



Sustainability in Fort Collins, Colorado

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FORT COLLINS

College town combines its energies for a greener planet

2010s

WHOSE IDEA WAS IT?
When the renewable energy and fuel cell race is on, most think of solar and wind. But Fort Collins is also seeing a green transportation revolution. Self-powered "hybrid" diesel "E-Drive" (the use of the EET Energy team) provides electric power for "zero" to "near" the range for a hybrid, but efficient super turbochargers for cars and trucks. Smart Cities' concentration on energy power for the people, inventing ways to make the electric green and more sustainable and viable.



PLACE

HOW WAS IT INVENTED?
The EET Energy team has been working on this technology for over 10 years. It was developed in Fort Collins, Colorado, at Fort Collins State University. The team consists of several researchers and engineers who have been working together to develop this technology. The technology is based on a combination of diesel and electric power, which allows for a more efficient and sustainable power source. The team has been successful in developing a prototype that is capable of running on a single tank of diesel fuel, which is a significant improvement over traditional diesel engines. The team is currently working on refining the technology and preparing for commercialization.



PEOPLE

WHY HERE? WHY NOW?
Fort Collins is a leader in the renewable energy industry. The city has a strong commitment to sustainability and innovation. The city's location in the heart of the Rocky Mountain region provides a natural setting for renewable energy development. The city's population is growing, and there is a strong demand for sustainable energy solutions. The city's infrastructure is well-developed, and there is a strong network of researchers and engineers in the area. The city's government is supportive of innovation and entrepreneurship, and there are many opportunities for collaboration and investment. The city's focus on sustainability and innovation makes it an ideal location for the development of this technology.

INVENTION



HOW WAS IT INVENTED?
The team at Fort Collins State University has been working on this technology for over 10 years. It was developed in Fort Collins, Colorado, at Fort Collins State University. The team consists of several researchers and engineers who have been working together to develop this technology. The technology is based on a combination of diesel and electric power, which allows for a more efficient and sustainable power source. The team has been successful in developing a prototype that is capable of running on a single tank of diesel fuel, which is a significant improvement over traditional diesel engines. The team is currently working on refining the technology and preparing for commercialization.

SKILL SPOT: CREATIVITY

Fort Collins is a city of innovators. The city's focus on sustainability and innovation makes it an ideal location for the development of this technology. The city's government is supportive of innovation and entrepreneurship, and there are many opportunities for collaboration and investment. The city's focus on sustainability and innovation makes it an ideal location for the development of this technology.

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Context for Sustainability Work

City issues its first climate action proclamation



Organizational sustainability goals established



Municipal Sustainability & Adaptation Plan created

1999

2012

2013

2015

2019

Sustainability Service Area formed

*Environmental Services
Social Sustainability
Economic Health*

Did you know...

The City has Sustainability Goals that drive its daily operations? The goals are meant to inspire environmental, financial, and social stewardship.

- 1. Carbon:** Reduce greenhouse gas emissions and carbon footprints by 20% by 2020 and 50% by 2050. Set a goal to reduce greenhouse gas emissions by 20% by 2020 and 50% by 2050. Set a goal to reduce greenhouse gas emissions by 20% by 2020 and 50% by 2050.
- 2. Electricity & Natural Gas:** Reduce City energy consumption by 20% of the 2005 baseline by 2020, when demand peaks, and by 10% by 2020. Reduce energy consumption by 20% of the 2005 baseline by 2020, when demand peaks, and by 10% by 2020.
- 3. Food:** Reduce food waste by 25% by 2020 and 50% by 2050. Reduce food waste by 25% by 2020 and 50% by 2050.
- 4. Recycle & Waste Management:** Reduce solid waste by 20% by 2020 and 50% by 2050. Reduce solid waste by 20% by 2020 and 50% by 2050.
- 5. Education & Outreach:** Increase the number of employees who participate in sustainability programs by 20% by 2020 and 50% by 2050. Increase the number of employees who participate in sustainability programs by 20% by 2020 and 50% by 2050.
- 6. Funding:** Increase the amount of funding for sustainability programs by 20% by 2020 and 50% by 2050. Increase the amount of funding for sustainability programs by 20% by 2020 and 50% by 2050.
- 7. Parks & Natural Areas:** Maintain 20% of the City's land area as parks and natural areas by 2020 and 50% by 2050. Maintain 20% of the City's land area as parks and natural areas by 2020 and 50% by 2050.
- 8. Water:** Reduce water consumption by 20% by 2020 and 50% by 2050. Reduce water consumption by 20% by 2020 and 50% by 2050.
- 9. Sustainable Purchasing:** Increase the percentage of City purchases that are sustainable by 20% by 2020 and 50% by 2050. Increase the percentage of City purchases that are sustainable by 20% by 2020 and 50% by 2050.
- 10. Employee Safety & Health:** Reduce the number of lost workdays due to safety incidents by 20% by 2020 and 50% by 2050. Reduce the number of lost workdays due to safety incidents by 20% by 2020 and 50% by 2050.
- 11. Local Food:** Increase the amount of local food purchased by the City by 20% by 2020 and 50% by 2050. Increase the amount of local food purchased by the City by 20% by 2020 and 50% by 2050.

