### Warrant Article 10: Specialized Stretch Energy Code

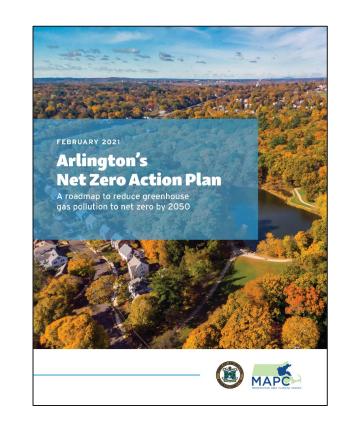
Select Board Hearing

March 20, 2023



### **Net Zero Action Plan Priority**

- Roadmap to net zero greenhouse gas (GHG) emissions by 2050
- Key strategy is electrification of buildings
- Priority measure: "Advocate...for a state net zero energy stretch code" (what eventually became the Specialized Stretch Code)
- Metric of success is Town adoption of Specialized Stretch Code





### **HISTORY**

#### 2010

Town Meeting adopts
Stretch Code

Arlington receives Green Communities Designation; ~\$2M in grants since 2010

#### 2020

Town Meeting adopts clean heat home rule petition/bylaw amendment

#### 2022

Town Meeting passes Article 73 Resolution: A True Net Zero Opt-In Code for Cities & Towns

DOER completes Stretch Code updates, develops Specialized Code

Act Driving Clean Energy & Offshore Wind creates Fossil Fuel Free Demonstration Project



Stretch Code created, provides 20-35% greater efficiency over Base Code

#### 2018

Select Board adopts goal of net zero greenhouse gas emissions by 2050

#### 2021

Arlington files clean heat home rule petition

Select Board endorses Net Zero Action Plan

Act Creating Next Generation Roadmap for MA Climate Policy

#### 2023

Stretch Code Update takes effect for residential buildings

CEFC & Town Manager bring Article 10 to adopt Specialized Code to Town Meeting for vote



## Three Levels of MA Energy Codes Build Successively

Opt-in Specialized Code

**IECC 2021** 

- + MA amendments
- + Stretch Code amendments
- + Specialized Code appendices

**Updated Stretch Code** 

**IECC 2021** 

- + MA amendments
- + Stretch Code amendments

**Updated Base Code** 

Int'l Energy Conservation Code (IECC) 2021 + MA amendments



# Three Levels of MA Energy Codes Build Successively

#### **Town Meeting Vote**

5 communities have already opted in, ~20 more plan to this year

#### **Automatic for Arlington**

+ for all 300 Stretch Code communities in Massachusetts

Opt-in **Specialized** Code

## **Updated Stretch**

Code

IECC 2021

+ MA amendments

**IECC 2021** 

+ Stretch Code amendments

+ Specialized Code appendices

- + MA amendments
- + Stretch Code amendments

**Updated Base Code** 

Int'l Energy Conservation Code (IECC) 2021 + MA amendments



## Three Levels of MA Energy Codes Build Successively

**Town Meeting Vote** 

Fossil Fuel Free Demonstration Project

Adoption of Specialized Code may facilitate participation

#### **Town Meeting Vote**

5 communities have already opted in, ~20 more plan to this year Opt-in Specialized Code

**IECC 2021** 

- + MA amendments
- + Stretch Code amendments
- + Specialized Code appendices

#### **Automatic for Arlington**

+ for all 300 Stretch Code communities in Massachusetts **Updated Stretch Code** 

**IECC 2021** 

- + MA amendments
- + Stretch Code amendments

**Updated Base Code** 

Int'l Energy Conservation Code (IECC) 2021

+ MA amendments



## The Specialized Code applies to new construction only

Key requirements for new homes in Arlington would include:

- 1. Exemplary performance for large homes using fossil fuels Homes greater than 4,000 conditioned square feet (CSF) that use fossil fuels must be net zero energy
- 2. Exemplary performance for large multifamily buildings Multifamily buildings >12,000 CSF must use Passive House pathway
- 3. Pre-wiring for electrification for buildings using fossil fuels
  Buildings using fossil fuels (except multifamily and Passive House projects)
  must prewire for future electrification
- 4. Solar arrays for buildings using fossil fuels

  Buildings using fossil fuels must install a certain amount of rooftop solar

  (with exemptions for shaded sites and Passive House buildings)



### Potential Specialized Stretch Code Timeline in Arlington

#### March-May 2023

- Forums for builders (2/15) and public (3/1)
- Select Board hearing (3/20)
- Town Meeting vote (April/May)

#### **July 2023**

 Six-month (recommended) phase-in period begins

#### **January 1, 2024**

- Potential effective date of Specialized Code in Arlington
- Future updates automatic (like Stretch Code)

