New York Climate Smart Communities

Town of East Hampton Climate Action Plan

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ACKNOWLEDGEMENT

The Town of East Hampton designates its existing Energy Sustainability Committee as its Climate Smart Community Committee and internal Green Team. The Committee includes the following members:

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- Gordian Raacke, Chairman
- Frank Dalene
- Nay Htun
- Linda James
- Janet Van Sickle
- Margaret Turner
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- Dominick Stanzione
- Kimberly Shaw, Ex-officio
- Marguerite Wolffsohn, Ex-officio
- John Sousa-Botos, Secretary, Ex-officio

The Committee acknowledges the contributions of Cameron Engineering & Associate, LLC, and the Sustainability Institute at Molloy College for assisting with the development of this Plan in the course of performing their work as Climate Smart Community Coordinators contracted for and sponsored by the New York State Energy Research and Development Authority (NYSERDA).

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PREAMBLE

Accelerating climate change continues to escalate the need for communities and municipalities to develop strategies combating current challenges to local infrastructure and the projected intensity of impacts on community assets, natural resources and public health.

The Town of East Hampton's Climate Action Plan is not definitive. Rather it is the start of a process, an educational tool, to engage this coastal community's awareness of a rising sea level, coastal erosion, a warmer ocean and more extreme and frequent weather events.

If this Climate Action Plan stirs the East Hampton community to a sense of urgency, to call on its town leadership to plan and to act as climate change continues to intensify, the planning process has succeeded. If this Climate Action Plan presents pathways that residents use to strive towards a sustainable and resilient future for their community, the Plan has demonstrated the power of raising a community's awareness. The East Hampton Climate Action Plan will have provided the working platform to address the current and future impacts of a changing climate in this coastal community.

EXECUTIVE SUMMARY

This Climate Action Plan ("CAP") was produced as part of the New York State Climate Smart Communities program[1]. The East Hampton Town Board moved to become a member of the Climate Smart Community on April 3, 2009 (RES-2009-427)[2] and reaffirmed this action on March 4, 2010 (RES-2010-209)[3]. The draft CAP was developed by the East Hampton Climate Smart Community Committee.

This document is organized into four sections:

1. **Introduction** includes among other items data on greenhouse gas emission inventories and reduction targets, community-wide renewable energy goals and, as part of the Climate Action Plan, the required Climate Smart Community certification;
2. **Municipal Facilities and Operations** includes information on (6) sub sections which the Town can control directly, namely
   - Buildings
   - Renewables
   - Exterior Lighting
   - Fleet
   - Solid Waste & Waste Water
   - Operations

   Each sub section contains a description of (i) past actions and achievements; (ii) projects and policies currently under consideration, development or implementation; and (iii) potential future actions and initiatives.
3. **Community-wide Policies and Initiatives** includes items that the Town can affect by policy and describes (i) past actions and achievements; (ii) laws, codes, and regulations in effect; (iii) current programs and policies in effect and under consideration, and (iv) potential future actions & initiatives. The (6) sub sections here are
   - Initiatives to Promote Renewable Energy
   - Residential Buildings
   - Commercial & Industrial Buildings
   - Transportation
   - Educational Initiatives
   - Land Management

[1] http://www.dec.ny.gov/energy/50845.html
[2] http://easthamptontown.iqm2.com/Citizens/Detail_LegiFile.aspx?ID=7121
[3] http://easthamptontown.iqm2.com/Citizens/Detail_LegiFile.aspx?ID=8256

4. **Climate Change Adaptation and Resiliency** provides an overview of observed effects and projections of climate change, the Town's plans to adapt to the effects of climate change including rising sea level, more intense rainfall, higher temperatures, and more frequent droughts. The (3) sub-sections are

    - Climate Change in New York
    - Community Self-Assessment and Planning
    - Adaptation Strategies

The Town of East Hampton has adopted the transformative goals to meet 100 percent of community wide electricity consumption with renewable energy sources by the year 2020 and to meet the equivalent of 100 percent of economy wide energy consumption such as electricity, heating, and transportation with renewable energy sources by the year 2030. These goals can be reasonably met based upon existing and new national, state, and local initiatives. Since their adoption in 2014, the Town has begun the transformation to reduce greenhouse gas emissions and becoming a model resilient coastal community in the United States. The Town has been partnering with local organizations, schools, institutions and businesses to encourage public support for its transformative community goals and climate change awareness.

To develop a strategy and conceptual blueprint for reaching its 100% renewable energy goals, the Town has obtained a NYSERDA grant which will be used to develop its Decentralized Resilient Energy Assessment and Management ("D.R.E.A.M.") Plan. This plan will offer policy options, initiatives and programs designed to reduce energy waste, increase renewable energy sources, and lower GHG emissions community wide and from municipal facilities, fleet, and operations.

The Town has conducted a Municipal Facilities and Operations internal greenhouse gas emissions audit which is attached to this CAP as Appendix E. The Town government has begun implementing a paradigm change in internal operations to ensure a more sustainable and resilient future for East Hampton. For example, town staff has compiled a list of all municipal electric accounts and now tracks electricity consumption across all municipal operations. Similarly, the fuel consumption of its fleet of vehicles is now being captured and monitored.

Climate Change is a critical community issue. East Hampton has sponsored numerous educational workshops related to resiliency planning for coastal communities. The Town has been awarded over $12 million in grants and awards since 2014 to meet its transformative goals and demonstrate leadership in resiliency, floodplain management, and clean water projects. Issues related to water quality are global problems with local implications; East Hampton is vulnerable, both economically and environmentally, to these issues. The Town is dedicated to implementing a network of Green Reach Infrastructure Demonstration (G.R.I.D.) projects at Three Mile Harbor, Accabonac Harbor, and Lake Montauk. These projects will showcase natural and zero-carbon methods of addressing water quality issues including stormwater and nitrogen loading in water bodies.

1 INTRODUCTION

1.1 Climate Action Plan Summary

This Climate Action Plan is prepared in accordance with the Climate Smart Communities[4] pledge[5] adopted by the Town of East Hampton in 2010. East Hampton has been pursuing a number of energy and sustainability initiatives for several years.

Existing Plans, Studies and Reports

- Comprehensive Management Plan (CMP)[6], 2005
- Local Waterfront Revitalization Plan (LWRP), July 2005 (RES-2005-999) and September 2007 (RES-2007-1357)[7]
- Comprehensive Wastewater Management Plan, 2015[8] (RES-2013-318)
- Clean Energy Action Plan, November 2005 (RES-2005-1458)[9]
- Comprehensive Energy Vision, September 2013 (RES-2013-1110)[10]

Pledges/Memberships/Associations

- 100 Renewable Energy Goals, May 2014 (RES-2014-662)[11]
- Climate Smart Communities (RES-2010-209)[12]
- Long Island Green Homes Consortium[13]
- Clean Energy Leadership Taskforce[14]

Greenhouse Gas Inventory

The Rauch Foundation funded an effort by the New York Institute of Technology ("NYIT") to draft a comprehensive regional greenhouse gas ("GHG") emissions[15] inventory for Long Island's ("LI") Nassau

[4] Climate Smart Communities Guide to Local Action: http://www.dec.ny.gov/energy/50845.html
[5] RES-2009-427 http://easthamptontown.iqm2.com/Citizens/Detail_LegiFile.aspx?ID=7121; and RES-2010-209 http://easthamptontown.iqm2.com/Citizens/Detail_LegiFile.aspx?ID=8256
[6] http://ehamptonny.gov/HtmlPages/TownCompPlan.htm
[7] http://docs.dos.ny.gov/communitieswaterfronts/LWRP/East%20Hampton_T/Index.html
[8] http://www.ehamptonny.gov/DocumentsPDF/NaturalResources/WasteWaterManagementPlan/EHTownWastewaterMgmtPlanJune82015.pdf
[9] http://easthamptontown.iqm2.com/Citizens/Detail_LegiFile.aspx?ID=1639
[10] http://easthamptontown.iqm2.com/Citizens/Detail_LegiFile.aspx?ID=12923
[11] http://easthamptontown.iqm2.com/Citizens/Detail_LegiFile.aspx?ID=13906
[12] http://easthamptontown.iqm2.com/Citizens/Detail_LegiFile.aspx?ID=8256
[13] http://www.longislandgreenhomes.org/
[14] http://www.molloy.edu/about-molloy-college/community-and-institutes/the-sustainability-institute/program-description
[15] The inventory included a variety of different greenhouse gases, such as carbon dioxide, methane and nitrous oxide, expressed in terms of the global warming potential in equivalent units of carbon dioxide (CO2e).

and Suffolk counties. NYIT released the results of the inventory as a report and interactive website[16] in 2013. The "*Long Island Carbon Footprint Project*" provides an inventory and analysis for 2010 and comparisons to 2005 emissions. The website also hosts an interactive map that provides emissions data by sector, source, region, and municipality. The Inventory methodology utilized by NYIT was based in large part on the protocols developed by the New York State ("NYS") GHG Protocol Working Group that was administered by the New York State Energy Research and Development Authority ("NYSERDA"). The LI GHG inventory includes the following sources:

- Fuel use (oil and natural gas) and electricity
- Transportation
- Industrial processes
- Agriculture[17]
- Waste (wastewater and solid waste)
- Land use, land-use change, and forestry

The inventory utilizes data from the following sectors:

- Residential - building energy consumption
- Commercial and Industrial - building energy consumption
- Municipal - building energy consumption (included in commercial sector)
- Land Transportation - vehicle and fuel types, vehicle miles traveled (VMT)
- Marine Transportation - recreational only
- Solid Waste - generation rates and disposal types
- Waste Hauling - types and destinations
- Wastewater Treatment –wastewater treatment plants, and on-site wastewater systems
- Land Use - agriculture, forested areas, open space
- Streetlights - type

Most data collected in the inventory are parsed by taxing jurisdictions (town, county, and city) and in some cases by zip code. Other data were from the following sources:

