

President's Climate Commitment and Sustainability Committee
Meeting Report for April 3, 2012

In Attendance:

Scott Benjamin, Meghan Callaghan, John Chirichiello, Mike D'Entremont, JoDe Levine, Carmen Magana, Ken Nies, Karalynn O'Rourke, Oscar Pena, Shanay Reed, Paul Righi, Indira Rakhimzyanova, Venkat Rao, Les Warren ,Paul Wolff

In Absentia:

Stephenson Aman, Henry Chu, Jeff Ginsberg, Dawn Monahan, Arlene Vallie

Invited Guests:

Margo Attaya (Staff), Valter Gomes (BHCC Student), Nicole Jennings (Staff), Rob Kutner; Higher Education Consultant (Big-Belly Solar). George Locascio (BHCC student), Taiyisha Pierre (BHCC student), Mikey Paintenen (Student), Esmeralda Rojoas (BHCC student), Leonilla Tellez-Valle (Student)

AGENDA ITEMS

1) Discussion on Solar Trash Compactors

Presentation

Invited guest from BigBelly Solar (Rob Kutner; Higher Education Consultant) gave a presentation on their innovative waste collection solutions made available to the global waste management industry. They are the first company in the world to offer an integrated system that uses renewable power and information technology to dramatically lower the operating costs, fuel consumption and greenhouse gas emissions associated with the waste collection process.

Combining solar-powered trash compaction, efficient recycling solutions, and network management software and services into a powerful approach, the BigBelly Solar intelligent waste collection system enables municipalities, universities, parks departments and other institutional customers to reduce the operating costs associated with collection by up to 80%. With just a few simple inputs, users can gauge the approximate savings with the BigBelly system.

From any web browser, the new CLEAN™ Management Console provides unprecedented visibility and transparency into public space waste & recycling collection operations. New visualization tools and reporting capabilities provide powerful insights for more efficient management of operations, better activity tracking and enhanced auditing of results.

Behind the scenes, the network Command Center crunches the data that delivers the reporting and insights and controls the waste & recycling stations, while providing remote

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diagnostics, over-the-air software upgrades and proactive maintenance options. Optimizing collections allows teams to maintain high service levels, while dramatically reducing costs. Patterns of historical information allow customers to drive even deeper efficiencies by adjusting routes and staff dispatching patterns. Real-time information ensures “no surprises” and allows the organization the flexibility to shift to prevent issues and address changing conditions on the ground (e.g. special events, seasonal usage, population or foot traffic growth areas, etc.).

Discussion

Karalynn O'Rourke asked about the ability to monitor indoor systems for efficient collection. Rob explained that they can do this if the system had an electrical connection. composting.

Scott Benjamin explained that he had seen these in the city of Sommerville and asked how they were working out in that area. Rob indicated that the recycling rates have increased dramatically as a result.

Paul Wolff asked the management system allowed users to run reports based on the usage of various machines deployed in a given setting. Rob showed actual reports generated from MIT where there are several dozen compactors in use today.

Mikey Paintenen asked if the signage on the exterior could be customized to advertise the schools' sustainability club or other sustainability initiatives. Rob showed examples of how other schools use the side of the compactor to display sports game schedules, bus schedules and student initiatives.

2) Building Dashboard Follow-up

Presentation

Margo Attaya reviewed feedback received from the user surveys distributed by PCCSC members since the last meeting. She also shared the work done on the tour which includes a template for signs to be posted along the tour route and a “guide book” that may be used by anyone giving a tour.

Paul Righi announced that the dashboard would soon be moving around the corner from its current location. He indicated that the data drop would be installed no later than Friday April 6 and that the dashboard would be moved shortly thereafter to the new location.

Paul Wolff announced that the College has received over a dozen media hits from the recent press release on the new dashboard. A few of the responses included original articles featuring the dashboard.

3) Student Project Selected for State-wide Event at Hampshire College

In response to suggestion by PCCSC member Mike D'Entremont to explore venues for sharing student work, a venue called the *Massachusetts School Sustainability Coordinators Roundtable* was identified at the last meeting. This group sponsors an annual student convocation event designed to feature student sustainability projects.

BHCC student Leonilla Tellez-Valle's project called "Frugal Flushing" was accepted for presentation at Hampshire College on April 4, 2012. Leonilla was the only student selected from a community college to present at this event that also featured students from Emerson University, LaSalle College, Boston University and Worcester State University.

4) Renewable Energy Sources at BHCC

Paul Wolff shared with the group that he has proposed the College consider a hybrid solar system for installation as part of the scope of the current Energy Efficiency Design/Build project at BHCC. Instead of installing panels on the B- Building roof as originally proposed by contractor Fred Williams, Wolff proposed an installation on the G- Building roof that has southern exposure and a new membrane. There is room for a 10 kw system in the area above the student lounge, on the existing sunshades on the south façade of the building and on the front overhang.

In this alternative location, the panels may be could be seen from the ground, and also easily connected to a "building dashboard" that we have recently installed. This would illustrate the output of the panels to students, staff and visitors to the College. If the inverter was also installed in a visible place, Wolff indicated that there would be another visible "education" opportunity.

Wolff explained that this strategy is proactive since the roof of the B- Building is at least 15 years old and when it fails, the solar panels would have to be taken off and reinstalled at great expense to the College in the near future.

Wolff recommended the "hybrid" array that includes photovoltaic panels and a solar thermal collector to be used for hot water. This system has an efficiency rating of over 50% percent, compared to the 15% efficiency rating of the system originally specified for the B- Building. Contractor Fred Williams is currently reviewing the recommendation with solar consultant John Mazalli to determine the costs and feasibility.

ACTION ITEMS

- 1) The next meeting is scheduled for Tuesday, May 1, 2012 1-2:15pm G139.