

**A Proposal to
The Mass Clean Energy Center
for
SOLARIZE MASSACHUSETTS**

From the Towns of
Wayland, Lincoln and Sudbury
March 21, 2012

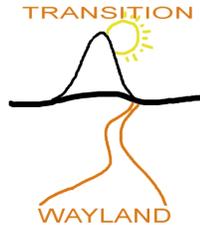


Table of Contents

Community Information	3
Statement of Commitment.....	3
Municipal Representatives	3
Utility Area Networks	3
Contract Review	3
Advantages of Group Proposal	4
Community Project Plan and Organization.....	5
Community Solar Coach Statements	5
<i>Wayland: Katrien Vander Straeten</i>	5
<i>Lincoln: Jennifer Morris</i>	5
<i>Sudbury: Rami Alwan</i>	6
Core Teams	6
<i>Wayland</i>	6
<i>Lincoln</i>	6
<i>Sudbury</i>	7
Installer Selection Team	7
<i>Representing Wayland</i>	7
<i>Representing Lincoln</i>	7
<i>Representing Sudbury:</i>	8
Expert Advisors	8
Collaborating Groups	9
<i>Wayland</i>	9
<i>Lincoln</i>	9
<i>Sudbury</i>	10
Marketing & Outreach Plan	11
Event Venues	11
Maximizing Program Visibility and Accessibility	11
Events	13
Volunteer Participation.....	15
Joint Community/Installer marketing strategy.....	15
Lessons learned from Solarize I Pilot Program	17
Permitting	18
<i>Wayland</i>	18
<i>Lincoln</i>	19
<i>Sudbury</i>	21
Demonstrated Local Interest.....	22
ATTACHMENTS AND APPENDICES.....	23
ATTACHMENT A: Signature and Acceptance Forms (each Town)	24
Appendix 1: Statement of Commitment	30
Appendix 2: Community Letters of Support	33
Appendix 3: Event Timeline.....	48
Appendix 4: Online Survey Results.....	49

Community Information

Statement of Commitment

Signed letters from each Town executive are appended to this document as Attachment A.

Wayland: Fred Turkington, Town Administrator

Lincoln: Anita Scheipers, Assistant Town Administrator

Sudbury: Maureen Valente, Town Manager

Municipal Representatives

Wayland: Daniel Bennett, Building Commissioner/Zoning Enforcement Officer

Lincoln: Anita Scheipers, Assistant Town Administrator, and member Lincoln GETC

Sudbury: James F. Kelly Sudbury Town Building Inspector

Utility Area Networks

Wayland: There are no utility area networks in Wayland.

Lincoln: There are no utility area networks in Lincoln.

Sudbury: There are no utility area networks in Sudbury.

Contract Review

Wayland: Reviewed by Fred Turkington, Town Administrator; no comments

Lincoln: Reviewed by Anita Scheipers, no comments

Sudbury: Reviewed by Maureen Valente, Town Manager, and Paul Kenney, Sudbury Legal Counsel, who expressed an objection to 6.a), Indemnification.

Advantages of Group Proposal

Lincoln, Sudbury, and Wayland have decided to partner for this proposal. Our communities feel there would be substantial cost savings for residents to be gained from the economy of scale.

The collective population of Lincoln, Sudbury, and Wayland is roughly 36,000. This has the potential to produce at least 300 installations, using the pilot program as a guide. We feel this would be attractive to potential installers, as well as offering even more attractive pricing for residents through the possibility of achieving a higher tier.

This collaboration would be a natural extension of existing programs that have proved very successful. An example of such a program is the G4 partnership. This partnership between our four school districts - Lincoln, Lincoln-Sudbury, Sudbury, and Wayland, has and continues to look for ways to strengthen educational opportunities and create fiscal efficiencies to benefit all of our students, pre-K to 12th grade. Areas of focus have included joint purchasing, professional development, technology, virtual learning, curricular alignment and continuums, outsourcing of payroll, food services and facilities use and oversight, to name a few.

The three towns are contiguous. Lincoln and Sudbury share a high school. Wayland and Sudbury share a Park and Recreation director, the Town Managers, School Superintendents and School Committees frequently collaborate.

The demographics of our towns are very similar. Primarily bedroom communities, semi-rural, with limited commercial development, the towns pose similar challenges and opportunities for the *Solarize* program: leafy canopies and wooded lots, but larger homes and many residences.

The median incomes are similar, and indicate that families might be willing to invest in solar panels. Residents of each of the three towns also routinely shop, worship, or work out across each other's town borders. *Solarize* tables set up at Whole Foods, Longfellow Health Club or Russell's Garden Center could reach each town's residents, for instance.

