

WORK SESSION AGENDA ITEM SUMMARY

City Council



STAFF

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SUBJECT FOR DISCUSSION

Council Priority Update: Reduce Climate Pollution and Air Pollution Through Best Practices, Emphasizing Electrification

EXECUTIVE SUMMARY

The purpose of this item is to provide an update on work supporting the Council Priority to Reduce Climate Pollution and Air Pollution Through Best Practices, Emphasizing Electrification.

GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

1. What questions do Councilmembers have about the elements underway in this Council Priority?
2. Does the OCF approach align with Councilmember expectations for this priority area?

BACKGROUND / DISCUSSION

The City of Fort Collins has long been a regional and national leader in efforts to improve air quality and decrease emissions contributing to climate change. In early 2024 Council established a specific Council Priority for this term to *Reduce Climate Pollution and Air Pollution Through Best Practices, Emphasizing Electrification*. This update for Council and the community is shared in three parts: Context, Current Efforts, and Building to the Future.

The first section describes community-wide indicators that help inform the City's and community's efforts to reach Council-adopted goals. The second section highlights specific implementation initiatives that are driving change in key areas. And the final section summarizes how Our Climate Future (OCF) is evolving as a framework to help the City organization and the community strategically move forward together.

1) Context

Our Climate Future (OCF) is the community guide to reducing pollution and waste and adapting to the changing climate in Fort Collins, with a focus on people's day-to-day needs. OCF was adopted by Council in 2021 and continues the City's commitments to the specific data-based, timebound targets laid out in the previous Climate Action Plan, Energy Policy, and Road to Zero Waste.

The 2030 Council-adopted targets are:

1. **Cut greenhouse gas emissions by 80%** compared to 2005 levels.
2. **100% renewable electricity** from both the grid and local sources.
3. **Reach zero waste**, meaning nothing goes to landfill.

OCF uses a systems approach for solutions addressing those climate, energy, and waste goals while positively impacting the daily lives of residents and supporting community-defined priorities.

Greenhouse Gas Emissions

In addition to the 2030 goal of 80% reduction in climate pollution by 2030, Council has adopted a goal of reducing community-wide emissions 50% below baseline by 2026 and achieving carbon neutrality by 2050. In 2023, the Fort Collins community reduced community-wide greenhouse gas emissions (GHGs) 27% compared to 2005 baseline levels. Per capita emissions were down 44% over the same time period.

In the long term, electrification supports GHG reduction goals by transitioning energy loads from natural gas (methane) and petroleum to renewable sources; in the short term, electrification can lead to an increase in emissions from electricity generation until all Fort Collins electricity comes from renewable sources.

Key climate pollution reduction areas include:

- Lower community electricity use (3% decrease in electricity consumption since 2022)
- Increased local solar (36% increase in local electricity generation from 2022)
- Decrease in electricity emissions factor (lower GHGs / MWh) due to a decrease in coal at the utility scale
- Lower industrial manufacture emissions (69% reduction in emissions from 2022)
- Decreased materials going to landfill (13% decrease in tons of waste from 2021)

Air Quality

Consistently, Fort Collins' air quality measurements indicate numerous days each year deemed "unhealthy" or "unhealthy for sensitive groups", according to the Air Quality Index (AQI). The number of unhealthy days fluctuates between 5 or 6 days per year to over 30 days in a single year.

Drivers of poor air quality in our region include:

- Environmental sources (e.g., wildfires)
- Regional sources (e.g., oil & gas extraction, transportation)
- Local sources (e.g., transportation, industry, small engines)
- Indoor sources (e.g., cleaning products)

Key air pollution area of focus:

- Summertime Ozone – the North Front Range continues to violate federal health-based standards and earn "F" grades from the American Lung Association. Ozone levels are impacted by regional emissions from oil and gas, plus other local emissions. Electrification is an important strategy because vehicles and small gas engines, such as lawnmowers and leaf blowers, are a large part of the local contribution to air pollutants.

Renewable Electricity

Fort Collins electric utility customers currently receive more than half of their electricity from renewable sources, with Platte River's (PRPA) Integrated Resource Plan (IRP) helping the community reach its Council-adopted goal of 100% RE by 2030. The Our Climate Future goal is based on annual energy consumption, meaning that when the community generates more renewable electricity than is consumed, we will have met our OCF-defined goal. PRPA's Resource Diversification Policy targets operational achievement of 100% renewable electricity, meaning, all electricity generated would be from non-carbon resources. Forecasts currently identify that our consumption-based OCF goal can be met by 2030, while PRPA's generation-based goal will likely reach approximately 88% by the end of 2030.

Key statistics regarding renewable electricity:

- Between 2005 and 2023, consumption on the electric grid has advanced from 20% non-carbon (renewable) resources to 49%
- The Our Climate Future plan identifies 5% of local generation coming from local resources, with a current local distributed solar contributing approximately 3.4%

The local goal was developed as part of a larger strategy for reducing emissions from electricity use, including by driving more energy efficiency and encouraging electrification. At the time the goals were developed, Fort Collins local DERs accounted for approximately 1.5% of community electricity, and therefore the goal represented an increase of 233%. At the end of 2024, local distributed generation accounted for approximately 3.42%, and on track for achievement of the 2030 goal.

