

HEALTH COMMITTEE

Climate Protection Action Committee

GOALS AND OBJECTIVES

July 8th, 2014
Health and Environment Committee
Presented by Bronwyn Cooke and Susanne Rasmussen



CPAC | **RECOMMENDED GOALS AND OBJECTIVES**

Submitted to City Council for adoption

- **Goals** provide long term framework for climate protection
- **Objectives** provide mid-term targets
- **Actions** should be responsive to short term opportunities, challenges and innovations as they emerge, and contribute towards goals

CPAC committee will continue to work with E&T staff to fulfill their charge / recommend actions towards goals and objectives

CPAC | BACKGROUND

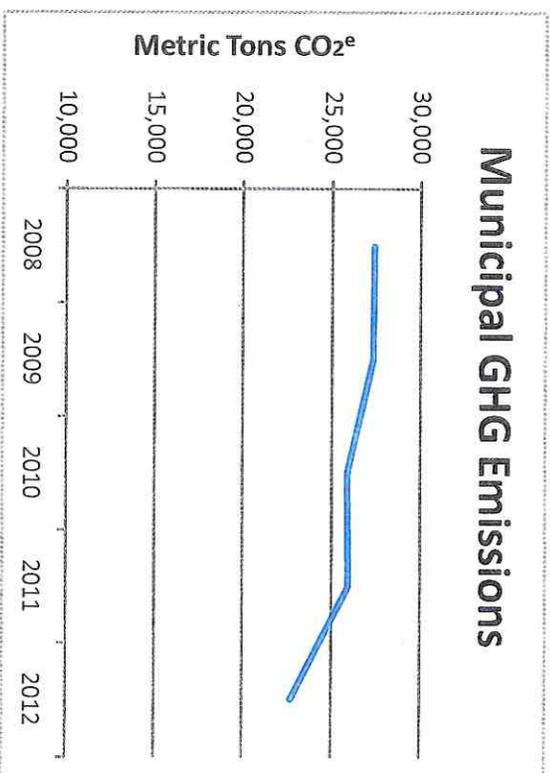
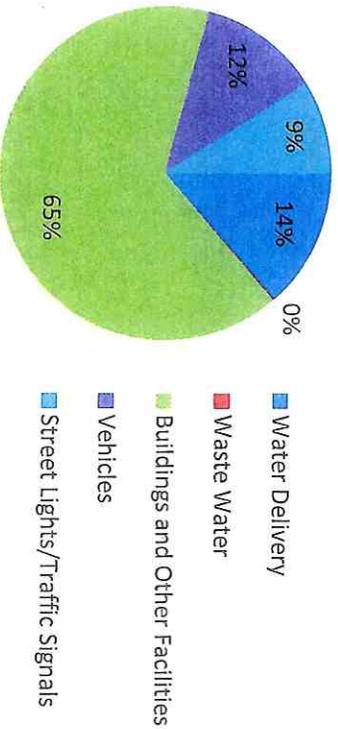
- **2002 Climate Action Plan**
 - CPAC committee formed - advisory body appointed to assist City in identifying and prioritizing implementation of climate protection policies, strategies, and measures
 - Guided climate efforts through 2010
- **2009 Interim Recommendations on Moving Cambridge Forward on Climate Protection**
 - Evaluation of progress as 2010 timeframe approached
 - Identified barriers and challenges to achieving and measuring GHG emissions reductions
 - Prioritized potential solutions and actions to achieve GHG emissions reductions
- **Recommendations for Adaptation to Climate Change**

GOAL A | MINIMIZES GHG EMISSIONS FROM ALL MEASURABLE SOURCES

Objective 1:

Reduce municipal greenhouse gas emissions by a specific amount below 2008 levels by 2020. Quantify the amount by December 2015.

