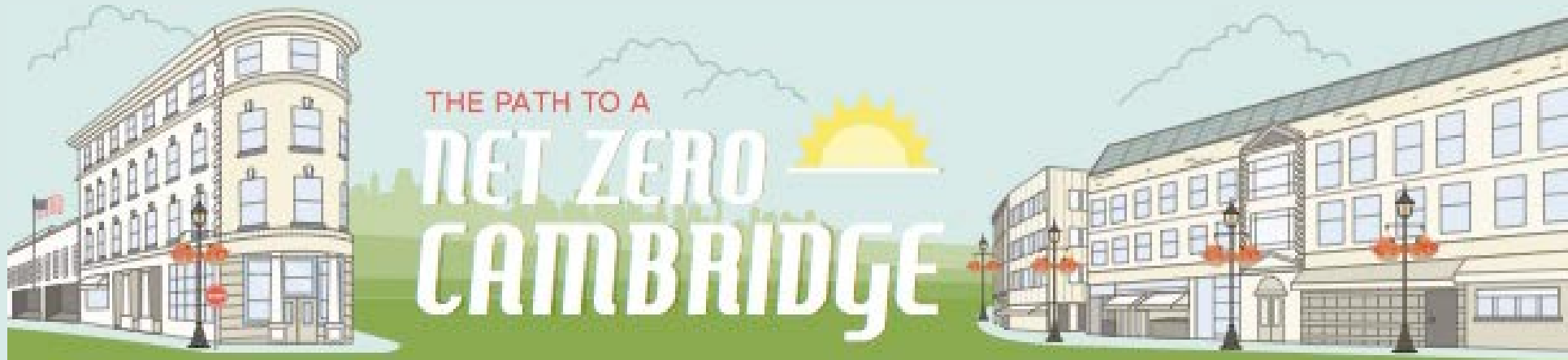


# City of Cambridge

## Getting to Net Zero Action Plan 5-Year Review

### Meeting 5: NZAP Implementation

May 27, 2021



# NZAP Meeting Timeline

January			February			March			April			May					
		Mtg. 3				WG		WG			Mtg. 4					Mtg. 5	

- NZTF Mtg. 3 – Jan 21, 2021
  - NZAP Action Adjustment Frameworks
- Working Group Mtgs – March, 2021
  - Adjustment Proposals by Action Category
- Reconvene NZTF April 15, 2021 (Mtg. 4)
  - Review Working Group Adjustment Proposals
- **NZTF Mtg. 5 – May 27**
  - Discuss Implementation Plan

# Meeting Objectives

- Review the feedback and prioritization of the adjusted NZAP actions
- Consider implementation steps for the prioritized actions and means of ensuring success

# Meeting Agenda

**4:00 – 4:10 Introduction**

**4:00 – 5:00 Part 1: Review feedback & prioritization results**

- > Highlight general trend & significant comments
- > Explore the prioritization of each action according to key metrics
- > Discuss needs for equity for those actions flagged as needing improvement
- > Q&A

**5:00 – 5:45 Part 2: Discuss what Implementation looks like**

- > Review timeline / NZAP Gantt chart
- > Discuss granular & overall drivers of implementation
- > Discussion of Implementation by Action

**5:45 – 5:50 Part 3: Review anticipated next steps for NZAP review**

**5:50 – 6:00 Part 4: Public comment**

# Frames of Reference for NZAP Adjustments

1. Original **NZAP Principles**
2. Current **Science, Policy, Technology and Equity** conditions
3. Overall **potential impacts and co-benefits** to the community



## Net Zero Action Plan Principles:

- Supports **climate goals** and **healthy economic** strategies
- Uses **science, market, and data-driven** analysis to inform decision making
- Support an openness **to new ideas** when circumstances change
- Commitment to allowing the principle of **offsets**
- Commitment to **measuring and monitoring** impact over time
- Ensures consultation is comprehensive and **engages affected stakeholders**
- Commitment to developing informative and **replicable models**
- **NEW:** Commitment to implementing the Net Zero Action Plan through a **racial equity and social justice lens**



# Equity Implications of Net Zero Action Plan Adjustments

The Net Zero Task Force has developed a list of adjustments to Cambridge's Net Zero Action Plan—ranging from building retrofits to renewable energy development to a community energy program.

