

INTRODUCTION

Julie Newman, *Director, Yale Office of Sustainability*

The *Northeast Campus Sustainability Consortium (NECSC)* was established in October 2004 to support the growing network of campus sustainability professionals from the Northeast U.S. and maritime Canada. The NECSC is committed to advancing the goals of education and action for sustainable development at colleges and universities in the region. Representing an increasing number of higher education institutions [40-plus], the NECSC has organized itself around the UN Decade of Education for Sustainable Development which spans the years 2005-2014. The following statement from the United Nations launching the commitment to sustainability education captures the intention of the designated decade and what the NECSC strives to promote:

“Thus education is the primary agent of transformation towards sustainable development, increasing people’s capacities to transform their visions for society into reality. Education not only provides scientific and technical skills, it also provides the motivation, justification, and social support for pursuing and applying them. The international community now strongly believes that we need to foster – through education – the values, behavior and lifestyles required for a sustainable future. Education for sustainable development has come to be seen as a process of learning how to make decisions that consider the long-term future of the economy, ecology and equity of all communities. Building the capacity for such futures-oriented thinking is a key task of education.”

In keeping with Yale’s focus on global outreach, the 2006 NECSC Conference engaged practitioners and experts from institutions of higher learning both from within and outside of the region to foster broader opportunities for exchange. After the two-day NECSC conference, a third day was devoted to an international roundtable symposium entitled “*The Role of International Alliances to Advance Sustainability Objectives on University Campuses.*”

The primary goals of the NECSC are to advance sustainability on campus and in the region by providing networking opportunities, best practices exchange, professional development, and access to the region’s vibrant and growing college and university sustainability practitioner community. The NECSC is committed to an annual meeting hosted by a college or university in each of the representative states

and provinces. The theme of the 2006 conference was “*Strategies for Institutionalizing Sustainability in Higher Education.*”

NECSC representatives include a growing number of small liberal arts colleges, large private research institutions, and state universities, as well as non-governmental organizations and governmental entities. The goals of the annual gathering are to:

1. Knit together our successes to work towards an overall goal of global sustainability;
2. Identify creative ways to both learn from and share our experiences in creating a sustainable campus so as to challenge each others’ goals and increase our efficiency to finding solutions;
3. Invest in the development of partnerships between individuals, institutions, regions and countries.

This report is organized around and expands on themes that emerged from the workshops and plenaries that were the core of the NECSC 2006 Conference and International Symposium, both hosted by Yale University, and held November 2-4. The intention is to offer a synthesis of each session, including the very lively dialogue with the audience that many of the speakers inspired.

WELCOMING ADDRESS

Richard Levin, *President, Yale University*

I am really delighted to welcome all of you here for this third annual Conference of the NECSC. It's our pleasure to have you here on campus. I do hope that you get a chance to look around a bit while you are here.

The fabulous turnout for this conference demonstrates that commitment to sustainability is taking hold in educational institutions of every kind, from community colleges to small liberal arts colleges to mid-size universities like Yale to very large state universities. For the next two and a half days you will have the opportunity to interact and engage with students, staff, and administrators that represent more than 50 colleges and universities predominantly from the Northeast of the United States and Eastern Canada, but as you have just heard, from elsewhere as well, including the West coast and from abroad.

It's wonderful to have international participants in this conference, I take it for the first time. We're thrilled that all of you from the United States will have a chance to connect with colleagues who come from as far away as Tokyo, Singapore, Australia, from Europe, Sweden, Switzerland and Slovenia.

I thought I would take my few minutes of welcome to tell you what Yale is doing in this area of sustainability. I want to give just a brief summary of our institutional history, not to suggest that we're doing so great – far from it – but to share with you the trajectory of a school that has managed to come a very long way in a very short time. We haven't been at this very long but we feel we have made terrific progress, though there are many more years of hard work ahead.

At the turn of the millennium Yale was not a leader in the area of sustainability, despite Gus Speth beating up on me from time to time about that. We took the occasion of our 300th birthday in 2001 to establish a number of ambitious institutional goals. One of them was to get all of our students overseas as part of their educational experience. So internationalization was one major theme. But another one was a strength in and commitment to the environment and to making a constructive stand on issues that affect the future of the planet. So we established initially an Advisory Committee on Environmental Management known around here as ACEM by its acronym, which was an effort to bring faculty, students, staff together to have an organized dialogue about how Yale should begin to tackle the challenges of making the university sustainable.

Within a year the group proposed a comprehensive set of principles combined with a series of explicit actions to improve Yale's environmental performance. And

based on the committee's recommendations, we've taken the following steps over the last four years.

First and foremost in terms of results, we hired an accomplished, energetic sustainability director, Julie Newman, whom many of you know, whose job was to develop a strategic plan for the campus and to oversee the coordination, development and implementation of all these emerging activities. She's done a great job at this. We built around her an Office of Sustainability now supported by 12 research assistants, and the work is disbursed throughout the campus.

