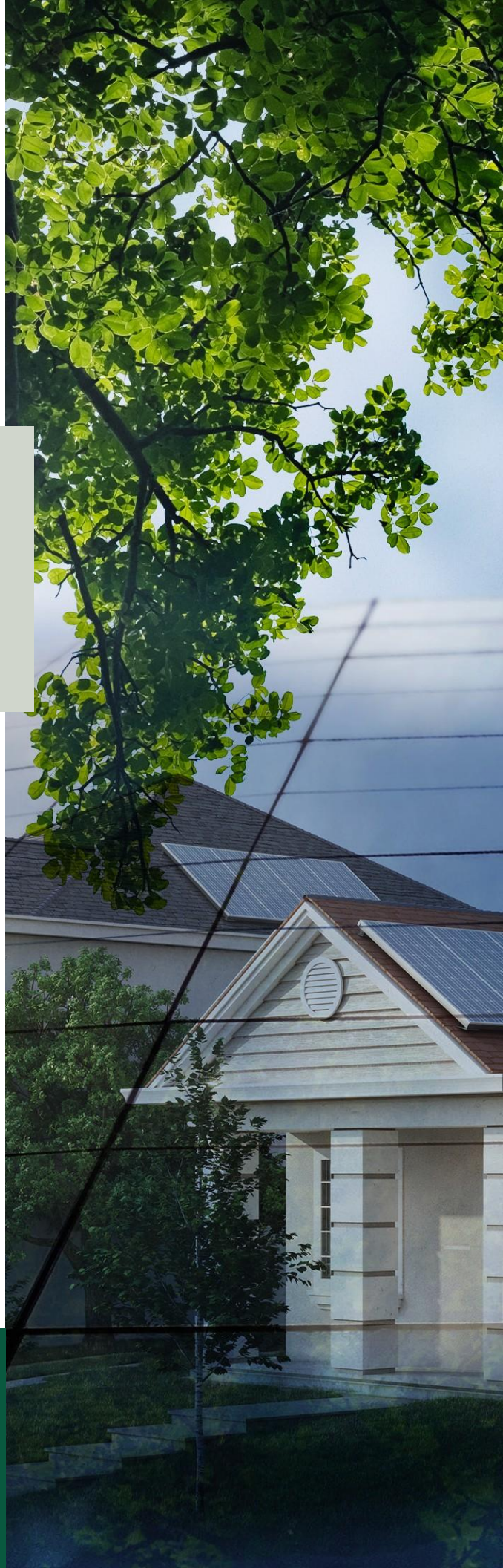
INTERNATIONAL CODE COUNCIL®

2030 IECC®/IRC Chap. 11/ IECC Expanded (IECCX)

Scope & Intent

PUBLIC COMMENT RESPONSES



April 30, 2026

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PUBLIC COMMENT RESPONSES

On December 5, 2025, the International Code Council Board of Directors approved a IECC 2030 Energy Strategy document and released draft scope and intent statements for the 2030 International Energy Conservation Code® (IECC®)/Chapter 11 of the IRC/IECC Expanded (with commentary) for public comment. The International Code Council Board of Directors provided a 30-day public comment review period.

This document provides responses to the public comment feedback received.

*Note: **The "IECCX" name is under review by ICC.** For consistency of responses to the original scope and intent, in this document it is being referred to as IECCX here.*

Over 100 comments were submitted in response to the published IECC 2030 Energy Strategy and the draft scope and intent statements for the IECC and IECCX. The comments included a range of feedback expressing support for and criticizing the strategy and draft scope and intent statements, and asking related questions.

ICC would like to thank those who took the time to provide thoughtful feedback and raised questions related to this 2030 and beyond strategy on the energy codes.

Contents

General Questions / Comments

Why do we need two energy codes?

The 2030 approach offers a core energy code applicable to every community. The additive approach introduces a comprehensive document that includes the core energy conservation code with additional enhancements. These enhancements are designed for communities and jurisdictions wishing to strengthen the core energy conservation standards with additional energy conservation targets and considerations for broader community effects and longer-term cost advantages.

