Town Clerk's Office Wakefield, Ma. 9/7/2020 9:15 AM



#### **ENVIRONMENTAL SUSTAINABILITY COMMITTEE**

September 10 th , 2020 | 7:00 p.m. Via Zoom: https://zoom.us/j/99548708041

Consistent with the Governor's orders suspending certain provisions of the Open Meeting Law and banning gatherings of more than 10 people, this meeting will be conducted by remote participation to the greatest extent possible. The public may not physically attend this meeting, but every effort will be made to allow the public to view and/or listen to the meeting in real time. Persons who wish to do so are invited to click on the following link <a href="https://zoom.us/i/99548708041">https://zoom.us/i/99548708041</a>. If you do not have a camera or microphone on your computer you may use the following dial in number: 1-646-876-9923 Meeting ID 995 4870 8041. Please only use dial in or computer and not both as feedback will distort the meeting. This meeting will be audio and video recorded.

ITEM 1: Call to order - 7 pm

ITEM 2: Public Participation

**ITEM 3:** Approval of Minutes - July 9th and August 13th Vote anticipated.

ITEM 4: Pending Business and Discussions

Trash reduction - Focus group update
Green Communities Act - Focus group update - Vote Anticipated
Land protection - Focus group update
Plastic Bag Collection update
Safe Streets Group

#### **Updates:**

Student Member comments
Wakefield Public School (WPS) Member update
Town Council Member update
WMGLD Member update
DPW Member update
Clean Lake Committee (CLC) update

ITEM 5: Next Meeting Thursday, October 8th

**ITEM 6:** Matters Not Anticipated for Agenda

ITEM 7: Motion to Adjourn





#### **ENVIRONMENTAL SUSTAINABILITY COMMITTEE**

Thursday, July 9, 2020 7:00 P.M. Zoom Meeting #966 7205 1810



COMMITTEE MEMBERS PRESENT:

Rob Darnell, Chair Mary Hajjar, Vice Chair

Robin Greenberg, Recording Secretary

Myra Sessions

none

Suzy Veilleux, School Committee rep

Claire Moss, DPW rep Tom Boettcher, WMGLD rep

Julie Smith-Galvin, Town Council rep Sophie Brown, Student Liaison Addie Festel, Student Liaison **COMMITTEE MEMBERS ABSENT:** 

Cameron Sweeney, Student Liaison Liz Sheridan, Student Liaison

#### ---- TOPICS OF DISCUSSION ----

**Call to Order** The meeting was called to order at 7:04 p.m by R. Darnell.

Public

Participation

Approval of Minutes, June 2020

R. Greenberg made a motion to accept the minutes for June meeting as amended by C. Moss, S. Veilleux second. Meeting minutes accepted with M.

Sessions abstaining.

Green Community Neal Duffy, NE Regional Coordinator of MA Department of Energy Resources (DOER), provided an overview of the Green Community (GC) program, see enclosed presentation. DOER supports all communities, not communities just with Green Community status. For example, they helped fund the conversion of Wakefield street lights to LED. Since the program started in 2010, 270 communities has become a Green Community.

There are five qualifications criteria in order for a town to be GC, including adoption of the state's Stretch Code. When you adopt the Stretch Code, you say that you accept future modifications to the Stretch Code. Communities can leave the GC program at any time. The current stretch code applies only to new residential construction and new commercial construction greater than 100K square feet or greater than 40,00 for conditioned space (i.e. labs and supermarkets).

In order for Wakefield to adopt the Stretch Code, it needs to be approved by the town's Town Meeting. In future meetings, ESC will work on a campaign to educate the residents about it and get it on an upcoming town warrant.



As a community with municipal gas and electrical utilities, meeting the other GC criteria will take some work. DOER can assist WMGLD, T Boettcher, on developing the utility baseline standard and audit information.

DOER has grants available now through August 2020 for audits and studies. Grants are available for GC and non-GC municipalities.

For additional questions about GC, contact Neal.duffy@mass.gov

Styrofoam, Plastic Bags, and Straw Town Warrant Articles Next Steps Melissa Eusden, citizen sponsor of the warrant articles shared that they were deferred until the Fall 2020 Town Meeting. This time extension will give supporters time to work with Chamber of Commerce, local businesses, and residents on the proposed articles. She noted that Melrose delayed the implication of their Styrofoam ban from summer 2020 to summer 2021 due to COVID-19. J. Smith-Galvin has talked with the Chamber and is working on potential Working Group to address the articles. Board of Health had questions on the potential bag language. J. Smith-Glavin suggested that the language of the articles to be distributed to the committee for their review and discussion at August meeting. Melissa will share some cost data learned from Somerville's report when they reviewed a similar rule.

