

New Federal Funding and Technical Assistance Opportunities for Building Energy Codes

Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA)

National Energy Codes Conference

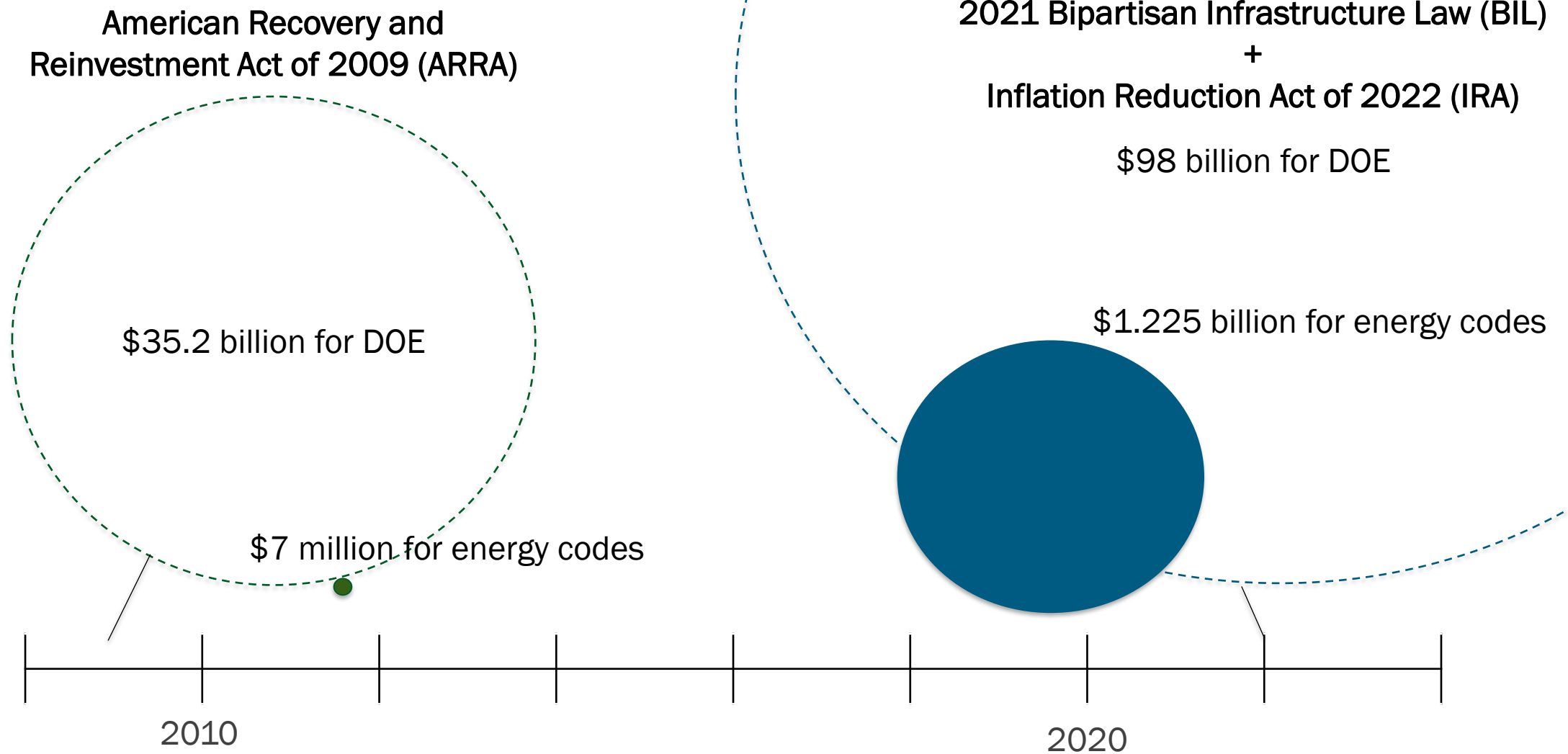
Chicago | May 2-4, 2023



\$1.2 billion in new federal funding

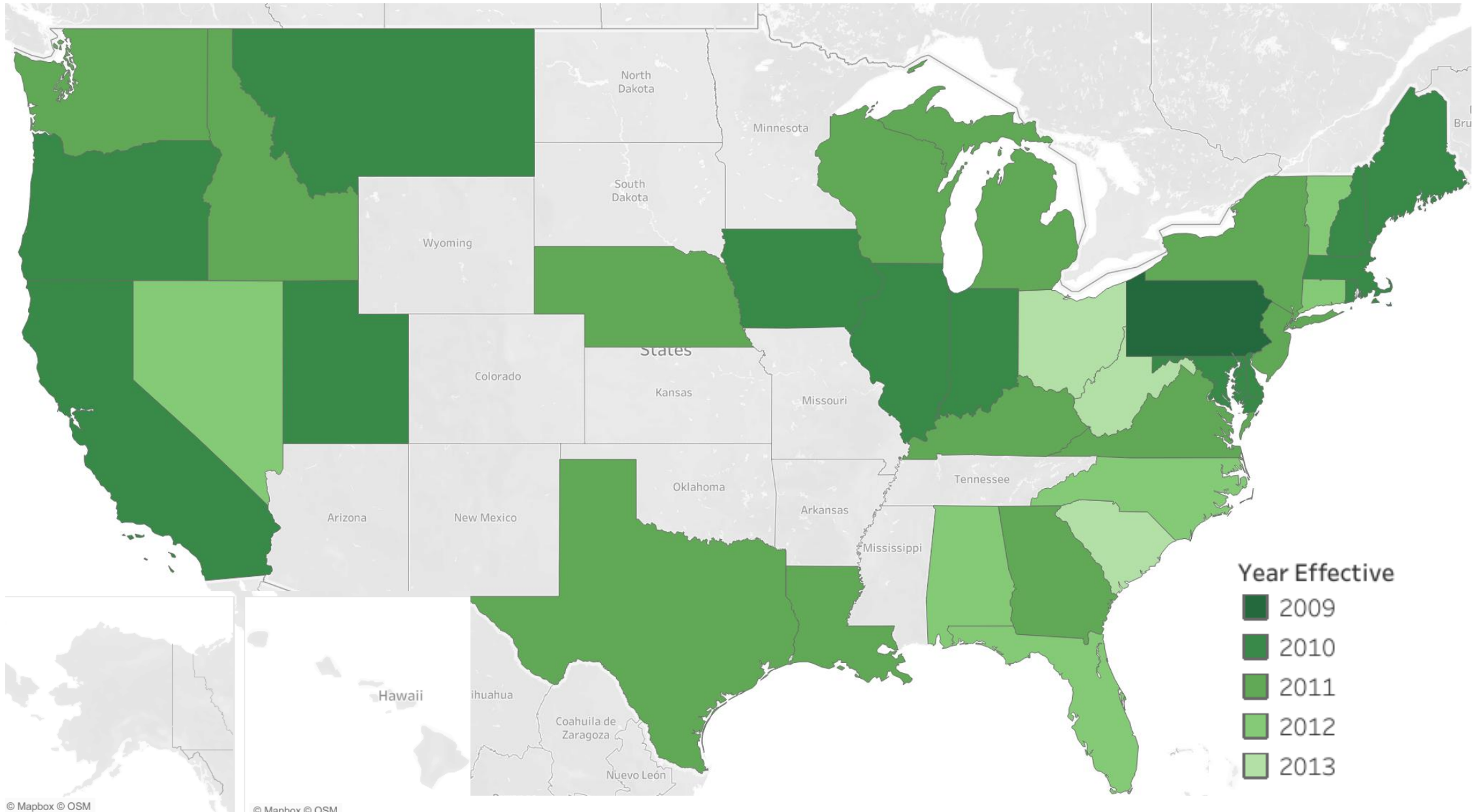
\$225 million	Bipartisan Infrastructure Law (BIL)