Previous cycles have demonstrated notable differences in perspectives regarding approaches to energy conservation. Further, adoption within the United States and internationally has highlighted substantial regional variability in preferred methods among jurisdictions. Some jurisdictions favor minimal energy conservation strategies grounded in traditional metrics such as BTUs and Therms, emphasizing individual impacts, while others seek to incorporate additional considerations, including carbon generation and broader community effects. These divergent views underscore the impracticality of implementing a single, universal energy conservation code.

The 2030 approach presents a comprehensive energy conservation framework, complemented by an enhanced, higher energy performance solution suited to jurisdictions with varying requirements. Consensus codes deliver greater uniformity and increased reliability in energy consumption and conservation measures, thereby minimizing the risk of issues arising during implementation.

The ICC consensus process provides a world class consensus process through which industry and consumer perspectives converge, enabling the development of model energy codes that accommodate the varied needs and expectations of adopting jurisdictions.

Won't the two energy code approach increase confusion and compliance costs?

Since many areas already make changes to the model energy codes when adopting them, standardizing these codes is expected to minimize inconsistencies. This reduction in variability can help eliminate confusion and provide greater clarity for designers, builders, officials, and those responsible for compliance training.

Why is embodied carbon being minimized?

It is not being minimized. This approach allows the introduction of embodied carbon into the discussion with the [B] IECCX, which was not allowed in past energy codes and otherwise would have been prohibited in a singular energy code.

How does the [A] IECC relate to the [B] IECCX?

The ICC is adopting an additive approach to both the [A] IECC and [B] IECCX codes. Each code's scope and purpose are specifically designed to address distinct differences among the U.S. jurisdictions that implement energy conservation and usage codes. The division into two separate documents directly responds to consumer demand and continues to uphold the principle of offering relevant model codes developed through consensus-based processes while supporting individual jurisdictional adoption.

The [A] IECC serves as the base document to which additional energy related requirements may be added in the [B] IECCX. The [B] IECCX will include the base [A] IECC text plus additional ("additive") requirements as defined by the respective [B] IECCX committee. The following graphics demonstrate the concept.

Figure 1 Demonstrating Additional Requirements Above the [A] IECC

[A] CORE CODE = IECC

R402.5.1.3 Maximum air leakage rate. Where tested in accordance with Section R402.5.1.2, the air leakage rate for *buildings*, *dwelling units* or *sleeping units* shall be as follows:
Where complying with Section R401.2.1, the *building* or the *dwelling units* or *sleeping units* in the *building* shall have an air leakage rate not greater than 4.0 air changes per hour in Climate Zones 0, 1 and 2; 3.0 air changes per hour in Climate Zones 3 through 5; and 2.5 air changes per hour in Climate Zones 6 through 8.
Where complying with Section R401.2.2 or R401.2.3, the *building* or the *dwelling units* or *sleeping units* in the *building* shall have an air leakage rate not greater than 4.0 air changes per hour, or 0.22 cubic feet per minute per square foot [1.1 L/(s × m2)] of the *building thermal envelope* area or the dwelling *testing unit enclosure area*, as applicable.
Exceptions:
Where *dwelling units* or *sleeping units* are attached or located in an R-2 occupancy, and are tested without simultaneously testing adjacent *dwelling units* or *sleeping units*, the air leakage rate is permitted to be not greater than
0.27 cubic feet per minute per square foot [1.4 L/(s × m2)] of the *testing unit enclosure area*. Where adjacent *dwelling units* are simultaneously tested in accordance with ASTM E779, the air leakage rate is permitted to be not greater than 0.27 cubic feet per minute per square foot [1.4 L/(s × m2)] of the *testing unit enclosure area* that separates *conditioned space* from the exterior.
Where *buildings* have 1,500 square feet (139.4 m2) or less of *conditioned floor area*, the air leakage rate is permitted to be not greater than 0.27 cubic feet per minute per square foot [1.4 L/(s × m2)].

