

Advanced Building Energy Efficiency Policy Task Force (ABEEP) Meeting

Building Energy Policies and Municipal Opportunities in Illinois







Agenda

- Introduction
- Community Updates
- Robert Coslow, Professional Services
 Administrator, Illinois Capital Development
 Board
- Chris Dillion, President, Campbell Coyle
- Federal Funding Opportunity
- Questions / next steps



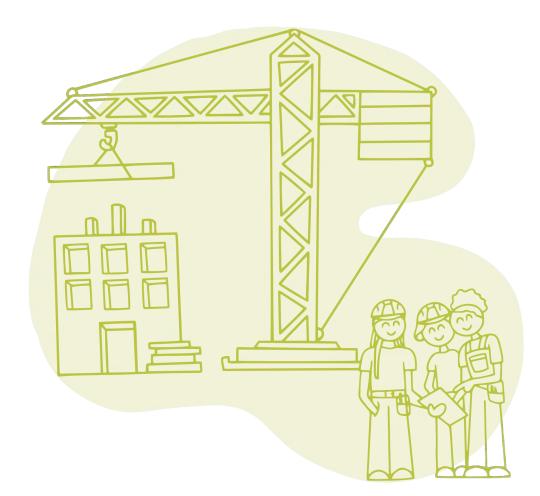


Project background

Project Background

Our Approach

- Engage with municipalities to assist with the adoption and implementation of advanced building policies
- Develop utility-funded support programs that help municipalities successfully implement policies
- Develop savings and attribution methodologies that follow market transformation protocols



Our Team

Slipstream, MEEA, MMC with funding support from ComEd

Advanced Building Policies Overview

Stretch codes

Target: New Buildings

Alternative compliance path that defines a higher level of energy efficiency

Benchmarking and Building Performance Standard (BPS)

Target: Existing buildings

Focus on improving existing building stock through setting targets for efficiency upgrades



One-on-One Municipality Updates

1-on-1 Assistance

Goals

- Provide technical assistance directed at each city's circumstances
- Help drive forward adoption of stretch code and BPS

Requirements

- Recurring meetings at cadence that works for each city
- Consider the policies in earnest with no need to commit

1:1 Municipal Engagement

Engaged Municipalities

- Broadview
- Chicago
- Downers Grove
- Elgin
- Evanston
- Naperville
- Northbrook
- Oak Park
- Skokie

Examples of Technical Assistance

- Town Hall or public meeting presentations and material support
- Internal presentations on stretch code details
- Analysis of building data to estimate savings
- Comparison of stretch vs. base code
- Benchmarking "data jam" facilitations

Resources for Communities

Stretch codes

- Creating your own stretch code
- Stretch code FAQ
- Massachusetts case study
- Residential stretch vs base code comparison

Benchmarking/BPS

- Analyze existing building stock and define scope
- Choose building performance metric and determine targets
- Create compliance pathway and determine timeline
- Benchmarking implementation fact sheet
- Case studies Chicago, Oak Park, Evanston

Applicable to both policies

- Stakeholder engagement
- Policy Champion Engagement

ADVANCED BUILDING POLICY TOOLKIT FOR ILLINOIS COMMUNITIES | 2023

Related Policy: Building Performance Standards and Stretch Code

Creating a Policy Champion Coalition

Building a coalition supportive voices of advanced building stretch codes and standards (BPS), TI provide policy chan trying to convince of the value and to page

GOAL

Promote aware

individuals with and ability to dis

Demonstrate a individuals shou

Advocate for in the adoption of adoption.

It identifies dif Slipstream

Stakeholder Gr Represented

(City staff, elect officials, commi

Stretch Code FAQs

ADVANCED BUILDING POLICY TOOLKIT FOR ILLINOIS COMMUNITIES | 2023

When would the stretch code take effect?

The Illinois Capital Development Board (CDB) shall complete development of the Illinois stretch code elements and requirements by December 31, 2023. The stretch codes shall then be completed and available for adoption

1. What is a stre

A stretch code is an beyond the minimur and defines a higher construction. Once f stretch code takes th establishes the mini new construction, ac codes cover both co

Stretch Code	Implements
Version	Date
004 Residential	December
Stretch Code	2023
026 Residential	December
Stretch Code	2025
029 Residential	December
Stretch Code	2028
032 Residential	December
Stretch Code	2031

"If "unanticipated burdens" are asso efficient than 2006 IECC and at leas "If "unanticipated burdens" are as: more efficient than 2006 IECC and

3. What are the b

- Energy and operat
- Policy mechanism
- Improved indoor sealed ducts, and
- Increased ability

ADVANCED BUILDING POLICY TOOLKIT FOR ILLINOIS COMMUNITIES | 2023

Related Policy: Building Performance Standards

Benchmarking 101 for Municipalities

What is Benchmarking?

Building energy benchmarking is measuring and tracking a building's energy use over time. A benchmarking policy requires commercial building owners to track and report energy use in buildings annually.

Why Does it Matter?

The goal of benchmarking is to enable municipalities, as well as building owners and managers, to:

- understand energy use patterns and relative performance
- spot any unexpected changes
- set energy goals
- track progress
- identify opportunities to save energy and money

IMPLEMENTATION OF BENCHMARKING PO

In implementing a benchmarking policy, key items to consider are

REPORTING REQUIREMENTS IN POLICY

Reporting Tool: ENERGY STAR Portfolio Manager (ESPM)

- Free and easy-to-use web-based tool developed by the U.S. EPA
- Used by almost all municipalities implementing benchmarking
- Requires property owners to input utility bills, and some basic information about building (e.g., use type, location, size, occupancy)

Reporting frequency

Most often required annually

Verification

 Recommended to require third-party verification of building and energy data every 3 years

MUNICIPAL SUPPOR **BUILDING OWNERS**

Organize data jams to h owners understand how with policy

 Free workshops to an about newly adopted



Illinois Energy Code Update



Presented by

Robert Coslow
Professional Services Administrator
Capital Development Board

Illinois Stretch Energy Code

Mandated by Public Act 102-0662 Energy Transition Act formerly CEJA

Modified the Energy Efficient Building Act (20 ILCS 3125/55) to require a Stretch Energy Code.