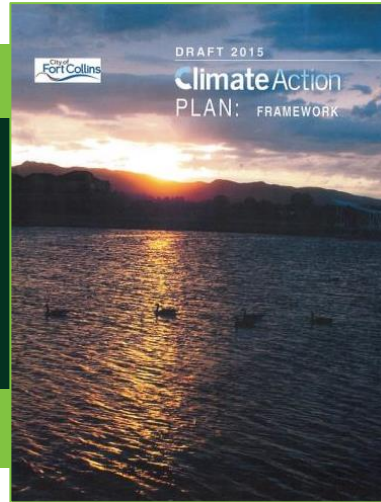
Climate Action Plan adopted

City of Fort Collins
2019 Municipal Sustainability and Adaptation Plan

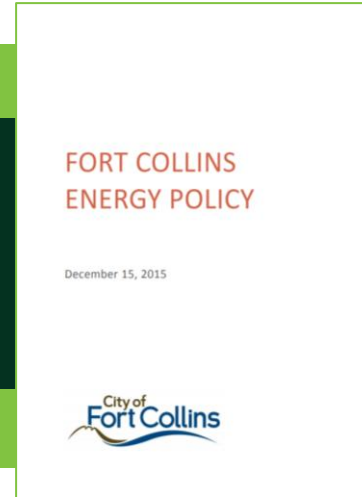


OUR CLIMATE FUTURE

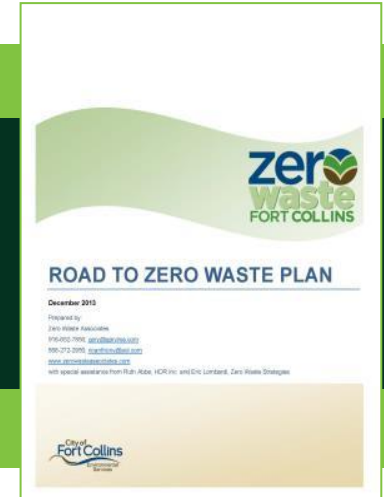
INCLUDES UPDATES TO:



Climate
Action Plan



Energy Policy



Road to Zero
Waste Plan

Equity = Process and outcome both

Process = ensures opportunities for all to co-create policies, tools and programs