[B] Additive = Name TBD

R402.5.1.3 Maximum air leakage rate. Where tested in accordance with Section R402.5.1.2, the air leakage rate for *buildings*, *dwelling units* or *sleeping units* shall be as follows:
Where complying with Section R401.2.1, the *building* or the *dwelling units* or *sleeping units* in the *building* shall have an air leakage rate not greater than 4.0 air changes per hour in Climate Zones 0, 1 and 2; 3.0 air changes per hour in Climate Zones 3 through 5; and 2.5 air changes per hour in Climate Zones 6 through 8.
Where complying with Section R401.2.2 or R401.2.3, the *building* or the *dwelling units* or *sleeping units* in the *building* shall have an air leakage rate not greater than 4.0 air changes per hour, or 0.22 cubic feet per minute per square foot [1.1 L/(s × m2)] of the *building thermal envelope* area or the dwelling *testing unit enclosure area*, as applicable.
Exceptions:
Where *dwelling units* or *sleeping units* are attached or located in an R-2 occupancy, and are tested without simultaneously testing adjacent *dwelling units* or *sleeping units*, the air leakage rate is permitted to be not greater than
0.27 cubic feet per minute per square foot [1.4 L/(s × m2)] of the *testing unit enclosure area*. Where adjacent *dwelling units* are simultaneously tested in accordance with ASTM E779, the air leakage rate is permitted to be not greater than 0.27 cubic feet per minute per square foot [1.4 L/(s × m2)] of the *testing unit enclosure area* that separates *conditioned space* from the exterior.
Where *buildings* have 1,500 square feet (139.4 m2) or less of *conditioned floor area*, the air leakage rate is permitted to be not greater than 0.27 cubic feet per minute per square foot [1.4 L/(s × m2)].

[HP] R402.5.1.3B High Performance Maximum air leakage rate. The air leakage rate for *buildings*, *dwelling units* or *sleeping units* specified in Section R402.5.1.3 shall be reduced by 0.5 ACH50. For Climate Zones 0 through 2 an air leakage rate not greater than 3.5 ACH50; for Climate Zones 3 through 5 not greater than 2.5 ACH50; and in Climate Zones 6 through 8 not greater than 2.0 ACH50.

Legend:

Additive Volume Text

Figure 2 Demonstrating Additional Requirements Above the [A] IECC with Associated Table and Credits

[A] CORE CODE = IECC

R408.2 Additional energy efficiency credit requirements. Residential buildings shall earn not less than 10 credits from not less than two measures specified in Table R408.2. Five additional credits shall be earned for *dwelling units* with more than 5,000 square feet (465 m2) of *living space* located above *grade plane*. To earn credit as specified in Table R408.2 for the applicable *climate zone*, each measure selected for compliance shall comply with the applicable subsections of Section R408. Each *dwelling unit* or *sleeping unit* shall comply with the selected measure to earn credit. Interpolation of credits between measures shall not be permitted.

TABLE R408.2—CREDITS FOR ADDITIONAL ENERGY EFFICIENCY

MEASURE NUMBER	MEASURE DESCRIPTION	CREDIT VALUE								
		Climate Zones 0 & 1	Climate Zone 2	Climate Zone 3	Climate Zone 4 Except Marine	Climate Zone 4 Marine	Climate Zone 5	Climate Zone 6	Climate Zone 7	Climate Zone 8
R408.2.1.1(1)	≥ 2.5% Reduction in total TC	0	0	0	1	1	1	1	1	1
R408.2.1.1(2)	≥ 5% reduction in total TC	0	1	1	2	1	2	2	2	2

[B] Additive = Name TBD

R408.2 Additional energy efficiency credit requirements. Residential buildings shall earn not less than 10 credits from not less than two measures specified in Table R408.2. Five additional credits shall be earned for *dwelling units* with more than 5,000 square feet (465 m2) of *living space* located above *grade plane*. To earn credit as specified in Table R408.2 for the applicable *climate zone*, each measure selected for compliance shall comply with the applicable subsections of Section R408. Each *dwelling unit* or *sleeping unit* shall comply with the selected measure to earn credit. Interpolation of credits between measures shall not be permitted.

