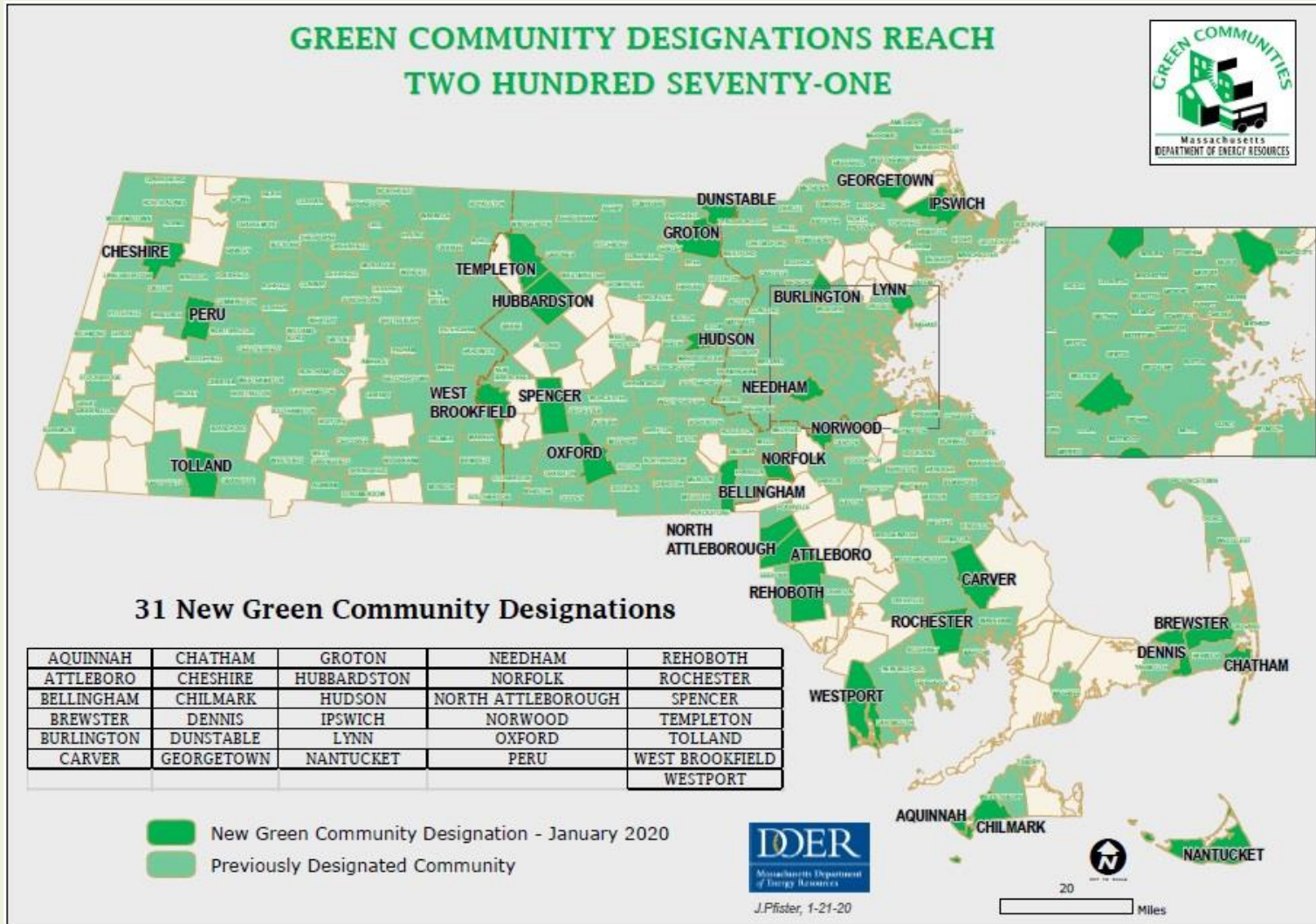


# Massachusetts Green Communities Program

- Initiated in 2008 under the MASS Department of Energy Resources  
<https://www.mass.gov/guides/becoming-a-designated-green-community>
- Focuses on increasing energy efficiency in the Commonwealth
- Provides financial assistance for municipalities
- 271 Green Community (GC) designations as of January 2020, including Tisbury and West Tisbury since 2012, plus Aquinnah and Chilmark as of January 2020
- In the Fall of 2019, Oak Bluffs (and Edgartown) began the Green Community process, working with the State, the Town and Cape Light Compact to meet the 5 Criteria to win GC designation.

