

City of Cambridge

CLIMATE PROTECTION ACTION COMMITTEE

Minutes

September 10, 2020

Virtual Meeting via Zoom

Attendees: Melissa Chan (chair), Steven Nutter (vice chair), Tom Chase (secretary), Jerrad Pierce, Keith Giamportone, Rosalie Anders, David Rabkin, Emily Flynn Pesquera, Fred Hewett, Julie Wormser, Keren Schlomy, Lauren Miller, Lyn Huckabee, Nicole Morell, Peter Crawley, Ted Live, Trisha Montalbo etc;
staff: Susanne Rasmussen, Bronwyn Cooke, John Bolduc

Guests: Lia Downing, Hannah Lyons-Galante

Approval of Minutes

January minutes approved

February minutes amendment, bullet denoting community choice aggregation options misplaced, approved as amended with 1 abstention (for absence)

ETP Director Report

- City staff fully remote until June 1 and functioning, up to 40% occupancy on site as of late July, stakeholder meetings on projects continued including net zero, transportation, EV charging
- Next week starting outdoor public engagement in person
- Council committee meeting about Net Zero Action Plan annual update held, interest amongst councilors for establishing interim targets for entire inventory, not just municipal buildings
- Meeting to be scheduled in early- to mid-Fall for a briefing on proposed updated BEUDO language
- Recent zoning petition to require all new development projects to analyze feasibility and cost of full renewables power, working with Councilor Carlone so that the proposal fits with current green building requirements
- Has been challenging to have building owners access energy efficiency services, but Eversource launched new insulation incentive for residential buildings, City is seeing significant uptake so far with over 100 sign-ups so far, mostly 1-4 family homes
- Amendment to cycling ordinance expected to be discussed at next City Council meeting, to be discussed is fully connected, fully separated bike network in the City, with impact considerations for on-street parking
- Question: have we seen uptick in auto registrations since March? Unknown, but permanent counters are in place for bikes, peds, and driving, and currently traffic is operating at 30-70% of pre-COVID numbers and bicycling is trending upward faster than other modes. However, it is clear that people are driving to work, and may be told by employers not to take transit. Susanne will share presentation shared with the Council. Cannot enforce low drive-alone rates this year, but survey data is being collected on how employees are coming to work. Expected that work-from-home trend will continue to be very strong.

Member Updates

- Jerrad Pierce – Boston Green Ribbon Commission Webinar Series has been interesting, large switch away from ground source heat pumps to air source heat pumps, e.g. Upcoming sessions on climate change impacts on real estate values and Seaport and Citywide flooding.
- Lauren Miller - Upcoming Climate Adaptation Forum (included in CPAC bulletin)
- Lauren Miller - State resilience design guidelines comment period recently closed (under RMAT project), to be applied to projects with State funding
- Fred Hewett - 350 Massachusetts has been following State climate legislation, two bills now in conference committee, two potential impacts to City of Cambridge. Senate version of the bill would mandate a net zero green building code that cities could opt into.
- Tom Chase - Passive House Massachusetts Symposium coming up October 27-28, session proposal invitation still open
- Tom Chase - Climate Central naturally occurring affordable housing report on MA climate risk is planned
- Peter Crawley – what information can the City get on reduced occupancy in buildings and impact on building energy use and carbon emissions? City can collect information on municipal buildings, but early findings suggest that new ventilation protocols is increasing energy use in City buildings. Will know next year when BEUDO data is out, but even though buildings are unoccupied, they're still be operated. Encouraging response rate for this year. Building shutdowns may not have been performed properly, and would therefore not see significant shutdown benefit. Best practices for operating buildings with high vacancy? Doubling up on use of space? Very undesirable by businesses, and occupancy limited at 50% max by Governor's order.
- Effects of COVID on building energy use as potential future meeting topic.