- LIPA electric data by municipality (including villages and some unincorporated areas)
- National Grid gas data by zip code
- Fuel Oil – from the Oil Institute of Long Island
- Transportation data – by municipality, but includes vehicles traveling through

The NYIT project documented a significant reduction in emissions on Long Island from 2005-2010. As a region, Long Island reduced its overall emissions by 9.75 percent from 2005 to 2010. The following

[16] The full report can be downloaded as a .pdf file at http://www.nyit.edu/images/uploads/2013/academics/LICFP_Report_v2_2.pdf

[17] The agriculture sector GHG emissions were calculated in the 2005 ICLEI analysis but have not been computed for 2010 due to lack of appropriate data. See http://www.nyit.edu/carbonfootprint/report/ for more information.

breakdown of GHG emissions for the Town of East Hampton was compiled by NYIT as part of their comprehensive GHG emissions inventory for Long Island's Nassau and Suffolk counties:

Town of East Hampton GHG Emissions: 2005 - 2010 (MT CO2e)		
Source	**2005**	**2010**
Electricity	183,936	190,462
Natural Gas	27,317	28,085
Fuel Oil	60,653	52,472
Gasoline	47,180	35,446
Diesel	45,844	45,963
Total	**364,930**	**352,428**

The NYS GHG Protocol Working Group also developed a template for future emissions tracking by municipalities. That template was populated with local data for each sector from the spreadsheets developed by NYIT. The template contains the raw data, calculations, emissions factors, and methodology used for the "*Long Island Carbon Footprint Project*". The template will be used for tracking of future Town of East Hampton GHG emissions.

Greenhouse Gas Emissions Reductions Targets

Scientific consensus suggests that an 80 percent reduction in GHG emissions below 1990 levels by 2050 is necessary to reduce the impact of climate change. New York State policy has set this as a long-term target for statewide GHG emissions. The Town of East Hampton has moved beyond the statewide target and committed to one of the most aggressive energy use/GHG emissions reduction policies in the United States. The Town's commitment to using 100% renewable energy sources for community-wide electricity consumption by 2020 and the equivalent of 100% renewable sources across all sectors by 2030 is the first such policy to be passed on the east coast of the U.S.

Government Operations Goals

The Town of East Hampton has direct control over a number of buildings and other facilities and a fleet of vehicles. Investment in and management of these assets can make significant changes in energy use and GHG emissions. The Town of East Hampton 100% renewable resolution includes all town facilities and fleet energy use.

Community-wide Goals

As a Town, East Hampton government has direct control of the policies that impact community emissions, including zoning authority/control over land use. This level of authority allows the Town to pursue emissions reductions for the built environment and transportation sector. These programs and policies are highlighted in Section 3 of this Plan.

There is reason to be somewhat optimistic concerning community-wide reductions in GHG emissions. The "*Long Island Carbon Footprint Project"* found that overall emissions in the Town of East Hampton dropped from 364,930 metric tons CO_2e in 2005 to 352,428 metric tons (MT) CO_2e in 2010, a reduction of approximately 4 percent. Analysis by the Sustainability Institute at Molloy College indicates that already planned changes to the Long Island Power Authority ("LIPA") electric generation fleet on Long Island, along with projected reductions from energy efficiency programs and investments in renewable energy would reduce the carbon emitted by electric generation by an amount approximately equal to 10 percent of Long Island's overall GHG emissions in 2010.

Vehicle related emissions make up about 31 percent of Long Island's total GHG emissions. Emissions from on-road vehicles dropped from 12,960,118 MT CO2e in 2005, 10,854,420 in 2010, a drop of 16.25 percent, even though vehicle miles traveled increased slightly during that period. This is believed to be due primarily to consumers choosing more fuel-efficient vehicles. It is anticipated that increases in federal fuel efficiency standards for new vehicles (new CAFE standard of 54.5 mpg by 2025) will have a significant effect on reducing GHG emissions in the Town of East Hampton, as these more efficient vehicles displace the existing fleet.

Climate Smart Community Certification

The Town of East Hampton is participating in the recently-launched Climate Smart Communities ("CSC") certification process to document the efforts being made by the Town. The CSC certification program provides municipalities a unique platform to share and promote their climate action achievements. It is designed to align with the ten CSC pledge elements, which were adopted by the East Hampton Town Board on March 4, 2010 (RES 2010-209). The certification program awards communities using a point-based rating system based on four levels: Certified (150 pts), Bronze (250 pts), Silver (350 pts), and Gold (450 pts). There are over 120 climate actions that generate points towards a community's CSC certification. Out of these 120 actions, 13 have been designated as "priority" actions, which are critical activities required across all levels of certification. The chart below provides a summary of the possible certification points based on these ten pledge elements and the points that are anticipated for the Town's actions as described in this Climate Action Plan. The number of points that will ultimately be approved for the Town will depend on how well the Town's actions correspond to the certification program's detailed requirements. It appears from the chart that the Town could qualify for Bronze Certification, though it is possible that they could qualify for a higher certification level in the future. The full list of possible and anticipated certification points is found in Appendix B.

Table 1: Summary of CSC Certification Points by Pledge Element

Pledge Element	Possible Points	Percent of Total Points	Anticipated Points
Pledge Element 1: Pledge to Combat Climate Change by Becoming a Climate Smart Community	31	4%	31
Pledge Element 2: Set Goals, Inventory Emissions, Develop a Plan	40	5%	36
Pledge Element 3: Decrease Energy Demand from Local Government Operations	138	16%	27
Pledge Element 4: Encourage Renewable Energy for Local Government Operations	62	7%	30
Pledge Element 5: Realize Benefits of Recycling and Other Climate-Smart Solid Waste Management Practices	49	6%	15
Pledge Element 6: Reduce Greenhouse Gas Emissions Through Use of Climate-Smart Land Use Tools	109	12%	42
Pledge Element 7: Plan for Adaptation to Unavoidable Climate Change	117	13%	54
Pledge Element 8: Support a Green Innovation Economy	56	6%	12
Pledge Element 9: Inform and Inspire the Public	18	2%	8
Pledge Element 10: Commit to an Evolving Process	11	1%	3
Innovation	15	2%	15
Performance Bonus	230	26%	0
TOTAL	**876**	**100%**	**273**

2 MUNICIPAL FACILITIES AND OPERATIONS

2.1 Buildings

Reducing energy consumption through energy efficiency improvements and conservation measures in existing buildings is one of the most cost effective ways to reduce greenhouse gas emissions. At the same time, this work will increase economic activity by creating local jobs and reducing municipal energy costs for taxpayers.

The Town of East Hampton owns and manages 30 buildings or independent suites. It has completed audits of the following buildings:

- Senior Center (2010)
- Highway Department Garage (2010)
- Ditch Plains Comfort Station (April, 2007)
- East Lake Drive Comfort Station (April, 2007)
- Lion's Field Comfort Station (April, 2007)
- Soccer Field Comfort Station (April, 2007)
- West Lake Comfort Station (April, 2007)
- Marine Museum (April, 2007)
- Police Headquarters (April, 2007)
- Montauk Police Substation (April, 2007)
- Parks Department (September, 2006)
- Police Annex (September, 2006)
- Town Attorney and Purchasing Trailers (September, 2006)
- Compost Building (January, 2001)
- Highway Department (January, 2001)
- Trustees Donald Lamb Building (January, 2001)[18]
- Shellfish Hatchery (January, 2001)
- Scavenger Waste Plant (October, 2000)[19]

The Town of East Hampton has been an early adopter of many of these energy efficient technologies, which has resulted in significant returns in terms of energy and cost savings. The East Hampton Comprehensive Energy Vision ("CEV") calls for an economically efficient and environmentally sustainable comprehensive municipal energy policy. The Town's Natural Resources Department and Energy Sustainability Committee ("ESC") have accomplished the following first steps to further this vision:

[18] Building decommissioned/demolished/removed
[19] Building decommissioned/demolished/removed

2.1.1 Past Actions and Achievements

- Upgrades of Heating, Ventilation, and Air Conditioning (HVAC), insulation, windows and lighting in several buildings;
- Invited one representative, approved by the East Hampton Town Board, from Public Service Enterprise Group ("PSEG") Long Island and East Hampton Village to serve on the Energy & Sustainability Advisory Committee;
- Obtained funding from NYSERDA for the development and implementation of the CEV;
- Formulated a public outreach and participation process;
- Developed an intergovernmental outreach program and coordinate with other organizations (*i.e.* Suffolk County Planning, PSEG, NYSERDA);
- Established specific goals and milestones;

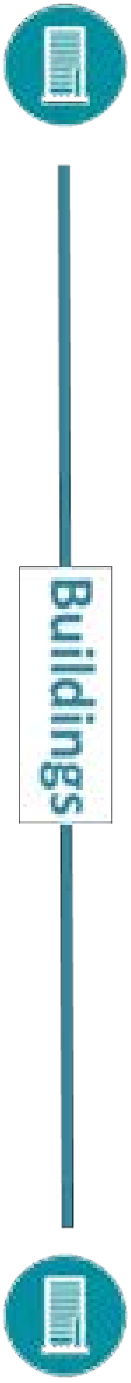
2.1.2 Projects and Policies Currently Under Consideration, Development or Implementation

- The Town's Natural Resources Department and Energy Sustainability Committee have outlined the following next steps to further this vision:
    - Convene technical experts/consultant to create an energy policy plan as will be outlined in the Decentralized Resilient Energy Assessment and Management, "D.R.E.A.M.", Plan;
    - The D.R.E.A.M. Plan will offer a roster of actionable policy options to reduce energy waste, increase renewable energy sources, and lower GHG emissions from municipal facilities, fleet, and operations;
    - Work towards a community solar awareness project in partnership with the Town of Southampton;
    - "NY Prize" – East Hampton Microgrid Project: Phase I (Feasibility Study);
    - "#UnplugEH" – A community outreach implementation program to communicate community goals and educate the public on phantom energy and identifying phantom devices;
    - Planned development of a Town Hall Annex building to consolidate all departments within the Town Hall Campus. The building will incorporate green technologies and solutions.

