

HEALTH & ENVIRONMENT COMMITTEE

COMMITTEE MEETING

~ MINUTES ~

Tuesday, April 11, 2023	12:30 PM	Sullivan Chamber
		795 Massachusetts Avenue
		Cambridge, MA 02139

The Health and Environment Committee will hold a public meeting to review plans for solar and renewable energy installations in the city, including report on solar expansion and works by the CEA (Cambridge Energy Alliance) and potential for solar on city owned water supply land, and any other items related to renewable energy.

Attendee Name	Present	Absent	Late	Arrived
Patricia Nolan	\checkmark			
Burhan Azeem	Remote			
Dennis J. Carlone	\checkmark			
Marc C. McGovern		\checkmark		
Quinton Zondervan	\checkmark			

A public meeting of the Cambridge City Council's Health and Environment Committee was held on Tuesday, April 11, 2023. The meeting was Called to Order at 3:00 p.m. by the Chair, Councillor Nolan. Pursuant to Chapter 2 of the Acts of 2023 adopted by Massachusetts General Court and approved by the Governor, the City is authorized to use remote participation. This public meeting was hybrid, allowing participation in person, in the Sullivan Chamber, 2nd Floor, City Hall, 795 Massachusetts Avenue, Cambridge, MA and by remote participation via zoom.

At the request of the Chair, Clerk of Committees Erwin called the role. Councillor Nolan – Present/In Sullivan Chamber Councillor Azeem – Present/Remote Councillor Carlone – Present/In Sullivan Chamber Councillor McGovern – Absent Councillor Zondervan – Present/In Sullivan Chamber Present – 4, Absent – 1. Quorum established.

Councillor Nolan offered opening remarks (Attachment A) and noted that the call of the meeting was to review plans for solar and renewable energy installations in the city, including a report on solar expansion and works by the CEA (Cambidge Energy Alliance) and potential for solar on city owned water supply land, and any other items related to renewable energy. Councillor Nolan introduced Iram Farooq, Assistant City Manager for the Community Development Department (CDD) who was joined by Susanne Rasmussen, Director of Environmental and Transportation Planning and Ellen Katz, Fiscal Director for the Department of Public Works (DPW). Councillor Nolan noted that Mark Gallagher, Acting Managing Director, and Julie Greenwood-Torelli, Director of Water Operations from the Water Department were also present at the meeting. Susanne Rasmussen and Ellen Katz gave a presentation titled "City of Cambridge Renewable Energy" (Attachment B) and reviewed renewable energy and net zero emissions, municipal programs that include onsite renewables, strategic electrification, and renewable electricity

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supply, and community programs. They noted that the City will continue to make buildings more energy efficient and install solar systems, but the majority of renewable electricity will come from off-site utility scale purchases. Ellen Katz shared that unlike most communities, Cambridge self-funds its photovoltaic (PV) systems to retain the right to claim greenhouse gas reductions. Susanne Rasmussen reviewed the Net Zero Action Plan Policies and shared the short-term goals for rooftop requirements, community solar access, and off-site renewable electricity access. After the presentation, team members from CDD, DPW, and the Water Department were available to answer questions or concerns.

The Chair, Councillor Nolan introduced Jocelyn Tager from Neighborhood Solar who offered comments on the work their program provides for solar installation. Jocelyn shared that they promoted Watertown's Solar Ordinance, and that it is the first City in New England to have a Solar Ordinance, noting that it requires all new construction of a certain size to be 50% covered with solar and all parking garages to be 90% covered with solar.

The Chair, Councillor Nolan opened Public Comment.

Heather Hoffman, 213 Hurley Street, Cambridge, MA, shared concerns about solar panels being blocked by the sun with the increase of tall buildings in Cambridge and shared information on photovoltaic glass to use as windows to produce solar energy.

Peter Hsu had a question on solar roof installation in condos or apartment complexes and how the tax credit would work.

The Chair, Councillor Nolan recognized Councillor Carlone who shared concerns that neighbors have brought to his attention regarding the noise levels from equipment on the roofs of buildings. Councillor Carlone asked if adding solar panels to help run equipment and make them less noisy has been considered for future, especially with labs. Susanne Rasmussen shared that it could be part of the solar requirements that the City is looking into in combination with the upcoming fossil fuel program. Councillor Carlone thanked the City for their presentation and hard work, and noted that Cambridge is a leading example of the strategy that can be done to promote solar energy and asked if any large developers come to CDD for guidance. Susanne Rasmussen shared that affordable housing is a large production of solar energy as well as Universities who are working to get to their net zero strategy, but not seeing it as much with private and commercial development.

The Chair, Councillor Nolan recognized Councillor Zondervan who had a question on the 12-15% energy efficiency gains and if that number reflected only city operations or if it was a citywide estimate. Ellen Katz shared that it was for city operations and noted that it was a rough estimate to get the sense of proportions. Counillor Zondervan shared that in terms of solar goals, the City's efforts are commendable, but compared to what the City needs to be doing it is way behind and he would like to look at ways to accelerate the progress. Susanne Rasmussen and Iram Farooq were available to respond noting that these are goals in both the short term and net zero action plans.

The Chair, Councillor Nolan recognized Councillor Azeem who had a question on transformers and if the City would need to add more to accommodate the increase of solar panels. Susanne Rasmussen noted that there will have to be a connection with the transformers and the solar panels. Megan Shaw, Cambridge Energy Alliance Director CDD, was joined via Zoom, and shared that there are distribution limitations and the City is aware that Eversource has distribution systems that would prevent solar panels to safely connect to the grid, which has been a challenge in some parts of the City. Councillor Azeem shared that he would be supportive of simplifying the process going forward. The Chair, Counillor Nolan had questions on the data that has been provided on buildings that the City has spent efforts on using solar energy and if they are above or below specs and why certain municipal buildings have not been able to make the switch to solar energy. Ellen Katz shared that they are in the process of getting a new contract where PV systems will be getting inspected which will help the City go back and assess capacity versus what is being performed and that the City is looking into a municipal facilities improvement plan update to provide a high-level estimate of solar capabilities. Councillor Nolan stressed the importance of having the Climate Committee and the City Council be involved in the next steps moving forward to address concerns and help accelerate the programs that are available. Councillor Nolan referenced a chart that was provided by CDD (Attachment C) that lists alliance programs and the services that are provided. Councillor Nolan shared that if the City does not have a certain program now, what does the Council and the City need to provide to get a program in place and understand what the limitations are preventing the City from providing it to have greater success in the future.

