# Cambridge Climate Protection Action Committee CPAC BULLETIN October 2017

<u>MEETING:</u> The Climate Protection Action Committee will meet in on October 12<sup>th</sup>, 6:00 pm at City Hall Annex, 2<sup>nd</sup> floor. The agenda focus is on the Local Carbon Energy Supply Study and the Multifamily Pilot retrofit program. The agenda for the meeting will be posted on the <u>Community Development</u> <u>Department website</u>.

## **EVENTS & MEETINGS**

- Resilience as Policy: Harvey, Irma October 10, 1:00 pm, Graduate School of Design, Gund Hall, Room 124, 48 Quincy St. Lecture by Alice C. Hill, Research Fellow, Hoover Institute, focusing on building resilience to destabilizing catastrophic events, including the impacts of climate change. Hill formerly served as Special Assistant to the President and Senior Director for Resilience Policy for the National Security Council and was the Supervising Judge in the municipal and superior courts in Los Angeles. For more information, click here.
- Planning for Net Zero October 11, 8:30 am 1:00 pm, District Hall, Boston. The MAPC Clean Energy Forum will focus on cities planning for net zero. For more information and to register, click here.
- Greening Business & the Bottom Line October 11, 1:00-2:00 pm, FXB, G-13, Harvard School of Public Health. Tedd Saunders, CEO of EcoLogical Solutions and CSO of The Saunders Hotel Group, will talk about how to improve the sustainability of businesses while becoming more profitable. For more information, click here.
- Green Innovation Industry Night October 11, 4:00-8:00 pm, Venture Café, 5<sup>th</sup> floor, Cambridge Innovation Center, One Broadway. Panels include Financial Innovation as the Key to Clean Energy and Efficiency Transformation (4:15 pm) with Wendy O'Malley, PACE Program Manager, MassDevelopment Charlie Lord, Renew Energy Partners, and Kathryn Elmes, MassCEC; What Would 100% Renewable Energy Look Like in Metro Boston? (5:15 pm) with Ben Hellerstein, Environment Masschusetts, Seth Federspiel, City of Cambridge, Laila Partridge, Wegowise, and James Robe, USGBC MA Chapter. For more information, click here.
- Green Banks in New England October 12, 4:15pm to 5:30pm Allison Dining Room, 5th floor, Taubman Bldg, HKS, 15 Eliot St., Cambridge. Learn how New England is leading the way in innovative clean energy financing, and what more can be done throughout the region to increase access to low-cost financing for energy efficiency and renewable energy projects. Panel features Bryan Garcia, Executive Director of the Connecticut Green Bank; Carter Wall, Managing Director, Franklin Beach Energy; Jeffrey Schub, Executive Director, Coalition for Green Capital; and the Honorable Paul Mark, Massachusetts State Representative, 2nd Berkshire District. Contact: Melissa D'Anello, melissa\_danello@hks.harvard.edu.
- Climate Change & Social Inequality October 12, 3:30-4:30 pm, The HUB, 1 City Hall Square, Boston. Speakers: David Cash, UMass Boston & Dr. Atyia Martin, Chief Resilience Officer, City of Boston. This is a Hubweek event. Free but registration rerquired; click here.
- Deep Dive: Open Innovation on Climate Change October 13, 9 am-12 noon, 1 Faneuil Hall Square, Boston. Brainstorm and advance promising, high-impct solutions to climate change. Worskhop led by Maria Ivanova of the MIT Climate CoLab. This is a Hubweek event. Free but registration required; click here.

