Cambridge Climate Protection Action Committee CPAC BULLETIN

August 2015

<u>MEETING:</u> The Climate Protection Action Committee <u>will not meet in August</u>. The next meeting is scheduled for September 10, 6:00 pm, City Hall, 795 Mass. Ave., Sullivan Chamber. The September meeting will be CPAC's annual meeting with the City Manager and departments. The agenda for the meeting will be posted on the <u>Community Development Department website</u>.

EVENTS & MEETINGS

- <u>BASG Meeting</u> September 1, 6:00 pm, Venture Café, One Broadway, Cambridge. This meeting of the Boston Area Sustainability Group is a special session about the upcoming COP21 international climate summit in Paris. This meeting is held in collaboration with Net Impact Boston and the Sustainable Business Network of Massachusetts. Dr. Matthew Gardner, Managing Partner of Sustainserv, will lead a discussion about what to expect from the Paris meeting. To register, click here.
- Climate Ride Northeast September 17-21. This event raises funds for climate action organizations, raises awareness of climate change, and promotes sustainable lifestyles. The Northeast bicycle ride follows a 320 mile route from Bar Harbor, Maine to Boston. Riders can choose from among more than 100 beneficiaries to support. For more information, click here.
- ▲ ACCO Climate Fundamentals Workshop October 5-6, Boston University. Workshop on climate science, climate hazard identification and vulnerability assessment, leveraging climate data and tools, and fundamentals of the energy, water, food nexus. Instructors include Christine Baglin, Project Performance Co.; Kelly Burks-Copes, U.S. Army Corps of Engineers; and Rawlings Miller, ICF International. Presented by the Association of Climate Change Officers. Workshop is part of a series that contributes to a Climate Governance Certificate. Fees apply. The registration deadline is September 21. For more information and to register, click here.
- Solve October 5-8, MIT. The conference will convene technologists, philanthropists, business leaders, policy makers, and change agents to examine and address problems around the four themes of learn, cure, fuel, and make. The fuel theme includes climate change. This conference runs in tandem with the Crowds and Climate Conference. For more information and to register, click here.
- Crowds & Climate Conference October 6, MIT. This is the annual conference sponsored by the MIT Climate CoLab. Climate CoLab contest winners will present their ideas on how to tackle specific climate change problems, including from the Cambridge contest on mitigating the local urban heat islands. For more information, click here.
- <u>Biodiversity for a Livable Climate</u> October 16, Tufts University. This year's theme is "restoring water cycles to reverse global warming". Sponsored by Biodiversity for a Livable Climate. For more information and to register, <u>click here</u>.
- <u>Rising Seas Summit</u> November 3-5, Boston Sheraton Hotel. This is an annual professional conference convening national and local government, industry, academia, and environmental NGOs to highlight the interrelationships between sea level rise, climate change and extreme events. One of the keynote speakers will be renowned climate scientist Michael Mann. Sponsored by the Association of Climate Change Officers. For more information and to register, <u>click here</u>.

- Local Solutions Conference April 4-6, 2016, Baltimore. This is the Eastern Regional Climate Preparedness Conference hosted by Antioch University and the EPA. Details are forthcoming.
- Friends of Alewife Reservation Walks Friends of Alewife Reservation is a stewarding and educational non-profit for the Alewife Reservation in northwest Cambridge and for the surrounding city natural resources of marshes and wetlands abutting Belmont and Arlington. Free wildlife and history educational tours, clean ups and conservation initiatives for the silver maple forest. "Virtual" Tour of the Reservation: click here.
- Walk/Ride Day Corporate Challenge Annual workplace competition in which organizations throughout Cambridge and surrounding cities and towns compete one day each month from April through October to have staff check in their commute online and consider healthier and more environmentally friendly choices (transit, bicycle, walk, etc.) Data show significant green shifts among participants on Walk/Ride Days and other days throughout the month. Promoted by Green Streets Initiative, a Cambridge-based grassroots group. Register your company for the Challenge here.
- 350MA.Org 350 Massachusetts is a volunteer-led, campaign-focused initiative connecting and organizing a strong grassroots coalition to address climate change and build a just and secure future beyond fossil fuels. Meetings are held every two weeks. All meetings are held at First Church Cambridge, 11 Garden Street, Cambridge, MA and begin at 6:30 PM. More info at www.350MA.org.
- Green Cambridge Green Cambridge is a 501(c)(3) not for profit organization and a founding chapter of the Massachusetts Climate Action Network (MCAN). Green Cambridge works to create a more sustainable Cambridge, and to protect the environment for the health and safety of all. Green Cambridge meets monthly at the Eastern Bank community room in Harvard Square, usually on the first Thursday of every month at 6:30pm. All are welcome and invited to attend! For more information and a listing of community events, please visit: http://www.greencambridge.org/.