2.1.3 Potential Future Actions and Initiatives

- Consider and implement significant policy options and transformative initiatives offered in the D.R.E.A.M. Plan mentioned above, including the following:
- Continue with retrofits of municipal facilities, including: solar and renewable technologies, lighting, white/green roofs, improved insulation, and window replacements;
- Consider initiatives that modify behavioral patterns to increase energy efficiency in municipal operations;

- Consider policy requiring compliance with LEED principles, or equivalent, for new construction and major renovations of Town buildings, and for projects "built to suit" for long-term lease.
- Consider energy performance contracts for selected buildings;
- Consider policy requiring green roofs or cool roofs for new construction or renovation of facilities with flat roofs;
- Explore energy modeling technologies for Town buildings, referencing the Advanced Energy and Research Technology Center at SUNY Stony Brook University for assistance with new and emerging technologies;
- Explore partnerships with BOCES to encourage energy efficiency of school districts within the Town;
- Consider implementing web-based interface and dashboard of building automation systems to monitor and control the entire Town-owned building inventory. This can be electronically linked to building drawings, equipment operation guides, and maintenance records;
- Consider making municipal facilities available for third parties to install and test new or emerging technologies and systems;
- Consider adopting a comprehensive internal best practices policy to lead by example in addressing carbon monoxide hazards; establish best practices for maintenance of mechanical systems in municipal owned and operated buildings.



2.2 Renewables

Renewable energy technologies are clean sources of energy that have a lower environmental impact than conventional energy technologies. Most renewable energy investments are spent on materials and workmanship to build and maintain facilities, rather than on energy imports. This helps to create local jobs, lower greenhouse gas emissions, and reduce reliance on foreign sources of energy. As an example, the solar PV industry creates 22.4 jobs per megawatt while natural gas in comparison creates 1.1[20].

2.2.1 Past Actions and Achievements

- In May 2014, the East Hampton Town Board voted unanimously to meet 100% of community-wide electricity needs with renewable energy sources by 2020;
- Installed two electric vehicle charging stations at Town Hall and East Hampton Airport;
- Successfully awarded New York State's "NY Prize" to develop a feasibility study for the East Hampton Microgrid Project;
- Installed solar panels at Bluff Road Town building and the Montauk Police substation.

2.2.2 Projects and Policies Currently Under Consideration, Development or Implementation

- In total, the Town has identified ten municipal properties as sites for future solar/renewable energy production, including landfills, brush dumps and rooftops. The 3 properties selected by the Town and Long Island Power Authority will produce up to 4.8 megawatts of power.
- The Town is in the process of preparing a response for the 2015 PSEG-Long Island South Fork Resources RFP[21] to address the issues of load growth, power supply and transmission needs in East Hampton.

2.2.3 Potential Future Actions and Initiatives

- Develop and adopt comprehensive renewable energy codes to facilitate and regulate the siting of renewable energy technologies, i.e. a code for the siting of small wind turbines, larger solar arrays, etc.
- Monitor the technology development of other renewable energy technologies, including biofuels and tidal or wave energy devices and consider pilot projects as appropriate.
- Explore educational partnerships and training programs.
- The D.R.E.A.M. Plan will lay out a number of options for the deployment of renewable energy technologies and policies in the Town of East Hampton. See section 2.1.2 for more thorough information.

[20] EPA Clean Energy Strategies for Local Governments On-site Renewable Energy Generation (2008). Figure 7.2.1. Job Creation From Renewable Energy Projects per MW Capacity. <www.epa.gov/statelocalclimate/documents/pdf/on-site_generation.pdf>

[21] See https://www.psegliny.com/page.cfm/AboutUs/Proposals/SouthFork

2.3 Exterior Lighting

Improving the efficiency of exterior lighting is one of the simplest, yet most effective changes to be made at the municipal level. The typical warm LED street light uses 50 percent less energy per lumen than high-pressure sodium lighting, has an average lifespan 10 years longer than conventional lighting, and lower maintenance costs. The Town has 728 street lights.

2.3.1 Past Actions and Achievements

- Town adopted an outdoor lighting ordinance to reduce light pollution, which also reduces energy use and operational costs: "Dark Skies Equivalent Outdoor Lighting Standards".

2.3.2 Projects and Policies Currently Under Consideration, Development or Implementation

- Consider timing and light sensors and/or remote energy management control of streetlights.

2.3.3 Potential Future Actions and Initiatives

- Perform audit of all exterior lighting in the Town, including street lights, traffic lights and parking lot lights.
- Convert metal halide and high-pressure sodium lighting fixtures to more efficient warm LED lights, specifically low Kelvin (2700K or lower). Depending on the type of exterior lighting, it may be possible to replace only the bulb rather than the whole fixture.
- Review placement, public benefit usefulness, hours of operation, fixture types, shielding, bulb types, light levels and uniformity for all municipal exterior lighting. Perform a Return on Investment report for potential opportunities to save energy.
- Recommend that shielding or removal of streetlighting that illuminates nature preserves, beaches, and waterways (with the exception of dock areas used at night).
- Install middle of the night shut offs for exterior lighting which is not necessary for pedestrian passage late at night.
- Explore feasibility of renewable sources of power for streetlights.

2.4 Fleet

There are numerous benefits to developing a more fuel efficient fleet. By purchasing and driving vehicles that have a higher fuel efficiency rating, the Town can decrease greenhouse gas emissions while cutting fuel costs. The initial additional cost associated with more fuel efficient vehicles can typically be recouped in a relatively short time.

The Town of East Hampton has a fleet that includes: 1 bus, 128 heavy trucks, 66 light trucks, 72 passenger vehicles, 4 hybrids and 16 marine boats. A breakdown is shown below:

Table 2. Town of East Hampton Fleet

2014–Fuel Metric in Gallons	Number of Vehicles	Fuel	Department
1312.10	Not Available	Gas	VFW
505.80	1	Gas	Supervisor
37.90	1	Hybrid	Pool Car
26.00	1	Gas	Town Clerk
651.40	2	Gas	Land Acquisition
14.20	1	Gas	Information Technology
186.60	1	Gas	Engineering
16805.30	27	Gas/Diesel	Parks
1479.40	3	Gas	Lifeguards
1249.50	4	Gas	Animal Control
375.20	3	Gas/Hybrid	Planning
958.90	4	Gas	Natural Resources
1310	4	Gas/Diesel	Fire Marshall
2734.10	5	Gas	Ordinance
56.20	1	Gas	Trustees
1354.30	4	Gas	Building Inspector
776.90	6	Gas	Assessors
1455.60	2	Gas	Airport
8426.60	17	Gas	Harbor and Docks
241.40	13	Gas/Diesel	Sanitation
11732.50	7	Gas	Senior Transportation
877.80	4	Gas/Hybrid	Home Aid
77.80	1	Hybrid	Housing and Com. Dev.
1559.20	8	Gas	Aquaculture
1762.50	112	Gas/Diesel	Highway
42942.87	52	Gas/Diesel	Police
98910.07	286		TOTAL

2.4.1 Past Actions and Achievements

- Installed two electric vehicle charging stations at Town Hall and East Hampton Airport.
- Established three year baseline inventory of town vehicle fleet including marine vehicles with annual fuel use and costs.

2.4.2 Projects and Policies Currently Under Consideration, Development or Implementation

- Replace or convert vehicles, focusing on alternative fuel vehicles, hybrids and electric vehicles to improve gas mileage, reduce emissions, and cut life-cycle/operational costs.
- Implement a green purchasing policy for fleet vehicles. Consider that energy savings can be deposited into a future Town environmental savings fund and be used to fund future municipal purchases.

2.4.3 Potential Future Actions and Initiatives

- Consider municipal capital leasing in place of purchases to eliminate upfront cost. An additional benefit is that capital lessees typically own the vehicle at the end of the lease.
- Determine best locations for additional charging/fueling stations, in coordination with other municipalities and private facilities. Potential locations could include municipal facilities, transit stations, schools, and office complexes.
- Explore the feasibility of reducing fleet size. This could be achieved through vehicle sharing between departments and sharing between the Town and special districts, such as the school district.
- Install GPS tracking and anti-idling technology in fleet vehicles.
- Require use of compressed natural gas (CNG) vehicles in future waste hauling contracts.
- Consider policies and programs which would offer town staff and others increased and attractive public transportation options.

2.5 Solid Waste and Wastewater

Wastewater management is generally managed by thousands of individual septic systems. There are several small-scale sewage treatment plants within the Town's geographic borders, including a decommissioned Town-owned scavenger waste plant, the Village of Sag Harbor sewer district, and two small private wastewater facilities. Improving or upgrading septic systems within the Town is vital to reduce nitrogen discharges to the ground and surface waters. This helps to maintain healthy wetlands, bays, and lakes that are important to improve our resiliency against increased storm surges and flooding due to climate change. In September of 2014, the Town of East Hampton completed a Town Wide Comprehensive Wastewater Management Plan (CWMP) that was prepared by Lombardo Associates, Inc. The CWMP includes a lot by lot analysis of wastewater management needs and solutions for each of the Town's approximate 20,000 developed properties. Each property is classified as to its adequacy of its wastewater system and its impact on water quality. Each property was evaluated to assess its compliance with each of eleven (11) needs categories, which ranged from groundwater bacterial contamination, legal compliance, nitrogen impact acceptability to having sufficient space for a code compliant system. Solutions were developed for properties that had needs and could rely upon individual systems. Community solutions were developed for needs areas, in particular for downtown Montauk, the Docks and Ditch Plains, that cannot rely on individual systems. Treatment and disposal/reuse sites were identified and preliminary project cost and user charge estimates prepared.