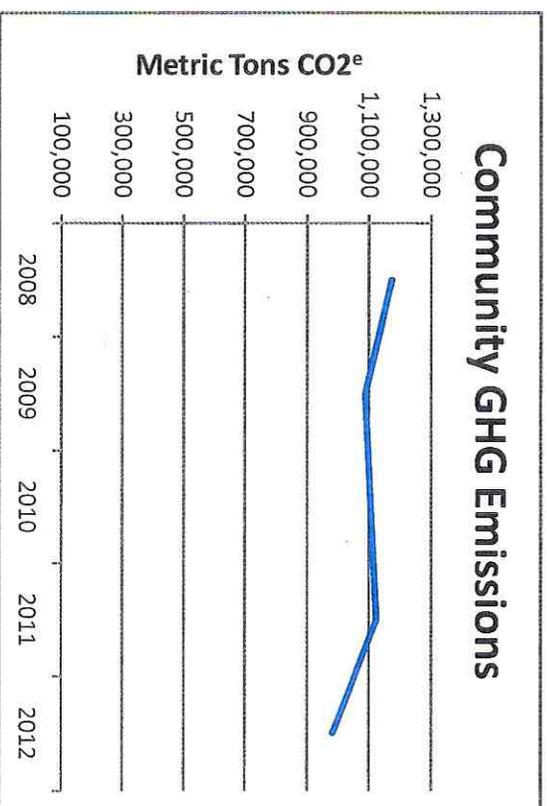
Municipal GHG Emissions By Sector



GOAL A | MINIMIZES GHG EMISSIONS FROM ALL MEASURABLE SOURCES

Objective 2:

Track and report quantifiable sources of greenhouse gas emissions in the community. Establish targets for community GHG emissions reduction.

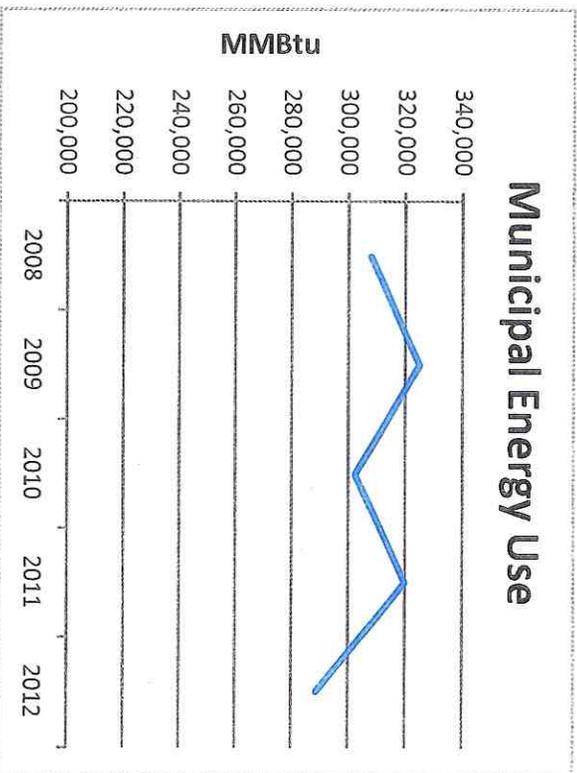
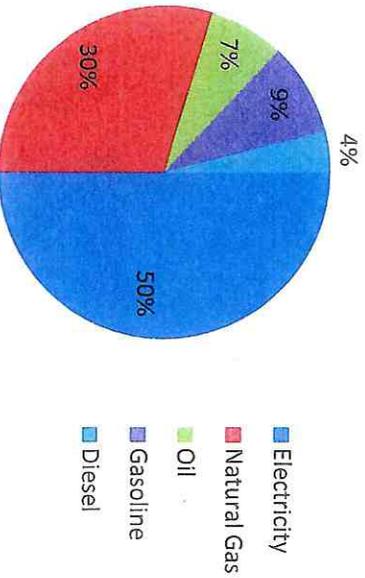


GOAL B | DRIVES ENERGY EFFICIENCY

Objective 3:

Reduce municipal energy use by a specific amount below 2008 levels by 2020. Quantify the amount by 2015.