Organizationally, we could offer residents the option of attending a Solar 101 or 102 meeting in a nearby town if they are unable to attend the meeting in their own town. The proposed solar "office hours" at a Town Hall could alternate between the three towns. Solar home and business tours may be attended by residents from any town. Sign up goals could be framed as "friendly competitions" between the towns. And one website can be created for all three towns' use.

We feel the collaboration of these three closely linked towns will provide exceptional benefits for both potential *Solarize* participants and installers. Our Teams look forward to the opportunity to demonstrate that.

Community Project Plan and Organization

Community Solar Coach Statements

Wayland: Katrien Vander Straeten

I consider it my life's work to address climate change and fossil fuel depletion by building a resilient, sustainable local community and economy in my home town. So I founded Transition Wayland (www.transitionwayland.org/) in April 2011, and along with a team of volunteers made it into a household name in Wayland.

I have many community organizing and enabling skills. I was trained in two Transition Trainings, one of which I organized. I set up and maintain websites and Facebook pages, extensive email, volunteer and resource lists. I publish many press releases. I organize movie screenings, presentations by specialists, nature walks, potlucks, even a beekeepers group. I foster collaborations with the local press, government, and other organizations. I speak about Transition, climate change and resilience to audiences large and small, in churches, schools, town buildings and farms. Last year I was the MetroWest outreach coordinator for 350.org's Moving Planet. I am one of two coordinators of this year's Wayland Earth Day.

My husband and I also switched on our own 5 kW solar system in August 2011. We went through the entire process, from retrofitting our house to selling SRECS. We answer questions about the system all the time and were planning on opening up our house "solar tours". I love being a producer of clean, solar electricity.

I am eager and able to devote myself full-time to the *Solarize* project. I believe I can help make the program a success in Wayland, as the community already knows me, and my organization's message.

-- *Kaat Vander Straeten, Ph.D., also called "the Kaatalyst"*

Lincoln: Jennifer Morris

I have lived with my family in Lincoln since 1992. We were drawn here by the strong sense of environmental stewardship and community spirit, and soon became engaged in town affairs. I have served in volunteer positions with Lincoln Friends of METCO, Lincoln Scouts, LEAP (the afterschool program) and have spent two years on the Green Energy Technology Committee. I developed a serious interest in the energy industry during my graduate studies at Simmons School of Management (MBA '07) and developed a business plan centered around renewable energy and "vehicle-to-grid" opportunities. Since that time, I have continued to stay abreast of policy issues and market developments affecting the New England region, and often attend DOER and MassCEC-sponsored events, as well as the Restructuring Roundtable and related forums.

Along with a team of GET committee members and volunteers, I helped organize and execute a successful residential energy-efficiency campaign, known as “Get Real Lincoln” and was instrumental in designing outreach materials and events, including postcards, flyers, posters, a full-featured website (www.greeninglincoln.org) and two public forums (parts of which can be viewed at here: http://greeninglincoln.org/?page_id=45)

I am presently self-employed and working from home, so am able to maintain community connections and visibility, along with access to a strong network of other volunteers who share my passionate commitment to fostering widespread adoption renewable energy. I look forward to making *Solarize Massachusetts* the coolest thing going in Lincoln!

-- Jennifer Morris

Sudbury: Rami Alwan

Sudbury has been at the forefront of the Massachusetts DOER Green Communities movement.

As a founding member of the Sudbury Energy and Sustainability Green Ribbon Committee, I am dedicated to finding ways to decrease our town’s carbon footprint for three reasons. It makes financial sense for our town. It makes environmental sense for our planet. Most importantly it is a legacy of behavior that I hope to leave behind for my students and my children. As a Biology teacher at Lincoln Sudbury Regional High School and an adult member of the high school “Green Team”, I hope to energize students to move forward in a more focused manner to publicize the *Solarize Massachusetts* Program. We have a showcase solar project that had been on hold for economic obstacles that this opportunity would remove, and could thereby serve to spearhead our anticipated publicity campaign. I believe that through our collective enthusiasm we, as part of this program, can set an example now and for future generations. For these reasons I am fully committed to the implementation and success of this initiative.

-- Rami Alwan

Core Teams

Wayland

- *Kaat Vander Straeten* (Solar coach): Co-founder Transition Wayland (<http://www.transitionwayland.org/>), part of core group Wayland Schools Green Team (<http://www.waylandgreenteam.org/>), founder Wayland BEElieve beekeepers group
- *Daniel Bennett*, Building Commissioner/Zoning Enforcement Officer, Town of Wayland
- *Anne Harris*, Co-Chair, Wayland Energy Initiatives Advisory Committee, member of Transition Wayland, Low Carbon Diet group facilitator, former civil/structural engineer

Lincoln

The Green Energy Technology Committee is the primary driver for energy initiatives in Lincoln’s town government. The Committee includes seven committee members appointed by the Selectmen. Lincoln’s Selectmen appointed the Committee in 2005 to identify green energy technology opportunities for the Town’s facilities. Our charge expanded in 2009 to include

residential energy use. In addition, members of [Greening Lincoln](#), our local climate action team, work on specific projects to support our “GET REAL” residential initiatives.

