

Town of Erie, Colorado Town Council Study Session

Molly Marcucilli | Climate Mitigation and Resilience
Planning Associate | Lotus Engineering &
Sustainability

Eryka Thorley | Sustainability Manager | Town of Erie

#### **SAP Presentation Overview**

- Project Background & Timeline
- Greenhouse Gas (GHG) Emissions Overview
- Stakeholder and Community Engagement Updates
- Strategy Development
- Looking Ahead
- · Q&A



### **SAP Project Background**

- Erie adopted a Sustainability Plan in 2019.
  - The 2019 plan was a 5-year plan.
  - Many strategies have been implemented! ~80%
- Town of Erie declared a Climate Emergency in 2024.
  - Initiative to adopt a 2025 Climate Action Plan.
  - Renewable energy expansion across all Town operations.
  - Multi-modal zero and low emission transportation.
  - Additional zero waste and strategic waste diversion to reduce waste going to landfill.
  - Beneficial Electrification Plan adopted in May 2025.
- Erie conducted a GHG Emissions Inventory in 2021 and 2023.
  - This inventory will guide the direction of the new plan.



#### Climate Emergency Proclamatic

Whereas, in April 2016, world leaders from 175 countries recognized the threat of climate disruption and the urgent need to combat it by signing the Paris Agreement, agreeing to keep warming "well below 2C above pre-industrial levels" and to "pursue efforts to limit the temperature increase to 1.5C°; and

Whereas, the harm already caused by global warming of 1.35C above the pre-industrial average (1850-1900) is reflected in increased and intensifying harm from extreme heat events and other extreme weather, wildfires, droughts, floods, and rising seas; and

Whereas, in Colorado and Erie these impacts can already be seen in wildfires burning twice as much acreage now as they did in 1980; wildfires burning in all seasons, even in winter; more frequent, and more severe flooding; and almost twice as many days in a year with temperatures of 90F or hotter, from an average of 27 between 1954-1951 to 47 between 2004-2023; and

Whereas, the risk of climate disruption is increasingly recognized by major corporations and financial institutions such as The World Bank, which found that climate disruption impacts could push an additional 100 million people into poverty by 2030: and

Whereas, restoring a safe and stable climate requires mobilizing to reduce greenhouse gas emissions across all sectors to protect all people and species from the consequences of climate disruption; and

Whereas, clean energy resources such as solar, wind, and energy efficiency are providing growing numbers of well-paying jobs and in 2023 were less expensive than fossil fuels and highly reliable due to rapid improvements in technology; and

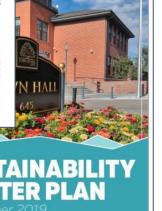
Whereas, the Town can act as a leader by joining other local, state, and federal governments that are implementing just transition and climate emergency actions; and

Now therefore, be it declared by the Town Council of the Town of Erie that:

Section 1. The Town Council hereby declares a Climate Emergency due to the significant threat climate disruption has on Erie residents and on the world and in recognition of the reasonable and feasible actions we can take to reach a safe and stable climate before irreversible climate catastrophe occurs.

Section 2. The Town Council will lead in addressing the Climate Emergency by the following initiatives, as permitted by law:

a. Considering the climate impacts of all future decisions and favor action, solutions or pat
that are positive for climate, environment, biodiversity and equitable;

