

City of Cambridge
Climate Protection Action Committee

Minutes

June 14, 2012

6:00 PM, City Hall Annex (344 Broadway)

Attendees: Quinton Zondervan (chair), Milton Bevington, Carri Boiselle, Peter Crawley, Janet Curtis, Jan Dillon, Robyn Tsukayama, Sarah Hill, Lyn Huckabee, Ted Live, Lauren Miller, Tom Page, Terry Smith, Scott Wood; **staff:** Susanne Rasmussen, John Bolduc, Clair Ricker

Guests: Anthony Marciano (JCI), Martin Turnbull (Novartis), Purvi Patel, Ben Pignatelli

Approval of Minutes

The minutes of the meeting of May 10, 2012, were approved as drafted.

Report of the ETP Director

- The City has completed the 2nd interviews of 3 consultant teams for preparing the vulnerability assessment.
- The solar map for Cambridge should be completed in July; the beta version looks good. The map will include information on incentives and costs. A big introductory event is planned for October. The assessment of the solar potential of municipal property (to be completed by the end of June) includes parking lots and some open spaces, aiming toward obtaining 5% of municipal power needs from PV.
- An urban forest canopy assessment is being prepared, too (preview: the city has about 30% of the surface area, net of water).
- Sustainability elements of the Kendall Sq. development proposal include: future buildings to meet LEED Gold standards, and mandatory energy consumption tracking and reporting to the City (every year for 5 years, then every 5 years). There's hope of creating a voluntary ecodistrict (modeled after Seattle's).
- The SunShot grant has been signed off; DOER has hired a consultant to work on developing a shared community solar model (due in September)
- Bike-share: the manufacturer has still not provided delivery dates; currently, the hope is to be up and running by the end of July. There will be 24 stations. A kick-off event is planned at both the Central Sq. and Harvard Sq. sites.
- Bike corrals (for securing private bikes) are being installed around the city.
- There will be a retirement party for Rosalie Anders on Tuesday, July 10 at 5:30.

Commercial Building Energy Use

- *Martin Turnbull (site energy engineer for Novartis):*

In Cambridge, Novartis has done most of its energy measurements and efficiency improvements at 250 Mass. Ave. There, beginning in 2008, they have saved 4.7 million

kWh, for a net savings of \$616,000 annually; the payback was 1.6. They are implementing a series of projects, building on each other. Examples include: shifting from 9-10 air changes per hour to 6, and down to 4 at night, without compromising health or safety; lighting changes; and chiller optimization.

Efforts will expand beyond the 2014 target; for example, the building under construction has a trigen system. One aspect of their efficiency efforts is performing analyses to optimize timing of equipment replacement.

In general, the major obstacle to energy-reduction changes is the capital required. Novartis, though, has corporate mandates (enforced by performance reviews and financial incentives) for energy avoidance and CO₂ reduction. They have already reached their 2014 goal of 15% energy reduction goal (relative to 2008). CO₂ is down 2%, with a target is 10% by 2014 (but this has been impacted by temporary crowding in this facility pending new building construction). The real driver of the energy efficiency effort is incentivizing these activities through the performance review process.

Novartis is also considering investing in large solar PV project outside the city to provide a portion of its energy needs in Cambridge, via net metering, and to help meet its greenhouse gas reduction goals.

- *Anthony Marciano (Johnson Controls):*

Johnson Controls works with its clients to identify the most advantageous energy-saving options, notably lighting and water conservation; their ultimate goal is cost reduction. With a large database, they can compare a client's building to other like buildings to assess the potential for energy reduction. A primary technique is installing and utilizing controls to minimize energy consumption when a facility is not in use.

- *Discussion:*

There's a need to incent landlords - triple-net leases are a disincentive because the lessee does not see the savings so they have no incentives to reduce energy use. A key need is submetering.

Energy use must be benchmarked, either using EnergyStar Portfolio Manager or some other tool (Johnson Controls has its own tool, using all of their managed buildings as its database).

Obstacles to improving energy efficiency include long payback periods, and human behavior and expectations (e.g., warm temperatures in winter, cool in summer); also, energy costs are usually a very small proportion of the total corporate budget. Opportunities to encourage energy efficiency include submetering, modifying lease terms, and providing incentives.

May 10 CPAC Meeting Followup on Business Outreach & Engagement

- One suggestion was to increase coordination between CPAC and the Cambridge Chamber of Commerce.
- We need better marketing, to overcome resistance by businesses to spending time and to paying to join the Sustainable Business Leader Program (SBLP).
- Talk up other benefits: being green (being perceived as green), employee retention and attraction, etc.
- Could we have a toolkit for green businesses on the City website? Support for green teams? Scholarships for SBLP?
- It would be helpful to have volunteers from existing organizations to recruit and educate businesses.
- It's often helpful to target other departments than operations and green/sustainability – e.g., Human Resources (consider the benefits of employee engagement).

Climate Protection Goals and Objectives

Staff is continuing to refine the CPAC goals and objectives; there are still a lot of gaps in the metrics, with some sources of information still being developed. In particular, the entrepreneurship and education goals are the least developed at this point.

Adjournment

The meeting was adjourned at 8:10 PM.

Submitted by Ted Live