The equity considerations of the NZAP adjustments fall into two primary buckets:

1. **Equitable Adjustment Design**—how can the adjustment be *designed* to enhance equity?
2. **Equitable Adjustment Implementation**—how can the adjustment be *implemented* to enhance equity?

# Equity Implications of Net Zero Action Plan Adjustments

## 1. Equitable Adjustment Design—

- Broader and deeper engagement, access, participation and feedback
- Community knowledge building
- Avoid burdens for the most vulnerable
- Target benefits to the most vulnerable
- Equity/diversity guidelines
- Sometimes, equity impacts are conditional and indirect





# Equity Implications of Net Zero Action Plan Adjustments

## 2. Equitable Adjustment Implementation—

- Track as many adjustment metrics as possible (i.e. housing and energy costs, program participation, improvements made, retrofits undertaken, payouts, renewable energy installations, etc.)
- Commit to transparency and accountability
- Provide publicly available updates that are easy to find and understand, available in multiple languages



# Review Feedback & Prioritization Results

Part 1

# Key Themes from Feedback in Consider.it

1. Timeline should be accelerated especially for many mid- and long-term activities
2. Need to more clearly define implementation details
3. Need to incorporate feasibility assessments and planning aspects for some of the actions
4. Too much focus on financing support and not enough on capacity building (Re: Action 1.4)
5. Alternative compliance pathways need to be incorporated (Action 1.2 BEUDO and 2.3 Green Building Requirements)

# NZAP Priorities by Action

Cambridge Net Zero Action Plan

Date: May 27, 2021

Adjusted Actions Ratings by Various Metrics of Interest

Action number	Type	Action	**GHG Impacts Rating	**Resilience Rating	**Other Co-benefits Rating	Summed Benefits Ratings	*Avg Score (Consider.it Po	***Equity Rating	TF Adjusted Ranking
1.2		Action 1.2 BEUDO Requirements	3	2	2	7	80	Flagged	1
4	Enabling	Action 4 Local Carbon Fund (Aggregation 3.0)	3	3	3	9	64	Positive	2
3.3	New	Action 3.3 Off-site Renewable Energy Access	3	1	2	6	62	Flagged	3
1.4	New & Enabling	Action 1.4 Financing and Capacity Building	3	1	2	6	36	Positive	4
2.1		Action 2.1 Net Zero Requirements for New Constructio	2	3	2	7	71	Flagged	5
2.5	New	Action 2.5 Embodied Carbon Management	1	2	1	4	30	Neutral	6
1.3		Action 1.3 Upgrades at Transaction Points	2	3	3	8	39	Flagged	7
1.1		Action 1.1 Custom Retrofit Program	1	3	3	7	6	Positive	8
3.1		Action 3.1 Low Carbon Energy Supply	1	3	1	5	47	Positive	9
3.2		Action 3.2 On-site Renewable Energy Access	1	3	3	7	70	Neutral	10
3.2.1	Enabling	Action 3.2.1 Rooftop Solar Requirement	1	3	3	7	49	Flagged	11
2.3		Action 2.3 Increase Green Building Requirements	1	2	3	6	33	Flagged	12

Notes:

\*Avg. Score (Consider.it Poll): Average priority score given in Consider.it by TF members

\*\*GHG Impact, Resilience and Other Co-benefits rated 1-3 with 3 having the highest positive impact, and 1 having lowest impact

\*\*\*Equity ratings: Positive > Action having a positive impact, Neutral > Actions that have neither positive or negative impact, Flagged > Needs work

"N/A" indicates that that Action is enabling or supporting emissions reductions in another Action

