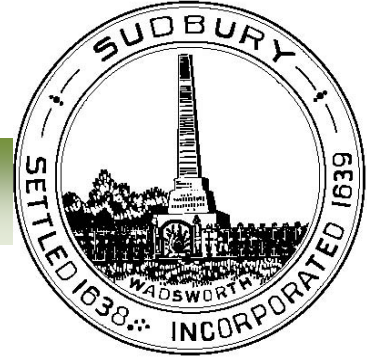




Town of Sudbury
Massachusetts



Green Communities Action Plan

April 2010

REVIEW DRAFT

Prepared by:

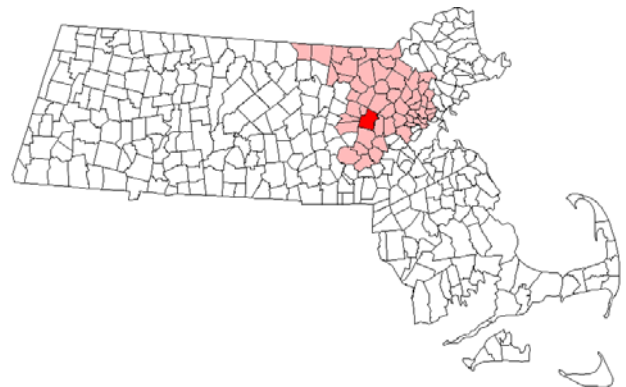


Introduction

The development of this Green Communities Action Plan provides the Town of Sudbury with a set of actions to meet each of the five required criteria to achieve the Green Community designation. The Action Plan provides a comprehensive summary of all the actions that the Town has already taken to date and identifies the critical remaining steps to meet all five criteria and successfully become a Green Community. With the Green Community designation, Sudbury will become formally recognized as a sustainability leader in the Commonwealth, gain financial and environmental benefits through municipal energy savings and reduction of greenhouse gas emissions, and potentially attract new economic development opportunities within a rapidly expanding green economy. Lastly, as an official Green Community, the Town of Sudbury will qualify to apply for up to \$1 million in Green Communities grants for studying, designing, constructing or implementing energy efficiency and renewable or alternative energy projects including but not limited to:

- Energy conservation measures and projects
- Procurement of energy management services
- Installation of energy management services
- Adoption of demand side reduction initiatives
- Adoption of energy efficiency policies.
- Financing the siting and construction of renewable or alternative energy projects on municipally-owned land

Incorporated in 1639 with a population of 476, Sudbury is one of the oldest towns in New England and has one of the oldest and longest running town meeting forms of government. A major battle of the King Philip War was fought in Sudbury in 1676, the Sudbury militia helped fire the “shot heard round the world,” and Longfellow wrote his tales of the town’s historic Wayside Inn. Primarily agricultural until after World War II and the ascendancy of the automobile, Sudbury is now a suburb of Boston, and largely a bedroom community. The colonial flavor of the town center and winding roads bordered by stone walls built by the farmers of yesteryear impart an historic, semi-rural ambience the town cherishes.





Town of Sudbury
Green Communities Action Plan

Sudbury is a predominantly low-density residential community, with vestiges of farming, a small segment of light industry, and significant tracts of preserved open space. Sudbury is located approximately 25 miles west of Boston in the heart of "Metro West" in Middlesex County. The town is bordered by Concord and Lincoln to the north, Marlborough, Maynard and Hudson to the west, Wayland to the west, and Framingham to the south. The major thoroughfares through the town are state routes 20 and 117, both running in an east/west direction.

Town of Sudbury Facts

Population (2000 US Census)	17,977
Date Incorporated as a Town	1639
County	Middlesex
Size of Land Area	25 square miles
Regional Planning Commission	Metropolitan Area Planning Council
Number of Municipal Buildings	22

Sudbury adopted the Sustainable Sudbury Master Plan in 2001. Partly in response to the accelerated conversion of vacant land to residential development in Sudbury during the 1990s, the Planning Board and the Board of Selectmen initiated the preparation of the Master Plan in order to address residential growth and its effects on the Town. The Plan addresses land use, economic development, natural resources, open space, historic resources, housing, transportation and community services, and facilities. In addition to the Master Plan, Sudbury has also prepared a series of reports on specific planning areas including the 2009-2013 Open Space and Recreation Plan, which shares many similar goals and objectives with the 2001 Master Plan, the 2002 Land Use Priorities Committee Report, the 2004 Athletic Field Master Plan, and the 2007 Heritage Landscape Report.

In the summer of 2009, the Town of Sudbury applied for Green Communities Planning Assistance to the Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs (EEA) Department of Energy Resources (DOER). Sudbury's application included a letter of commitment from the Board of Selectmen to meet all five criteria within one year of the technical assistance award. In May 2009, Sudbury established an Energy and Sustainability Green Ribbon Committee to "provide a mechanism to assist the Board of Selectmen and Town Manager in developing


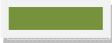
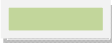


programs and projects to foster energy conservation, energy efficiency, renewable energy generation and sustainability planning." For more information about Sudbury's Energy and Sustainability Green Ribbon Committee, see:

http://www.sudbury.ma.us/committees/committee_documents.asp?dept=Energy



Town of Sudbury
Green Communities Action Plan

The Green Communities Technical Assistance application established and provided evidence that the Town met some of the requirements of the Green Communities Criteria (meeting one or more is required for eligibility). A summary outline of the application is provided below:

Status of the Five Criteria At A Glance	
As-of-Right Siting/Zoning	 Complies
Expedited Permitting Process	 Complies
Energy Baseline and Reduction Plan	 Needed
Fuel-Efficient Vehicles	 Needed
Efficient New Construction/Stretch Energy Code	 Completed

- **As-of-Right Siting/Zoning.** Sudbury’s zoning bylaw does not preclude renewable energy (RE) or alternative energy (AE) research and development (R&D) in its Business, Limited Industrial or Industrial Park zoning districts. Additionally, RE/AE manufacturing is not precluded in Sudbury’s Industrial, Limited Industrial and Industrial Park zoning districts.
- **Expedited Permitting Process.** Sudbury does not have Chapter 43D Expedited Permitting in place for development sites in town. However, a Site Plan Review process, which is acted upon by the Board of Selectmen, requires the review and action of a review of a potential RE/AE R& or manufacturing facility within 120 days.
- **Establish an energy baseline for all building, vehicles and streetlights and commits to reducing baseline by 20 percent over five years.** Sudbury initiated an energy baseline for its municipal buildings, street lights and fuel usage. The Town is developing an Energy Reduction Plan to document its commitment to reduce municipal energy use by 20 percent within five years of the baseline year.
- **Procure Fuel Efficient Vehicles.** Sudbury has documented its municipal vehicle fleet but has not adopted a fuel efficient vehicle policy.
- **Require all new construction to minimize life-cycle cost of the facility by utilizing energy efficiency, water conservation and**

other renewable or alternative energy technologies. At the 2009 Annual Town Meeting, Sudbury adopted 780 CMR 120. AA “Stretch Energy Code” administered by the Board of Building Regulations and Standards (BBRS).

