

## ACTIONS TO REDUCE EMISSIONS AND/ OR ADAPT TO EFFECTS OF CLIMATE CHANGE

### Contents

Actions to Reduce Emissions that are currently being pursued as part of this plan are in **six groups**.

### Energy Efficiency

Item #	Description	Status/ Action
A-1	<b>Commercial Buildings:</b> Use the EPA's portfolio manager software to assess the 10 largest commercial properties to identify underperforming buildings and recommend appropriate energy improvements.	Not started. Needs a Champion. Chamber of Commerce can't be the champion this coming year.
A-2	<b>Municipal Buildings:</b> As outlined in the <i>Town of Brookline Energy Reduction Plan</i> , reduce energy use in Town Buildings by 20% by 2014, through a variety of efficiency techniques. <i>[Includes school buildings.]</i>	Part of Green Communities Act. Most things in plan have been done. Report is prepared annually.
A-3	<b>LEED for Large Buildings:</b> Zoning requirement for LEED certification for new medium and large commercial buildings.	Not started.
A-4	<b>Lights Out at Night:</b> Research potential for a Town-wide Light's Out at Night policy to reduce light pollution and save energy.	Not started
A-5	<b>Lighting Retrofits:</b> Market NStar's lighting audit and subsidy program to large commercial and residential buildings.	Started. L. Hayes is coordinating w/ A. Leviton. Mass Save.
A-6	<b>Energy Star:</b> Develop an incentive program to encourage Energy Star appliance replacement.	Not started.
A-7	<b>Oil to Gas:</b> Develop a program to promote conversion from oil heat to natural gas, possibly using incentives including property tax or permit fee rebates.	Fall 2014 TM Warrant Article 19 raises a question of whether this should remain an action.
A-8	<b>Green Homes Brookline:</b> Continue and expand existing Green Homes Brookline program, which coordinates home energy assessments and improvements, including securing available utility rebates and offers financial assistance for qualified homeowners.	In progress. Question: Should it continue w/ CAB due to proprietary involvement of Next Step Living?

A-9	<b>Cool Flat Roofs:</b> Voluntary program, incentives, or zoning requirement for green, white, or solar PV flat roofs on commercial and residential buildings.	Focus shifted to Solarize Brookline after it was learned that PVs on roofs had the greatest impact on GHG reduction.
A-10	<b>School Coordinators:</b> Identify an individual at each school to promote energy saving changes to day-to-day activities.	Not started.
A-11	<b>Business Campaign:</b> Develop an outreach and incentive program to promote energy efficient business practices, possibly including a sustainable business award program.	Not started. Should be pursued in the future.
A-12	<b>LED Street Lights:</b> Replace existing streetlights with energy efficient LED lighting. Two test areas for LED streetlights have been installed by the Department of Public Works.	In progress. Completely funded.
A-13	<b>Residential Loans:</b> Develop a revolving, low or no interest loan program to offer financing options to Brookline residents for energy efficiency or renewable energy facilities.	Some banks are already doing this. It was suggested to remove this action from list.
A-14	<b>Public Housing Weatherization:</b> Continue energy efficiency upgrades to Public Housing.	Not happening on a grand scheme. Discuss with Patrick Dober, head of Housing Authority.

## Renewable Energy

Item #	Description	Status/ Action
A-15	<b>Geothermal Task Force:</b> Establish Task Force responsible for researching engineering, science, costs, financing and contractor availability of geothermal energy and publicize findings.	
A-16	<b>Green Electricity:</b> Continue CAB's NStar Green promotion and research other green energy generators.	Mother's Out Front and CAB program for Mass Energy. NStar Green is being discontinued.
A-17	<b>Residential Solar:</b> Participate in Solarize Massachusetts, which markets, coordinates and provides bulk purchasing of solar panels. Research potential for revolving loan fund or property assessed clean energy financing.	Phase 1 Complete

A-18	<b>Solar Farm:</b> Develop a ground solar farm on the Town-owned Single Tree Hill parcel.	In progress. Spring 2015 TM Warrant Article 15 expanded zoning overlay to include portion of Transfer Station property.
A-19	<b>Municipal Roofs:</b> Establish policy that all municipal roof replacements will include structural and electrical components to permit future solar panel installations and require panel installation by 2020.	Complete. Panel installation not required.
A-20	<b>Zoning Incentives:</b> Amend Zoning By-law to include incentives for provision of residential and commercial renewable energy facilities.	
TBD	<b>Community Shared Solar:</b> Establish a working group and develop a Community Shared Solar (CSS) project for Brookline residents and businesses based upon one of the two CSS models developed by the Massachusetts Department of Energy Resources (DOER).	Approved by CAC on 12/15/ 2014. Action underway led by W. Lohe & D. Lescohier.