- *John Snell*: Chair, Lincoln Green Energy Technology Committee; member Lincoln School Building Committee. Mr. Snell is a consultant with Peregrine Energy.
- *Jennifer Morris*: Serves as Lincoln Green Energy Technology Committee communications coordinator, and is Web Services Manager of Net Impact Boston. Ms. Morris founded LocalWatt Resources, a communications consultancy.
- *William B. Stason*: Serves on Lincoln Green Energy Technology Committee and Lincoln Community Preservation Committee. Dr. Stason, a physician, is also a past member of the Lincoln Board of Assessors and is active in Lincoln Boy Scout Troop 127.

Sudbury

- *Rami Alwan* - Solar Coach - Sudbury Energy and Sustainability Green Ribbon Committee
- *William Braun* - Chairman, Energy and Sustainability Green Ribbon Committee
- *Jennifer Dudgeon* - Member of Sudbury Energy and Sustainability Green Ribbon Committee
- *Jim Kelly* - Sudbury Building Inspector - Member of Sudbury Energy and Sustainability Green Ribbon Committee
- *Edward Lewis* - Member of Sudbury Energy and Sustainability Green Ribbon Committee
- *Joe Martino* - Member of Sudbury Energy and Sustainability Green Ribbon Committee
- *Michael Melnick* - Co-Chairman Sudbury Permanent Building Committee, Member of Sudbury Energy and Sustainability Green Ribbon Committee
- *Bob Morrison* - Member of Sustainable Sudbury and member of Sudbury Energy and Sustainability Green Ribbon Committee
- *Kurt Reiss* - Member of Sudbury Energy and Sustainability Green Ribbon Committee
- *Mark Sevier* - Member of Sudbury Energy and Sustainability Green Ribbon Committee

Installer Selection Team

We will create a team made up of specialists from all three towns, specifically for the selection of the installer. This is for several reasons: one, some advisers are better employed in this task, especially if they can't commit their time and energy for the duration of the entire program; secondly, separating this task may be a good way to avoid possible conflicts of interest.

Representing Wayland

- *John Moynihan*: Public Buildings Director
- *Bill Huss*: Energy Committee member and solar panel owner
- *Michael Staiti*, Principal, Keystone Development Corporation, EnergyStar builder, Solar Developer *
- *John Harper*, Founder & Principal at Birch Tree Capital, renewable energy financing

Representing Lincoln

- *Peter Watkinson*: Global Account Manager at Emerson Electric (for large scale solar inverters) and founding member at BABCNE Environment and Energy Committee
- *Michael Haines*: Town of Lincoln Facility Manager

Representing Sudbury:

- *Bob Morrison*: P.E.; Energy Engineer; October Engineering, LLC
- *Mark Sevier*: P.E.; Mechanical Engineer; Cadmus Group Inc.

Expert Advisors

A number of individuals and groups within our communities are prepared to advise on pertinent issues . These include:

- **Wayland** Energy Initiatives Advisory Committee
 - Anne Harris (Core Team member, see above)
 - Ellen Tohn, Tohn Environmental Strategies, LLC
 - Tom Sciacca, retired engineer
 - Harvey Michaels, Scientist and Lecturer, Environmental Policy and Planning, MIT
 - Bill Huss, former senior vice-president and COO, XENERGY; Lecturer, Babson College
- **Lincoln** Green Energy Technology Committee
 - John Snell, Peregrine Energy consultant
 - Roy Harvey, P.E., Infrastructure Standards Manager at Osran Sylvania
 - Ed Lang, retired Electrical Engineer
 - Al Schmertzler, retired Engineer
- **Sudbury** Energy and Sustainability Green Ribbon Committee
 - Bill Braun, Chairman, Sudbury Energy and Sustainability Green Ribbon Committee
 - Bob Morrison, P.E.; Energy Engineer; October Engineering, LLC
- Outside Advisors:
 - Phil Giudice, CEO Liquid Metal Battery Corporation; former Energy Undersecretary, Commonwealth of Massachusetts
 - Rob Pratt, Chairman & CEO at GreenerU, former Director at Massachusetts Renewable Energy Trust
 - Frank Gorke, Director, Business Development, Northeast, at CLEAResult; former Assistant Secretary for Energy at Executive Office of Energy and Environmental Affairs, Commonwealth of Massachusetts
 - Jen Gorke, Chief of Staff at Division of Health Care Finance and Policy; former Chief Operating Officer at Massachusetts Clean Energy Center
 - Wendy Levey, environmental lawyer, National Grid
 - Anthony Amato, Senior Energy & Climate Analyst at Eastern Research Group
 - Dr. Nathan Phillips of the the Boston University Sustainable Neighborhood Lab* (http://www.bu.edu/energy/sustainable_neighborhood/)