The Chair, Councillor Nolan recognized Mark Gallagher and Julie Greenwood-Torelli from the Water Department to ask questions on the use of solar energy with water supply. Mark Gallagher shared that the Water Department has be engaged in renewable energy resources, noting that solar rays on the water are restricted in Massachusetts by the Massachusetts Department of Environmental Protection (MDEP). Mark Gallagher noted that MDEP prohibits solar arrays on the water because they are counterproductive to what the water is used for, which is a public water supply. Mark Gallagher shared that adding wind turbines along the Reservoir would require going through the legislative body because it would be a change of use for a reservoir. Mark Gallaher noted that the Water Department is looking into putting two small hydroelectric generators in the Stony Brook conduit and has conducted a feasibility study that provided data showing that it could produce almost half a megawatt of power. Councillor Zondervan shared that if it is easier for the Council to approve funds to go to the Water Department rather than going through the grant process to help move the hydroelectric generators along faster, he would be supportive of that. There were questions from Councillor Nolan and Councillor Zondervan, who asked if a hydroelectric generator was currently in place. The team from the Water Department did not believe there was, but would look into it further.

The Chair, Councillor Nolan thanked all of the City staff for providing an update and shared that any help they need from the City Council to move forward with these efforts, the Council is happy to help.

The Chair, Councillor Nolan recognized Councillor Carlone who made a motion to adjourn the meeting. Clerk of Committees Erwin called the role. Councillor Nolan – Yes Councillor Azeem – Yes Councillor Carlone – Yes Councillor McGovern – Absent Councillor Zondervan – Yes Present – 4, Absent – 1. Meeting adjourned.

Attachment A – Opening statement from Councillor Nolan Attachment B – Presentation titled "City of Cambridge Renewable Energy" Attachment C – Alliance program chart

Clerk's Note: The City of Cambridge/22 City View records every City Council meeting and every City Council Committee meeting. This is a permanent record.

The video for this meeting can be viewed at:

https://cambridgema.granicus.com/player/clip/479?view_id=1&redirect=true&h=f10afa639ee2e 883caf0f29cb8a07693

A communication was received from Susanne Rasmussen, Director of Environmental & Transportation Planning for the Community Development Department, transmitting a presentation titled City of Cambridge Renewable Energy. Good afternoon everyone, with a quorum being present, I call today's Health and Environment Committee meeting to order. The call of today's meeting is to review plans for solar and renewable energy installations in the city, including a report on solar expansion and work by the CEA (Cambridge Energy Alliance) and potential for solar on city owned water supply land, and any other items related to renewable energy.

First order of business is a roll call of members present.

Pursuant to Chapter 2 of the Acts of 2023 adopted by Massachusetts General Court and approved by the Governor, the City is authorized to use remote participation at meetings of the Cambridge City Council and its Committees. In addition to having members of the Council participate remotely, we have also set up zoom teleconference for public comment. Please be aware that zoom is primarily being used for public comment. To watch the meeting, please tune into Channel 22 or visit the open meeting portal on the city's website. If you would like to provide public comment, please visit the City Council section of the city's webpage. Instructions for how to sign up to speak are posted there. Once you have completed the sign up procedure, you will receive a link to the zoom meeting. We will allow each speaker three minutes. We will not allow any additional public comment sign up after 1:00p.m. With that, all of today's votes will be by roll call.

PNolan Intro:

Table of contents for meeting: Presentation by CDD and DPW, followed by public comment, and then we will hear from Jocelyn Tager who will offer her perspective from Neighborhood Solar, before we go to questions and comments from Councillors.

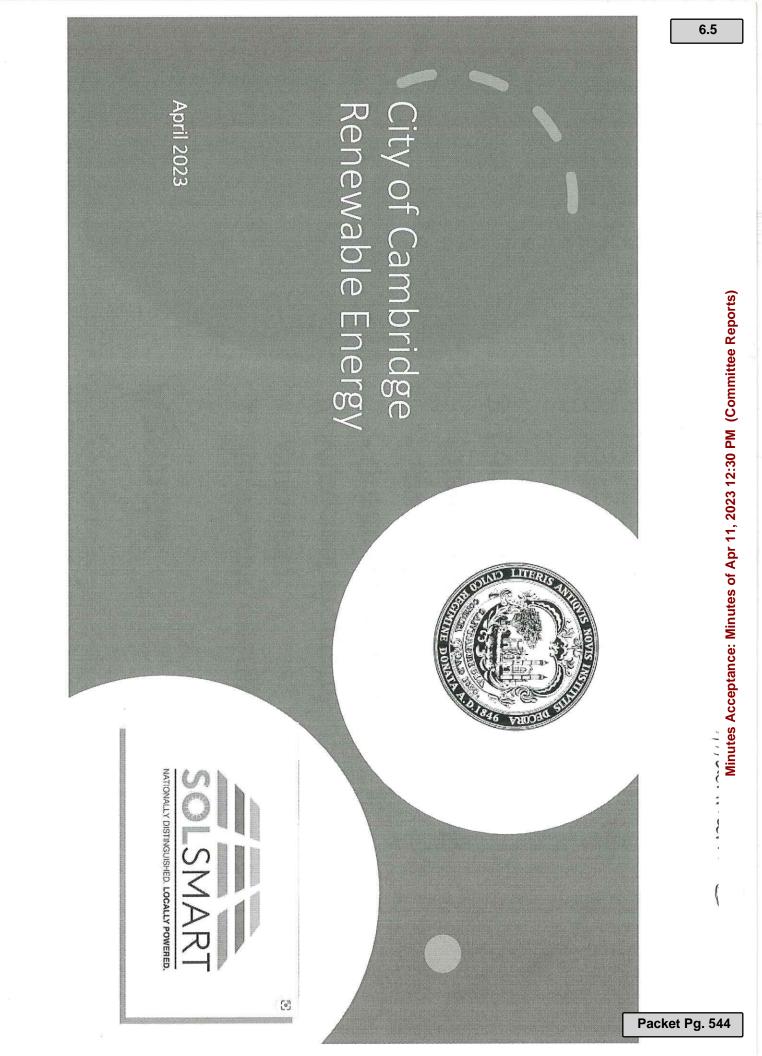
As mentioned in the call of the meeting, we are here to meet and receive a report on the status and strategy of renewable energy installations across the city. The city's renewable energy programs are divided into two major areas - the municipal strategy, that is, what the city is doing on its own land and buildings to expand our renewable energy portfolio, and the community strategy, that is, what the city can do to help incentivize residents - individuals, businesses, institutions - to increase the use of renewable energy. In discussing citywide renewable energy, it should start with an assessment of the status, and a review of the effectiveness of initiatives and programs, like the Cambridge Energy Alliance, Community Electricity Aggregation, and individual installations, and also how those individual programs work in tandem to form a cohesive renewable strategy.

