medium
T5. Focus on sustainable economic development opportunities and assets that increase the number of employers and jobs in Erie.	Medium
T6. Develop a community-wide anti-idling campaign.	Low

Table 5. Transportation Mode Shift Strategies.



## Guiding Principles for Implementation of Transportation Mode Shift Strategies

The strategies identified that support a mode shift in Erie will be focused on enhancing multi-modal infrastructure and support systems and ensuring that Erie's residents can live, work, and play all within their own community. Details on the guiding principles for implementing these strategies are provided below.

> **Strategy T1. Collaborate with regional agencies to develop approaches to provide safe and sustainable transportation management services and transit access within the community, in alignment with Erie's Transportation Master Plan.**

To enhance transit access and sustainable transportation options in Erie, the Town will need to work closely with partners such as RTD, Boulder County, Smart Commute Metro North, and the North Area Transit Alliance, among others. Regional transportation planning, especially for transit, is a long-term process and it remains important for Erie to be a part of these conversations early on to ensure that transit decisions have positive benefits for the whole community.

Currently, Erie has limited transit service available in the community, and resident's use of these services is also limited. By developing a communications and marketing campaign that highlights transit opportunities and access in Erie, the Town may be able to increase ridership and, therefore, have more leverage to work with partners on increasing routes and access. The Town may consider organizing workplace transportation programs that encourage Town employees to take advantage of carpooling and vanpooling options and may communicate these options (which are supported by some of the aforementioned partners) to the general public. Erie will focus on education and outreach and partnership

## ♻️ Help Erie Go Green!

Interested in carpooling or vanpooling to work? The WayToGo program provides support in finding people to share your commute with. Go to <https://waytogo.org/getting-around/vanpool> and sign up to learn more and get connected with your new carpool buddies.

building in the first two years of implementation and focus on increasing transit ridership and access in subsequent years.

> **Strategy T2. Ensure that all community members have safe and well-maintained access to sidewalks, bike lanes, and walking paths within current and new development.**

Erie will continue to work to provide an interconnected network of streets, pedestrian and bicycle paths, and open space trails that allow community members to safely travel throughout the community without the use of a car. The implementation of this strategy may vary by the specifics of the neighborhood in question (e.g., implementation in the Air Park neighborhood may look different than in more standard residential neighborhoods). The Town will work with schools to ensure that any property renovations support walking, biking, carpooling, and busing to school. Trails within Erie's open space areas are required to be eight-foot wide with a four-foot soft shoulder; these trails connect with neighborhood trails throughout the community, and Erie will continue to work with developers to ensure that connector trails are also of sufficient width (i.e., at least eight feet) and are ADA-accessible. Erie is in the process of working with the City of Boulder, Boulder County, and other partners to develop a trail system that will connect the Town directly with Boulder, which will provide a non-vehicular commuting alternative to the many residents of Erie that work and recreate in the Boulder area.

### COMMUNITY VOICES

*When the community was asked what they would like to see prioritized, respondents said: "Improve bike safety and access (especially east of SH 287 and Erie Parkway)."*

*"Separated bike lanes."*



Figure 6: A "sharrow" in Washington, D.C.

Moving forward, Erie may also work to educate drivers about safe driving when cyclists are on the road, as well as provide bicycle clinics to help people interested, but hesitant about cycling, to gain confidence. Enhanced signage and pavement markings, such as 'sharrows' (see Figure 6), help to inform drivers of the presence of cyclists on the road. Ensuring the safety of all travelers

in the Town remains of key importance to this strategy, and education and awareness building will be crucial to ensuring that safety.



### Erie's Transportation Sector Targets

- Increase transit serving the community by adding **one additional daily bus route** by 2025 (with a stretch goal of 2 additional daily bus routes)
- Determine a baseline and **increase transit ridership by 10%** by 2025.

> **Strategy T3. Require multi-modal connectivity and transit-oriented development principles at all new commercial developments to address first and last mile connections.**

Erie will work with developers interested in building new commercial projects in the Town to ensure that these new developments support access to public transit and multi-modal connectivity and ensure that there are more destinations in the community that are accessible via walking, biking, or otherwise not using a car to travel. This will be specifically important to ensuring that multifamily housing is accessible via transit and multi-modal options, which can help to reduce the costs of transportation for families living in and near these developments.

### COMMUNITY VOICES

*When the community was asked what they would like to see prioritized, respondents said: "Better signage on bike paths & more connections"*

> **Strategy T4. Develop multi-lingual wayfinding and signage on trails, roads, and paths to support greater use of alternative forms of transportation.**

Enhancing wayfinding and signage and ensuring that it is multi-lingual and accessible to the whole community can enhance safety for cyclists and others using these trails and paths and can also help to communicate how Erie's trail system can be used for travel within the community. By alerting trail users to various destinations within the community and other important information (such as the termination of a bicycle path), Erie can ensure that residents and visitors feel more comfortable and confident using the trail system and may be more likely to take the trails to their destination in the future.

> **Strategy T5. Focus on sustainable economic development opportunities and assets that increase the number of employers and jobs in Erie.**

As previously noted, Erie is primarily a community from which most residents travel out of to arrive at their places of work. By focusing on economic development opportunities and enhancing community assets that will bring jobs and employers to the community, Erie may be able to reduce the amount of travel by residents for work and play. Erie may consider exploring the development of an entrepreneurial center or co-working office space in the community, installing municipal broadband, and increasing the number of service-related businesses (e.g., cafes,

### COMMUNITY VOICES

*When the community was asked what they would like to see prioritized, respondents said: "Education about idling."*

*"More public transportation choices"*

lunch restaurants, etc.) that are open during the day to support more workers staying in Erie and encourage more employers to make Erie their permanent home.

> **Strategy T6. Develop a community-wide anti-idling campaign.**

The Town has an anti-idling policy for Town-owned vehicles but ensuring that this policy is enforced and that the benefits of anti-idling are communicated to the community, remain of utmost importance. In particular, communicating about the negative air quality and health impacts near schools, where idling is prevalent in many communities, and near delivery areas like the downtown will encourage people to turn off their engines when their vehicles are not moving, thus reducing air pollution and related greenhouse gas emissions; see Figure 7 for an example of signage.



Figure 7: Example of signage for an idling campaign.

Simple signage to remind people about idling and its impacts can go far in influencing behavioral change. While this strategy doesn't directly result in a mode shift, it does enhance individuals' awareness of the impacts of transportation choices on health, which can inform future individual transportation choices.

## Erie's Electric Vehicle Priority:

Encourage the use of electric vehicles by providing incentives to purchase vehicles and installing publicly available charging stations.