The Chamber has been doing group buying for PPE related to COVID and it was suggested that maybe could continue group buying on sustainable goods. J. Smith-Galvin shared with the ESC a draft of a Business guide. She will confirm that the draft can be distributed to the town via Google docs. She hopes to create a Positive Awareness Campaign that highlights businesses who follow sustainable practices.

J. Smith-Galvin is reviewing the language of the articles.

#### Plastic Film Collection Update

Collection for plastic film for a Trex bench has been a success. Material is collected in front of the dumpster enclosure at the Town Hall. As of today, there has been 320lbs collected. R. Darnell has had to collect is twice a week. If town collection ends, people should bring their plastic firm to Home Depot and other local facilities for recycling until another collection for a bench can be arranged.

#### **Land Trust**

J. Smith-Galvin confirmed that there is no town land trust. Judy Green, Wakefield Conservation Commission (ConComm) administrator, was in the Zoom audience. She said that creating a Trust has been looked at the past but there were funding issues when purchasing land. If there is a land trust, the Trust would get right to first refusal to buy open land. Partnering with other town entities could to help with funding.

Town owned land is managed by ConComm and there are limited sites in town like adjacent Reedy Meadow and near Crystal Lake. Wakefield's Town Forest is not protected or managed. Town Open Space Plan lists areas wanted



to be preserved, see town planner website, for site locations. The committee sees a need for greater awareness on limited open spaces in town. Andover Land Trust was said to be a good resource. Student No comment Liaison **Update WPS Updates** S. Veilleux reported that School Committee is focused on back to school plans. Future of Food Rescue program, etc. depends on school plans. **Town Council** J. Smith-Galvin reported that at the spring Town Meeting, a Community and Economic Development position was approved. A town Community and Liaison Comments Economic Committee is being formed. **WMGLD** T. Boettcher shared that there was virtual community forum on June 25,2020. **Update** To watch, go to https://youtu.be/737BCBy2K6I A peak shaving program is now active. To learn more about it and to sign up for peak electricity usage alerts, go to: https://www.greenenergyconsumers.org/shavethepeak **DPW Update** C. Moss shared draft of the new dashboard which is scheduled to go live by end of the month. "Envision Wakefield Resilient" was developed with MVP funds. Clean Lake C. Moss shared that the committee now has student members. Committee **Update Next Meetings** The next regular Environmental Sustainability Committee meeting is scheduled for August 13, 2020 via Zoom. Committee R. Darnell motion to adjust. M. Sessions second. R. Darnell performed roll call Meeting for approve to adjourn. Meeting adjourned at 9:05 pm.

Respectfully submitted,

Adjournment

Robin Greenberg, Secretary

Attachments: The Green Communities Division Partnering with Massachusetts Cities and Towns



#### **COMMONWEALTH OF MASSACHUSETTS**

Charles D. Baker, Governor Karyn E. Polito, Lt. Governor Kathleen Theoharides, Secretary Patrick Woodcock, Commissioner

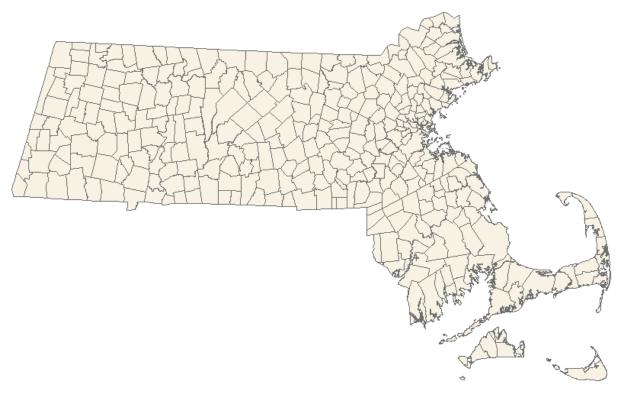
# The Green Communities Division Partnering with Massachusetts Cities and Towns

Neal Duffy Northeast Regional Coordinator

Town of Wakefield July 9, 2020

#### **Green Communities Division**

The energy hub for **all** Massachusetts cities and towns, not just designated Green Communities.