1. Summary of Initial Site Visit

On November 11, 2009, Vanasse Hangen Brustlin (VHB), the consultant providing Sudbury with technical assistance in support of its Green Communities Action Plan, met with members of Sudbury’s Energy and Sustainability Green Ribbon Committee and town staff, including James Kelly, Building Inspector and Jody Kablack, the Planning and Community Development Director. Joanne Bisetta, the Northeast Regional Coordinator for Green Communities, also attended the meeting. Felipe Schwarz of VHB first provided an overview of the Green Communities Planning Assistance program and the goals of the technical assistance that will be provided.



Town of Sudbury
Green Communities Action Plan

The consultant team reviewed Sudbury's application by criteria. Mr. Kelly and Ms. Kablack provided additional clarification on the Town's progress on each of the criteria. The group also brainstormed on how the Town might further the Town's progress toward meeting each criteria and identified possible gaps. After a thorough review of Sudbury's application, the group discussed possible presentation or workshop topics that would be helpful as part of the technical assistance program. The consensus was that a technical presentation about the energy reduction and baseline criteria would be helpful in addition to a presentation of a draft action plan to the Energy and Sustainability Green Ribbon Committee.

Appendix A provides detailed meeting notes and a sign-in sheet of the initial site visit. VHB's team also includes a subconsultant, Demand Management Institute (DMI) who assisted on the energy baseline and reduction task.

1

As-of-Right Siting for Renewable/ Alternative Energy Facilities

Green Communities Criteria #1

Provide for the as-of-right siting of renewable or alternative energy generating facilities, renewable or alternative energy research and development (R&D) facilities, or renewable or alternative energy manufacturing facilities in designated locations.

1. Background

A municipality must provide for as-of-right siting of renewable energy or alternative energy (RE/AE) generating facilities, RE/AE research and development (R&D) facilities, or RE/AE manufacturing facilities in designated locations. Green Communities Program guidance outlines the definitions of RE/AE as well as the requirements for R&D and manufacturing facilities. Additionally, the Green Communities Program has identified specific types of RE/AE generation facilities that are applicable to this criterion. They include:

- wind turbines (minimum of 600 kW in size);
- single ground-mounted system of solar photovoltaic (minimum 250 MW); or
- biomass combined heat and power generation in a stand-alone building (minimum of 5 MW).

As-of-right siting refers to the allowance of a particular use, such as those described above, by right within the zoning bylaws/ordinances. In short, the bylaws/ordinances do not unreasonably regulate such development nor do they require a Special Permit. As described in the criteria, the as-of-right siting is only required in the location(s) designated by the community for the use(s) selected. In some cases, the placement of these uses may already be allowed by right in the current zoning bylaws/ordinances as a permitted use for specific locations identified by the community, such as an Industrial District. In other cases, the zoning bylaws/ordinances may need to be



Town of Sudbury Green Communities Action Plan

amended to allow as-of-right siting for the particular facility(ies) in the location(s) designated by the community. This may be accomplished in different ways, such as a change to the existing use table or the creation of a new zoning overlay district. Any zoning amendment would require the applicable local legislative approval method, as required by the Commonwealth's Zoning Act (M.G.L. Chapter 40A). If already allowed or once enacted, the as-of-right siting will allow an individual, business, corporation or governmental entity to establish the RE/AE facility identified in a specified location selected by the community, by right and without unreasonable regulation or special permit. Other permits may continue to be required for construction (such as conservation commission permits, air quality permits, building permits, fire code standards) or doing business (such as state or local licenses).

2. Progress to date

Sudbury currently meets this criterion because Sudbury's zoning bylaw does not preclude the siting of RE/AE R&D and/or manufacturing uses.

Research and Development Facilities

Sudbury allows as-of-right R&D facilities in its Business District (B), Limited Industrial District (LID) and Industrial Park (IP) zoning districts. Appendix B contains the Table of Principal Uses from the Zoning Bylaw and a series of sites zoned B, LID, IP and ID.¹

Manufacturing Facilities

Sudbury allows as-of-right manufacturing facilities in its Industrial District (ID), Limited Industrial District (LID) and Industrial Park (IP) zoning districts (see Appendix B and the Table of Principal Uses).²

While the Town of Sudbury does not currently provide as-of-right siting of RE/AE generation facilities, there are a number of RE/AE generation projects in the planning stages largely driven by the Town's efforts to promote RE/AE generation. These efforts are described further below.

Solar PV

Recently, the Town was awarded an Energy Efficiency and Conservation Block Grant in the amount of \$141,864 from the DOER for the solar photovoltaic (PV) project at the Fairbanks Community Center. The Town is also considering a solar PV project on the landfill site along Route 20 and other renewable energy initiatives discussed in section 3 of this Action Plan. **[TO BE DESCRIBED MORE]**

Wind

Sudbury has determined, based on the Massachusetts Technology Collaborative (MTC) wind resources map, that there are no locations in the Town that meet the 14 and above miles per hour wind speeds.³ Given the lack of viable wind resources, the Town has decided to focus its efforts on other forms of RE/AE generation.



Town of Sudbury *Green Communities Action Plan*

3. Method for Meeting Criteria

Type of as-of-right zoning

As described in the previous section, Sudbury currently complies with the criterion to provide as-of-right siting for the development of RE/AE R&D and/or manufacturing facilities.

Documentation

To comply with this criteria, Sudbury will need to obtain a letter from Town Council confirming that the Town of Sudbury's zoning districts, described earlier, allow for R&D and manufacturing of RE/AE activities. In addition, the letter needs to provide yield calculations or discussion regarding available or underutilized sites within those zoning districts. The letter should demonstrate that there is land available for the construction of a facility or facilities of 50,000 square feet or larger.

4. Steps Completed During Planning Assistance

The following steps were completed during the Planning Assistance:

- VHB reviewed the Sudbury Zoning Bylaw and map.
- VHB confirmed that a letter from Town Council is required.
- VHB provided sample letter from Town Council needed to confirm compliance.
- VHB reviewed current zoning for siting as-of-right RE/AE generation.



Town of Sudbury
Green Communities Action Plan

5. Action Items & Schedule

In order to apply to be designated a Green Community, the Town must complete the following tasks to meet this criteria within 12 month of the submittal of this Action Plan.

