Cambridge Climate Protection Action Committee CPAC BULLETIN

October 2014

MEETING: The next meeting of the Climate Protection Action Committee is scheduled for October 9, 6:00 pm, City Hall Annex, 344 Broadway, 2nd floor meeting room. The meeting is open to the public. The <u>agenda</u> will be posted on the Community Development Department website. The focus of the meeting this month will be climate change communications. Lee Gianetti, the City's communications director, and Jennifer Lawrence of the Community Development Department who coordinates sustainability engagement, will discuss the topic with the committee. There will also be a discussion with Meghan Shaw, of CDD, about the City's participation in the Georgetown University Energy Prize.

EVENTS & MEETINGS

- Boston Area Sustainability Group October 7, 6:00 to 9:00 pm, Venture Café, One Broadway, 5th floor. The topic is Sustainability and Innovation, with speakers Asheen Phansey, Dassault Systems; Eric Hudson, Preserve; Helen Sahi, Avery Dennison; and Rakhshita Dhar, MassBio. For more information and to register, click here.
- <u>Net Zero Task Force</u> October 8, 6:00 pm, Citywide Senior Center, 806 Mass. Ave. This is the next meeting of the Cambridge Getting to Net Zero Task Force which is working to make recommendations by January 2015. For more information, visit the task force webpage.
- <u>Race to Solar</u> October 8, 4:00 to 5:00 pm, Cambridge Public Library. Learn more about the <u>Race to Solar program</u>, which aims to deploy more solar and energy efficiency among community-based organizations. <u>RSVPs requested</u>.
- President's Effort to Combat Climate Change October 8, 4:00 pm, Dworkin Hall, Lessin Room G115, 33 Oxford Street, Harvard. Panel discussion on the President's Effort to Combat Climate Change Without Congress: What is EPA Proposing to Do and Is it Legal? Paenl with Jody Freeman and Richard Lazarus of the Harvard Law School, moderated by Dan Schrag, Director of Harvard Center for the Environment.
- Anatomy of a Sustainable Real Estate Project Course starts October 8, Suffolk University. A professional development course over six sessions on how to incorporate sustainability into real estate projects and property management. Registration fees apply; fee discount available to fill the few remaining seats; contact Erica Mattison, ericahmattison@gmail.com. Course is eligible for AIA CE credit hours. For more information, click here.
- <u>Net Zero Northeast</u> October 9, Montpelier, VT. The region's first technical summit on net zero construction. Presented by Efficiency Vermont and the New Buildings Institute. For more information about the agenda and to register, <u>click here</u>.
- Earthwatch Trees October 11. The Earthwatch Institute is working with the Cambridge Public Works Department Urban Forestry Program to collect data on the City's street trees to help protect the urban forest. Volunteers will be trained in techniques for identifying species, measuring and observing individual trees, and uploading data via mobile apps. Volunteers will work in groups to collect data on halth, growth patterns, and the impact on buildings and streets of individual trees. This is a free one-day expedition hosted by a resident Earthwatch scientist. Use the promo code TREES upon registration and the \$15 registration fee is entirely waived. You can find more information about the Urban Forest Program and sign up by clicking the link.