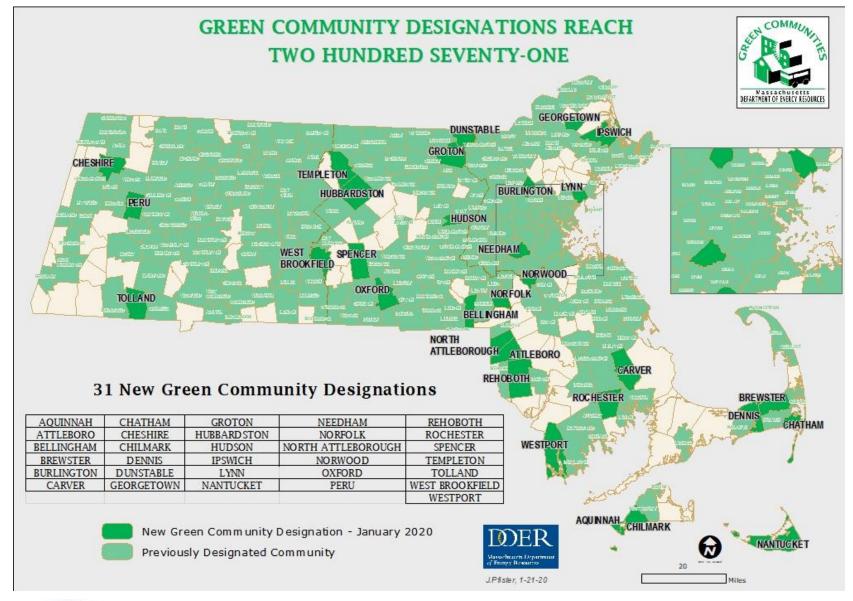
#### **Green Communities Division**

The energy hub for **all** Massachusetts cities and towns, not just designated Green Communities.













>\$123.6 M grants awarded



480 grants completed

>\$17 M savings/yr





#### **Projected Savings**

569,353 MMBTUs

44,302 mt CO<sub>2</sub> eq.





x 9,348





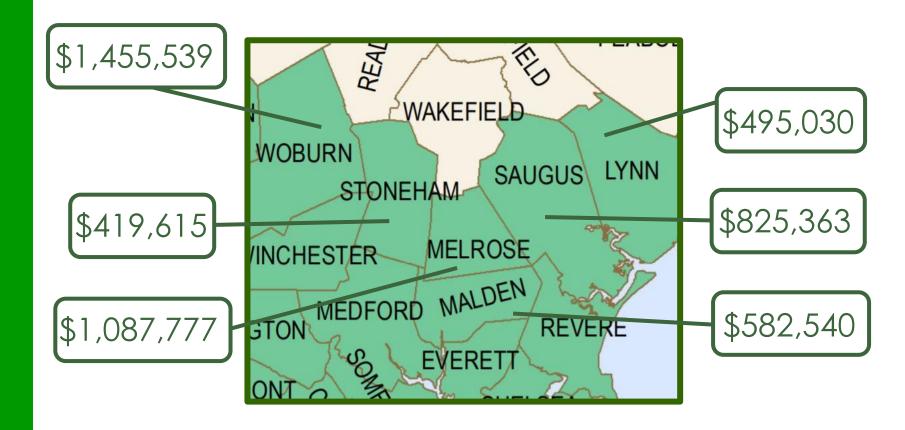
Provides up to \$20M annually in grants and loans to *Green Communities* (RGGI Auction proceeds and ACP funds)















Designation Grant = \$125K + population & per capita income formula

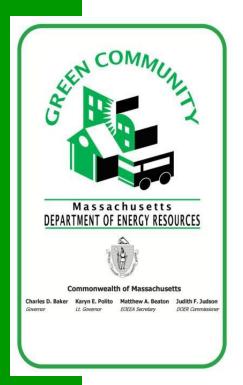
Wakefield estimated designation grant amount:

\$170,000

 Competitive grants available annually, up to \$200,000 per applicant, for Green Communities that have expended all prior grant funds







#### **Qualification Criteria - Designation**

- Adopt as-of-right siting for RE/AE generation, R&D, or manufacturing -
- 2. Adopt expedited permitting process
- 3. Create an Energy Reduction Plan to reduce energy use by 20% in 5 years
- 4. Adopt Fuel Efficient Vehicle Purchase Policy
- 5. Minimize life cycle cost in new construction → adopt the Stretch Code





# Criteria 1 & 2 – As-Of-Right siting and expedited permitting

For at least **one** of the following:

- Renewable or Alternative Energy Generating Facilities or;
- Renewable or Alternative Energy Research and Development (R&D) Facilities or;
- 3. Renewable or Alternative Energy Manufacturing Facilities in designated locations.