Action Item	Person Responsible	Completion Date
Submit the required documentation for Green Communities Designation Application including the following materials:	Energy and Sustainability Green Ribbon Committee	Within 1 month
1. Letter from municipal counsel certifying that the existing zoning complies with the RE/AE Facilities criteria	Planning & Community Development Director/Building Inspector	Within 1 month
2. The applicable section of zoning bylaw/ordinance	Planning & Community Development Director/Building Inspector	✓
3. Copy of zoning map that shows area zoned	Planning & Community Development Director/Building Inspector	✓
4. Important zoning definitions	Planning & Community Development Director/Building Inspector	✓
5. The relevant section of the use table and any key that will help DOER interpret the use table	Planning & Community Development Director/Building Inspector	✓
6. Any related local regulations applicable to facilities sited under the bylaw/ordinance—such as site plan review regulations—so that DOER can confirm that the related local regulations are non-discretionary;	Planning & Community Development Director/Building Inspector	Within 1 month
7. Yield calculations must be either included in the text of the letter or attached.	Planning & Community Development Director/Building Inspector	Within 1 month

✓ Provided in Appendix B

2

Expedited Permitting

Green Communities Criteria #2

Adopt an expedited application and permitting process under which these energy facilities may be sited within the municipality and which shall not exceed 1 year from the date of initial application to the date of final approval.

1. Background

To qualify as a Green Community, a municipality must adopt an expedited permitting process for RE/AE facilities sites identified in Criteria #1. The expedited timeframe for permitting shall not exceed one year from the date of initial application to the date of final approval. By adopting an expedited permitting process, the municipality is committing to making local permitting decisions within one year. The one year deadline will be established with an effective enforcement mechanism which is the inclusion of constructive approval provisions within local bylaws/ordinances or regulations. An expedited permitting process is accomplished by providing a transparent and efficient process for municipal permitting by various boards, including but not limited to, the Planning Board, Conservation Commission, Historic Commission, Zoning Board of Appeals, Fire Chief, and Board of Health. The result is a streamlined procedure that is efficient for municipal staff and boards to implement, and that will provide a predictable schedule for decision making for the applicants.

2. Progress to Date

In order for an RE/AE facility, discussed in Criteria #1, to be permitted in Sudbury, one of the major project review/permit process required is Site Plan Review (Section 6300 of the Zoning Bylaw, provided in Appendix C). Site Plan Review in Sudbury requires the review and approval by the Board of Selectmen. The Board must review and act upon a Site Plan Review application within 120 days, which clearly meets the requirements of Criteria #2. Additionally, the Town has other local permitting procedures in place such as the Wetlands Administration Bylaw (ie, local wetland



Town of Sudbury *Green Communities Action Plan*

bylaw) and review under the Water Resource Protection Overlay District. Depending on the site selected and impacts associated with a potential proposed RE/AE facility, those permitting procedures may be required.

Based on discussions with the Town, previous permitting and review activities within the Town have rarely extended beyond 12 months. It is the Town's intent to review and act upon proposed RE/AE facilities in an expedited manner that meets the goals of the Green Communities Program.

3. Method for Meeting Criteria

Type of Expedited Permitting

The Town does not have Chapter 43D Expedited Permitting in place at the moment and will continue to rely upon its established permitting procedures to meet the one-year requirement pursuant to the Green Communities Program.

Documentation

The Town of Sudbury is required to provide DOER with a letter from Town Counsel affirming that nothing within the municipality's rules and regulations precludes issuance of a permitting decision within one year along with the language addressing approval procedures and associated timing from any applicable bylaws or regulations. Due to the anticipated permitting/review procedures described previously, a map of the sites associated with expedited permitting is not applicable and not required.

Once a community is designated a Green Community, DOER will enact reporting requirements which will include reporting on all permitting actions associated with proposed RE/AE projects within the past year within as-of-right zoned districts. If there is evidence that the Town has not adhered to the one year permitting requirement, they will be at serious risk of losing their Green Communities designation.

4. Steps completed during Assistance

- VHB review the Town's permitting process including Site Plan Review and other regulations within the Town's regulations.



5. Action Items & Schedule

Action Item	Person Responsible	Completion Date
Submit the required documentation for Green Communities Designation Application including the following materials:	Energy and Sustainability Green Ribbon Committee	Within 1 month
1. Letter from Town Counsel affirming that nothing within the municipality's rules and regulations precludes issuance of a permitting decision within one year along with the language addressing approval procedures and associated timing from any applicable bylaws or regulations	Planning & Community Development Director	Within 1 month
2. A copy of the applicable map(s) showing that the areas where the expedited permitting applies coincides with the as-of-right zoned areas for Criteria 1	N/A	N/A

3

Energy Use Baseline Inventory and Reduction Plan

Criteria #3

Establish an energy use baseline inventory for municipal buildings, vehicles, street and traffic lighting, and put in place a comprehensive program designed to reduce this baseline by 20 percent within 5 years of initial participation in the program.

1. Background

To fulfill Criteria 3, a municipality must establish an energy use baseline inventory for municipal buildings, vehicles, street and traffic lighting, and put in place an Energy Reduction Plan designed to reduce this baseline by 20 percent within five years of initial participation in the program. The energy use baseline inventory should be applied in the aggregate across buildings, streetlights, traffic lights and vehicles on a million British Thermal Units (MBTU) basis. There are a number of acceptable tools for performing the inventory including:

- **MassEnergyInsight:** In 2010, the DOER developed a new energy information reporting tool created MassEnergyInsight, a robust, easy-to-use, energy information system with customized electricity, natural gas and oil usage details for cities and towns across Massachusetts. This web-based tool is provided at no cost to the municipality and offers a wealth of information that provides the foundation for critical decision making,
- **Energy Star Portfolio Manager:** This is a free energy and water consumption tracking software available on the Energy Star website. This program allows an entity to track and assess energy and water consumption within individual buildings (generally consisting of at least 5,000 square feet) as well as across numerous buildings. This program does not assess the energy consumption of vehicles, street or traffic lighting.
- **ICLEI Software:** The ICLEI software, Clean Air and Climate Protection (CACP) Software, is a one-stop emissions management tool that calculates and tracks emissions and reductions of greenhouse gases and criteria air pollutants. This tool



Town of Sudbury *Green Communities Action Plan*

is available, free of charge, to members of ICLEI and has the capacity to assess buildings and facilities, vehicle fleets, waste, wastewater treatment, employee commute, street and traffic signals, and port and airport facilities.

- Other tools proposed by the community and deemed acceptable by DOER

Once the energy use baseline inventory has been established, the community must develop an Energy Reduction Plan to decrease energy consumption by 20 percent consisting of a number of key components which would enable a municipality to establish energy reduction goals and develop a structure to meet those goals over a five year time frame.

