

Your Building/Fire Officials Are Essential to Your City's Goal of Putting America's Energy Code (the IECC) on a Glide Path to Net Zero Buildings

Buildings are our largest consumer (and waster) of energy - and they last a long time. Building energy codes were created in response to historic U.S. energy crises, which sparked calls from Mayors, Governors, and Congress to improve building efficiency. In the 21st Century, growing climate concerns and data showing that building efficiency is the single-most impactful and cost-effective step jurisdictions can take to reduce carbon emissions has generated a strong consensus among elected officials and policymakers that – **starting with the 2021 IECC this November** – America's Model Energy Code must be placed on a glide-path of steady gains to net-zero building construction by 2050 or earlier. Efficiency measures are easiest and most cost-effective to install during construction (renovations are harder/more expensive); return tens of thousands in energy bill savings to owners/occupants; and are often permanent, performing the entire 100-year lifespan of the building.

Building and Fire Officials are often overworked, under-staffed, under-funded, and focused on protecting home and commercial building owners from shoddy and unsafe construction. Their jurisdiction counts on them to ensure building safety and quality, but it also wants public policies that address low-income and other energy ratepayer issues, local grid stability, energy independence, and climate mitigation. Local jurisdiction leaders are increasingly aware of the vital role a dynamic IECC can play in solving these pressing municipal and national issues.

As Austin Mayor Will Wynn once told the US Conference of Mayors Energy Committee: "I haven't really worked with my city's building officials and certainly wasn't aware they were voting to update America's Model Energy Code every three years. It's important for me to explain to them why a stronger IECC is important to our city's energy policy." In your discussions to unite your jurisdiction's building policy within its various branches of government, it's important to recognize some common myths that may arise:

Myth: The IECC is not a life-safety code and is less important than ICC's 14 other codes.

The benefits of the International Energy Conservation Code (IECC) may not meet a code official's traditional view of the "public protection" offered by other International Code Council codes that address fire, structural, or electrical issues. But the IECC, in addition to **lower monthly energy bills, reduced strain on aging power plants, reduced foreclosures, and reduced carbon emissions**, offers structural/safety protection to home and business owners and tenants through:

- **Augmenting fire codes:** The IECC's tight building envelopes slow the spread of fires by sealing cracks, holes, and other draft openings, separating conditioned from unconditioned space.
- **Improved indoor air quality:** A well-sealed and purposefully ventilated building keeps pollutants outdoors and ensures healthy air flow inside.
- **Greater durability:** Moisture management prevents construction material rot and harmful mold growth; a strong building envelope reduces condensation and ice damming.
- **Enhanced resiliency:** Efficient buildings allow people to shelter in place longer during power outages.
- **Fewer deaths and from extreme temperatures:** More efficient buildings hold air conditioning and heating better during heat waves and cold snaps.

Myth: Only Code Officials can vote on the 2021 IECC.

Traditionally, mostly fire and building officials have voted to update the IECC, but as more local officials embrace the benefits of an updated IECC, they are exploring multiple ICC "Governmental Memberships" to maximize their voting power for pro-efficiency code updates. ICC bylaws state that any "governmental unit, department or agency engaged in the administration, formulation, implementation or enforcement of laws, ordinances, rules or regulations relating to the public health, safety and welfare is eligible to become an ICC Governmental Member."

Jurisdictions can have multiple ICC Governmental Memberships; each is allotted 4, 8, or 12 votes based on the jurisdiction’s population. Many departments may qualify: Inspection, Public Works, Sustainability, Planning, Facilities, the Mayor’s office, Public Health Boards and others.

Population	Up to 50,000	50,001-150,000	Over 150,000
# of votes per Governmental Member	4	8	12
Annual ICC dues	\$135	\$240	\$370

Myth: IECC updates cost too much.

Builder trade groups claim the IECC’s efficiency improvements raise the price of housing too much. But remember: the purpose of the “I-codes” is to protect citizens – building owners, ratepayers, and tenants. Homes are typically priced at what the market will bear, which includes many more factors than just the cost of construction. And efficient homes help keep money in homeowner pockets year after year through lower energy bills! After job loss, the inability to pay energy bills (the least predictable monthly bill) is a leading cause of foreclosure. The modest upfront cost for added insulation, air sealing, etc. is recouped quickly via lower energy bills -- typically in only one to two years; then owners keep more of their money each month. As shown in the table, the small incremental cost to the monthly mortgage payment is offset by lower monthly energy bills.

Monthly Cost	With \$4,000 in energy improvements	Without energy improvements
Mortgage	\$552.38	\$524.42
Energy bill	\$90	\$150
Total	\$642.38	\$674.42

Source: Residential Energy Services Network

This represents a conservative estimate; the actual cost of energy updates to the 2021 IECC will be less than \$4,000.

The energy code is the only building code that pays for itself via lower monthly energy bills and then earns owners’ money every month for the 100-year lifetime of the building. Rather than looking only at the first-cost, policy-makers should consider the positive return-on-investment to citizens, business owners, and tenants, as well as grid repair costs and stability throughout the community.

Myth: Governmental Member Voting Representatives (GMVRs) Can Vote However They Want.

When they vote on I-Codes to protect building owners, ratepayers, and tenants, the Voting Representatives appointed by a Governmental Member are acting on behalf of their jurisdiction and its goals and policies. That is why – while GMVR votes are cast by secret ballot – ICC will provide each delegation’s votes to a Governmental Member that requests them.

Myth: Enforcing the energy code isn’t worth the time it consumes for building inspectors.

Anything worth doing right requires time and attention. If building department staff is not accustomed to enforcing the energy code, homeowners, tenants and businesses will likely be saddled with higher energy bills over the life of the building (owners and occupants of buildings meeting the 2012/2015/2018 IECCs will pocket tens of thousands in energy savings over a 2006 IECC home after fully recouping the cost of efficiency improvements). Building departments can learn the best practices used by other building inspection departments that have already tackled this issue. EECC can provide your department with a webinar, including specific tactics used successfully in other building departments.

Myth: The energy code doesn’t allow builders enough flexibility.

The IECC’s “Prescriptive Path” is the least flexible way to comply with the code and is basically a mandatory list of building provision requirements. But the code also offers two other flexible compliance paths options: a “Performance Path” which allows builders to choose their -efficiency measures; and an “Energy Rating Index (ERI) Path” which allows builders the maximum flexibility. In addition, new proposals for updating the energy code include additional flexibility via simple and scalable Prescriptive Path improvement options.

These proposals will give builders additional flexibility for complying, while also achieving city affordability and climate goals for all citizens.