\$1 billion	Inflation Reduction Act (IRA)

Together, BIL and IRA provide unprecedented level of codes funding



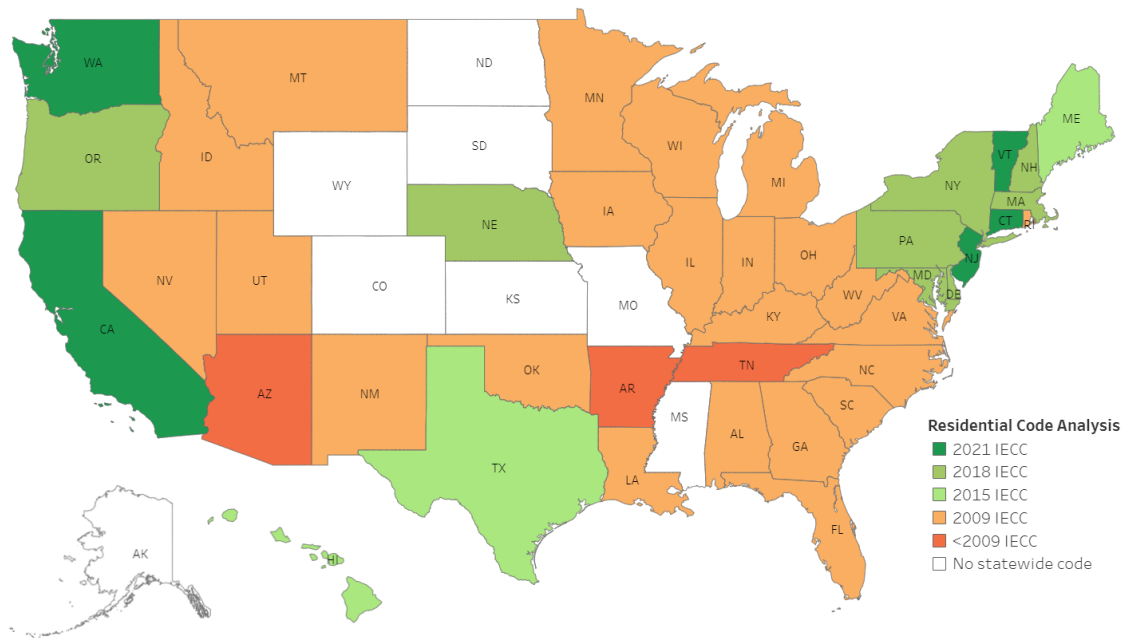
Note: this graphic does not include base DOE Building Energy Codes Program funding or broader funding opportunities like EECBG that could be used to support energy codes activities