- Designing for Climate Change October 15, 2:30-3:15 pm, The HUB, 1 City Hall Square, Boston. Speakers: Paul Kirshen, UMass Boston and Amy Korte, Nick Black, and Nicholas Iselin of Arrowstreet architects. This is a Hubweek event. Free but registration required; click here.
- Climate & Energy Executive Course October 15-20; Harvard Kennedy School. Executive Education course on Climate Change and Energy: Policy Making for the Long Term. Application deadline is August 15<sup>th</sup>; course fee is \$8,500.
- <u>I2SL Annual Conference</u> October 15-18, Boston Marriott Copley Place. The <u>annual conference of the International Institute for Sustainable Laboratories</u> will be held in Boston this year. The conference will feature a panel about the initiatives underway in Cambridge and Boston to increase the energy efficiency of our laboratory buildings. A plenary panel on October 16 will focus on climate leadership in Cambridge and Boston and include Susanne Rasmussen, Director of Environmental & Transportation Planning for Cambridge.
- Climate Change & Infectious Health Symposium October 16, 4:00pm to 5:30pm; TMEC 334, HMS, 260 Longwood Ave., Cambridge. The Harvard Global Health Institute and the Planetary Health Alliance jointly host a symposium on climate change and infectious disease. Mercedes Pascual, Department of Ecology and Evolution, University of Chicago, will deliver the keynote address. Expert panels will address the effect on the range and lifecycle of key disease vectors, and the intersecting fields of ecology, public health, and climate modeling. Contact Erika Veidis, erikaveidis@g.harvard.edu.
- DC, MA, & the Future of the Clean Energy Economy October 17, 6:00-7:30 pm, UMass Club, One Beacon St., Boston. Speakers: David Cash, UMass Boston; Ruben Marcos, Proper Pipe, USA; and Dr. Emily Reichert, Greentown Labs. To register, click here.
- Passive House Massachusetts Symposium October 25, District Hall, Boston. For more information and to register, <u>click here</u>.
- Why You Don't Know Your Carbon Footprint October 25, 1:00-2:00 pm, FXB, G-13, Harvard School of Public Health. Speaker: Ory Zik, Greenometry. For more information, click here.
- Envision Cambridge Advisory Committee October 25, 6:00-8:00 pm, Citywide Senior Center, 806 Massachusetts Avenue.
- Envision Cambridge Alewife Working Group November 2, 6:00-8:30 pm, Russel Youth Center, 680 Huron Avenue.
- <u>GreenBuild 2017</u> 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. For more information and to register, click here.
- Climate Adaptation Forum − November 17, 7:30 am − 12:00 noon, UMass Club, One Beacon Street, Boston. Discussion with former Interior Secretary Sally Jewell and three panels on city and regional adaptation featuring south Florida, New York City, and Tidewater region of Virginia. Small registration fee applies. For more information and to register, click here.
- Northeastern North America Climate Summit December 7 & 8, MIT. The New England Governors and Eastern Canadian Premiers will convene a <u>regional climate change summit</u> hosted by MIT. Michael Bloomberg will be the keynote speaker.
- 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. It focuses on implementation of federal stormwater regulations, flooding and water quality in the Little River, and development improvement projects such as work at Blair Pond.
- 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. During the summer of 2017, meetings will be

held at Harvard Epworth Church, 1555 Mass. Avenue in the sanctuary, 7:00-9:00 pm, on July 18 and August 1, 15, and 29 (no meeting on July 11). Note this meeting location is temporary while the usual meting location at First Church undergoes some renovation work.

Green Cambridge - Green Cambridge works to bring neighborhood resiliency to individuals and communities across Cambridge by empowering individuals to embrace renewable energy, practice urban agriculture, care for our urban tree canopy, and utilize sustainable transportation. Green Cambridge meets monthly at the Eastern Bank community room in Harvard Square, usually on the third Thursday of every month from 7:00-8:30pm. All are welcome and invited to attend! For more information and a listing of community events, including volunteer opportunities at our prototype urban farm, please visit: greencambridge.org.

### **NEWS**

- <u>Urban Forest Master Plan</u> The Cambridge Public Works Department has issued a Request for Qualifications for consultants to work on the City's first Urban Forest Master Plan which will consider the urban forest as a system and cover both public and private property. The RFQ is available on the <a href="Purchasing Department website">Purchasing Department website</a>. Submittals are due October 19<sup>th</sup>.
- Envision Cambridge Updates Envision Cambridge is seeking feedback on draft goals related to housing, mobility, economy, climate and environment. Indicate how much of a priority you think each goal should be, leave specific comments, and engage with other users on the Consider.it platform. Your feedback will help refine the goals and shape future City policies and programs. The City has also issued the Cambridge Today report which provides information on existing conditions in the city to inform the Envision Cambridge plan.
- Boston to Host International Climate Conference Mayor Marty Walsh of Boston announced that a climate change summit will be held in the city in the summer of 2018, focusing on how to combat climate change at the local level. Representatives from cities from around the globe are expected. The date and venue have not been announced yet. Under the Obama Administration, the State Department had announced that an international climate change conference would be held in Boston with China. The Trump Administration indicated to Boston that the conference was no longer a priority. [WBUR, 9/20/17]
- Northeast US/Eastern Canada Climate Summit MIT will host a summit of the New England Governors and Eastern Canadian Premiers on December 7 and 8 to continue building on their collaboration and leadership in responding to climate change. The summit will gather policymakers, researchers, and business and civic leaders. Michael Bloomberg, former mayor of New York City, founder of Bloomberg LP, and native of Medford will be the keynote speaker. [MIT news release, 9/29/17]
- Tropical Forests Now Net Emitters New research published by the Woods Hole Research Center and Boston University researchers in *Science* indicates that tropical forests have switched from being carbon sinks to carbon emitters. Using 12 years of satellite data, laser remote sensing technology, and field measurements, the reseachers captured losses from large scale deforestation as well as fine-scale degradation and disturbance. Tropical forests still sequester carbon, but deforestation and degradation have led to a net release of carbon. Tropical forests have been counted on to remove carbon dioxide from the atmosphere. The researchers estimate the net annual emissions to be about 425 teragrams of carbon which is more than the annual emissions from all cars and trucks in the U.S. [Woods Hole Research Center news, 9/28/17]
- Soil Carbon Emissions May Increase A 26-year experiment at the Harvard Forest indicates that warming temperatures may cause increasing releases of carbon to the atmosphere from the upper soil layer. Test plots were tracked over the course of the experiment where some plots were artificially heated to increase soil temperature by 9 degrees Fahrenheit and compared to control plots. Researchers observed that the soil lost 17 percent of its carbon. The experiment is being conducted by researchers