## Criteria 3 – Energy Baseline & 20% Energy Reduction Plan

Calculate a Municipal Energy Use Baseline that includes:

- 1. Municipal Buildings & Schools
- 2. All Vehicles
- 3. Municipally Owned Street & Traffic Lights
- 4. Water & Wastewater facilities











#### Criteria 4 – Fuel Efficient Vehicles

- 1. Purchase only fuel-efficient vehicles for municipal use whenever such vehicles are commercially available and practicable.
- 2. Police cruisers and other emergency vehicles are exempt until commercially available.
- 3. Heavy duty vehicles such as Fire Trucks, Ambulances and some DPW trucks are exempt (GVW of 8500 lbs. or more)





#### **Criteria 5 – Minimize Life Cycle Costs**

Require all new. residential construction and all new commercial and industrial real estate construction to minimize, to the extent feasible, the lifecycle cost of the facility by utilizing energy efficiency, water conservation and other renewable or alternative energy technologies

The DOER recommended way for cities and towns to meet this requirement is by adopting the BBRS Stretch Code (780 CMR 115.AA) an appendix to the MA State Building Code.

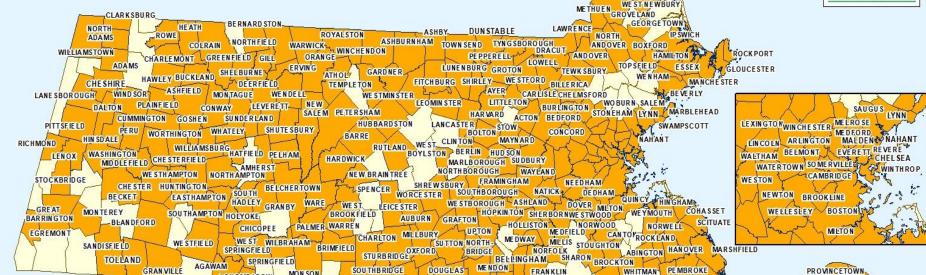
In a town, the Stretch Code must be adopted as a general bylaw by its Town Meeting.





#### Stretch Code Adoption, by Community

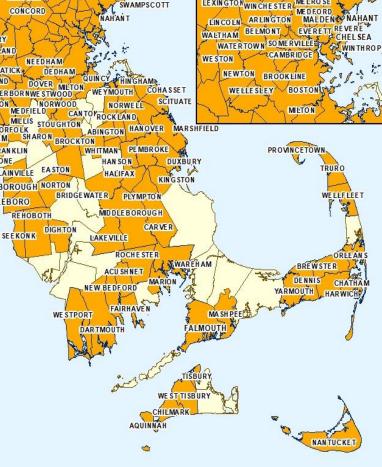




WEBSTER UXBRIDGE BLACKSTONE

Two hundred eighty-two (282) Two hundred seventy-eight (278) municipalities have adopted the Board of Building Regulations and Standards (BBRS) Stretch Code, as of November 14, 2019

GRAN VILLE



#### **Stretch Code**

- The Stretch Code ONLY applies to:
  - NEW residential construction and
  - NEW commercial construction > 100,000 sq. ft. or > 40,000 sq. ft. for conditioned spaces = Labs & Supermarkets
- Additions, Renovations & Repairs are <u>EXEMPT</u> from the Stretch Code





# The Stretch Code is not much of a stretch

- Current Base Energy Code (IECC 2015 with MA Amendments) and Stretch Code adopted 1/1/2017
- Current Base Code allows builders two options for residential and commercial new construction:

#### **Prescriptive**

- Checklist of compliance measures
- Inspections during and post construction

#### **Performance**

- Pre & Post construction energy modeling
- Inspections during and post construction





# The Stretch Code is not much of a stretch

- Current Base Energy Code (IECC 2015 with MA Amendments) and Stretch Code adopted 1/1/2017
- Current Base Code allows builders two options for residential and commercial new construction:

#### **Prescriptive**

- Checklist of compliance measurer
- Inspections during and post construction

#### **Performance**

- Pre & Post construction energy modeling
- Inspections during and post construction





## Why Test Performance?

- Prescriptive codes don't guarantee good installation, air and water tightness, or that thermal insulation is effective.
- Small air gaps can reduce insulation R-values by 50% or more.
- HERS Raters provide third party verification







