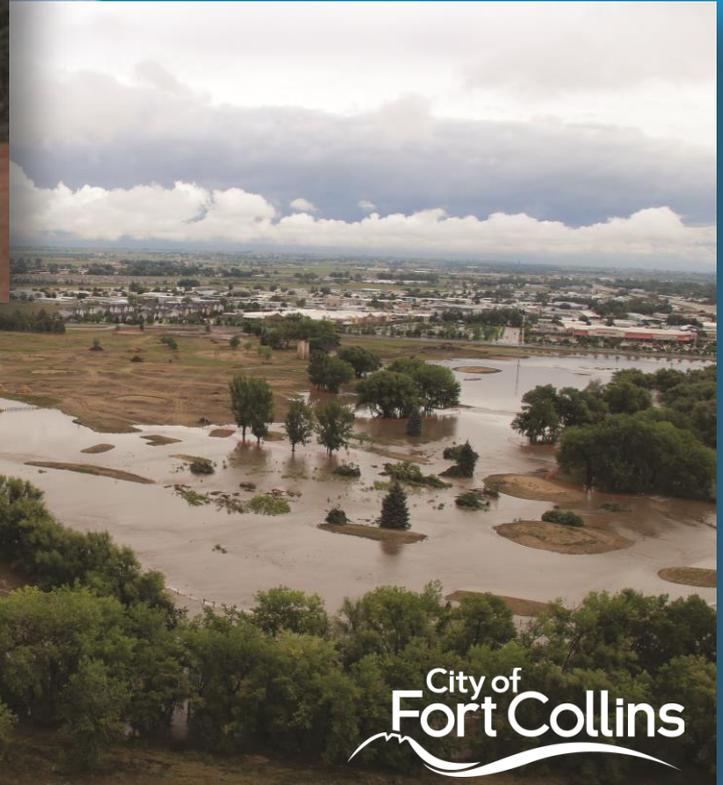


# Fort Collins: Pursuit of a Net Zero Community

Bruce Hendee, Chief Sustainability Officer  
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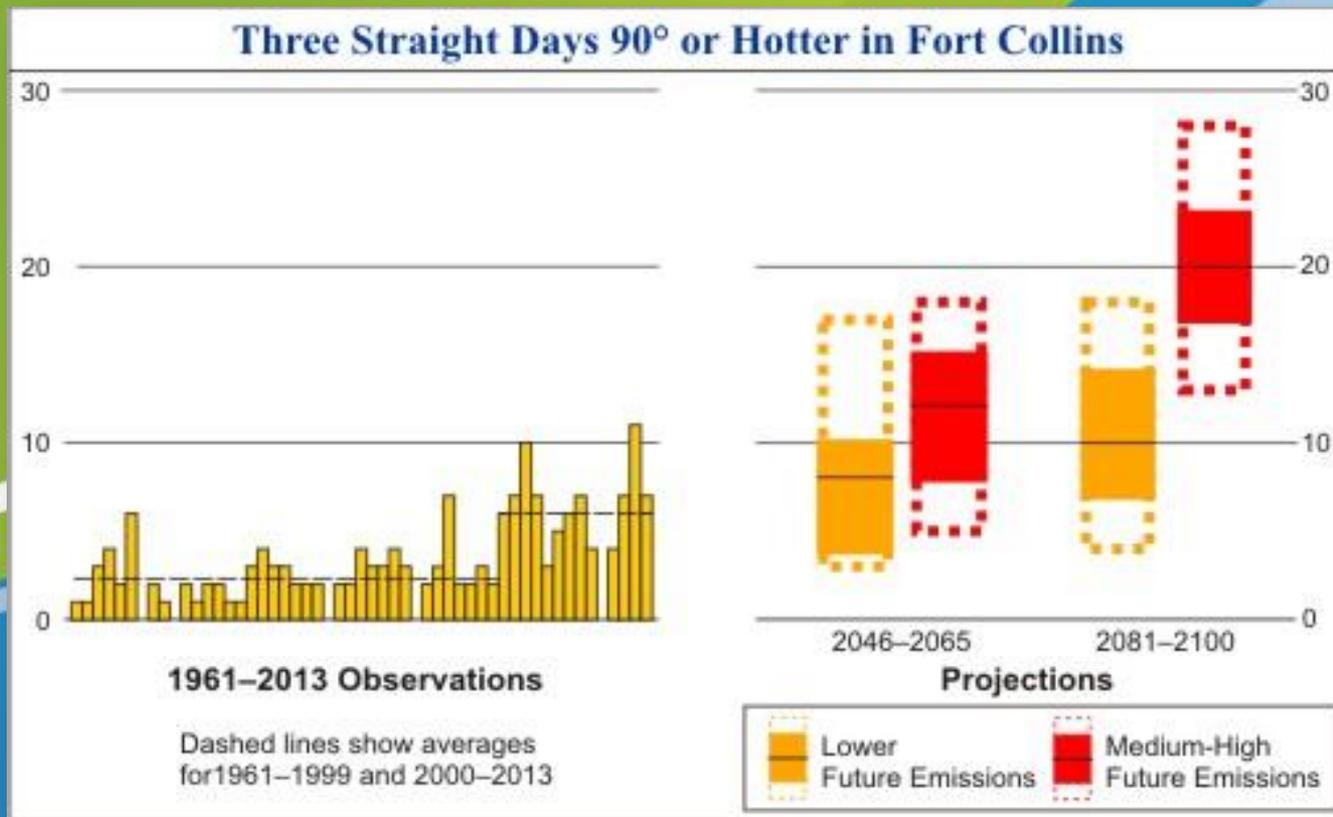
# WHY?