Collaborating Groups

The following groups are committed to working with the Team to do outreach (* letters of support are included in Appendix 1)

Wayland

- Transition Wayland *: enabler of local resilience in the face of climate change, fossil fuel depletion and economic uncertainty. Group has a committed core group, an extensive list of interested residents, high visibility in the community and well-established connections with other organizations as well as the local press.
- Green Team *: promoting environmental stewardship in Wayland Public Schools, Committee of the Wayland Public Schools, division of the Wayland PTO
- Wayland Children and Parents Association
- Wayland Council on Aging *
- Wayland Public Library
- Wayland Business Association
- Wayland Clergy Association
- Green Sanctuary, First Parish *
- Weston Wayland Interfaith Action Group (WWIAG)
- Peace Lutheran Church *
- Walden Forum *: will hold a forum on Harvesting Solar Energy” in April or May (cf. <http://waldenforum.org>)
- Sudbury Valley Trustees
- Pine Brook Association
- LEES Group - Let's Encourage Environmental Sustainability: community farm group
- Sustainable Wayland *
- Wayland e-newsletter Website and Forum *
- Russell's Garden Center *
- Maple Hill Architects*: principal, Doug Sacra, writes “Green Guy” article for Town Crier
- Middlesex Savings Bank

Lincoln

MassAudubon's Drumlin Farm Sanctuary is a key supporter, and very visible non-profit in our community. Their existing solar displays and meeting spaces will be invaluable to our program marketing effort.

http://www.massaudubon.org/Nature_Connection/Sanctuaries/Drumlin_Farm/solar.php

Mass Audubon and Drumlin Farm Wildlife Sanctuary, together, support this initiative in any proposal you are preparing. I would be happy to talk further about the display or other ways we can actively participate in the residential solar project. -- Christy Foote-Smith, Director, Drumlin Farm

In addition, numerous Lincoln organizations have expressed support for our outreach efforts:

- Lincoln Garden Club

- Lincoln Land Conservation Trust
- Conservation Commission
- Lincoln Council on Aging
- Friends of the Lincoln Library
- Lincoln Family Association
- Boy Scout Troop 127
- Walden Woods Foundation
- First Parish in Lincoln
- St. Anne's-in-the-Fields
- St. Julia's Roman Catholic Parish

Sudbury

- Sustainable Sudbury *
 - Sustainable Sudbury was founded in 1992. They have been a leader in promoting environmental awareness and advocating for sound environmental policies and behaviors. They regularly run recycling drives for plastic, paper and to keep hazardous materials out of landfills. Over the years they have garnered a number of awards for their array of innovative conservation efforts. We feel that having them couple their knowledge and resources to ours is invaluable to this project.
- Lincoln Sudbury Regional High School Green Team
 - This is a group of dedicated students, who coordinate our building wide recycling efforts, have begun a composting initiative, and who regularly promote earth awareness with the high school. Through their efforts we have eliminated thousands of pounds from the waste stream annually. We are counting on their youth and enthusiasm as we move forward.
- Sudbury Chamber of Commerce
- Sudbury Public Schools

Marketing & Outreach Plan

Event Venues

Venues with full audiovisual presentation support:

- Lincoln Sudbury Regional High School - Auditorium capacity - 750, Lecture Hall capacity - 130
- Sudbury - Ephraim Curtis Middle School - Auditorium capacity - 350
- Wayland - High School - Auditorium capacity - 600, Middle School - 550
- Wayland - Town Building - Large Hearing Room capacity - 200

Additional venues for smaller gatherings:

- Lincoln School Donaldson Auditorium, Hartwell Multi-purpose room
- Bemis Hall auditorium - capacity 200; A/V equipment available
- Lincoln Library - capacity 50; A/V equipment available
- Wayland Library Raytheon Room - capacity 50
- Russell's Garden Center Community Room, capacity 75-100 (Solar panels can be viewed from deck)

Maximizing Program Visibility and Accessibility

We aim to reach as many of the residents and businesses as possible by employing every channel available to us and distributing events over the allotted time period, scheduled at different times of day in various venues, so as to attract the maximum attendance. [See Event Timeline, Appendix 3].