The establishment of the 5% goals was informed by an analysis of local solar rooftop potential (availability of physical space), economics – including available and/or uncertainty of tax credits and incentives, and local resources available to drive solar, including Utility incentives and available workforce. Staff have confidence the existing and forecasted Utilities budget has the right levels of incentives and infrastructure to achieve the existing goal. An expansion of the goal would likely require additional resources that we do not believe are the best use of funds at this time.

2) Current Efforts

The focus of this Council Priority has been on strategic, achievable, near-term initiatives to reduce pollution, primarily through electrification in three key areas, to help advance toward community goals during this Council term.

- A) Electrification of Buildings
- B) Electrification of Transportation/Fleet Vehicles
- C) Electrification of Small Engine Equipment

Buildings

Economic and behavioral efforts: City programs have a long history of financial and behavioral based efforts encouraging efficiency and conservation of energy in buildings, and Staff have continued to evolve voluntary programs to include electrification-based incentives and advising services. For the context of this Council priority, it's important that effort continued to prioritize efficiency ahead of electrification to minimize grid infrastructure impacts.

- Utilities residential programs have included addition of residential heat pump and heat pump water heater incentives, phase out of natural gas furnace incentives, and introduction of electric panel

upgrades incentives. Across programs, \$4.4 million in incentives were paid for community through participation in voluntary programs with Utilities.

- Utilities continues to evaluate effectiveness of the time-of-day rate structure and other behavioral program efforts such as behavioral home reports.

Regulatory efforts: Staff continue to evaluate regulatory emissions and electrification-based efforts in the context of other Council priorities as well as from a community member perspective.

- Staff are currently in 3-year cadence of updating codes and local amendments. Last updated on April 22, 2022, this code update includes alignment with new state requirements and legislation, enhancements to simplify the building energy codes framework, and potential inclusion of wildfire resiliency code requirements. Legislative efforts through the City Manager's office and the Legislative Review Committee also support bills and other legislation at the state level supporting community and Council priorities.
- The Building Performance Standards policy has been discussed with Council and is currently in a pilot phase to test the assumptions used in policy development, validate the requirements and resources required for implementation, and to continue the economic impacts and feasibility of the policy. Staff are currently working with six building owners of a diverse set of commercial properties and foresee completing this pilot effort in the summer of 2025, and plan to report back to Council with findings.

Infrastructure updates: City efforts continue to advance the existing infrastructure, and are often embedded in existing processes across City service areas.

- Utilities continue evaluating existing electric grid infrastructure and our future asset management plans to support building and transportation electrification. For example, field staff are currently upsizing distribution transformers when replacing existing infrastructure anticipating the need for additional loads.
- Staff continue to work with partners to ensure the existing and future operational technology is in place and recently completed a Utilities technology Assessment roadmap to identify a future state application landscape that best support utilities customers and City goals.
- Staff continue supporting workforce development through education and alignment with local trades and developers.

Transportation and Fleet Vehicles

In 2024 and 2025, the City has been updating the Electric Vehicle Readiness Roadmap (EVRR) to support current and future adoption of EVs in our community. This plan identifies tactics and strategies that align with the Transportation Master Plan and Active Modes Plan to advance toward City goals. The vision for the plan is Fort Collins will promote the community's adoption of electric vehicles through equitable access to charging infrastructure, engaging outreach and education, innovative policy approaches, and leading by example.

Economic and behavioral efforts: Utilities has supported community awareness and education for electric transportation options through the launch of several resources, including incentive-based and technical advising services related to electric vehicles.

- The Efficiency Works EV shopper tool allows community members to compare electric vehicles with traditional combustion engine and hybrid vehicles. This tool can be used for both personal and fleet electric vehicle exploration and shows the total cost of ownership evaluation and available incentives by eligible vehicle.

- Efficiency Works supports upfront incentives for the installation of public level 2 EV charging infrastructure
- Efficiency Works also supports fleet electrification through study-based incentives and a planner tool

Regulatory efforts: During the 2022 code adoption process, Council supported adding EV infrastructure requirements into building code, represented as percentage of parking spaces for new construction for EV capable, EV ready and EV installed categories of infrastructure. In 2025, Council will likely be presented with options and recommendations for:

- Evaluate and refine the EV charging requirements within the Building Code
- Incorporate elements of the proposed statewide EV Model Code language into the Land Use Code

Infrastructure: The EVRR includes several benchmarks for comparing existing quantity of EV charging infrastructure across communities. The study identifies that the community is close to the appropriate estimated number of level 2 chargers (147 existing public level 2 ports out of recommended 151 ports), while falling shortly behind for level 3 charging (6 existing public level 3 ports out of recommended 15 ports).