- <u>DisruptCRE</u> October 16, District Hall, Boston. A commercial real estate/technology event designed to connect disruptive ideas with capital and commercial real estate professionals. Topics include the science of buildings, sponsored by USGBC MA. To register, <u>click here</u>. Registration fees apply.
- Preparing Our Communities for Climate Change November 1, 9:30 am to 12:00 noon, Jenks Senior Center, 109 Skillings Road, Winchester. Speakers: Kathy Baskin, EOEEA; Suzanne Condon, MA DPH,; Marie Jordan, National Grid; Cynthia McHale, CERES; Brian Swett, City of Boston; moderated by Jim Braude, WGBH & NECN. Presented by Sustainable Middlesex. For more info, email fredyen@att.com.
- <u>Climate CoLab Conference</u> November 6&7, MIT. Crowds and Climate: From Ideas to Action. This the annual conference of the MIT Climate CoLab about technology-enabled, crowd-based approaches for developing creative new ideas for meaningful action on climate change. The event includes plenary panels and featuring of the 2014 winners from the Climate CoLab contests. <u>To register, click here</u>. Fees apply.
- Earthwatch Summit November 8, 8:00 am to 4:00 pm, Science Center, Harvard University. This is a free event with a slate of speakers talking about the latest environmental research. Speakers include Dr. William Moomaw, Chief Science Officer for Earthwatch; Dr. J. Nichols, marine biologist and author of Blue Mind; Dr. Richard Primack, Boston University, author of Walden Warming. For more information about the agenda, click here.
- Community Based Social Marketing Workshops November 17-20, Tufts University, Medford. Dr. Doug McKenzie-Mohr is presenting an introductory and an advanced workshop on community based social marketing to foster sustainable behavior. For more information and to register, <u>click here</u>. Group rates are available.
- <u>Restoring Ecosystems to Reverse Global Warming</u> November 21-23, Tufts University, Medford. A conference on soil carbon management presented by Biodiversity for a Livable Climate. For more information and to register, click here. Fees apply.
- Friends of Alewife Reservation Walks Wildlife walks sponsored by FAR impart the history and background to the DCR's Alewife Reservation, a rare urban wild in Cambridge. The walks are led by a professional wildlife assessor, Dave Brown. Tours last 2 hours. To prepare for the tour, or to get a "Virtual Tour", 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.
- 350.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 6PM for potluck and networking, with the general meeting and working groups at 7PM. 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/.

- MIT Climate Change Conversation The Massachusetts Institute of Technology has launched an MIT-wide Climate Change Conversation that will take place over this academic year and culminate in a report by Commencement 2015 to the Conversation Leadership consisting of Provost Marty Schmidt, Vice President for Research Maria Zuber, Environmental Solutions Initiative Director Susan Solomon, and Energy Initiative Director Bob Armstrong. A letter was circulated to the MIT community on September 19th announcing the appointment of a Committee on the MIT Climate Change Conversation and its charge. The letter stated the 11-member committee of faculty, researchers, and students "should seek broad input from the Institute community on how the US and the world can most effectively address global climate change. The Conversation should explore pathways to effective climate change mitigation, including how the MIT community through education, research and campus engagement can constructively move the global and national agendas forward. Possible activities for the Campus Conversation could include a lecture series, panels and a survey in which all points of view of the MIT community are sought, presented and discussed." MIT President L. Rafael Reif noted that "without exception, every member of the Committee was deeply grateful for the opportunity to help lead our community forward in meeting the pressing civilizational challenge of climate change."
- <u>ULI Living with Water Report</u> The Boston Chapter of the Urban Land Institute, a non-profit organization representing real estate development and land use disciplines, released its report <u>The Urban Implications</u> <u>of Living with Water</u>, which is based on a recent planning charrette that considered possible design solutions for sea level rise-related flooding at four sites in the Greater Boston area, including the Alewife Quadrangle in Cambridge. City staff participated in the charrette. [Boston Globe, 9/30/14]
- Greenhouse Gas Levels Accelerate According to the UN's World Meteorological Organization analysis of 2013 data, greenhouse gas concentrations and emissions rates broke records again. Global atmospheric concentrations reached an average of 395 parts per million (ppm) last year, or 142 percent of pre-industrial levels. Methane and nitrous oxide also increased. The increase of the CO2 concentration in the atmosphere between 2012 and 2013 was 2.9 ppm, the largest annual increase in 30 years. The report found that warming effect on our climate (radiative forcing) attributed to greenhouse gases increased 34 percent from 1990 to 2013. About a quarter of the emissions are absorbed by land systems such as forests and another quarter is absorbed by the oceans; the remainder accumulates in the atmosphere. Absorption by the oceans is leading to increased acidification, which have reached levels unprecedented in at least over the last 300 million years. The WMO finds that current GHG emissions trajectories are tracking some of the most carbon intensive emission scenarios used by the Intergovernmental Panel on Climate Change that takes average temperatures to about 3.2 to 5.4 degrees celsius (~6 to 10 degrees Fahrenheit) above pre-industrial times by 2100. WMO Secretary-General Michel Jarraud stated "far from falling, the concentration of carbon dioxide in the atmosphere actually increased last year at the fastest rate for nearly 30 years. We must reverse this trend by cutting emissions of CO2 and other greenhouse gases across the board. We are running out of time." The rate of GHG emissions also increased by 2.3 percent in 2013. This was a slight decrease from the average annual increase in rate of emissions of 2.5 percent over the past decade, but much of that decrease was attributed to an economic slowdown in China. US emissions increased 2.9 percent in 2013 after declining in recent years. [Washington Post, 9/9/14; New **York Times, 9/21/14**]
- MIT Report Says Global Energy & GHG Emissions May Double The MIT Joint Program on the Science and Policy of Global Change issued its 2014 Energy and Climate Outlook. Key findings include fossil fuels will remain the largest source of GHGs far into the 21st century as global energy use and CO2 emissions double. Global energy use is expected to double by 2050 and most of that energy will likely come from fossil fuels. Developing countries are projected to be primarily responsible for nearly doubling GHG emissions. The share of emissions from developed nations will be cut in half by mid-century to 15% in 2050 from 30% in 2010. Renewables and nuclear energy are projected to make up less than 20% of the globe's energy sources by 2050. The report's forecasts assume the developed countries will honor the pledges they made at climate summits in Copenhagen and Cancun. Lead author John Reilly, of the MIT Joint Program, stated "Ultimately, if the scenario we develop emerges, then the argument by some

