Advanced Building Energy Efficiency Policy Task Force (ABEEP) Meeting

Building Energy Policies and Municipal Opportunities in Illinois

December 16, 2025

Agenda

- Introduction to State base energy code and stretch energy code
- Municipal motivations and options for adopting the stretch code
  - Alison Lindburg, City of Aurora
- Updates on base code and stretch code requirements and timelines
  - Robert Coslow, Illinois Capital Development Board
- So, what's the difference?
  - Key differences between new base code and proposed new stretch code
- Discussion/Q & A

Introduction to Illinois Energy Codes

Illinois Energy Codes

- Energy Efficient Building Act (20 ILCS 3125/)
  - Requires state to adopt “the latest published edition of the International Code Council's International Energy Conservation Code” (IECC) as base energy code
  - Requires state to create and adopt the Illinois Stretch Energy Code, allowing munis to achieve more EE than what is possible through base code
    - Must meet specific site energy index targets, laid out in Illinois' Climate and Equitable Jobs Act

- Base Energy Code
  - Sets baseline EE standards for all buildings within state
  - Currently 2024 IECC, with a few state-specific amendments

- Stretch Energy Code
  - Optional for munis to adopt
  - Once they do, stretch code standards become new minimum baseline

Why Stretch Code?
Aurora's Motivation

CURRENT ILLINOIS ENERGY CODE OPTIONS

	Name	Description	Site Energy Index (% over 2006 IECC)	Adoption and Effective Dates
Residential Base	2021 Base Code (Residential)	2021 IECC with slight roof weakening amendments	0.671 (32.9%)	Effective date: 1/1/2024
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Residential Stretch	2023 Stretch Code (Residential)	2021 IECC w/ mandatory "readiness" measures + increased EE	0.60 (40%)	Available for adoption: 1/1/2025
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Commercial Base	2021 Base Code (Commercial)	2021 IECC	0.59 (41%)	Effective date: 1/1/2024
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	2026 Stretch Code (Commercial)*	2024 IECC w/ mandatory "readiness" measures + increased EE	0.40 (60%)	Estimated: Available for adoption March/April 2026

* - upcoming

2026 Illinois Stretch Energy Code

Capital Development Board

Building a Better Illinois

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 12/31/26 must have a site energy index no greater than .50 of the 2006 IECC.
- By 12/31/29 must have a site energy index no greater than .44 of the 2006 IECC.
- By 12/31/32 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 12/31/26 must have a site energy index no greater than .40 of the 2006 IECC.
- By 12/31/29 must have a site energy index no greater than .33 of the 2006 IECC.
- By 12/31/32 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 PHI & PHIUS
- EV Infrastructure Appendix CG
- Demand Response Controls Appendix CI
- Energy Storage Appendix CJ
- 90.1 Compliance Appendix CK
- Increased R Values Table C402.1.3
- Fenestration Orientation C402.5.1.3
- Reduced Air Leakage C402.6.2
- Electric Infrastructure C405.17
- 1.25X for non heat pump bldgs. C406.1.1.1

Illinois Residential Stretch Energy Code

Residential is based on 2024 IECC

- Allows PHI & PHIUS
- EV Infrastructure Appendix RE refers to state law
- Demand Response Controls Appendix RJ
- Electric Readiness Appendix RK
- Renewable Energy Infrastructure Appendix RL
- Air Leakage Testing R402.5.1.2
- Ductwork in Conditioned Space R403.3.3
- HRV/ERV Requirement R403.6.1
- Additional Energy Efficiency R408.2

Illinois Residential Stretch Energy Code

Cost Effective Analysis

- PNNL is working on a cost-effective analysis and should be available March of 26 for residential and commercial.

Illinois Stretch Energy Code

DOE is working on a custom IL Stretch Code version of REScheck and COMcheck.

Illinois Stretch Energy Code

Status

- Final Draft has been approved by Council.
- Waiting on Cost-Effective Analysis.
- Should be effective by mid 2026.

Questions?