City of  
Fort Collins

- High Park Fire 2012
- 2013 Flood
- Low carrying capacity vs. population growth
- One Planet

# Climate Change is Impacting Us



A hand holding a magnifying glass over the word 'Focus'. The magnifying glass is positioned over the word 'Focus', which is written in a large, white, sans-serif font. The background is a vibrant green and blue gradient with diagonal lines.

# Our Focus

Two major categories of effort:

- Resilience
- Carbon reduction

# EPA /Fort Collins Partnership

Fort Collins Mayor on President's Task Force on  
Climate Preparedness and Resiliency  
Assigned to Built Systems Subgroup  
Climate Hub (USDA)



# Sustainability Services

## Triple Bottom Line

- Environment
- Economy
- Social

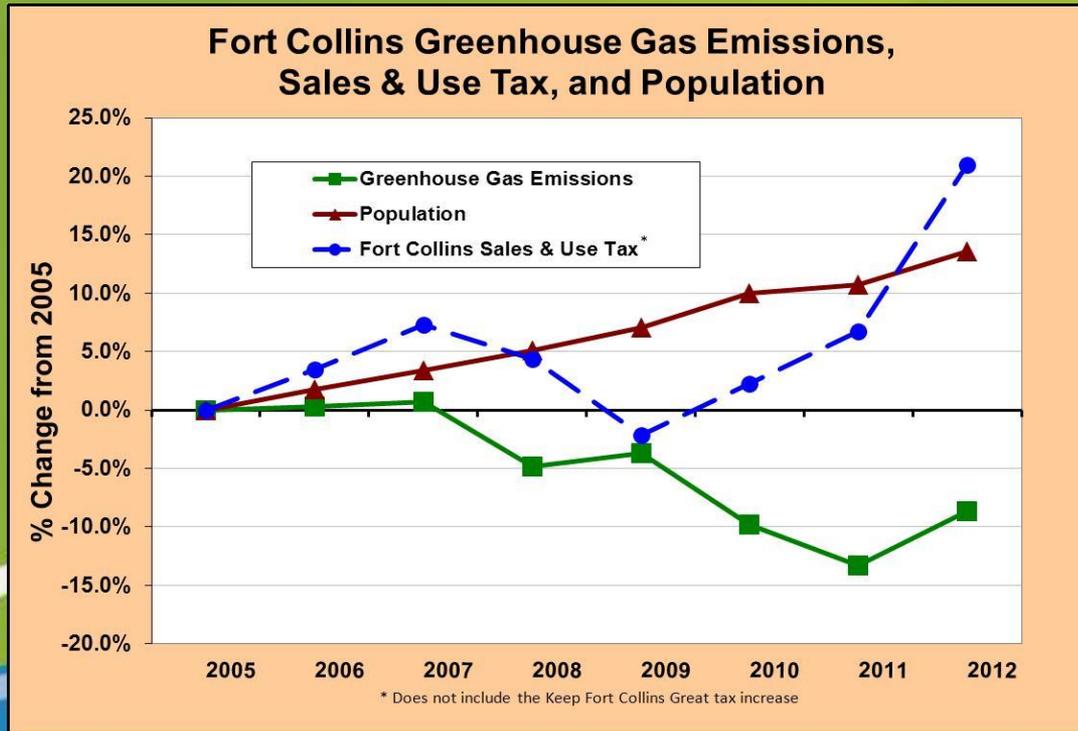
A Unique Management Structure  
for Environmental, Economic,  
and Social Sustainability