RAC-CPAC Consumption-Based Subcommittee

- One of the next steps will be to share this presentation around and getting feedback from other departments
- Goal of this presentation is to get CPAC up to speed, get feedback on presentation, and prep for working with other departments
- Bronwyn presented joint sub-committee update report:

Joint Sub-Committee on Consumption

Recycling Action Committee & Climate Protection Action Committee

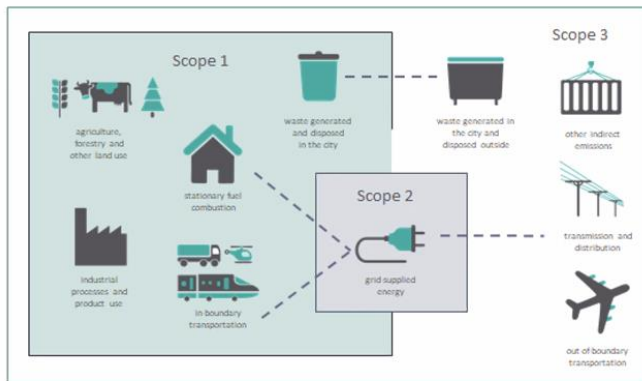
Goal

- Develop a common understanding and an actionable framework for pursuing community-wide actions that reduce the negative impacts of consumption and waste, and take advantage of opportunities to support the circular economy.

Objectives

- **Compile and summarize foundational information on emissions, waste and consumption in the City**
- Define the desired outcomes related to consumption, waste and circular economy, and possible metrics for measuring outcomes
- **Develop a framework for community-wide action that supports desired outcomes related to consumption, waste and circular economy**
- Draft a recommendation for consideration by both committees for possible submission to the City Manager.

Community GHG Emissions



Module 2 – Slide 5

Cambridge Emissions Inventory includes

- **Scope 1**
 - All fossil fuels combusted by building in Cambridge, vehicles registered in Cambridge, and the portion of public transit trips made in Cambridge.
- **Scope 2**
 - Electricity delivered to Cambridge
- **Limited Scope 3**
 - Emissions calculated from municipal solid waste, and estimated from commercial solid waste
 - No emissions from goods and services consumed

What is in Cambridge's residential trash?

	2019 audit	2016 audit
Recyclables	13.2%	16.7%
Organics (food waste + non-food organics)	26.4%	41.5%
Textiles	3.4%	4.2%
Other divertables (scrap metal, electronics)	1.4%	2.8%
Trash	55.6%	34.8%
TOTAL	100%	100%

Municipal Solid Waste

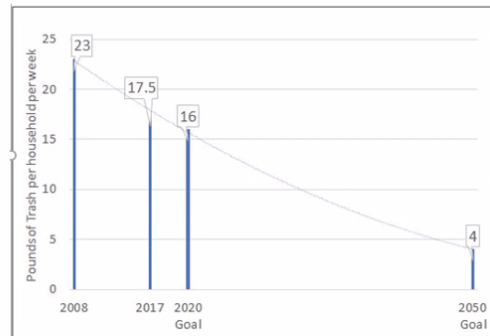
The City's goal is to ...

- Reduce the amount of trash (pounds of trash/household, per week)
- 80% by 2050 (from a 2008 baseline)

As of 2019, trash has been reduced by 32% over 2008.

This has been accomplished by diverting materials into other disposal streams.

- Recycling out of trash and into recycling streams
- Food waste out of trash and into organics collection



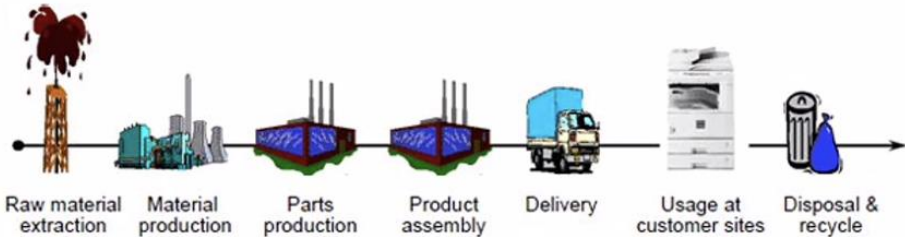
This reduces emissions and other environmental impacts of trash disposal

- For example, recycling materials allows them to be re-used in other products. This reduce emissions associated with burning of waste, and emissions associated with extraction of raw or virgin materials to manufacture products.