R408.2B Additional energy efficiency high performance credit requirements. Residential buildings shall earn not less than 5 credits in addition to those specified in Section R408.2 from Table R408.2B.

TABLE R408.2B—CREDITS FOR ADDITIONAL ENERGY EFFICIENCY

MEASURE NUMBER	MEASURE DESCRIPTION	CREDIT VALUE								
		Climate Zones 0 & 1	Climate Zone 2	Climate Zone 3	Climate Zone 4 Except Marine	Climate Zone 4 Marine	Climate Zone 5	Climate Zone 6	Climate Zone 7	Climate Zone 8
R408.2.1.1(1)	≥ 2.5% Reduction in total TC	0	0	0	1	1	1	1	1	1
R408.2.1.1(2)	≥ 5% reduction in total TC	0	1	1	2	1	2	2	2	2
R408.2.10	Electrical Vehicle Infrastructure	1	1	1	1	1	1	1	1	1
R408.2.11	Battery Energy Storage System	2	4	5	4	7	5	4	3	3

Legend:

Additive Volume Text

Which committee will be responsible for the text in the documents?

There will be four consensus committees. The following table indicates the areas of responsibility for each committee.

Code	*IECC*		*IECCX*	
	Residential Consensus Committee	*Commercial* Consensus Committee	*Residential* Consensus Committee	*Commercial* Consensus Committee
[A] IECC (Commercial Provisions)		X		
[A] IECC (Residential Provisions)	X			
[B] IECCX (Commercial Provisions)				X
[B] IECCX (Residential Provisions)			X	

The [B] IECCX consensus committees will **not** be editing the [A] IECC text.

Has the committee balance changed from prior years?

Consistent with longstanding practice, representation from any given interest category cannot exceed 1/3 of the committee. In previous years, the governmental members were required to be 33% of the committee. In 2030, the minimum number of governmental members is no less than 25% for the [A] IECC and no less than 20% for the [B] IECCX.

This approach aligns with the practices of other Standards Development Organizations (SDOs) adhering to the ANSI and international standards development practices best practices, which stipulate that no single interest category may comprise more than one-third of the representation. While most SDOs do not mandate minimum governmental representation, ICC's longstanding commitment to including governmental participants in the decision-making process is demonstrated by the minimum governmental representation designated for the Energy Codes.

How will be text between the two codes be coordinated?

ICC staff and consensus committee chairs will coordinate text between committees where needed in the process.

How are consumer interests represented within development of the Energy Codes?

The ICC has included an industry leading consumer interest perspective through multiple methods in the development of the IECC historically and will continue to ensure that consumer interests are strongly represented.

