Cambridge Climate Protection Action Committee
CPAC BULLETIN
March 2012

MEETING: The next meeting of the Climate Protection Action Committee is scheduled for Thursday, March 8, 6:00 pm at City Hall Annex, Second Floor. The agenda will be posted on the CPAC webpage.

EVENTS & MEETINGS

- **Past Sea Level Changes** – March 8, 7:00 pm. *Past Climate & Sea Level Changes: Looking Back to Our Future*, Dr. Stephen Pekar. Part of the **New England Aquarium Lowell Lecture Series**. At the New England Aquarium Harborside Learning Center Central Wharf.
- **MIT Energy Conference** – March 16 & 17, Park Plaza Castle/Westin Copley Place, Boston. The 7th annual conference bringing together innovators, policy makers, financiers, and leaders to explore solutions to our energy problems. For more information, click **here**.
- **Re-Think Waste for a Sustainable Massachusetts** – March 27, 8:00 am to 4:00 pm, Boxborough Holiday Inn, 242 Adams Place, Boxborough. Annual conference of **MassRecycle**.
- **Sustainable Communities Conference** – Friday, April 20; UMass Boston Campus Center. A day of workshops, speakers, and exhibitors on sustainable communities. For the agenda and registration info, click here.
- **Sustainable Campuses Conference** – Saturday, April 21; UMass Boston Campus Center. Associated with the Sustainable Communities Conference, a day of workshops, speakers, and exhibitors focused on sustainable campuses and environmental education. For the agenda and registration info, click **here**.
- **Green Streets** – This initiative encourages people throughout Cambridge (and Somerville and surrounding cities and towns) to use a green form of transportation (transit, bicycle, walk, skate) on a designated day of the month and to wear a green-colored item of attire. The goal is to make Cambridge and neighboring cities safer, quieter, and friendlier for pedestrians and cyclists, and to minimize the use and impact of cars. Generally, the designated day is the last Friday of the month. Check the **Cambridge Green Streets Initiative website** for more info and incentives.

NEWS

- **Urban EV Delivery Vehicles Can Make Sense** – According to a new study by the MIT Center for Transportation and Logistics, urban electric vehicles can markedly lower the costs of delivery truck fleets. The Center ran an analysis assuming that diesel costs $4.00 per gallon and if a vehicle-to-grid (V2G) system was in place that allowed electric vehicle batteries to be plugged into the electric grid to supply electricity during certain overnight hours. The analysis used data from the Staples fleet of 53 all-electric delivery vans deployed around the country. The analysis found that businesses could earn $900 to $1,400 per truck per year in V2G revenues in current energy markets, representing a 7 to 11 percent reduction in vehicle operating costs. The operational cost per mile of the electric trucks would drop from 75 cents per mile to 68 cents per mile when V2G-enabled trucks are substituted for internal combustion trucks. V2G is not currently in place, but is a concept being considered by electric grid managers. The MIT study was

conducted in cooperation with the Independent System Operator of New England, which manages the electric grid in the region. [**MIT News, 2/1/12**]

