

Cambridge Climate Protection Action Committee

CPAC BULLETIN

September 2016

MEETING: The Climate Protection Action Committee will meet on September 8, 6:00 pm at City Hall Annex, 344 Broadway, 2nd floor community meeting room. The main topics of this meeting will be commercial Property Assessed Clean Energy financing and other committee business. The agenda for the meeting will be posted on the [Community Development Department website](#).

EVENTS & MEETINGS

- **BASG** – September 6, 6:00 to 8:30 pm, Venture Café, One Broadway. *Topic:* GMOs – Science, Sustainability, and Consumer Transparency. *Speakers:* Gary Hirshberg, Chairman of Stonyfield Farm and Timothy Griffin, Associate Professor at Friedman School of Nutrition Science and Policy, Tufts. For more information and to register, [click here](#).
- **Boston's Climate Vulnerabilities & Solutions** – September 15, Federal Reserve Bank, Boston. Presented by A Better City and Boston Green Ribbon Commission. Symposium on latest climate projections, technological solutions, and panel discussions. For more information and to register, [click here](#).
- **Green Building Showcase** – The Massachusetts Chapter of the US Green Building Council will hold its 2016 Green Building Showcase at 888 Boylston Street in Boston, the new Boston Properties project at the Prudential Center. Registration fees apply. For information and to register, [click here](#).
- **Crowds & Climate Conference** – September 28-29, MIT. The annual conference of the MIT Climate CoLab. For information and to register, [click here](#).
- **Environmental Film Festival** – September 28-29, Kendall Square Cinema, Cambridge. Washington, DC's Environmental Film Festival will be on tour. Four films will be featured on topics including climate change, water, and toxics. For information about the tour and the films, [click here](#). This a HUB Week event.
- **Green Careers Conference** – September 29, 8:00 am – 4:00 pm, Worcester DCU Center. For more information and to register, [click here](#).
- **National Adaptation Forum** – May 9-11, 2017, St. Paul, Minnesota. The call for proposals for presentations, panels, trainings, and work groups is open. For more information, [click here](#).
- **GreenBuild 2017** – November 2017, Boston Convention Center. The international green building conference and expo of the U.S. Green Building Council will be held in Boston again next year. Persons interested in serving on the host committee or conference subcommittees should [visit the USGBC Massachusetts Chapter website](#).
- **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](#).
- **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

- **Electric School Bus for Cambridge** – Cambridge is one of four school districts awarded a grant from the Mass. Department of Energy Resources to purchase an electric school bus and charging station. Amherst, Concord, and Acton-Boxborough are the other participating districts. The electric school buses are part of a pilot effort to try out vehicle to grid power supply when the buses are not in use or charging. [[Boston Globe, 8/9/16](#)]
- **First Offshore Wind Farm in US** – Finally, the first offshore wind farm has been constructed in the U.S., 3 miles off the coast of Block Island, Rhode Island. The project is 30 megawatts in capacity and is owned by Deepwater Wind. Massachusetts, which has some of the best conditions for offshore wind energy, is expected to see the development of offshore wind in waters near Martha's Vineyard. The Commonwealth just enacted legislation that requires utilities to enter into long term contracts for 1,600 megawatts of offshore wind. The U.S. has been very slow in this market. In contrast, Europe has 84 offshore wind farms with 11 gigawatts of capacity. [[Fortune, 8/8/16](#)]
- **KeepCool App Launched** – The Metropolitan Area Planning Council has launched the [KeepCool app](#) to help people find places to cool off and protect their health during extreme heat. The app maps swimming pools, water parks, and air conditioned public buildings. It also provides tips and resources including how to recognize heat stress, information about energy efficient air conditioners and rebates, and the role of climate change. The app covers most of the cities that have joined the [Metro Boston Climate Change Preparedness Commitment](#), including Cambridge. The commitment is a regional effort to address the risks of increasing temperatures, precipitation, and sea levels related to climate change. Other cities in the MAPC region will be added to the app over time.
- **Boston CZM Grant** – The Massachusetts Office of Coastal Zone Management [awarded a coastal resilience grant of \\$227,000 to the City of Boston](#) to assess ways to mitigate flood risks in East Boston and Charlestown. One of the sites that the project will look at is the area around the Schrafft Building, which was identified as a location where a storm surge could travel inland through Charlestown and Somerville and eventually reach the northeastern area of Cambridge. In the near term this risk is very low for Cambridge, but as sea level rises the risks becomes more significant. The Cambridge Climate Change Vulnerability Assessment projects that at the highest rates of sea level rise, the risk of a storm surge affecting the eastern part of Cambridge starts to become significant between 2030 and 2070. This analysis is based on modeling done in cooperation with the Massachusetts Department of Transportation, which identified the Schrafft site as a potential location for a sea wall that could mitigate the flooding risk. Cambridge supported the grant proposal and will work with the City of Boston as it moves forward.
- **EV's Can Meet 90% of Drivers' Needs** – Researchers at MIT find that roughly 90% of the personal vehicles on the road daily could be replaced by a low-cost electric vehicle even if they can only charge overnight. The researchers integrated large data sets on second-by-second driving behavior based on GPS and national travel survey data. The latter studied how and where people actually drive to understand distances and timing of trips. This research indicates that for the majority of driving trips, the range limitations of EVs is not critical. The researchers also found that the vast majority of cars on the road

