



Citizen Advisory Committee statement on goals?

- reaffirm the current goal to reduce communitywide greenhouse gas emissions 20% below 2005 levels by 2020,
- set the aspirational goals to reduce communitywide GHG emissions 80% below 2005 levels by 2030,
- and 100% by 2050 (carbon neutrality).

Citizen Advisory Committee finds:

- that the suite of strategies identified through the process to develop the CAP Framework Feasibility Plan indicates potential feasibility of achieving accelerated goals (20% reduction by 2020, 80% reduction by 2030 and carbon neutrality by 2050),
- recommends City Council adopt the *Framework Plan*
- recommends development of a (2020?) Implementation Plan
- Recommends exploration of public engagement, financing and cost mitigation approaches
- Recommends xx first steps

Analysis review by CAP Core Team (Platte River, Brendle, RMI, staff)

Adjustments:

- Revised BAU electricity consumption to account for baseline annual efficiency savings
- Revised representation of PR outputs
- Consistently included PR's surplus sales in all segments of analysis (causing higher GHG emissions factor)
- Added program costs for fuel switching
- Adjusted (up) program cost of City role in efficiency programs
- Adjusted (up) energy use intensity of new buildings
- Revised analysis to just apply vehicle electrification to cars (trucks not included)

Cost analysis

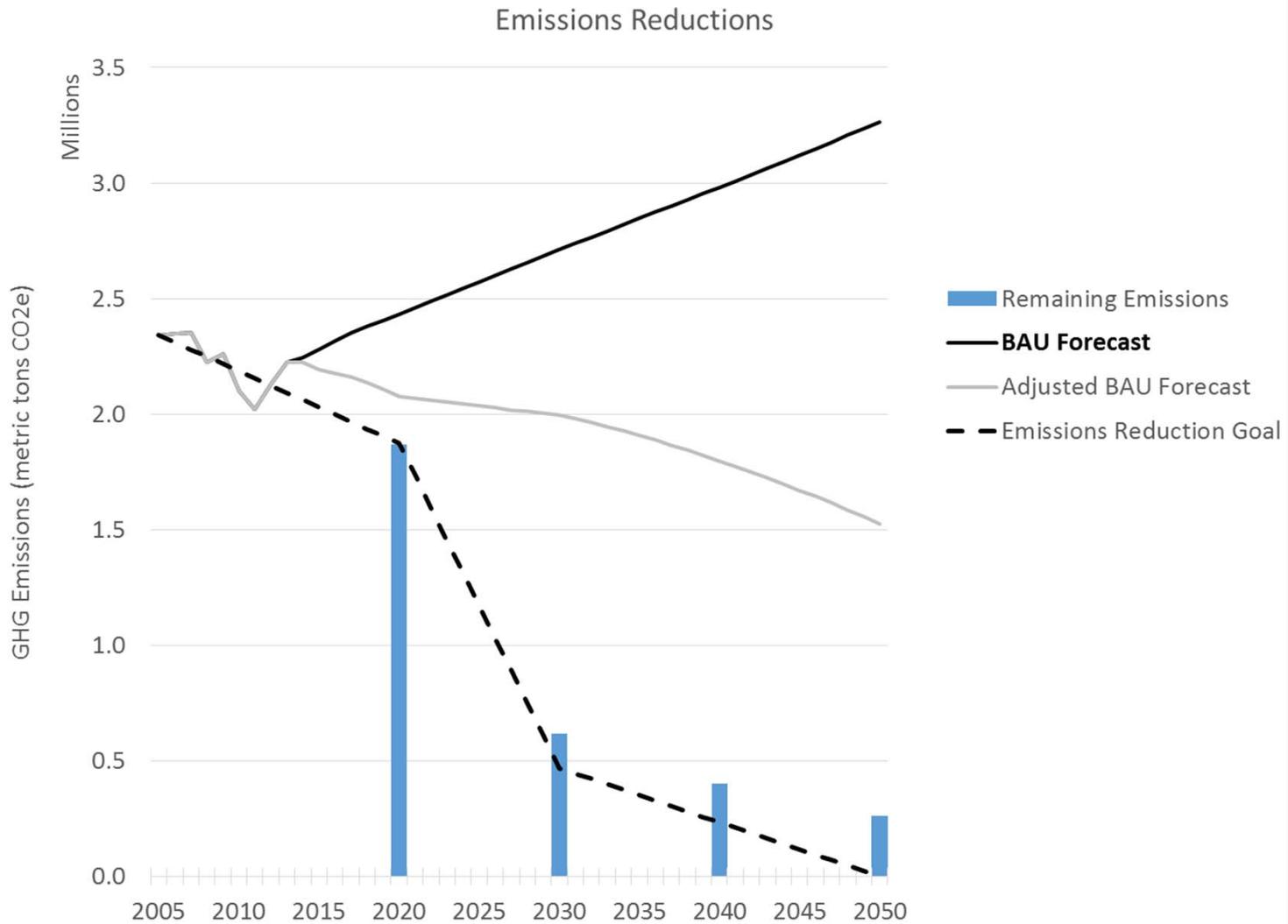
- Generally addresses total cost, not incremental cost, therefore more conservative
- Uncertainties require providing cost estimates in a range