As was discussed with city officials during our prep meeting for this hearing, it is necessary that we review the effectiveness of all our programs in conjunction with outside programs so that we can remain deft in our strategies and on the cutting edge of renewable energy reliance.

It's also important to remember during this conversation that renewable energy is not only a means of addressing our reliance on carbon emitting energy, but also that renewable energy represents a way that our city and our residents can take advantage of the benefits of an emerging and exciting market. And most of the jobs created are local, good jobs - so the strategy fits well with our commitment to provide workforce development opportunities for residents. There are hundreds of millions of dollars flowing in from federal and state funding thanks to the Inflation Reduction Act and the state Climate Bill that can benefit Cambridge and

all of its residents. We also expect to hear today about strategies and existing programs which seek to help lower income residents take advantage of the cost saving benefits of solar investment.

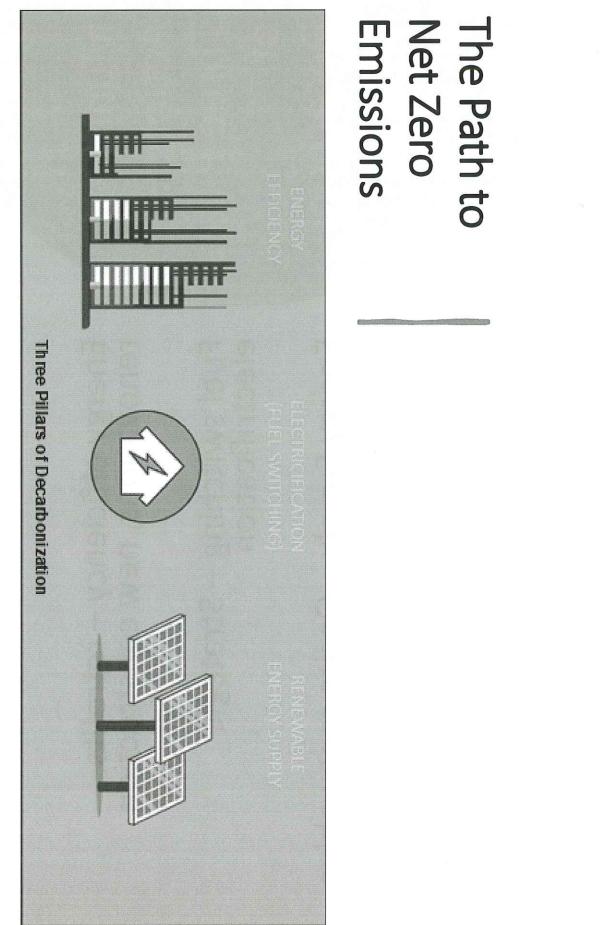
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Renewable Energy Programs

Agenda

- Renewable energy and net zero emissions
- 2. Municipal programs
- Onsite renewables
- Strategic electrification
- Renewable electricity supply
- 3. Community programs



Three Pillars Municipa zation Actions – Decarboni-

Fuel switching – Strategic electrification

Energy Supply – Onsite renewables

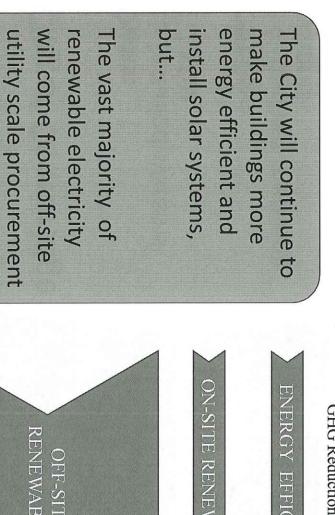
Offsite renewables

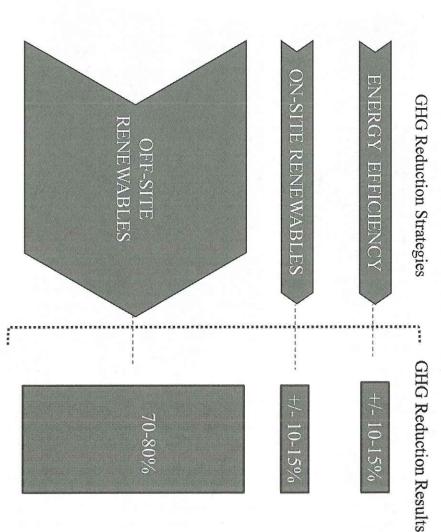
Energy efficiency – retrofits, renovations, new construction