# NZAP Implementation

Part 2

# Original timeline

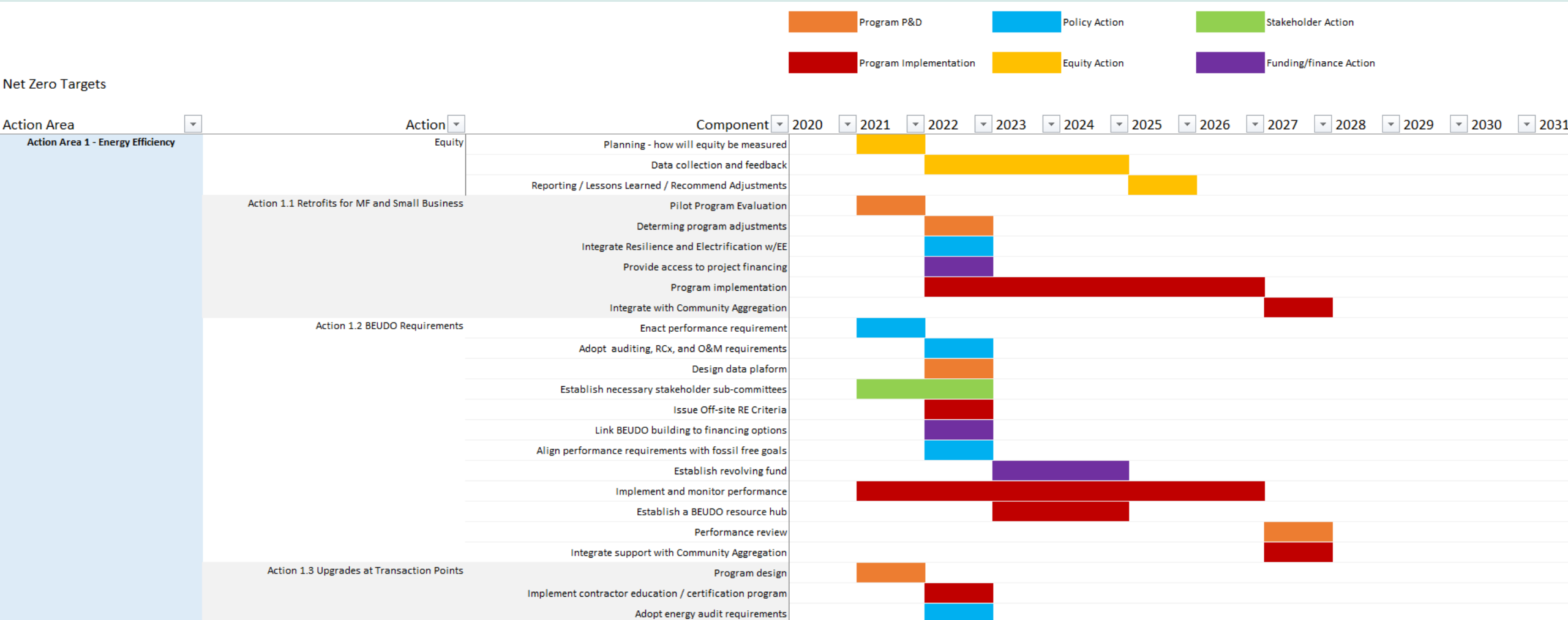
## Cambridge Net Zero Action Plan - April 29, 2015