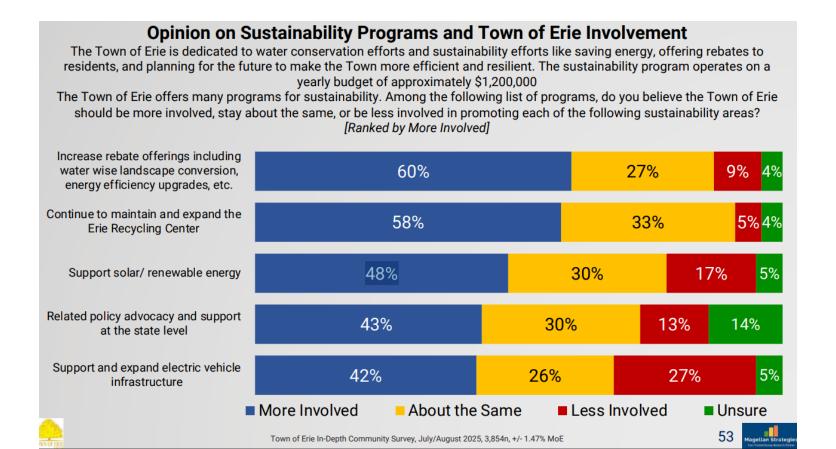






## SAP Project Background

Sustainability programs & Town involvement identified as important by the community in recent and historical surveys.