NEWS

- State of the Climate in 2014 The American Meteorological Society released State of the Climate in 2014, based on data compiled by the National Oceanic and Atmospheric Administration (NOAA), which reports continuing trends of a warming planet. Key trends include: atmospheric greenhouse gas concentrations continue to increase, reaching a new high of 397.2 ppm (compares to 354.0 ppm in 1990 when the reports started); four independent global datasets showed 2014 to be the warmest year on year on record in terms of the Earth's surface temperatures; sea surface temperatures reached a record high; global upper ocean heat content was a record high; global sea level reached a record high, keeping up the pace of 3.2 + 0.4 mm per year rise over the past two decades; the Arctic experienced its 4th warmest year since records started in the early 20th century and sea ice extent reached its sixth lowest since satellite observations started in 1979; the Antarctic showed highly variable temperture patterns and sea ice extent reached a record high; and tropical cyclones were above average globally due to a record number in the Eastern/Central Pacific. It was noted in the report that while average global temperatures increased, eastern North America saw lower than average temperatures.
- Cambridge Housing Authority Commits to President's Solar Goal − The Cambridge Housing Authority made a commitment to President Obama's new initiative to increase access to solar energy for all Americans, particularly low- and moderte-income comunities. The Cambridge Housing Authority is among various organizations in more than 20 states committing to develop more than 260 solar energy projects that will contribute to the President's goal of installing 300 megawatts of renewable energy in federally subsidized housing.
- Baker Files Net Metering Bill Governor Charlie Baker filed <u>legislation</u> in in the Massachusetts House of Representatives to raise the net metering caps on solar photovoltaic systems by 2% each for the public

and private sectors, which effectively increases the cap space for public solar projects by 50% and private projects by 40%. Net metering provides an important source of revenue, and therefore incentive, for solar PV systems and support for the Commonwealth's goal of installing 1,600 megawatts of solar PV by 2020. The existing caps had been reached in the National Grid service territory and are being approached in Eversource's territory. The legislation would also give the Public Utilities Commission the authority to raise the caps further as needed. Small projects – below 10 kilowatts for residential and 25 kilowatts for business – remain uncapped. In the longer term, the legislation would lower the value of net metering credits for solar PV to the wholesale cost of electricity. [Commonwealth, 8/10/15]

