GREENHOUSE GAS AUDIT A SUCCESS

Jack Byrne, Sustainability Coordinator for Middlebury College recently visited the Monterey Institute campus to put on two different events.

by Natalie Berland

On Saturday, March 1st, a greenhouse gas audit workshop was held. The goal of this workshop was to learn about different audit tools and how they are being used in the marketplace, as well as working with real numbers to create a greenhouse gas audit for the Monterey Institute.

First we spoke about different carbon trading schemes and greenhouse gas audit tools that exist in the United States and abroad. For example, Clean Air, Cool Planet® is a tool that can be used fairly easily. It is basically a calculator where you input the data and the computer calculates your emissions. If you are not interested in the nuts and bolts of an emissions calculation this is the tool that is the most user friendly. Middlebury decided that it wanted to be more hands on with its calculations. Therefore, two students developed a greenhouse gas accounting system that is specifically designed for Middlebury.

We began the audit process by reviewing the raw data that had been collected. During the afternoon we split into 2 groups, and went ahead to calculate Monterey Institute’s greenhouse gas emissions for the fiscal year 2006-2007. We used the framework created by Middlebury, but were required to make certain changes to accommodate the differences between the two campuses. We learned that the process of greenhouse gas emissions reporting still has some weaknesses. One major weakness is due to the limited amount of data often auditors are often required to make assumptions. Most institutions are not used to recording all of the information needed in a greenhouse gas audit. Tracking air miles traveled, weight of trash and recyclables, or carbon emitted from employee commutes are not usually things that are tracked in a normal accounting system. Therefore, auditors are required to make assumptions in their calculations to fill in the gaps. As long as the auditor is explicit about the assumptions that they make, then the audit should not change drastically from year to year, and can be a helpful tool in monitoring emissions of greenhouse gases.

GREEN DRAGON MEDIA PROJECT

by Nat Skinner

The Green Dragon Media Project was started in May 2007 by Max Perelman, an MAIEP/MBA student at the Monterey Institute. It is a new documentary and multimedia project shedding light on green construction in China and was recently presented at the Woodrow Wilson Center during the 2008 DC Environmental Film Festival. Several screenings and presentations are scheduled for later this year in both the US and China. The project is also planning a localized broadcast on Chinese Central Television (CCTV).
LEED for American Schools: A Case Study

by Jeff Swartz

My research was inspired by Greg Kats’ “Green America’s Schools” report. In his analysis he found that the cost premium was 1.7% or about $3 per square foot. However, the energy cost savings from a green versus a conventional school was between $7 - $9 per square foot, or an average savings of $100,000 each year. On average they use 33% less energy and 32% less water. This inspired me to examine a local school and see if their example reflected Kats’ conclusions.

Chartwell School is located in Seaside, California, on 30 acres of the former Fort Ord Military Complex. It is the first school to achieve a US Green Building Council Platinum rating for Leadership in Environmental and Energy Design in New Construction (LEED). Chartwell’s shared vision was to create an exceptional, high performance learning environment for children with dyslexia. The goal was a campus that integrated proven strategies to improve learning rates and that would function as a tool about sustainability, all while dramatically reducing environmental impacts. The school first registered for LEED in late 2003, and was certified LEED-NC Platinum in November 2007. The project took 4 years altogether: 1 year of planning, 2 years on construction, and 1 year on commissioning. LEED Platinum was a conundrum to many of the projects’ contractors as problem solving design and spatial issues were difficult to address because no one on the Chartwell project had seen examples of issues at that level of LEED before.

With a budget of $13 million, Chartwell still had to spend an additional $100,000 on upfront costs to get to energy neutral status (net-zero). However, the investment in daylighting which reduced electricity demand by 50% and a 32 kW solar array, the school is expected to see a payback in approximately 10 years. In theory, the school will save the amount of money spent on the Uni-solar photovoltaic array over 10 years by being a net zero facility. After 10 years, the school will save money as no budget will be required for heating or lighting the space.

Is the cost to go green more than building a conventional school? For Chartwell, the educational benefits will far outweigh the upfront costs of the building; not only will the school see a payback in 10 years, it will save money in the long-run as school staff continue to ensure the building’s energy efficiencies. Although it might be too soon to predict, Chartwell staff already claim that the benefits from a LEED building far outweigh the costs. For California, Chartwell can become the LEED Platinum school only if additional LEED school’s economic assumptions are accurately factored, power utilities are engaged in all life-cycles of the building, and school faculty and staff’s dedicate time to ensuring that the building maintains its efficiency.