## **SAP Project Timeline**



- √Staff Focus Group
- √Farmers Market
- √Steering Committee
- **√Charrette**

- Existing **Conditions Analysis** Equity Analysis

#### **Spring**



#### **Summer**

- Engagement
- GHG emissions modeling
- Strategy **Development**

- Strategy **Development**
- Strategy **Prioritization**

Fall

#### Winter

- Strategy **Modeling**
- Plan Development
- Plan adoption

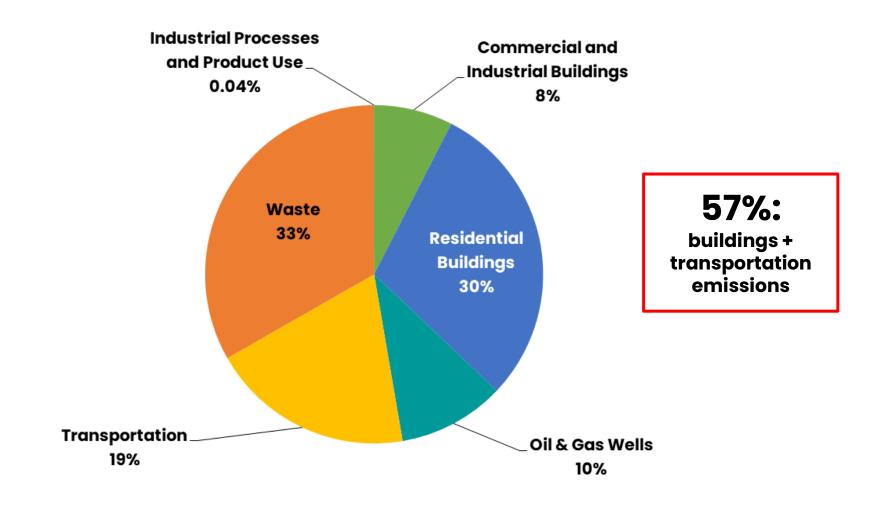


## SAP: Greenhouse Gas (GHG) Emissions Inventory Overview



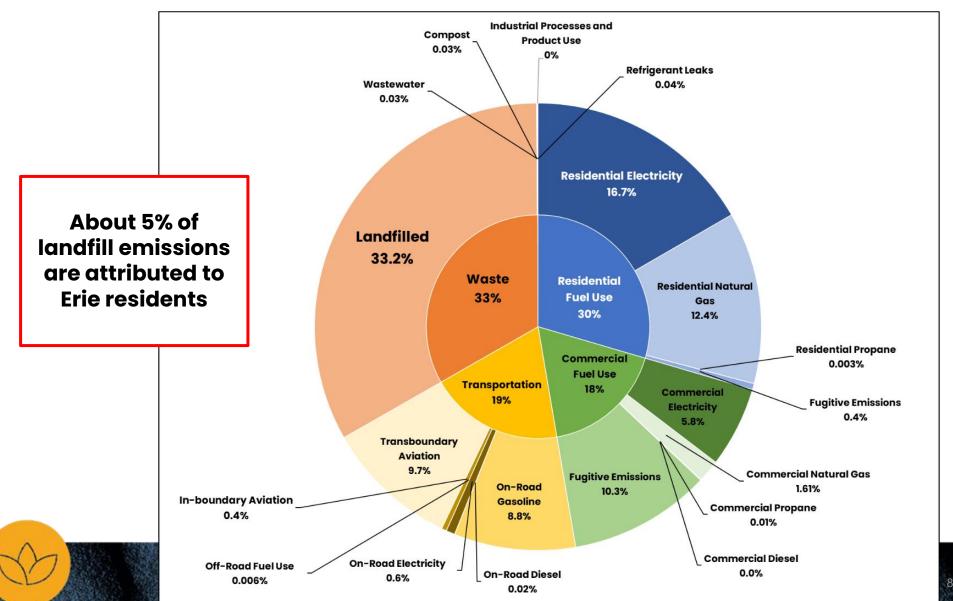


### Community GHG Emissions by Sector (2023)

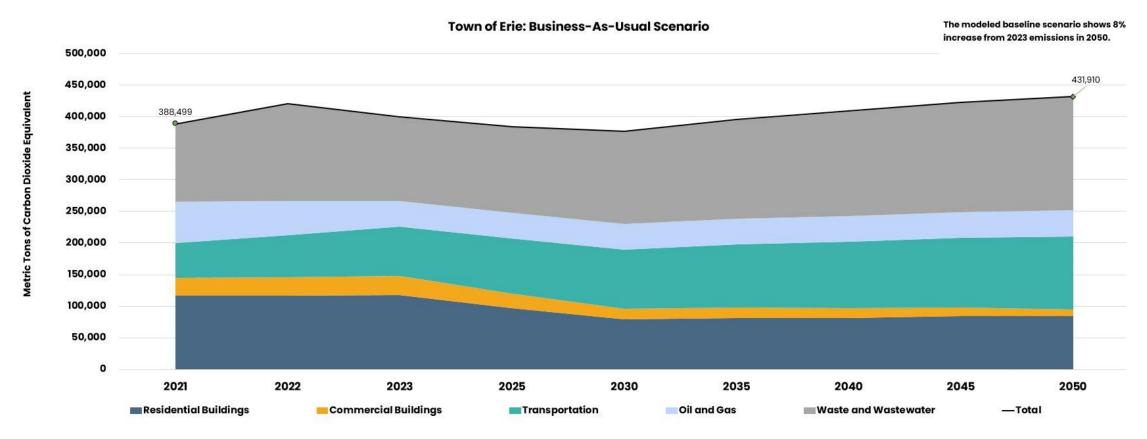




### Community GHG Emissions by Source (2023)



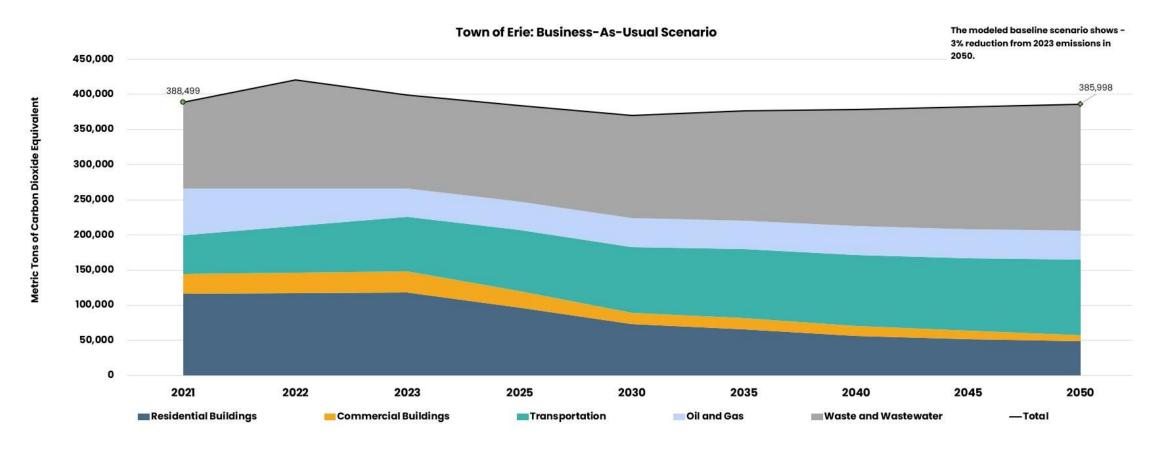
## Low Electrification With Landfill, Oil and Gas, and Transboundary Aviation