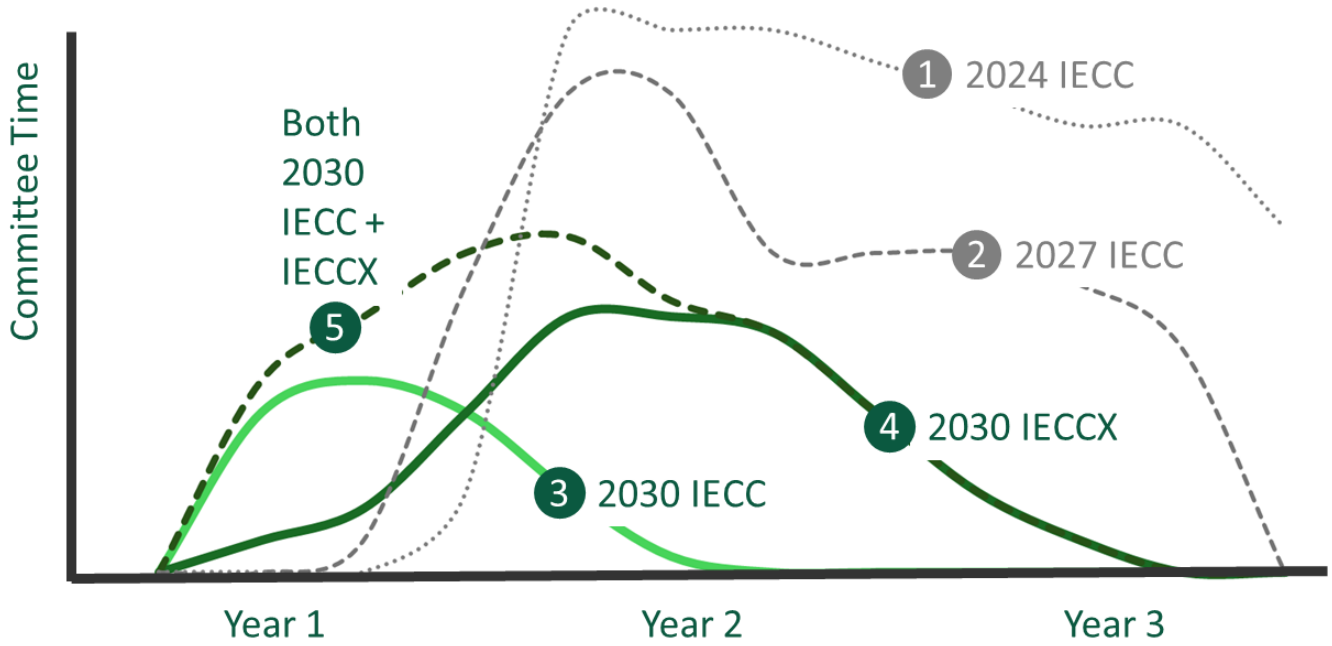
The makeup of the committee includes a balanced representation from various individuals, entities and organizations who represent a broad range of consumer interests on the main consensus body. Additionally, multiple subgroups, which review code change proposals and feed recommendations to the main consensus body, are open to interested parties. The interested parties participating in the IECC include over 120 individual consumers from across the U.S.

Through ensuring a balance of interests in the consensus committees, industry leading transparency and widespread opportunities for interested party participation, the ICC is ensuring every opportunity is available for anyone, anywhere to actively participate in the development of the U.S. energy codes.

Will the [A] IECC and [B] IECCX be developed in different cycles?

No. They will both be developed within the same development cycle and both will be published as 2030 editions. While the development will be within the same development cycle, it is anticipated that the development within that cycle will stagger slightly. The following diagram shows the anticipated development schedule.

Figure 3 Anticipated timelines and workloads for development of 2030 IECC [A] and IECCX [B]



It is anticipated that the first year will be focused heavily on work related to the [A] IECC and the [B] IECCX will work on elements that are not dependent on [A] IECC. Due to the scope of the [A] IECC, it is not anticipated that there will be any remaining work to be done in year 2 of the cycle. In year 2 of the cycle, it is anticipated that the bulk of the [B] IECCX work will be completed.

Even for those who participate in both the [A] IECC and [B] IECCX committees, the total time commitment will be meaningfully less than the time commitment required in either the 2024 or 2027 IECC development cycles.

Can elements of the [B] IECCX be moved to the [A] IECC main or appendix sections?

After careful consideration of the comments that were submitted, the scope and intent statements for the respective energy codes was reaffirmed by the ICC Board of Directors. Please refer to the original scope and intent document provided.

In accordance with the ICC standards consensus procedures, the consensus committee, by 2/3 vote, can recommend changes to the scope and intent statements to the ICC Board of Directors for their consideration (CP-12C, Section 11.4.3). Additionally, anyone can ask the Board of Directors for a scope and intent clarification using the "Scope and Intent Question" form on the Codes & Standards - ICC webpage.

Doesn't this approach make it more problematic for jurisdictions to adopt?