### Electric Vehicles Strategies

Electric vehicles (EVs) present a significant opportunity to improve air quality and reduce the environmental impact of transportation activities in the community. An all-electric vehicle uses no gasoline and is powered only by its battery, which must be periodically recharged. Electricity is less expensive than petroleum and using it to power a vehicle does not produce tailpipe emissions (i.e., exhaust). Electric vehicles also typically require less maintenance, since electric motor drives have fewer moving parts compared to a traditional internal combustion engine. Additionally, if the EVs are powered by renewable energy, the emissions from the vehicle are effectively zero. Erie will prioritize supporting a transition to more electric vehicles in the community through policies, incentives, and by supporting the development of needed infrastructure.

In September 2019, The Town leased an EV to replace an existing traditional gasoline internal combustion engine vehicle that had come to the end of its useful life. This replacement could save Erie taxpayers approximately \$7,000 over the life of the vehicle. The Town plans to increase the use of these vehicles in the future and increase the number of electric vehicles charging stations in the community.

Specific strategies related to EVs and their priority level are provided in Table 6.

STRATEGIES	Priority Level
T7. Increase the number of EVs on the road through equitable programs and policies such as bulk purchase programs and improved charging infrastructure.	High
T8. Develop EV-ready building codes for residential and commercial new construction and incentivize during retrofit projects for existing residential and commercial buildings.	High
T9. Switch government fleet vehicles to electric vehicles or other high-efficiency vehicles within the replacement cycle (or sooner) and when appropriate models are available.	High
T10. Support state and regional goals for EV adoption, and work with regional partners and neighboring communities to reach these goals.	Low

Table 6. Electric Vehicles Strategies.



## Guiding Principles for Implementation of Electric Vehicles Strategies

Erie can support the increased adoption of EVs through policies and programs, and the Town is already actively working to enhance EV infrastructure in the community. Details on the guiding principles for implementing these strategies are provided below.

> **Strategy T7. Increase the number of EVs on the road through equitable programs and policies such as bulk purchase programs and improved charging infrastructure.**

Ensuring that there is access within the community to EV infrastructure (i.e., charging stations) to reduce range anxiety for EV drivers, as well as providing education, outreach, and support for residents interested in owning EVs, can help to encourage greater adoption of these vehicles and will result in many benefits to the community including improved air quality and reduced emissions. The Town may be able to access grant funds to support the installation of charging infrastructure at Town-owned facilities that are open to the public and additionally may consider working with the Chamber of Commerce and the Erie Green Business Program to encourage and incentivize businesses to install charging stations at workplaces and for customers (some businesses may be able to access grant funds for charging infrastructure as well). Erie may also consider supporting bulk purchase programs, which cost the Town nothing to organize and implement but through which dealerships selling EVs can provide discounts to buyers due to the economies of scale realized by increased interest in the cars (this is a similar model to the solar bulk purchase programs mentioned in Strategy E14).

> **Strategy T8. Develop EV-ready building codes for residential and commercial building new construction and incentivize during retrofit projects for existing residential and commercial buildings.**

By adopting EV-ready building codes, Erie would be ensuring that all new construction is equipped and has the appropriate infrastructure to install a charging station if and when the building owner desires. Installing this infrastructure at the time of construction is significantly less expensive than doing so as a stand-alone project in the future. Erie will work to ensure that EV charging is made available specifically to attached housing properties and low-income residents within the community. Additionally, Erie will consider incentivizing adding EV-ready infrastructure to buildings during major renovation projects, which would be defined as when the project reaches a certain size or cost threshold. Finally, Erie will work to ensure that commercial parking lots of a certain size are either EV-ready or have charging stations installed for a certain number of spaces and will consider how to support the installation of Level III charging (i.e., DC fast charging) at strategic locations.



### Erie's Transportation Sector Targets

**Increase the share of EVs registered in the community by 25% by 2025 (with a stretch goal of 50%)**

#### COMMUNITY VOICES

*Based on a 2016 survey conducted by the SAB, residents would like to see more publicly accessible electric vehicle charging stations. Many residents expressed interest but were unsure of the logistics surrounding their use and practicality for their everyday lives.*

*Currently, Erie has four public charging stations. The Town is in the process of identifying priority locations for the installation of additional charging stations in the coming years.*

> **Strategy T9. Switch government fleet vehicles to electric vehicles or other high-efficiency vehicles within the replacement cycle (or sooner) and when appropriate models are available.**

In 2019 Erie began leasing an EV for a fleet pool vehicle for Town staff to use when on official business for the Town. Due to the significant cost savings, Erie is likely to accrue from this vehicle (saving taxpayers an estimated \$7,000 over the life of the vehicle), Erie is interested in continuing to bring more EVs into the Town's fleet. Erie will evaluate the use of municipal vehicles in order to make informed decisions about which vehicles may be appropriately replaced with EVs and will also determine if there are other vehicles that may be replaced with hybrid or high-efficiency options in order to reduce both the costs and environmental impacts of Town operations. Erie may also consider exploring opportunities to enhance efficiency in Town fleet operations through the use of electronic fleet management systems to improve route and resource efficiencies, especially for large vehicles like snowplows.



Figure 8: The Town of Erie's first EV.



> **Strategy T10. Support state and regional goals for EV adoption, and work with regional partners and neighboring communities to reach these goals.**

Many of Erie's neighbors, as well as the State of Colorado at large, are working to enhance EV infrastructure and support the adoption of EVs across the state. Erie will collaborate with its neighbors on mutually beneficial efforts and goals to ensure that Erie can achieve its vision for enhanced EV adoption and cleaner air in the community in the most efficient way possible. Exploring public-private partnerships to establish a network of EV charging infrastructure across the region may be a viable option for this strategy.



# WASTE, RECYCLING, AND COMPOSTING SECTOR

The Town recognizes the significant negative environmental and social impact created by waste, through both the decomposition of waste in a landfill that releases methane gas and by using vital community resources. By increasing conservation measures, composting, and recycling, significant reductions in the amount of waste generated in the community can be realized.

Composting and recycling strategies rise to the top of survey results, and resident feedback regarding what they would like the Town to do to enhance sustainability, and the strategies in this sector provide many opportunities to make an impact on waste in the community.

## CURRENT CONDITIONS

The Town's current waste initiatives include annual spring and fall clean-up days, recycling and composting at the Erie Concerts in the Park, and an annual leaf composting event. Additionally, the 5<sup>th</sup> Annual Erie BrewFest (held in 2019) marked the first official zero waste event in Erie. As a result of the Town's efforts (in partnership with Eco-Cycle, who provided volunteers to help ensure recycling and composting occurred properly), 422 pounds of solid waste was diverted from the landfill (this represents 89 percent of all waste discarded at the event). The waste recovery equated to 935 pounds of avoided greenhouse gas emissions.<sup>21</sup>

The Town Public Works Department operates a recycling center in Erie, and residents have access to the Boulder County Recycling Drop-Off Center and Boulder County Hazardous Waste Center as well. However, it was noted in several conversations that the Town's recycling center is not functioning ideally due to a variety of reasons, including significant contamination issues at the drop-off site. Additionally, it was noted that the Town's recycling facility may not be large enough to accommodate the current or anticipated future need, does not offer composting or hard-to-recycle items, and is located in a floodplain, making any expansion to or retrofits of the facility difficult.

