

ENERGY CODES | 2024



2024 NATIONAL ENERGY CODES CONFERENCE
HOSTED BY THE U.S. DEPARTMENT OF ENERGY

May 6-8, 2024 | Sacramento, CA

U.S. DEPARTMENT OF
ENERGY

Office of ENERGY EFFICIENCY
& RENEWABLE ENERGY



Building Energy Codes

NECC BOOTCAMP & TOUR Monday, May 6

1:00 – 4:00p	Tour
12:30 – 5:00p	Energy Codes 101 BPS 101 REScheck Basics COMcheck Basics
5:00 – 6:00p	Welcome Reception

Day 01 Tuesday, May 7

8:00 – 9:00a	Registration & Breakfast		
9:00 – 9:30a	Welcome & Opening Remarks		
9:30 – 10:00a	Keynote: Andrew McAllister, California Energy Commission		
10:00 – 10:30a	Break		
10:30 – 11:30	Federal Funding and Assistance Opportunities for Building Energy Codes		
11:30 – 1:00p	Networking Lunch and Awards		
1:00 – 2:30p	Grid Edge Modernization and the Energy Code: How Codes Can Support a Transition to a Clean and Resilient Grid	Inclusive Energy Codes: Bridging the Gap to Achieve Equity and Environmental Justice	Efficiency Policy for Existing Buildings: Driving Market Transformation (Discussion)
2:30 – 3:00p	Break		
3:00 – 3:30p	Lightning Round		
3:30 – 5:00p	Using Tools and Data Analysis to Inform Building Policy Adoption and Implementation	Building a Green Workforce: Training for Tomorrow's Energy Code Compliance	Reaching for the Sun: Lessons Learned from California (Discussion)

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Day 02 Wednesday, May 8

7:30 – 8:30a	Registration & Breakfast		
8:30 – 9:30a	Federal Roundtable: Decarbonization, Affordability, and Everything in Between		
9:30 – 10:00a	Break		
10:00 – 11:30	Acceleration Station: Boosting Building Performance Standards through RECI Funding Projects	Diversifying Your (EE) Portfolio: Utility Code Support Programs	Are We There Yet: Defining a Model Energy Code Endpoint (Discussion)
11:30 – 12:30p	Networking Lunch		
12:30 – 2:00p	Driving Change: Electric Vehicle Charging Infrastructure in the Energy Codes	Third Parties and Residential Energy Code Compliance	Using Technical Assistance to Support the Adoption and Implementation of Energy Codes (Discussion)
2:00 – 2:30p	Break		
2:30 – 4:00p	Working Collaboratively: Building Relationships and Sharing Resources to Achieve Common Goals		Approaching Zero: Integrating Renewable Energy in Building Codes



Session Descriptions *(keep watch – missing descriptions will be added soon)*

Grid Edge Modernization and the Energy Code: How Codes Can Support a Transition to a Clean and Resilient Grid

As we transition to an electricity grid powered mostly by renewables and all-electric buildings become more prevalent, it will be increasingly important for buildings to be capable of shifting when electricity is being drawn from the grid. During this session, speakers will provide context on what is needed to achieve grid modernization (the grid perspective) and how codes can help with the transition. We will discuss attributes of a grid-integrated buildings (e.g., solar, storage, load management, EV infrastructure) and the logistics of establishing effective codes to ensure buildings have these attributes. Topics of discussion will include differences in grid needs and the related need for grid integrated buildings in different parts of the country, how building performance standards or energy codes can impact the utility grid, different calculation methodologies to demonstrate energy value and cost effectiveness, where code requirements should reside (energy code v. another code) and the interplay between appliance standards and building codes.

Inclusive Energy Codes: Bridging the Gap to Achieve Equity and Environmental Justice

Dive into the intersection of energy codes, equity, and environmental justice in this engaging session. Experts from across the country will share insights on crafting energy codes that not only meet technical standards, but also address the needs of underserved communities, empower the workforce, and ensure Justice40 goals are being met. Learn about strategies that provide accessible and inclusive benefits throughout the entire lifecycle of energy codes—from development to enforcement and evaluation. This is a crucial conversation for those interested in how energy policy can be a tool for positive change.

Efficiency Policy for Existing Buildings: Driving Market Transformation

Approximately 80% of the 2024 U.S. building stock will remain in 2050, making improving the energy efficiency of existing buildings a crucial part of achieving 2050 energy efficiency and climate goals. If the energy efficiency, affordability, and climate goals of federal, state, and local governments are to be met, existing buildings must achieve additional energy efficiency. This discussion session will explore how policy and programs can drive market transformation in existing buildings, with a focus on small commercial buildings and residences.

Using Tools and Data Analysis to Inform Building Policy Adoption and Implementation

As building codes and building performance standards become more advanced, new tools and insights are critical to help inform their adoption and implementation across the United States. In this session, we will explore various data-based solutions at the national, state, and local level helping jurisdictions realize savings and achieve their goals.



