



ROLE OF BUILDING ENERGY CODES IN FEDERAL POLICY

Ensuring Energy Codes Support State Energy Policy Goals: Seizing the Moment

February 5, 2019

ABOUT THE ALLIANCE TO SAVE ENERGY

We envision a world that uses energy more productively to achieve **economic growth**, a **cleaner environment** and greater **energy security, affordability** and **reliability**.

TO ACHIEVE THIS VISION, WE:

- ✓ Lead **bipartisan initiatives** that drive **technological innovation** and **energy efficiency** across all sectors of the economy, through policy advocacy, education, communications, and research
- ✓ Convene and engage in diverse public-private partnerships, collaborative efforts and strategic alliances to optimize resources and expand our sphere of influence.

OUR VISION & MISSION

- ✓ STAFF 25+ professionals
- ✓ EXPERIENCE 40 years
- ✓ RECOGNIZED AS a premier energy efficiency organization

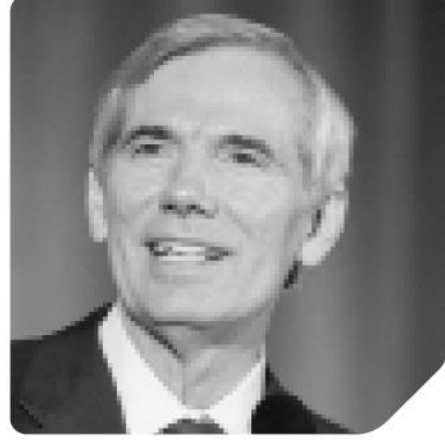
POLICY LEADERS + ENVIRONMENTAL GROUPS + ACADEMIA + BUSINESS LEADERS

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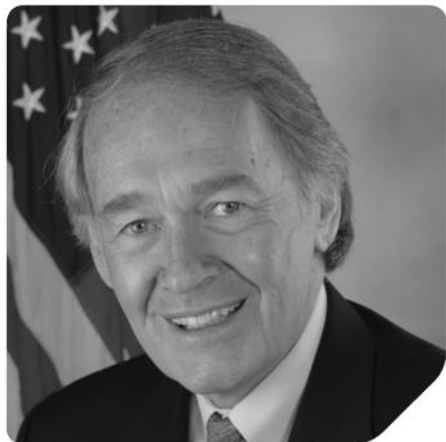
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Kandeh Yumkella
Former CEO
Sustainable Energy for All

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Terence Sobolewski
SVP & Chief Customer Officer
National Grid US



Dana Soukup
SVP, Field Operation
Siemens Building Technologies



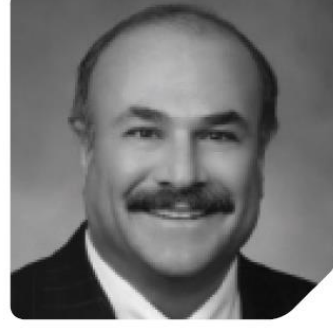
Maryrose T. Sylvester
President & CEO
Current, powered by GE



Marc Ulrich
VP, Customer Program &
Services
Southern California Edison



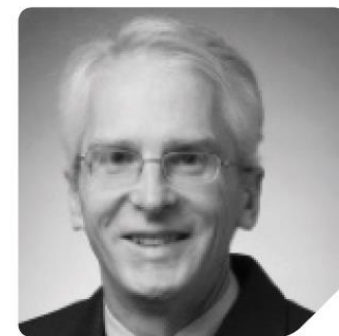
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Partner, Group Program
Manager
Microsoft



Clinton Vince
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Dentons



Christopher Womack
Executive Vice President &
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Southern Company



Steve Wright
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PARTNER ORGANIZATIONS

WORKING WITH, AND ACROSS, ALL SECTORS OF THE COMMUNITY



BUSINESS + GOVERNMENT + PUBLIC INTEREST

BUILDING ENERGY CODES: ORIGINS AND STATUS

42 USC 6833: Updating State Building Energy Efficiency Codes

(a) (1) Not later than 2 years after October 24, 1992, each State shall certify to the Secretary that it has reviewed the provisions of its residential building code regarding energy efficiency and made a determination as to whether it is appropriate for such State to revise such residential building code provisions to meet or exceed **CABO Model Energy Code, 1992**.