**Takeaways:** Waste from landfills and transportation the largest emitters in 2050. This scenario shows an *increase* in emissions due to a combination of low electrification and steady landfill growth.



## High Electrification With Landfill, Oil and Gas, and Transboundary Aviation



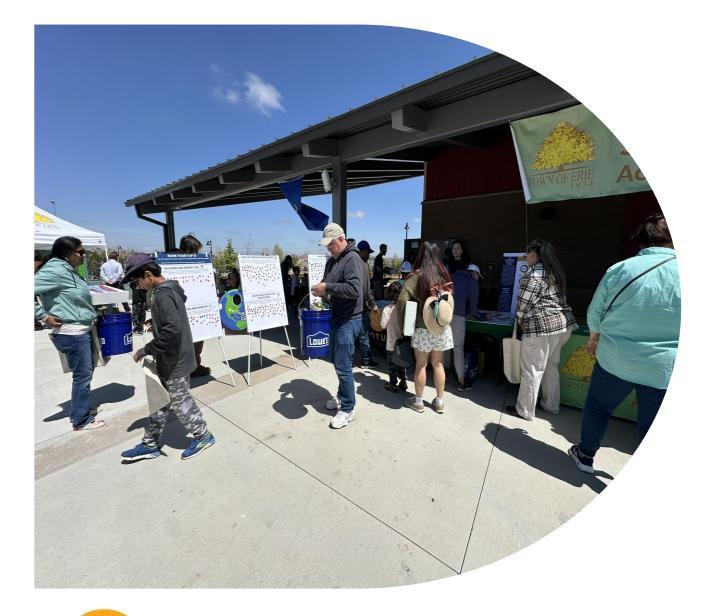
Takeaways: Waste from landfills and transportation remain the largest emitters in 2050.



## SAP Stakeholder and Community Engagement Updates







- Kickoff at Arbor/Earth
   Day celebration
- Stats:
  - 1,000 attendees
  - 433 dot votes
  - 70 responses





Focus Areas	Votes
Local Ecosystems and Watersheds	101
Waste Diversion	92
Land Use and Built Environment	85
Transportation and Mobility	65
Education and Outreach	55
Buildings and Energy Use	35



## Why is sustainability & climate action important in Erie?

- 27 responses
- Key themes:
  - Public health and safety
  - Protect natural resources and wildlife
  - Be a leader in the region
  - Little/local actions add up
  - Longevity and future generations







### What environmental considerations should be priority as the Erie community grows?

- 43 responses
- Key themes:
  - Local and clean energy
  - Multimodal transportation access
  - Safer transportation
  - No idling
  - Waste diversion and zero waste events
  - Curbside composting
  - Sensible growth

- High density/mixed use
- Community agriculture
- Manage mosquito larvae rather than spraying
- Air pollution
- Dark skies
- Open space and trails
- Fire mitigation