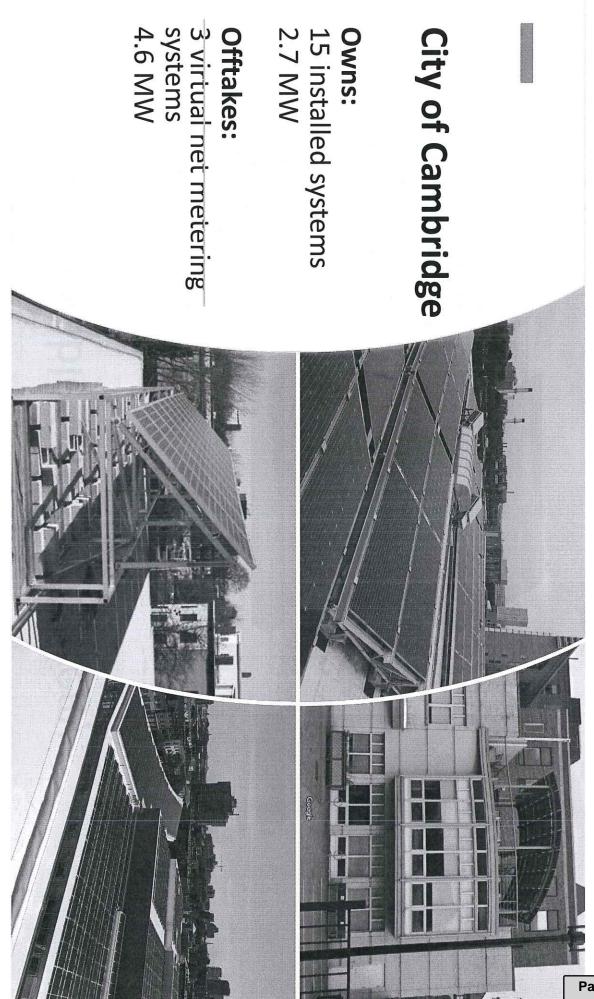
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Renewable Energy Strategy







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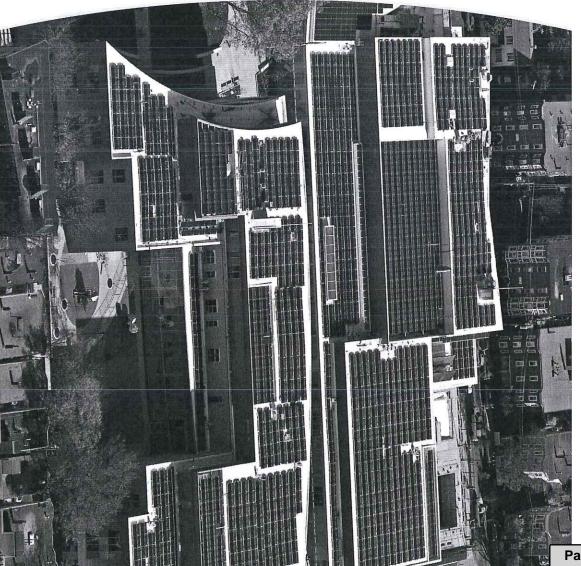
Existing Solar Installations

The City typically installs PV during scheduled roof replacements or during gut renovations/new construction

243	iraham & Parks School
	Community Solar
2,664	Total:
120	he Foundry Works Building
24	aylor Square Fire House
1324	ing Open & Cambridge Street Upper School and ommunity Complex Project
16	59 Mass Ave
61	Jain Library
97	letcher Maynard Academy
174	ennedy Longfellow School
12	itywide Senior Center
171	ullivan Water Treatment Facility
592	Aartin Luther King, Jr. School
31	ambridge Rindge & Latin High School
3	risoli Youth Center
2)PW Frazier Building
10	ussell Youth and Community Center
27	ity Hall Annex
(kW)	
Capacity	Acation

Onsite Renewables

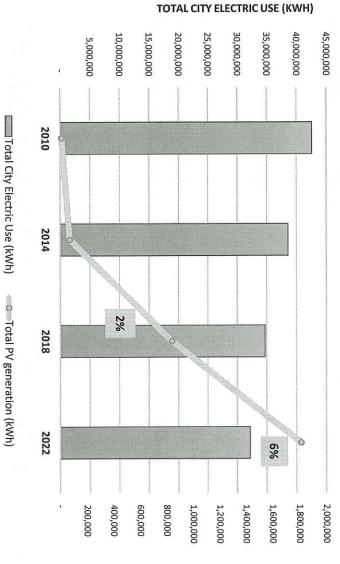
King Open/Cambridge Street Upper School & Community Complex – 1.3MW capacity



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In 2022, 6% of Cambridge's municipal electricity use was generated from onsite solar

Onsite Solar and City Electricity Use



TOTAL PV GENERATION (KWH)

PV Systems in Design or Construction

Construction Phase:	Capacity (kW)
DPW Simard Maintenance	86
Tobin Montessori & Vassal Lane	1 000
Upper Schools Complex	EDD'T

Danehy Park Sports Pavilion (2025)	Fire Headquarters (2025/26)	Design Phase:
TBD	TBD	Capacity (kW)

Future Systems:

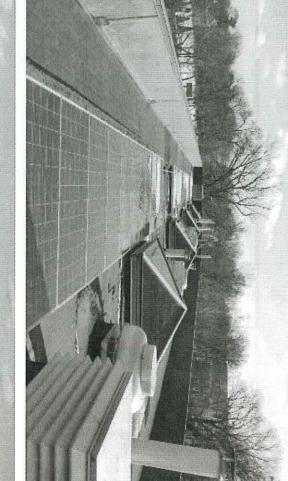
The City continues to assess buildings for renewables capacity through the ongoing School Master Planning study and the Municipal Facilities Improvement Plan