An initial assessment of water quality issues in each of the Town's eight (8) major watersheds was performed along with the degree to which nitrogen and phosphorus loadings from various sources are affecting water quality. Additional watershed evaluations that are needed to refine water quality needs were identified. Suffolk County is currently performing several planning and feasibility studies to improve and streamline wastewater treatment throughout the County.

Efficient management of solid waste is also vital to the health of the Town, as every step in the life cycle of municipal solid waste (MSW) management contributes to greenhouse gas emissions— from the production of the products that eventually become municipal solid waste to its collection and eventual decomposition.

2.5.1 Past Actions and Achievements

- Establish East Hampton Recycling and Litter Committee (RES-2006-286, RES-2012-228, RES-2014-1045)
- Adopted single-use checkout plastic bag ban, LOCAL LAW NO. 42 of 2014. Effective September 22, 2015 (RES-2014-1513)
- Establish a Water Quality Advisory Committee (RES-2015-717)
- Close the Scavenger Waste Facility located at Springs Fireplace Road (RES-2014-731)
- Montauk Recycling Bin Project with The Montauk Chamber of Commerce (RES-2013-441)

2.5.2 Projects and Policies Currently Under Consideration, Development or Implementation

- Require the use of low-flush toilets or waterless urinals for municipal new construction.
- Amend the Towns Comprehensive Plan to include the CWMP.

2.5.3 Potential Future Actions and Initiatives

2.5.3.1 Wastewater

- Explore the feasibility of a decentralized wastewater district.
- Establish a Water Quality Improvement District.
- Consider a Water Protection Fee paid by all property owners. The fee would be based on water use, assessed value, on-site system, or sewered connection. All occupied properties contribute to higher nitrogen concentrations in groundwater and local waterways. Utilize the Water Protection Fee to upgrade onsite systems, construct new community wastewater treatment systems.
- Consider gray water reuse systems for appropriate Town facilities, such as golf courses and parks.
- Consider a referendum to authorize Community Preservation Funds to be utilized for Water Quality Improvement Projects including wastewater improvements.

2.5.3.2 Solid Waste

- Implement paperless office preference in Town offices.
- Ban use of disposable Styrofoam products throughout the Town.
- Explore the feasibility of a regional composting initiative - potential partners: five east end towns.

2.6 Operations

Environmentally manufactured products, "green" services and operations have a reduced effect on human health and natural resources when compared with competing products or operations. Often, small changes to purchasing and operating protocols contribute significantly to meeting the Town's environmental goals, improving worker safety and health, and reducing health and disposal costs. These small shifts in the selection of products and office operational practices can have a major impact on energy use and expenses.

2.6.1 Past Actions and Achievements

2.6.2 Projects and Policies Currently Under Consideration, Development or Implementation

- Implement energy policy that includes use of programmable thermostats, automatic shutdown of computers, installation of light sensors, occupancy-driven heating and cooling, double-sided copying, reminders to shut off lights, no idling policy, and recycling in Town buildings.

2.6.3 Potential Future Actions and Initiatives

- Implement a green-purchasing policy. Energy savings can be deposited into a Town environmental savings fund and used to fund future Climate Smart projects and purchases. Remaining funds could be apportioned to fund community-wide Climate Smart projects;
- Implement a group purchasing policy. Where possible, look to collaborate with other municipalities and agencies in an effort to reduce capital costs. Organizations such as the Long Island Purchasing Council (LIPC) can help to facilitate group purchase agreements;
- Implement asset management system to track material, equipment, and labor expenditures to identify savings opportunities.

3 COMMUNITY-WIDE POLICIES AND INITIATIVES

CLIMATE SMART COMMUNITIES DEMONSTRATION PROJECT
TOWN OF EAST HAMPTON RENEWABLE ENERGY POLICY

On May 20, 2014, the East Hampton Town Board voted unanimously to meet 100% of community-wide electricity needs with renewable energy sources by 2020. Furthermore, the Town aims to meet 100% of community-wide energy consumption in all sectors (electricity, heating, and transportation) with renewable energy sources by 2030.

The Town of East Hampton is the first municipality on the east coast to adopt such a goal. Aspen, CO and San Francisco, CA are among a handful of US cities that have set 100% renewable energy goals to be met before the end of the decade. (Excerpt from Renewable Energy Long Island, July 7, 2014)

3.1 Community-Wide Policies and Initiatives to Promote Renewable Energy

With direct control over local zoning and land use, the Town of East Hampton can establish codes, policies, and guidelines to encourage the installation and use of renewable sources of energy.

3.1.1 Laws, Codes and Regulations in Effect

- In May 2014, the East Hampton Town Board voted unanimously to meet 100% of community-wide electricity needs with renewable energy sources by 2020;
- Fast track solar installation permitting. No permit fee for residential solar, although a certified plan or construction drawings of the solar panel installation is still required;
- Electric Vehicle Supply Equipment has been identified as accessory use with no building permit required for Level 1 or 2 charging stations.

3.1.2 Potential Future Actions and Initiatives

- Provide incentives, such as direct monetary rebates, aggregation purchases, or property tax abatements, for energy efficiency improvements, solar energy and other forms of renewable energy installations;
- Participate in inter-municipal efforts to develop unified commercial solar and wind permitting, and adopt fast-track permitting for commercial properties once developed;
- Adopt standards for geothermal heating and cooling systems;
- Consider a benchmarking residential and commercial properties for sale

3.2 Residential Buildings

According to the US Energy Information Administration most recent Residential Energy Consumption Survey, US homes built in 2000 and later consume only 2 percent more energy on average than homes built prior to 2000, despite being on average 30 percent larger. The same agency also found a decline in the proportion of energy consumption used for heating and cooling (48 percent in 2009 vs. 58 percent in 1993). The study attributed the decline to increased adoption of equipment that is more efficient, better insulation, more efficient windows, and population shifts to warmer climates. Some of the decline is also due to increased energy consumption for appliances and electronics. Although larger appliances such as refrigerators and clothes washers are more efficient, the increasing number of energy-consuming devices has offset these efficiency gains.

3.2.1 Past Actions and Achievements

- Participated in Long Island Green Homes program, which promoted home energy audits and performance upgrades to residents;
- Developed flood and emergency preparation materials for distribution to homeowners. Potential information could include emergency preparedness procedures, directory of local resources and services, as well as information about flood insurance, home retrofits and resilient building material requirements for properties within flood hazard areas;

3.2.2 Laws, Codes and Regulations in Effect

- Solar fast track permitting
- Require home sellers to provide an elevation certificate for properties located within the floodplain/flood hazard area. Elevation certificates are an important part of the flood insurance process - securing one will enable a homebuyer to obtain an accurate flood insurance premium cost prior to closing.
- Clearing restrictions 1984, 1996 and 2004
- Coastal setback requirements (RES-2010-526 & RES-2015-912)
- Sanitary systems Inspections Chapter 210

3.2.3 Potential Future Actions and Initiatives

- Consider requiring newly built or substantially reconstructed subject dwellings to be rated by an independent Residential Energy Services Network (“RESNET”) certified home energy rating system (“HERS”) rater and to achieve a tiered home energy rating index of 60 or lower;
- Consider requiring Energy Performance Certificates (“EPC”) at point of sale or rental: this low-cost strategy targets residential energy GHG emissions, the largest single portion of the region’s GHG emissions, by requiring homeowners or landlords to issue energy performance certificates (EPCs) at the point of sale or rent;
- Offer refunds of LEED certification fees for eligible projects;

- Offer property tax abatements for new or renovated homes that meet LEED or similar standards;
- Participate in carbon monoxide awareness campaign to promote health and safety of residents and to encourage home energy audits and regular maintenance of combustion appliances for both safety and energy efficiency;
- Continue to promote residential recycling and home composting campaign;
- Explore feasibility of permitting wind turbines on residential properties;
- Explore energy-efficiency measures for multi-family housing. These properties can offer unique opportunities due to shared systems as well as provide ideal locations for renewable energy generation;
- Consider requiring new residential construction to incorporate stormwater management features including pervious surfaces/paving, green/white roofs, catch basins, water recycling for irrigation/landscaping etc.;
- Consider providing free water and energy audits for low-income units in the Town;
- Consider rebates for upgrading substandard sanitary systems (see section 208) or rebates for installing alternative onsite.
- Consider energy and greenhouse gas emission impacts when making zoning decisions or establishing new zoning regulations.

3.3 Commercial and Industrial Buildings

Reducing energy and operating costs for local businesses helps both the environment and the local economy.

3.3.1 Past Actions and Achievements

- New York Prize (2015 Community Microgrid Feasibility Study)

3.3.2 Laws, Codes and Regulations in Effect

- Commercial lighting code & policy requires the minimum site lighting required for safety and ensures that light is not wasted[22]

3.3.3 Potential Future Actions and Initiatives

- Introduce a code amendment to incentivize or require renewable energy sources on commercial/industrial properties;
- Explore the feasibility of requiring or incentivizing white/green roofs for commercial/industrial properties;
- Explore the feasibility of requiring bicycle racks for commercial/industrial properties;
- Explore the feasibility of requiring or incentivizing electric vehicle charging stations at employment or shopping centers;
- Develop an expedited permitting process for private installation of alternative fuel and electric vehicle charging infrastructure at commercial/industrial properties;
- Develop expedited permitting for site plans that incorporate sustainable features and/or practices;
- Explore the feasibility of a local green business incubator;
- Explore the feasibility of energy-efficiency benchmarking for commercial properties above a certain size (see NYC Local Law 84 of 2009);
- Collaborate with local utilities to review, revise, and promote energy-efficiency incentives for large commercial properties;
- Consider opting "in" when Suffolk County becomes a member and works with the New York State Energy Improvement Corporation's Energize NY ("PACE") Benefit Financing Program/Energize NY (local level). The Benefit Financing Program offers financing for energy upgrades on real property using PACE (Property Assessed Clean Energy) financing. The Energize NY program provides marketing and outreach assistance for energy upgrade programs at the local level. Establish PACE funding mechanism;
- Require LEED standards for new construction of large commercial buildings;
- Offer refunds of LEED certification fees for eligible projects;
- Offer property tax abatements for new or renovated commercial buildings that meet LEED or similar standards;

[22] i.e. light fixtures should direct light only to areas proposed to be lit and motion controls and/or timers are used to limit the time a property is lit to the time lighting is actually needed.