Net Zero + Net Positive Targets																										
		YEAR (fiscal year July - June)																								
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035					
<b>Action 1 - Energy Efficiency in Existing Buildings</b>																										
1.1.1 Custom Retrofit Program	Residential	Feasibility	Multi-Family Pilot	Review	Potential Multi-Family Program					Review	Potential Multi-Family Program															
	All				Feasibility	Custom Retrofit Pilot	Review	Custom Retrofit Program					Review	Custom Retrofit Program												
1.1.2 Additional BEUDO Requirements	Comm. + MF		Design	New Building Energy Use Disclosure Ordinance Req's						Review	Version 2 Potential T.O.S./R. Requirements					Review	Version 2 Potential T.O.S./R. Requirements									
1.1.3 Upgrades at Time of Renovation or Sale	All			Feasibility	Potential T.O.S./R. Requirements					Review	Potential T.O.S./R. Requirements					Review	Potential T.O.S./R. Requirements									
1.1.4 O+M Plan Requirement	Comm. + MF (New Const.)		Design	Required O+M Plan					Review	Required O+M Plan					Review	Required O+M Plan					Review	Required O+M Plan				
<b>Action 2 - Net Zero New Construction</b>																										
2.2.1 Market Based Incentive Program	Residential	Feasibility	Pilot Residential	Review	Pot. Net0 Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program						
	Comm. + MF				Pilot Commercial		Review	Potential Net0 Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program						
	Labs		Feasibility		Pilot Labs		Review	Potential Net0 Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program						
2.2.2 Height + FAR Bonus		Feasibility*	Potential H+FAR Incentive Program					Review	Potential H+FAR Incentive Program		Review	Potential H+FAR Incentive Program		Review	Potential H+FAR Incentive Program		Review	Potential H+FAR Incentive Program		Review	Potential H+FAR Incentive Program					
2.3 Increase Green Building Requirements in Cambridge Zoning Ordinance		Design	Stage 1 - New LEED Requirements		Review	Stage 2 - New LEED Requirements			Review	Stage 3 - New LEED Requirements			Review	Stage 4 - Potential New Green Building Requirements												
2.4.1 Net Zero Requirement for New Construction of Municipal Buildings		Design	Net Zero Ready		Review	Net Zero Required			Review	Net Positive Required			Review	Net Positive Required												
2.4.2 Renewal of Municipal Buildings		Design Action Plan		Pilots	Stage 1 - Building Renewal Strategy					Stage 2 - Building Renewal Strategy																
2.5 Removal of Barriers to Increased Insulation		Design	New Policy		Review	New Policy																				
<b>Action 3 - Energy Supply</b>																										
3.1 Low Carbon Energy Supply Strategy		E.S.S. Study**	Implement Energy Supply Strategy																							
3.2 Rooftop Solar Ready Requirement		Design	Solar Ready Requirement	Study	Potential Solar Requirement Version 1					Potential Solar Requirement Version 2																
3.3 Develop a Memorandum of Understanding with Local Utilities		Develop MOU	Utility Collaboration					Review	Potential 3rd Utility Collaboration																	
<b>Action 4 - Local Carbon Fund</b>																										
4 Investigate Local Carbon Fund		Feasibility	Establish Potential Carb Fund																							
<b>Action 5 - Engagement and Capacity Building</b>																										
5.1 Communication Strategy		Design	Implement Communication Strategy																							
5.3 Net Zero Lab Standards		Feasibility***	Dev. Standard	Pilot Standard 1	Implement Potential Standard					Review	Pilot Standard 2	Implement Potential Standard														

\* To occur as part of Cambridge Master Plan process  
 \*\* To happen in conjunction with Kendall Square study  
 \*\*\* Externally Led

# Adjusted timeline based on current proposed adjustments



# Questions for Guided Timeline Discussion

## **Off-site Renewable Energy Access**

- Off-site Renewable Energy criteria will enable emissions reduction action for new construction and BEUDO; agree that this needs to be a top priority?
- Are there other ways that we should consider to accelerate timeline?

## **Financing**

- What do we see as the primary needs or risks associated with this action?
- What other needs are there in order to provide financing access within the desired timeline?

## **Capacity Building**

- What actions are needed in 1.4 to support capacity building in other actions (toolkits, guidelines, training, etc.)?

Example: On-site Renewable Energy; Do the program funding/financing needs align with other funding/financing actions? Does the timeline support an effective deployment plan for on-site solar development?



# Questions for Guiding Timeline Discussion

## **Local Carbon Fund / Community Aggregation**

- Do we have the right mix of steps in place to reach our goal of a transition to a more comprehensive equitable community aggregation program?
- Are there other steps that may be taken to accelerate the timeline of this action?

## **Embodied Carbon**

- Is this timeline realistic given this is a new action and requires planning and organization up-front?
- Should this action be more closely aligned with the Green Building Requirements? Might that help in accelerating the timeline?

## **Net Zero New Construction**

- Should the city continue to pursue city-standards for efficiency, on-site and off-site renewables while State code is developed?

# **REVIEW ANTICIPATED NEXT STEPS FOR NZAP**

Part 3

# NEXT STEPS

**May 27:** Net Zero Task Force Meeting 5

- *Discuss prioritization of updated actions and implementation*

**June:** Complete draft of updated Net Zero Action Plan

**Summer:** Additional stakeholder engagement as needed

**Fall:** Submit updated Net Zero Action Plan to City Council for adoption



# **PUBLIC COMMENT**

Part 4:

# Thank You!

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