- **Walk/Ride Day Corporate Challenge** - The Green Streets Initiative is calling on businesses and organizations to participate in its **Walk/Ride Day Corporate Challenge**. The challenge is a competition between employers to encourage colleagues and staff to green their commutes just one day a month over the course of seven months. There will be a leader board posted on the Green Streets website. The competition kicks off March 30 and runs through September 28, 2012. Go to the Green Streets website for information and to sign up for the challenge.
- **MIT Storm Surge Study** – According to a new study by MIT and Princeton researchers, climate change could make tropical storms and hurricanes more frequent and more likely to make landfall in the Northeast. The authors of the study, led by MIT postdoctoral fellow Ning Lin, used computer models to simulate 45,000 synthetic storms within a 200 kilometer radius of Battery Park in New York City. Each storm was studied under a current climate condition representing 1981 to 2000 and a future climate condition representing 2081 to 2100 using the IPCC projections of future moderate carbon dioxide emissions. Then they modeled the resulting storm surges using three different models. Today, a 100-year storm equates to a storm surge flood of about two meters on average while a 500 year storm causes a three meter surge. Both of these storm types would overtop Manhattan's seawalls which stand 1.5 meters high. The analysis found that with added greenhouse gas emissions, the two-foot storm surge would occur once every 3 to 20 years and a three meter surge would occur 25 to 240 years. The study was published in **Nature Climate Change**. [**MIT News, 2/13/12**]
- **Energysage.com** – A new Cambridge-based online resource called **EnergySage.com** has been launched to help consumers evaluate clean energy options for their buildings. EnergySage.com was founded by Vikram Aggarwal, who comes out of the financial services industry. EnergySage.com is designed to assist residential and commercial property owners to research and buy appropriate clean energy systems to heat, cool, and power their properties. The site provides personalized guidance for users and provides information and reviews of clean energy systrems, brands, local installers, and contractors as well as financing and leasing companies. Online and onsite consulting is also provided. A full range of clean energy options is covered including solar photovoltaic, solar thermal, small wind, geothermal, combined heat and power, and biomass/biofuel systems. EnergySage.com has a wizard that delivers customized recommendations of suitable clean energy solutions and then connects site users to leading brands, installers, and financiers. Users can read case studies of actual projects in the area and also reviews of systems and contractors. [EnergySage.com press release, 11/9/11]
- **Sagewell Infrared Images** – The Home Energy Efficiency Team (**HEET**) is partnering with **Sagewell** to bring infrared imaging of buildings to Cambridge. Sagewell is a private firm that collects the images of buildings by driving down streets with a vehicle equipped with infrared cameras. The images are then made available on Sagewell's website. The images are password protected and can only be accessed by the property owner. The imagery is free to residential properties and for a fee for commercial properties. The imagery comes with an analysis and tells you the rate of energy loss experienced by your building and whether you mgiht need more insulation or air sealing. To bring this service to Cambridge, Sagewell needs to receive 400 requests from Cambridge property owners.

RESOURCES & IDEAS

- **Boston MPO Natural Hazards Viewer** – The Boston Region Metropolitan Planning Organization (MPO), which administers transporation funding, has created a GIS viewer depicting natural hazards relative to city boundaries and infrastructure location. The maps show key transportation infrastructure and emergency management facilities and areas susceptible to natural hazards and extreme weather including hurricanes, flooding, and earthquakes. The All Hazards Planning viewer can be seen **here**.

- **Cape Farewell** – Cape Farewell is a project that uses climate-focused art, often gathered from scientific expeditions, to convey the science of climate change. Information is conveyed across various platforms including festivals, digital media and video, and publications.
- **Tying Climate Change to Weather** – The National Center for Atmospheric Research has a webpage addressing the challenges of attributing extreme weather events to climate change. Science is developing techniques to address the questions.
- **EPA Heat Island Strategies Compendium** – Reducing Urban Heat Islands: A Compendium of Strategies is an updated EPA resource explaining urban heat islands and strategies to mitigate them.
- **Cool Roofs & Pavements Toolkit** – A Practical Guide to Cool Roofs and Cool Pavements is a new resource from the Global Cities Alliance.
- **Energy Efficiency Retrofits Markets** – Deutsche Bank and the Rockefeller Foundation have published United States Building Energy Efficiency Retrofits: Market Sizing and Financing Models. The report estimates that in the US, retrofits offer energy savings of over $1 trillion over 10 years for a $279 billion investment. The report also reviews financing mechanisms including PACE, energy services agreements (i.e., energy efficiency PPAs), on-bill EE tariffs, and on-bill loans.
- **Deep Energy Savings in Existing Buildings** – A summary report, presentations, and other information from the New Buildings Institute summit on Deep Energy Savings in Existing Buildings offers various approaches, including policy mechanisms, to accelerate deep energy retrofits (meaning 30 to 60% energy savings) in existing buildings.
- **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 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 messges, emails, and the Web. There is also a trip planning tool.
- **NSTAR Green** – 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 NSTAR website.
- **Cambridge Energy Alliance** – Residents, businesses, and organizations can indicate their interest in the services of the Cambridge Energy Alliance by going to the website and registering. No obligation is implied. Those who register will receive an email in response with a telephone number to call to schedule an energy audit.
- **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**.
- **MCAN Low Carbon Living Program** – The Massachusetts Climate Action Network works with its local member organizations to develop teams of 5 to 8 households to assess their household carbon footprints and undertake actions to reduce greenhouse gas emissions. The program is based on the Low Carbon Diet workbook and involves 3 to 4 meetings.

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.