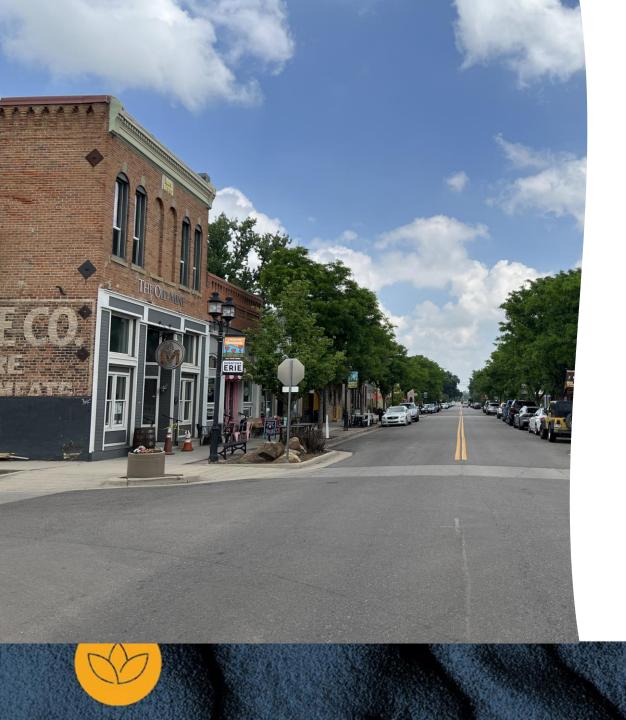


#### **Erie Farmers Market**

Tabled at farmers markets to raise awareness and collect input on the Resilience Action Plan and SAP.

- Stats:
  - ~350 interactions across 5 farmers markets
- All respondents said it was "important or "very important" for Erie to protect its natural environment.
- The most selected topics of priority for the SAP included:
  - Public transportation and multimodal access
  - Waste diversion
  - Nature-based solutions
  - Renewable energy





## **Staff Focus Group**

- Met with key Erie staff to receive general guidance on plan direction.
- Staff support the plan focus areas and strategy topics.
- Ideas:
  - Benchmarking for smaller buildings
  - Geothermal for municipal buildings
  - Transit access improvements
  - E-bikes and e-car share
  - Organics collection



# Steering Committee Meeting #1

#### Steering Committee Overview:

• Community representatives and Town staff to inform plan development.

#### Meeting #1 Objectives:

- Provide feedback on vision statement & guiding principles for the SAP.
- Ideate new strategies to build on 2019 plan.

## **Steering Committee Meeting #1**

#### What makes Erie special?



#### **Core Values Identified:**

- Quality of life
- Achievable goals
- Equity and access
- Resilience and vitality
- Rural and natural character
- Clean, healthy, safe
- Fiscal responsibility
- Workforce and opportunity



### Charette

- Met with Town board members, community leaders, and representatives to identify priorities for the SAP and community values.
- Priorities identified:
  - Walkability and bikeability
  - Education
  - Lead by example
  - Waste diversion





### Other SAP Engagement Tactics

#### **Sustainability in Action**

#### **Sustainability Accomplishments**

First established in 2019, the Town's Sustainability Division leads projects and initiatives that make a real difference in Erie. From scaling water conservation and renewable energy adoption, to improving waste diversion rates and creating sustainability first policies, the Sustainability Division works together with residents and businesses to reduce the climate change impact of Town actions and the activities of its inhabitants. These efforts are a testament to the power of the Erie community and our shared commitment to environmental stewardship. Below, explore our accomplishments and how we are making a positive impact, one step at a time.





## Emerging Themes from SAP Engagement

#### Important focus areas:

 Waste diversion, multimodal transportation access, renewable energy, and protection of natural resources.

#### Core values:

- Quality of life, equity, resilience, open space & recreation, and public health.
- To date, this project is well-received by everyone we have engaged with thus far.