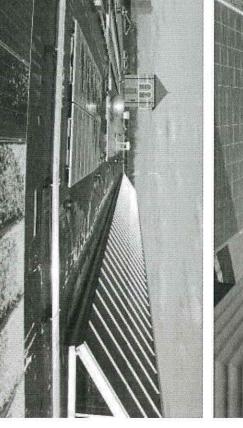


WATER

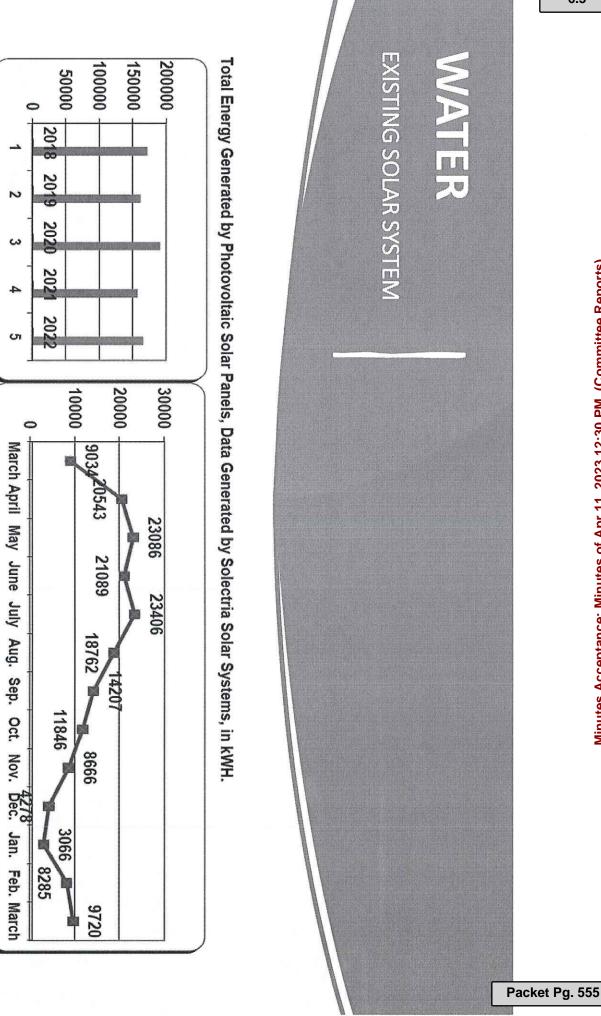
EXISTING SOLAR SYSTEM

Water Treatment Plant and Vehicle Storage Building Rooftop PV installed in 2017





Minutes Acceptance: Minutes of Apr 11, 2023 12:30 PM (Committee Reports)



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WATER

STONY BROOK CONDUIT

HYDROELECTRIC

FEASIBILITY STUDY CONDUCTED

- CITY EXPLORING GRANT FUNDS FOR DESIGN
- TWO SEPARATE LOCATIONS
- SOUTH ST WALTHAM 325,000 KW-hr/yr
- FRESH POND WEIR STRUCTURE 161,000 KW-hr/yr
- TOTAL POSSIBLE 486,000 KW-hr/yr

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Reservoirs – Floating Solar
 Arrays – Not allowed per
 Mass Department of
 Environmental Protection



Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs



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Floating Solar Photovoltaic Projects Frequently Asked Questions – FAQs: Drinking Water Program

regulated community with questions about proposing floating solar arrays on water bodies in MassDEP's Bureau of Water Resources has compiled this Questions & Answers document to assist our Massachusetts.

1. What is the status of floating solar arrays on public drinking water reservoirs in Massachusetts?

- sources of water supply. MassDEP's Drinking Water Program oversees all waters used by public water suppliers (PWS) as
- prohibited contaminant unless it has been approved MassDEP's Drinking Water Program generally considers any physical substance or matter in water a
- Floating solar arrays are inconsistent with the primary purpose and requirements of PWS which is to provide the public with water that is safe and fit.
- MassDEP's Drinking Water Program is not aware of any floating solar arrays that have been permitted in the United States on drinking water supplies that are surface waters.

Next Steps – Onsite Renewables

Municipal Facilities Improvement Plan Update:

- Set target for GHG emissions by 2030 by 12/31/23
- Will include onsite renewables target

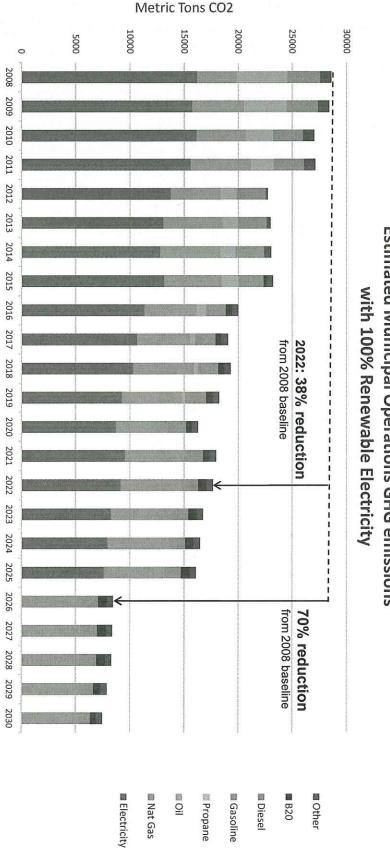
Onsite Renewables – Other Highlights

> to claim the greenhouse gas reductions self-funds its PV systems in order to retain the rights Unlike most communities, the City of Cambridge

support a comprehensive program to maintain and amount of energy. The FY24 budget includes funds to monitor all City-owned solar PV systems condition ensures that they generate the maximum Keeping photovoltaic (PV) systems in top operating

OFFSITE RENEWABLES

Estimated Municipal Operations GHG emissions with 100% Renewable Electricity



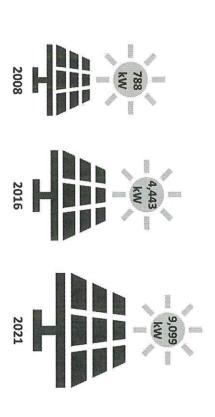
begin operating on or about Dec. 2025. the significant impact of the planned procurement of 100% renewable electricity supply from a new renewable system estimated to In 2022, the City reduced greenhouse gas emissions (ghg) from municipal operations 38% below 2008 levels. The chart also depicts



Community Renewables

- 1. Net Zero Action Plan
- 2. City Programs Supporting Residents and Businesses
- 3. Cambridge Community Electricity:
- Solar Installation and Green Power Procurement

