

## Stepping Up to Passive | Policies We Want

A Passive House Network Brief

PHN's 2022 [Policy That Works](#) report identified a number of regions where step and reach codes were accelerating market transformation via the adoption and implementation of policies supporting Passive House buildings. The report identified successful replicable patterns across a number of regions. In this brief we expand on them, highlighting pathways every region should consider.

### 1. Approval of alternate compliance pathway:

We found that this barrier removal step can be a *foundational move prior to implementing any incentive or reach code*. It allows project design teams to remove the requirement to develop two separate energy models, reduces cost and complexity and conflicting directions generated by two differing modeling programs.

**Example:** In 2012, Massachusetts approved an alternate compliance pathway that allowed PHPP and Wufi Passive to be submitted for energy code compliance in lieu of the state's standard compliance model. This set the foundation for their incentive program to move forward. PHN has developed an overview of all jurisdictions where an alternate compliance pathway is already in place, with links to the specific code language they've adopted:

<https://passivehousenetwork.org/codes/>

### 2. Passive House Incentives:

Incentives are a direct way to overcome market inertia. They build industry capacity, expand product supply chains, and provide market confidence in delivering Passive House projects in a region. To be effective, they must be sufficient to motivate. They are an essential first step prior to reach or step code launches. These incentive programs may be structured in multiple ways:

- a. **Passive-House-Specific Incentives:** MassSave developed a Passive-House specific incentive program that offered significant financial support to multifamily projects targeting Passive House certification. This incentive package included three tiers:
  - i. Professional training subsidies
  - ii. Preliminary modeling support for feasibility studies
  - iii. Project construction subsidies to reduce first costs

- b. **Competitive Awards Programs:** [NYSERDA's 'Buildings of Excellence'](#) awards program offered substantial financial support to applicants who demonstrated willingness to strive for excellence. While this program did not specify Passive House certification, 95% of the applicants chose this pathway to demonstrate excellence. This program was inspired by the [Brussels' Environment 'Exemplary Buildings' program](#) where Passive House emerged similarly as the front-runner program of choice to demonstrate exemplary performance.
- c. **City-led incentives:** These may be structured as zoning incentives with increased height allowances, setback encroachments or beneficial re-zoning allowances that improve financial outcomes for developers to offset increased first costs.
  - i. The [City of Vancouver implemented zoning relaxations and incentives specific to Passive House](#) that increased development of Passive House prior to a step code introduction.
  - ii. [Somerville, Massachusetts, 2019 Zoning Ordinance](#) includes Passive House as a qualification for density bonuses and requires PH or comparable performance in specific Master Plan districts. It offers Passive House certification as an alternative pathway for Green Building compliance for all large projects.
  - iii. New York City, with NYSERDA launched a [\\$15 million program funding all-electric Passive House certified multifamily buildings](#).
- d. **Outlier Incentives:** In Colorado, Xcel Energy has provided a significant incentive to homeowners affected by the Marshall Fire disaster. This [incentive offers \\$37,500 to owners who choose to rebuild their home to meet Passive House standards](#).

### 3. Revised Reach & Stretch Codes:

Once a critical mass of professionals and projects has been developed in a region, policymakers can begin formal integration of Passive house into regulatory frameworks via reach or stretch codes. This is the logical place to introduce Passive House to a market. Examples of this already exist in the North American marketplace:

- a. **MA's Opt-In Stretch Code:** [Massachusetts' Department of Energy Resources \(DOER\) revised their reach code structure](#) to replicate the metrics and targets used in Passive House. They simultaneously developed a set of 'opt-in' stretch codes available for adoption by local jurisdictions. They include a requirement for multifamily buildings over 12,000 SF to deliver Passive House certification for energy code compliance. Details of this overhaul process and opt-in stretch code are outlined here: <https://youtu.be/hOh--DlvxCA>.
- b. **The BC Energy Step Code - A revised reach code structure:** British Columbia took the opportunity to overhaul their reach code structure

by removing the option for each jurisdiction to develop custom, incremental improvements to the baseline code. Instead, they established an end goal target for all buildings with a deadline for this target to be achieved. They then 'backcast' the five interim steps that jurisdictions could adopt on their journey to the end goal. The BC Energy Step code revised the target metrics required for buildings to show compliance, using the opportunity to transform the tools and methodologies used by industry to design buildings. Thermal Energy Use Intensity (TEDI) replaced Energy Use Intensity as the new metric, which was determined to be better able to deliver emissions reduction targets required for the BC region. Certified Passive House was deemed an equivalent to their top step. This provided clarity to developers and manufacturers on where their regulators were heading. It has accelerated market transformation in this region as many developers have chosen Passive House certification ahead of the 2032 deadline.

#### **4. Revised Baseline Codes:**

Once jurisdictions have habituated their marketplace to the targets, metrics and methodologies common to Passive House, the baseline code may be revised to deliver Passive House outcomes. This fourth step is most successfully implemented when the previous three steps are completed. Market confidence, professional competence and a cost-effective product supply-chain must be in place before a robust transformation may be successfully rolled out. This process - start to finish - took only seven years to accomplish in Brussels and is currently almost complete in Scotland. Massachusetts is following this same path. Cities with locally controlled energy codes, such as Denver, are similarly in position to implement this step ahead of state, and national codes.

PHN encourages all jurisdictions to follow these steps to deliver similar, reliably excellent outcomes.

PHN's Policy Committee  
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