Caveats:

- Does not include cost of storage and integration technologies for local distributed renewables
- Does not consider stranded costs of Platte River retired assets and FC distribution system
- Does not consider multiple indirect cost savings to community

- Electric supply: 80% reduction in PRPA emissions factor
- Existing homes and businesses:
 - Are 36% more efficient
 - 25% of homes and 5% of existing commercial buildings are converted to all electric (heating, cooking, etc.)
 - 22% of homes and 50% of businesses have installed solar
- New construction:
 - Will be 36% more efficient than current code
 - 100% will have enough solar PV to achieve net zero energy
 - 50% of new homes and 25% of new businesses will be all electric
- Vehicles and Mileage:
 - 50% are electric vehicles
 - Remaining 50% are ~40% more efficient than avg. new stock
 - On the whole, people are driving 29% less miles per year

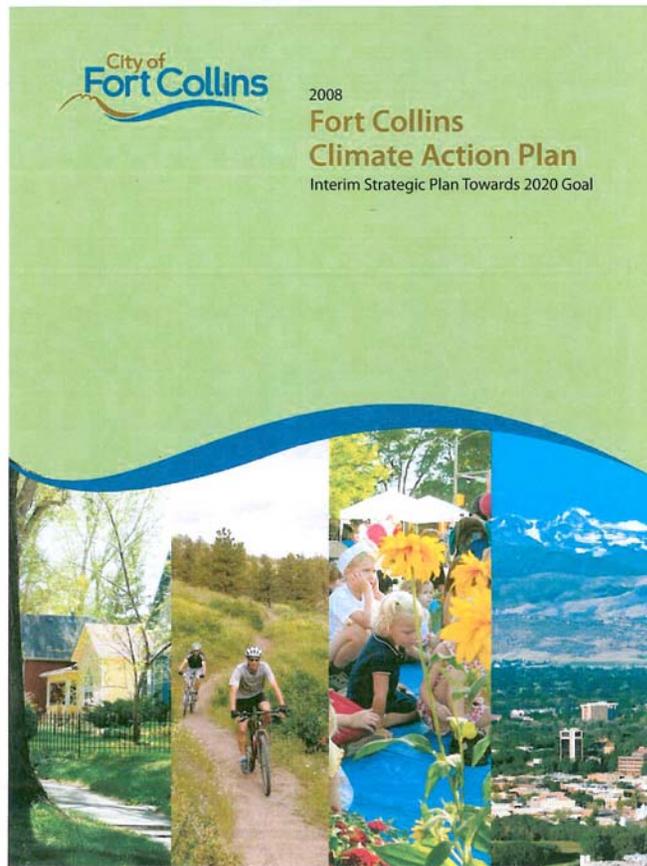
- Green Building for New Construction and Redevelopment
- Shift Land Use Patterns to Shorten/Reduce Number of Trips
- Increase Energy Efficiency – Residential
- Increase Energy Efficiency – Commercial and Industrial
- Drive Adoption of Multi-Modal Transportation
- Fuel Efficient & Electric Personal Vehicles
- Advance Cleaner Energy at the Utility Scale
- Advance Residential and Commercial Solar Adoption
- Shift Heating Loads Away from Natural Gas
- Road to Zero Waste
- Carbon Sequestration



	2020	2030	2040	2050
% Below 2005 Baseline	20%±	75%±	85%±	90%±
Net Cumulative Costs/Savings <i>(Jan 7th Results)</i>	\$290-300M Cost <i>(\$300M Cost)</i>	\$260-370M Savings <i>(\$390M Savings)</i>	\$2.8-3.7B Savings <i>(\$2.8B Savings)</i>	\$7.0-9.9B Savings <i>(\$7B Savings)</i>

Assumptions:

- Includes Cost of Carbon for all fuels
- Savings range shows 2.5% to 5% discount rate
(2.5% in Jan 7th results)



December 2008

Goal

- Community leadership
- Attract outside capital
- Enhance innovation
- Spur community engagement

Climate Action Plan (CAP)