The structure of previous energy codes, influenced by polarization across the United States on this topic, has posed challenges for jurisdictions seeking to prioritize energy conservation without incorporating alternative energy sources, complex systems, or unconventional measurement methods. Likewise, jurisdictions seeking to implement more ambitious energy conservation strategies found that existing energy codes required considerable modification to address the needs of their constituents.

This approach adopts consensus-driven solutions that emphasize jurisdictional requirements and objectives, avoiding a singular uniform approach that often impedes rather than facilitates adoption. This supports more consumer choice.

Doesn't this new approach undermine grid reliability and resiliency?

This approach allows jurisdictions to choose where they focus their priorities. While there is a consistent overall cost benefit analysis (CBA), the IECC [A] focuses on individual benefits and payback and the IECCX [B] allows for broader community perspectives that account for grid reliability and resiliency perspectives.

The split allows this perspective to be effectively addressed and allows the jurisdictions to more easily understand the impacts of the model code they are adopting.

The appendices should be written as overlays to simplify their application.

An appendix can be written as an overlay to the relevant energy code. While IECCX [B] committees cannot change the core IECC [A] text, committees may create appendices as overlays within their scope.

Will there be a requirement for ICC to publish a 2030 IECC base code that provides positive energy savings over 2027?

The intent is for the initial draft of the IECC to be equivalent to the efficiency level of the 2027 IECC. No minimum savings threshold is required; however, it is the goal that the [A] IECC be equivalent to or better than the 2027 IECC efficiency. Ultimately it will depend on the cumulative results of the committee's decisions.

If an existing energy efficiency measure is removed, the expectation is that the committee is replacing it with an individual or set of energy efficiencies that are equal or more energy efficient than the measure(s) that were removed.

Cost Benefit Analysis (CBA) and Payback Periods

How were the payback period years determined for the [A] IECC?

The [A] IECC emphasizes the costs and benefits for individual owners and occupants throughout a typical period of ownership, considering first costs and the associated energy savings. The [B] IECCX includes broader community impacts and longer-term building life and resiliency related energy savings.

Residential: Review of U.S. Census data, National Association of Home Builders Data, and Redfin were used in this determination. The data also indicated a similar tenancy duration for multi-family occupants that was similar enough to one- and two-family dwellings and townhomes, therefore the determination of consistency in the payback period.

Multiple independent housing data sources converge on an average U.S. homeownership at 12 years, despite measuring tenure from different perspectives. The U.S. Census Bureau's American Housing Survey calculates tenure based on how long current homeowners have lived in their homes, producing a median tenure of 12 years in recent survey waves. Redfin's national housing analyses independently confirm this result by synthesizing Census tenure data with MLS records, showing homeowner tenure peaking around 13.5 years in 2020 and stabilizing near 12 years through 2024–2026. Consumer Affairs and similar secondary analyses directly summarize this Census-based data and report an average tenure of 11.9 years. By contrast, transaction-based datasets such as ATTOM report shorter ownership periods (roughly 8 years) because they measure only homes that are sold, excluding long-term owners. When considered together, these sources consistently indicate that the typical homeowner, across the full population, owns their home for about 12 years, while sellers represent a shorter-tenure subset.

Commercial: Individual lease durations for commercial properties can differ significantly and range from singular to multi-tenancy. Further, the investment decision-making process incorporates both tenant and building owner perspectives, which complicates generalizations. Employing a cumulative 10-year average is an effective approach for analyzing occupancy rates, as properties typically experience multiple tenants with minimal vacancy. This 10-year timeframe provides a more comprehensive assessment of the advantages associated with building investments, such as energy efficiency, over several lease cycles. It aligns with established practices in capital planning, financing, and depreciation, and is frequently utilized in cost-benefit and policy analyses that emphasize cumulative occupancy.

How were the payback period years determined for the [B] IECCX?

A 30-year payback period can be considered appropriate in cost-benefit analysis for buildings because buildings are long-lived, capital-intensive assets whose economic and societal value is realized over decades rather than years. The cost-benefit analysis (CBA) evaluates whether total lifetime benefits, discounted over the useful life of the asset, exceed total costs, not whether an investment recovers its cost quickly.