Stretch Code

Energy Efficient Building Act (20 ILCS 3125/55)

- Creates an optional, more stringent code that municipalities can adopt to achieve more energy efficiency than the Illinois Energy Conservation Code through a consistent pathway across the State.
- Shall be available for adoption by any municipality, taking the place of the Illinois Energy Conservation Code.
- Shall have separate components for commercial and residential buildings, which may be adopted by the municipality jointly or separately.

Illinois Stretch Energy Code Requirements

Commercial Buildings

- By 6/30/24 must have a site energy index no greater than .60 of the 2006 IECC.
- By 12/31/25 must have a site energy index no greater than .50 of the 2006 IECC.
- By 12/31/28 must have a site energy index no greater than .44 of the 2006 IECC.
- By 12/31/31 must have a site energy index no greater than .39 of the 2006 IECC.

Residential Buildings

- By 6/30/24 must have a site energy index no greater than .50 of the 2006 IECC.
- By 12/31/25 must have a site energy index no greater than .40 of the 2006 IECC.
- By 12/31/28 must have a site energy index no greater than .33 of the 2006 IECC.
- By 12/31/31 must have a site energy index no greater than .25 of the 2006 IECC.

Illinois Commercial Stretch Energy Code

Commercial is based on 2024 IECC

- Allows PHIUS as a compliance path
- Renewable Energy Requirement
- EV readiness
- Electric readiness in R-2
- Heat pump incentives in exist buildings
- ASHRAE 90.1 alignment with IECC

Illinois Commercial Stretch Energy Code

2024 IECC Final Draft vs Final Version

- Appealed items moved to appendices in IECC Final Version **remain** in the main body of the Stretch Code.
- C406.1.1.1 Requires buildings w/o heat pumps to get 25% more credits.
- C403.4.6 Demand responsive controls.
- C405.14 EV charging infrastructure.
- C405.16 Energy storage system readiness.

Illinois Residential Stretch Energy Code

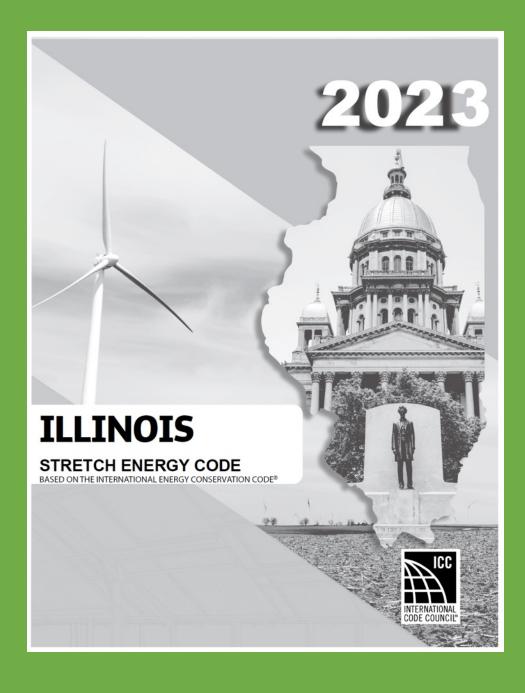
Residential is based on 2021 IECC

- Allows PHIUS as a compliance path
- Electric readiness
- Renewable energy readiness
- Heat pump incentives
- Demand response thermostats

Illinois Residential Stretch Energy Code

Cost Effective Analysis

- The resulting analysis shows that the proposed code is costeffective, yielding short-term and long-term consumer benefits when homes are built to the stretch code as compared to the 2021 IECC. Over the course of 30 years, a homebuyer will net approximately \$2,355 in life-cycle energy cost savings as well as \$6,474 in avoided future retrofit costs for the electrified technologies, resulting in a total life-cycle cost savings of \$8,829.
- Visit CDB website for full report.



ICC to Publish Stretch Code online and print versions

Illinois Stretch Energy Code



DOE is working on a custom IL Stretch Code version of REScheck targeted for end of this year and COMcheck for 2025.

Illinois Stretch Energy Code

Status

- Currently in rulemaking process
- Public comment period
- Should be effective by year end

Questions?





Chris Dillion, Campbell Coyle



Introduction to Federal Funding Opportunity

Designing & Implementing Building Performance Standards in Small, Rural, and Justice 40 Communities

Technical Assistance

 Receive support on how to add administrative capacity to implement the policy, engage stakeholders, support local job growth, and more.

Peer-to-Peer Exchange

- Engage with other communities to help inform efforts, identify needs
- In-person and Virtual meetings

Software Access

 Access to the BEAM platform to help implement the policy



























This Project is supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under the Building Technologies Office - DE-FOA-0002813 - Bipartisan Infrastructure Law Resilient and Efficient Codes Implementation



Next steps

Next steps

- Stay tuned for follow-up from MMC with resources
- Next ABEEP meeting later in summer or early fall
 - Focus on stretch code next steps
 - Program support next steps
- Always looking for more communities interesting in 1:1 assistance

Interested in finding out more about energy codes or policies?



Jeannette LeZaks
Slipstream
jlezaks@slipstreaminc.org



Alison Lindburg
MEEA
alindburg@mwalliance.org