# What is a HERS Rating? (Home Energy Rating System)

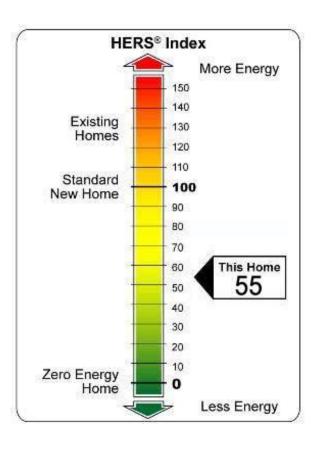
#### Annualized energy analysis

Heating, Cooling, Water Heating, Lighting and Appliances.... On site power generation-renewable energy

#### **Reference Home**

- Based on IECC 2006 Code
   (International Energy Conservation Code)
   Defined as 100 Points
- 1 percent change in consumption = 1 point

HERS 55 means about 45% more efficient than reference home







#### What is HERS Process?

- 1. Review Building Plans via

  Computer Energy Modeling
- 2. In-process inspections
  - First inspection
    - Duct tightness test (if applicable)\*
  - Second Inspection(usually combined with 1st)
    - Insulation
  - Final Inspection
    - Blower door test\*
- 3. Finalize energy model based on verified performance and equipment







<sup>\*</sup>Required by Base Energy Code 2015 IECC

#### 9th Edition Stretch Code Modeling Analysis

2550 sq.ft. 3 BR Single Family Home with Electric Heat Pump Worcester, MA





HERS Index	
Target⁵	60
Example Base	64
Example Stretch	52

#### Incremental Costs and Benefits to Meet Stretch Code 0.0054% of Total Construction Cost<sup>4</sup>

nple Stretch <b>52</b>	COSTS		BENEFITS	NET	
	Adjustments + HERS Rater Fee		Rebates <sup>1</sup>	Cost Compared to Base Code	
BUILDER	+\$2,260		-\$0	\$2,260	
HOMEBUYER	Change to Downpayment <sup>3</sup>	Change to Annual Mortgage Payment <sup>3</sup>	Estimated Energy Cost Savings per Year <sup>2</sup>	Year 1 Cash Flow	Year 2+ Cash Flow
	+\$226	+\$180	-\$486	+\$80	+306

- 1 Incentives are determined using the Pay For Savings calculator. Savings compared to MA reference home. PFS Incentive = \$0.35 \* kWh savings + \$35 \* MMBtu savings + \$3000 \* 0.xx percent savings (single family home)
- 2 Energy costs are based on \$0.25/kWh, \$1.21/therm, \$2.90/gal propane, \$2.88/gal oil. Savings are compared with Base Code home. For Wakefield 15.5 cents per kWh used
- 3 30-year mortgage assumes 10% down payment at 4% APR.
- 4 NAHB New Contractor Built Median Cost Per Square Foot in North East US (2017) \$161.53
- 5 MA Amendment sets HERS Index target to 60 for Heat Pumps





#### 9th Edition Stretch Code Modeling Analysis

2550 sq.ft. 3 BR Single Family Home with Electric Heat Pump Worcester, MA



#### **Breakdown of Incremental Construction Costs to Meet Stretch Code**

FEATURE	Base Code	Stretch Code	Construction Cost
HERS RATING	64	52	\$500
WINDOWS (U- VALUE/SHGC)	.30/.30	.27/.30	\$500
DHW	0.95 EF Tank Electric	3.24 EF Heat Pump DHW	\$660
HEATING	10 UCDE / 10 CEED Hoot Dump	12 UCDE / 10 CEED Hoot Dump	\$600
COOLING	10 HSPF / 19 SEER Heat Pump	12 HSPF / 19 SEER Heat Pump	
DUCT LEAKAGE TO OUTSIDE	4 CFM25 / 100 CFA	No change required	\$0
FOUNDATION	Unconditioned, uninsulated basement	No change required	\$0
FLOOR	R38 fiberglass Grade 1	No change required	\$0
WALLS	R21 fiberglass Grade 1	No change required	\$0
HIGH EFFICACY LIGHTING	100% LED	No change required	\$0
CEILING – FLAT	R-50 blown in cellulose	No change required	\$0
AIR INFILTRATION	3.0 ACH50	No change required	\$0
TOTAL			+\$2,260





#### 9th Edition Stretch Code Modeling Analysis

2550 sq.ft. 3 BR Single Family Home with Natural Gas Heat Worcester, MA





HERS Index	
Target	55
Example Base	61
Example Stretch	53

## Incremental Costs and Benefits to Meet Stretch Code 0.0032% of Total Construction Cost⁴

mple Stretch <b>53</b>	COSTS		BENEFITS	NI	ΕΤ
	Adjustments + HERS Rater Fee +\$2,216		Utility Rebates <sup>1</sup>	Cost Compared to Base Code \$2,216	
BUILDER			\$0		
HOMEBUYER	Change to Downpayment <sup>3</sup>	Change to Annual Mortgage Payment <sup>3</sup>	Estimated Reduced Energy Cost per Year <sup>2</sup>	Year 1 Cash Flow	Year 2+ Cash Flow
	+\$221	+\$176	-\$204	\$194	\$28

- 1 Incentives are determined using the Pay For Savings calculator. Savings compared to MA reference home.