Chartwell Students studying the physics and efficiency of the school’s 8000 gallon rainwater cistern that is used to meet Chartwell’s non-potable water demands. Excess water goes into the sluice and irrigates the school’s organic garden.

Photo courtesy of EHDD Architecture
Clothing Swap Held at International Bazaar

by Emily Sloane

The Monterey Institute’s Environmental Task Force hosted its first-ever school-wide clothing swap at the International Bazaar on Saturday, April 5th. It was a great opportunity for students, staff, and faculty to clean out their closets and come home with a few “green” garments.

What is a clothing swap, exactly? It’s very simple. Participants scour their shelves and closets for garments that they never wear. They bring them in during the swap and are then free to take items brought in by other participants in exchange. It’s like a trip to Goodwill, only minus the (albeit small) price tag.

Along the “reduce, reuse, recycle” continuum, reusing resources can have huge positive impacts on the planet. Purchasing new clothes means supporting the clothing production chain and the associated raw resources, greenhouse gas emissions, long-distance transportation and often questionable working conditions in overseas factories. Each time we choose a secondhand garment over a new one, we bypass this production chain and take an important step towards living a more sustainable lifestyle.

Like it or not, we live in a society obsessed with consumption. Even the thriftiest among us are likely to have a surplus of clothes. Buying secondhand is far from gauche, as the array of vintage and consigned clothing shops in any hip, urban area in the U.S. will attest. Clothing swaps are especially appealing, particularly for financially limited graduate students, because they are free. Leftover items from the swap will be donated to charity.

For More Information on Sustainability, Climate Change, and Efforts at the Monterey Institute:

Earth Day 2008: [Climate Change Awareness Walk](#)

Student-Led Environmental Groups

Learn more about the [President’s Climate Commitment](#).

For Sustainability Careers resources search for “Sustainability Job Openings” sustainability or visit [Wiser Earth](#).

Vote on the IEP T-Shirt Design
by Ryan Bigelow & Nat Skinner

Now is your chance to provide input on the IEP T-shirt design. Email Ryan Bigelow with your ideas. He is in the idea-gathering stage and has a few points anyone submitting designs should take into account:

1) Simple is better
2) Comments on theme are great, but actual designs are better
3) Right now the 2nd design is what is in Ryan’s mind, but you could change it!

Climate Change and Adaptation
by Nat Skinner

April 3rd & 4th saw the UC Hastings College of the Law & the Monterey Institute of International Studies present “Surviving Climate Change: Adaptation and Innovation” at the UC Hastings campus in San Francisco. The conference was unique in presenting the idea of moving towards adaptation as part of the climate change lexicon rather than mitigation alone. Both are needed, not just focus on one or the other. Dean Laurance gave opening remarks about how Hurricane Katrina opened his eyes on climate change’s reality. Professors Zarsky and Williams also spoke on two panels while some 30 IEPers attended.

A variety of subjects were covered, from the “Strategic Complements: Adaptation and Reducing Greenhouse Gases” to “Private Market Responses”. One remarkable facet which made the conference truly enjoyable was the dialogue between the speakers. No one came and read entirely from a pre-planned speech and failed to react to what their fellow panelist said, or what the audience asked, which was refreshing.

For myself, the most interesting topic was “Impact of Climate Change on Development and Human Rights” which included Luke Cole of the Center on Race Poverty and the Environment; Edward Cameron, of the Embassy of the Maldives; Martin Wagner of EarthJustice; and Tseming Yang from Vermont Law School. Mr. Cameron and Mr. Wagner both represented peoples faced with an existential crisis caused by climate change, yet their discussion did not rely entirely on humanistic pleas, instead highlighting the potential disruption and chaos if groups larger than the Inuit or countries bigger than the Maldives suffer the brunt of climate change. Mr. Wagner talked about development in China, including the Three Gorges Dam and a proposed project to build a canal from the wetter south to the more arid north, a feat he compared to bringing water to California from the Mississippi River.

All in all, a very well moderated, conducted, and informative conference that was worth attending.