2. Quantification of Energy Use

This subsection includes descriptions of municipal assets, utility accounts, current energy purchasing agreements, methods of tracking energy use, how results are to be presented, and those persons who will be responsible for overseeing the energy consumption review and reporting process. Reductions in energy use will be calculated relative to a baseline year. It is important that the same methodology and data sources are used to quantify energy consumption for the baseline analysis and future analyses to ensure a fair comparison of energy performance.

Town Assets and Management

The Town of Sudbury is structured such that different departments manage their facilities independently based upon their annual budgets. Capital expenditures for upgrades to municipal property must be approved by through the Town's capital budget planning procedures which typically includes review by the Board of Selectmen and Finance Committee and approval at Town Meeting. The Town has its own elementary schools and middle school and shares a high school with the Town of Lincoln.

The listed municipal properties presented below are assets the Town directly controls, and they are divided based upon the best contact to discuss management and energy matters.

Sudbury Schools

Contact: Joe Kupczewski, Schools Facility Director, (978) 443-058



Town of Sudbury *Green Communities Action Plan*

- Curtis Middle School
- Hayes Elementary School
- Loring Elementary School
- Nixon Elementary School
- Noyes Elementary School
- Vehicles

Sudbury Town Buildings Department

Contact: Arthur Richard, Supervisor of Town Buildings, (978) 443-2209

- Town Hall
- Flynn Building
- Police Station
- DPW Town Offices
- Fairbanks Community Center (excludes pool)
- Hosmer House
- Carding Mill House
- Loring Parsonage (tenant pays utilities)
- Haynes Meadow House (tenant pays utilities)
- Frost Farm House (tenant pays utilities)
- Parking Lot Lights, Signal
- Vehicles

Sudbury Department of Public Works

Contact: William Place, Director, (978) 443-2209

- DPW Garage
- Parks and Recreation Facilities
- Street Lights
- Traffic Signals
- Vehicles

Sudbury Police Department

Contact: Richard Glavin, Interim Chief of Police, (978) 443-1042

- Vehicles

Sudbury Fire Department

Contact: Ken MacLean, Fire Chief, (978) 443-2239



Town of Sudbury *Green Communities Action Plan*

- Hudson Road Headquarters
- Boston Post Road Station
- North Road Station
- Vehicles

Atkinson Pool:

Contact: Tim Goulding, Aquatics Supervisor, (978) 639-3261

Goodnow Library

Contact: Bill Talentino, Library Director (978) 443-1035

Water service is provided by the Sudbury Water District, an entity that is entirely separate from the municipal government. Energy use associated with water supply will not be included in the municipal energy budget.

Sudbury does not have a municipal wastewater treatment system, and all wastewater is handled using septic systems. The Town previously shared a septage treatment station with the Town of Wayland, but this plant has been decommissioned. Septage is now trucked out of town by private service contractors to be treated at regional treatment plants.

All 556 street lights in Sudbury are owned by the Town. Traffic signals located on state highways are owned and operated by the Massachusetts Department of Transportation.

Energy Providers and Sources of Energy Data

Electricity for the entire town is provided by NSTAR Electric. The Town holds electrical generation purchasing contracts with Glacial Energy Group for all accounts. A summary of NSTAR account numbers has been prepared by the Town and is presented in Appendix D of this document.

Natural gas is provided by National Grid Gas, and a summary of these accounts is included in Appendix D.

Heating oil is only used in several town-owned and operated facilities. Oil is purchased through a single contract with Global Montello.

Propane is not used by any town-owned and operated facilities.

Diesel and gasoline for vehicles and equipment is purchased through the state bid list from Global Petroleum (gasoline). The majority of fueling for town vehicles occurs at the highway barn. Fuel consumption and mileage is tracked for each



Town of Sudbury *Green Communities Action Plan*

vehicle using an electronic key system. On occasion, the DPW runs out of fuel and municipal vehicles must get gas and diesel from a local station.

Calculation Methodologies

Prior to involvement in the Green Communities process, Sudbury had been compiling energy use data using an Excel spreadsheet for all of its buildings going back to at least fiscal year 2005. The Town had not used any baseline tools such as the Energy Star Portfolio Manager.

Going forward, the Town hopes to use MassEnergyInsight, the energy information reporting system released by DOER for use by all municipalities free of charge. MassEnergyInsight allows for instant download of electricity and natural gas consumption information from large utilities. Monthly consumption of gasoline, diesel, heating oil, and propane will need to be entered manually by Town staff.

Data that is manually entered into MassEnergyInsight may need to be manipulated if billing cycles do not coincide with the end of each month. For example, if a billing cycle starts on June 12, 2009 and ends on July 15, 2009, the energy use during July will be calculated using the following expression:

$$\text{July 2009 Energy Use} = \text{Energy Use for Billing Period} * 15 \text{ Days in July} \div 33 \text{ Days in Billing Period}$$

For purposes of normalizing heating fuel consumption relative to variations in weather, natural gas and heating oil consumption values should be divided by the number of heating degree days (HDD). Modified heating fuel consumption value for the year can then be calculated by multiplying the units/HDD value by the baseline year HDD value. Normalization of electricity data for buildings with electric heat is not possible without sub-metering data for the facility heating equipment.

The overall energy consumption of all municipal and school buildings, fleets, and other holdings will be combined into a single value that will represent the energy consumption of the Town for one year.

Energy Use Baseline

The baseline year can be 2007, 2008, or 2009, and the Town can choose which data set to utilize. Furthermore, the Town can choose whether to report energy consumption based on the calendar year or fiscal year. The deadline for achieving a 20 percent reduction in energy use is five years after the end of the baseline year.

Sudbury will calculate savings for each fiscal year relative to the consumption data for fiscal year 2008 (the period July 1, 2007 through June



Town of Sudbury *Green Communities Action Plan*

30, 2008). Thus, the Town will aim to achieve a 20 percent reduction in energy use by June 30, 2013 to maintain their Green Communities status.

Going forward, the baseline energy consumption will not be adjusted for any of the following reasons:

- The construction, demolition, or transfer of ownership of town buildings¹
- The acquisition or loss of town vehicles
- The expansion of the wastewater collection system or the water supply system to service new customers

Exempt energy end uses include the following:

- Commercial space and vehicles that are leased by the town
- Street light fixtures and signals that are owned by the state or electric company

Presentation of Results

An annual energy use report will be completed by the town within six weeks of the end of each fiscal year (August 15). The purpose of this annual report is to do the following:

- Provide a status update on progress toward the 20 percent reduction goal
- Explain factors that either increased or decreased total town energy consumption
- Describe efforts undertaken during the previous year to reduce energy use
- Describe efforts that will be undertaken during the coming year
- Describe changes to the original Energy Reduction Plan if it is found that the original scope of effort is unlikely to result in the 20 percent energy reduction target

DOER is planning to release specific reporting guidelines for reporting content and format. In the absence of this guidance, the Town will include the following items in annual energy reports:

- A bar chart illustrating how the overall energy use of the Town has varied over past years. The 20 percent energy use reduction target will be indicated by a

¹ If a new building or new addition is completed after the baseline is established but before this action plan is fully implemented (e.g. before the town becomes a Green Community), the energy consumption of the new building or addition is to be added to the baseline. Once a town achieves Green Community status, there are no alterations to the baseline.



