About NEEP A Regional Energy Efficiency Organization





One of six REEOs funded in-part by U.S. DOE to support state and local efficiency policies and programs.

Northeast Energy Efficiency Partnerships

"Assist the Northeast and Mid-Atlantic region to reduce building sector energy consumption 3% per year and carbon emissions 40% by 2030 (relative to 2001)"

Mission

We seek to accelerate regional collaboration to promote advanced energy efficiency and related solutions in homes, buildings, industry, and communities.

Vision

We envision the region's homes, buildings, and communities transformed into efficient, affordable, low-carbon, resilient places to live, work, and play.

Approach

Drive market transformation regionally by fostering collaboration and innovation, developing tools, and disseminating knowledge

Green Zoning: Using Local Zoning to Achieve Community Energy Efficiency and Resiliency



Precursor to Climate Zoning Update

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• Draft a climate action plan

- Sets local sustainability and energy goals
- Identifies areas of focus in terms of climate impact
- Outlines strategies for achieving goals in each area
- For the topic of buildings, MA communities often run up against the Building Code in terms of requiring energy savings above the code.
 - Climate Zoning can HELP!!



Case Studies

Case Study: Northampton, MA



• Urban Residential Sustainable Growth Overlay District:

- Buildings have to meet one of two requirements:
 - HERS rating of 47 or lower : 1,200 sq. ft. or less
 - HERS rating of 41 or lower: larger than 1,200 sq. ft. OR
 - LEED Gold for new construction or LEED Gold in Neighborhood Development

Other Option: A density bonus can be used to incentivize developers to meet a LEED certification for higher density allowances

• Density bonus can also be used for incentivizing affordability

Case Study: Somerville, MA



• Green Score:

- performance-based environmental landscape standard with a weighted point system that incentivizes landscape and site design elements that:
 - Reduce storm water runoff
 - Improve urban air quality
 - Mitigate urban heat island effect
 - Improve general well being of residents and visitors

Case Study: Denver, CO



- Denver Green Building Ordinance
 - Offers flexible pathway for compliance of green building ordinance
 - NEW BUILDINGS (25,000 SQ. FT. AND UP) & ADDITIONS (50,000 SQ. FT. AND UP)
 - Cool Roof requirement

AND ONE OF THE FOLLOWING:

- Payment into green building fund
- On-site solar
- Purchase off-site solar energy
- Energy conservation of at least 12% above code req.
- Green building certification

Other Climate Zoning Pathways



- Specify building orientation to maximize daylighting
- Require covered parking in commercial districts to reduce heat island effect
- Minimum Solar Reflectance Index (SRI) requirements for roofs in commercial/industrial districts
- Exempt overhang and/or exterior wall thickness from counting toward gross sq. ft. if it contributes to tighter building envelope and energy efficiency
- Building fenestration standards to promote passive solar

Thank You!

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