Cambridge Context on Waste & Consumption

Waste and emissions could be reduced further by generating less of it overall.

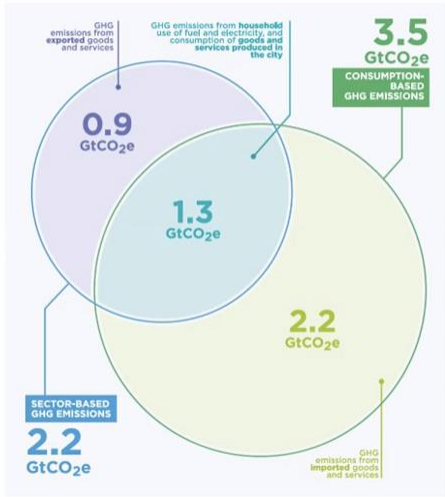
- Most of the emissions associated with a product come from the products life-cycle prior to being disposed of.
- The City has focused its efforts on "end of life" strategies to reduce waste emissions by diverting it away from trash and trash disposal.
- The RAC/CPAC committee is interested in, and is beginning to explore, what role the City can play in reducing waste and emissions in other parts of a products life cycle.



- Provided refresher on C40 Cities reports used in building out waste source reduction
- Consumption based emissions inventory methodology, based on financial flows

Consumption Emissions

- Consumption based emissions for 79 C40 Cities were modeled and compared to their Sector based community GHG emissions
- Consumption based emissions accounting suggests that Cities can be categorized by whether they are "producer" cities, or "consumer" cities.
- Cambridge can be considered a "consumer" City. This is not to say that Cambridge does not produce anything of value. But it does suggest that consumer cities have a significant role to play in reducing emissions associated with the goods and services consumed within the City.



- Committee decided to focus on one sector and explore role City might play in that sector to reduce emissions

Deep Dive - Food Sector

- Sub-committee brainstormed actions within a strategy type
- Strategy type based on where in the emissions equation the action will have impact
- Emissions = \$ x CO2e/\$ (specific to product type)

Consumption Strategies			
Change In Carbon Intensity of End Products (CO2e/\$ of a product type)		Change in Expenditure (\$)	
lower carbon production methods	avoided production	shift expenditure to lower carbon product	avoid/reduce expenditure
<i>Reduce carbon intensity of the food product's production</i>	<i>Reduce household and supply chain food waste</i>	<i>Reduce spend on high carbon food products (meat and dairy) and increase spend on lower carbon food products (plants)</i>	<i>Reduce total spending on food by not purchasing more than needed</i>

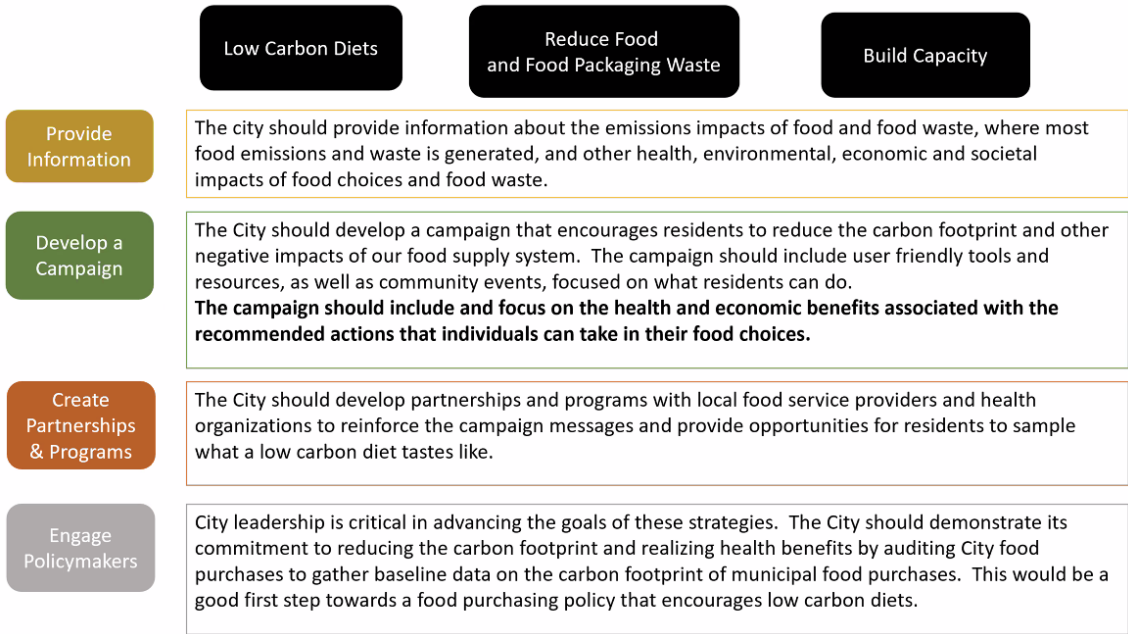
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Deep Dive - Food Sector