Our plan is ambitious, but we are confident that we can make it work because we are pooling our resources and because each community in this partnership has a large pool of volunteers to work with.

We will make use of the marketing materials such as banners, yard signs and bumper stickers provided and use the *Solarize* logo on all correspondence so as to maximize visual recognition of the program.

Communication vehicles to be employed include:

Open line via email and telephone to community Solar Coaches.

Online Surveys:

Wayland and Lincoln have proactively surveyed community interest, in advance of submitting this proposal. Survey results are provided in Appendix 3.

- **Wayland** Survey: <http://www.surveymonkey.com/s/QYNKM9B> went live on 3/12.
- **Lincoln** Survey: <http://www.surveymonkey.com/s/M7TD9CM> went live on 3/14.
- More info and results: cf. "Local Interest" below

If our proposal is accepted by MassCEC, we expect to launch a second survey to gauge more specialized interest (e.g., about financing options) within a narrower population (e.g., those who provided email addresses).

Website: With the support of High School students from both Lincoln-Sudbury Regional and Wayland High School, we will set up a dedicated *Solarize* website to include:

- all relevant program information and links
- contact information for Solar Coaches and Municipal Representatives
- detailed description of local solar systems: process, cost, online production tracking
- regular updates on progress
- transparent decision making
- announcements of events: presentations, tours, booths, office hours
- information on town's permits
- links to articles in the press
- link to Surveys

Facebook/Twitter::

- A joint *Solarize* Facebook page will offer more interactive outreach and daily discussion
- Linking the website and Facebook page to a Twitter feed will provide quick news bursts to community subscribers

Snail-mailings:

- Postcard announcements will promote the online resources town-wide, in each town
- Inserts in each Town's Property Tax Bills, water bills, Park and Rec program brochures will provide program contact and online resource information.

Email lists: Announcements via many email lists of local partner organizations

- e-newsletters
- member lists of environmental and other community groups
- Voters networks
- Houses of worship
- Individual networks and neighborhood contacts

Articles in the local media:

- **Wayland:** Wayland Town Crier, Wayland Patch
- **Lincoln:** Lincoln Journal, Lincoln Review
- **Sudbury:** Sudbury Town Crier, Sudbury Patch
- Metrowest Daily

Door-knocking: face to face contact:

- Solicit High School students to promote door-to-door as a community service project.

- Recruit a neighborhood representative from as many neighborhoods as possible to promote the Solarize initiative in their neighborhood.

Solar office hours at Town Buildings

- one week in the evening
- the other week in the am
- rotating between Towns

Brochures: visible information booths with brochures

- Libraries
- Town Buildings
- Town Pools (Lincoln: Codman Pool; Sudbury: Haskel Pool; Wayland: Community Pool)
- Public School lobbies
- Lincoln Codman Farm Store
- Council on Aging foyers

Events

The *Solarize Massachusetts* Teams plan to organize *Solarize*-specific events and to be present at other community events so that the program has a constant presence in community life. These events will be regular and will alternate between evening and daytime, taking place within each of the three towns in many different settings (schools, churches, etc.), so that we reach a maximum of residents.

A draft timeline of our events plan is appended as [Appendix 3](#).

Events in or spanning all three towns:

Solar Presentations

- Solar 101: videorecorded and broadcast live and later on Waycam, Sudbury Cable, Lincoln public access and online, invite local media
- Solar 201: videorecorded and broadcast live and later on Waycam, Sudbury Cable, Lincoln public access and online, invite local media

Solar tours: These take place in homes, guided by the home owners, as well as in businesses, in all three towns. Different systems will have different configurations, owners will also discuss financing and our team will invite local media to cover tours and write it up on the *Solarize* website. Home owners with solar PV systems willing to open their homes or facilities for a SolarTour include:

- Kaat Vander Straeten and Satrajit Ghosh: Wayland, 5 kW roof-mounted system solar installed in August 2012.
- Bill Huss: Wayland, installed home solar: 3.15kW in June 2010: 4.51kW in May 2010; 2.46kW in June 2011
- Dave Watkins: Wayland, YouTube video tour; installed solar on building: 67 kW
- Doug Sacra: Wayland, ground-mounted residential system
- Russell's Garden Center, Route 20, Wayland: 25 kW solar on building installed 2011

- Drumlin Farm, Mass Audubon: Lincoln, existing 10kW solar array and educational displays
- Mark Doughty: Lincoln, net-zero home builder
- Fairbanks Senior Center, Sudbury - roof mounted PV and hot water system
- Mark Sevier: Sudbury, solar home

Walden Forum on “Harvesting Solar Energy”: April or May (cf. <http://waldenforum.org>)

These events are well-attended, attracting people from all three towns and beyond, and spark lively debate. They are broadcast on Public Access Television.