Consideration and determination respecting residential building energy codes

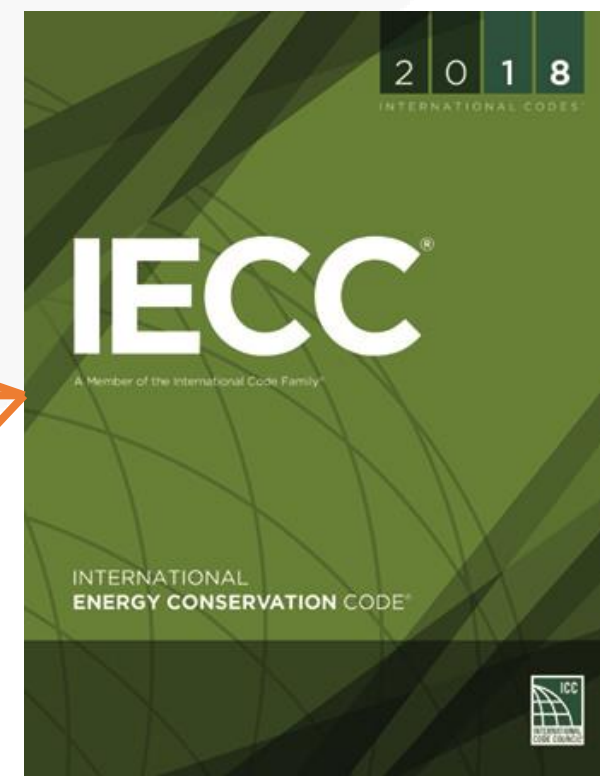
...
 (3) Each State may, to the extent consistent with otherwise applicable State law, revise the provisions of its residential building code regarding energy efficiency to meet or exceed **CABO Model Energy Code, 1992**, or may decline to make such revisions.

(4) If a State makes a determination under paragraph (1) that it is not appropriate for such State to revise its residential building code, such State shall submit to the Secretary, in writing, the reasons for such determination, and such statement shall be available to the public

(5)(A) Whenever **CABO Model Energy Code, 1992,1 (or any successor of such code)** is revised, the Secretary shall, not later than 12 months after such revision, determine whether such revision would improve energy efficiency in residential buildings. The Secretary shall publish notice of such determination in the Federal Register.

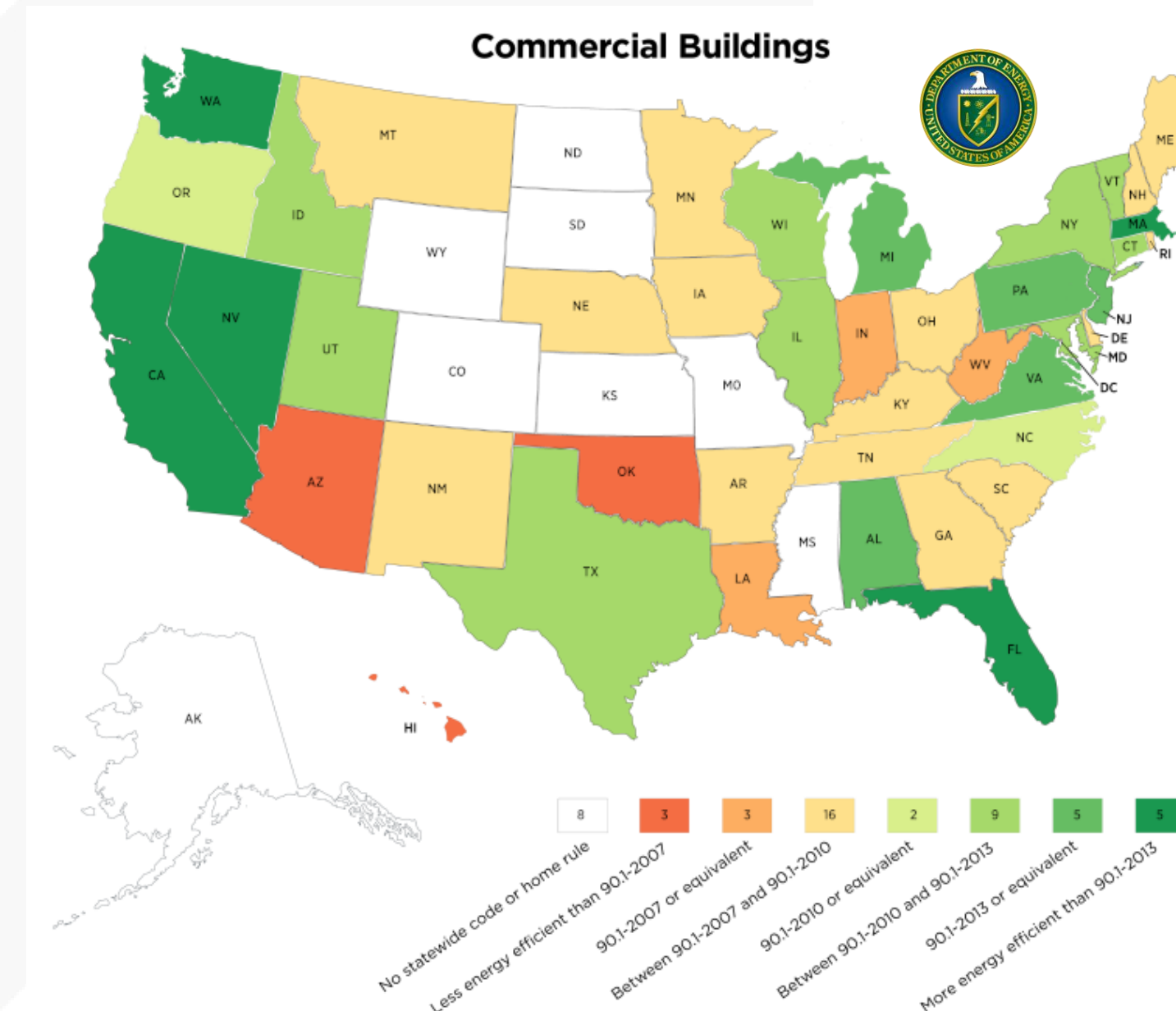
(B) If the Secretary makes an affirmative determination under subparagraph (A), each State shall, not later than 2 years after the date of the publication of such determination, certify that it has reviewed the provisions of its residential building code regarding energy efficiency and made a determination as to whether it is appropriate for such State to revise such residential building code provisions to meet or exceed the revised code for which the Secretary made such determination.

