

HCC Meeting
26 October 2009

Present:

Emma Crossen, Karen McKinnon, Alisyn Johnson, Warren Anderson, Eric Bettendorf, Eric Uva, Cassandra Freyschlag, Stephen Jensen, Gracie Brown, Sophia Wen, Tim Lehman, Tiffany Curtis, Julia Africa, Kathleen Attfield

Special guest: Jaclyn Olsen (OFS)

- Presentation from Jaclyn Olsen regarding Harvard GHG reduction commitment (slides available online)
- Green Load fund: low interest funding for operations department to begin projects that will ultimately be profitable
- Occupant engagement: Green teams through departments, try to build culture towards behavior change
- OFS is not only working on the GHG commitment - sustainability at Harvard goes way beyond the commitment
 - Recycling
 - Composting
 - Renewable energy projects: wind turbines on Soldier's Field park garage,
 - HRS to put up one of largest solar PV system
- GHG reduction goal: 30% reduction from 2006 levels by 2016
- Implementation cross-university: see slides for schematic
 - Six working groups made up of facilities staff, some students and faculty, school administrators
 - Working groups address challenges presented by decentralization at Harvard
 - Stakeholders at table
- Baseline is ~297,000 MTCDE (megaton carbon dioxide equivalent), goal is ~208,000 MTCDE
- Key accomplishments: university-wide collaboration (first time in recent past), school/unit GHG reduction draft plans (going to be submitted at the end of the month)
- Other accomplishments: Rigorous review of inventory, building energy audits (ongoing), universal financial analysis across schools, central energy plant upgrades, university-wide temperature policy
- Student Advisory Group: would like to have representation from each school, opening up applications for first-years
 - Ask students to write student section for GHG reduction plan from each school
 - Answer question: what can students do?
 - Student events, offices, common spaces
 - Mini grants program for innovative student/staff projects
- Some schools missing representation on the Student Advisory Group: More information to come
- Question from Emma: Are students generally aware of OFS/GHG reduction plan?
- Eric: Students who are interested in environmentalism have general idea of the plan but do not know the details

- Julia: Difficulty separating out what services are done on a consulting basis and what services are offered by the university - student leaders are not always sure how to best use/be of use to OFS
 - Jaclyn: OFS is always changing, moving away from consulting role - what is the best way to bridge that communication gap?
 - No funding available for Student Advisory Group - may be something to discuss in the future
 - Would love more input about ways to reach out to students more effectively
 - Emma: Plans to do a larger event to bring students in across the University?
 - Jaclyn: Goal to have large event every year; this year, will do a recognition ceremony in the spring (Green Oscars)
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- Warren Anderson, Extension School - presentation on water efficiency
 - From Green is the new crimson to Blue is the new crimson: Water issues are and will continue to be prominent, especially in developing countries
 - Extension school 2nd in eco-competition last year - but only have one building! 51 Brattle St.
 - Pat Shea - building manager for continuing education building
 - Actions taken at DCE: installation of low volume aerators (same pressure, less water), waterless urinals (typical: 1.2 gallons/flush), timed irrigation, water filtration system
 - Recommendation: put sensors on sprinklers so that they do not function during rain (smart irrigation)
 - Water savings will be large as price of water increases as projected
 - Occupant engagement: HES has on-campus and distance education students
 - Blue legacy with Alexandra Cousteau (Jacques Cousteau's granddaughter): HES students got involved with project and provided regional recommendations for water-stricken regions
 - FAS has reduced water use: 23.73 gallons/sq. ft. to 18.41 gallons/sq. ft. between FY06 and FY04
 - Probably more that can be done
 - Idea of water footprint of products and food: analogous to carbon footprint
 - Measures direct and indirect impacts - operations, supply chain, life cycle
 - International trade implications: when importing product, also talk about importing water necessary to produce product (embedded water)
 - Risk assessment: physical, regulatory, reputational
 - Recommendations for schools: Biggest savings through implementation of smart irrigation systems (take advantage of loan fund)
 - Also: install low-flow aerators, waterless urinals/low flow toilets
 - Indirect impacts: Start to research water footprint (waterfootprint.org), and encourage transparency, reporting and outreach
 - Water footprint is easier to measure than carbon footprint! Can be more fun to measure!
 - U.S. average: ~100 gallons/day water consumed vs. Palestinians use ~3 gallons/day
 - European countries: ~60 gallons/day (potential goal for U.S.)
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- Small group wrap up

- Erin (HMS):
 - Bottle water blind fold taste test with tap water and different bottled waters
 - Show movie “Flow” on Med School campus
 - Work with facilities to rearrange drinking fountains to make them more accessible
 - Not turn on sprinklers during hot days
- Drinking fountain accessibility may be an issue across schools
- Chilled tap water dispensers – need ones that can provide both hot and cold water
 - Med school facilities looking for ones that provide both temperatures
 - May be ones present in the chemistry building and law school library – to be looked into
- Bottled water banned at the school of public health – cafeteria also composts everything
 - Only spigots, no water fountains – need to carry receptacle at all times
- Emma: how would students feel about removing bottled water?
 - Eric: primary obstacle would be budgetary – fixed cost to improve infrastructure to allow for removal of bottled water – spigots, additional soda machine, etc.
- Warren: show movie ‘Flow’ and make second assessment of situation
 - OFS will show ‘Tapped’ in December
- How can we effectively communicate the message that water issues matter?
 - Gracie: Div School is going to take field trip to Fresh Pond to better understand where the water comes from
 - Eric: When speakers are present re: environmental issues, ask at least one question regarding water – build momentum and change social norms
 - Resource at Harvard – John Briscoe (HSPH, SEAS) – sit down discussion with students
 - Julia: Tie water issues into other issues: connect water to oil, health, human rights issues
 - Warren: Water is a unique issue in that it ties into many other issues
- Emma: Use gray water – dual streams for water
 - Julia: Being done at Oberlin – the living machine at the Adam J. Lewis center
 - Cassandra: Yale also has one of the machines at the school of forestry
- Landscaping issues – over-watered lawns
 - Warren: talked to athletic fields manager – looking to get on a smart irrigation system
- Resource: phone number to call (email?) when you see misuse of water
 - Use energy@fas email address (probably will redirect inquiry appropriately)
- Wrapping up! Non-thematic issues and questions
 - How much can/should we deprive people of options (i.e. bottled water)? What can we replace those options with?
 - Embedded water use
 - Comparing water footprints across schools
 - Tie in projects in different schools with HES projects
 - *Update:* Regarding any water projects for the Extension School students (thesis or capstone projects), contact George Buckley(email: gbuckley@fas.harvard.edu; phone: 617-998-8597) as he is the co-Director of the Extension School Sustainability and Environmental Management program and he deals with the

water projects/teaches the courses related to water (EM1 and Ocean Environments).

- Follow ups:
 - Tim: toilets – do stickers really work?