Booths and tables with information and at least one member of the Solar Teams

- Farmers Markets: alternating between Wayland (Wednesday afternoon) and Lincoln (Saturday mornings)
- School events: concerts, plays, sports, etc.
- Library Sales
- Transfer station: a significant part of the community life in our towns take place at our transfer stations. These are ideal places to man a booth, on Saturdays, alternating between the three towns
- Community potlucks: several of our organizations already meet monthly, usually over a potluck. Solarize can be present at these.
- At town offices on town property tax due dates: May 1, Aug.1
- Check local media for other event announcements weekly

Wayland-specific events

- Wayland Earth Day: Solarize booth, on April 29 to promote Solar 101 and collect email addresses
- Memorial Day Parade
- Whole Foods “Local Day”

Lincoln-specific events

- Greening Lincoln Earth Day workshop
- Grand re-opening of Donelan’s Supermarket at Lincoln Station (early June)
- July 4th Parade: float and information table

Sudbury-specific events

- Sudbury Town Meeting, May 7
- July 4th Parade

Volunteer Participation

Our towns are home to many volunteer groups.

In Wayland, the most active and relevant among these are [Transition Wayland](#) and the Wayland Green Team. These groups have email lists with around 200 email addresses each, and they have come out to help with School Gardens and Earth Day organization. Both groups have worked with students in the community hours program and plan to do so again for Solarize. As a member of the TimeTradeCircle Timebank, Transition Wayland can also tap into over 200 hours of volunteer hours.

Lincoln plans to leverage the momentum generated by a previous residential initiative, which focused on energy efficiency. This program, known as “[Get Real Lincoln](#)” succeeded in getting over 100 households in town to commit helping our town meet its Green Community goal, by lowering their household electricity consumption -20% by 2015. The Get Real participants also pledged to get home energy assessments through a single MassSave-qualified vendor (Next Step Living) and to act on recommendations for energy improvements. Through this effort, we were able to gather 255 local email contacts, who subscribed to our e-newsletter.

[Sustainable Sudbury](#) grew out of an Earth Day initiative begun in 1990, and now has over 300 members. It is a member of the Mass Climate Action Network, and regularly organizes events (such as plastic collection for recycling) and addresses energy and environmental issues within the town through its newsletter.

We also plan to enlist the support of the Lincoln Sudbury Regional High School Green Team, through the use of their community service hours, to help design the website, participate in a “Get the Word Out” campaign and to be part of fundraising efforts for model solar installations.

Joint Community/Installer marketing strategy

To work effectively with the chosen Installer, we believe the Solar Team should act as a facilitator, with the goal establishing a mutually beneficial relationship between homeowners and the Installer. To accomplish that, we must accurately and enthusiastically inform residents of the solar program opportunity, listen to their questions and concerns, and accurately represent the communities’ needs to the Installer. We intend to maintain open communication between Solar Coaches and the Installer at all times.

We expect to open the door for the selected Installer by including notices in town-wide mailings (e.g., water and property bills, etc.) We also propose also to welcome the Installer at a Program Kickoff, a celebratory occasion to complement the information-driven *Solar 201*. Solar Teams will work closely with the Installer when planning additional outreach events and disseminating program information.

We will publicize Installer visits through our local press, email lists, newsletters and word-of-mouth channels. The Installer’s identity and contact information will be featured clearly on our

website and social media activity. And we will work with the Installer to provide the space and technology needed to make effective presentations or demonstrations.

One lesson learned through Lincoln's experience with its MassSAVE energy efficiency service supplier is that establishing simple metrics and using a shared reporting format encourages teamwork and generates committed action. For instance: a weekly progress report tracking data such as:

- number of new contacts collected
- number of phone calls completed
- number of households assessed for solar compatibility
- new households committed to installations

This provides a "snapshot" of program effectiveness and a basis for deciding on where team attention needs to focus.

We intend to work with the Installer to adopt a shared progress reporting vehicle, based on mutually acceptable metrics. This will help us make appropriate adjustments to our marketing efforts as the program unfolds. We believe this is the best way to motivate our respective teams, and maximize the number of solar PV projects within our communities.

We want residents to perceive the Installer as a partner with the Solar Teams and an expert we can all rely upon. To build confidence among homeowners, we will welcome Installer representatives as fellow guides at Solar Home Tours, and as participants at any and all events or booths where *Solarize Massachusetts* is promoted.

Lessons learned from Solarize I Pilot Program

The *Solarize* teams from our three communities have read the description of the pilot program, and have modeled marketing and outreach efforts to address the lessons learned.