Municipal Energy Use By Fuel Type

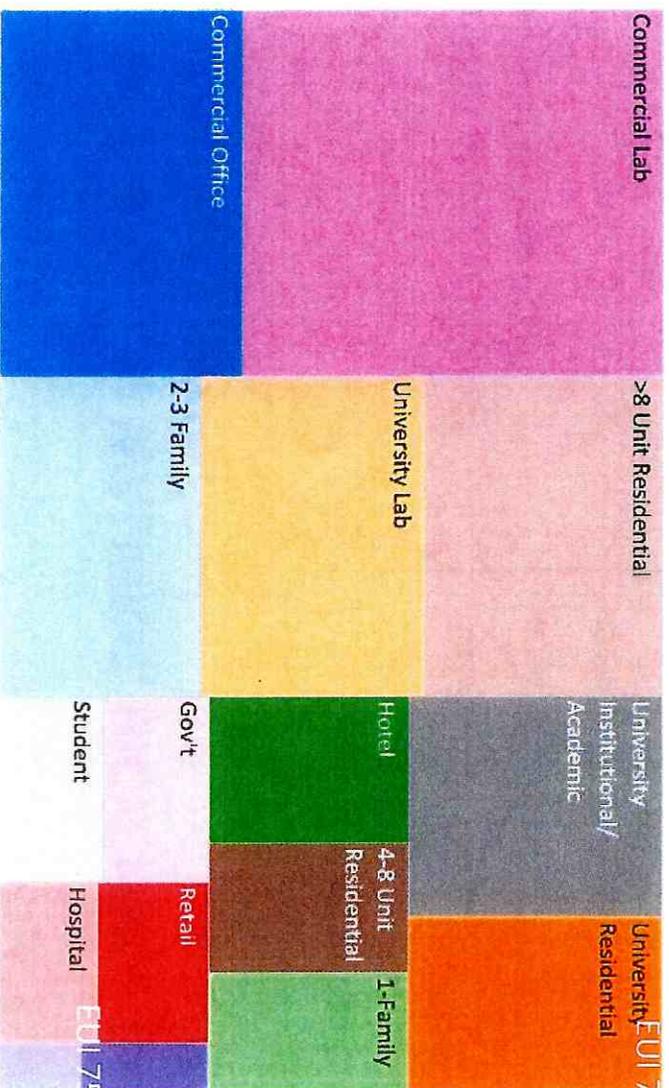


GOAL B | DRIVES ENERGY EFFICIENCY

Objective 4:

Continually reduce the energy use intensity (EUI) for commercial and residential buildings below current levels. Establish targets and benchmarks as information about building energy use becomes available.

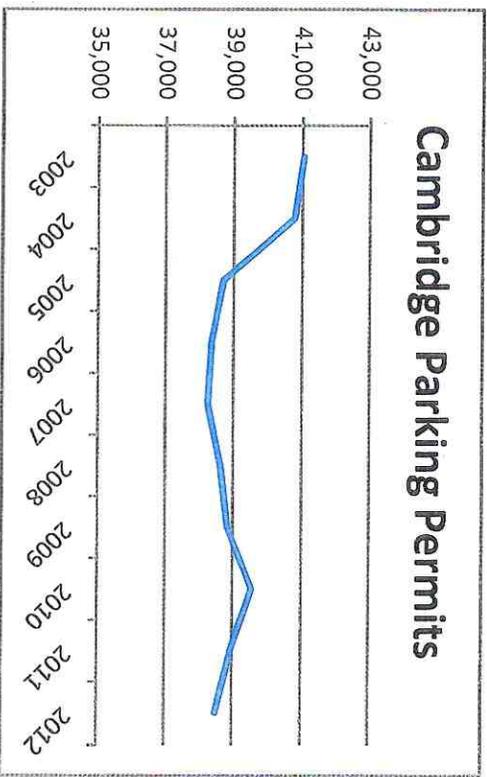
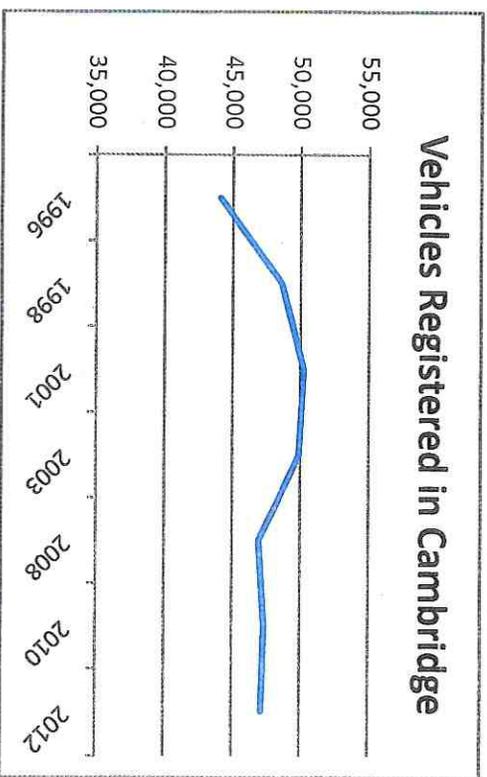
Estimated Total Energy Use by Space Type