New Stretch Code Provisions

Residential Code

Residential Key Differences

New Base Code (2024 IECC) vs New Stretch Code (2026)

Feature	2024 IECC Residential Base Code	2026 Residential Stretch Code
Electric Vehicle Ready	Optional Appendix	Mandatory
Demand Response Capable	Optional Appendix	Mandatory
Solar Ready	Optional Appendix	Mandatory
Electric Ready	Optional Appendix	Mandatory
Additional Efficiency Credits (R408)	10 Credits	31 Credits (with combustion equipment) 16 Credits (all-electric)
Performance Path Target	80% of Reference (Energy Cost) (with combustion equipment) 85% of Reference (Energy Cost) (for all-electric)	52% of Reference (Site Energy) (with combustion equipment) 84% of Reference (Site Energy) (for all-electric)
ERI Score Target (CZ5)	54 (with no onsite power) 43 (with onsite power)	40 (with combustion equipment) 46 (all-electric)

Key Changes - Residential

2023 Stretch Code vs 2026 Stretch Code

	2023 Stretch Code	2026 Stretch Code
Underlying Code	Based on 2021 IECC	Based on 2024 IECC
Site Energy Index	0.50 (50% of 2006 Baseline)	0.40 (40% of 2006 baseline)*
Prescriptive Additional Efficiency Credits	30 credits needed for all (Does not differentiate based on fuel source)	Fuel burning homes: 31 credits All-electric homes: 16 credits
Mechanical Ventilation	Not required, but available for additional efficiency credits	Required for all compliance pathways. No additional credits
Ducts	Not required to be in conditioned space, but available for additional efficiency credits	All ducts required to be in conditioned space. No additional credits
Max. Air leakage rate	3.0 ACH50	2.5 ACH50

*20% More efficient than 2023 Stretch Code

2026 Residential Stretch Code

Mandatory Aspects – Mostly Unchanged from 2023 Stretch Code, but not required in the 2024 Base Code*

Concept	Short Description
Electric-Ready	Requires mixed-fuel residential buildings to be electric-ready for water heating, space heating, cooking, and clothes drying.
EV-Ready or EV Charger Installed	Requires residential buildings to be EV-ready or EV Charger installed and multifamily buildings to comply with commercial stretch code EV infrastructure requirements.
Solar-ready	Requires residential buildings to be solar-ready and multifamily buildings to comply with commercial stretch code solar readiness and installation requirements.
Demand response capable thermostats and water heaters	Requires thermostats and electric water heaters to be demand response capable.

***In Illinois the Electric Vehicle Charging Act** (Public Act 103-53) requires at least **one** EV-capable parking space for each residential unit that has a designated parking space.

Residential Stretch Code

Compliance Pathway Options

Concept	Short Description
Allowed Alternate Compliance Pathways	Passive House Pathway - Allows compliance with PHIUS and PHI as a compliance option
	Net-Zero Pathway – Allows compliance with language from Appendix RC (the Zero Energy Appendix)
Section R408 and Prescriptive Pathways	Achieve **31 credits** (with combustion equipment) or **16 credits** (all-electric) from Table R408
Performance Pathway Metric	Like the 2023 Stretch Code the Performance Pathway is based on a Site Energy metric aligned with CEJA targets, instead of utility cost
ERI Compliance Pathway	Revises ERI metric to align with CEJA targets

Commercial Stretch Code

Commercial Key Differences

New Base Code (2024 IECC) vs New Stretch Code (2026)

Component	2024 IECC Commercial Base	2026 IL Commercial Stretch
Mandatory Metric	Energy Cost	Site Energy
Additional Efficiency Credits (C406)	Required, varies by building type	Required, varies by building group, 1.25x for non-electric building
Required Credits (C406)	Moderate	Increased
Solar Credits	Flexible	Capped
Renewable Energy Requirement	Mandatory for Prescriptive, Simulated is hard to achieve without renewables or offsite procurement	Mandatory
EV Infrastructure	Optional Appendix	Mandatory
Demand Response	Optional Appendix	Mandatory
Battery Ready	Optional Appendix	Mandatory
Electric Ready (R-2)	Optional Appendix	Mandatory

Key Changes - Commercial

2023 Stretch Code vs 2026 Stretch Code

	2023 Stretch Code	2026 Stretch Code
Underlying Code	Based on 2024 IECC	
Site Energy Index	0.60 (60% of 2006 Baseline)	0.50 (50% of 2006 baseline)*
Prescriptive Additional Efficiency Credits	Moderate amount to meet 0.60 index	Increased credits among many building groups to achieve 0.50 index

*17% More efficient than 2023 Stretch Code

Commercial Stretch Code

Overall Concepts

Mandatory

- Renewable Energy Requirements
- Energy Storage-Ready
- Electric-Ready (R2*)
- Demand Response Requirements

*Residential buildings with permanent occupants, such as apartment buildings, dormitories, and non-transient hotels and motels, that contain more than two dwelling units or sleeping units.

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Questions and Discussion

Thank You!

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