Town of Sudbury *Green Communities Action Plan*

horizontal line passing across all of the columns. MassEnergyInsight will be capable of producing this chart.

- A chart illustrating the distribution of energy use among the major end use groups listed below. Additional charts will be included that further break down energy use within each major end use group. MassEnergyInsight will be capable of producing these charts.
 - Town Buildings
 - School Buildings
 - Each Vehicle Fleet
 - Street Lights & Signals
- Tables presenting normalized energy use for each end use account
 - Buildings will be compared on a kBtu/yr·ft² basis (thousands of Btu per year per unit area of conditioned space)
 - Vehicle fuel will be compared based on gallons consumed
 - Street lights and signals will be compared based on annual kilowatt-hours

New Construction, Renovations and Replacement of Buildings

In order to address issues within a municipality's proposed Energy Reduction Plan related to new buildings or renovations or additions to municipal buildings, the following provides guidance for all communities as they draft their plans:

- For building stock added after the energy baseline was completed but during the Energy Reduction Plan timeframe (five years), the additional energy load from these buildings will not be added into the consumption profile and therefore the additional load will not be factored into the 20 percent reduction target. However, the MassEnergyInsight tool will be able to monitor the performance of these buildings, which will be built to the Stretch Code, and if a community is designated, it will be expected to monitor the performance of this building under its Green Communities reporting to verify that it is performing as designed and modeled. If it is not, a corrective action plan must be developed and implemented to correct the building's performance.
- Renovations that occur after completion of the baseline but during the Energy Reduction Plan timeframe (five years) will be factored into the 20 percent reduction. This is not additional space and should be done such that the space will be more efficient than it was before the renovation.
- For additions that occur after completion of the baseline but during the Energy Reduction Plan timeframe (five years), after the addition comes on



Town of Sudbury *Green Communities Action Plan*

line, the energy load for that building counted towards the 20 percent reduction target will be pro-rated based on the building square footage. For example, if an addition provides an additional 30 percent square footage for the building, then 70 percent of the energy bills will be accounted for in monitoring the community's progress towards meeting the 20 percent reduction target.

- For communities that select to use a baseline that goes back two years, and then after the baseline year new buildings came on line, the additional load from these buildings will not be added into the consumption profile and therefore the additional load will not be factored into the 20 percent reduction target. However, as part of the Green Communities designation application and the Energy Reduction Plan, the community should address these buildings separately, noting how these building were built to be as energy efficient as possible and what the energy performance of the building was designed to meet. The Energy Reduction Plan must include a separate monitoring program for these buildings to ensure that they are performing as designed and modeled, and include a plan for corrective actions if they are not.
- For buildings that are removed from the building stock after the baseline was completed but during the Energy Reduction Plan timeframe (five years) and are not replaced by a new building, once these buildings are removed, the baseline will be readjusted to subtract that building and the 20 percent reduction target will be revised accordingly.
- For buildings originally included in the baseline that go offline and are replaced by a new building, the baseline will not change, and the new building will be included in the 20 percent reduction target.
- At any time, a community can petition DOER to consider modification of its baseline. For example, a community may replace an existing smaller school with a new school that is significantly larger, with a pool added, etc, and they may wish to adjust its baseline to take this added square footage and energy use data into consideration. DOER reserves the right to approve or deny any such petition.

3. Energy Reduction Strategies

The third goal of the Green Communities process is to reduce municipal energy use by 20 percent within five years of the baseline year. This document serves as a roadmap that describes steps that have already been taken by the Town, current plans for on-going optimization, and potential future modifications that can help achieve the target reduction.

The Town will create an Energy Reduction Plan within one year of the submission of this initial Green Communities planning document that will include specific projects to be undertaken and their estimated impact on energy use.



Town of Sudbury *Green Communities Action Plan*

The following sections provides a snapshot at previous energy reduction measures, current initiatives, potential measures to be considered within a future Energy Reduction Plan and resources that the Town of Sudbury may consider when creating an Energy Reduction Plan.

Past Efforts

The Town took part in the DOER's Energy Audit Program to review the town hall, all of the schools, the police station, the Fairbanks Community Center, and the Flynn building (suggested central HVAC system).

The schools have upgraded their automatic temperature controls, pumping systems, and lighting systems through the utility incentive programs in recent years.

Two old boilers were upgraded in the Fairbanks Community Center through Keyspan's programs in 2004.

Lighting in the DPW Garage and Flynn Building was upgraded in 2009 through NSTAR's program.

Lighting in the senior center, public schools offices, and parks/recreation portions of the Fairbanks Community Center building was upgraded in 2004 through NSTAR's programs.

Additional insulation was added to the Town Hall roof during a 2007 reroofing project.

The Flynn Building boilers were upgraded in 2006 through Keyspan's programs.

Ceiling insulation was upgraded at the Loring Parsonage in 2009.

The police department purchased a hybrid vehicle in 2009.

Current Efforts

The Town obtained an Energy Efficiency and Conservation Block Grant (\$141,864) from the DOER to install a solar DHW system and PV array on the Fairbanks Community Center building.

The Town currently has a lighting upgrade proposal underway with NSTAR.

The school department has a proposal to perform a \$140,000 lighting controls upgrade project through NSTAR.

Street light fixtures are planned to be modified to use lower wattage lamps and ballasts, and an incentive is being sought through NSTAR.

A capital request is in process to upgrade the heating system controls in the Fairbanks Community Center.



Town of Sudbury *Green Communities Action Plan*

MTC is providing funding for a 2 kW demonstration PV array on the Noyes School.

The Energy and Sustainability Green Ribbon Committee is discussing potential plans for a large PV installation at the site of the former landfill.

This April, the Town will be voting on a petition to replace the police station with a more efficient building that better meets the needs of the community.

Potential Measures for Energy Reduction Plan

HVAC & Controls Improvements

All buildings should be reviewed to identify systems or equipment that are not operating as designed.