# Green Communities



# Benefits to the Town of Oak Bluffs

- Cut municipal energy costs
- Reduce Green House Gas (GHG) emissions
- Promote energy-efficient construction
- Foster renewable energy / clean energy technology
- Gain access to grants for clean, affordable, and resilient energy projects
- Act on OB Master Plan, Section 6.2, Becoming a “Greener” Community

# OB Master Plan: Becoming A “Greener” Community

## Sustainability

The Town of Oak Bluffs has a fleet of electric passenger-type vehicles as a way to be more sustainable in terms of energy use.

Section 6.1 of the Zoning Bylaw contains provisions allowing wind energy installations under certain conditions.

Section 12 of the Zoning Bylaw contains provisions allowing solar energy systems under certain conditions.

MV Transit Authority has purchased electric buses and is intending to convert its entire fleet to electric buses in the future.

## 6.2 Becoming A “Greener” Community

For the purposes of the Master Plan, “sustainability” refers to:

- the philosophy of encouraging activities that allow present generations to meet their needs without compromising the ability of future generations to meet their needs.
- being efficient and economical in our use of resources using approaches that are economically viable, of social benefit, and environmentally responsible.

Some of the items to be considered as part of an overall approach to sustainability could include:

<b>Energy-Related</b>	<ul style="list-style-type: none"> <li>• Reducing energy use (and considering life-cycle costing)</li> <li>• Becoming more efficient in use of energy resources</li> <li>• Providing for alternative generation approaches (solar, wind, fuel cell, micro-grids, etc.)</li> <li>• Consider establishing a carbon reduction target</li> </ul>
<b>Water-Related</b>	<ul style="list-style-type: none"> <li>• Reducing water use</li> <li>• Regulating lawn irrigation</li> <li>• Reducing water waste / recycling water</li> </ul>
<b>Waste-Related</b>	<ul style="list-style-type: none"> <li>• Reducing waste (including food waste)</li> <li>• Increasing recycling</li> </ul>

Becoming A “Greener” Community		Legend on inside back cover	
<b>A. Policies</b>		<b>Partners</b>	
1. Seek to become a “greener”, more sustainable community (and Island).	CA	Town	
2. Seek ways to reduce energy use by residents and visitors in Oak Bluffs and encourage energy options,	CA Town	UC	
3. Encourage or require reduction in water usage.	CA	WD	
4. Maintain sections in the Zoning Bylaw related to: a. Accessory wind generating facilities (Section 6.1). b. Solar energy systems (Section 12).		PB	
5. Partner with utility companies to educate residents and businesses about sustainability concepts.	Town	UC	
<b>B. Action Steps</b>		<b>Partners</b>	
<input type="checkbox"/> 1. Explore obtaining the Massachusetts “Green Community” designation.	BOS CA	PB	
<input type="checkbox"/> 2. With other Island communities, evaluate ways to reduce the waste stream and increase on-Island recycling.	PW	Town	

# Becoming a MASS designated Green Community

<https://www.mass.gov/guides/becoming-a-designated-green-community>

- **Criterion 1:** Adopt as-of-right zoning for renewable energy
- **Criterion 2:** Adopt expedited permitting of renewable energy projects (a maximum of 12 months for a response) in the renewable energy zone
- **Criterion 3:** Establish a municipal energy baseline, with a 5-year pledge to reduce energy use by 20%
- **Criterion 4:** Purchase fuel-efficient vehicles whenever practicable
- **Criterion 5:** Adopt Massachusetts stretch building code for energy efficiency