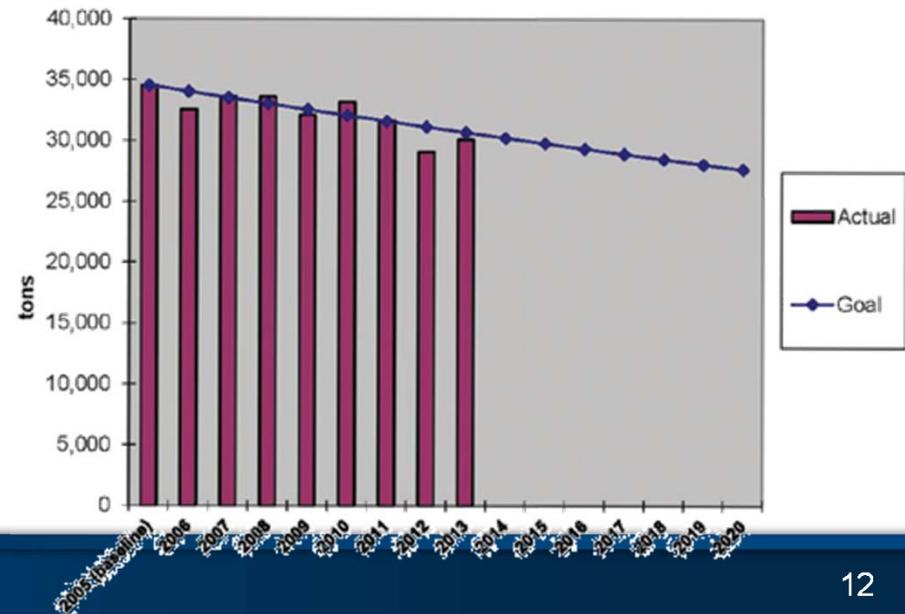
- Demonstrates feasibility
- High level strategic plan
- Roadmap for 15+ years
- Requires periodic updates
- Each action requires further analysis and vetting

Colorado State University (Largest Employer in Fort Collins)

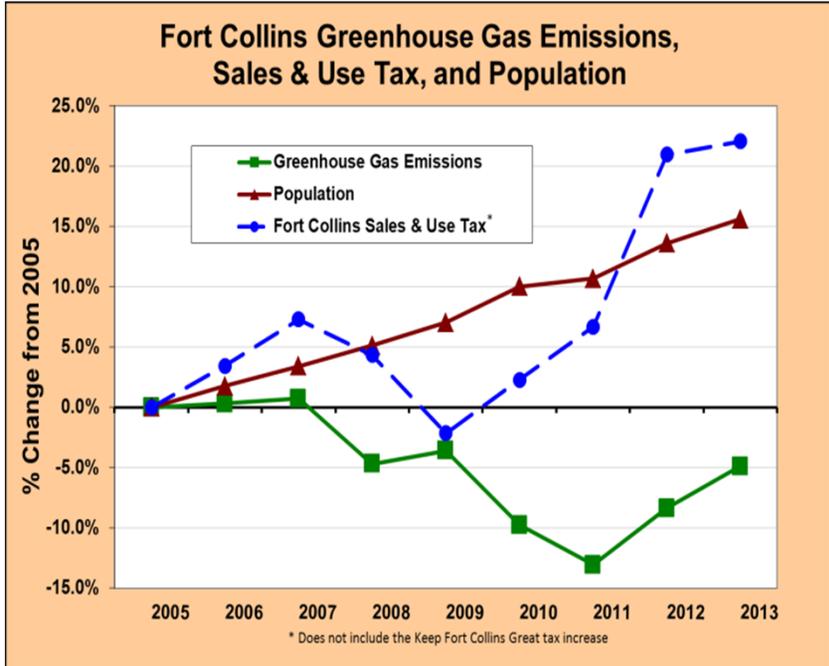
- #1 source of commuting miles in Fort Collins
- On path to carbon neutrality by 2050
- Achieved 6% GHG reduction despite 5% increase in students
- Working to reduce commuting miles and fleet fuel consumption → In 2014, CSU hired an Alternative Transportation Manager for this purpose
- Participant in DENC's Workplace Charging Challenge & Drive Leadership programs
- International academic leader in environmentally conscious initiatives and clean-energy research



- **Poudre School District (2nd Largest Employer in Fort Collins)**
 - Currently on track to reduce emissions 20% by 2020
 - One of two school districts in Colorado recognized in 2012 as Gold Leaders by the Environmental Leadership Program
 - Alt. transportation infrastructure in place with plans for more, encouraging/enabling staff to walk/bike more



Fort Collins Community



Climate Wise

Colorado Clean Energy Cluster

...and more