We established four campus-wide sustainability committees, again drawn from students, staff, faculty and administrators, and engaged them in dialogue about four topics: energy and climate change; transportation; waste management; and building design and construction. The transportation committee developed Yale's first comprehensive demand management plan and conceived the position of director of sustainable transportation, which we are hoping to fill this year.

The integrated waste management committee completed a waste management analysis and that has provided the basis for the development of a waste minimization and procurement strategy.

The sustainable building design and construction committee is still in the process of analyzing and developing a campus-wide standard to be applied both to new construction and major renovation. But in the meantime, we have committed that with all of our new construction we are going to seek Leadership in Energy and Environmental Design (LEED) certification for every project. At the moment we have 13 buildings that are at various stages between preliminary design and completion which are going to go for LEED certification. Just last month we got our very first LEED gold certification and for an engineering laboratory building no less, which we are very pleased with. Cesar Pelli designed the magnificent engineering center that is not far from here. I hope you get a chance to go see it. It's a beautiful building as well as very efficient.

We are learning lessons with each construction project that accumulate and make the next one easier. I'm very optimistic about the prospects. We are going to be going for platinum certification with the building that will be the home of the School of Forestry & Environmental Studies. Construction on that will begin this summer.

One of the accomplishments that I'm most proud of is our Greenhouse Gas Reduction Strategy. In October 2005, at the recommendation of the energy task force, and after careful consideration by the senior leadership, we committed to the goal of reducing our greenhouse gas emissions 10 percent below 1990 levels by the year 2020. Since the university will be expanding approximately 15 percent from its current square footage over that period (at least that's the current plan) and since energy use is up substantially since 1990, this actually means we have to reduce our energy consumption by 43 percent below what it would be if we stayed on the trajectory we're on.

We are in the process of doing that. We made very substantial gains in our first year. Some of them are very much behavioral changes on the part of the students and staff using the buildings. The students had a competition across the residential

colleges to see who could save the most energy and I think they achieved something like 7 percent reduction in energy in one year, which was very, very exciting. I think this really helps raise consciousness about doing more.

As you leave, out on the registration table you can get one of these brochures which describes our strategy and actually shows some of the targets we have for the various strategies that we'll use to achieve greenhouse gas reduction, such as conservation, building design, better management, use of offsets, and use of non-conventional fuels, which we're already doing in our buses where we are using a mix of ultra low sulphur diesel and bio-fuels.

Now the challenge that's facing our university is the same as the challenge that faces the whole industrial world, indeed the developing world, and that is to reduce emissions drastically while also trying to ensure future growth, development, and continued evolution of higher standards of living for people around the world.

I think our commitment is reshaping the way we think about energy use at Yale. It's providing an impetus for all of us who are engaged in running the university, and for outside architects, to think about strategies that minimize greenhouse gas emissions. And I think it provides, of course, an extraordinary educational model for our students.

While you're on campus I hope you will have a chance to see what we've done. You could ride on one of our shuttle buses, which as I said, run on a blend of ultra low-sulphur diesel and bio-diesel fuel. Or eat at one of our dining halls which now serves 40 percent of the food from locally grown organic foods, which has been supported by another fabulous project we have going on, the Yale Sustainable Food Project. Take a look at the windows in the graduate school, which have been cleaned with non-toxic green seal products. Walk through our residential colleges, which have not only reduced their energy consumption 7 percent, but as a challenge, the university agreed if they met their goal, we would buy 10,000 megawatt hours of renewable energy certificates to offset electricity use elsewhere.

If you were to walk into a residential college some evening you might encounter students from the Student Taskforce for Environmental Partnership (STEP) engaged in peer-to-peer education in which students are teaching other students about energy conservation and are passing out compact fluorescent lights.

While you look at this, though, remember that we're not nearly so far along as we need to be. It's a lot of progress and we're very proud of it, but we've got another 38 percent or 39 percent to go in terms of reducing our greenhouse gas emissions. We're deeply committed to achieving that goal and we know we still have a lot to learn. What's so wonderful about a conference like this is that it's an opportunity for everyone to share their practices, to talk about the things that have worked and haven't worked and to learn from one another about how we can all improve.

I would like to say to the representatives of the roughly 50 universities that are here, I hope you'll find your own way to actually establish the kind of formal goal for yourself that we have. Some institutions might find it difficult to meet a standard as severe as a reduction of 10 percent below 1990 levels. But whether you can meet that particular goal or not, establish one. It would be great if institutions all across America and around the world, campuses which teach, which educate the next

generation, all made commitments of one kind or another of a concrete measurable kind that could be benchmarked, that could be used as a model in industry and government, to show that these things can be done.

I want to thank you all for being here. I ask you to expend some energy this weekend and interact with one another and learn from one another and have a terrific time while here at Yale. Thank you very much.