# Criterion 1: As-of-Right Zoning

- For Oak Bluffs, solar photovoltaic only, at the Town landfill
- No loss of regulatory control (Town sets the requirements)
- Can be as small as 1.5 acres (250 kW solar array)
- Private or municipal developer, private or municipal land
- Criterion covers zoning only (i.e., a project is not required)
- **Adopt As-of-Right Zoning Bylaw – to be voted April 14th Town Meeting**

# As-of-Right zone for renewable energy at OB Landfill



## Criterion 2: Expedited Permitting

- Should not be onerous – maximum of 12 months for a *response*, not a *decision*, for a proposed project in the designated renewable zone



## Criterion 3: Establish a Municipal Energy Baseline

- Energy usage baseline for municipal buildings, facilities, street lighting and vehicles
- All forms of energy are evaluated – electricity and fossil fuels (including oil, propane, gasoline, diesel)
- Tools and consultants are available – from MASS Department of Energy Resources, Cape Light Compact, RISE Engineering, OB Energy Committee
- 5-year pledge to reduce energy usage 20% from this baseline – in practice, good-faith attempts have been acceptable
- No municipalities have “flunked out” so far
- Valuable to the town in and of itself (to identify opportunities for energy reduction and resiliency)

## Criterion 4: Municipal Fuel-Efficient Vehicles

- New vehicle purchases should be energy efficient (note: not necessarily electric)
- Heavy-duty vehicles (>8,500 lbs) and police cruisers are exempt
- To inform the Town's purchasing decisions, information on makes and models of vehicles, including fuel economy comparisons, can be found at:  
<http://www.fueleconomy.gov>

# Criterion 5: Stretch Building Code Adoption

- Applies only to new residential construction (not renovation / additions)
- Stretch code and base building code have been converging – the “stretch” is quite small at present
- 85.7% of MASS population live in a town that adopted the stretch code
- Economics:
  - Net cost increase of approximately **0.2%\***
  - Simple payback time from energy cost savings < 3 years
  - Energy cost savings continue after payback of ~ \$400/year...
  - House has an increased value with a high energy efficiency rating