Actions were further classified by lever type and key stakeholder

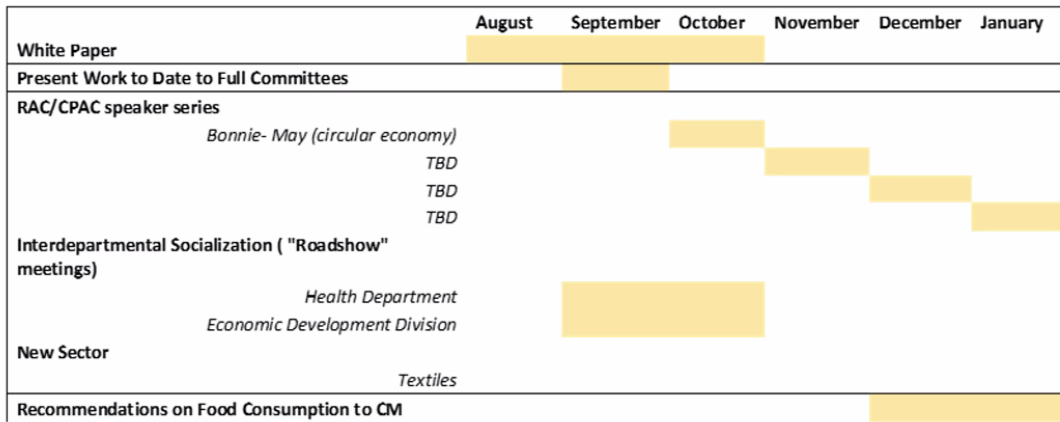
Levers	Key Stakeholder Groups
Education	City Government
Programs & Partnerships	Residents
Policy & Regulation	Food Service Providers
Advocacy in State & Federal Regulation	Civil Society
	Regulators

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- 70-100 actions brainstormed, categorized by lever type and strategy, narrowed by feasibility, impact, and phasing
- Key strategies:



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- Open questions about what's better for food products

Next Steps



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- Discussion
 - Infrastructure of food waste, commercial waste specifically, locally produced food
 - Possible public information campaign? Would be important to target to sector and message, and which sectors will actually reduce carbon emissions
 - Will review sectors and opportunities with Health Department
 - Importance of urban farming for health, employment, education, etc.
 - Focus on individual actions could reduce focus on policy improvement that's needed
 - Potential interest in working with Economic Development Department to understand role of restaurants, e.g. diversity of vegan and vegetarian options

PACE

- State has launched MA PACE program, John provided overview of program details
- MassDevelopment crafted and will administer the program, officially opened July 28, 2020
- Commercial program, offices, labs, multifamily, etc.
- Finances energy efficiency and renewables, only applies to existing buildings
- Allowed to be used for extension of natural gas distribution to properties
- Financing from private capital
- Savings to investment test applied to projects, savings > cost over life of measure, including for natural gas extensions
- To be administered through cities and towns, each community must opt in, in Cambridge through majority vote of City Council, so far 25 communities have opted in
- PACE loans will be secondary to mortgages, but default rates in other cases is very low
- Process was so delayed because of debt service order, which required a legislative change
- New legislation would add new construction to PACE legislation
- Is this at all controversial in Cambridge? Technical and logistical questions to be addressed first

Public Comment

- No comments

Notes by Tom Chase