NZAP Smart Goal: 55MW in City and City Properties by 2030



Net Zero Action Plan Policies

Action 3.2.1: Rooftop Solar Requirements

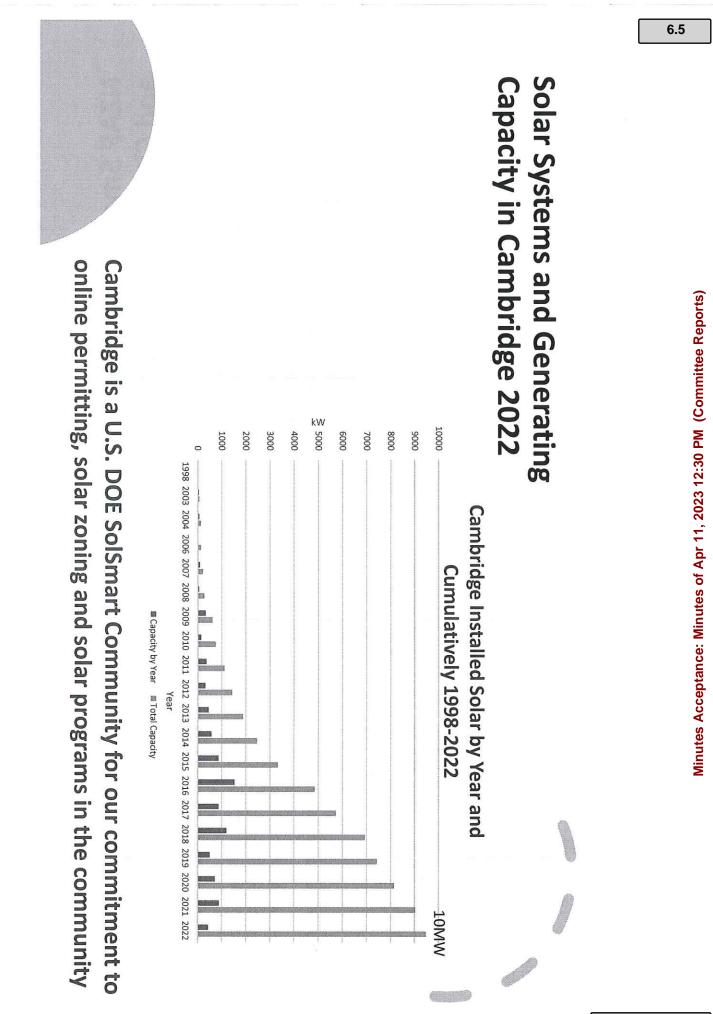
- <u>Short-term</u>: adopt a solar installation requirement for new construction
- Interacts with Action 2.1 Net Zero New Construction Requirements/Fossil Fuel Free Demonstration Program
- Specialized Stretch Code requires solar, where feasible, if building utilizes fossil fuels
- <u>Medium-term</u>: consider solar installation requirements for existing buildings, such as upon roof replacement

Action 3.2.2: Community Solar Access

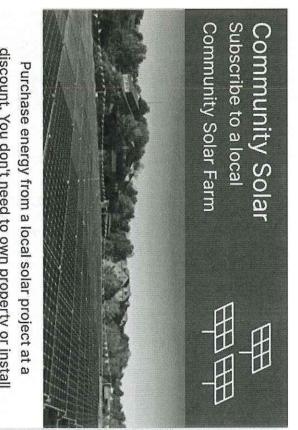
<u>Short-term</u>: design and launch a community solar program to install solar on open roofs to benefit LMI population and residents without access to solar

Action 3.3: Off-Site Renewable Electricity Access

 <u>Short-term</u>: continue to pursue impactful renewable electricity sources for Cambridge Community Electricity aggregation program, with goal of giving all buildings access to at least 50% RE by 2025 and 100% by 2030



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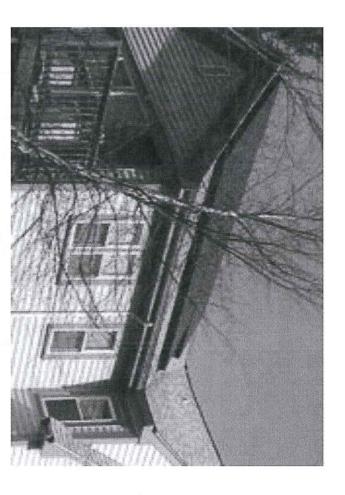
discount. You don't need to own property or install equipment to save with community solar.

energysage (4). S sunwealth*

Existing Programs

Sunny Cambridge

- **Rooftop Solar Ownership**
- Small Residential Rooftop Solar Marketplace to compare installer quotes and get unbiased technical advice (EnergySage)
- 200 installations (50% through City Link)
- Multi-Family Solar Technical Assistance:
- 74 buildings (1,000 units)
- **Community Solar**
- Market-rate Community Solar Marketplace that provides utility bill savings to participants (EnergySage) – 70 participants
- Income-eligible Community Solar Marketplace that provides utility bill savings to low-income residents (Sunwealth) 25 participants



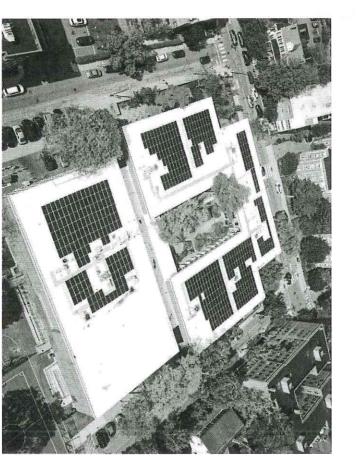


BlocPower Multi-Family Retrofits

- Guides property owner through whole-building fossil-fuel free equipment replacements and provides financing to building owner(s) to complete comprehensive retrofits
- Launched April 10!

Decarbonization Advisor

- Guide property owner through fossil-fuel free equipment replacements and create "zero emissions over time" retrofit plans that may include solar PV and solar thermal equipment
- Launching FY24
- Local Community Solar Administrator (in development)
- Determine feasibility of third-party entity identifying host sites and leading the development of community solar installations on Cambridge large residential, commercial, and non-profit buildings



Cambridge Community Electricity (CCE)

243kW solar project on Graham and Parks School

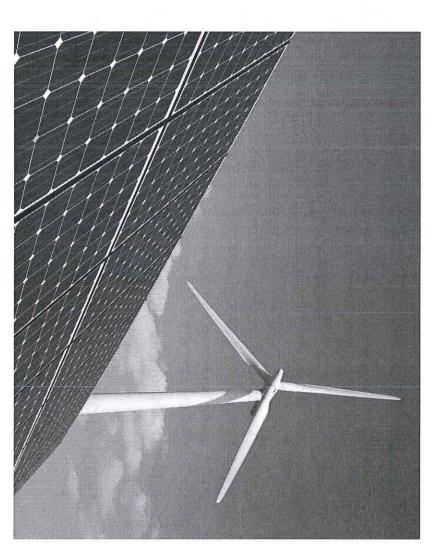
- Over 40,000 CCE accounts pay a \$0.002 charge on each kWh of electricity they use to the City Revolving Fund
- All the RECs from this solar project were retired on behalf of the Community Electricity Program participants, reducing their carbon emissions.
- All the solar net metering credits will be sold and the funds re-invested in the revolving fund.
- This solar project is collectively "owned" by all the Cambridge Community Electricity Program participants
- The electricity produced by this new solar project will take the place of some fossil fuel-generated electricity.