- Require new commercial buildings to be designed to be 20 percent more energy efficient than if built to New York State Code requirements, as shown by "COMcheck";
- Consider requiring new commercial buildings to be solar ready;
- Consider energy and greenhouse gas emission impacts when making zoning decisions or establishing new zoning regulations.

3.4 Transportation

The Town of East Hampton shall meet the equivalent of 100% of our economy-wide energy consumption with renewable energy sources by 2030, and this includes the transportation sector.

3.4.1 Past Actions and Achievements

- The Town has installed two electric vehicle charging stations at Town Hall and East Hampton Airport;
- The Town has completed, adopted, and is in the process of implementing its "Complete Streets" policy[23].

3.4.2 Potential Future Actions and Initiatives

- Create municipal actions plans to implement the Volpe and SEEDs study recommendations;
- Continue work to develop Town-wide bicycle network, including a bike rental network, the provision of public parking (racks, lockers) and site plan requirements for bicycle racks/access;
- Provide incentives for carpooling/vanpooling: free park and ride lots, preferred parking at transit hubs etc.;
- Develop a car-sharing network: promote use of public/more efficient forms of transportation, such as local shuttles, trains and buses;
- Site and construct an intermodal transit hub, attempt to coordinate schedules across modalities.
- Develop a town-wide sidewalk plan to encourage pedestrian activity throughout the Town while preserving the town's rural character ;
- Utilize transportation assets for multiple functions such as road energy systems that use heat captured by asphalt to store and pipe heated water to nearby buildings;
- Develop expedited permitting processes for private installation of alternative fuel and electric vehicle charging infrastructure;
- Create a pilot demonstration project by constructing a solar roadway and/or a solar walkway;
- Develop additional bike lanes and safe bike routes to encourage safe and green transportation in our hamlets;
- Consider to use of municipal parking lots for share ride to alleviate parking issues at beaches.
- Encourage private enterprises such as "Free Ride" that help to reduce the use of private vehicles for transportation within the town.
- Examine the infrastructure necessary for increased public transportation use.

[23] RES-2011-650 http://easthamptontown.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=1406&MediaPosition=1848.000&ID=9886&CssClass=

3.5 Educational Initiatives

The Town of East Hampton has an active community outreach effort related to environmental issues, producing educational materials on solid waste, recycling, and reference guides on energy efficiency, residential retrofits, and green living.

The Natural Resources Department partners with other organizations such as the National Oceanographic and Atmospheric Administration (NOAA), National Disaster Preparedness Training Center (NDPTC), Renewable Energy Long Island, Peconic Estuary Program, and Peconic Institute to provide a multitude of educational workshops related to climate change adaptation and improving resiliency.

3.5.1 Current Programs and Policies

- Continue to provide educational workshops to the public to increase awareness of the Town's energy goals, resiliency, and climate change adaptation;
- Public stewardship of endangered species protection;
- Long Island Green Homes Consortium;
- #UnplugEH;
- Partner with youth groups such as the Boy Scouts, to conduct MS4 stormwater compliance, GIS mapping, and education;
- Green Reach Infrastructure Demonstration G.R.I.D. Projects at Three Mile Harbor Accabonac Harbor, and Lake Montauk;
- Conducting educational programs related to energy utilizing FLIR devices for students to conduct home energy audits.

3.5.2 Potential Future Actions and Initiatives

- Consider establishing a community group outreach partner network that could communicate important Town information to their own respective members or contact list;
- Build local support for the inclusion of wind energy as a significant alternative to fossil fuels;
- Initiate a dialogue with all stakeholders who are engaged with wastewater/water quality management on benefits of a clean energy agenda to their local objectives;

3.6 Land Management

The Town of East Hampton is a leader in protecting its environment, community character and sense of place through the acquisition and management of the community's unique natural environments, open spaces, farms and historic places. The Town's preservation goals and objectives are protection of environmental quality, habitat protection, preservation of geological features, wetlands protection, providing recreational and educational opportunities, maintaining buffers to roads and developed areas, watershed protection, maintaining clean groundwater recharge, historic preservation, providing land for park use, and heritage preservation. The Town's long standing policies of protecting large blocks of open space, confining intense development to existing commercial centers and limiting suburban sprawl have served to create development patterns that facilitate the policies and actions discussed in this plan.

The Town of East Hampton Community Preservation Fund is a 2% transfer tax for the specific purpose of preserving the community character of the East End of Long Island.

3.6.1 Laws, Codes and Regulations in Effect

- Community Preservation Fund has had a cumulative total revenue of $289,911,762 as of November 30, 2014;
- As of September 16, 2015, the Town has acquired interests or rights of 296 parcels which encompass approximately 1941 acres.

3.6.2 Current Projects and Policies

- Town continues to evaluate parcels available for acquisition;
- Town has been awarded $9.9 million from the United States Department of Agriculture to purchase 16 properties in Lazy Point to convert the land back to its natural state for floodplain management purposes.

3.6.3 Programs and Policies under Consideration for Potential Future Action

- Incentivize mixed use/mixed income development in village/hamlet centers, downtowns, and transit hubs by reducing Water Protection Fee (see section above). Discourage development in less desirable areas (valuable open space/undeveloped land etc.) by increasing Water Protection Fee and making program revenue neutral;
- Continue the Town's policy of limiting commercial sprawl and confining its intense development to existing commercial centers.
- Consider creating an erosion control district for downtown Montauk
    - Town would like to advance with more detailed parcel/economic analysis;
    - Local Waterfront Revitalization Plan has already identified vulnerable infrastructure, including fuel tanks and substations.
- Consider policies for maintaining and improving ecosystem services for e.g. agriculture, horticulture and fishery.

4 CLIMATE CHANGE, PLANNING AND ADAPTATION

4.1 Climate Change in New York

The following summary of climate change effects is taken from the "*Climate Smart Resiliency Planning Evaluation Tool for New York State Communities"*, developed by the New York State Climate Smart Communities program.

4.1.1 Observed Effects of Climate Change

The New York State Energy Research and Development Authority (NYSERDA) released a report in 2011 that evaluated scientific work to date and discussed the projected the effects of climate change in New York over the next 100 years. The report, "*ClimAID: the Integrated Assessment for Effective Climate Change Adaptation Strategies in New York State"* is the work of more than 50 scientists. The report examines the effect of climate change on a number of sectors in seven geographic areas of the State. Those sectors include water resources, coastal zone, ecosystems, agriculture, energy, transportation, telecommunications, and public health. *ClimAID* noted the following critically important observations:

- *Annual average temperatures have risen about 2.4 °F since 1970, with winter warming exceeding 4.4 °F;*
- *Sea level along New York's coastline has risen about a foot since 1900;*
- *Intense precipitation and heavy downpours have increased in recent decades.*

4.1.2 Projected Climate Changes

The "ClimAid" report released by NYSERDA in 2011, projected climate changes through a 100 year window. Current climate change scientific investigation has collapsed this benchmark. As the world continues to track the rise of carbon dioxide concentrations in the atmosphere, the science community continues to model new projections using timeframes as short as 5 to 10 year time frame. If a community is not successful in adapting and coping with the accelerating impacts from sea rise, coastal erosion or more frequent and extreme weather events, the 100 year time frame is not relevant. After Super Storm "Sandy" in 2012, there is no climate change mystery about its impacts on the town of East Hampton.

After Super Storm Sandy, NYSERDA issued an updated report as a supplement[24] to the 2011 ClimAid report detailing more recent findings of climate trends and future projections for Long Island and the New York metro region.

> *"The new climate projections for New York State use methods developed by the New York City Panel on Climate Change (NPCC) to provide updated climate information for the City following Hurricane Sandy (NPCC, 2014). The observed trends and future climate*

[24] Horton, R., D. Bader, C. Rosenzweig, A. DeGaetano, and W. Solecki. 2014. Climate Change in New York State: Updating the 2011 ClimAID Climate Risk Information. New York State Energy Research and Development Authority (NYSERDA), Albany, http://www.nyserda.ny.gov/-/media/Files/Publications/Research/Environmental/ClimAID/2014-ClimAid-Report.pdf

projections in this update report for Region 4 (New York City metropolitan area and Long Island) were created as part of the NPCC process."

According to the updated report, mean annual temperature changes for our region are estimated to range from +1.5 ℉ (low estimate) to +3.2 ℉ (high estimate) in the 2020s. Precipitation changes are projected to range from -1 percent (low estimate) to +10 percent (high estimate) during that timeframe.[25]

Sea level rise at Montauk Point in the 2020s is projected to be between 2 inches (low estimate) and 10 inches (high estimate). By the 2050s, sea level rise is projected (in the high estimate case) to be as much as 30 inches and by 2100 as much as 72 inches.[26]

The updated report includes a number of other projections beginning in the 2020s, including an increase in severe weather events, intense precipitation, and coastal floods and storms.

The original 2011 *ClimAID* report[27] made the following predictions for the next 100 years in New York State:

- *Annual average temperatures in New York State will rise by 4 to 9 °F by about 2080;*
- *Average precipitation will increase five to 15 percent by about 2080, with most of the increase in winter;*
- *Intense downpours will become more frequent;*
- *Short-term droughts will become more frequent;*
- *The number and duration of extreme heat events will increase;*
- *Along the seacoast and tidal portion of the Hudson River (to the Federal Dam at Troy), sea level could rise more than four feet by 2090.*

4.1.3 Projected Effects of Climate Change

The report utilized the predicted climate changes to describe the potential effects on the State's natural resources, built environment, and public health. The following potential effects of climate change from the ClimAID report will affect the residents of the Town of East Hampton:

- Infrastructure damage;
- Disruption of water, transportation, communication, and energy systems;
- More frequent and more intense rainstorms increase localized flash floods;
- Power outages affect apartment dwellers and vulnerable populations in particular;
- Public health impacts;
- Expansion of vector-borne diseases;
- Heat waves leading to increased illness and deaths from heat stress;
- Increased levels of air pollution, causing asthma and other respiratory illness.