## Urban Form and Mobility

Item #	Description	Status/ Action
A-21	<b>Bicycle Sharing:</b> Brookline is joining the Hubway regional bike sharing network summer 2012. The network provides bikes for one-way rental for short trips throughout the system.	Ongoing. Hubway Advisory Committee appointed by Selectmen.
A-22	<b>Bicycle Routes:</b> Continue implementing the Bicycle Network Plan, developed by the Bicycle Advisory Committee.	
A-23	<b>Bicycle Parking:</b> Amend Zoning By-law to require well designed bicycle parking spaces at the rate of one space for every two multi-family dwelling units and one space for every ten automobile parking spaces for commercial buildings.	
A-24	<b>Zoning Parking Requirements:</b> Amend Zoning By-law to reduce minimum parking requirements for residential and commercial properties within .5 miles of MBTA Green Line.	
A-25	<i>Moved to Climate Change Adaptation.</i>	
A-26	<b>Taxi Fuel Efficiency:</b> Require taxi vehicles put into service in Brookline <del>under the new Medallion system</del> to be new vehicles that are on an approved list. The list will identify those makes and models that are more fuel-efficient and offer other customer-friendly features.	Staff Committee of Transportation Department working on this.

A-27	<b>Idling:</b> Promote systematic enforcement of M.G.L. 90 Section 16A, 310 CMR 7.11 which limits the maximum engine idling time to five minutes (except for emergency and some public safety vehicles).	
A-28	<b>Trip Reduction:</b> Through a collaborative effort between the Transportation Administrator and the Department of Planning and Community Development, publicize and promote employer participation in the NuRides on-line ride share matching and corporate T pass programs.	Transit Demand Management is being used, e.g. Brookline Place Development. Consultant hired by Town for TDM policy.
A-29	<i>Moved to Climate Change Adaptation.</i>	
A-30	<i>Moved to Climate Change Adaptation.</i>	
A-31	<b>Pedestrian Advisory Committee:</b> Create a Pedestrian Advisory Committee to advise Town and other Boards and Commissions on design and policy matters of import to pedestrians. The Committee would be a sub-committee of the Transportation Board.	Complete Streets Committee has been formed and will cover this subject.
A-32	<b>Transit Oriented Development:</b> Amend Zoning By-law to promote mixed-use, dense development near transit. Possible TOD amendments include reduced parking requirements, increased density and incentives for mixed-use.	
A-33	<b>Diesel Emissions:</b> Reduce diesel emissions, including retrofitting town vehicles that use diesel fuel.	Committee met on this. Plan is in place. P. Maher to follow up.

## Consumption and Solid Waste

Item #	Description	Status/ Action
A-34	<b>Pay as You Throw:</b> Implement some form of pay as you throw solid waste collection with the renewed FY 2014 solid waste contract.	DPW going forward w/ proposal for 2016.
A-35	<b>Buy Local:</b> Create and implement a buy local program that promotes local businesses selling locally produced goods. Documentation of the environmental benefits of local buying would be developed and distributed.	Brookline Local First has been formed by private business interests.
A-36	<b>Meatless Diet Days:</b> Implement a town-wide education campaign on the health and environmental benefits of eating less meat, with the goal of reducing the amount of meat consumed in Brookline.	
	<b>Commercial Recycling:</b> Require businesses to separate recyclable items from trash, as is currently required for residences.	Adopted by CAC in 2013. Warrant Article 10 passed at Fall 2014 Town Meeting.

## Food and Agriculture *[Incorporated into Consumption and Solid Waste]*

### Climate Change Adaptation *[New Category]*

Item #	Description	Status/ Action
A-25	<b>Permeable Pavement:</b> Incorporate permeable pavement where appropriate in Town Capital Improvement Projects. Change Town By-laws to require permeable pavement for new or refurbished paved surfaces where appropriate.	Pilot projects being implemented & studied by Town. Enhance to include Green Infrastructure. Collaborate w/ Conservation Commission.
A-29	<b>Open Space Protection:</b> Protect and preserve important privately-owned open space resources utilizing conservation restrictions or other means.	No further action on this item since 2/2014 Forum sponsored by BNA, Conservation Commission, BGSA. [BGSA has had some follow-up meetings w/ Planning Department.]
A-30	<b>Urban Forest:</b> Add 1,000 trees to Brookline's urban forest by 2022.	Tree Planting Committee has indicated that they have their hands full maintaining existing tree inventory.

### Community Coordination

Item #	Description	Status/ Action
A-37	<b>Institutionalize Education and Outreach:</b> Continue education and awareness programs such as Climate Week and <del>Brookline Tomorrow</del> . Expand involvement, outreach and coordination with community partner organizations.	
A-38	<b>Formalize Town Hall Staff Function:</b> Expand Town Staff allocated to climate change functions to at least 1.0 Full Time Equivalent.	
A-39	<b>Public Progress Symbol:</b> Create a publically visible symbol depicting progress towards reducing community greenhouse gas emissions.	