### Landfill Gas to Energy—How does it work?

Landfill gas (LFG) is a natural byproduct of the decomposition of organic materials in landfills. LFG is composed of roughly 50 percent methane (the primary component of natural gas), 50 percent carbon dioxide, and a small amount of organic compounds.

Instead of escaping into the air, LFG can be captured, converted, and used as an energy source.

LFG is extracted from landfills using a series of wells and a blower/flare system. This system directs the collected gas to a central point where it can be transported, compressed, and filtered before it is combusted to generate electricity.

The Town embarked on a Gas to Energy Project in 2011. Through this project LFG is captured and combusted to generate electricity. The project was completed in conjunction with the landfill owner (Waste Connections), project developer (Aria Energy), and energy buyer (United Power).

There is no readily available data on waste and recycling activity in the Town (e.g., tons of waste disposed of, recycling diversion rate, etc.). The Town recognizes that efforts to increase waste reduction, composting, and recycling are important and that the tracking of such data is useful for understanding the effectiveness of the community's waste, recycling, and composting efforts; the suggested approach to tracking this data in the future is detailed in Strategy W2.

<sup>21</sup> For more information, see: <https://www.erieco.gov/DocumentCenter/View/9805/Erie-BrewFest-Zero-Waste?bidId=>



# WASTE, RECYCLING, AND COMPOSTING PRIORITIES AND STRATEGIES

Strategies surrounding waste, recycling, and composting present an area of great opportunity for Erie. The three subtopics identified for this area include recycling and composting, construction and demolition waste, and Town facilities and events. Each subtopic is discussed in the following sections.

## Recycling and Composting Strategies

Recycling and composting present areas for progress and improvements where residents and business owners can see immediate and tangible results from conservation and diversion.

Priorities for recycling and composting include providing options to make diverting waste easy and accessible. Additionally, the Town strives to be active participants in the Boulder County Resource Conservation Advisory Board (RCAB) (which advises the Board of County Commissioners on major waste diversion policies and strategies) and supports regional and state efforts. Specific strategies related to recycling and composting and their priority level are provided in Table 7 below.

**Erie’s Recycling and Composting Priorities:**

1. Provide options to make diverting waste through reuse, recycling, and composting easy, accessible, and a viable option for all residents and business owners.
2. Be active participants in the Resource Conservation Advisory Board and support regional and state efforts to coordinate on policies and programs and encourage recycling and reuse.



STRATEGIES	Priority Level
W1. Relocate and make improvements to the Erie Recycling Center and explore opportunities to add a yard waste collection facility that provides mulch and/or compost to residents and businesses.	High
W2. Adopt the Re-TRAC policy that ensures that waste diversion is tracked, and recycling is provided to all residents and businesses of Erie at a minimal cost.	High
W3. Explore a phased approach to ensure that curbside composting is available within the community to anyone who chooses to use it.	High
W4. Implement a phased approach to a Universal Zero Waste Ordinance.	High
W5. Work with regional organizations to expand easy and local access to materials reuse and hard-to-recycle services and events.	Medium

Table 7. Recycling and Composting Strategies.

## Guiding Principles for Implementation of Recycling and Composting Strategies

Erie residents have expressed much interest in recycling and composting access within the community, and the strategies in this sub-topic are intended to ensure that every community member has access to these services and that the community diverts as much waste from the landfill as feasible. Details on the guiding principles for implementing these strategies are provided below.

> **Strategy W1. Relocate and make improvements to the Erie Recycling Center and explore opportunities to add a yard waste collection facility that provides mulch and/or compost to residents and businesses.**

As noted above, the current recycling center in Erie has multiple challenges that limit its success. Erie will work with the SAB and partners to identify viable tracts of land to which the recycling center can be relocated so that it is no longer in a flood plain. Erie will make enhancements to the recycling center, including improved signage and information on sorting recycling, perhaps separating out glass and cardboard, as they are more valuable commodities that the Town can potentially profit from. The Town will also consider any other items that can be accepted at the facility without significantly increasing staff time and management for the site. Erie will consider adding a yard waste collection area to the facility, where residents can drop off yard waste (such as leaves and grass clippings) that can be turned into mulch and/or compost that can be made available to residents and businesses. In doing so, Erie will need to carefully consider the impacts of such a facility on local pest issues, such as the emerald ash borer and pine beetle, to limit the spread of these pests.

> **Strategy W2. Adopt the Re-TRAC policy that ensures that waste diversion is tracked, and recycling is provided to all residents and businesses of Erie at a minimal cost.**

Currently waste data, including tonnage of waste and diversion rates, are not tracked by haulers in Erie. In order for Erie to be able to measure the impact of the Town's waste strategies, this data will be needed. Erie can adopt the Re-TRAC Ordinance, which is a hauler license ordinance developed by Boulder County and made available to all communities within the County, to require that haulers track and report on waste and diversion rates within the Community. Erie has the option of adopting the ordinance in whole or in part, and Erie will work to ensure that the ordinance adopted in the Town also requires that haulers provide recycling



### Erie's Waste Sector Target

- Currently, waste tonnage and diversion rates are not tracked by haulers in Erie. Therefore, Erie will **establish a waste baseline and set a target for increased diversion** by 2022v.

services to customers in Erie. Erie may also consider a Pay-As-You-Throw model, which incentivizes waste diversion by pricing recycling and composting at a lower rate than standard trash. Erie will require that all new commercial and multifamily developments include space for recycling bins in the design and construction of new facilities.

> **Strategy W3. Explore a phased approach to ensure that curbside composting is available within the community to anyone who chooses to use it.**

Working with Boulder County's RCAB and Zero Waste team, Erie will consider requiring the curbside collection of compostable materials by creating a subscription-based composting program for the residential sector. Erie will begin with a pilot program in the near term and work towards the adoption of the voluntary subscription program across the Town in the coming years. Additionally, Erie may conduct a study of where curbside composting is currently available and increase outreach and education about available services. Erie will also work with local schools to expand composting efforts in their facilities and work with the Erie Green Business Program to support food scrap composting at local businesses by providing incentives for pilot projects.