current 100% renewable electricity option through CCE Almost 1,700 CCE participants have opted up to 100% Green Plus, the

Next Steps

CCE Supply Contract 2024

- Procurement of electricity supply contract for aggregation starting January 2024
- Structure the amount of renewable electricity in the default CCE offer for 2024
- Virtual Power Purchase Agreement(s) vPPA
- Procure offsite renewable energy through contracts with developer(s) of new, yet-to-be-built renewable energy projects
- Likely available late 2025
- Continue additional procurements to meet goals of 100% renewable electricity by 2030



		So		1				Enu Pro	18	5.5
Phased out Fall 2022 to be replaced with upcoming Decarbonization advisor program, BlocPower Pilot, and Community Solar Program.	Cambridge Multi-family Solar Program	ar Programs	Cambridge Multi-family Retrofit Program			Mass Save Small Business Turnkey	Mass Save Home Energy Assessments (1-4 unit residential)	ergy Efficiency (EE) grams	gram	
	2017		2017			2008	2008		Year Started	arte)
	Provides customized solar technical advice for MF building and unit owners		Provides customized EE technical advice for MF building and unit owners		2		Outreach to connect residents to Mass Save. Troubleshoot participation challenges.		Services Provided	Minutes Accentance: Minutes of Anr 11 2023 12:30 PM (Committee Renorts)
	Outreach through AiE budget		Outreach through AiE budget	*AiE outreach Iaunched in 2019		budget of	Outreach and participant services in All in		Budget	es Accentance: Mi
	74 MF buildings, ~1000 units		200 MF buildings, ~2800 units	223 small businesses received energy upgrades *numbers above since AiE launched in 2019	101 residents referred to the low income EE programs run by CAPIC	contracts with at least 116 (44%) rental units	1,110 HEAs with at least 479 (43%) in rental units 261 weatherization		Impact	(Minim
solar companies	Focus on building sector that is		Focus on building sector that is underserved by Mass Save	lingual customer service	AiE translates materials and does multi-	environmental justice census	AiE canvassing and community partnerships are		Equity	
	be	mily2017Provides customized solar technical advice for MF building and unit ownersOutreach through AiE budget74 MF buildings, ~1000 unitsbe program, mmunityImage: Image: Im	mily2017Provides customized solar technical advice for MF building and unit ownersOutreach through AiE budget74 MF buildings, ~1000 unitsbeprogram, ommunity	Multi-family ogram2017Provides customized EE technical advice for MF building and unit ownersOutreach through AiE200 MF buildings, ~2800Multi-family ram2017Provides customized solar technical advice for MF building and unit ownersOutreach through AiE74 MF buildings, ~1000 unitsall 2022 to be up coming ion advisor program, tot, and Community m.2017Provides customized solar technical advice for through AiEOutreach through AiE74 MF buildings, ~1000 units	223 small businesses received energy upgrades223 small businesses received energy upgrades *unmber alcore for MF building and unit ownersOutreach through AiE2017 upgrades *unmber alcore since AIE launched in 2019Multi-family ram2017Provides customized EE technical advice for building and unit ownersOutreach through AiE200 MF buildings, ~2800 unitsMulti-family ram2017Provides customized solar technical advice for MF building and unit ownersOutreach through AiE201 MF buildings, ~1000 unitsall 2022 to be upcoming tot and Community n.2017MF building and unit ownersOutreach budgetCutreach units	Multi-family 2017 Provides customized EE technical advice for MF Outreach through AiE 200 MF buildings.~2800 Multi-family 2017 Provides customized Solar technical advice for MF Outreach through AiE 200 MF buildings.~2800 Multi-family 2017 Provides customized solar technical advice for building and unit owners Outreach through AiE 200 MF buildings.~2800 Multi-family 2017 Provides customized solar technical advice for MF building and unit owners Outreach through AiE 200 MF buildings.~2800 Multi-family 2017 Provides customized solar technical advice for MF building and unit owners Outreach through AiE 200 MF buildings.~1000 MF building and unit owners MF building and unit owners 0uteach through AiE 14 MF building and Mit, and Community 2017 Provides customized solar technical advice for MF building and unit owners 0uteach through AiE 14 MF building and Mit, and Community 2017 Provides customized solar technical advice for through AiE 14 MF building and Mit, and Community 2017 Provides customized solar technical advice for through AiE 14 MF building and	s Small Business 2008 Conversion would would budget of 116 (44%) rental units 101 residents referred to the low income EL programs run by CAPIC 101 residents referred to the low income EL programs run by CAPIC 101 residents referred to the low income EL programs run by CAPIC 223 small businesses received energy upgrades sumbled in 2019 101 residents referred to the low income EL programs run by CAPIC 223 small businesses received energy upgrades sumbled in 2019 101 residents referred to the low income EL programs run by CAPIC 223 small businesses received energy upgrades sumbled in 2019 101 residents referred to the low income EL provides customized solar technical advice for run adviser program, air 2017 Outreach budget AL building and unit owners Outreach budget AL budget	It Home Energy 2008 Outreach to connect residents to Mass Save. 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Discounted Electric Rate New Start subsidized bill payment plan	Energy Conservation and Weatherization	Fuel Assistance (FA)	Income Eligible Programs	Program Sunny Cambridge: Rooftop & Community Solar
N/A	2008	N/A		(studd Year Started 2016, Community 2020
Help ratepayers qualify and enroll in Eversource bill payment assistance programs	Promote LI weatherization, troubleshoot participant challenges. Coordinate with HRI Home Improvement Program (HIP)	Promote fuel assistance and coordinate LI energy programs like LI Comm. Solar.		(strodeal eatitimuoc) Md 06::11 troc to compare community solar advice. Marketplace to compare community solar bartnership with discounts. Outreach through AiE budget Im longet Im longet
Outreach and coordination through AiE budget	Outreach and coordination through AiE budget	Outreach and coordination through AiE budget		W :outreach through AiE budget No cost partnership with Energy Sage Outreach through AiE budget
During Covid especially helped residents avoid utility shut-offs	Help LI ratepayers enroll in LI Weatherization, troubleshoot participant challenges	Coordinated utility bill moratorium and LI Comm Solar outreach to LI customers. Help LI ratepayers enroll in FA		Impact Impact Rooftop solar through City unique link: Participants (798); Installations (97) ALL rooftop solar via EnergySage: Participants (1410); Installations (200) Comm. solar through City unique link: Participants (9) ALL comm. Solar via EnergySage: Participants (70)
Low income, behind on bills, and language access	Low income and language access	Low income and language access		reduce their electricity bill by 25% Comm. Solar focuses on providing electricity bill discounts to renters, small businesses and homeowners who cannot install rooftop solar.