## SAP Strategy Development

Countywide and Regional Plans	Also led by:
Boulder County Sustainability, Climate Action, and Resilience Plan	Community input from tabling events
Boulder County Transportation Plan	Steering Committee
DRCOG Priority Climate Action Plan	Staff engagement
BoCo Regional Transportation Electrification Plan	Charette
Weld County Environmental Services	Consultant expertise & best practices
	Boulder County Sustainability, Climate Action, and Resilience Plan  Boulder County Transportation Plan  DRCOG Priority Climate Action Plan  BoCo Regional Transportation Electrification Plan  Weld County Environmental





Parks, Recreation, Open

Space, & Trails Plan

### **Sectors for the SAP**

Sector	Description
Buildings & Energy	Building electrification, energy efficiency, renewable energy adoption, energy code
Waste & Materials Diversion	Residential and commercial composting, waste diversion, circularity
Transportation & Mobility	Vehicle electrification, expanding transit + transportation infrastructure
Nature- Based Solutions	Protecting the natural environment, resilience, agriculture
Education & Outreach	Educate and empower the community to take part in advancing sustainability and climate action

Equity and resilience built into each sector



## **Draft SAP Strategies**

## Buildings & Energy

#### **TOPIC AREAS**

- Advanced energy code adoption
- Benchmarking and reporting
- Programs for low-income households
- Renewable energy adoption

## Transportation & Mobility

#### **TOPIC AREAS**

- Improving and promoting trails, paths, and alternative transportation
- Car and bike share
- Continued community & town EV adoption
- Subsidized transit passes

# Waste & Materials Diversion

#### **TOPIC AREAS**

- Expand Recycling Center services
- Curbside composting
- Universal Zero Waste
   Ordinance
- C&D waste diversion
- Education



### **Draft SAP Strategies**

## Nature-Based Solutions

#### **TOPIC AREAS**

- Community agriculture
- Regenerative agriculture
- WaterWise, native landscaping, xeriscaping, and pollinator friendly practices
- Green infrastructure

## Education & Outreach

#### **TOPIC AREAS**

- Green Business Network
- Expand outreach (and targeted outreach) to promote energy efficiency and renewable energy resources
- Multimodal transportation advocacy

#### **Goal-Setting**

We will identify short-term and long-term goals within each sector to keep Erie on track to meet the 2030 & 2050 goals of this plan.

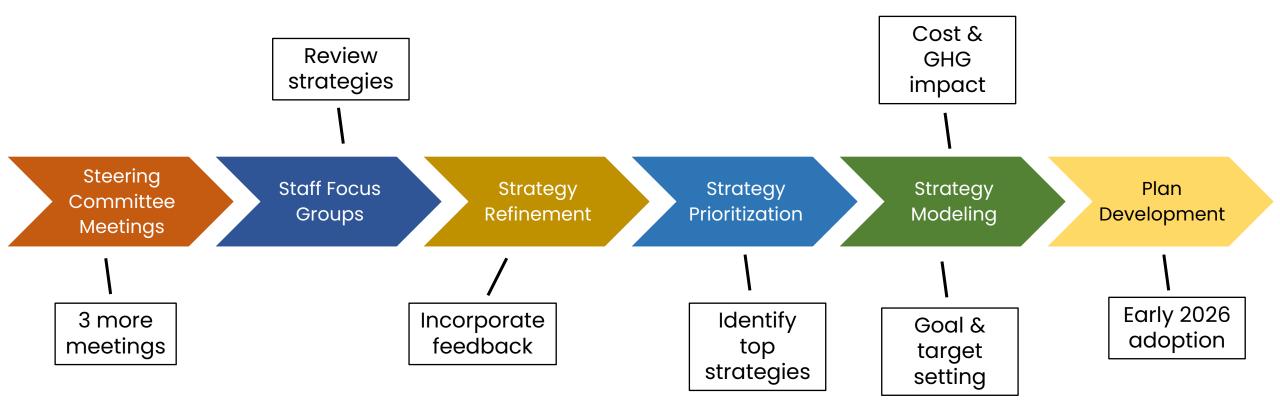


## **Looking Ahead**





## **SAP Next Steps**







Molly Marcucilli molly@lotussustainability.com

Eryka Thorley ethorley@erieco.gov