### COMMUNITY VOICES

*When the community was asked what they would like to see prioritized, respondents said: "More composting and recycling."*

*"Recycling pick-up weekly and curbside composting."*

> **Strategy W4. Implement a phased approach to a Universal Zero Waste Ordinance.**

Erie’s ultimate aim is to be a zero-waste community and moving towards this in a phased approach that begins with education and incentives and eventually moves towards zero waste requirements. Erie will again work closely with both the Boulder County RCAB and the County’s zero waste team to implement this phased approach, which will begin with outreach and education about waste costs and opportunities and incentives to commercial and multi-family property owners to provide recycling and composting collection services. Funding may be available through Boulder County to support this work. Erie may consider conducting a business impact study to determine the impacts on the cost of doing business of such an ordinance and work to offset these costs through incentives and engagement programs (such as recognition through the Erie Green Business Program). Erie will also ensure that all municipally funded projects practice waste diversion to the highest level.

> **Strategy W5. Work with regional organizations to expand easy and local access to materials reuse and hard-to-recycle services and events.**

Erie will work with local partners, such as Boulder County, EcoCycle, and others, to expand access to hard-to-recycle items through events and drop-off locations. This may include expanding collection events for materials such as holiday items, Styrofoam, and batteries, or working with partners to collect appliances, mattresses, and other items at greater rates. Erie will support statewide product stewardship efforts and consider opportunities to reduce the use of single-use plastics in the community. Erie will also work with local businesses to divert food waste from restaurants and events to food kitchens and homeless shelters.

## Construction and Demolition Waste Strategies

As Erie continues to grow in population, a parallel track of increased construction and demolition (C&D) waste will likely occur. This type of waste can be complex and is often comprised of many different materials (e.g., steel, wood, gypsum, etc.). Recycling and reusing waste from C&D projects is one way to reduce the environmental impact and lessen the burden on landfills. Cost-savings can also be realized by the reduction of waste generated as it reduces the amount of new material that needs to be purchased. Specific strategies related to C&D waste and their priority level are provided in Table 8.

### Erie’s Construction and Demolition Waste Priority:

Ensure that all construction in Erie diverts construction and demolition waste to the greatest degree possible.

STRATEGIES	Priority Level
W6. In a phased approach, reward waste diversion on construction and demolition and public works projects.	Medium
W7. Explore the opportunity to bring a materials reuse center to Erie that will provide a location for diverting reusable construction and demolition materials and create local jobs.	Medium

Table 8. Construction and Demolition Strategies.

### COMMUNITY VOICES

*When the community was asked what they would like to see prioritized, respondents said: “Thrift stores! Clothing, furniture, and other waste can be lowered by buying second-hand.”*



## Guiding Principles for Implementation of Construction and Demolition Waste Strategies

As Erie grows in size the amount of construction waste is likely to increase; this complicated waste stream requires careful management. Details on the guiding principles for implementing the strategies to support the greater diversion of C&D waste are provided below.

> **Strategy W6. In a phased approach, reward waste diversion on construction and demolition and public works projects.**

Due to the complicated nature of C&D waste, a phased approach towards requiring C&D waste diversion, beginning with rewarding C&D projects that divert high levels of waste (such as through recognition by the Town) is most likely to result in success. In the coming years, Erie will provide information and resources to businesses and developers regarding C&D diversion and look towards requiring the recycling of clean dimensional lumber from C&D projects.



Figure 9: Commercial building construction in Erie.

### Erie's Town Facilities and Events Priority:

Reduce waste at Town events and facilities by improving access to recycling and composting and implementing sustainable purchasing policies.

> **Strategy W7. Explore the opportunity to bring a materials reuse center to Erie that will provide a location for diverting reusable construction and demolition materials and create local jobs.**

Due to the rapid pace of construction in Erie, there may be an opportunity to develop a materials reuse center in partnership with local organizations (such as Resource Central) that serves as a collection center and store for reusable construction materials from around the region. Implementing this strategy would also create local jobs and enhance the strength of the local sustainable economy.

### Town Facilities and Events Strategies

Erie prides itself on being a community where people love to live. To foster that community pride, Erie hosts approximately 40 community special events each year.<sup>22</sup> To reduce waste at community events and facilities, Erie will prioritize improving access to recycling and composting and implementing sustainable purchasing policies.

Specific strategies related to waste generated at Town facilities and events and their priority level are provided in Table 9.

STRATEGIES	Priority Level
W8. Expand zero-waste policies for all Town events and meetings.	High
W9. Enhance the recycling infrastructure at Town facilities and in public locations, such as downtown and in outdoor commercial and community gathering spaces.	High
W10. Develop Town-wide green purchasing policies where cost-benefit is shown.	Medium

Table 9. Town Facilities and Events Strategies.

<sup>22</sup> For more information, see: <https://www.erieco.gov/1540/Town-of-Erie-Special-Events>

## Guiding Principles for Implementation of Town Facilities and Events Strategies

These strategies were developed with the ultimate goal of ensuring that Erie leads by example and provides community members and Town staff with ample opportunities to reduce waste generated and increase recycling and composting activities. Details on the guiding principles for implementing these strategies are provided below.

### > **Strategy W8. Expand zero-waste policies for all Town events and meetings.**

Erie currently works with EcoCycle to support diversion at Town events such as the Town Fair, Concerts in the Park, and the Erie Brewfest. Moving forward, Erie will expand upon these efforts by working with vendors at Town events to ensure that they adhere to the Town's zero waste policies and provide information on zero waste policies and resources to vendors and others looking to host events in Erie. The Town will also implement zero-waste guidelines for internal Town events and meetings to ensure materials are recycled and composted appropriately and explore composting infrastructure at Town-owned facilities, beginning with 'simple' items like paper towels and other non-food items.

### > **Strategy W9. Enhance the recycling infrastructure at Town facilities and in public locations, such as downtown and in outdoor commercial and community gathering spaces.**

Erie will improve and expand municipal recycling facilities to include additional bins at public parks and in community areas like downtown. In order to ensure successful recycling, effective and branded signage will be key to communicating to the public what can and cannot go into the recycling bins. To facilitate higher recycling rates, Erie will also ensure that recycling bins are placed directly next to trash bins in public spaces and will also work to measure and reduce waste per-capita for Town employees.

### > **Strategy W10. Develop Town-wide green purchasing policies where cost-benefit is shown.**

In order to limit the negative environmental impact of its own operations, Erie will work to implement green purchasing decisions where appropriate and cost effective. By establishing a list of environmentally preferred products and adopting guidelines to limit the use of single-use plastic and disposable products in Town operations, Erie may be able to realize significant gains in reducing the amount of waste produced through Town operations. Erie may also consider purchasing and utilizing certified and locally generated compost for municipal projects, which supports the market for these goods and enhances the soil quality and water retention capabilities of the areas where the compost is used.

### COMMUNITY VOICES

*When the community was asked what they would like to see prioritized, respondents said:  
"Zero Waste Town events."*



# EDUCATION AND OUTREACH SECTOR

Education and outreach efforts not only provide an opportunity for residents and business owners to become engaged in the Town's sustainability work but also allow for increased awareness regarding the opportunities to confront the sustainability challenges in the community, such as energy use, waste, congestion, and growth.