Lead By Example for EV Adoption: City of Fort Collins Fleet Vehicle Conversion continues with many new purchases of vehicles including hybrid or battery electric vehicles.

- 989 Total Vehicles, Including Police Patrol Vehicles
 - **36** Battery Electric Vehicles
 - **38** Hybrid Vehicles
- Transfort Transit Conversion
 - 57 Total Transfort Buses in Service
 - **6** Battery Electric
 - **5** Additional Battery Electric Buses Expected Delivery: Early 2026

Small Engine Equipment

The City has long supported transitions of small engine equipment to electric alternatives, especially as electric options have become more reliable. Recently, Colorado's Air Quality Control Commission adopted [Regulation 29](#) restricting the use of push/hand-held gas-powered landscaping equipment under 10 horsepower by public entities and their contractors during ozone season (June 1 through Aug 31) beginning in 2025. Public entities will be required to report their compliance to CDPHE's Air Quality Control Division on an annual basis beginning June 1, 2026. Relevant City departments are working to conform to Regulation 29, building on existing efforts towards electrification of equipment.

- Natural Areas: **80%** Electrified
- Parks: **91%** Electrified
- Other Departments actively converting and cataloguing

2050 Tax Impacts

Additionally, a 2023 voter-approved sales tax provides dedicated sustainable revenue to advance several of the above efforts and additional initiatives. In 2024 alone, nearly four million dollars in funding from the climate and air quality portion of the 2050 Tax delivered direct impacts for the Fort Collins community.

Funding was prioritized for projects that focused on transportation, buildings and electricity (primary contributors to air & climate pollution) while also improving community resilience, safety and accessibility.

2024 Outcomes from 2050 Tax Investments:

- Projects helped reduce the impact of rising energy costs, benefitting affordability, comfort and safety, especially for low income and underserved households.
- Projects that engaged with community members and small businesses helped build relationships and create opportunities for the City to learn from our community.
- Direct home improvements and loans increased climate resilience and health for residents, especially regarding increasing summer temperatures and poor air quality.
- Several projects contributed to foundational planning or research on topics including integrated community transportation systems, under-resourced community buildings, and riparian carbon sequestration and watershed health.

2024 Direct Impacts from 2050 Tax Investments:

- **75** direct home upgrades and **31** loans for residential energy efficiency, comfort and safety
- **60** residential indoor air quality assessments
- **27** sustainability workforce scholarships
- **16** grants to local food service businesses to reduce single-use plastics
- **7** electric utility carts to replace gas carts
- **3** major Active Modes infrastructure improvements for safety, connectivity and accessibility
- **3** comprehensive lighting upgrades to community centers
- Support for **140** affordable homes to go above-and-beyond code for sustainability
- Repair of community solar project, supporting **500 kW** of local solar generation

3) Building to the Future

Climate change threatens not just the environment around us but also the local economy, living costs, and human health. The ambitious Council-adopted goals and community-driven Big Moves established in Our Climate Future require bold and transformational action to achieve. Sustained, transformational change can be in tension with near-term priorities and resource constraints associated with two-year and four-year budget and election cycles.

OCF is a framework designed to help bridge that divide and guide Fort Collins toward a sustainable future while focusing on the needs of community members and putting people first. With the advent of the 2050 Tax revenue for helping achieve carbon neutrality in the next 25 years, there is an increasing need for a more comprehensive and long-term strategy to map out the effective use of local government “levers” for progress (i.e., Economic, Regulatory, Infrastructure Investment, and Behavior Change).

After several years of OCF being leveraged to coordinate, guide, and report on sustainability efforts related to the three goal areas, an evolution of the structure and systems is underway to enhance strategic implementation. Much has changed – in the City organization and the world – since OCF was developed in 2019-21. And we continue to be in a time of growth and transition that allows for OCF to become more effective, integrated and inclusive of the City’s sustainability efforts.

This work will lead to an OCF Strategic Funding Plan later this year to effectively map and resource implementation strategies with timely accountability to Council and taxpayers to meet goals, steward taxpayer funds, and report on progress.

NEXT STEPS

Staff will continue supporting electrification efforts for the City organization and the community, while partnering with PRPA to achieve 100% renewable electricity for Fort Collins. Several key Council Advisory Boards are being engaged as strategic thought partners for this work. A Council Work Session will be scheduled in Q4 to review final 2025 outcomes from this Council Priority and to discuss the OCF Strategic Funding Plan.

Staff are currently exploring a number of potential pathways to increase efficiency and curb emissions in our built environment, prioritizing a Building Performance Standards (BPS) policy framework and pilot program, and an update to the building & energy code. Staff are exploring if and how a proposal for a Large Methane User Fee (LMUF) complements the policies that are already under development to determine impact, efficacy, and timing, in addition to the trade-offs that may exist if such a policy was to be implemented.

ATTACHMENTS

1. Presentation