

The IECC “Pays”



**The Only I-Code That Pays For
Itself in Cash . . . Then Keeps On
Paying for 100 Years.**



IECC Stabilizes Grids; Delays the Need For New Power Plants

The 2011 Prediction:

Continued savings of the magnitude of recent efficiency gains in building energy codes and appliance standards

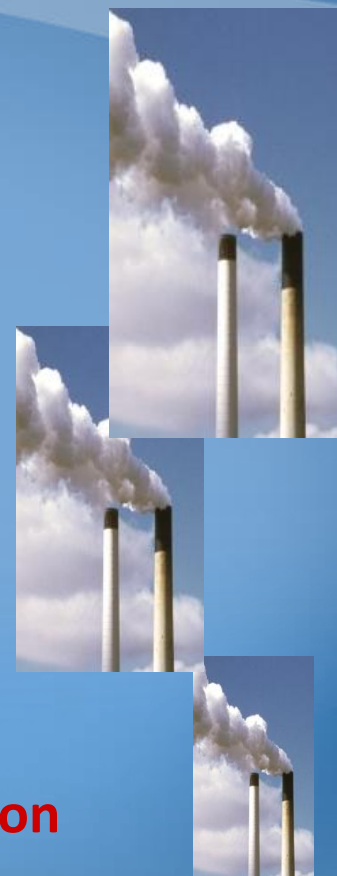
“will completely offset the anticipated growth in demand in the residential, commercial, and industrial sectors combined, eliminating the need for additional power plants to serve these sectors through 2025.”

Institute for Electric Efficiency White Paper May 2011

The 2014 Evidence:

“Improvements in energy efficiency for buildings & appliances appear to have broken the traditional connection between electricity demand & economic growth.”

Duke Energy CEO Lynn Good, 1/6/2014 Financial Times interview



IECC IS A LIFE SAFETY CODE

- IECC, IgCC: Part of ICC's Resiliency Initiative
- SWEEP/MEEA Analyses: IECC IS a Life-Safety Code
 - Moisture Management
 - Indoor Air Quality
 - Fire Safety
 - Thermal and Air Barriers
 - Strong Envelope Performs Best in Extreme Weather
 - Tighter Construction/Better Windows Help in Storms
- If You Haven't Seen It Yet – See SMC Chair Greg Johnson's Presentation: "Green Building Codes Are Life Safety Codes"

The ONLY I-Code Cited in Federal Law

1992, 2005 and 2007 Energy Policy Acts urge state adoption of IECC/ASHRAE.

Signed by Both Presidents Bush after strong bipartisan passage by Congress



2009: All 50 states cash billions in ARRA \$ in exchange for:

1. **Adopting** 2009 IECC & ASHRAE 90.1 2007 or better
2. Implementing a plan to **achieve 90% compliance** with 2009 IECC or equivalent by 2017

The ONLY I-Code That Pays for Itself ... And then Some

- 2012/2015/2018 – Unfortunately all about the Same – Put \$4,763 - \$33,105 in Homeowner Wallets Over 1st 30 years

IECC Climate Zone	30-Year Life-Cycle Savings (\$US)		
	IECC 2009 vs. 2006	IECC 2012 vs. 2009	IECC 2012 vs. 2006
1	\$2,877	\$5,347	\$8,256
2	\$2,443	\$2,280	\$4,763
3	\$1,944	\$3,613	\$5,621
4	\$2,259	\$5,320	\$7,625
5	\$2,466	\$6,717	\$9,189
6	\$3,094	\$8,183	\$11,307
7	\$3,622	\$9,502	\$13,166
8	\$9,147	\$23,900	\$33,105

The IECC Solve Big Hairy Problems

- National Energy Policy
- Making Homes & Commercial Buildings More Affordable *AFTER* Purchase
- Most Cost-Effective & Impactful Way to Reduce Carbon Emissions



WHEN IT COMES TO NATIONAL ENERGY POLICY, BUILDINGS ARE THE “ELEPHANT IN THE ROOM”