Sustainability Careers Workshop
by Natalie Berland

On Friday, February 29th, Jack Byrne, Sustainability Coordinator for Middlebury College, held a talk on careers in sustainability. At the beginning of his talk, Mr. Byrne highlighted his career path and how he came to be in the position he currently occupies.

We then talked about looking for companies that have a certain culture and support system. For example, Seventh Generation® has a great corporate culture and even a Vice President in Corporate Consciousness. Also, there are many conferences each year in all fields related to sustainability. The underlying message at the end of the talk was to get out and network.

RISE
by Jeff Condit

On Saturday, April 19th, the Monterey Institute will host its annual Earth Day celebration. This year’s event aims to raise public awareness about climate change and its potential local & global impacts. The event will entail a 3-mile hike, beginning at 10am in front of Fisherman’s Wharf, will progress along a projected Monterey coastline if there is a 1-3 meter rise in sea level. Climate change experts will provide insight on climate change as well as possible solutions. A free community picnic at Windows on the Bay will conclude the event.

The event is funded in part by a grant from Washington DC-based Americans for Informed Democracy and is part of a nationwide effort to spur community action.
Sustainability Initiatives on Campus

by Natalie Berland

Field Study in Sustainability

Last fall the MIIS offered a course called Field Study in Sustainability, which focused it’s efforts on greening the Monterey Institute. The course started with setting a baseline to gather any information of past sustainability efforts. Then they did some field research on green businesses in the area. The culminating project for the class was a campus-wide event called the Conversation Café, and Co-laboratory, which were put on last fall. The Conversation Café took the form of a community brainstorming session. The Colaboratory was more of a strategic planning workshop. Through the information generated from these ideas and plans, sustainability initiatives have been carried through this semester. In fact, some very exciting things have been happening on campus in this realm.

Sustainability Council

One of the main recommendations that came out of the events last fall was the creation of a body that will organize and streamline sustainability initiatives on campus. The creation of a Sustainability Council achieved this goal. The Council is made up of representatives from each college, including a faculty member and a student, as well as a staff member, and a representative of the administration. The first meeting of the Sustainability Council was on February 14, 2008. This group came together to be the leaders and decision makers for sustainability initiatives on campus. The first half of the meeting decided procedure, and the second half was brainstorming exercise on priorities for this semester. Each of the council members is working on one of these initiatives and will present their work at the next meeting on April 10, 2008.

President’s Climate Commitment

President Yu signed the President’s Climate Commitment last spring. In order to carry out the goals in the document, the President’s Climate Commitment committee was established last semester and has been working on various policy changes on campus. The two major policies that are being drafted are a green procurement policy, and a green building policy for major renovations and new structures. Each of these policies will have major impacts on how the institute goes about its daily business. These two policies should be in place by August 2008. In addition, the President’s Climate commitment requires that the Institute do a greenhouse gas audit. The Institute is well on its way with the help of Jack Byrne of Middlebury, who came recently to do a workshop on this subject. The greenhouse gas audit is due to be finished by mid-April and will be presented to the school at the end of the year.

Paper Waste Reduction

We began a paper waste reduction project this year, starting with the faculty and staff. Although the students have a cap on the amount of paper that they can use, the staff does not. Therefore, the faculty and staff do not have an incentive to conserve the amount of paper they use. The work-study students are approaching each of the staff and faculty individually to let them know ways of reducing their paper consumption, and therefore saving trees, as well as money, for the Institute.

50/50 Policy

Also, we are working with several key staff members in order to fully implement the 50/50 policy. This policy, which was drafted by the Environmental Task Force 2 years ago, has now been fully adapted by the Institute and the President’s office. It requires that all receptions, services and other MIIS events provide at least 50% plant-based foods. These items are low on the foot chain and require much fewer resources than animal-based foods. With the participation of everyone on campus this can be a large first step in a movement by the Institute to become more sustainable. No precise measurement to judge 50/50 is planned at this time.

Be on the lookout for the new MIIS Sustainability website!
McKibben Panel & Environmental Journalism
by Nat Skinner

On Wednesday, April 23, Middlebury College & the Monterey Institute of International Studies’ Environmental Speaker Series is proud to host Middlebury’s Bill McKibben and his panel on Environmental Journalism. The speakers are: Bill McKibben, Director, Middlebury Fellowships in Environmental Journalism; William Finnegan, New Yorker staff writer & Fellowship Reporter in Residence; Monika Bauerlein, Editor, Mother Jones Magazine; Jason Scorse, IEP Program Director; & Matt Jennings, Editor, Middlebury Magazine.