  PFS Incentive = \$0.35 \* kWh savings + \$35 \* MMBtu savings + \$3000 \* 0.xx percent savings (single family home)
- 2 Energy costs are based on \$0.25/kWh, \$1.21/therm, \$2.90/gal propane, \$2.88/gal oil. Savings are compared with Base Code home. For Wakefield, \$2 per cubic foot used.
- 3 30-year mortgage assumes 10% down payment at 4% APR.
- 4 NAHB New Contractor Built Median Cost Per Square Foot in North East US (2017) \$161.53



#### 9<sup>th</sup> Edition Stretch Code Modeling Analysis 2550 sq.ft. 3 BR Single Family Home with Natural Gas Heat Worcester, MA





#### **Breakdown of Incremental Construction Costs to Meet Stretch Code**

FEATURE	Base Code	Stretch Code	Construction Cost
HERS RATING	61	53	\$500
WINDOWS (U- VALUE/SHGC)	.30/.30	.27/.30	\$500
HEATING	95% gas furnace	96% gas furnace	\$100
COOLING	13 SEER	15 SEER	\$392
DHW	0.62 EF 40 Gallon tank Gas	0.96 EF Tankless Gas	\$724
DUCT LEAKAGE TO OUTSIDE	4 CFM25 / 100 CFA	No change required	\$0
HIGH EFFICACY LIGHTING	100% LED	No change required	\$0
AIR INFILTRATION	3.0 ACH50	No change required	\$0
FOUNDATION	Unconditioned, uninsulated basement	No change required	\$0
FLOOR	R38 fiberglass Grade 1	No change required	\$0
WALLS	R21 fiberglass Grade 1	No change required	\$0
CEILING – FLAT	R-50 blown in cellulose	No change required	\$0
TOTAL			+\$2,216





# Anticipated Updates to Base & Stretch Code Aug 7th, 2020

 August 7th, 2020 – MA moves from 2015 IECC to 2018 IECC – almost no change to residential code, or stretch code – based on HERS score of 55.

#### So, what is new in Stretch code as of Aug 7th?

- 4-story multi-family will have to follow HERS or Passivehouse path (previously this only applied to 1-3 story buildings)
- HERS 55 raised to HERS 60 for new homes with heat pumps (air-source, or ground-source)
  - Efficient electric heat is better for climate so incentive to use heat pumps instead of gas or propane heating





## FUTURE STRETCH CODE CHANGES Proposed Timeline for Building Code Changes

- Anticipate a DRAFT Stretch Code to be published Fall 2020 for public comment
- Anticipate BBRS to hold public hearings in November 2020 plus additional hearing to be determined
- Goal is to have new Stretch Code ready to align with the timing of state adoption of 10<sup>th</sup> edition of building code (IECC 2021)
  - Final vote of BBRS Summer 2021
  - January 2022 target effective date

NOTE: If there is a Zero-Energy component, we anticipate that it will be optional

- Municipalities can vote to "opt in" to require renewables
- No vote needed for current Green Communities to maintain designation



#### **Contact Information**

Neal Duffy– Regional Coordinator <u>neal.duffy@mass.gov</u> (978) 694-3315

www.mass.gov/orgs/green-communities-division

Sign up for email updates on our home page!







#### ENVIRONMENTAL SUSTAINABILITY COMMITTEE

Thursday, August 13, 2020 7:00 P.M. Zoom Meeting #962 5690 0184



COMMITTEE MEMBERS PRESENT:

Rob Darnell, Chair Mary Hajjar, Vice Chair

Robin Greenberg, Recording Secretary

Myra Sessions

Joe Conway, DPW rep Tom Boettcher, WMGLD rep

Julie Smith-Galvin, Town Council rep Sophie Brown, Student Liaison **COMMITTEE MEMBERS ABSENT:** 

Addie Festel, Student Liaison Cameron Sweeney, Student Liaison Liz Sheridan, Student Liaison Suzy Veilleux, School Committee rep

#### ---- TOPICS OF DISCUSSION ----

**Call to Order** The meeting was called to order at 7:03 p.m by R. Darnell.

Public Participation No comment

Approval of

Vote rescheduled for September meeting.