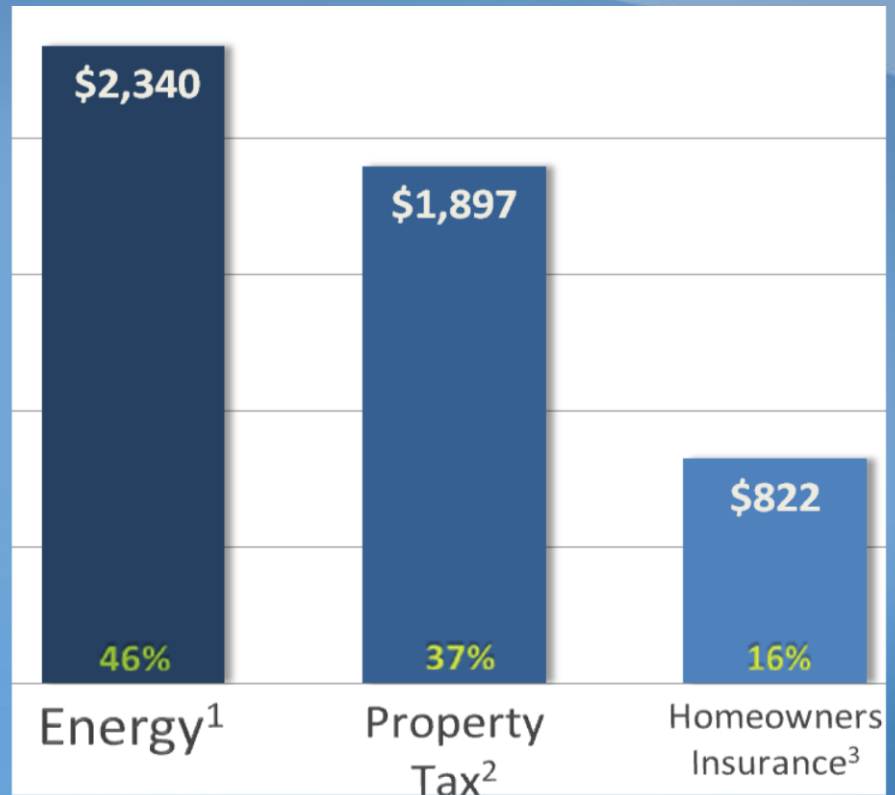
America's Homes &
Commercial Buildings
use:

- ✓ 42% of all energy
- ✓ 54% of natural gas
- ✓ 71% of electricity

... And account for
39% of US manmade
GHGs



**AFTER MORTGAGE,
PRINCIPAL &
INTEREST,
ENERGY IS THE
HIGHEST COST OF
HOME OWNERSHIP**



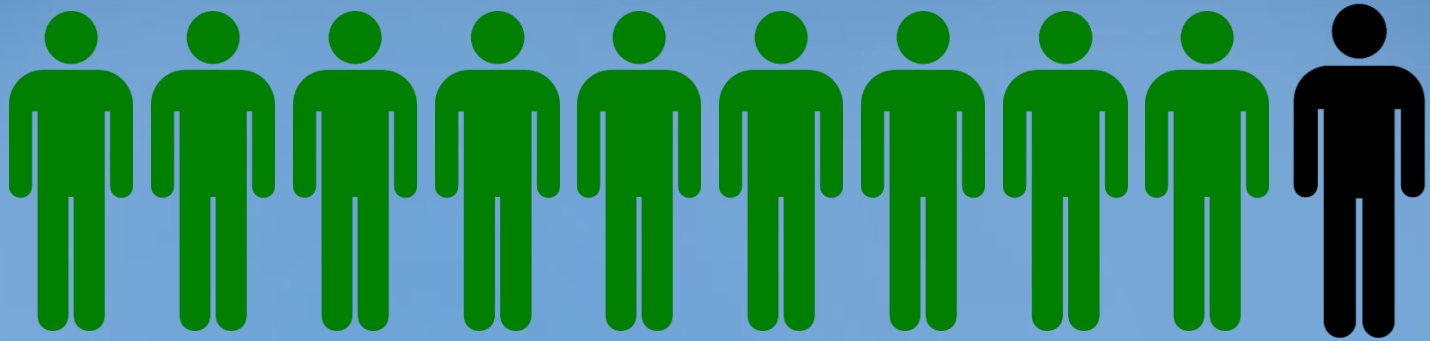
Average U.S. Homeowner Costs

The IECC Bridges Chasms

- Between Home Buyers and Builders
- Between Ratepayers & Utilities
- Between Tenants & Landlords



Americans WANT – & Will Pay More For – Efficient homes



Nine out of ten buyers
would rather buy an energy-efficient home...
and they are willing to pay up to 3% more!