Outcome = everyone benefits from a carbon neutral Fort Collins



Mitigation

- Energy
- Transportation
- Waste

Resilience

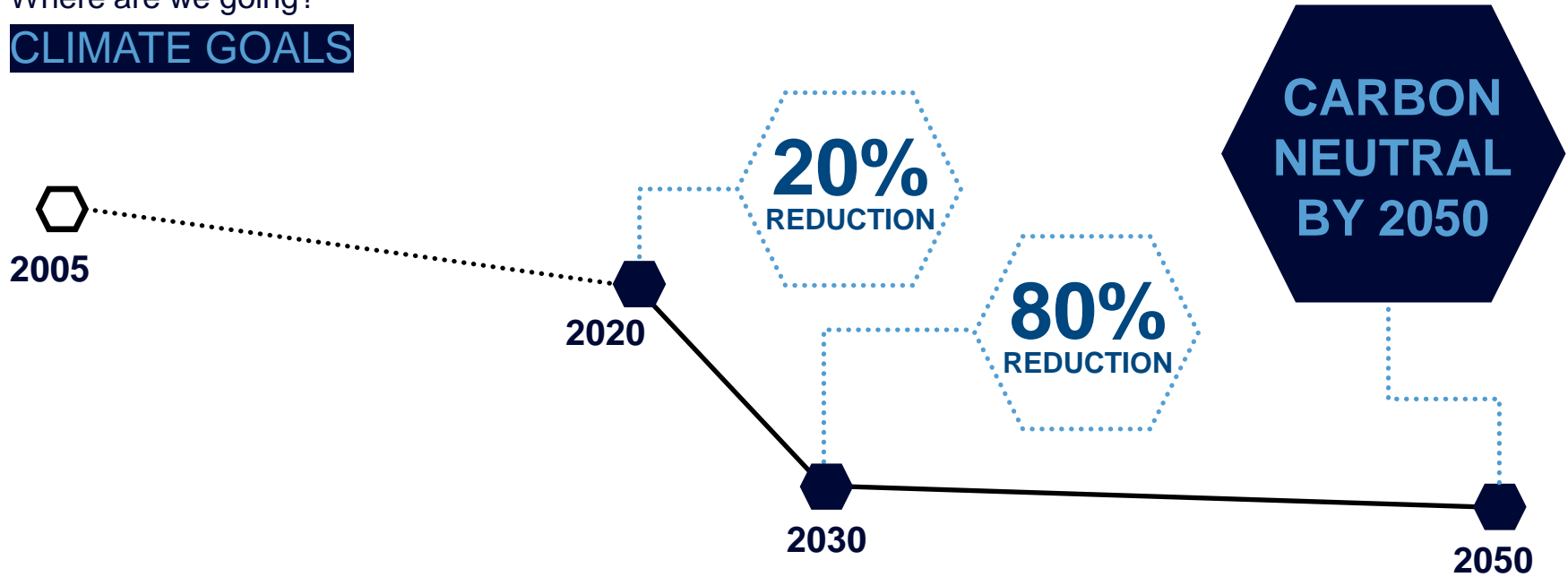
- Water
- Air Quality
- Extreme Heat
- Wildfire Risk

Equity

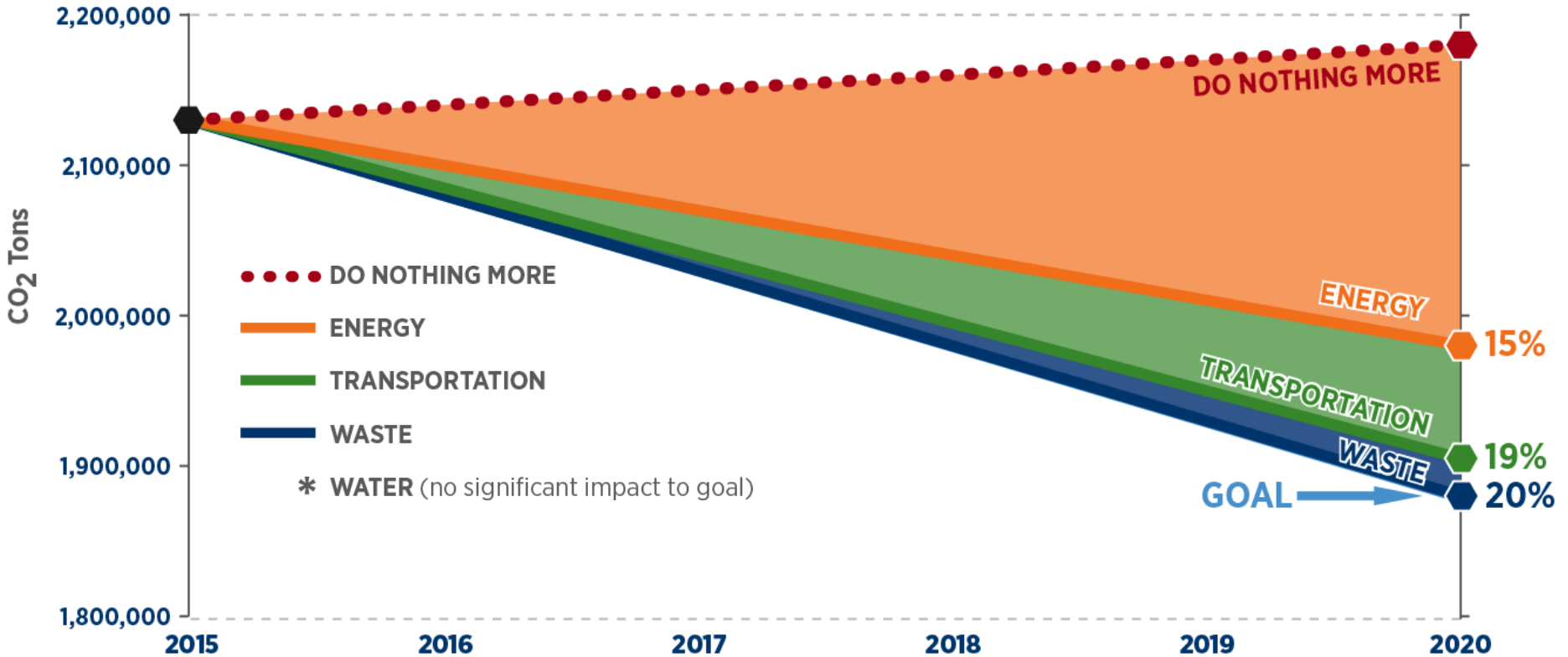
- Affordability
- Workforce
- All dimensions of diversity, including race