ARRA Impact on Energy Code Adoption (2009 IECC/90.1-2007)

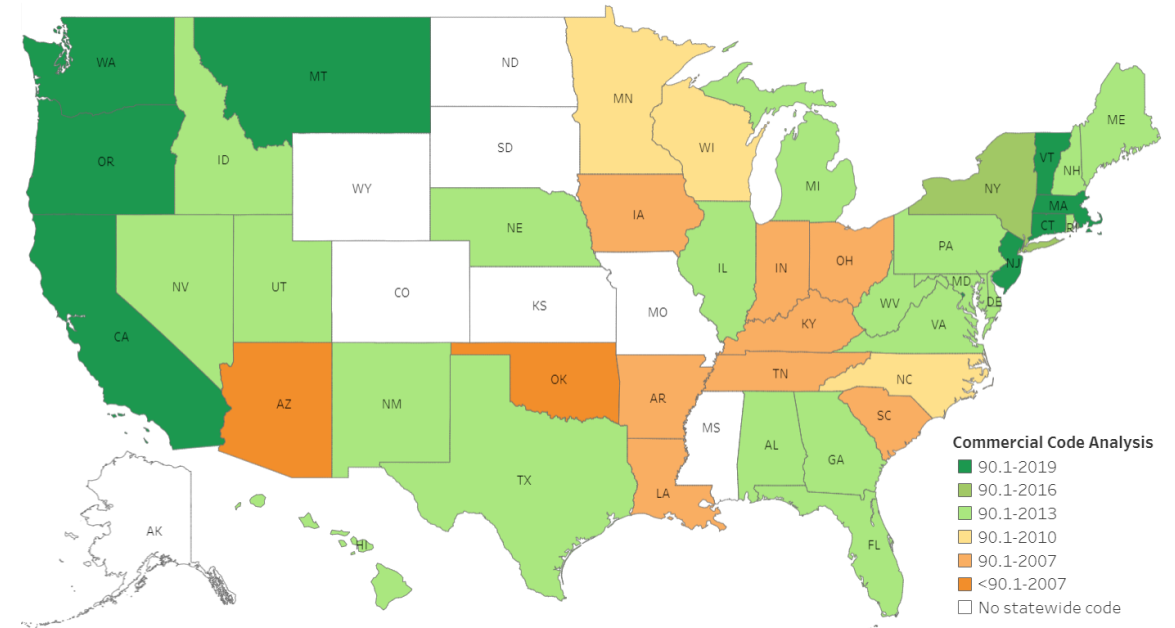


Many states still use outdated energy codes, and need support for key code activities like adoption, implementation, workforce training, and compliance.

Current status of state energy code adoption:



Residential Buildings (IECC)



Commercial Buildings (Standard 90.1)



BRIEFING ROOM

FACT SHEET: Biden-Harris Administration Launches Initiative to Modernize Building Codes, Improve Climate Resilience, and Reduce Energy Costs

JUNE 01, 2022 • STATEMENTS AND RELEASES

BIL and IRA Support Key White House Initiatives to Advance Building Codes

Modernize Building Codes

- Incentivize governments to adopt and enforce current building codes
- Improve resilience to hazards
- Incorporate science and technology



Improve Climate Resilience

- Increase smart design and construction
- Build resilience to extreme weather events
- Save lives and reduce property damage



Reduce Energy Costs

- Increase energy efficiency
- Establish federal building performance standards
- Achieve net-zero emissions across federal buildings by 2045



Prioritize Underserved Communities

- Invest in capacity building for communities
- Provide tools to reduce damage and accelerate recovery
- Identify needs for rural and underserved communities



Create Good-Paying Jobs

- Develop workforce training partnerships
- Provide support to state and local agencies
- Prioritize needs of disadvantaged communities



2023 | National Energy Codes Conference

Bipartisan Infrastructure Law (BIL)