...



IECC is the successor code, updated every three years since the Energy Policy Act of 1992

- About **two-thirds** of Americans live in a jurisdiction covered by **the 2015 or 2018 IECC**
- Nine states do not have statewide codes...



...but cities and other jurisdictions often adopt their own codes (e.g., **Denver, Phoenix**)

BUILDING ENERGY CODES: SAVINGS



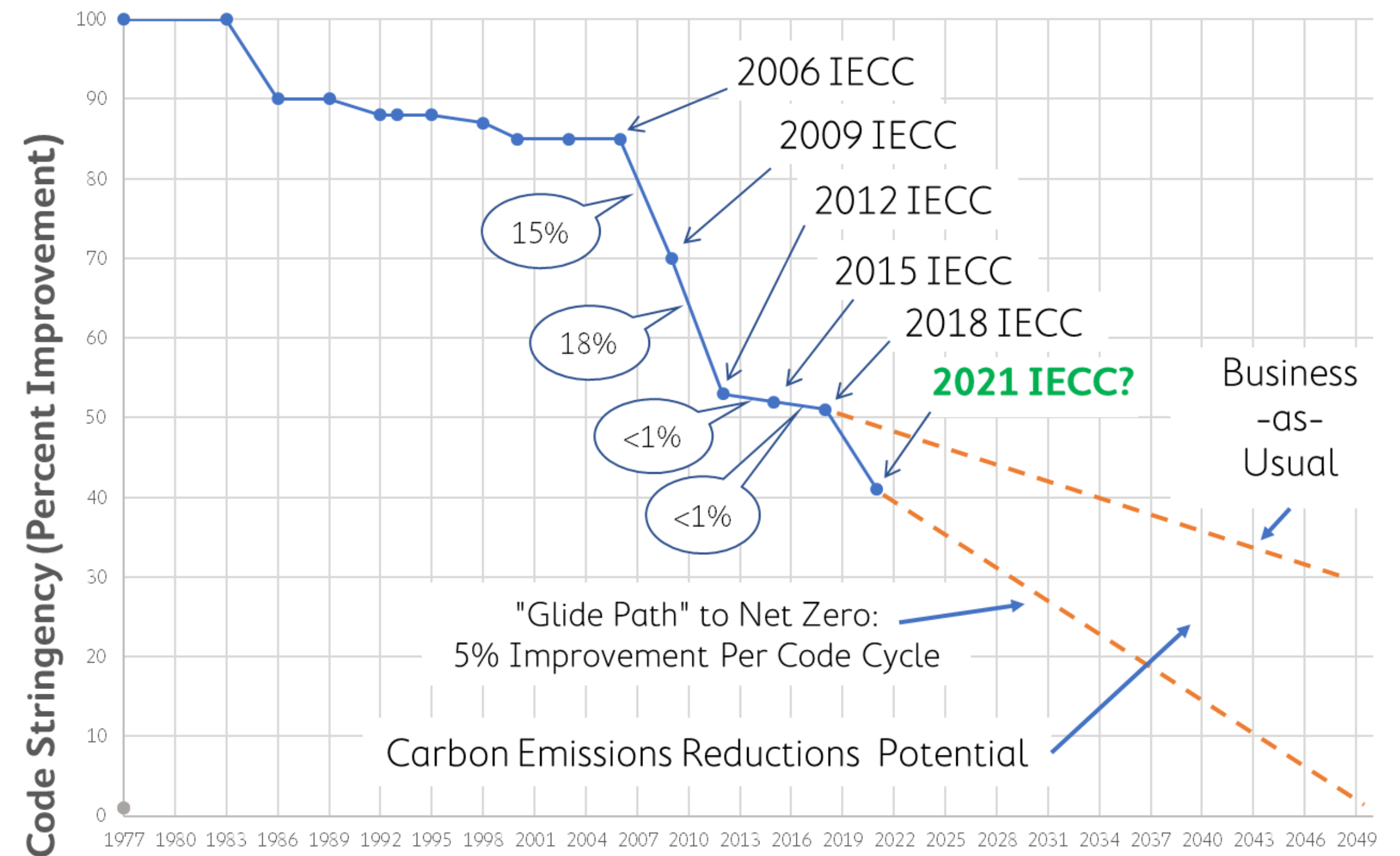
- / Building Sector Energy Consumption
 - / About **40%** of all U.S. energy
 - / More than **70%** of all U.S. electricity
 - / Accounts for about **40%** of carbon emissions