Minutes, July 2020

**Focus Groups** 

ESC has creating focus groups to discuss selection topic. Groups will include ESC members and non-ESC members. Groups will research the topic and to seek outsiders' input. Groups are being formed on trash reduction, Green Communities Act, and Lands Trust.

Focus Group -Trash Reduction The focus group's goal is to work on revised language on new proposed plastic and Styrofoam rules, discuss how to increase recycling and composting, and how to reduce refuse.

A representative of the Chamber of Commerce was not available to attend tonight ESC meeting. J. Smith-Galvin will invite them to the September ESC meeting.

The State ban on plastic bag ban because of the pandemic has been lifted. The Town's ordinance banning plastic bag can be in forced again starting in September.

Focus Group -Green Communities Act The focus group's goal to work to make Wakefield a Green Communities.



#### Focus Group -Land Trust

The focus group's goal to address land protection, potentially through a Land Trust or other avenues.

#### Plastic Bag Collection Update

R. Darnell reported that more 600 pounds have been collected to date for the Trix benches. R. Darnell confirmed that we can get more than one bench provided that sufficient plastic bags are collected by December 1, 2020. Currently, R. Darnell collects the bags from the bins at the Town Hall on Mondays. He weighs the collection using a fish scale. J. Conway offered DPW's help on delivery of the bags to the Home Depot in Reading. R. Darnell and J. Conway will discuss logistics.

#### Student Liaison Update

No comment

#### **WPS Updates**

R. Darnell will see if WPS food service kitchen's can make use of 2010-2020 Black Earth compost contracts. Three-quarters of the school year compost service has already been paid with grant. Glavin Middle School might offer lunch service in fall 2020.

J. Conway will ask school superintendent in his weekly meeting if the table coverings used in the cafeterias can be paper and therefore be available for composting.

#### Town Council Liaison Comments

J. Smith-Galvin reported that a resident has expressed interested in expansion of bike lanes, especially along the Albion Street streetscape design. She plans to discuss with Bill Renault, the town engineer, and J. Conway. J. Smith-Galvin proposes that can be another ESC focus group could be formed to look into expansion of bike lanes, consider Melrose's PedBike as a model.

Applications are due next week for municipal technical grants for studies from the state.

#### WMGLD Update

T. Boettcher is looking at potential solar and battery opportunities at the renovated public safety building to create a "microgrid". Public safety building has good solar exposure.

On July  $24^{th}$ , the town reached annual electrical capacity so "shave the peak" is now in effect.

The public dashboard to see the DPW solar panels is available on via the WMGLD website.

#### **DPW Update**

C. Moss has resigned from her position at Wakefield DPW. Ann Waitt, DPW Business Manager, and J. Conway will share responsibility of ESC representation.

J. Conway reported that MVP grant results are expected this week.



J. Conway reported that the Simpler recycling 'pink bags' collection of clothing and fabrics has been successful. Its impacted on school clothing unknown at this time.

#### Clean Lake Committee Update

R. Darnell reported that the committee is waiting for the MVP grant results. At their next meeting, with the Friends of the Lake, they will discuss the Converse proposed project. The committee is considering suggesting zoning changes around the outfall into the lake inlets. Potential zoning changes include to change the protection zone around the lake from its current 100 ft buffer zone to the full watershed. The watershed is the area where water can flow into the lake.

#### Other Comments

J. Smith-Galvin thanked Carol Zoubek for her efforts for maintaining the green

space at the First Baptist Church.

**Next Meetings** 

The next regular Environmental Sustainability Committee meeting is

September 10, 2020.

Committee Meeting Adjournment R. Darnell motion to adjust. M. Hajjar second. R. Darnell performed roll call for

approve to adjourn. Meeting adjourned at 7:48 pm.