- Common problems include the following:
 - Excessive ventilation rates
 - Poor control of ventilation scheduling (e.g. bringing fresh air into unoccupied buildings)
 - Inoperable economizer controls
 - Broken damper linkages
 - Overridden setpoints in control systems
 - Timeclock schedules that do not correspond to actual use patterns
 - Pumps operating against partially closed valves
 - Static pressure and differential pressure setpoints that are higher than necessary



Town of Sudbury *Green Communities Action Plan*

- Consider hiring a testing and balancing contractor to review problematic buildings with a history of occupant comfort complaints or in systems with variable speed controlled fans/pumps that operate at high speeds when system loads are low.
- Review facility operation during unoccupied hours to identify equipment that is operating unnecessarily. Lights, large HVAC equipment, and pumping systems are common culprits.
- Install programmable thermostats to control all systems where setback is possible, and program the thermostats to allow space temperatures to be set back to 60°F or cooler and 85°F or warmer. Care should be taken to ensure proper freeze protection. Equipment rooms with electric unit heaters commonly have broken controls or controls that are set warmer than necessary. Mail-in rebates from Energy Star may be available for these thermostats.
- Air sealing of buildings is a standard approach to reducing heating costs. Care needs to be taken when reducing infiltration to prevent conditions favorable to mold formation. Improved ventilation control may be required in some cases. Energy recovery ventilators can reduce operating costs associated with increased mechanical ventilation airflow rates.
- Spaces with high design occupancies, such as auditoriums, may be over-ventilated relative to the number of people who are actually present for many business hours. Demand controlled ventilation controls allow ventilation rates to be reduced without compromising indoor air quality.
- Energy recovery ventilators are cost effective in situations where the outside air fraction must remain above 60 percent during non-economizer hours. For systems that do not require this much outside air, demand controlled ventilation controls are generally more cost effective.
- Ensure that all pipes, valves, and system components are insulated for space heating systems and domestic water heating systems.
- Consider installing thermostatically controlled valves or autovalves on radiators serving buildings with limited space temperature control capability. Digital control systems are an alternate approach that provide increased management and monitoring flexibility but at a higher cost.
- Place exhaust fans on timeclock or occupancy sensor control to minimize unnecessary exhausting of conditioned air.
- Engage a company knowledgeable about the latest boiler and burner technology to review existing heating plants to determine whether



Town of Sudbury *Green Communities Action Plan*

cost-effective improvements can be made. The installation of advanced combustion controls with sealed air intake can improve overall system performance and reduce building infiltration.

- Implement policies requiring specific guidelines for unoccupied equipment operation in buildings. Regularly tour unoccupied buildings to ensure compliance.

Lighting Improvements

- Drive through Town and identify street lights and other exterior lights that are operating unnecessarily during the day.
- Turn off street lights if it is acceptable to residents and does not pose a public safety or property damage issue. Street lights can also be retrofitted with lower wattage, higher efficiency lamps and ballasts.
- Take advantage of utility lighting efficiency programs to upgrade interior lighting systems. Improvements include reballasting and relamping with high efficiency T8 technology, the installation of occupancy sensors, and implementation of daylighting controls near exterior windows.
- Identify spaces that may be over-lit relative to illumination levels required for typical tasks. Replace fixtures or lamps as needed.
- Modify lighting system circuits to allow for multi-level switching. For example, allow fixtures along exterior walls with windows to be turned off.
- Utilize task lighting rather than general lighting provided that the changed light levels do not pose safety issues.

Building Envelope Improvements

- Fill uninsulated walls with an insulation product such as cellulose or foam. Care needs to be taken to manage condensation and avoid the creation of indoor air quality problems.
- Utilize the Energy Star Thermal Bypass Checklist to identify areas where infiltration is most commonly found, and properly seal voids, gaps, and cracks.
- Replace old single-pane windows with Energy Star rated windows. The greatest energy impact will be in buildings with low internal heat gains and leaky, double-hung windows.
- Review historic buildings that may have been constructed with gravity air distribution systems to ensure that old chases are completely



Town of Sudbury *Green Communities Action Plan*

blocked at the roof and pickup points. If buildings still rely upon gravity systems, consider installing ductwork, dampers, and fans to bring ventilation rates under control.

- Retrofit exterior doors to minimize infiltration. In entrance areas that are routinely under-heated during the winter, consider installing a second set of doors to create an unconditioned air lock.

Process Equipment Improvements

- Review exhaust systems serving vehicle bays to ensure that safe ventilation rates are maintained and that conditioned air is not unnecessarily being exhausted. Automatic controls utilizing carbon monoxide sensors could be of use.
- Review pumping systems to ensure that throttling valves are more than 90 percent open; consider the installation of VSDs on systems that are routinely more heavily throttled.

Vehicle Improvements

- Review the age and mileage performance of trucks, buses, and cars that the Town owns and determine whether the lower operating costs associated with new, fuel efficient vehicles would justify replacement of older models. There may be grant programs for improving bus fleets.

Alternative Energy Systems

- Solar hot water systems are the most cost effective option in the alternative energy market and should be considered for sites with good solar exposure, a moderate to heavy service water load, and an older or inefficient hot water generation system.
- Photovoltaics should not be pursued until all efficiency projects in the town are complete and there is money to spare.
- Ground-coupled heating and cooling systems are commonly called 'geothermal' systems and are mistakenly regarded as a kind of renewable energy. Ground-coupled heat pump systems can lead to reduced heating costs but retrofits of existing heating systems are generally not cost effective.

Energy Reduction Plan Resources

The major gas and electric utility companies offer considerable expertise and



Town of Sudbury *Green Communities Action Plan*

resources for municipalities searching for ways to improve energy performance. Facility managers should remain in contact with their utility representatives and fully understand the requirements of the prescriptive and custom incentive programs. One major benefit of working with utilities is the offer of free or reduced cost scoping studies and their standard 50%/50% cost sharing offer for focused engineering studies.

Municipalities can independently hire consultants to perform comprehensive operations and maintenance (O&M) reviews of town buildings and facilities. These services can help managers prioritize projects relative to budget constraints, risks to equipment/building longevity, and energy performance goals. It is important that these consultants be aware of utility incentive program requirements/opportunities and the Town's goal of reducing energy consumption by 20 percent.

MassEnergyInsight will allow each building within the Town to be compared on a Btu/ft² basis. Additional benchmarking resources exist that allow a building's annual energy use to be compared to other buildings within the geographical region. Energy Star's portfolio manager provides a performance score for specific building types (e.g. schools, office buildings) based on historical utility data and building use details. More information can be found at the following website:

http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfolio_manager_benchmarking

The Town should consider subscribing to National Grid's Energy Profiler Online service to access historical 15-minute demand data for facilities on the large commercial rates (monthly demand >200 kW). This data can be reviewed to determine a facility's demand profile during unoccupied hours. If unoccupied demand is more than 10 percent of the normal occupied period demand, then there may opportunities for setting back or turning off equipment. This data is also useful in identifying equipment response to programmed building schedules and past changes in operating strategies.