- Curbside Organics Collection The Cambridge Public Works Department issued a report on the City's curbside organics collection pilot. The pilot sought to divert household food scraps from the waste stream to composting by collecting them at the curbside. A specific area of the Monday collection route in North Cambridge was selected for the pilot because of the mix of housing types and lack of access to existing off-site food scrap drop off sites. For the beginning of the collection in April 2014, 554 households. both single family and multifamily up to 12 units, were recruited. Participating households were given a green kitchen container, a year's supply of BioBags, a green curbside bin for multifamily buildings, and free collection. Participants received monthly email updates and were asked to periodically respond to online surveys, and were aslo given access to finished compost that could be used in gardens. The data found that an average of 6.6 pounds of compostable material was collected per household each week, which represented a 35% reduction in trash by weight. The analysis suggested that 89% of the organics were captured by collection. Overall, 3,364 pounds were brought to Rocky Hill Farm in Saugus for composting. The program achieved a resident satisfaction rate of 95%. Based on the successful results, the City has decided to expand curbside organics collection to all eligible residences on the Monday route in fall 2015. The City also intends to expand citywide within two years and to the 13+ unit multifamily buildings on a case-by-case basis in subsequent years.
- Next Steps on Net Zero Task Force Recommendations The Cambridge City Council adopted the recommended action plan of the Getting to Net Zero Task Force at its meeting on June 22nd. The task force laid out a roadmap on how the community could move toward net zero greenhouse gas emissions from building operations by 2050. The Council asked the City Administration to accelerate the implementation of the task force recommendation to upgrade Cambridge's green building requirement. It was hoped to file a zoning amendment in time for the August 10th Council meeting, but the City Manager has informed the City Council that due to the technical complexity of writing the language, the amendment will be readied for the City Council's next meeting on September 21st. The City's existing standard (Article 22 of the Zoning Ordinance) is based on the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standards and currently requires projects subject to the Special Permit requirements of the Zoning Ordinance to be certifiable at the LEED Silver level. Certifiability is based on a review by City staff of documentation provided by the applicant. The amendment will propose raising the citywide greenbuilding standard to LEED Gold and require achievement of at least 6 energy optimization credits based on the LEED 2009 standard. USGBC is transitioning to the new LEED Version 4, which has a different scale for the energy optimization points. The proposed amendment will account for the change in the LEED standard. The amendment will also require achievement of the enhanced commissioning credit, which makes sure building energy systems operate effectively and efficiently, and provide for third party review of documentation by the Green Building Certification Inc. The amendment will provide options if the GBCI review cannot be completed within a certain time frame.
- Sustainability Compact Climate Resilience Committee A new Climate Resiliency Working Group has been formed by the Cambridge Compact for a Sustainable Future. The Compact is a collaboration involving the City, MIT, Harvard, and many of Cambridge's largest employers who work together on making the city a more sustainable place. The Compact directors have identified preparing for climate change to be a priority issue. Sarah Brylinsky of the MIT Office of Sustainability and Dan Noberini of Novartis Institutes for Biomedical Research are co-chairing the working group. The working group is expected to build off the Cambridge Climate Change Vulnerability Assessment. [MIT News, 7/16/15]