[25] Ibid, Table 3
[26] Ibid, Table 4
[27] See http://www.nyserda.ny.gov/climaid

4.1.4 Hazard Mitigation Grant Program

The Hazard Mitigation Grant Program (HMGP) provides grants to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.[28]

As disasters occur, the Federal Emergency Management Agency (FEMA) also makes an additional percentage of the total damage amounts incurred available to local governments having an approved Hazard Mitigation Plan (HMP) for implementing rebuilding projects.

Suffolk County submitted the 2014 Update to the Suffolk County Multi-Jurisdictional Multi-Hazard Mitigation Plan to FEMA in April 2014. The County incorporated data updates from all participants to be included in the Suffolk County Hazard Mitigation Plan Update. The County indicated that its priority and mandate is to ensure that the Plan includes all municipalities that are willing to participate. They emphasize that the consequence of non-participation is the potential loss of federal funding for future hazard mitigation projects.

4.1.5 New York Rising Community Reconstruction Program

Through the New York Rising Community Reconstruction Program (NYRCR), New York State is assisting communities to rebuild better, more resilient and safer through community-driven plans that consider current damage, future threats to community assets, and the community's economic future. In keeping with the National Disaster Recovery Framework, NYRCR Plans consider the needs, risks, and opportunities related to assets in the following recovery support functions: Community Planning and Capacity Building, Economic Development, Health and Social Services, Housing, Infrastructure, and Natural and Cultural Resources. To better align the Town's climate strategies with future funding opportunities, the Town of East Hampton's Climate Action Plan addresses adaptation and mitigation within a similar structure and framework, although it was not specifically part of the NY Rising process.[29] The final plans for the NYRCR communities are available on the Office of Storm Recovery's website: http://stormrecovery.ny.gov . Implementation of those plans will begin in the later part of 2014.

[28] http://www.fema.gov/hazard-mitigation-grant-program
[29] http://stormrecovery.ny.gov/community-reconstruction-program

4.2 Community Self-Assessment and Planning

Performing a risk and vulnerability community assessment is the first step in developing comprehensive adaptation and mitigation strategies addressing climate change impacts on a coastal community. In the Town of East Hampton extreme weather events, rising sea levels, warmer ocean temperatures and coastal erosion are the most damaging effects climate change has on this community. The residential community is at risk from energy, transportation and communication failures, loss of property and homes, failure of the waterfront and ocean economies, and challenges to public health and natural resources.

The "*Climate Smart Resiliency Planning Evaluation Tool for New York State Communities"* recommends a number of measures to increase the resiliency of New York State communities. Most measures begin with an identification of vulnerable assets and populations. A vulnerability assessment is then performed of Town-owned or controlled sites and facilities, infrastructure, contaminated sites, utilities, transportation systems, building stock (commercial and residential), emergency facilities, parks/recreation/public access areas, vulnerable populations (should be updated on a regular schedule and/or as new data becomes available). Finally, an implementation plan is developed and responsibilities assigned for specific actions to individuals or organizations, and timelines are established for each action.

The Town of East Hampton is in the process of implementing two resiliency assessments and planning projects. The first project is the Coastal Erosion Assessment and Resiliency Plan (CARP) being funded by the New York State Department of State. The Second project is being conducted and implemented by Dewberry Consultants and is funded by the New York State Energy Research Development Authority.

4.3 Adaptation Strategies

The terms 'adaptation' and 'resilience' are related but often used interchangeably. A recent article defines 'resilience' this way: *Community resilience is the capability to anticipate risk, limit impact, and bounce back rapidly through survival, adaptability, evolution, and growth in the face of turbulent change*[30]. Adaptation is the set of strategies that communities use to become more resilient. Adaptation strategies to increase the resilience of housing, infrastructure, natural and cultural resources, and health and social service facilities typically fall into the three categories - protection, accommodation, and retreat.

Protection strategies include natural (green or soft) solutions and constructed (gray or hard) solutions. Generally, natural protection strategies, including maintenance of local and regional ecosystems, habitat restoration, coastal buffers, wetland mitigation, urban reforestation, and expanded green infrastructure, are preferred to 'hard' structures. These 'green' solutions offer ecological benefits in addition to their value for adaptation. Certain community assets are location-dependent and therefore 'hard' protection systems may be the only feasible option.

Accommodation strategies do not prevent flooding or inundation, but allow structures to survive (*i.e.,* it makes them more resilient). Examples include elevation of structures and stormwater system improvements.

Retreat strategies do not prevent flooding or inundation but offer options for the loss of use or property value. Examples include buyouts, acquisitions, transfer of development rights, purchase of development rights, rolling easements, and conservation easements.

Still other strategies involve new programs, policies, plans, actions, and data collection. These adaptation strategies are categorized in the NYRCR program as Community Planning and Capacity Building.

Following are the strategies included in Suffolk County's Hazard Mitigation Plan as well as other strategies under consideration. The strategies from the Mitigation Plan and the others are arranged into the Recovery Support Function categories of the NYRCR program as follows.

4.3.1 Community Planning and Capacity Building

- Integrate climate change (including sea-level rise) planning into other plans and documents. To be effective, local comprehensive plans, hazard mitigation plans, emergency management plans, and post-disaster recovery plans should all address the potential impacts of sea-level rise.
- Expand emergency preparedness public awareness campaign, potentially collaborating with the Suffolk County Office of Emergency Management. Continue to distribute and post the Town's "Emergency Preparedness Resource Information" flyer.
- The Town of East Hampton has adopted participation in the National Flood Insurance Program's *Community Rating System.*

[30] *Definitions of Community Resilience: An Analysis*, 2013. Community & Regionals Resilience Institute. 14pp.

- Expand floodplain management activities to receive additional FEMA Community Rating System points (residents receive larger discounts on NFIP premiums)
- Promote 'No Adverse Impact' concepts from the National Association of Floodplain Managers.
- Track repetitive loss properties and develop potential strategies for transitioning properties to non-residential/public use.
- Coastal Resiliency Plan

4.3.2 Health and Social Services

- Consider partnerships with local hotels and other "safe" structures. Or consider storm-proofing Town facilities to increase shelter space
- Consider partnerships with local non-profits and/or elderly care specialists to assist individuals during emergency situations
- Provide access to cooling centers during dangerous heat waves
- In preparing for a storm or emergency event, efforts should be made to restrict access to highly vulnerable and/or dangerous areas. This can help evacuation times and reduce unnecessary risks

4.3.3 Housing

- Work with Suffolk County to expand the use transfer of development rights (TDRs) programs to reduce risks to vulnerable properties, direct development away from undeveloped land, and create compact, walkable communities.
- Investigate impact of building code revisions for properties in vulnerable areas. For example, waiving height limits in flood hazard areas to accommodate elevated properties.

4.3.4 Infrastructure

- Reduce reliance on municipal stormwater system through smart landscaping, pervious surfaces, open space protection, and on-site retention.
- Develop a wellhead protection program for primary and secondary recharge zones.
- Upgrade Town-wide emergency communication systems - radio, mobile cell towers, satellite phones
- Local Waterfront Revitalization Plan has already identified vulnerable infrastructure, including fuel tanks and substations

4.3.5 Natural and Cultural Resources

- Maintain and allow for the expansion of green/natural infrastructure. Set targets for forest coverage, wetlands, and pervious surfaces.
- Evaluate various restoration techniques in marshes and wetlands. Healthy wetlands will adapt and grow with sea level rise, providing a natural buffer for low-lying coastal areas.
- Preserve land for public uses for in high-risk areas to reduce vulnerability of residents and properties.

- Restore USGS monitoring of ground and surface water.
- Develop policies and plans for periods of declared drought.

APPENDIX

Anticipated Certification Points for CSC Certification Program


Climate Smart Communities Certification Program Checklist
Climate Smart Communities Certification: Scoring Wor
Town of East Hampton