Respectfully submitted,

Robin Greenberg, Secretary

Attachments: -

# Green Communities: Program Overview and Next Steps

Environmental Sustainability Committee Meeting September 10, 2020



## Purpose of the presentation



Describe Green Communities



Identify eligibility requirements



Summarize program benefits



Propose a path forward



## What is a Green Community Designation?

- A Green Community is a municipality that has received the Massachusetts designation and qualifies for the state grant program
- Green Communities are focused on reducing energy use and environmental impacts by municipal buildings and its vehicles and new construction
- Utilized by the majority of Massachusetts towns and cities
- Green Community Designation and Grant Program is managed by the state Department of Energy Resources (DOER)



## What are the program benefits?

- Reduce energy costs for the Town and its residents
- Enable investments in buildings and vehicles
- Access grants for clean affordable and resilient energy projects;
  - Receive an estimated initial \$170,000 grant upon acceptance into the program
  - Receive awards of up to \$200,000 annually towards actions identified the town's energy reduction plan
- Reduce greenhouse gas emissions
- Promote energy-efficient building construction
- Foster renewable energy and clean energy technologies
- Become a clean energy leader and a better place to live, work, and play
- Contribute to Wakefield's positive reputation



# What are the qualification criteria to be designed as a Green Community?

- 1. Adopt zoning for renewable energy facilities
- 2. Adopt expedited permitting process for renewable energy facilities
- 3. Create an town Energy Reduction Plan
- 4. Adopt a Fuel Efficient Vehicle Purchase Policy
- 5. Adopt the Stretch Code



## Criteria 1 & 2: Renewable energy

Identify zones and adopt updates to include <u>at least</u> one of three siting options for those zones:

1. Research & Development2. Generation3. Manufacturing

Adopt an Expedited Permitting Policy

One year at most, for applicable facilities in designated renewable zones



## Criteria #3: Energy Reduction Plan

Understand current energy use of municipal facilities and vehicles to create a baseline and develop a plan to reduce energy use by:

20 % in 5 years



## **Criteria #4: Efficient Vehicles**

Adopt an Efficient Vehicle Purchasing Policy that:

- 1. Requires all municipal departments and divisions to replace non-exempt vehicles with fuel-efficient vehicles over time
  - 2. Develops and maintains a vehicle inventory for all municipally-owned four-wheeled passenger vehicles
    - 3. Includes planning for replacing non-exempt vehicles with vehicles that meet specified fuel efficiency ratings



## Criteria #5: Adopt the Stretch Code

Promote energy efficiency by requiring all <u>new residential</u> construction and <u>large commercial</u> construction to meet the state stretch energy code

Massachusetts Stretch Code (780 CMR 115.AA)



## **Proposed Path Forward**

Fall/Winter 2020

Declare ESC
Desire to Pursue
- Present to
Town Council

Community Outreach By Spring 2021:

Secure town approvals

<u>Summer 2021:</u>

Complete
Energy use
baseline and
develop
reduction plan

Fall 2021:

- Apply to be a Green Community



## **Additional Resources**

To learn more, see the state's website on Green Communities

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



#### Environmental Sustainability Committee Sets Goal to Earn Bench for Each Elementary School

In June, the Environmental Sustainability Committee (ESC) called on the Wakefield community to take on the Trex Plastic Film Recycling Challenge. They reached their goal to collect 500 pounds of plastic film in the form of grocery bags, Ziplocs, cereal-box-liners, bubble wrap, produce bags, and more. Trex, the world's largest manufacturer of wood-alternative decking products, will repurpose those plastic materials into a bench that will be donated to the Greenwood School.

With several months left in the Trex challenge, and residents motivated to participate in the recycling initiative, the ECS has set their sights on donating a bench to all Wakefield elementary schools.

"In March, Governor Baker temporarily prohibited the use of reusable checkout bags and ceased the enforcement of local plastic-bag ban bylaws," noted ESC chair Robert Darnell. "Though the order was rescinded in July, residents have built up lots of grocery bags in their pantries and are looking for a way to recycle them. The great thing about this program is that it also includes other plastics—like drycleaning bags, cereal liners, snack bags, and more. The response from the community has been so inspiring that we're hoping to use the next three months to earn a bench for the Walton, Woodville, and Dolbeare schools."

All are encouraged to recycle plastic bags and films via bins located in the parking lot of Town Hall (near the fenced dumpster). The program concludes on December 1, 2020. Plastics must be clean, dry, and free of food and organic waste.

For more information about this program, connect with the ESC at <a href="ESC@wakefield.ma.us">ESC@wakefield.ma.us</a>.

# BAGS TO BENCH CHALLENGE

# Recycle plastic bags, films, and wraps into benches for Wakefield schoolyards.

Wakefield's Environmental Sustainability Committee (ESC) invites you to take on the Trex Plastic Film Recycling Challenge.

Trex, the world's largest manufacturer of wood-alternative decking products, will repurpose our plastic bags and films into benches that will be donated to our elementary schools.





Drop off your clean, dry, food-free plastic products in the bins in the parking lot of Town Hall (near the fenced dumpster). The program concludes on December 1, 2020.

Questions? Connect with the ESC at ESC@wakefield.ma.us.