## CURRENT CONDITIONS

Education and outreach are a vital component of the success of this Plan and their importance cannot be overstated. Current initiatives include environmental education associated with Earth Day celebrations; the year 2020 marks the 50th anniversary of Earth Day, and the Town's Annual Earth Day celebration will be the 23rd annual occurrence of the event. These large events increase awareness surrounding sustainability and demonstrate the Town's commitment to action.

## EDUCATION AND OUTREACH PRIORITIES AND STRATEGIES

Strategies surrounding education and outreach aim to increase awareness, meaningfulness, and accountability for sustainability initiatives. This sector includes many strategies, as shown in Table 10.

*In September 2019, the Town was awarded the Bronze Environmental Achievement Award by the Colorado Department of Public Health and Environment's Environmental Leadership Program.*

*The award was given for the voluntary and significant environmental achievements the Town has embarked upon, including the solar array on the Leon A. Wurl Service Center, solar thermal system at the Erie Community Center, automatic lighting controls in Town facilities, water conservation efforts, the annual spring and fall clean-up days, and the environmental education associated with the Arbor and Earth Day Celebrations.*



Figure 10: Collecting feedback at Erie's Farmers Market.



STRATEGIES	Priority Level
EO1. Hire dedicated sustainability staff members that will coordinate and implement internal and community-wide sustainability projects and programs and build partnerships with local and regional organizations to collaborate on sustainability efforts.	High
EO2. Host creative and innovative events that engage all residents and businesses in resources for sustainability.	High
EO3. Ensure that all community events and functions include elements of sustainability in their implementation and messaging.	High
EO4. Perform a community-wide greenhouse gas emissions inventory to understand the Town's and overall community's environmental impact and where there are opportunities to reduce that impact.	High
EO5. Work with the schools in Erie to develop sustainability clubs that will engage youth and empower them to work with the Town on sustainability issues.	High
EO6. Establish a resource center for sustainability that provides information and resources for energy efficiency, renewable energy, etc., and also increases community awareness of sustainability efforts.	High

Table 10. Education and Outreach Strategies.

STRATEGIES	Priority Level
EO7. Ensure that the Town actively takes advantage of regional and state sustainability initiatives, funding, and programs to ensure Erie residents are benefiting from these resources.	High
EO8. Ensure that all Town plans include sustainability (i.e. transportation master plans, water plan, etc.).	High
EO9. Develop a coordinated and branded marketing and communications campaign that is multilingual, multicultural, equitable, and inclusive.	High
EO10. Be active members in statewide organizations that are working on our behalf to combat climate change, such as Colorado Communities for Climate Action.	High
EO11. Host neighborhood sustainability competitions or challenges.	Medium
EO12. Support enhancement of the Erie Green Business Program.	Medium
EO13. Support the expansion of access to local food by supporting the development of new community gardens and the creation of a standard community garden plan that can be used to engage and educate the community.	Medium
EO14. Create, communicate, and share best practices to manage municipal natural areas, parks, right of ways, and other properties to maximize ecological health and biological diversity.	Medium

## Guiding Principles for Implementation of Education and Outreach Strategies

The strategies identified above for education and outreach aim to create an environment in which the whole community is engaged in sustainability. Further, the implementation of the education and outreach strategies will ensure that all of the other strategies identified in this plan are communicated to Erie's residents and businesses, made accessible to the entire community, and overall met with success. The following sections discuss the education and outreach sector strategies in detail.

> **Strategy EO1. Hire dedicated sustainability staff members that will coordinate and implement internal and community-wide sustainability projects and programs and build partnerships with local and regional organizations to collaborate on sustainability efforts.**

Building internal capacity by ensuring Erie has dedicated staff that can implement this Plan is crucial to the success of these strategies. Erie has recently hired its first dedicated sustainability position, a Sustainability and Water Conservation Specialist, and is looking to grow this team in future years both through more dedicated staff and collaborations within other departments in the Town through a staff 'Sustainability Team'. The staff will collaborate across departments and with partners to implement Erie's sustainability initiatives and leverage programs and resources (including funding) available from state, federal, and local non-governmental organizations (including schools, libraries, the business community, and other community organizations) to support Erie's sustainability work. Staff will also collaborate across other Front Range communities and utilities to share best practices, supplement resources, and work to leverage their combined power to enhance sustainability initiatives and work to provide more resources and support reduced energy costs across the community.

## Erie's Education and Outreach Sector Priorities:

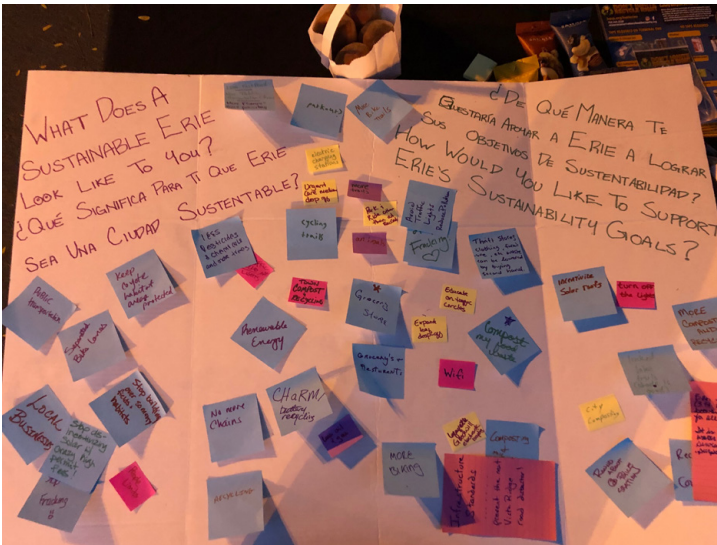
1. Use innovative and engaging techniques to educate all community members about the importance of and value of participating in the Town's sustainability efforts.
2. Build capacity internally by hiring dedicated staff and developing collaborative partnerships with local and regional organizations.

> **Strategy EO2. Host creative and innovative events that engage all residents and businesses in resources for sustainability.**

Erie is a lively, fun, and exciting place to live, and the Town wishes to build off of those assets when engaging residents and businesses in sustainability. Erie will develop sector-specific outreach and educational materials and host fun, creative, and compelling events to engage residents in sustainability; topics for engagement will include water conservation, waste reduction and home composting, energy conservation and renewable energy, and transportation access and options. Events and materials will be branded for Erie's sustainability efforts and will be multilingual and made accessible to all audiences across the community.

> **Strategy EO3. Ensure that all community events and functions include elements of sustainability in their implementation and messaging.**

As noted, Erie hosts many Town-sponsored events throughout the year; while many of these events already include elements of sustainability (such as recycling and composting options), the Town will also ensure that sustainability is a part of the messaging around events. Further, the Town is host to many events that are held by other organizations in the community, and Erie will provide information about the Town's sustainability policies, resources, and options in event permit applications.



