

***Reducing Needham's CO₂ Emissions
Through Energy Efficiency & Sustainable Design:
A Collaboration Between Olin College and the Town of Needham***

September 29th Kick-off Meeting

On Friday, September 29, 2006, twenty individuals, representing four groups, met to explore ways in which Olin College and the Town of Needham could collaborate on projects related to reducing CO₂ emissions in our town. Participants represented:

- Olin College students and faculty
- Town of Needham staff and elected officials
- Teachers/administrators from Needham High School & Pollard Middle School
- Members from the Needham League of Women Voters

Meeting Highlights:

- Michael Greis summarized the history behind creation of this initiative and three objectives, from short to longer term, for the group:
 - Introducing groups and organizations with shared interest to each other
 - Developing and executing an initial project
 - Creating a self-sustaining structure facilitating ongoing projects over the long term
- A 10-minute video presentation was shown featuring Director of Public Facilities Maintenance, Mark LaFleur's report to the School Committee. Mr. LaFleur summarized both recent efforts and remaining challenges related to reducing town energy use in public buildings.
- The groups shared objective and interests, agreeing that there were potential benefits that would advance each organization's primary mission from a sustainability project.

The group briefly discussed a handful of ideas. Some of these included:

- Creating a solar powered hot water heater for one of the schools
- Conducting a feasibility study related to constructing wind turbines on the RTS site
- Conducting a town-wide assessment of Needham's carbon foot print.

(More comprehensive summary of meeting included at end of this document)

Suggested Next Steps:

- Each group is encouraged to go back and brainstorm potential project ideas. (See Guidelines on next page)

- Olin College will create a listserv to facilitate discussion and a cross-fertilization of ideas between groups.
- Each group should submit at least one “Project concept” idea to WendySurr@aol.com by Wednesday, October 18th.
- Project concepts will be circulated to the group prior to our next meeting to be held in late October. Date and location TBA. This meeting will allow members to discuss project concepts and select those warranting further refinement.

Project Concept –Suggested Guidelines:

- Outline the basic idea in 2-4 sentences
- Indicate any particular role your group would like to play or you envision other groups playing--in its implementation.
- Suggest a potential timeline.
- Send to WendySurr@aol.com by Wednesday, October 18th.

Optional:

Groups may also want to highlight any key benefits and/or potential challenges related to the project’s implementation, and identify any resources and/or constraints they feel their group brings to the proposed project.

In developing your “concept” we encourage you to:

- Check out what other cities and towns are doing (See Resources)
- Talk with others that attended the meeting. The contact list is below, or you contact the whole group by emailing the listserv at GreenNeedham@lists.olin.edu. If you attended the Sept 29th meeting you were automatically subscribed to the listserv. If you were not at the meeting and would like to be subscribed, contact laura.stupin@students.olin.edu.
- Consider the following priority criteria. This list is based on priorities expressed by individuals/groups at last Friday’s meeting.

High Priority Project Criteria: This project....

- ✓ Will, or is likely to, help reduce Co2 emissions in Needham in the next 12-36 months.
- ✓ Will benefit the Town of Needham through reducing energy use/cost or other expenses related to long-term energy use.
- ✓ Will offer Olin College students the opportunity to apply or gain new engineering skills in an applied project.
- ✓ Will offer Needham High School students the opportunity to apply or gain new skills related to the current (or planned) science curriculum at NHS.
- ✓ Will offer Pollard Middle school students the opportunity to apply/gain new skills and participate in a project that will have an impact on global climate change.

- ✓ Can be started within the next 3 months and at least some distinct portion of it completed before June 1, 2007.
- ✓ Can be implemented with no or minimal cost to the Town, schools or Olin College. (If costs are associated, these can be covered by available outside funding)
- ✓ Has the potential of expanding over time to meet more of the “desired criteria” listed below.

*******Please let us know if you think we missed any other important criteria.*******

Additional Desired Project Criteria:

- ❑ Project can become an impetus for a more comprehensive local climate change initiative.
- ❑ Project can create an established collaborative relationship between the town and Olin College for addressing projects requiring engineering expertise related to energy use.
- ❑ Project can help enrich and expand the science curriculum at Needham High School thereby ultimately reaching hundreds of students each year.
- ❑ Project can establish a mechanism for engaging Pollard Middle School students in applied climate-change projects alongside high school and Olin student.
- ❑ Project aligns well with town decision-making timelines and budget process.

A few “project starter” ideas:

- *Are there innovative approaches to energy efficiency that a team of Olin engineering students could help identify for use in existing public buildings such as Pollard or Newman?*
- *Are there sources of alternative energy (solar, hydropower, wind) that could be explored for town use? (feasibility study)*
- *Could Olin College students help shift patterns of energy use by students, teachers, parents and town employees in schools and public in order to reduce overall energy use?*
- *Are there new technologies that Olin students might develop and pilot in town buildings related to energy use and lowering emissions?*
- *What is Needham’s “carbon footprint”? Could Olin College students work with Needham High School students to conduct an assessment of energy use in the community ?*

Resources

To help in formulating ideas, groups may want to connect with other groups attending the meeting (see contact list below) and watch for a notice regarding a new listserv. Groups may also want to check out what other communities have—or are currently doing:

Local Climate Change Initiatives: Resource List

Mass Climate Change Network
www.massclimateaction.org/

Sierra Club
Cool Cities Initiative
www.coolcities.us/

Clean Air-Cool Planet
www.cleanair-coolplanet.org/

ICLEI Global
www.iclei.org

Concord Green Team
www.massclimateaction.org/concord.htm

Green Decade
Newton, MA
www.greendecade.org

Green Decade
Cambridge, MA
www.massclimateaction.org/cambridge.htm

Sustainable Belmont
Belmont, MA
Jan Kruse
www.town.belmont.ma.us/Public_Documents/BelmontMA_BComm/vision21/sustainbelmont

**Olin College-Town of Needham Collaboration on Energy Efficiency and Sustainable Design
Contact List**

Name	Affiliation	Phone	Email	Best Times to Meet
Town of Needham				
Christopher Coleman, Assistant Town Manager	Town of Needham	781-455-7530	ccoleman@town.needham.ma.us	Afternoons
Mark LaFleur, Director Municipal Facilities Maintenance	Town of Needham	781-455-0442	Mark_LaFleur@needham.k12.ma.us	Unknown
Michael Greis	Town Meeting Member, School Committee Member	781-449-8017	mgreis@comcast.net	Unknown
Olin College				
Ben Linder, faculty member Sustainable Design	Olin College	617-852-9050	blinder@olin.edu	Fri afts
Laura Stupin, student	Olin College	505-670-9768	laura.stupin@students.olin.edu	Weekends MWThF afts
Bennett Chabot, student	Olin College	207-561-0458	Bennett.Chabot@students.olin.edu	Weekends MWTh afts
Robin Maslowski, student	Olin College	513-543-5413	robin@students.olin.edu	Mornings MWThF afts
Tim Smith, student	Olin College		timothy.smith@students.olin.edu	

Needham High School				
Bob Lockhart, Coordinator Science Program	NHS	781-455-0800X2949	Bob_Lockhart@needham.k12.ma.us	afts
Mike Hirsh, science teacher	NHS	781-455-0800X2108	Michael_Hirsh@needham.k12.ma.us	afts
Michael Hamblin, science teacher	NHS	781-455-0800X2103	Michael_Hamblin@needham.k12.ma.us	Late afts
Gerry Gagnon, science teacher	NHS	781-455-0800X2102	Gerard_Gagnon@needham.k12.ma.us	afts
Darcy Roberts, Environmental Science	NHS	781-455-0800X2213	Darcy_Roberts@needham.k12.ma.us	afts
Mark Healey, science teacher	NHS	781-455-0800X22 09	Mark_Healey@needham.k12.ma.us	4pm and later
Pollard Middle School				
Glenn Brand, Principal	Pollard M.S.	781-455-0480	Glenn_Brand@needham.k12.ma.us	Unknown
Jessica Pollard, Environmental Action Team	Pollard M.S.	781-455-0480 X253	jessica_crosby@needham.k12.ma.us	Unknown
Meg Taylor Environmental Action Team	Pollard M.S.	781-455-0480 X251	Meghan_taylor@needham.k12.ma.us	afts
League of Women Voters				
Wendy Surr	League	781-449-9226 X 1	wendysurr@aol.com	Weekends, eves, Mon & Wed, Thurs afts
Susan Abbott	League	781-444-8275	sswabbott@rcn.com	Afts/eves
Carol Knapton	League	781-444-3092	cdknapton@hotmail.com	afts

Meeting Notes-September 29, 2006

In attendance:

Wendy Surr, Michael Greis, Laura Stupin, Bennet Chabot, Robin Maslowski, Tim Smith, Mike Hirsch, Christopher Coleman, Michael Hamblin, Jessica Pollard, Glenn Brand, Meg Taylor, Gerry Gagnon, Bob Lockhart, Darcy Roberts, Benjamin Linder, Mark Healey, Carol Knapton, and Susan Abbott. (See contact list below)

Meeting Highlights:

Michael Greis, Town Meeting Member and School Committee member, facilitated the discussion.

The meeting began with a 10-minute video presentation featuring Director of Public Facilities Maintenance, Mark LaFleur. Mr. LaFleur's report to the School Committee summarized both recent efforts and remaining challenges related to reducing town energy use in public buildings.

Following the video presentation, participants were asked to introduce themselves and articulate their interests and priorities related to any collaborative project on energy use. Some of the priorities expressed by members of the group, included: an interest on the part of Needham High School to find ways for the collaborative project(s) to enhance and become integrated into the existing science curriculum and service learning program and to find ways for projects to benefit large numbers of students—rather than a select few; an interest on the part of Olin students to create projects with clearly defined goals, objectives, and identified tasks so that Olin students with busy schedules could more easily “plug in” to the project; and interest on the part of the town to find ways for the project to be viewed as an asset to the town—for instance, by jump starting a feasibility study; an interest on the part of the League of Women Voters that projects consider town decision-making timelines and examine work by other groups—such as Newton's Green Decade in creating projects.

With the limited time that remained, meeting participants discussed a handful of ideas. Some of these included:

- ❖ Creating a solar powered hot water heater for one of the schools
- ❖ Conducting a feasibility study related to constructing wind turbines on the RTS site
- ❖ Conducting a town-wide assessment of Needham's carbon foot print.

Michael Greis closed the meeting by asking each group to go back and brainstorm potential project ideas. Greis asked that each group submit a brief written description of their top idea to the group within the next two weeks. Surr suggested that participants from differing groups connect with each other to promote a cross fertilization of ideas. Greis asked whether Olin College students could create a listserv for the group to facilitate this ongoing conversation.