

EAC Recommendations  
Emissions Reduction &  
Carbon Neutrality

Feb.25, 2020



# History & Timeline

- Laramie Greenhouse Gas Emissions Inventory 2018 report is published (Jul.2019)
- EAC asked by Laramie City Council to provide emissions reduction recommendations, creates subcommittee (Dec.2019)
- EAC approves subcommittee recommendations, submits to the City of Laramie (Feb.2020)



# Objectives & Approach

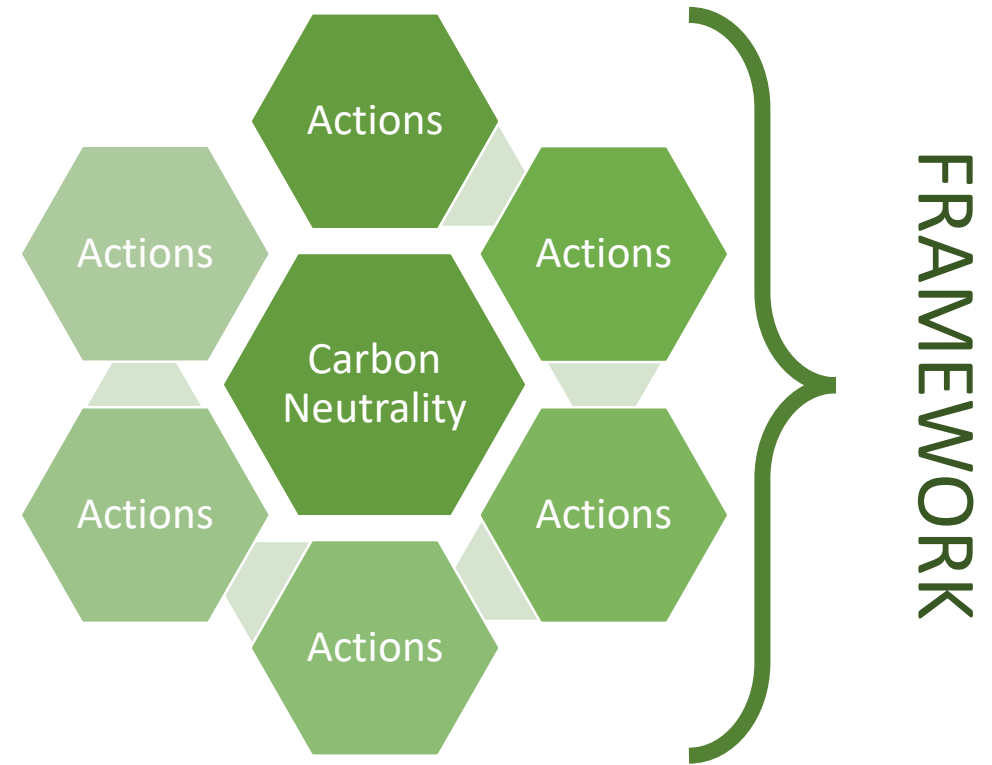
- Reduce greenhouse gas emissions (GHGe) and achieve “net zero” emissions by 2050
- Net zero: to make the *net* greenhouse gas emissions—including efforts from reduction, capture, and offset—as close to zero as is possible
- Recommendations cover municipal operations and city community
- Where possible, recommendations reduce emissions and provide a financial return on investment



# Framework & Targeted Recommendations

Framework Recommendations provide a *guiding structure and strategy* for overall emission reduction, carbon neutrality, and sustainability.

Targeted Recommendations provide *specific actions* toward emission reduction and carbon neutrality.





# Establish Goals

- We recommend that Laramie publicly establish goals for municipal operations and community emissions reduction.
  - **These goals will provide tangible targets.**
  - Suggested goals are similar to those of other regional cities.