Appendix

Climate Smart Communities Certification Program Checklist

Action #	Action Name	Action Pathway Phase	Possible Points	Town's Points	Priority Action	Currently Recognizable	Anticipated Points	Notes	Awarded Points	Documentation to Submit (See manual for complete description)
Pathway: planning and financing			**10**				**9**		**0**	
5.1	Adopt regional power purchase policy for secure increasing local government energy supplies sourced from renewables	Assess, Plan, Structure	3	0		Yes	0	Community-wide renewable goal (100% by 2030) **HBR 09/16/800**		Adopted policy, plan to implement it, progress towards meeting targets
5.2	Require LEED new construction of local government buildings or 20% better	Assess, Plan, Structure	3			No	0			
5.3	Conduct feasibility studies for renewable energy installations	Assess, Plan, Structure	3			Yes	3	ongoing - the Town participated with LIPA regarding the feed-in Tariff program. The Town has made 11 properties eligible for consideration for Renewable installations		Copy of feasibility study
5.4	Purchase renewable energy credits (RECs)	Implement	1	0		Yes	0			Detailed program or registry purchase (town E-aggregation RECs, Power Trust, Green Mountain, purchase)
Increase use of renewables			**43**				**27**		**0**	
5.5	Install a geothermal heat pump or other geothermal technology at one or more public facility	Implement	8			Yes	0			Documentation of specific installation - location, size, costs, date, estimates of energy savings
5.6	Install solar hot water and/or solar photovoltaic technology on public property	Implement	8			Yes	0	management has implemented has installed Solar PV. Town is currently working on Solarize Campaign to be augmented with a concept solar		Documentation of specific installation - location, size, technology, date, costs, estimates of energy savings
5.7	Serve as a host site for a renewable energy installation and enter into a long-term lease contract or power purchase agreement (PPA)	Implement	8			Yes	0	Town is in progress with working with solar developers who are using municipal land for solar farms		Copy of power purchase agreement outlining duration of contract, energy load and location of turbines, and other relevant details
5.8	Install a wind turbine on public property	Implement	8			Yes	0			Documentation of specific installation - location, size, technology, date, costs, estimates of energy savings
5.9	Install a wood pellet heating system on public property	Implement	8			Yes	0			Documentation of specific installation - location, size, technology, date, costs, estimates of energy savings
Pledge Element 3: Realize benefit of recycling and other climate smart solid waste management practices			**40**				**33**		**0**	
Waste diversion policies and plans			**8**				**8**		**0**	
5.10	Adopt a zero waste initiative policy	Assess, Plan, Structure	3			Yes	0	Not in CAP		Copy of or link to policy/legislation establishing the zero waste policy and its requirements
5.11	Discourage the use of disposable bags	Assess, Plan, Structure	3	0		No	0	Town has adopted ban on single-use retail checkout bags **RES 2014 #263**		
In-place waste diversion strategies			**32**				**22**		**0**	
5.12	Participate in the WH Waste Exchange program	Implement	2	0		Yes	0			Evidence of enrollment and active participation in program, copy of annual report submitted
5.13	Implement a pay-as-you-throw or similar unit pricing program	Implement	5	0		Yes	0			Proof of adoption of PAYT program, policy, fee structure,
5.14	Adopt a construction and demolition waste reduction program/ordinance	Implement	3	0		Yes	0			If regulatory - adopted ordinance, resolution or policy. If voluntary - policy developed and copy of program
5.15	Set up and manage a resource recovery center to encourage reuse of items used or new materials that have been	Implement	3			Yes	0			Documentation including cited legislation for center, site coordinates, center's website or web
5.16	Offer recycling to residents	Implement	5	0		Yes	0	Recycling is offered at Town Transfer and Recycling Stations		Proof program is active, parameters, what is collected and how, voluntary vs. mandatory, enforcement
5.17	Offer recycling to commercial entities (or require that they recycle)	Implement	5	0		Yes	0	Recycling is offered at Town Transfer and Recycling Stations		Proof program is active, parameters, what is collected and how, voluntary vs. mandatory, enforcement
5.18	Provide recycling bins in public places and events	Implement	3	0		Yes	0	Bike Program being operated in Montauk **RES 2015 #53**		Proof program is active, details of program - where, when, what is collected
5.19	Provide compost bins to residents (for sale or free)	Implement	2			Yes	0			Description of compost bin distribution program, educational materials, number of bins
5.20	Create an organics or yard waste collection program	Implement	3			Yes	0	Town accepts organics at yard waste at Transfer Stations		Details of program, materials collected, how it's collected, where it goes, requirements
5.21	Host household hazardous waste collection days	Implement	2			Yes	0	Town hosts 3 CESP Days in conjunction with SWCMD		Where, when, and what materials collected, website with information can be submitted
5.22	Create an educational campaign to encourage recycling, composting and waste reduction	Implement	2			Yes	0	The Town's other Operations conducts extensive outreach **RES 2015 #395**		Print any outreach documents - website, brit, flyer
Pledge Element 4: Reduce greenhouse gas emissions through use of climate smart land use tools			**100**				**62**		**0**	
Planning			**9**				**9**		**0**	
5.23	Develop and adopt a comprehensive plan with sustainability elements	Assess, Plan, Structure	4	0		No	0	Town is currently drafting a Climate sustainability elements into various plans. (Wetlands Code, Hazard Mitigation assessment with CEFF@EPA)		Copy of approved comp plan/addendum, including minutes reflecting plan was formally approved
Land use and building codes			**51**				**39**		**0**	
5.24	Incorporate smart growth principles into land use policies and regulations	Assess, Plan, Structure	8	0		No	0	The Town incorporates smart growth principles into land use policies and regulations via Town Codes, Planning Department, Zoning Board and Planning Board Software including Chapter 255-400 and Chapter 255-600, Sanitary sewers and Storm water control also incorporated into decision-making process		Link or copy of updated zoning provisions and how they meet smart growth principles
5.25	Adopt a renewable energy ordinance	Assess, Plan, Develop	4	0		Yes	0	Town has adopted renewable energy ordinances for Solar PV, EVSE. Town is currently drafting ordinances for Wind & Geothermal		Electronic copy or link to ordinance and proof it was adopted, proof approved by State Codes Council
5.26	Establish green building codes	Assess, Plan, Structure	8			Yes	0	Town will adopt NYS codes and LEED Certification. Property Tax Exemption for residential properties. Town has a compliance energy codes		Electronic copy or link to green building code, proof adopted, proof approved by State Codes Council
5.27	Create inclusive, efficient site design guidelines	Assess, Plan, Structure	4			Yes	0			Electronic copy or website link of design guidelines
5.28	Invest in low-interest energy and energy efficiency projects	Implement	3			Yes	0	LEED Property Tax Exemption investment in renewable energy and energy efficiency projects		Info on investment program - process to adopt program, solicit energy program, eligibility, successes to date
5.29	Adopt land use policies that support or incentivize farmers' markets, community gardens and urban and rural agriculture	Assess, Plan, Structure	3	0		Yes	0	Ag Reserves - Open Space Conservation Preservation		Zoning and zoning amends or new policy, maps highlighting districts that support farmer's markets, community gardens, urban/rural agriculture
Promotion efficient transportation			**32**				**24**		**0**	
5.30	Adopt green parking lot standards	Assess, Plan, Structure	4			Yes	0	**RES 2014 #280** adopted green parking lot standards for EVSE		Code or ordinance revisions that adopts one or more green parking standard
5.31	Adopt a complete streets policy	Assess, Plan, Develop	4			No	0	**RES 2015 #280** adopting Complete Streets		Electronic copy or link of adopted Complete Streets Policy
5.32	Implement strategies that support bicycling and walking	Implement	16	0		Yes	0	Complete Street projects to support bicycling and walking have been implemented where possible in the Town		Documents describing policies that have been implemented
5.33	Install electric vehicle infrastructure	Implement	8			Yes	0	Installed at Town Hall. Currently being installed at the Airport. Evaluation opportunities in Montauk		Steps taken to install EV charging stations, funding sources, stakeholders involved, feasibility study
5.34	Implement strategies that increase public transit ridership and alternative transport modes	Implement	10	0		Yes	0	Hampton Transit Bus - Private organizations are providing clean energy options to increase public transit		Documentation of implementation, shuttle schedule/schedules, funding source, photos of upgraded public
5.35	Implement a Safe Routes to School program	Implement	3			Yes	0	In progress at Springs School District		All elements, including assessment, events that outline program details, routes, safety features
5.36	Implement traffic calming measures	Implement	5	0		No	0			Evidence traffic calming measures have been implemented - studies, plans, reports, photos
5.37	Adopt and enforce an anti-idling ordinance	Assess, Plan, Develop	3			Yes	0			Adopted anti-idling ordinance, photos of signage, educational materials and other outreach
5.38	Implement transportation technology solutions	Implement	3	0		No	0			Specific details of such strategy - how was it implemented, funding, environmental impact
Natural Resource and Open Space Preservation			**17**				**12**		**0**	
5.39	Develop a natural resource inventory	Assess, Plan, Structure	3			No	0	A Guide to the Natural Plants, Natural Plan Communities and Rare and Invasive Species of East Hampton, Town (published 2005)		Copy of natural resources inventory, proof of adoption
5.40	Develop a local forestry or tree planting project or program	Implement	8	0		Yes	0			Copy of tree canopy inventory, ordinance, store of large-scale planting project, participation in State stewardship program, forest management plan
5.41	Preserve natural areas through zoning or other regulations	Assess, Plan, Structure	6			Yes	0	Town has strict zoning regulations to preserve natural areas - vegetation clearing codes are strictest on Long Island		Zoning amendment, ordinance or policy that preserves open space