developing countries that developed countries must reduce first will be rendered moot, as it is pretty clear that even if developed countries dropped to zero, global emissions and concentrations would continue to rise." The implications of the MIT analysis are that CO2 concentrations approach 750 ppm by 2100 with no sign of stabilizing. World governments have identified a goal of keeping temperature increases at 2 degrees celsius which implies an atmospheric CO2 concentration of 450 ppm. The report finds, that based on an emissions path that stabilizes CO2 concentrations to 530-580 ppm CO2e (includes other GHGs with CO2), in 2030 the world will be about 7 years away from hitting cumulative emissions levels that are consistent with a 50% chance of holding temperature increases to less than 2 degrees C. The report states that "any hope of averting considerable climate consequences by stabilizing atmospheric GHG concentrations will require significant emissions reduction. Another 20 or 30 years of increasing emissions suggest substantial risks of dangerous climate change." The reports projections also see ocean pH levels increasing in acidity; the average pH drops from 8.03 in 2010 to 7.85 by 2100. 7.7 pH is considered a level of acidity at which corals are likely to cease to exist. [Climate Central, 10/1/14]

RESOURCES & IDEAS

- Job Community Development Department is seeking a <u>Land Use Project Planner</u>; duty includes reviewing development proposals for compliance with green building requirements and resilience measures.
- <u>Harvard/Stanford Climate OpEd in Huffington Post</u> Harvard President Drew Faust and Stanford President John Hennessy posted a piece to the <u>Huffington Post titled What Universities Can Do About Climate Change</u>.
- Fannie Mae Green Initiative Fannie Mae, the federal housing finance agency, has partnered with the US EPA to issue an Energy Star scoring system for multifamily housing. Transforming Multifamily Housing: Fannie Mae's Green Initiative and Energy Star for Multifamily describes the new scoring system and their green initiative which aims to make efficiency upgrades in multifamily housing more affordable via loans. [Ecobuilding Pulse]
- NYC 2013 Energy Use Disclosure Report New York City issued its third annual Local Law 84 Benchmarking Report, which analyzes 2013 building energy use data. The Institute for Market Transformation has a nice blog post summarizing the highlights of the report.
- 2012 CBECS Data The U.S. Energy Information Administration has issued the preliminary results of the 2013 Commercial Buildings Energy Consumption Survey (CBECS). This is the first survey since 2003. The CBECS data is used to underpin some of the U.S. EPA's Energy Star scoring indexes for commercial building energy performance.
- 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 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!

- Check Out Watt Meters at the Library Cambridge residents can borrow a "kill-a-watt" meter from the Main Public Library to measure how much electricity their home appliances and devices use. The meters come with a guide on how to use them and information on how to save energy. The meter kits and guide were developed by the Sprouts of Hope group based at the King Open School.
- 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>NSTAR Green</u> Residential and small business electric customers of NSTAR can opt to purchase renewable electricity generated by wind energy farms. To sign up for the service, visit the <u>NSTAR</u> <u>website</u>.
- <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.
- Sustainable Business Leader Program SBLP is a comprehensive certification program that supports local businesses in improving their environmental business practices and reducing their carbon footprint. For more information please visit the SBLP website or email to katrina@sbnboston.org.

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.