Bipartisan Infrastructure Law (BIL) Overview

Section 40511: Cost-effective Codes Implementation for Efficiency & Resilience

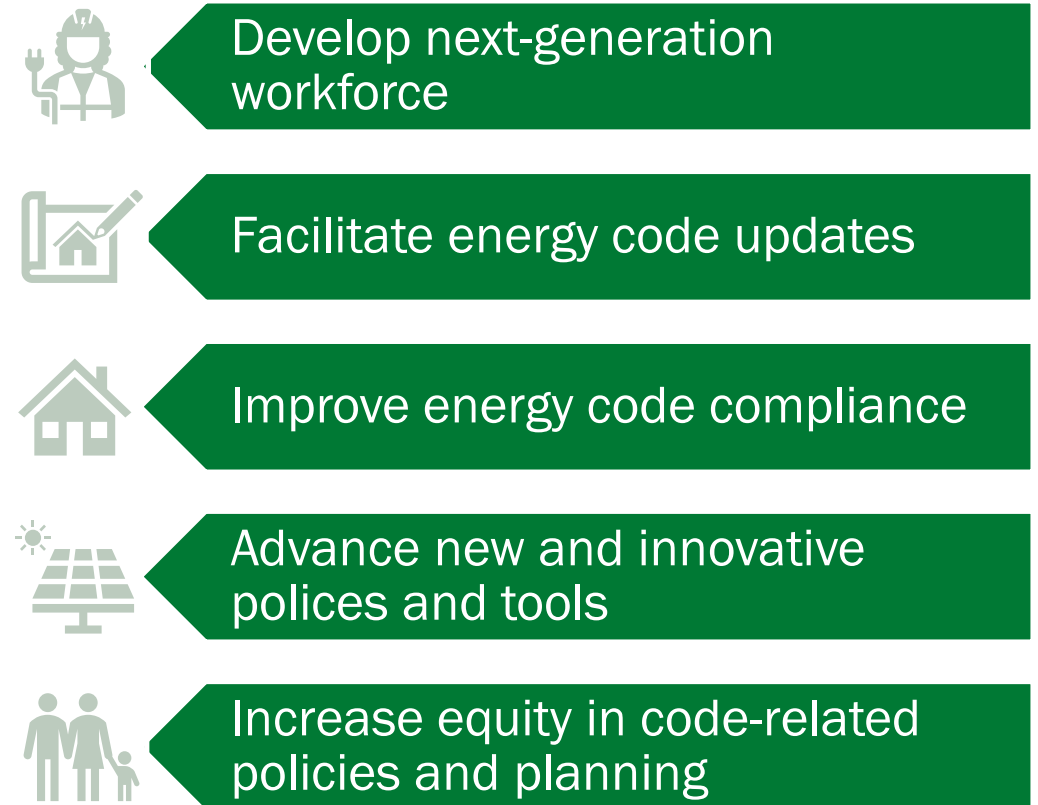
- Provides **\$225 million in technical assistance** supporting updated building energy codes for **energy efficiency** and **resilience**
- **Resilient and Efficient Codes Implementation ([RECI](#))** funding opportunity announcement (FOA) released December 19, 2022
 - \$45 million available to fund implementation activities supporting updated energy codes
 - Example activities: workforce development and training, partnerships between key building code stakeholder, development of tools to streamline local code compliance processes
 - Anticipated 10 to 30 awards, ranging from \$500,000 to \$10 million per award
 - Encourages “partnerships” comprised of states and other key stakeholders (including design professionals as critical stakeholders)
 - Represents the initial installment with additional coming in future years
 - Appropriated as \$45 million per year for FY22 through FY26

RECI: Areas of Interest and Targeted Outcomes

Key Areas of Interest



Targeted Outcomes



- DOE recognizes the cross-cutting nature of potential activities and acknowledges concepts may cover multiple Areas of Interest.

RECI: Eligible Entities

- **State agencies** are eligible entities
 - E.g., state building code agencies, state energy offices, Tribal energy offices
 - **Partnerships** are eligible entities and must include a state agency, and one or more of the following
 - Local building code agencies;
 - codes and standards developers;
 - associations of builders and design and construction professionals;
 - local and utility energy efficiency programs;
 - consumer, energy efficiency and environmental advocates; and
 - other entities as determined by the Secretary.
- Priority will be given to partnerships
 - State agencies are not required to be the prime applicant/recipient
 - Local governments may apply with a state outside from which it resides



RECI: Building Code Updates

The BIL defines an “updated building code” as:

An update to a building energy code under this section, including an amendment that results in increased efficiency compared to the previously adopted building energy code, shall include any update made available after the existing building energy code, even if it is not the most recent updated code available.

Building code updates:

- Increase energy efficiency compared to the previously/currently adopted code
- Can be any update more recent than the existing/currently adopted code
- Are not constrained to the most recent code editions (e.g., 2021 IECC and 90.1-2019)

RECI: Criteria and Priorities

CRITERIA; PRIORITY.—In awarding grants under subsection (b), the Secretary shall—

1. Consider:

- Impact: Prospective energy savings and plans to measure the savings
- Long-term sustainability of measures and savings
- Prospective benefits, and plans to assess benefits, including resilience and peak load reduction, occupant safety and health, and environmental performance
- Demonstrated capacity to carry out the proposed project
- Need for assistance

2. Prioritize *partnerships*

- Applicants develop impact statements based on the listed priorities
- A spreadsheet calculator is provided to help quantify estimated GHG/energy/cost impacts
- Applications must include *Community Benefits Plan* which considers equity and energy justice
- DOE seeks a balance of residential vs. commercial and rural vs. urban vs. suburban activities