> **Strategy EO4. Perform a community-wide greenhouse gas emissions inventory to understand the Town’s and overall community’s environmental impact and where there are opportunities to reduce that impact.**

In order to truly understand the environmental impact of Town operations and community-wide activities, Erie will complete both a municipal operations and a community-wide greenhouse gas emissions inventory that utilizes standard protocol and is, therefore, able to be compared to other communities locally and across the country. By developing a standardized inventory, Erie can understand how its environmental impact compares to other communities, and where there is the greatest opportunity to reduce that impact through programs, policies, and projects.

> **Strategy EO5. Work with the schools in Erie to develop sustainability clubs that will engage youth and empower them to work with the Town on sustainability issues.**

Today’s youth are among those most likely to be seriously impacted by lack of action on environmental issues and sustainability, and nationally they are also among the most active on creating change in this field. Erie will work with the local schools to support the development of sustainability clubs that will engage the youth and empower them to be a part of the Town’s sustainability work. The Town will do this by providing

the clubs with the information, tools, and resources that would be useful in supporting the Town’s sustainability work and implementing sustainability initiatives in their own schools. When children are actively involved in sustainability efforts, from energy conservation to recycling and everything in between, the parents often follow their leadership. This strategy will help to create a broad network of engaged stakeholders for Erie’s sustainability work.

> **Strategy EO6. Establish a resource center for sustainability that provides information and resources for energy efficiency, renewable energy, etc., and also increases community awareness of sustainability efforts.**

Erie wishes to provide sustainability resources and information to the community in a way that is accessible and equitable. The Town will consider both an online platform to communicate this information (such as a website that demonstrates progress on the Town’s efforts and provides resources for residents and businesses), as well as a physical innovation center where residents can come to learn about sustainability and environmental topics. This center could also provide resources that community members can borrow, such as a Kill-A-Watt meter, which allows one to measure the energy used by various plug load appliances, and an irrigation audit kit.

> **Strategy EO7. Ensure that the Town actively takes advantage of regional and state sustainability initiatives, funding, and programs to ensure Erie residents are benefiting from these resources.**

Erie is not pursuing sustainability in a vacuum, and a wide array of resources and support (from financial to programmatic to structural) are available from regional, state, and national organizations and initiatives. Erie will work with partner organizations to ensure that the available resources are provided to the benefit of all of the Town’s residents and will consider joining national organizations through which Erie may be able to access resources and support, such as the Urban Sustainability Directors Network.



> **Strategy EO8. Ensure that all Town plans include sustainability (i.e. transportation master plans, water plan, etc.).**

When developing and adopting a new master plan for the community, Erie always works to reference existing and past planning documents to maintain consistency of policy and implementation and ensure that the Town follows through with its intended plans. Future planning documents created for the Town, from master planning efforts to community and neighborhood-level plans, will incorporate sustainability where relevant and applicable to ensure that Erie's sustainability goals and initiatives are woven into the fabric of the community. Specifically, Erie will ensure that future updates to the Town's water conservation, transportation, and comprehensive plans include strong considerations for sustainability.

> **Strategy EO9. Develop a coordinated and branded marketing and communications campaign that is multilingual, multicultural, equitable, and inclusive.**

Erie is a diverse community that includes people of all ages, races, income levels, and cultural backgrounds. In order to engage the entire community in the Town's sustainability efforts, Erie will develop a coordinated branding and marketing campaign for Erie's sustainability initiatives that is multilingual, multicultural, and inclusive. Only by engaging and empowering the entire community to participate in and support sustainability initiatives will Erie realize success, and this strategy will ensure that the entire community is engaged in, excited about, and benefits from Erie's sustainability work. This campaign will rely on community-based social marketing and highlight Erie's sustainability goals and efforts. Erie may create a community spotlight program that highlights local residents acting on sustainability and create a digital platform for residents to share what they are doing at home for energy and water conservation, transportation efforts, and materials reuse.



### Erie's Education and Outreach Sector Target

- **Double the number of businesses participating** in the Erie Green Business Program by 2025 (compared to a 2020 baseline).
- **Host or participate in a minimum of five community events** annually to educate the community about sustainability.

> **Strategy EO10. Be active members in statewide organizations that are working on our behalf to combat climate change, such as Colorado Communities for Climate Action.**

The Erie Board of Trustees approved the Town's participation in Colorado Communities for Climate Action, a collaboration of communities across the state working towards state-level legislative changes in support of sustainability initiatives. Erie will maintain active membership in this organization, and potentially identify other relevant organizations in which to participate, in order to ensure that the Town's voice is heard and influential in driving towards creating a sustainable future, not just for Erie, but for all residents of Colorado.

> **Strategy EO11. Host neighborhood sustainability competitions or challenges.**

Friendly competition can be a great motivator for individuals and communities, and Erie has the opportunity to leverage this in order to engage the broader community in supporting the Town's sustainability efforts. By engaging HOA groups and other community organizations in implementing sustainability projects and offering residents and businesses the opportunity to take pledges to illustrate their commitment to support sustainability goals, Erie can ensure that sustainability becomes a valued asset across the whole community. Erie may consider locating funding to provide mini grants to HOAs and neighborhood groups interested in developing local sustainability projects (such as a community clean-up or sustainability workshops) and could investigate the usefulness of a sustainability neighborhood challenge or recognition program to encourage participation.

> **Strategy EO12. Support enhancement of the Erie Green Business Program.**

The Erie Green Business Program recognizes local businesses that are taking steps to be more sustainable. The program was developed during the process of creating Erie's Energy Action Plan and has focused efforts over the last several years on supporting energy reductions in local businesses. Erie will work with the Chamber of Commerce to create a plan to expand and enhance the Green Business Program; specific initiatives may include using local events to recognize Erie's green businesses, developing a rating system to show which businesses are taking the greatest action on this front, and providing resources and information to businesses on reducing their environmental impact through waste reduction, energy and water conservation, and transportation initiatives. A focused branding campaign for the Green Business Program that highlights local businesses and also celebrates the hiring of local talent will help to market this program and the participating businesses to the general public.

> **Strategy EO13. Support the expansion of access to local food by supporting the development of new community gardens and the creation of a standard community garden plan that can be used to engage and educate the community.**

Erie has one existing community garden at Kenosha Farms and there is interest among community members in establishing more community gardens in the future. The Town will support the expansion of community gardens by helping to identify viable plots of land for gardens, providing letters of support for grant applications by groups trying to establish community gardens, and through other means, such as providing information on industry best practices and landscaping to ensure the gardens are sustainable. In collaboration with community groups and the SAB, Erie will work with community gardening organizations and experts to educate residents on rain barrels and xeriscape landscaping, as well as on gardening basics, food access and preservation, and backyard composting. Erie will ensure that residents are aware of recent State legislation that limits the ability of HOAs to require green grass in resident lawns (i.e., protects homeowner rights to xeriscape as desired), and will also look into policies that would protect single-family detached homeowners rights to keep backyard chickens and compost on their properties.