- Georgetown Energy Prize Update Summer is heating up and so is Cambridge's competition for the \$5 million Georgetown University Energy Prize! You may have seen the City's intrepid Team Energy Interns out in front of the library or on the street sharing information about the Prize and how everyone can help save energy in their home today by signing up for a no-cost energy assessment or pursuing DIY actions. Remember to beat the August heat by getting outside in the shade or your local pool, drawing the curtains against the sun, and running a fan at night instead of the AC to take advantage of the cooler air. Also, the Mass Solar Connect incentive ends this month, so if you've been considering going solar, then now is the time to act! If you have additional ideas for how the city can save energy and Win It!, don't forget to weigh in to the Winlt Ideas Forum and keep your eyes on the website for additional events and volunteer opportunities.
- Participatory Budgeting Process Now Open The idea collection stage is open for the Cambridge Participatory Budgeting initiative. Ideas should be submtited via the PB website by August 31. A Steering Committee consisting of 24 residents and representatives from local non-profit and community-based organizations will guide the selection of projects for which \$600,000 from the City's Fiscal year 2017 Capital Budget will be allocated. In 2015, six projects won \$528,000 in funding. Those projects included "Healthy trees for a healthy Cambridge" and 8 bike repair stations.
- Boston Chief Resilience Officer Mayor Marty Walsh announced he has appointed Atyia Martin as Boston's first chief resilience officer. The new position was created as part of the City of Boston's participation in the Rockefeller Foundation's 100 Resilient Cities program. The City of Boston has indicated the CRO will focus on social resilience. While climate change is part of the focus, the position has a much wider purview and includes other risks. [Boston Business Journal, 8/10/15]
- RGGI Provides Economic Benefits A new report from the Analsyis Group analyzes the economic impacts of the Regional Greenhouse Gas Initiative (RGGI) between 2012 and 2014 and finds there is an net positive benefit. RGGI is a regional agreement among nine northeastern and mid-Atlantic states to reduce carbon dioxide emissions from powerplants using market mechanisms. Highlights of the report include: over 2012-2014, RGGI led to a \$1.3 billion economic value for the nine-state region; investments of RGGI auction revenue in energy efficiency and reneable energy more than offset increases in electricity costs to consumers; regionally energy consumers saw a net gain of \$460 million; and regional CO2 emissions from powerplants have declined. [Bloomberg News, 7/13/15]
- AG Commissions Natural Gas Pipeline Study Attorney General Maura Healy has commissioned a study to assess the options to ensure electricity reliability needs in New England through 2030. The study will also tackle the question of how much additional natural gas is needed to meet electricity generation needs, particularly during the winter. This has become an issue in the siting of new natural gas transmission facilities in Massachusetts. [Attorney General news release, 7/6/15]
- 2007-2013 US CO2 Drop Due to Recession According to a forthcoming paper in Nature Communications, the decrease in U.S. carbon dioxide emissions between 2007 and 2013 was largely driven by the recession. Some have connected the increasing conversion from coal and oil to natural gas as the reason. But the analysis indicates this conversion contributed about 18% of the decrease. The majority of the decrease is attributed by the researchers to changes in consumption and some changes in the production structure of the economy. [Science Daily, 7/21/15]

RESOURCES & IDEAS

Principles for Adaptation Indicator Development – Good Practice Study on Principles for Indictor Development, Selection, and Use in Climate Chanage Adaptation Monitoring and Evaluation by the Climate-Eval Community of Practice provides guidance on developing, selecting, and using indicators for climate chanage adaptation.

- Community Resilience Planning Guide Community Resilience Planning Guide for Building & Infrastructure Systems from the National Institute of Technology and Standards is a draft document that lays out six steps on integrating disaster resilience into community planning, including how vital social functions are supported by buildings and infrastrucure systems. A comment period recently concluded so the guide may undergo some changes.
- <u>ULI Density Guide</u> <u>Density: drivers, dividends, and debates</u> by the Urban Land Institute Europe is a guide for policy makers, planners, designers, and the public to understand the tradeoffs in maximizing the benefits and minimizing the costs of compact and mixed urban development.
- <u>Hampton Roads Regional Adaptation Project</u> The <u>Hampton Roads Sea Level Rise Preparedness</u> and <u>Resilience Intergovernmental Planning Pilot Project</u> is working on a regional approach to planning for SLR in the Norfolk, Virginia area. The project is led by the Center for Sea Level Rise at Old Dominion University.
- MA Accelerated Renewable Thermal Strategy Commonwealth Accelerated Renewable Thermal Strategy is a report prepared by Navigant Consulting for the MA Department of Energy Resources that addresses how to use renewable thermal technologies such as solar thermal, ground-source heat pumps, biofuels and other technologies to reduce GHG emissions, expand economic development opportunities, and reduce heating and cooling costs for consumers.
- Renewable Heating & Cooling Polices An archived webinar sponsored bythe Clean Energy States Alliance highlights a recent paper by Meister Consultants Group titled Waking the Sleeping Giant: Next Generation Policy Instruments for Renewable Heating & Cooling in Commercial Buildings. The paper is available on the webinar webpage and at the IEA-RETD webpage.
- Progress Report on Federal Local/State Adaptation Recommendations The Obama Administration issued a <u>progress report</u> detailing the federal agency initiatives to implement the <u>recommendations of the State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience</u>.
 [Georgetown Climate Center, 7/9/15]
- Developing Resilient Waterfront Blocks Article in Urban Land titled <u>Developing Resilient Waterfront Blocks</u> which talks about the Boston Living with Water design competition and focuses on one of the design concepts for the Seaport district submitted by a team led by the consultant group Utile. The idea involves an alternative to raising the existing sytem of streets and their attendant system of utilties and services.
- <u>AARP Livability Index</u> The American Association of Retired Persons (AARP) has put out a new <u>Livability Index</u> webtool that lets users find an overall livability score for neighborhoods. The score is based on factors covering housing, neighborhood, transportation, environment, health, engagement, and opportunity.
- <u>Bornholm</u> The small Danish island of <u>Bornholm</u> is experimenting with an integrated energy grid bringing renewable thermal and electricity together.
- Minnesota Extreme Heat Toolkit The Minnesota Department of Public Health has an Extreme Heat Toolkit designed to advise local governments and public health professionals on how to prepare for and respond to extreme heat events, which are expected to grow over time due to climate change.
- Compound Flood Risks A new paper in Nature Climate Change finds the occurrence of compound flooding from coastal storm surges and high precipitation is increasing. [Climate Central, 7/27/15]
- SF Bay Area Development & Sea Level Rise A very detailed news article, <u>Major S.f. Bayfront</u> <u>Developments Advance Despite Sea Rise Warnings</u>, about the conflict between rising sea levels and development in the San Francisco Bay area.
- Cambridge Climate Change Vulnerability Assessment The City is working on preparing a vulnerability assessment that will serve as the foundation for a climate change preparedness plan that will follow. The