Cambridge Community Electricity 2017 Cost-effective electricity and consumer protection Paid for with bill 43.266 ratepayer adder Protects adder Program 2017 Cost-effective electricity supply with 100% or enewable option Paid for with bill 43.266 ratepayer adder Protects adder Start Corresponder Start Start Start Protects adder Start Start Protects adder Start Start Start Start Protects adder Start Start Protects adder Start Start Start Start Protects adder Start Start Protects adder Start Start Protects adder Start Start Protects adder Start Start Protects adder Start Start Protects adder Protects adder Start Start Protects adder Protects badder Protects Badder Protects Badd	5	orts)	inutes of Apr 11, 2023 12:30 PM (Committee Reports)	Minutes Acceptance: Minutes	Minut	570
pe Community Electricity2017Cost-effective electricity supply with 100% or diry-wetted electricity supply with 100% or diry-be percented by provided by prov						of Pa
YearYearStartedServices ProvidedBudgetImpactye Clean Heating &2020Education and technical advice and free installer quotes for air-source heat pump technologyOutreach through AlE200 participantsnd Climate Education2015Provides public school and afterschool programs with environmental education focused on STEM4 elementary schools, 9ge Energy Blil Helpline ce understanding electric pily contracts and g programs above)2019Single phone number for residents to get their energy bills reviewed for ways to save money, get out of deceptive electricity supply contracts and enroll in all Cambridge Energy Alliance programs listed hereIncluded in All in budget56 residents received budget contracts and program into ceutor calls to reach residents with CEA program into "numbers above refled tracking since 2022	Cambridge Community Electricity Program	2017	Cost-effective electricity and consumer protection of city-vetted electricity supply with 100% renewable option	Paid for with bill adder Outreach through AiE budget	•	ts le pricing le pricing risource. vyers tion from tive ers
A2020Education and technical advice and free installer quotes for air-source heat pump technologyOutreach through AIE200 participants budgetion2015Provides public school and afterschool programs with environmental education focused on STEM4 elementary schools, 9 after schoolsline electric2019Single phone number for residents to get their energy bills reviewed for ways to save money, get out of deceptive electricity supply contracts and enroll in all Cambridge Energy Alliance programs listed hereIncluded in All in budget156 residents received budgetd2000 inbound and programs listed hereIncluded in All in budget156 residents received budgetd2019Single phone number for resident to get their energy AllianceIncluded in All in budget156 residents received budgetd2019Single phone number for resident to get their energy AllianceIncluded in All in budget156 residents received budgetd2019Single phone number for resident hereIncluded in All in budget156 residents received budgetd2019Single phone number for resident hereIncluded in All in budget156 residents received budgetd2019Single phone number for resident hereIncluded in All in budget156 residents received budgetd2019Single phone number for resident hereIncluded in All in budget156 residents received budgetdSingle phone number for resident hereSingle phone number for resident hereSingle phone number	Program	Year Started	Services Provided	Budget		Equity
ion2015Provides public school and afterschool programs with environmental education focused on STEM4 elementary schools, 9 after schoolsline slectric2019Single phone number for residents to get their energy bills reviewed for ways to save money, get out of deceptive electricity supply contracts and enroll in all Cambridge Energy Alliance programs listed hereIncluded in All in Energy (AiE)156 residents received bill reviews & assistance 600 inbound and outbound calls to reach residents with CEA 	Cambridge Clean Heating & Cooling Program	2020	Education and technical advice and free installer quotes for air-source heat pump technology	Outreach through AiE budget		Reducing fossil fuel use in homes
line2019Single phone number for residents to get their energy bills reviewed for ways to save money, get out of deceptive electricity supply contracts and enroll in all Cambridge Energy Alliance programs listed hereIncluded in All in Energy (AiE)156 residents received bill reviews & assistancedd150 residents received budgetbill reviews & assistance outbound calls to reach residents with CEA program infodsssssdsss	Energy and Climate Education (Elementary age)	2015	Provides public school and afterschool programs with environmental education focused on STEM	ž		Partners with after schools that serve low- and moderate- income families
	Cambridge Energy Bill Helpline (assistance understanding electric bills, getting off predatory 3rd party supply contracts and accessing programs above)	2019	Single phone number for residents to get their energy bills reviewed for ways to save money, get out of deceptive electricity supply contracts and enroll in all Cambridge Energy Alliance programs listed here	Included in All in Energy (AiE) budget	Ŭ Ĝ	Provides bill literacy and consumer protection, multi- lingual service

by the City of Cambridge, including events, tabling, door-knocking, banners and yard signs, brochures, dedicated website, newsletter, press Cambridge Energy Alliance performs outreach and engagement for over 10 energy efficiency and renewable energy programs and services offered releases and social media and building community partnerships across City departments and local non-profits.

Mass Save Municipal Partnership (2022) Mass Save Community First Partnership (2022-2024) DOER Innovate EE (2020-2021)	CEA has consistently leveraged outside funding to provide these services to City residents and small businesses including, recently:	Since 2019 the City partnership contract with All in Energy has allowed CEA to accelerate outreach and engagement of these energy programs and services with a focus on providing multi-lingual services; renter-specific assistance; outreach focused in Cambridge's environmental justice census tracts; and build deeper connections with local non-profits and City departments that serve hard-to-reach residents.
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