Building Energy Codes Program

- / Model Building Energy Codes
 - / Cumulative savings from residential and commercial buildings 2010 to 2040:
 - / **\$126 billion** energy cost savings
 - / **841 MMT** avoided carbon emissions
 - / **12.82 quads** primary energy savings

Efficiency Improvements of IECC: Historic and Projected



The energy efficiency of the IECC improved by about 38% between 2006 and 2012, followed by more modest increases in 2015 and 2018. Modest gains can lead to net-zero energy codes by 2050. Greater energy efficiency gains will accelerate progress through 2030.

BUILDING ENERGY CODES: OPPORTUNITY FOR STATES

- The Model Building Energy Code—the IECC—Is Available **Now** for States to Leverage
- The IECC **Can** Be a Viable Tool of Federal Energy Efficiency Policy for States and Local Governments to Leverage to Achieve a Range of Positive Outcomes:
 - *Meeting climate and sustainability goals*
 - *Lowering monthly utility bills for homeowners, consumers, and businesses*
 - *Improving the energy efficiency and resilience of buildings*
 - *Reducing stress and strain on the electric grid*

States **Can** Influence the Energy Efficiency of the 2021 IECC by:



Prioritizing Building Energy Efficiency as a Climate and Sustainability Strategy



Registering with ICC



Testifying in Favor of Energy Efficiency at ICC Committee Action Hearings



Testifying in Favor of Energy Efficiency Proposals at ICC Final Action Hearings



Voting Online for Energy Efficiency Proposal

BUILDING ENERGY CODES: OUTLOOK



Greetings, my friend.

We are all interested in the future, for that is where you and I are going to spend the rest of our lives.

And remember my friend, future events such as these will affect you in the future.

You are interested in the unknown, the mysterious, the unexplainable.

That is why you are here....

BUILDING ENERGY CODES: OUTLOOK

- ✓ Energy Efficiency Proposals for the 2021 IECC Would:
 - ✓ *Improve performance of the building envelope*
 - ✓ *Guide states and local governments to scalable options*
 - ✓ *Provide added flexibility for code compliance*
 - ✓ *Increase heating and cooling system performance*
 - ✓ *Require electrical panel capacity for “EV-ready” charger installations*
 - ✓ *Establish an improved baseline for “glide path” gains that achieve net-zero energy consumption in buildings by 2050...or sooner*
- ✓ The Stakes for the 2021 IECC Are High...
 - ✓ *The fate of the model building energy code—the IECC—is dependent on participation from state and local government officials*
 - ✓ *Two development cycles have passed without meaningful energy efficiency improvements*
 - ✓ *Mid-century climate goals will be harder to meet if energy efficiency gains are delayed*

...and State Engagement Will Be a Critical Factor of a Successful Outcome

THANK YOU

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