The panel will run from 6pm to 8pm in Irvine Auditorium and is free and open to the public.

MII$ion New Orleans
by Jeff Swartz

Over the course of the recent winter break, a 4-unit course was taught on-site in New Orleans, Louisiana. The course, “Development Practicum in New Orleans,” exposed and engaged students in post-Katrina relief and community development efforts in New Orleans’ Freret and Milan neighborhoods. Students gained first-hand experience participating alongside residents in a variety of tasks and activities related to post-disaster aid work. Knowledge learned in the classroom (such as grant writing, survey, program assessment, among others) was applied to support local neighborhood efforts. The redevelopment of New Orleans is an unprecedented and historical challenge that requires a supranational effort. The Monterey Institute, Middlebury College and the Bronx Community College have formed a strategic partnership to link students with Neighbors United and Neighborhood Housing Services, two non-profit community agencies playing a pivotal role in rebuilding and recovering two vital New Orleans neighborhoods. The neighborhoods, Freret and Milan, are located in the central part of the city and have been selected as 1 of 17 target “recovery zones,” which guarantees grants from the City of New Orleans and the Federal Government to rebuild the neighborhood according to the designs and plans developed and submitted by Neighbors United in the Unified New Orleans Plan (UNOP) in early 2007.

As part of this process, Neighbors United requested institutional and student support of their efforts. Students were engaged in activities that advanced the neighborhood’s identified needs. On-site tasks included generating a survey that was taken door-to-door throughout the neighborhood to garner general demographic and statistical information, resident opinion, and output that could be collected and presented to the City of New Orleans for funding approval. Additionally, Neighbors United is at the forefront of the re-development of local businesses and marketplaces, public infrastructure, social services and many other vital tasks. Monterey Institute students from the Graduate School of International Policy Studies (GSIPS) and the Fisher Graduate School of International Business participated in a different group projects based on their own individual skills sets and personal interests.

The groups were: Community Survey Project - Baseline survey collection in the Freret and Milan neighborhoods with Neighborhood Housing Services and Neighbors United; DONA - Direct Observation of Neighborhood Attributes - Methodology used to assess the ease of committing crime in the Freret neighborhood based on environmental design. *This project is in the process of also being implemented in nearby Salinas, California*; Community Conferencing - Mediation program to work with troubled youth in New Orleans as an alternative to juvenile hall; and Freret Business - Consulting, Accounting and Freret Market Redevelopment.

The Monterey Institute hopes to host the practicum again next winter during the J-Term. For more information visit the “MII$ion New Orleans” course conference or contact the GSIPS information desk.
More on the Green Dragon Media Project
Media Buzz
E&E TV
Features, Urbane China (pdf)
Tree Hugger
Woodrow Wilson Center

Upcoming Presentations
Green Buildings 2008
US-China Green Energy Conference, Asia Society
Max’s Upcoming Project
Straw Building in China

Spring 2008 Environmental Speaker Series
Irvine Auditorium, 6pm, Free and Open to the Public
Upcoming Speakers
Danny Kennedy, April 10, “Solar on your Roof”
Casson Trenor, April 17, “ ”
McKibben Panel, April 23, “Reporting on the Environment”
Bill McKibben, April 24, “Environmental Op-Ed Workshop”
Past Speakers
Paul Cowles, “People and Wildlife”
Jenny Garmendia, “International Coral Reef Initiative (ICRI)”
Jack Byrne, “Greenhouse Gas Audit”

Congratulations 2008 Graduates!

Earth Day Activities
Beginning April 19th

The ETF is putting on a weeklong event involving:
★ Waste Reduction
★ Recycling
★ Overall Environmental Awareness

Participation in various events will allow you to enter the April 25th Happy Hour Raffle. Two bikes and a running stroller will be given out to the winners, and other giveaways will be available throughout the week.

Any Likes, Dislikes, Rants or Raves about the Barking Otter?
Email Nat Skinner or Jason Scorse and let us know.

Earth Day 2008: Climate Change Awareness Walk

May 7 - Green Schools Expo
Moss Landing (page 6)

Visit the IEP Website at: http://green.miss.edu