Further, Erie is currently implementing the Parks, Recreation, Open Space, and Trails Plan, which calls for the preservation of open space and agricultural land in the community where viable; in particular, the preservation of irrigated agricultural land is a key priority for Erie's citizen-led Open Space and Trails Advisory Board due to the fact that irrigated farm land (and natural spaces in general) provide many environmental and social benefits such as wildlife habitat, water infiltration, cooling effects for the surrounding area, providing stunning views, and reducing stress. In the past several years the Town has actively preserved existing irrigated farmland including the Allan Farm, the Wise Farm, and the Schofield Farm; collectively, this amounts to nearly 300 acres of preserved land. While most of this land is currently used to grow primarily grasses and hay, the Open Space and Trails Advisory Board has a particular interest in supporting any of the current landowners in transitioning to growing edible vegetable

crops that could be sold at the popular weekly Erie Farmers Market. Many sustainability benefits, from health benefits due to eating fresher food to reduced greenhouse gas emissions from not transporting food long distances, are gained by supporting and enhancing the availability of local food, and the **Sustainability Master Plan** supports these efforts to increase access to local food in an equitable way.

> **Strategy EO14. Create, communicate, and share best practices to manage municipal natural areas, parks, right of ways, and other properties to maximize ecological health and biological diversity.**

Erie prioritizes the conservation and protection of natural lands and open spaces and works to ensure that the community has access to these valuable spaces through open space preservation policies. The Town requires all new developments to donate 17 acres of open space for every 1,000 new residents that the developments will add to the community (based on an assumed average household size of 3 people), and property taxes in the community also are used for open space and trails maintenance.

Based on feedback from the community, residents are interested in the Town ensuring that the use of chemicals, including herbicides and pesticides, are limited in open spaces and parks. The Erie Board of Trustees recently adopted a resolution guiding staff to utilize native plants and water conserving landscaping on Town-owned and managed properties, and the Town will work to ensure that the lessons learned from this initiative are shared with the broader community. Additionally, the Town may consider developing a pesticide plan to regulate when and where these chemicals are used on Town-owned properties. Erie will ensure that the Parks, Recreation, Open Space, and Trails Plan is implemented as defined in the document, and will also look to incorporate educational



features and accommodate outreach programs that teach residents about best practices for sustainable management of natural areas, green infrastructure for habitat protection, and opportunities to reduce potable water use through greywater irrigation and other landscaping techniques. Erie is in the process of revising the Unified Development Code for the Town, which provides guidance on landscaping and green infrastructure, and will ensure that sustainable land management is woven into these codes.

## COMMUNITY VOICES

*When the community was asked what they would like to see prioritized, respondents said: “Less pesticides and chemicals and more trees”*



# Working towards a more Sustainable Erie



As a growing community in the Front Range region, Erie recognizes its responsibility to provide the best possible quality of life for residents while ensuring long-term fiscal responsibility and environmental sustainability. This Plan identifies the strategies and actions that will lead to significant progress in terms of enhancing community sustainability and quality of life. Erie believes in the power of its entire community to work together for the benefit of all community members and looks forward to engaging residents, businesses, and visitors in order to create a healthier and more sustainable future for all. As directed in Erie's Town Ordinance 14-2018, which established the Sustainability Advisory Board, Erie will report on the progress achieved in regard to the strategies in this Plan to the Town Board of Trustees and the community on a bi-annual basis (i.e., twice every year).

This Plan identifies the actions that Erie, with the help of its community and partners, will embark upon in the coming five years and sets specific priorities and targets to measure how well the Town has made progress towards its vision of being a leader in sustainability. Please refer to Appendix A for the full list of priorities and related strategies that Erie has identified and intends to implement over the coming years. In the future, Erie will have the opportunity to build off this work to continue to make Erie the best place to raise a family, and a place that many people love to call home.

# ■ APPENDIX A: FULL LIST OF PRIORITIES AND STRATEGIES

## Energy Code Sector

### Codes and Policies Priority:

Use Erie's Building codes to incentivize green building, energy efficiency, and the use of renewable energy in new construction.



### STRATEGIES

- E1.** Adopt the most recent International Energy Conservation Code (IECC) every three years, starting with the 2015 IECC in 2020.
- E2.** Ensure ongoing education for planners, plan reviewers, building inspectors, developers, and builders on updates to building and energy codes, available design and green building resources, and enforcement mechanisms and incentives.
- E3.** Incentivize and educate on renewable energy (e.g., solar-ready homes) for new construction.
- E4.** Adopt an 'above' building code with incentives for increasing energy efficiency above and beyond standard code requirements.
- E5.** Explore incentivizing building energy benchmarking and reporting on green building certification for all commercial properties and residential properties over a certain size threshold.
- E6.** Explore requiring or incentivizing reporting on energy efficiency in owner-occupied housing to meet a certain threshold at the time-of-sale.
- E7.** Educate on and incentivize dark sky compliant and/or LED outdoor light fixtures.

### Building Energy Use Priority:

Encourage new development and existing buildings to conserve the use of natural resources and actively utilize available incentives and rebates for green building and renewable energy.



### STRATEGIES

- E8.** Promote existing energy efficiency programs for commercial and residential users.
- E9.** Encourage building owners to utilize water-conserving landscaping practices and implement other measures that will reduce water use and align with the goals of Erie's Water Conservation Master Plan.
- E10.** Promote existing weatherization services and solar incentives to qualifying low- and moderate-income residents by working with partners, and work to fill gaps in resources.
- E11.** Educate on and incentivize commercial building retro-commissioning.

## Renewable Energy Empowerment and Innovation Priority:

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Provide education and incentives to encourage the use of renewable energy and energy storage within the community.



### STRATEGIES

- E12.** Identify creative and innovative opportunities to fund energy efficiency and renewable energy projects and programs in commercial and residential sectors and consider other innovative technologies, as they become available, for reducing energy use and increasing the amount of renewable energy powering the community.
- E13.** Develop ongoing Town-supported renewable energy projects that benefit the whole community (e.g., community solar, etc.).
- E14.** Identify equitable programs to market and incentivize solar through cost savings and communication campaigns (e.g., bulk purchase programs, etc.).

## Municipal Leadership Priority:

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Illustrate the Town's commitment to sustainability by reducing energy and water use in municipal buildings and supplying Town buildings with renewable energy.