GOAL C | DEPENDS ON WALKING, BICYCLING, TRANSIT FOR MOBILITY

Objective 5:

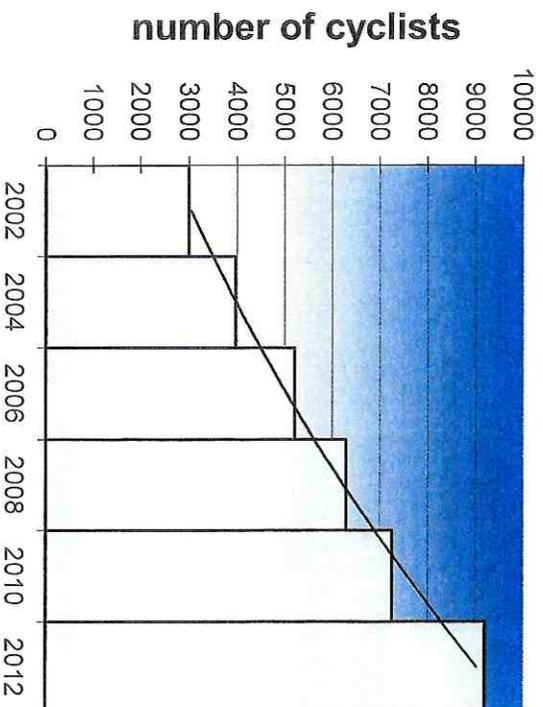
Reduce ownership of conventional vehicles 10 percent below 2010 levels by 2020.



GOAL C | DEPENDS ON WALKING, BICYCLING, TRANSIT FOR MOBILITY

Objective 6:

Reduce vehicle miles traveled by vehicles registered in Cambridge 5 percent below 2010 levels by 2020



Bicycling Rates

Numbers represent combined AM and PM peak hour cyclist counts at 16 locations on a fall weekday under similar weather conditions.

GOAL D | RUNS ON RENEWABLE & NON-FOSSIL FUEL ENERGY SOURCES

Objective 7:

Increase the portion of municipal electricity use that is supplied by renewable energy on city property to 5 percent by 2020

10% Electricity use Reduction Scenario	kWh
Projected Electricity Use in 2020 <small>(assumes 10% reduction over 2008 Baseline year)</small>	35,508,961
5% Solar Production Goal	1,775,448
Existing on-site PV production	-68,000
MLK, Jr. School PV projected production	- 779,174
Water Treatment Plant projection production	- 208,000
King Open School projected production	- 488,111
Remaining to Produce (new projects)	232,163