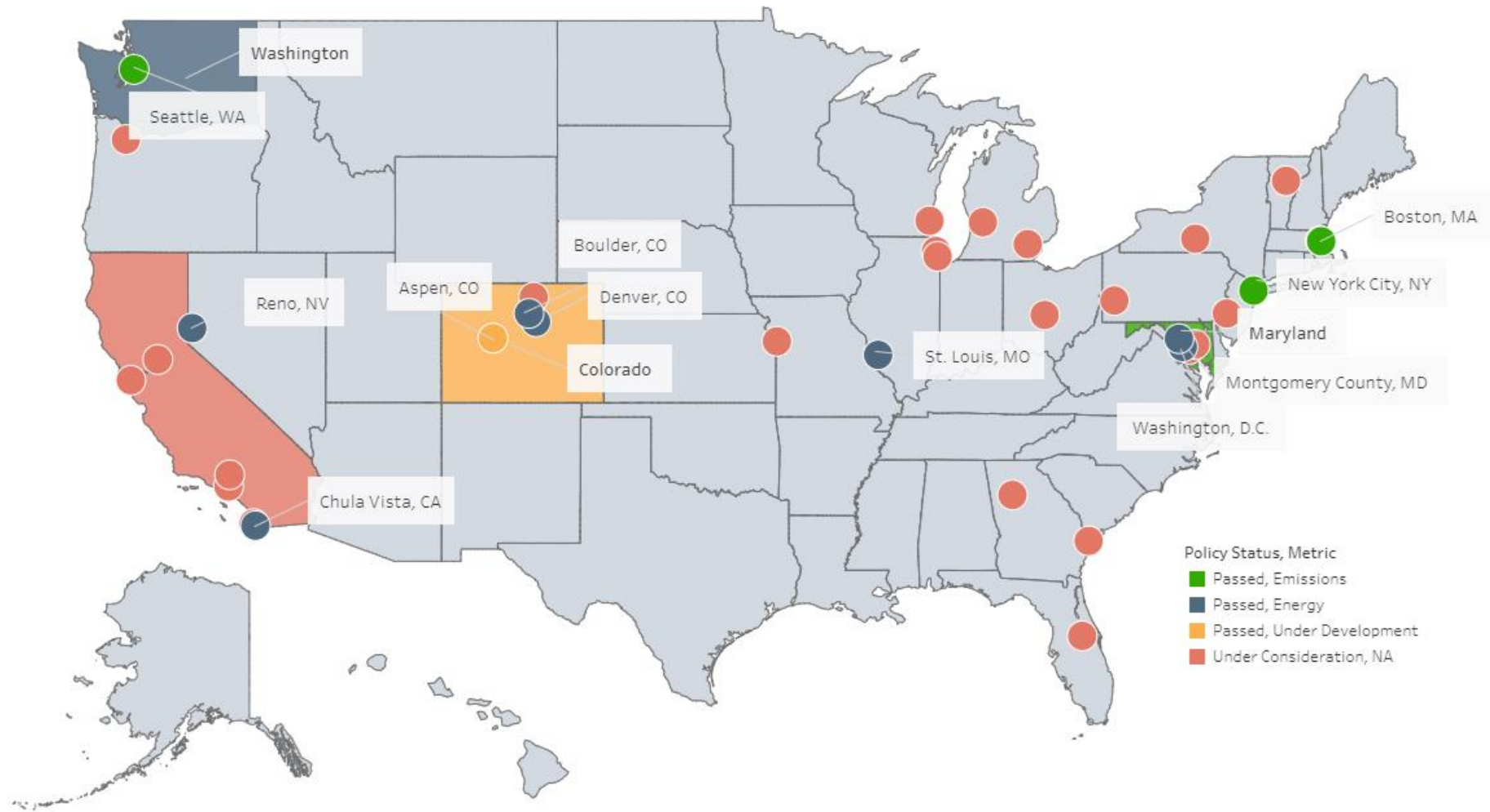
RECI: Sample Activities

Examples specified in the BIL:

- Create or enable state or regional partnerships to provide training and materials
 - Collect and disseminate data on construction and code implementation
 - Develop and implement a plan for effective implementation, including measuring compliance
 - Address implementation needs in rural, urban, suburban areas
 - Implement updates in energy codes
-
- DOE may consider additional activities that fall within the general scope and spirit of these activities
 - Emphasis on selecting activities of particular relevance, importance, and impact to the target state, locality, or region



Innovative Approaches: Building Performance Standards (example)



➤ BPS helps ensure existing buildings achieve the energy and emissions savings they were designed and constructed to save

➤ Learn more: www.energycodes.gov/BPS
➤ Send any additional questions to: BPS@ee.doe.gov

RECI: Targeted Outcomes

DOE is interested in applications that include the following:

- **Overall impacts** as a function of energy, emissions, and cost savings, as well as longevity of impacts
- Activities supporting adoption and implementation of:
 - The latest model energy codes (i.e., the 2021 IECC and 90.1-2019);
 - Innovative and advanced concepts which exceed the latest model codes, including zero energy codes and building performance standards; or
 - Codes that demonstrate significant impact and improvement over currently adopted codes or existing activities supporting code implementation
- **Ability to leverage other funding sources** beyond the BIL:
 - Examples: IRA, EECBG, SEP, FEMA, state or localized funding, utility partnerships, and other sources
- Ability to positively impact **building and grid resilience**, occupant safety and health, and the environment
- Ability to bolster domestic economic interests, such as through the workforce development, and support domestically manufactured building materials, equipment and services
- Capacity to assess, track, and measure project-related impacts
- Ability to **address EEEJ priorities**, including plans that will address underserved community needs
- Established need by an eligible entity for assistance

RECI: Application Timeline

- Submit Concept Papers – due January 31 (window has closed)
- DOE provides encourage/discourage feedback to applicants
- Submit Full Applications – due March 27 (window has closed)
- Selection notifications anticipated in June, with awards in August-September



If you missed this round of funding, don't fret! This is the first installment of a 5-year competitive funding program. Consider applying for future installments.