Sustainability Services  
Area Established in 2011

City of  
**Fort Collins**

# Successes



8.7% reduction in carbon emissions since 2005, 13% increase in population

# Successes



MAX opening May 2014

DENC

ClimateWise

Road to Zero Waste

Net Zero Cities

FortZED

Green Building Roadmap

Solar Power Program

Home/Biz Efficiency

Green Purchasing

1.5% Reduction/Year in Electricity

Go Solar in 2014



Business Smart.





**Net Zero Cities**  
Global innovators for a low-carbon future

Net Zero Carbon | Net Zero Water | Net Zero Waste



15 Countries, 3 Cities, Corporations





# Prototyping solutions in Net Zero Energy

Finance	System	Percent Generation	MWH generation
Private	ESCO Model	20%	46,000 MWh
City	LED Streetlights	1%	2,300 MWh
Private/PPA	Solar Downtown	5%	11,500 MWh
Utilities- Smart Grid Grant	Demand Response	5%	11,500 MWh
Private (Woodward)	Combined Heat and Power	15%	34,500 MWh
Consumer	Prepay	5%	11,500 MWh
Utilities	Conservation reduction	2%	4,600 MWh
Utilities (PPA)	Waste to Energy	10%	23,000 MWh
PRPA/FCU	Utility scale solar	33%	75,900 MWh
CSU	Wind	10%	23,000 MWh
	District heat (Lincoln)		
		106%	



## Prototyping solutions in Net Zero Energy



- Utilities as a service model
  - Wind and solar energy
  - Proprietary thermostat
  - Combined heat and power
- Information center for engagement

# Successes

Triple Helix Partnership

City of Fort Collins

Colorado State University

Colorado Clean Energy Cluster



# Successes

## Change in Greenhouse Gas Goals

80% Below 2005 by 2030

1. Reduce building energy use 31%  
Implement cost-effective conventional efficiency technologies

2. Carbon neutral electricity by 2030

3. Reduce transportation emissions by 48%

Make it easier for Fort Collins to drive less

Accelerate adoption of fuel-efficient autos and electric vehicles

# Fort Collins' Challenges



- Low energy costs
- Low landfill costs
- Regional Energy Provider
  - Thermal Energy
- Suburban development pattern
- First cost of energy & efficiency
  - Behavior change

# Fort Collins' Challenges



Complexity  
Time  
Engagement  
Getting to Scale  
Alignment

Net Zero Cities 2013



The logo for the City of Fort Collins features the text "City of Fort Collins" in white. "City of" is in a smaller font above "Fort Collins". Below the text is a stylized white graphic of a mountain range with a wavy line underneath. The background consists of green and blue diagonal stripes.

City of  
**Fort Collins**

Thank you

<http://www.fcgov.com/sustainability>