from the Marine Biological Laboratory, UMass Amherst, University of New Hampshire, and Research Designs of New Hampshire. The research found the releases were not linear and appear to fluctuate with changes in the soil microbe community. Other researchers note that this experiment was conducted in one location and that global warming will be more gradual than in the instant increase in soil temperature used in the experiment. If the findings are correct, the release of soil carbon would represent a significant feedback loop that would exacerbate climate change. [Washington Post, 10/5/17]

- Climate Policy Influence A group called Influence Map (IM) charted the 300 largest non-state owned companies and trade associations to score them on their influence over energy and climate policy. The scores were based on lobbying records, advertising, public relations, and sponsored research of the companies and organizations. In its report Corporate Carbon Policy Footprint, IM found that 50 of the companies and organizations that score the highest, 35 actively oppose climate policy and 15 actively promote it. The report notes that the number of business interests supporting climate policy have increased in the past two years since the Paris Agreement was signed. [Bloomberg, 9/12/17]
- State of the Birds Mass Audubon issued its third State of the Birds report, assessing 143 of the most common breeding bird species in Massachusetts and their vulnerabilities. This report focused on the threat of climate change. The report uses a "climate envelope" model to estimate what habitat ranges will be available to birds, comparing historic climate envelopes to projected envelopes for 2050. Mass Audubon finds that 43% of the bird species are highly vulnerable to climate change and another 22% are likley vulnerable. Of salt marsh-breeding species, 70% are highly vulnerable; 56% of coastal nesting species are highly vulnerable; and 49% of forest-nesting species are highly vulnerable. The Black-capped Chickadee, the Massachusetts state bird, is highly vulnerable and may disappear from large parts of the state including all of eastern Massachuetts as the climate shifts. Urban and suburban nesting birds are the least vulnerable to climate change. Some species will see an expanding range brought by climate change, including Eastern Kingbird, American Robin, Ruby-throated Hummingbird, Blue Jay, Great Blue Heron, and Orchard Oriole. Many of these are urban and suburban species. [Boston Globe, 9/12/17]
- GM Aims to Go All Electric General Motors, one of the largest automobile manufacturers in the world, announced its intention to work toward an all-electric future. GM will introduce two new electric vehicle models next year and plans 18 more by 2023. The new models will be a mix of battery electric and fuel cell vehicles. The shifting global market is pushing GM and other automakers toward EVs. France, Great Britain, the Netherlands, and Norway have all stated plans to ban the sale of gasoline and diesel cars in the future. China and India indicate they plan to do the same. In the China market, GM plans to launch 10 EV or hybrid electric models by 2020. Last year, GM sold more cars in China than in the U.S. [Wired, 10/2/17]
- Only Syria and US Out of Paris Nicaragua has announced it will join the Paris Climate Accord which means only Syria has not joined and the US would be the only other hold out if President Trump follows through on his announced withdrawl. [Washington Examiner, 9/20/17]
- EIA Projects Global Carbon Emissions to Keep Growing The U.S. Energy Information Administration forecasts that global carbon dioxide emissions will grow by 16 percent from 2015 levels by 2040. The forecast tries to take into account the Paris Agreement commitments, although those commitments don't' run past 2030. The EIA sees coal use plateauing over the next 20 years, oil holding its own, natural gas increasing significantly, and renewables also expanding significantly. However, renewables don't increase enough under the forecast to offset increased fossil fuel use that comes with increasing population and prosperity. [Inside Climate News, 9/14/17]
- Existential Threat of Climate Change Veerabhadran Ramanthan, distinguished professor of climate and atmospheric sciences at the Scrips Institute of Oceanography at UC San Diego and Yanyang Xu of Texas A&M University published a paper proposing two new risk categories for climate change called "catastrophic" and "unknown." Catastrophic would mean people would have difficulty adapting and Unknown means they would not be able to adapt. The ratings are based on defining global temperature increases of 1.5 degrees Celsius (2.7 degrees F) as "dangerous", 3 degrees C (5.4 degrees F) as