4. Method for Meeting Criteria

The 2008 and 2009 fiscal year utility and fuel use data will need to be entered into MassEnergyInsight after town representatives have been trained in its use. Additional inputs include the conditioned floor area of each building. This process will create the baseline energy consumption number that the Town will work against over the next several years. The results of the baseline analysis will be contained in an initial energy use report. This report will be submitted to DOER.

Over the coming months, the Town will need to determine which steps they will be taking to achieve the required 20 percent reduction in municipal energy. The



Town of Sudbury
Green Communities Action Plan

approach will need to be documented in an Energy Reduction Plan that will be filed with DOER.

The Energy Reduction Plan will include summaries of the recommendations prepared by various consultants as well as opportunities the Town has identified. Estimates of energy savings and costs for each action will be included in the plan.

Documentation

The Town of Sudbury will provide DOER with the identified energy baseline reporting tool, which is likely to be DOER’s MassEnergyInsight tool, the results of the baseline inventory, and an Energy Reduction Plan that describes how the Town will reduce energy use by 20 percent over the next five years. Additionally, the Town will submit an Energy Reduction Plan which documents measures the Town will implement to reduce its municipal energy use by 20 percent within five years of the baseline year.

5. Steps completed during Assistance

- VHB/DMI identified the necessary information required to develop the energy baseline.
- DMI reviewed all energy data submitted for review including Energy Audit Program information and energy baseline spreadsheet data.
- VHB/DMI met with and presented to the Energy and Sustainability Green Ribbon Committee to discuss all energy information data to better grasp the extent of municipal energy use and initiatives.

6. Action Items & Schedule

Action Items	Person Responsible	Completion Date
Attend MassEnergyInsight training session	Building Inspector	✓
Configure MassEnergyInsight tool, review account numbers and enter 2009 fuel data for baseline	Building Inspector	✓
Identify specific improvement opportunities	Energy and Sustainability Green Ribbon Committee	Within 1 month
Draft an Energy Reduction Plan	Energy and Sustainability Green Ribbon Committee	Within 1 month
Compile the required documentation for Green Communities Designation Application	Energy and Sustainability Green Ribbon Committee	Within 1 month
Submit the required documentation for Green Communities Designation Application including the following materials:	Energy and Sustainability Green Ribbon Committee	Within 1 month



Town of Sudbury
Green Communities Action Plan

Identification of inventory tool used	Energy and Sustainability Green Ribbon Committee	Within 1 month
Provide documentation of results of inventory	Energy and Sustainability Green Ribbon Committee	Within 1 month
Copy of plan / specific Actions to be implemented and timeline with milestones to achieve required energy reductions	Energy and Sustainability Green Ribbon Committee	Within 1 month

4

Procurement of Fuel Efficient Vehicles

Green Communities Criteria #4

Purchase only fuel-efficient vehicles for municipal use whenever such vehicles are commercially available and practicable.

1. Background

To qualify as a Green Community, the municipality must enact a policy to purchase only fuel-efficient vehicles for municipal use, whenever such vehicles are commercially available and practicable. The purpose behind this criterion is to reduce carbon dioxide emissions by municipal vehicles, which has a positive impact on the environment and results in costs savings for the municipality. Exempt from this policy are heavy-duty department of public works trucks, police cruisers, fire trucks and school buses. In communities that only have vehicles exempt from the policy, alternate policies to support fuel efficiency are required; such as policies that encourage municipal employees to utilize alternate transportation modes (for example, bicycle, transit) or carpooling.

2. Progress to Date

The Town of Sudbury drafted a preliminary vehicle inventory of non-exempt and exempt vehicles (Appendix E). The vehicle inventory will be completed with the required information by Town staff and submitted as part of the Green Communities application.

At this time, Sudbury has not developed a draft policy on purchasing fuel efficient vehicles. The Town of Sudbury plans to finalize a Fuel Efficient Vehicle Policy soon. At the appropriate time, the Board of Selectmen will vote on a Fuel Efficient Vehicle Policy. The draft policy will closely follow the model fuel efficient vehicle policy provided by DOER. As stated in the policy, Sudbury will commit to replacing non-exempt vehicles with fuel-efficient vehicles for municipal use whenever such vehicles are commercially available and practicable.



3. Method for Meeting Criteria

Documentation

Sudbury will provide a copy of the adopted Fuel Efficient Vehicle Policy as well as an inventory of existing fleet (model, year, estimated mpg) with plans for replacement with fuel efficient vehicles.

4. Steps completed during Assistance

- VHB reviewed Sudbury’s draft vehicle policy and provided guidance.
- Using DOER’s template, VHB started the vehicle inventory table for Sudbury.
- VHB documented progress on vehicle policy and plan.

5. Action Items & Schedule

Action Item	Person Responsible	Completion Date
Complete the vehicle inventory table and determine which vehicles would be subject to a Fuel Efficient Vehicle Policy	Building Inspector	Within 1 month
Adopt a Fuel Efficient Vehicle Policy	Board of Selectmen	Within 1 month
Compile the required documentation for Green Communities Designation Application	Energy and Sustainability Green Ribbon Committee	Within 1 month
Submit the required documentation for Green Communities Designation Application including the following materials:	Energy and Sustainability Green Ribbon Committee	Within 1 month
1. A copy of the policy or other mechanism adopted for purchasing only fuel efficient vehicles	Energy and Sustainability Green Ribbon Committee	Within 1 month
2. Inventory of existing fleet (model, year, estimated mpg) with plans for replacements with fuel efficient vehicles	Energy and Sustainability Green Ribbon Committee	Within 1 month

Note: The draft vehicle inventory is provided in Appendix E.



5

Minimize Life-cycle Costs in Energy Construction

Green Communities Criteria #5

Require all new residential construction over 3,000 square feet and all new commercial and industrial real estate construction to minimize, to the extent feasible, the life-cycle cost of the facility by utilizing energy efficiency, water conservation and other renewable or alternative energy technologies.

1. Background

To qualify as a Green Community, the municipality must require all new residential construction of more than 3,000 square feet and all new commercial and industrial real estate construction to minimize the life-cycle cost of the facility by utilizing energy efficiency, water conservation and other renewable or alternative energy technologies.

One method to satisfy this criterion is to adopt the Massachusetts State Building Code's new appendix called the Stretch Energy Code (780 C.M.R. Appendix 120 AA). The Stretch Energy Code was approved as an appendix at a meeting of the Massachusetts Board of Building Regulations and Standards (BBRS) in May 2009. Based on the International Energy Conservation Code (IECC) 2009, the purpose of the Stretch Energy Code is "to provide a more energy efficient alternative to the base energy code applicable to the relevant sections of the building code for both new construction and existing buildings." For municipalities that choose to adopt this appendix, they would meet this Green Communities Program criterion. Whereas Green Community designation applies only to new residential construction over 3,000 square feet and all new commercial and industrial real estate construction, the Stretch Energy Code applies to all residential buildings of any size for both new construction and redevelopment. Another method to satisfy this criterion is to establish an alternate policy that meets the requirements of the Green Communities Program and would require approval by the DOER. At this time, model policies or



Town of Sudbury
Green Communities Action Plan

regulations that may be an acceptable alternative to adopting the Stretch Energy Code is not available from the DOER.