Climate Smart Communities Certification Program Checklist

Action #	Action Name	Action Pathway Phase	Possible Points	Town's Points	Priority Action	Currently Recommended	Anticipated Points	Notes	Awarded Points	Documentation to Submit (Yes or no or file name/where documented)
Pledge Element 7: Enhance community resilience and prepare for the effects of climate change			**127**				**84**		**0**	
Establishing a baseline			**8**				**8**		**0**	
7.1	Conduct a vulnerability assessment	Assess, Plan, Govern	4	x	x	Yes	4	Hazard Mitigation Plan? Planning for climate change: An analysis of vulnerability in Suffolk County, New York?		Copy of most recent vulnerability assessment report
Goals			**2**				**2**		**0**	
7.2	Develop a climate resilience vision and associated goals	Assess, Plan, Govern	2			Yes	2	Town Comprehensive/Energy Vision Resolution 2015-1230 and Energy Goals (Resolution 2014-662)		Officially adopted version of community's vision for resilience and proof of incorporation into plan
Planning and policy			**10**				**6**		**0**	
7.3	Review existing community plans and projects to identify climate adaptation strategies and policies or projects that have the same vulnerabilities	Assess, Plan, Govern	3	x	x	Yes	3			Copies of completed checklists from Climate Smart Planning Tool or of completed CSPP spreadsheet, report from Tool, and overview sheet (if any)
7.4	Develop climate adaptation strategies	Assess, Plan, Govern	3	x		Yes	3			Copy of climate adaptation strategies and/or plan
7.5	Incorporate climate resilience vision, goals, and strategies into local plans and projects	Assess, Plan, Govern	3			Yes	3			Recently updated comprehensive plans and amendments, zoning/building codes, design guidelines, other plans
7.6	Update the multi-hazard mitigation plan to address changing conditions and identify specific strategies to reduce vulnerability to natural hazards	Assess, Plan, Govern	1			Yes	1	EC Hazard Mitigation Plan adopted and accepted by Town, County, State, and FEMA		Copy or link to state approved, new/updated hazard mitigation plan, and a corresponding update to plan
Strategies to address extreme heat			**10**				**2**		**0**	
7.7	Develop and implement a heat emergency plan	Assess, Plan, Govern	4			No	0	TLAPOA Council to develop a heat emergency plan of which the Town participates		Copy of heat emergency plan, how strategies in plan have been implemented
7.8	Require shade structures and features in public spaces	Assess, Plan, Govern	3			Yes	2			Copy of approved policy, documentation of increased shade structures in outdoor spaces
7.9	Open new or expand existing cooling centers	Implement	3			No	0	Town has cooling centers during times of emergencies in Montauk, East Hampton Village, and East Hampton		Documentation of active cooling centers, info indicating acceptance of gaps in centers
Strategies to address flooding			**30**				**20**		**0**	
7.10	Conduct a community-wide watershed assessment to address flooding and water quality priorities	Assess, Plan, Govern	4			Yes	4	In Progress: Town conducting Coastal Assessment and Resiliency Plan (CARP) with NYS DOS funding. Further, Town recently awarded funds for resilience assessments (see 4/7/2015		Date or version of watershed assessment and/or watershed management plan
7.11	Adopt affordable management and preservation ordinances to reduce vulnerability to flooding and erosion	Assess, Plan, Govern	3			Yes	3	Town has adopted stricter codes than required by National Flood Insurance Program (NFIP)		Ordinances, regulations, updated zoning or resolutions that discourage development in floodplains, wetlands conserved for flood storage, natural buffers created
7.12	Conserve, revegetate, and reconnect floodplains and buffers in coastal areas	Implement	7			Yes	3	Town is implementing a restoration project at Wilson St. Pier Acquisition (Harbor Subwatershed). Town awarded $8.8 million to purchase private flat for dune structure and restore to natural floodplain in Lake Pond, Amagansett.		Date or version assessment of priority floodplain and coastal areas, number of property lots, etc.
7.13	Protect natural areas for species migration and ecosystem resilience	Implement	3	x		Yes	3	Town has a very active Stewardship program to protect migrating species. Town has strict clearing codes to protect ecosystem services.		Date/updated natural resource inventory, open space inventory, open space plan, or other conservation plan identifying high-priority migration areas
7.14	Facilitate a strategic relocation of uses that are not water dependent from flood prone areas	Implement	3	x		Yes	3	In progress with recently awarded NYSDOS resiliency assessment grant		Plan detailing where strategic location would apply, why it is planned, who is responsible, how achieved
7.15	Promote community flood prevention strategies through the National Flood Insurance Program Community Rating System	Assess, Plan, Govern	3	x		Yes	3	Town submitted a letter of intent to join the Community Rating System. Town employee recently became a Certified Floodplain Manager to assist with CRS		Documentation indicating participation in CRS program, rating level
7.16	Use green infrastructure to manage storm water in developed areas	Implement	3	x		Yes	3	Town installing permeable Pavilion Banner at School St. Design is being developed for an additional 900 sq. ft. Town Beach to Three Mile Harbor. Town installing bioswales and other vegetation for stormwater management		Community-wide plans, green infrastructure projects implemented, retaining rules/ordinances for existing parcels
7.17	Conserve wetlands and forests to manage stormwater, recharge groundwater and mitigate flooding	Implement	3	x		Yes	3	Town has very strict mandates for conserving wetlands and forests- Vegetation Clearing Codes are centered on Long Island		Town-funded plan identifying priorities for wetland and forest conservation, etc.
7.18	Implement, redevelop or reconfigure developed areas to promote greater resilience	Implement	3	x		Yes	3	Need to set for examples		Documentation of action taken - before and after photos, maps, etc.
7.19	Amend areas in which the 100-foot freeboard requirement applies	Assess, Plan, Govern	3			Yes	0			Copy of enhanced freeboard policy approved by review council, noting/zoning change for expansion of 2/3
7.20	Require consideration of sea level rise in planning coastal development	Assess, Plan, Govern	3			Yes	0			Copy of approved zoning or building code that incorporates sea level rise guidance
7.21	Right-size bridges and culverts, and remove unnecessary and hazardous dams	Implement	3	x		No	0			Plan, strategies, design documents to replace known undersized and/or structurally deficient bridges/culverts
7.22	Develop or enhance early warning systems and community evacuation plans	Implement	4			Yes	3	EC Hazard Mitigation Plan etc.		Date on development of new or enhanced early warning system, or proof recognized by officials
Strategies to address drought risks			**10**				**7**		**0**	
7.23	Implement a water conservation and reuse program	Implement	3			Yes	1			Progress reports or at least copy of water conservation strategies and how implemented, date adopted
7.24	Encourage rainbarrels	Assess, Plan, Govern	3	x		Yes	3	The town is currently developing a rainbarrel/rain garden project on municipal property (School St. in Bridgehampton)		Adopted ordinances or regulations requiring or promoting rainbarrels or educational materials
7.25	Implement a source water protection program	Implement	4	x		Yes	3	The Town has the most vegetation clearing standards to protect our aquifers		Successfully passed source water protection plan, successfully implemented strategies identified in plan
Pledge Element 8: Support a development of a green innovation economy			**50**				**37**		**0**	
Training and Education			**8**				**8**		**0**	
8.1	Create a green jobs training program	Implement	3			Yes	3	The Town is partnering with Suffolk County College and the Town of East Hampton to incorporate solar job training with the Science Club's Tint cars project.		Proof training program occurred - agenda, materials used, number of attendees, evaluating materials
8.2	Hold green vendor fairs	Implement	3			Yes	3	The Town annually supports green vendor fairs, most recently the Earth and Climate Action Network presentation fair.		Posters or advertisements, list of vendors, list of government staff or attendance, number of attendees
Planning and Leadership			**8**				**6**		**0**	
8.3	Include green industries in economic development plans	Assess, Plan, Govern	4			Yes	4	The Energy Policy for the Town is focused around Green Energy and attracting the next generation of green industries to our community.		Adopted revision to development plan or other plan that has incorporated goals, objectives and initiatives to promote green industries in the community
8.4	Incorporate sustainability requirements in local government funded construction projects	Implement	4			Yes	2			
Local Business Engagement and Support			**8**				**8**		**0**	
8.5	Adopt a green procurement policy that emphasizes local sourcing	Implement	4	x		Yes	4			Policy or adopted sustainable policy, how it was incorporated into procurement decisions
8.6	Create and promote local farmers' markets	Implement	3			Yes	3	Multiple farmers' markets in the Town		Proof of at least one/farmer's market for a year, 10 days per year, how each business/organization runs
8.7	Create a "buy local/buy green" campaign	Implement	1			Yes	1	Long Island Farm Bureau "Grown on Long Island"		Campaign materials, host of gain engagement, branding and marketing materials, list of vendors
Siting and Incentivizing Green Business/Industry			**15**				**9**		**0**	
8.8	Redevelop abandoned sites	Implement	10	x		Yes	5			Copy of brownfield redevelopment plan, proof of completion of a brownfield project
8.9	Establish incentives for green industry or businesses in key economic sectors	Implement	4			Yes	4			Incentives established, participants/areas designated, criteria to determine applicability of incentives
8.10	Support alternative transportation fuel supply infrastructure	Implement	1	x		Yes	0			Policies or incentives that have been developed

Appendix

Climate Smart Communities Certification Program Checklist

Action #	Action Name	Action Pathway Phase	Possible Points	Tiered Points	Priority Action	Currently Reviewable	Anticipated Points	Notes	Awarded Points	Documentation to Submit (See manual for complete description)
[illegible]			[illegible]				[illegible]		[illegible]	
[illegible]	[illegible]	Implement	[illegible]	[illegible]		Yes	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	Implement	[illegible]	[illegible]		Yes	[illegible]			[illegible]
Pledge Element 8: Inform and inspire the public			[illegible]				[illegible]		[illegible]	
8.1	[illegible]	Build Capacity	[illegible]	[illegible]		Yes	[illegible]	[illegible]		[illegible]
8.2	[illegible]	Implement	[illegible]	[illegible]		Yes	[illegible]	[illegible]		[illegible]
8.3	[illegible]	Implement	[illegible]			Yes	[illegible]	[illegible]		[illegible]
8.4	[illegible]	Implement	[illegible]			Yes	[illegible]	In Progress		[illegible]
8.5	[illegible]	Monitor and report	[illegible]			Yes	[illegible]	[illegible]		[illegible]
Pledge Element 10: Commit to an evolving process of climate action			[illegible]				[illegible]		[illegible]	
10.1	[illegible]	Monitor and report	[illegible]			Yes	[illegible]	[illegible]		[illegible]
10.2	[illegible]	Assess, Plan, Convene	[illegible]			Yes	[illegible]	[illegible]		[illegible]
10.3	[illegible]	Build Capacity	[illegible]			Yes	[illegible]	[illegible]		[illegible]
Innovation			[illegible]				[illegible]		[illegible]	
11.1	[illegible]	Implement	[illegible]	[illegible]		Yes	[illegible]	[illegible]		[illegible]
11.2	[illegible]	Implement	[illegible]			Yes	[illegible]			[illegible]
Performance Bonus			[illegible]				[illegible]		[illegible]	
12.1	[illegible]	Implement	[illegible]	[illegible]		Yes				[illegible]
12.2	[illegible]	Implement	[illegible]	[illegible]		Yes				[illegible]
12.3	[illegible]	Implement	[illegible]	[illegible]		Yes				[illegible]
12.4	[illegible]	Implement	[illegible]	[illegible]		Yes				[illegible]
12.5	[illegible]	Implement	[illegible]	[illegible]		Yes				[illegible]
12.6	[illegible]	Implement	[illegible]	[illegible]		Yes				[illegible]
12.7	[illegible]	Implement	[illegible]	[illegible]		Yes				[illegible]
TOTAL			[illegible]				[illegible]		[illegible]	

Appendix