First: People are more ready to adopt solar if friends and neighbors have done so; hence the inclusion of solar home tours and reliance on a wide variety of community groups, businesses, schools and faith organizations for outreach.

Second: A short time frame creates a compelling reason to act, although we recommend that, as stated by Harvard and Winchester, the sign-up time frame be extended a few weeks beyond Aug. 31 as many residents will be gone for summer.

Third: Steeper price drops between tiers appear to be a stronger motivator than shallower ones; the installer selection teams will keep that in mind when reviewing bids.

Fourth: Community volunteers participating in the pilot felt it would be desirable to engage residents with non-feasible sites. While we would like to consider a community solar farm in the future, in the short term, we propose engaging residents with efficiency measures. We propose to adapt existing materials to send to residents who have sites that are unsuitable for solar, encouraging them to get a home energy assessment, with information on rebates, etc. The *Solarize* team could plan a future efficiency follow up initiative after the *Solarize* effort is completed.

Last, we do feel it is important that the program be represented as affordable to homeowners of all types. MassCEC requires that all installation bidders offer a direct purchase option, leasing/power purchase agreement or other financing option. This is essential to ensure that the option of installing solar panels can be considered by people of varying means within our communities.

Permitting

Our towns’ permitting processes operate in compliance Mass General Law 40, Sec. The defining regulation for Solar PV installations in zoning bylaws is MA General Law Chapter 40A, section 3:

“No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.”

Wayland

Permitting Component	Requirements	Review Timeline	Cost	Associated Links
Building Permit	Proper documentation including structural analysis, plus plot plan for ground mounted solar	10-14 days	\$12/\$1000 residential \$15/\$1000 new residential and commercial	http://www.wayland.ma.us/Pages/WaylandMA_Building/process
Historic District Commission	Certificate of Appropriateness, Non-Applicability or Hardship for buildings in Historic District	2-60 days; typically within 30	N/A	http://www.wayland.ma.us/Pages/WaylandMA_BCommission/HistoricDistrict/WHDCRules
Electrical Permit	Proper documentation	2-3 days	\$3/\$100	www.wayland.ma.us
Conservation Commission	Notice of Intent or Determination of Applicability for ground mounted solar only	21-60 days	http://www.wayland.ma.us/Pages/WaylandMA_Conservation/fees.pdf	www.wayland.ma.us

Solarize team members have spoken with the Building Commissioner, Historic District Commission Chair, Conservation Commissioner and Town Planner to appraise them of the *Solarize* initiative and to begin thinking about streamlining processes.

Building Department: Standard construction permits are required with the exception of an additional requirement of engineering calculations, plans and stamp indicating additional structural load on roof, or plot plan if panels are not located on roof. Building and electrical permit fees are currently based on system cost; flat fees could be considered, and will be discussed with the Board of Selection.

Currently, the Building Department does not track which homes have solar panels; they will consider adding that system variable for future ease of tracking.

Historic District Commission: Wayland has two historic districts. Business- or home-owners considering solar panels within these districts are required to file for a Certificate from the Commission. Panels in locations that would not be subject to public view would be issued a Certificate of Non-Applicability; this could be done in a matter of days. For panels that were in public view, the Commission Chair suggested they could review the concept of solar panels in advance and then could simply consider location for succeeding applications. She also mentioned that an argument could be made to issue a Certificate of Hardship, thus not allowing the historic nature of the property to prevent an owner from benefitting from solar panels. The Solarize team will come before the Commission at their April 19 meeting to discuss further.

Conservation Commission: Conservation review will be required for ground mounted panels for adherence to Ch. 194, Wetlands Protection for those locations within designated range of wetlands. The Conservation Commissioner suggests we consider also for ground mounted panels how stormwater drainage might be affected. The issue could be looked at broadly, but if mitigation is required it would be individual.

Planning Board: The Planning Board has jurisdiction over solar PV installations installed on properties that require site plan review for changes to the property or the structures. This would include commercial, but not single-family residential roof-mounted solar. If the use (ground mounted only) were to be classified as a Utility Facility (Use #38), site plan review would be required. This point will require more consideration.