consume no more energy in a day than the battery energy capacity in affordable EVs available on the market now (e.g., Ford Focus EV and Nissa Leaf). The study noted that for EV ownership to rise, the needs of drivers have to be met on all days. So car sharing of vehicles with internal combustion engines could play an important role in vehicle electrification. The work appeared in *Nature Energy* and the team was led by Jessika Trancik, the Atlantic Richfield Career Development Associate Professor in Energy Studies. [[MIT News, 8/15/16](#)]

- **Warmer Cape Cod Bay Slows Pilgrim Nuclear** – The warming waters of Cape Cod Bay forced a slowdown in the operation of the Pilgrim nuclear power plant for the third summer in the last four. The plant draws about 500 million gallons of ocean water per day for cooling. Under its federal license, the plant's intake water temperature cannot exceed 75 degrees Fahrenheit. Part of the reason for the problem can also be related to the mixing of warm water discharged from the plant with the intake water, which can happen under certain wind conditions. But the plant never was affected by the intake water limit before 2013 over its 44 year history. The warmer intake water forced the operators to cut back power to about 65 percent. According to the Gulf of Maine Institute, the waters of the Gulf of Maine, including Cape Cod Bay, are seeing increasing ocean temperatures six times the global average. Prior to 2009, maximum average temperatures never exceeded 70 degrees F. [[Cod Cod Times, 8/16/16](#)]

RESOURCES & IDEAS

- **Job – Sustainability Compact Coordinator**; this is a part-time position with the City of Cambridge to support the Cambridge Compact for a Sustainable Future.
- **Commercial Air Source Heat Pump Incentive** – The Massachusetts Clean Energy Center recently opened its [commercial air source heat pump incentive program](#). Incentives for commercial scale systems run up to \$93,750. There are also adders for affordable housing and non-profit/public projects. [For small residential projects](#), there is an incentive that runs up to \$6,000.
- **Pedestrian Heat Exposure** – Researchers at USC and Arizona State modeled the effect of different strategies to mitigate the urban heat island effect. They found that green roofs reduce average temperatures but tend to affect temperatures at roof level, not at street level. To improve pedestrian comfort, they found that street trees and cool pavements had the most effect. [[EnvironmentalResearchWeb, 4/8/16](#)]
- **Chicago Green/Cool Roof Study** – Researchers at the University of Notre Dame, working with the City of Chicago, analyzed the effect of green and reflective roofs on urban microclimate, building energy efficiency, and wind patterns in Chicago. They found that green roofs implemented on existing structures could reduce average urban temperatures by 5.4 to 7.2 degrees Fahrenheit. The study appeared in [Environmental Research Letters](#). [[University of Notre Dame press release, 6/1/16](#)]
- **EPA Excessive Heat Events Guidebook** – The U.S. EPA has produced the [Excessive Heat Events Guidebook](#) to help community officials, emergency responders, and others respond to excessive heat events.
- **Integrative Business Model for Net Zero Energy Districts** – The Rocky Mountain Institute released a report on [An Integrative Business Model for Net Zero Energy Districts](#). The report addresses the problem that net zero district developers have in not affecting the cost of development at the parcel level.
- **Cambridge Climate Change Vulnerability Assessment** – The City is nearing completion of its climate change vulnerability assessment that will serve as the foundation for a climate change preparedness plan that will follow. The CCVA Report – Part 1 was issued in November 2015, which covers the risks of increasing temperatures and precipitation. A second report will be issued on the risks of sea level rise and storm surges. The [project webpage](#) 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 [rider tools](#) 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 messages, emails, and the Web. There is also a trip planning tool.
- **Cambridge Energy Alliance** – The [Cambridge Energy Alliance](#), 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 jbalduc@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.