GOAL D | RUNS ON RENEWABLE & NON-FOSSIL FUEL ENERGY SOURCES

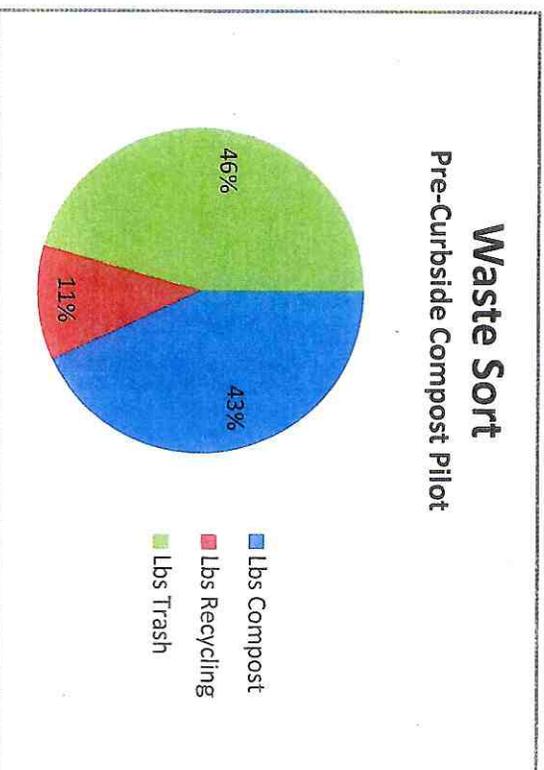
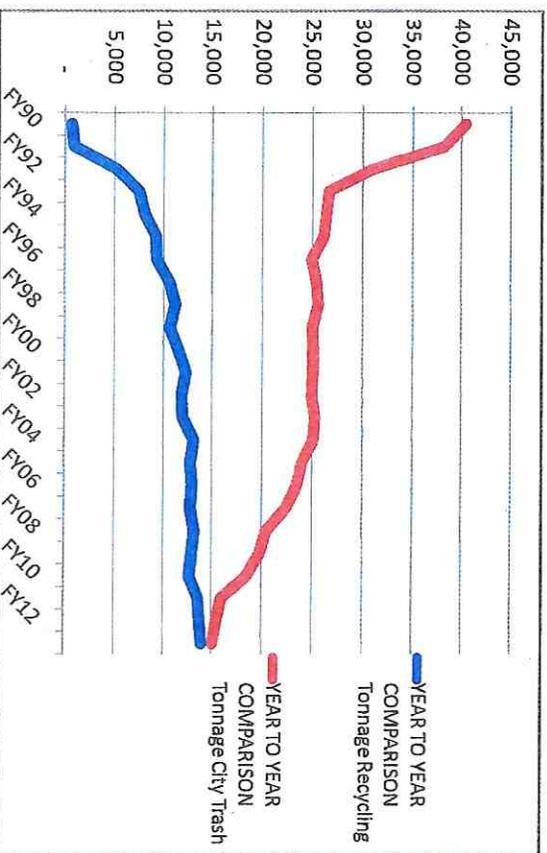
Objective 8:

Increase the portion of community-wide electricity use that is supplied by renewable sources to 20 percent by 2020