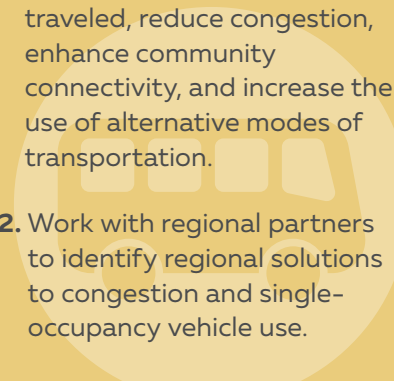
### STRATEGIES

- E15.** Supply municipal buildings with 100% renewable electricity (both through on-site installations and procurement decisions).
- E16.** Perform energy assessments on all existing municipal buildings and, when feasible, implement assessment recommendations for energy efficiency soon after.
- E17.** Implement benchmarking for municipal buildings.
- E18.** Require that all new government buildings and major renovations be EnergyStar certified.



# Transportation Sector

## Mode Shift Priorities:

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1. Provide access to transportation options and solutions that reduce community vehicle miles traveled, reduce congestion, enhance community connectivity, and increase the use of alternative modes of transportation.
  2. Work with regional partners to identify regional solutions to congestion and single-occupancy vehicle use.
  3. Support the development of the local economy to reduce commuting outside of Erie.

### STRATEGIES

- T1. Collaborate with regional agencies to develop approaches to provide safe and sustainable transportation management services and transit access within the community, in alignment with Erie's Transportation Master Plan.
- T2. Ensure that all community members have safe and well-maintained access to sidewalks, bike lanes, and walking paths within current and new development.
- T3. Require multi-modal connectivity and transit-oriented development principles at all new commercial developments to address first and last mile connections.
- T4. Develop multi-lingual wayfinding and signage on trails, roads, and paths to support greater use of alternative forms of transportation.
- T5. Focus on sustainable economic development opportunities and assets that increase the number of employers and jobs in Erie.
- T6. Develop a community-wide anti-idling campaign.

## Electric Vehicle Priority:

Encourage the use of electric vehicles by providing incentives to purchase vehicles and installing publicly available charging stations.




### STRATEGIES

- T7. Increase the number of EVs on the road through equitable programs and policies such as bulk purchase programs and improved charging infrastructure.
- T8. Develop EV-ready building codes for residential and commercial buildings new construction and incentivize during retrofit projects for existing residential and commercial buildings.
- T9. Switch government fleet vehicles to electric vehicles or other high-efficiency vehicles within the replacement cycle (or sooner) and when appropriate models are available.
- T10. Support state and regional goals for EV adoption, and work with regional partners and neighboring communities to reach these goals.

# Waste, Recycling, and Composting Sector

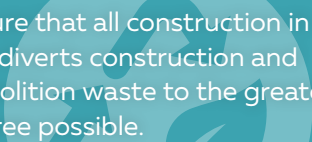
## Recycling and Composting Priorities:

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1. Provide options to make diverting waste through reuse, recycling, and composting easy, accessible, and a viable option for all residents and business owners.
  2. Be active participants in the Resource Conservation Advisory Board and support regional and state efforts to coordinate on policies and programs and encourage recycling and reuse.

### STRATEGIES

- W1.** Relocate and make improvements to the Erie Recycling Center and explore opportunities to add a yard waste collection facility that provides mulch and/or compost to residents and businesses.
- W2.** Adopt the Re-TRAC policy that ensures that waste diversion is tracked, and recycling is provided to all residents and businesses of Erie at minimal cost.
- W3.** Explore a phased approach to ensure that curbside composting is available within the community to anyone who chooses to use it.
- W4.** Implement a phased approach to a Universal Zero Waste Ordinance.
- W5.** Work with regional organizations to expand easy and local access to materials reuse and hard-to-recycle services and events.

## Construction and Demolition Waste Priority:



Ensure that all construction in Erie diverts construction and demolition waste to the greatest degree possible.

### STRATEGIES

- W6.** In a phased approach, reward waste diversion on construction and demolition and public works projects.
- W7.** Explore the opportunity to bring a materials reuse center to Erie that will provide a location for diverting reusable construction and demolition materials and create local jobs.

## Town Facilities and Events Priority:



Reduce waste at Town events and facilities by improving access to recycling and composting and implementing sustainable purchasing policies.

### STRATEGIES

- W8.** Expand zero-waste policies for all Town events and meetings.
- W9.** Enhance the recycling infrastructure at Town facilities and in public locations, such as downtown and in outdoor commercial and community gathering spaces.
- W10.** Develop Town-wide green purchasing policies where cost-benefit is shown.

# Education and Outreach Sector

## Education and Outreach Priorities:

1. Use innovative and engaging techniques to educate all community members about the importance of and value of participating in the Town's sustainability efforts.
2. Build capacity internally by hiring dedicated staff and developing collaborative partnerships with local and regional organizations.



### STRATEGIES

- EO1.** Hire dedicated sustainability staff members that will coordinate and implement internal and community-wide sustainability projects and programs and build partnerships with local and regional organizations to collaborate on sustainability efforts.
- EO2.** Host creative and innovative events that engage residents and businesses in resources for sustainability.
- EO3.** Ensure that all community events and functions include elements of sustainability in their implementation and messaging.
- EO4.** Perform a community-wide greenhouse gas emissions inventory to understand the Town's and overall community's environmental impact and where there are opportunities to reduce that impact.
- EO5.** Work with the schools in Erie to develop sustainability clubs that will engage youth and empower them to work with the Town on sustainability issues.
- EO6.** Establish a resource center for sustainability that provides information and resources for energy efficiency, renewable energy, etc., and also increases community awareness of sustainability efforts.
- EO7.** Ensure that the Town actively takes advantage of regional and state sustainability initiatives, funding, and programs to ensure Erie residents are benefiting from these resources.
- EO8.** Ensure that all Town plans include sustainability (i.e. transportation master plans, water plan, etc.).
- EO9.** Develop a coordinated and branded marketing and communications campaign that is multilingual, multicultural, equitable, and inclusive.
- EO10.** Be active members in statewide organizations that are working on our behalf to combat climate change, such as Colorado Communities for Climate Action.
- EO11.** Host neighborhood sustainability competitions or challenges.
- EO12.** Support enhancement of the Erie Green Business Program.
- EO13.** Support the expansion of access to local food by supporting the development of new community gardens and the creation of a standard community garden plan that can be used to engage and educate the community.
- EO14.** Create, communicate, and share best practices to manage municipal natural areas, parks, right of ways, and other properties to maximize ecological health and biological diversity.





TOWN OF ERIE  
1874



November 2019

# SUSTAINABILITY MASTER PLAN

The Town of Erie is a beautiful community on the eastern plains of the Rocky Mountains in Colorado, and the community is fast becoming a national leader for providing a high quality of life for residents. The sweeping and majestic mountain vistas, beautiful open and natural spaces, abundant recreational opportunities, and small-town feel are rightful sources of pride for the community.

*Erie's Natural Wetlands*