Where are we going?

CLIMATE GOALS



Getting to 2020 Goals





WASTE

Road to Zero Waste goals were set in 2013 to reach a **75% diversion rate by 2020 and Zero Waste by 2030.**

- **2020 progress:** The diversion rate in 2019 was 53% and did not meet the interim target in part because of delays in regional infrastructure to process yard and food waste, dramatic changes in waste and recycling markets for plastic, and an increase in per capita waste generation.



Goal 1. We Are Resilient



Goal 2. Our Public Lands Thrive



Goal 3. We Are Water Smart



Goal 4. We Are Zero Waste



Goal 5. We Are Carbon Neutral



Goal 6. We are a World Class Workplace



We Are Zero Waste



Goal 4 - We Are Zero Waste | We responsibly manage goods, products and services throughout their life cycle to achieve waste reduction outcomes.

Purchasing • Use • Disposal



Objective 4.1. City operations maximize the positive social, economic, and ecological impacts of City purchases and goods.

4.1.1. Adopt a comprehensive sustainable purchasing and contracting policy that incorporates triple bottom line thinking in alignment with City sustainability plans and goals.

4.1.2. Employees use a City-wide sustainable purchasing policy to guide procurement choices.

Objective 4.2. Employees sustainably utilize products and services to increase product longevity and reduce municipal consumption.

4.2.1. City departments adopt systems for comprehensive Sustainable Materials Management.

4.2.2. Educate City employees on how to sustainably utilize products and services.

Objective 4.3. City operations reduce disposable waste.

4.3.1. Implement waste reduction and recycling at all City facilities and operations.

4.3.2. Adopt comprehensive best management practices to handle and reduce municipally generated industrial waste (soil, aggregate, stormwater, etc.).

4.3.3. Responsibly manage waste originating from public spaces and public activities.

4.3.4. Responsibly manage waste originating from disruptive events or natural disasters.

Public



Industrial



Office

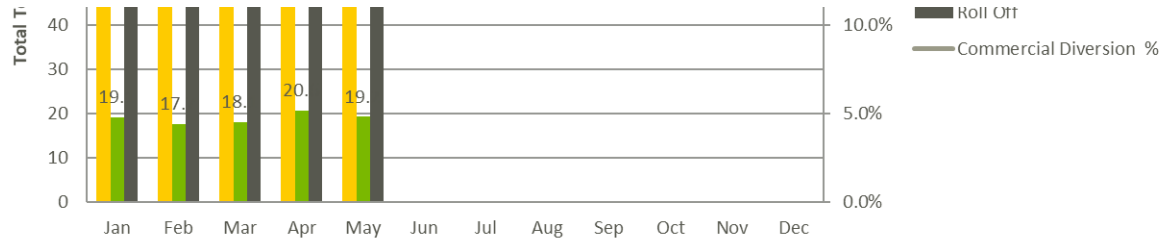




Total Commercial Materials Collected in 2019



We have data



Internal Communication/Education (office waste)

Engagement Program

Zero Waste Events and Meetings

Surveys

Audits

Mini Grants

Games



**Downtown
Transfort Waste
Audit**