Building a Green Workforce: Training for Tomorrow's Energy Code Compliance

Energy savings, carbon reduction, improved resilience - the full measure of energy code compliance benefits don't happen if the workforce is not properly trained to construct energy efficient buildings. This session will highlight different approaches to workforce training, including working with community-based organizations, targeted training for code officials, creating a comprehensive resource clearinghouse, and providing industry recognized certificate training.

Reaching for the Sun: Lessons Learned from California

For nearly fifty years, The Golden State has benefited from robust statewide energy efficiency authority. During this time, the state has successfully standardized highly insulated walls, windows, attics, and roofs for the majority of new homes and businesses. Recent initiatives have further standardized highly efficient heat pumps and required solar photovoltaic systems and battery storage for most building types. This session invites you to engage with representative state regulators, pioneering local governments, forward-thinking utilities, and innovative regional energy networks, all collaborating to distribute the benefits of energy codes throughout the nation's most populous state.

Federal Roundtable: Decarbonization, Affordability, and Everything in Between

We are in unprecedented times. With more than \$97 billion in funding from the Bipartisan Infrastructure Law and Inflation Reduction Act to the Department of Energy, there has never been a greater focus on and ability to fund transformational clean energy projects throughout the country. Doing so, while ensuring that equity and disadvantaged communities are front-and-center in all decisions, is a key priority for DOE and the Administration. This roundtable will cover some of the federal programs and initiatives to help drive towards decarbonization, while addressing the key equity considerations that are being made to help ensure Americans can live in affordable and secure homes.

Acceleration Station: Boosting Building Performance Standards through RECI Funding Projects

Building Performance Standards (BPS) are rapidly transforming the landscape of existing building decarbonization across America. States and local governments are leading the way in establishing innovative and equitable BPS to meet emissions reduction goals by midcentury. Organizations are teaming up alongside these governments to support realistic and achievable policy outcomes through thought leadership, technical analysis, tool development, and creative complementary activities. The US Department of Energy recently awarded 27 of these teams under the Bipartisan Infrastructure Law's Resilient and Efficient Codes Implementation funding opportunity. Hear from DOE and four awardees on how they're working with states and local governments on BPS to transform our built environment for communities everywhere.

Diversifying Your (EE) Portfolio: Utility Code Support Programs

As energy codes continue to evolve, utility incentive programs are faced with the need to adapt while meeting cost-effectiveness requirements. Learn from presenters about opportunities and challenges in planning and



implementing above-code and energy code support programs. Speakers will include utilities and utility program implementers from across the country who offer varying types of energy code-related programs.

Are We There Yet: Defining a Model Energy Code Endpoint

Where are we ultimately going with our energy code development work? Zero energy? Zero emissions? Some other standard? How much of that progress should be efficiency, vs. renewables, and is cost-effectiveness the only factor? These questions and more will help pin down our ultimate code target.

Driving Change: Electric Vehicle Charging Infrastructure in the Energy Codes

Third Parties and Residential Energy Code Compliance

This session will explore the effective use of residential third-party professionals in the design, construction, and enforcement processes to achieve compliance with modern energy codes (e.g., 2021 International Energy Conservation Code). Attendees will explore the role of third parties and the benefits of using these professionals in the code compliance process, discuss the concerns, challenges, and successes of third parties from the Code Official's perspective, and explore how HERS Raters are used to verify code compliance while meeting the needs of the jurisdictions they serve. This discussion session will offer insights on best practices and lessons learned with the goal of enhancing the relationship and communication between third parties and Code Officials.

Using Technical Assistance to Support the Adoption and Implementation of Energy Codes

Adopting and implementing updated energy codes is an important way to improve building energy efficiency and gain cost, health, and resilience co-benefits. In this session, participants will learn about energy code technical assistance resources currently available for states, Territories, tribal communities, and local jurisdictions. Speakers in various regions will share opportunities and best practices around accessing these resources and collaborating with others working toward similar goals.

Working Collaboratively: Building Relationships and Sharing Resources to Achieve Common Goals

To achieve ambitious climate goals and drive sustained improvements, strategic partnerships are key. State and local jurisdictions have sought out such partnerships with each other, as well as with other organizations, including builders, architects, engineers, academia, advocates, and other stakeholders who play an important role supporting the successful implementation of building codes. Join this session to hear about best practices and challenges in working collaboratively, as well as reflect on opportunities to expand partnerships to include those who have been historically left out of the climate and codes space.



Approaching Zero: Integrating Renewable Energy in Building Codes

This session explores innovative strategies and best practices that are driving progress towards renewable energy in building codes, toward zero-energy buildings in some regions. Learn how these initiatives can be universally applied to promote energy efficiency and sustainability in the built environment. This session offers valuable takeaways for those interested in shaping the future of building codes and achieving ambitious energy goals, regardless of whether you're located on the East Coast, West Coast, or anywhere in between.