- Sign-up for BECP updates at www.energycodes.gov/subscribe
- Learn more: <https://www.energycodes.gov/RECI>



RECI applications span the
entire United States

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Inflation Reduction Act (IRA) Energy Codes Funding





SCEP

STATE & COMMUNITY ENERGY PROGRAMS

SCEP IRA Codes Program:

Technical Assistance for the Adoption of
the Latest and Zero Building Energy Codes
(or equivalent codes and standards)

National Energy Codes Conference

Harry Bergmann

BPS & Zero Energy Codes Lead

May 2023



Outline

- Overview of the IRA Codes Program
- IRA Codes Provisions
 - Adoption of Latest Energy Codes
 - Adoption of Zero Energy Codes
 - Or Equivalent Codes and Standards, including Building Performance Standards
- Examples of Eligible Activities & Participation
- Timeline & What's Next
- Q&A





SCEP

STATE & COMMUNITY ENERGY PROGRAMS



IRA Funded Technical Assistance for Building Energy Codes

\$1 Billion in funding to make U.S. building stock cleaner and more efficient

Section 50131 Technical Assistance for Latest and Zero Building Energy Code Adoption

Highlights

- **\$330 million** to adopt the latest building energy code, which are 2021 International Energy Conservation Code (IECC) for residential buildings and the ANSI/ASHRAE/IES Standard 90.1-2019 for commercial buildings or other codes and standards that achieve equivalent or greater energy savings; and
- **\$670 million** to adopt a building energy code that meets or exceeds the zero energy provisions in the 2021 IECC code or other codes and standards with equivalent or greater energy savings.

What is a Building Energy Code?

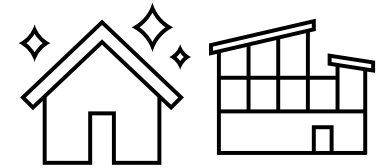
Energy codes set minimum efficiency requirements for new and renovated buildings that govern building construction around building energy using components

Traditional Building Energy Code Adoption Varies by State

- Adoption at the state level and allow localities to exceed state code (Min states)
- Adoption at the state level and prohibition on localities exceeding state code (Min/Max states)
- No statewide code allowing local governments to establish energy codes (Home rule states)

IRA Funding to Lift All States

- Codes must be implementable, verifiable, and able to be enforced
- Codes can be applicable to new or existing buildings (residential and commercial)



Great savings for states that adopt and enforce model codes



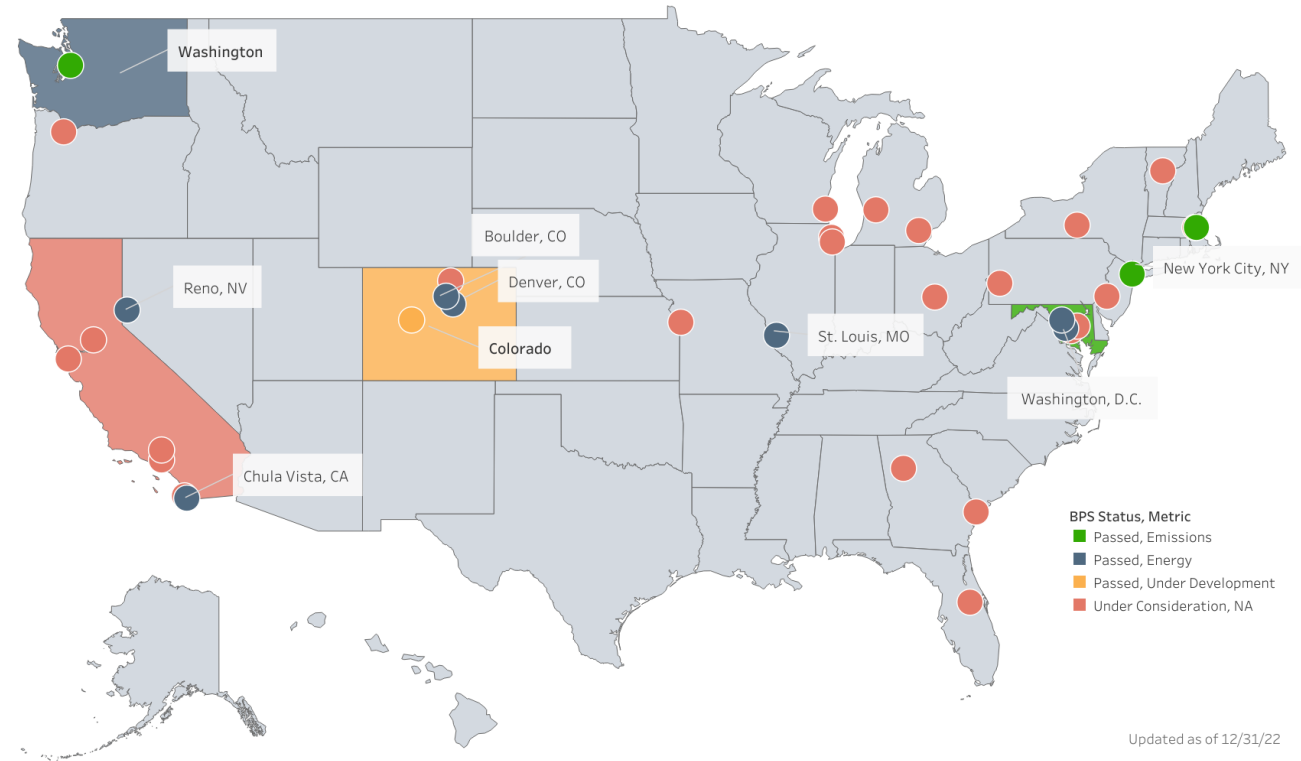
More savings possible with more pathways to achieve high-efficiency buildings