<u>project webpage</u> provides background information and documents from meetings. Interested people can send an email to jbolduc@cambridgema.gov to be placed on the project email list.

- Cambridge Solar Map The Cambridge Solar Tool provides a web-based interactive tool to find out the potential for installing solar photovoltaic systems on rooftops in the city. The tool also evaluates the financial feasibility of installations and makes comparisons to alternative investments. The tool is designed by Mapdwell and based on the research of the MIT Sustainable Design Lab led by Dr. Christoph Reinhart. The City's Cambridge Energy Alliance program can assist interested property owners with finding installers and understanding the financial aspects. The Mapdwell tool was upgraded in September 2015 and can now be viewed in Spanish.
- Opt Out of Unwanted Mail Do you get unwanted mail from retailers, credit card companies, or cable/phone companies? You can opt out of mailings from over 4000 companies with Catalog Choice and help reduce waste. For example, you can stop getting weekly circulars from Global Direct, they will honor opt-out requests, so add them to "your choices". Just register for FREE at https://cambridge.catalogchoice.org to create an account to start cleaning out your mailbox. To date, over 3700 Cambridge residents have signed up and opted out of nearly 25,000 different unwanted mailings!
- MBTA Rider Tools The MBTA has a number of <u>rider tools</u> that help riders to anticipate arrival times of buses, subways, and commuter trains and to receive alerts of delays. These tools can be used on iPhones, Android phones, text messges, emails, and the Web. There is also a trip planning tool.
- <u>Cambridge Energy Alliance</u> The <u>Cambridge Energy Alliance</u>, a program of the City of Cambridge Community Development Department helps residents, businesses, and organizations to obtain energy efficiency and renewable energy services. You can sign up for energy audits and ask questions through the energy advisor service.

About the CPAC Bulletin:

The Climate Protection Action Committee (CPAC) is a City of Cambridge advisory body appointed by the City Manager to assist in the implementation of the Cambridge Climate Protection Plan. Please forward this bulletin to other interested people. Anyone who would like to be added to the email distribution list should contact John Bolduc at jbolduc@cambridgema.gov or 617-349-4628. For more information about Cambridge climate protection activities, see http://www.cambridgema.gov/climate. Recent issues of the CPAC Bulletin are posted on the webpage.