(Source: National Association of Home Builders)

For Home Buyers, Paraphrasing Hamlet, “Here’s the Rub”

NW Survey: Home buyers believe the home they’re buying is meeting the most current energy efficiency and safety codes.

Very few home buyers are involved in their home design, even fewer in measures boosting its safety and efficiency. By the time we buy, those features are set.

Can You Spot Which Home Is More Efficient?

No evident difference to a new homebuyer, but . . .



Actual Michigan Homes . . . Just a Few Hundred Yards Apart

These Homes Look – And Are – Identical ... Except for the IECC They Meet!

No evident difference to a new homebuyer, but ...

2006 IECC



**2012/2015/2018
IECC**



**This House Cost \$1,250 More
...Far Less Than 2-3%!**

Which Home Would You Choose?

Better Codes = Better Homes

38%
more efficient

\$10,081
in **energy savings** over a typical
30-year mortgage *after fully*
recouping \$1,250 added cost.

Savings will continue
to accrue over the home's
100-year life

2012/2015/2018
IECC



And As Ratepayers or Tenants, We Have Absolutely No Say

All building owners are ratepayers, but they can't tell utility we're going to shop around, yet at an average of around \$2,000/year, our home will cost its owners over \$200,000 over its century long-life.

For landlords who can pass energy costs through to tenants, a building energy code is the principal incentive to constructing efficient rental properties.



Building Energy Codes Reduce CO₂ Emissions



How Much? EECC Code/CO2 Calculator

EECC's CO2 Calculator is an easy to use, but extremely powerful tool that determines the carbon saved based on:

- Climate Zone
- Current IECC Version in Force
- Code Compliance %

THAT SAID, IECC IS THE BANK FOR LIFE SAFETY CODES

- The entire suite of I-Codes is essential – together they address all of our nation's needs
- Within that suite, only the IECC generates thousands of dollars of homeowner savings that not only pay for its efficiency elements, but help recoup costs for fire and safety codes to boot.



**# of Votes Available to Local Gov'ts:
>100,000 votes**

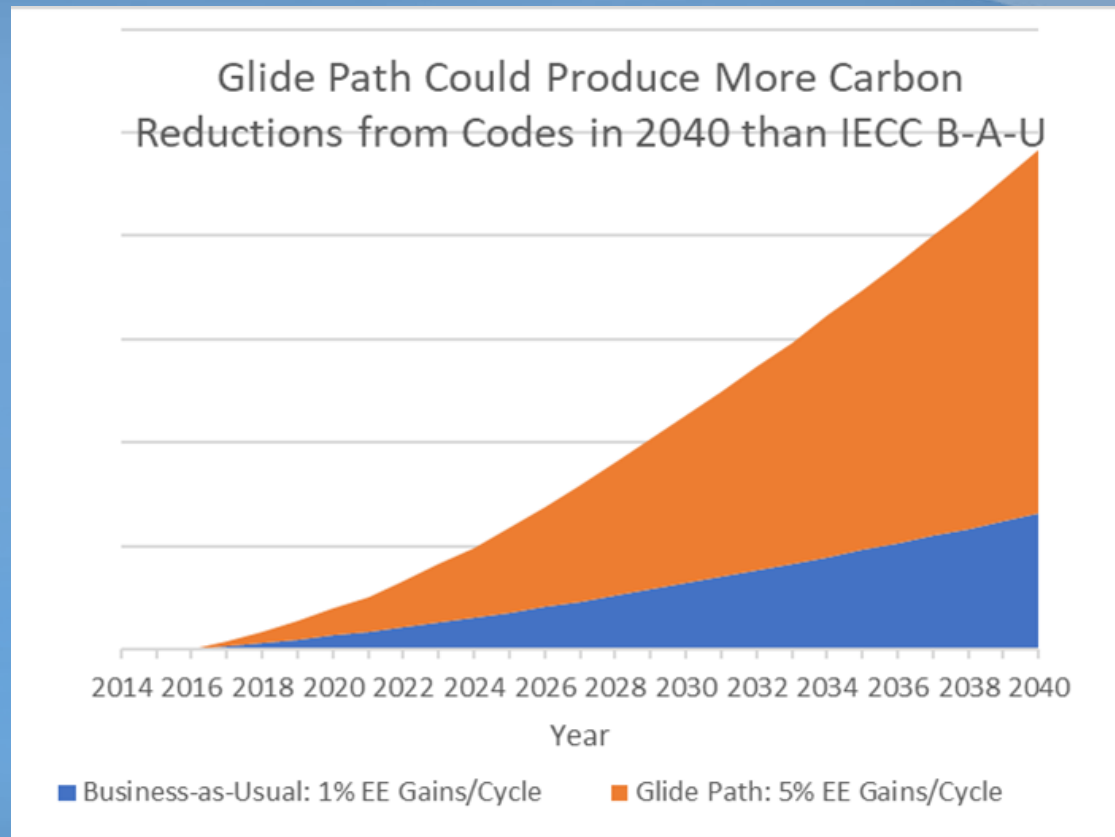
**Most # of Votes Cast on an IECC Proposal:
~500 votes**