Opportunity for All

\$1B for the latest building energy codes, zero energy codes, or equivalent for new construction and existing buildings.

- Enables states, counties, cities, and other jurisdictions with code making authority to lead the way on **decarbonizing the building stock**.
- Codes are typically used to “raise the floor” – this opportunity **lets jurisdictions** address all ends of the building stock.
- Codes and standards are cross-cutting and will create more inclusive programs that align with the Administration’s Justice40 priorities and **build capacity** at the State/local level.

State and Local Building Performance Standards



Jurisdictions with public commitments for advancing building performance standards already account for over 25% of the nation’s building footprint (near 20 billion ft²)

IRA Codes Program Overview

Section 50131 Provisions

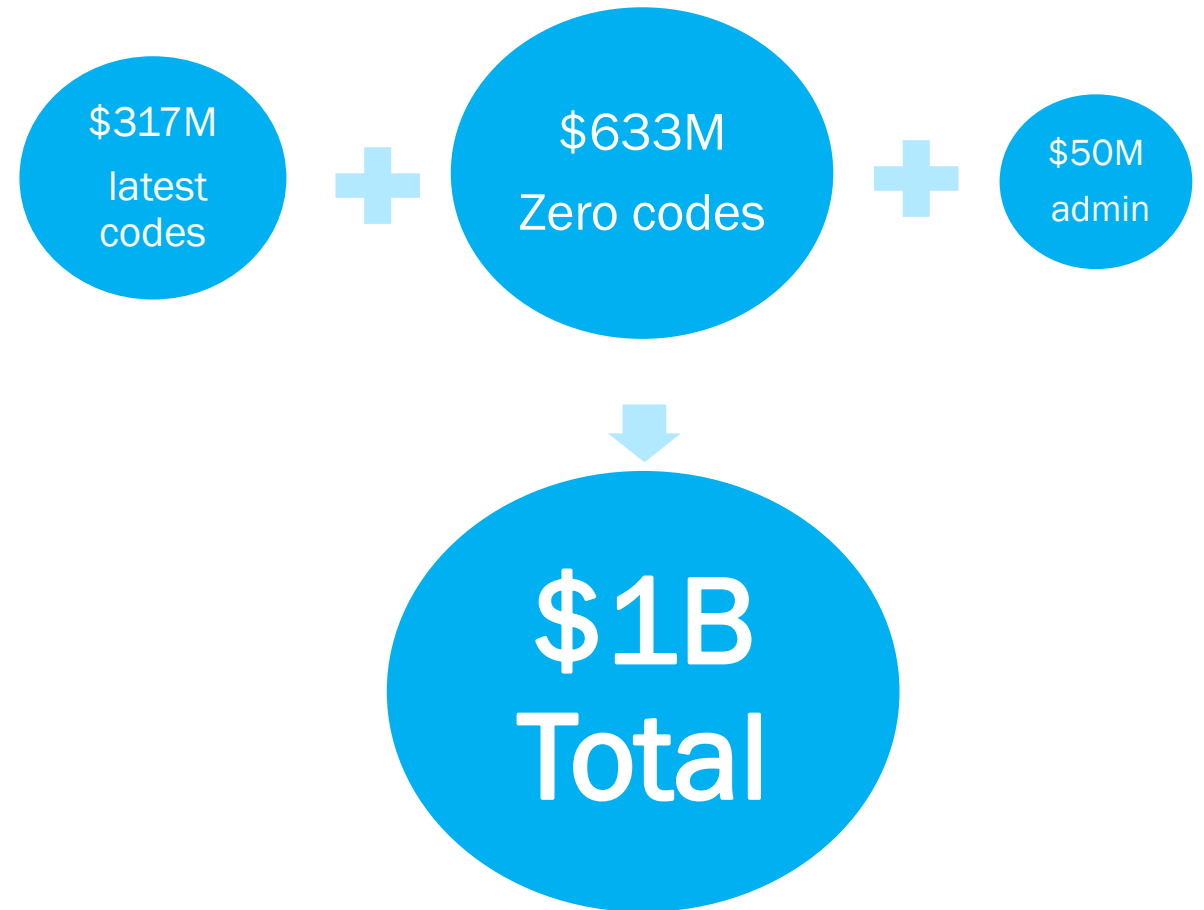
Grants to States and units of local government with **code making authority** to:

- adopt the latest model building energy codes or equivalent codes
- adopt zero energy codes or equivalent

Grant recipient must have a **compliance plan** consisting of

- Implementation plan to achieve full compliance with any building energy code adopted with grant funds for **new and renovated** residential or commercial buildings;
- Active **training and enforcement programs**; and
- Annual **measurement of compliance rates**

Funding Details



Timeframe: Funds to be available through September 30, 2029

“or equivalent”

(methodology under development)

Example Eligible Activities

What Can IRA Funds Support?