Municipal operations emissions reduction from 2018 baseline:

**50% reduction by 2030, 90% by 2040, achieving net zero by 2050**

City community emissions reduction from forthcoming baseline survey:

**30% reduction by 2030, 70% by 2040, achieving net zero by 2050**



# Draft Comprehensive Plan

- We recommend developing a comprehensive municipal operations emissions reduction plan, followed by a separate community plan.
- **A plan will provide a detailed roadmap for actions and budget toward net zero emissions.**
- Similar plans from other cities are available and can be used as models.



# Perform Regular Emission Assessments

- We recommend officially approving emissions baselines and performing GHGe inventories on an annual or biennial basis to compare progress against the baseline inventory, demonstrate impact of policies and solutions, and adjust actions based on feedback.
- To provide transparency, findings should be made publicly available in easy to read reports.
- **Assessments will provide feedback and the ability to adjust actions.**





# Implement Outreach

- We recommend that the City of Laramie initiate and support an “Emissions Reduction Community Network” to provide inspiration, guidance, and resources for emissions reduction efforts by citizens and businesses.
- This can include web-based resources, community engagement, and methods to connect interested parties.



# Provide Training

- We recommend providing energy efficiency and emissions reduction training to city personnel to help identify efficiency solutions and to build a culture of energy efficiency and emissions reduction.



# Explore Financing

- We recommend identifying extra-municipality sources of funding for city projects to help reduce emissions.
- This includes grants, partnerships, an emissions reduction initiative fund, and other mechanisms.
- Example:
  - Rocky Mountain Power Blue Sky grants just announced \$350,000 availability for renewable energy projects in the state of Wyoming.



# Streamline Procedures

- We recommend reviewing and adjusting all relevant ordinances, policies, and permitting procedures so as to streamline renewable energy and energy efficiency projects for individuals and businesses.



# Upgrade/Replace Current Fleet Vehicles

- We recommend that the City of Laramie develop and implement a “Green Fleet” purchasing policy wherein purchases of new fleet vehicles are mandated to be the lowest emission vehicle possible, with special effort made to purchase electric vehicles.

\*This recommendation may provide significant return on investment.



# Replace Maintenance Equipment

- We recommend that the City of Laramie consider phasing out two-stroke engines for landscaping and other maintenance equipment (e.g., lawn mowers, leaf blowers, trimmers) in favor of cleaner electric or four-stroke engine options.



# Continue Improving Facility Energy Efficiency

- We recommend that the City of Laramie continue to seek opportunities for energy efficiency upgrades.
- Existing audits, power usage information from invoices, and additional monitoring devices could be used to identify areas where efforts should be targeted and inform efficiency decisions.



# Install Rooftop Solar on Municipal Facilities

- We recommend that the city invest in photovoltaic arrays installed on all eligible and feasible municipal building rooftops.
- Installation of photovoltaic systems can make a considerable difference in overall carbon emissions by the city, as well as work to offset at least part of the city's considerable energy costs.





# Facilitate Rooftop Solar Bulk Buy Program

- The City of Laramie should consider facilitating or co-facilitating a rooftop solar bulk buy program in order to encourage adoption of community solar energy.
- Bulk buy programs reduce costs for community members who wish to install photovoltaics by consolidating their purchasing power through a centralized point of contact.
- Similar programs were successfully facilitated in Utah (and other locations) with up to 25% cost reductions.



# Reduce Solid Waste Management Emissions

- Since a large share of the city's emissions are derived from solid waste management, we suggest multiple actions to reduce these overall associated emissions.
- Continue the current green waste program and expand it to include larger-scale community composting solutions.
- Support increasing recycling opportunities.
- Review other ways to reduce emissions in the comprehensive plan.



# Increase Natural Carbon Capture

- When landscaping and reclaiming disturbed areas, we recommend choosing plant species strategically for carbon-storage capacity.
- Continue and expand opportunities for community gardens.



# Thank you

The EAC wishes to thank the Laramie City Council for allowing them the opportunity to provide these important recommendations and for their consideration.