2. Progress to Date

The Town of Sudbury currently meets this criterion. On April 6, 2010, Sudbury Town Meeting adopted the Stretch Energy Code. Prior to Town Meeting, as required by DOER, a public hearing on the Stretch Energy Code was held on December 15, 2009 during a Board of Selectmen meeting.

3. Method for Meeting Criteria

Type of Method

As described in the previous section, the Town of Sudbury adopted the Stretch Energy Code (Appendix 120 AA to the MA Building Code 780 CMR).

Documentation

DOER will require the documentation from the Town Clerk of the Town Meeting vote adopting MA Board of Building Regulations and Standards (BBRS) Stretch Energy Code. Appendix F includes the official documentation from Town Meeting enacting the Stretch Energy Code.

4. Steps completed during Planning Assistance and to be completed

- VHB provided resources from DOER’s website regarding the Stretch Energy Code.
- The building inspector attended the energy code training which included the Stretch Energy Code.

5. Action Items & Schedule

Action Item	Person Responsible	Completion Date
Building Inspectors attend BBRS Stretch Energy Code training	Building Inspectors	✓
Conduct public outreach meeting on Stretch Energy Code	Energy and Sustainability Green Ribbon Committee	✓
Adopt the Stretch Energy Code at Town Meeting	Town Meeting	✓
Submit the required documentation for Green Communities Designation Application including the following materials:	Energy and Sustainability Green Ribbon Committee	Within 1 month
1. Documentation of Town Meeting vote adopting MA Board of Building Regulations and Standards (BBRS) Stretch Energy Code.	Energy and Sustainability Green Ribbon Committee	Within 1 month

Summary of Action Items

Action Item	Person Responsible	Completion Date
CRITERIA #1		
Submit the required documentation for Green Communities Designation Application including the following materials:	Energy and Sustainability Green Ribbon Committee	Within 1 month
1. Letter from municipal counsel certifying that the existing zoning complies with the RE/AE Facilities criteria	Planning & Community Development Director/Building Inspector	Within 1 month
2. The applicable section of zoning bylaw/ordinance	Planning & Community Development Director/Building Inspector	✓
3. Copy of zoning map that shows area zoned	Planning & Community Development Director/Building Inspector	✓
4. Important zoning definitions	Planning & Community Development Director/Building Inspector	✓
5. The relevant section of the use table and any key that will help DOER interpret the use table	Planning & Community Development Director/Building Inspector	✓
6. Any related local regulations applicable to facilities sited under the bylaw/ordinance—such as site plan review regulations—so that DOER can confirm that the related local regulations are non-discretionary;	Planning & Community Development Director/Building Inspector	Within 1 month
7. Yield calculations must be either included in the text of the letter or attached.	Planning & Community Development Director/Building Inspector	Within 1 month



Town of Sudbury
Green Communities Action Plan

Action Item	Person Responsible	Completion Date
CRITERIA #2		
Submit the required documentation for Green Communities Designation Application including the following materials:	Energy and Sustainability Green Ribbon Committee	Within 1 month
1. Letter from Town Counsel affirming that nothing within the municipality's rules and regulations precludes issuance of a permitting decision within one year along with the language addressing approval procedures and associated timing from any applicable bylaws or regulations	Planning & Community Development Director/Building Inspector	Within 1 month
2. A copy of the applicable map(s) showing that the areas where the expedited permitting applies coincides with the as-of-right zoned areas for Criteria 1	N/A	N/A
CRITERIA #3		
Attend MassEnergyInsight training session	Building Inspector	✓
Configure MassEnergyInsight tool, review account numbers and enter 2009 fuel data for baseline	Building Inspector	✓
Identify specific improvement opportunities	Energy and Sustainability Green Ribbon Committee	Within 1 month
Draft an Energy Reduction Plan	Energy and Sustainability Green Ribbon Committee	Within 1 month
Compile the required documentation for Green Communities Designation Application	Energy and Sustainability Green Ribbon Committee	Within 1 month
Submit the required documentation for Green Communities Designation Application including the following materials:	Energy and Sustainability Green Ribbon Committee	Within 1 month
Identification of inventory tool used	Energy and Sustainability Green Ribbon Committee	Within 1 month
Provide documentation of results of inventory	Energy and Sustainability Green Ribbon Committee	Within 1 month
Copy of plan / specific Actions to be implemented and timeline with milestones to achieve required energy reductions	Energy and Sustainability Green Ribbon Committee	Within 1 month



Town of Sudbury
Green Communities Action Plan

Action Item	Person Responsible	Completion Date
CRITERIA #4		
Complete the vehicle inventory table and determine which vehicles would be subject to a Fuel Efficient Vehicle Policy	Building Inspector	Within 1 month
Adopt a Fuel Efficient Vehicle Policy	Board of Selectmen	Within 1 month
Compile the required documentation for Green Communities Designation Application	Energy and Sustainability Green Ribbon Committee	Within 1 month
Submit the required documentation for Green Communities Designation Application including the following materials:	Energy and Sustainability Green Ribbon Committee	Within 1 month
1. A copy of the policy or other mechanism adopted for purchasing only fuel efficient vehicles	Energy and Sustainability Green Ribbon Committee	Within 1 month
2. Inventory of existing fleet (model, year, estimated mpg) with plans for replacements with fuel efficient vehicles	Energy and Sustainability Green Ribbon Committee	Within 1 month
CRITERIA #5		
Building Inspectors attend BBRs Stretch Energy Code training	Building Inspectors	✓
Conduct public outreach meeting on Stretch Energy Code	Energy and Sustainability Green Ribbon Committee	✓
Adopt the Stretch Energy Code at Town Meeting	Town Meeting	✓
Submit the required documentation for Green Communities Designation Application including the following materials:	Energy and Sustainability Green Ribbon Committee	Within 1 month
1. Documentation of Town Meeting vote adopting MA Board of Building Regulations and Standards (BBRS) Stretch Energy Code.	Energy and Sustainability Green Ribbon Committee	Within 1 month

Endnotes:

¹Town of Sudbury Zoning Bylaw

²Town of Sudbury Zoning Bylaw

³ http://www.masstech.org/RenewableEnergy/Community_Wind/maps/Wind%20Resources_SUDBURY.pdf