- Technical Assistance for
 - Latest building energy code adoption
 - Zero energy (ZE) code adoption, or
 - Equivalent building code or standard adoption for new and existing buildings
- Workforce Training
- Compliance/Enforcement Support
- Tools and Analysis
- Education & Outreach
- Implementation Assistance
- Capacity Building
- Resilience (better construction practices)

Example Participants – Layering BIL & IRA

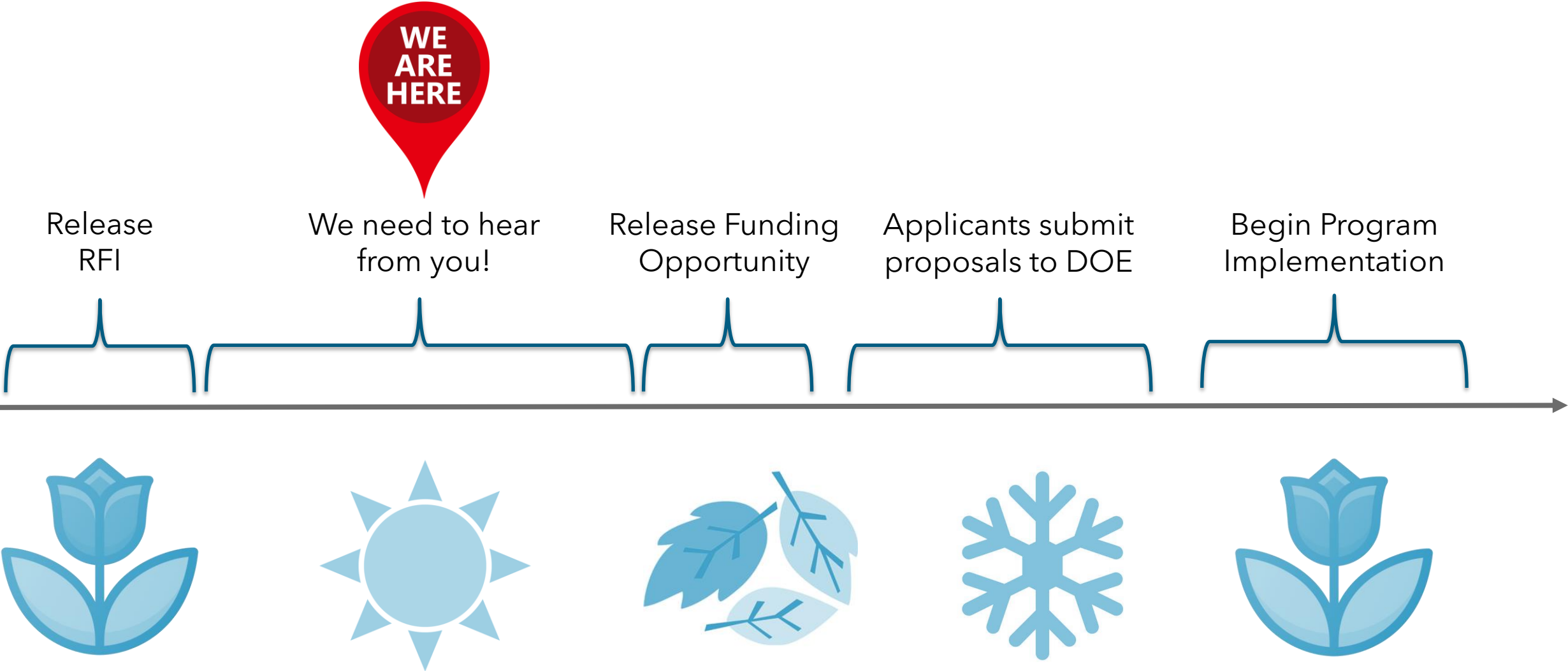
Example Participation in BIL & IRA Codes Programs

A state receives BIL funding to implement their recently updated commercial building energy code (e.g.: to ASHRAE 90.1-2016).

The state then decides to apply for IRA Codes funding to update their residential building energy code to the latest version of the code (IECC 2021).

A municipality within the state with the authority to adopt codes decides to go further and applies to the IRA Codes program for funding to support a BPS or innovative program that means the "equivalent or greater savings" provision.

Estimated Program Development Timeline



What's next?

Residential &
Commercial Building
Energy Codes

SEC. 50131

Amount: \$1,000,000,000

Through: September 30, 2029

Recipient: Jurisdictions with the authority to adopt building codes

Contact us & join the teaming list:

IRAcodes@hq.doe.gov

Learn more: [SCEP Building Codes](#)

(energy.gov/SCEP/technical-assistance-adoption-building-energy-codes)



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Thank you and Q&A

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