This perspective is especially important for energy-related building investments, where benefits extend beyond the individual owner to the broader community. Measures such as high-performance envelopes, demand reduction, on-site or off-site generation, and advanced controls reducing peak loads, smooth demand profiles, and lower stress on the electric grid, improving grid reliability, resilience to extreme weather, and overall system stability. These collective benefits accrue at the community or societal level rather than being solely captured in individual utility bills.

From an analytical standpoint, a 30-year horizon also reflects practical limits of net present value (NPV) analysis: at typical public-sector discount rates, benefits occurring beyond 30 years contribute only marginally to NPV and are increasingly uncertain, while still representing real physical performance of the building. As a result, a 30-year payback strikes a balance between capturing the meaningful economic, reliability, and resilience benefits delivered over a building's core service life and avoiding overreliance on highly discounted, speculative long-term projections, making it a sound and defensible benchmark in building cost benefit analysis.

Can alternative payback periods be proposed?

ICC welcomes suggestions for alternative payback periods that accurately reflect the broader market and are widely open to industry review and verification to ensure they are unbiased.

ICC worked with Dodge Construction Network (DCN) specifically to ensure that industry's best practices are followed for cost benefit analysis (CBA). ICC maintains that the chosen payback periods are suitable and do not reflect bias or special interests.

Can more information or details be provided on how the Cost Benefit Analysis (CBA) will be applied?

ICC engaged the Chief Economist of Dodge Construction Network (DCN) to develop a standardized cost analysis methodology that is impartial and aligns with established industry standards, ensuring accurate and appropriate cost assessments.

Dodge Construction Network is recognized for its expertise in providing data, analytics, and insights tailored to the architecture, engineering, and construction (AEC) industry. The organization compiles and analyzes comprehensive project information and market intelligence, supporting professionals in the AEC sector with relevant and timely data for decision-making. Through its technical capabilities, Dodge Construction Network facilitates collaboration among contractors, manufacturers, architects, and other stakeholders, contributing to improved efficiency and informed strategic planning within the construction industry.

Partnering with DCN, which brings industry expertise and impartial credibility, reinforces over a century of ICC and its founding organizations' commitment to consumers, occupants, and communities, regardless of political interests.

Please refer to the original scope and intent document provided. The prescribed approach provides a common cost benefit analysis (CBA) approach across the ICC energy codes. Specific variables are explicitly set to further ensure consistency and ease of use by code change proposal submitters and evaluation by consensus committees and their subgroups.

Examples will be provided in the updated Cost Impact Guideline related to energy submissions upon completion of the 2027 IECC. ICC will also provide a basic Excel based tool to assist in submission of standard energy code related code changes as part of the 2030 cycle.

Doesn't this create a conflict using CBA vs LCCA?

Cost benefit analysis (CBA) answers whether a proposed option produces a net value compared to its costs. Life cycle cost analysis (LCCA) is focused on which option provides the least cost over time. These two approaches, while distinct in their function, are not mutually exclusive of each other. The Department of Energy (DoE) is prescribed under EPCA to use LCCA, and in that the DoE evaluation compares the change from one version of the code to another.

CBA is appropriate for evaluating the individual benefit at the individual ([A] IECC), and life or community ([B] IECCX) levels as defined the scope and intent document.

If an energy code change proposal submitted does not meet the minimum payback period, will it be considered by the relevant committee?

No. For an individual energy code change proposal for either the main body or a non-mandatory appendix to be considered by the relevant committee, it must be within the payback period maximum identified using the prescribed Cost Benefit Analysis (CBA).

If an energy code change proposal submitted meets the minimum payback period, will it automatically be approved?

No. For an energy code change proposal to be considered by the relevant committee, it must be within the payback period maximum identified using the prescribed Cost Benefit Analysis (CBA). The proposal must

still be reviewed and approved by the appropriate consensus committee based on its technical merits.

The committee should provide a clear technical reason for not approving any proposal within the payback period.