Lincoln

Permitting Component	Requirements	Review Timeline	Cost	Associated Links
Building Permit	Solar PV installations require a building permit		\$10 per \$1,000; \$50 minimum	http://www.lincolntown.org/depts/build.htm
Historical Commission	Site plan review for proposed installations in the Historic District or on historic properties		N/A	http://www.lincolntown.org/depts/historic.htm
Wiring Permit	Electrician needs to provide a Certificate of Insurance	1-2 days	\$30 minimum fee	
Roofing Permit		1 day	\$20	
Conservation Commission	Review ground-mounted solar PV installations on property with conservation restrictions or easements.		N/A	http://www.lincolntown.org/depts/conserves.htm

Planning Board	Site plan review for ground-mounted PV installs		N/A	http://www.lincolntown.org/depts/planning.htm
----------------	---	--	-----	---

As part of our proposal development process, Lincoln GETC members have talked to the Building Department, met with the Historic Commission and Planning Board, and scheduled a meeting with the Conservation Commission to review the permitting process for residential and small commercial Solar PV installations in Lincoln.

Reasonable regulation in Lincoln includes standard construction permits, Historic Commission review for proposed installations in the Historic District or on historic properties, and site plan review for proposed installations in cluster developments and large homes.

Building Department - Solar PV installations require a building permit - \$10 per 1,000 and an electric permit (typically based on estimated cost of job at 4%).

Historic Commission - The Historic Commission requested the opportunity to review proposed solar PV installations in Lincoln’s historic district or on historic properties. The Commission assigned one of its members who is an architect with Solar PV project experience to work with GETC to help identify interested Solar PV customers and help coordinate and facilitate the Historic Commission’s review process.

Planning Board – The Planning Board has jurisdiction over solar PV installations installed on properties that require site plan review for changes to the property or the structures. This includes cluster developments, large homes, and recently constructed homes. One area that will require further research is the question when does a solar PV installation become a commercial installation and how this would be handled under the Town’s zoning bylaws.

For roof-mount Solar PV installations, Board members identified glare from Solar PV equipment as something that they would like to consider if it had a negative impact on neighbors. The Board did not think this was a major concern. For ground-mount solar PV installations the Board confirmed that the equipment qualifies as a structure and will need to respect zoning bylaw requirements for structures and receive site plan review. The Planning Board assigned Chris Reilly, the Town’s Planner as the primary contact to work with GETC on the Solarize Massachusetts program. GETC will provide the address for each potential solar PV installation to Chris. Chris will review any potential permitting or Board/ Commission review requirements.

The Planning Board anticipates quick review and approval for all roof-mounted Solar PV installations as a minor change to the site plan. The Planning Board anticipates a more detailed review of ground-mounted Solar PV installations to confirm that they comply with the Town’s zoning bylaws.

Conservation Commission – The Conservation Commission has limited jurisdiction over residential and small commercial solar PV installations. The one jurisdiction-related detail we will discuss is ground-mounted solar PV installations on property with conservation restrictions or easements. We will also discuss “good neighbor” considerations for solar PV installations that would be within the view shed of existing conservation land. Our primary focus with the

Conservation Commission will be ongoing support for the program because the environmental benefits of renewable energy align closely with the Conservation Commission’s mission and goals.

Sudbury

Permitting Component	Requirements	Review Timeline	Cost	Associated Links
Building Permit	Proper Documentation	1-10 days	\$10/\$1000	http://sudbury.ma.us/departments/DPW/
Historical Commission	Certificate of Historical Appropriateness	10 - 30 days	\$20	
Electrical Permit	Proper Documentation	1-10 days	\$3/\$100	
Conservation Commission	Should it be necessary: Notice of Intent or Determination of Applicability	1 - 30 days	\$125	

Building Department - Solar PV installations require a building permit - \$10 per 1,000 and an electric permit - \$3 per \$100

Historic Commission - The Historic Commission would need to issue a Certificate of Historical Appropriateness.

Conservation Commission - Conservation review will be required only if panels are ground mounted and within wetlands restrictions ranges.

Demonstrated Local Interest

Wayland

Wayland currently has roughly four businesses, one condominium complex and nine residences with solar panels. Anecdotally, Energy Committee members find residents are eager to see solar initiatives in Wayland, as opposed to say, efficiency measures.

Additionally, residents were surveyed as to their potential interest in solar panels through the Solarize program. [See [Appendix 4](#) for full results]

Survey One: <http://www.surveymonkey.com/s/QYNKM9B>

- went live on Mon, March 12, 9 am, when emails and press releases were sent to many channels
- Results: 372 responses to date, 85% interested in more information; 61% willing to help promote the program.

Lincoln

When we surveyed residents two years ago around energy efficiency, 25 homeowners indicated interest in renewable energy retrofits.

Current Survey: <http://www.surveymonkey.com/s/M7TD9CM>

- Went live Wed. March 14. Email notification to 254 residents and five organizations
- Results: 59 responses to date: 98% interested in more information; 74% willing to help promote the program.

Sudbury

There have been 7 solar building permits requested within the last 6 weeks, indicating that there is a high level of interest in Sudbury. We anticipate with publicity and outreach this will grow.