Your votes can make a big impact.

Long-Term Goal: A Glide Path to Climate Goals

Aiming for a 10% boost in 2021 IECC, followed by 5% every code cycle afterward to help achieve:

- Affordable Homes & Commercial Buildings
- Stabilized Utility Costs and Grids
- US Energy Independence and Security
- Net Zero Building Construction by 2050
- Meet Paris Climate Targets



Power Is In the Hands of Local/State Governments

The IECC is America's "Most Public Secret"

Only Governmental Officials Can Vote to Update the IECC

Of the More than 100,000 Potential GMVRs, Fewer than
500 Voted on the Last IECC Update

First Deadline Approaching: Governmental Memberships
Must Be Paid by March 23rd to Ensure Voting Eligibility

Three Small Steps to Move Codes Forward

1. JOIN ICC OR UPDATE YOUR MEMBERSHIP

- By March 29, 2019
- Annual fees are \$135 - \$370 based on population

2. REGISTER YOUR INDIVIDUAL VOTERS

- By September 23, 2019
- 4-12 votes per membership. Multiple memberships per jurisdiction are possible.

3. VOTE

- Online voting in November 2019
- Voting guide forthcoming.

Prominent Code Proposals

	Residential Code	Commercial Code
Flex Points / Points Option	✓	✓
Zero Energy / Zero Energy Appendix	✓	✓
Ready and Resilient Onsite Renewables		✓
EV Charging Stations	✓	✓

A Golden Opportunity: Small Steps, Big Results

Easy, Small Steps: Big Results

By March 29, 2019

Identify Multiple Memberships

Each Government Member Joins/Renews ICC;

Designates a "Primary Representative"

By September 24, 2019

Each Primary Rep submits 4, 8, or 12 voter rosters to ICC

Assign staff to ensure votes get cast

November 2-Week ICC Voting Window

Cast your City's maximum online votes!

Moderate Steps: Big Results

April 23 – May 8, 2019

ICC Committee Action Hearings, Albuquerque
Send 1-2 officials to testify in support of proposals that boost efficiency

October 23 – 30, 2019

ICC Public Comment Hearings, Las Vegas
Send 1-2 officials to testify and/or vote

The Means to Succeed

	Residential Code	Commercial Code
Flex Points / Points Option	✓	✓
Zero Energy / Zero Energy Appendix	✓	✓
Ready and Resilient Onsite Renewables		✓
EV Charging Stations	✓	✓

- International Code Council (iccsafe.org)
 - Energy Code adopting agency
 - Join ICC to become eligible to vote on code updates
- Energy-Efficient Codes Coalition (energyefficientcodes.org)
 - Factsheets and FAQs
 - Energy Codes Carbon Calculator
 - Voting Guide (available this fall)

THANK YOU!



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