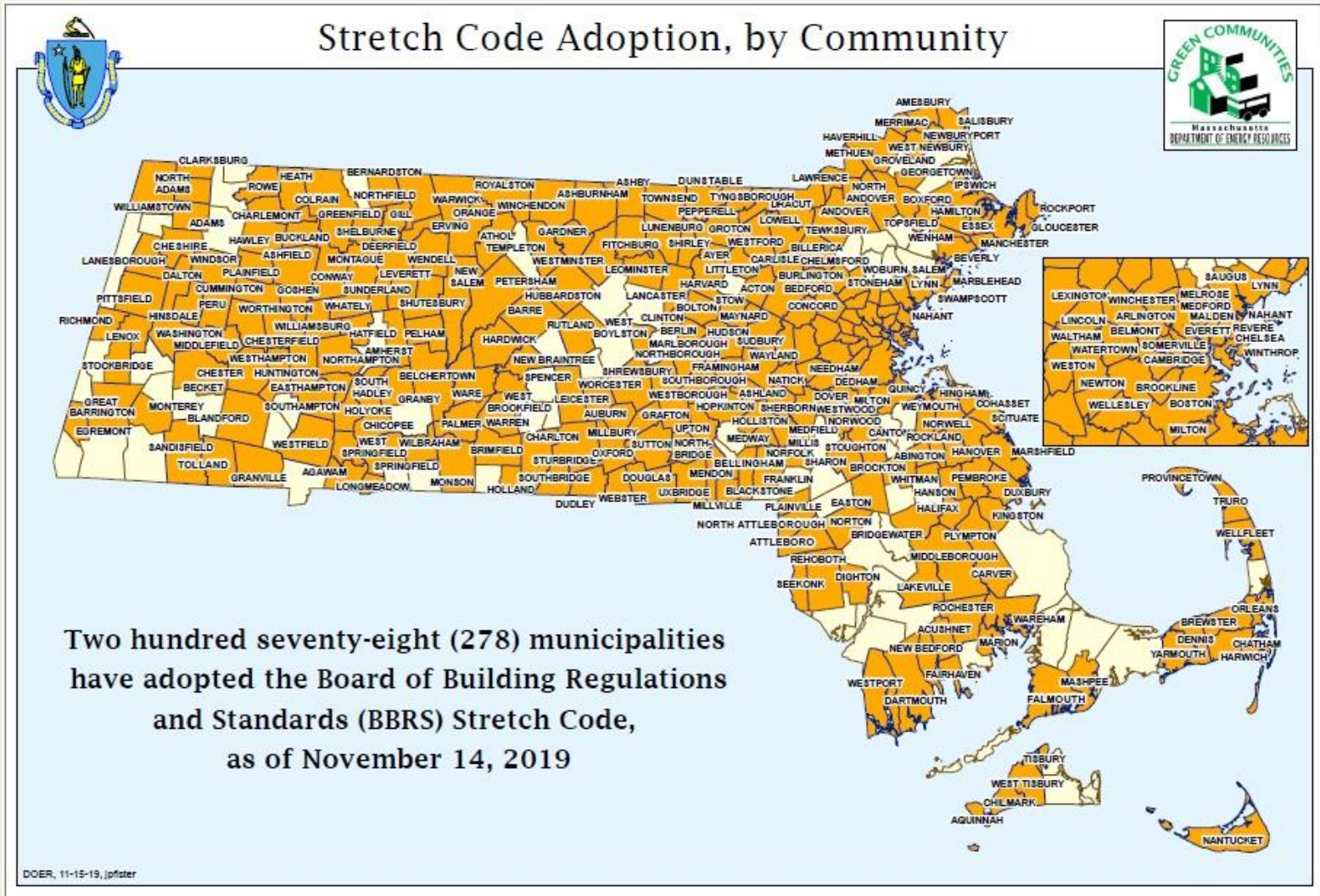
<https://www.mass.gov/service-details/stretch-code-residential-cash-flow-analysis>

*\*2500 ft<sup>2</sup> new construction; propane heat; assumed \$400,000 cost;*

*NOTE: most construction change orders cost more than 0.2%*

- **Adopt the Stretch Code – to be voted at April 14th Town Meeting**

# Stretch Code Communities (DOER expects 25-30 more towns by end of 2020)



# Sample grant awards

- Acushnet = \$528,112 - Designation and Two Competitive Grants
- Mashpee = \$446,093 - Designation and Three Competitive Grants
- Provincetown = \$178,462 - Designation and One Competitive Grant
- **Tisbury = \$140,925 – Designation Grant and over \$300K in Competitive grants**
- Truro = \$331,931 - Designation and Two Competitive Grants
- Wellfleet = \$260,423 – Designation and One Competitive Grant
- **West Tisbury = \$143,250 – Designation Grant; eligible to apply for up to \$200K in Competitive Grants in 2020**

# West Tisbury's Experience

- WT has benefitted financially
  - \$141K in energy efficiency grants
    - \$110K for new construction – library and police station
    - Additional \$30 - \$40K from Cape Light Compact (CLC)
  - Other projects in the future
- Using the Green Community-required energy audit, WT's municipal energy use is already down by about 20%
- WT is eligible to apply for up to \$200K in Competitive Grants in 2020
- The town feels good about the label "Green Community". The WT Energy Committee is happy to have the money in town coffers and see the reductions in town energy usage.

# Tisbury's Experience

- Tisbury has benefitted financially
  - \$140K in Green Community grants – heat pumps in fire station, replacement hot water heaters
  - Other projects in the future
- Like WT, the town of Tisbury is happy with the results