"catastrophic", and 5 degrees C (9 degrees F) as "unknown". The scientists find there is a 5% probability of catastrophic climate change by 2050 and less probability of unknown change by then. However the probability of an existential threat increases to 20 to 30 percent by 2070. The research appears in the <a href="Proceedings of the National Academy of Sciences">Proceedings of the National Academy of Sciences</a>. [San Diego Tribune, 9/14/17; ScienceBlog, 9/15/17]

# **RESOURCES & IDEAS**

- Effect of the Sharing Economy on Climate Change A Washington Post article about the effect of the sharing economy on reducing greenhouse gas emissions. Colorado State University researchers estimate that the sharing economy has mitigated 3 percent of emissions since 1960.
- <u>Decarbonizing the Northeast</u> <u>Northeastern Regional Assessment of Strategic Electrification</u>, a report developed for the Northeast Energy Efficiency Partnership by Synapse Energy and Meister Consultants Group, explores how strategic electrification can help the region meet its aggressive goals to reduce greenhouse gas emissions by 80 percent by 2050.
- The Business of Pricing Carbon The Center for Climate & Energy Solutions (C2ES) issued a report titled The Business of Pricing Carbon: How Companies are Pricing Carbon to Mitigate Risks and Prepare for a Low-Carbon Future, which looks at the practice of internal carbon pricing.
- <u>Building Codes</u> <u>Article from Inside Climate News</u> on how the lack of compliance with building energy codes misses energy efficiency opportunities and cost savings. The Institute for Market Transformation estimates that for every dollar spent on code compliance and enforcement, six dollars of efficiency savings are realized.
- Boston Climate Data Viewer The City of Boston has launched a Climate Ready Boston Map Explorer that displays maps of climate change risks from its recent Climate Ready Boston report. [WBUR, 9/21/17]
- NYC Updating Flood Resilient Zoning The New York City Planning Department is updating its flood resilient zoning requirements.
- <u>Commercial Tenant Energy Resources</u> There are a couple of new resources for commercial tenants and landlords to tackle energy efficiency and clean energy. The Department of Energy's <u>Greenlease</u> <u>Leaders program</u> has been revamped and the <u>Energy Star for Tenants program</u> is also being revamped. Energy Star is working toward scores for leased commercial speace. Boston Properties, which owns significant holdings in Cambridge, has been recognized by the Greenlease Leaders program.
- Measuring Urban Heat Islands The EPA Heat Island Mitigation Program has posted the <u>presentations</u> and <u>audio</u> from the recent webinar on measuring urban heat islands. Cambridge's work was featured in the webinar that was presented in September.
- <u>Evaporation Power</u> Scientists are beginning to evaluate the potential to harvest evaporation from surface water as a source of renewable energy. "Evaporation engines" would work through a process of abosorbing and rejecting water via evaporation and would be palced above water bodies. <u>Researchers at Columbia University</u> estimate that evaporation has the potential to produce 70 percent of the energy needs of the U.S. from its lakes and reservoirs. [Clean Technica, 9/28/17]
- Climate & Equity The Center for American Progress outline a <u>framework</u> that city mayors can use to build resilient and just communities to combat climate change.
- Sustainable Urban Logistics Cities work to develop strategies to move people around efficiently and safely. In a report titled The Road to Sustainable Urban Logistics, GreenBiz, sponsored by UPS, looks at strategies to deliver goods to people and workplaces in a sustainable manner.
- Paying for Trees In a new report titled <u>Funding Trees for Health</u>, The Nature Conservancy looks at financing and policy to support tree planting for public health.

- <u>Cambridge Recycling News</u> Waste reduction fights climate change! <u>42% of US greenhouse gas</u> emissions are from materials management. Help us meet Cambridge's waste reduction goals and stay informed with the monthly <u>Cambridge recycling e-newsletter</u>. Full of practical information, helpful tips, and fun events, this newsletter regularly receives compliments from the many Cambridge residents already subscribed! You can sign up quickly <u>here</u>.
- Cambridge Climate Change Preparedness & Resilience The City its climate change vulnerability assessment that is serving as the foundation for a climate change preparedness plan that is being developed. The CCVA Report Part 1 covers the risks of increasing temperatures and precipitation and CCVA Report Part 2 focuses on the risks of sea level rise and storm surges. Both reports are available on the CCPR project webpage, which also provides other information and documents from meetings. The CCPR Plan development has started with a focus on the Alewife area. After a second neighborhood is studied, the full plan will be developed with a goal of completion in 2018. 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 <a href="https://cambridge.catalogchoice.org">https://cambridge.catalogchoice.org</a> 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 <a href="http://www.cambridgema.gov/climate">http://www.cambridgema.gov/climate</a>. Recent issues of the CPAC Bulletin are posted on the webpage.