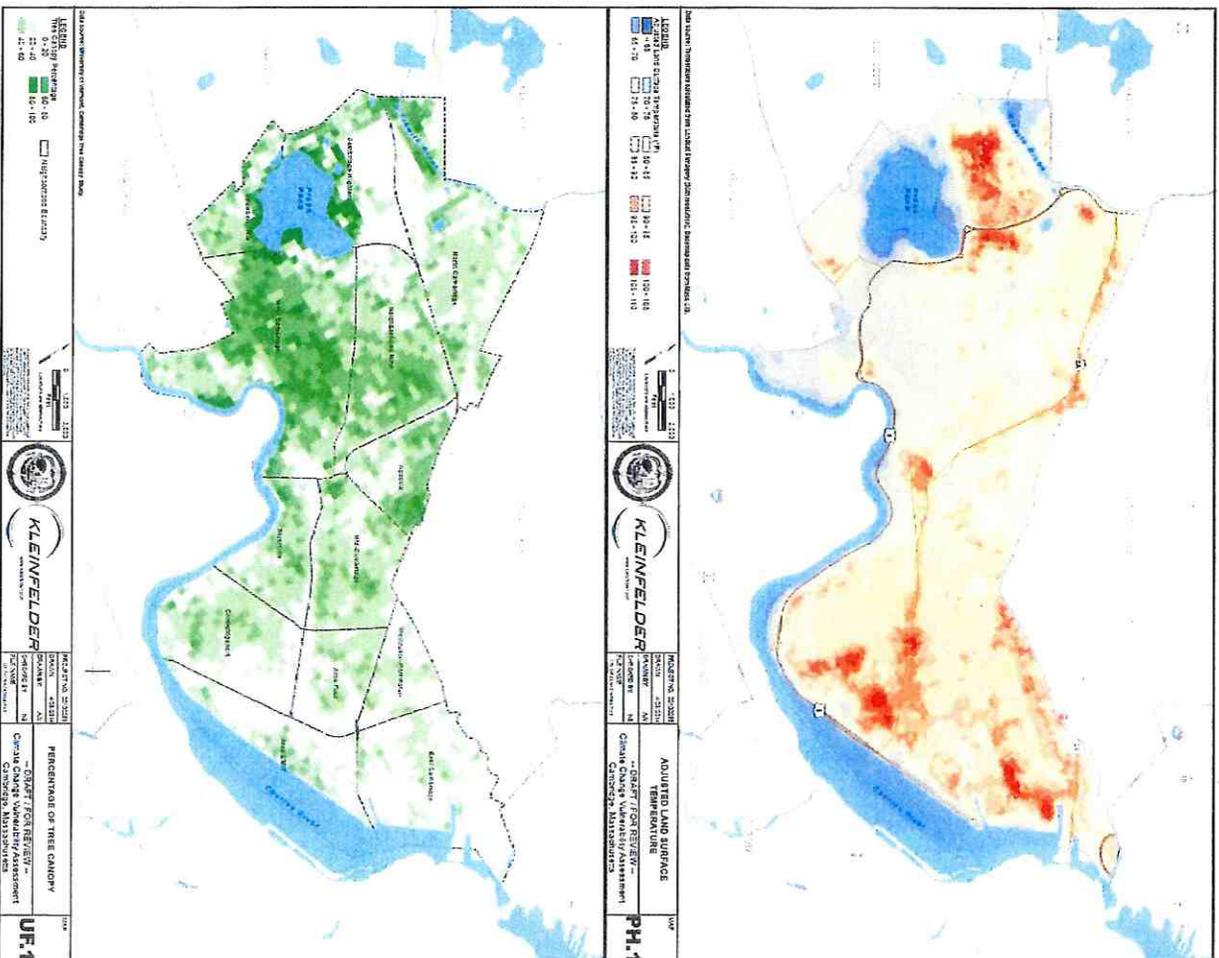
GOAL E | MINIMIZES THE IMPACTS OF MATERIAL CONSUMPTION & WASTE

Objective 9:
 Reduce residential waste collected by the City trash service 30 percent from 2008 levels by 2020 and 80 percent by 2050



GOAL F | MINIMIZES URBAN HEAT ISLAND EFFECT

Objective 10:
 Increase the overall amount of vegetative cover and reduce use of materials that absorb heat. Quantify the objective by 2015.



GOAL G | ANTICIPATES & PREPARES FOR THE IMPACTS OF CLIMATE CHANGE

Objective 11:

Complete a vulnerability assessment of the impacts of climate change in Cambridge in 2014

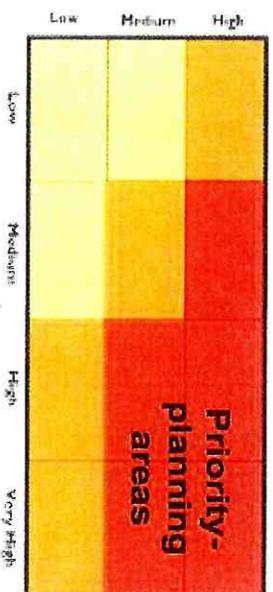
Objective 12:

Complete a climate change adaptation plan in 2015



Step 1

Climate Projections
Scenario Development



Step 2

Vulnerability & Risk Assessment



Step 3

Adaptation Planning and Design

GOAL H | IS INTERNATIONALLY RECOGNIZED FOR CLIMATE CHANGE EDUCATION

Objective 13:

Identify best practices in climate change education and implement climate change curriculum in Cambridge Public Schools



“Coming into biology, most of my students don’t know what’s causing climate change, but they are interested in it. They also have almost no idea of what the actual consequences are and how it will affect them.” - Barbara Dorritie

GOAL 1 | IS A CENTER OF INNOVATION FOR CLIMATE CHANGE SOLUTIONS

Objective 14:

Grow community capacity in climate-change knowledge, technology and entrepreneurship.

Objective 15:

Encourage community collaboration to create leading models for a more sustainable future



GOAL J | HAS THE CAPACITY TO EFFECTIVELY MITIGATE GREENHOUSE GAS EMISSIONS AND PREPARE FOR CLIMATE CHANGE

Objectives: TBD

