The equipment we buy, the buildings in which we live and work, and the vehicles we drive are all subject to energy codes and efficiency standards. These codes and standards “set the floor” for the efficiency and safety of all new products and buildings.

When codes and standards are technically feasible and economically justified, there are significant net benefits to customers. Energy codes and efficiency standards should be driven by actual customer savings.

DOE DISTRIBUTION TRANSFORMERS RULEMAKING UPDATE

On January 11, 2023, the U.S. Department of Energy (DOE) published proposed rules to significantly increase the minimum efficiency standards of utility liquid-filled distribution transformers, as well as medium-voltage dry type and low-voltage dry type transformers. The proposed standard would come into effect on January 1, 2027 and the 95-99 percent of distribution transformers currently available in the market containing grain oriented electrical steel (GOES) would not meet the standard. EEI, EEI member companies, and many other parties provided comments to DOE by the March 27, 2023 deadline.

On June 1, 2023, 47 U.S. Senators (33 Republicans and 14 Democrats) sent a letter to Energy Secretary Jennifer M. Granholm expressing concern about the rulemaking. The Senators wrote “We urge the Department to refrain from promulgating a final rule that does not exacerbate the shortage in distribution transformers and convene stakeholders across the supply chain to develop a consensus based approach to setting new standards.”

On June 16, 2023, U.S. Representative Richard Hudson (R-NC) and U.S. Senator John Barrasso (R-WY), along with Senator Thom Tillis (R-NC), introduced the Protecting America’s Distribution Transformer Supply Chain Act, legislation that would repeal the Department of Energy’s authority to propose, finalize, implement, administer, or enforce any new or updated energy efficiency standard for distribution transformers for the next five years. The legislation was endorsed by EEI, NRECA, NAHB, and NEMA, among others.

The Bottom Line

As of July 2023, DOE has not issued a final rulemaking and the proposed legislation has not passed the U.S. House or Senate. Under a consent decree, DOE must issue a final decision or rule for distribution transformers by June 30, 2024.
DOE CONTINUES ACCELERATION OF APPLIANCE EFFICIENCY STANDARD RULEMAKINGS

Since March 2023, DOE has taken the following actions:

Publication of Final Rules.
- Room Air Cleaners (Published: 4/11/2023. Tier 1 efficiency standard effective 12/31/2023; Tier 2 standards effective 12/31/2025)
- Room Air Conditioners (Published: 5/26/2023. Effective: 5/26/2026)
- Residential Pool Heaters (Published: 5/30/2023. Effective: 5/30/2028)
- Electric Motors 1-750 hp (Published: 6/1/2023. Effective: 6/1/2027)
- Three-phase commercial unitary air conditioners and heat pumps with capacities < 65,000 Btu/h along with three-phase commercial VRF air conditioners and heat pumps with commercial capacities < 65,000 Btu/h (Published: 6/2/2023. Effective: 1/1/2025)
- Computer Room Air Conditioners (Published: 6/2/2023. Effective: 5/28/2024)

Publication of Proposed Rules.
- Miscellaneous Refrigeration Equipment (Published: 3/31/2023. Comments due to DOE: 5/30/2023)
- Automatic Commercial Ice Makers (Published: 5/11/2023. Comments due to DOE: 7/10/2023)
- Residential Dishwashers (Published: 5/19/2023. Comments due to DOE: 7/18/2023)
- Beverage Vending Machines (Published: 5/25/2023. Comments due to DOE: 7/24/2023)
- Ceiling Fans (residential and commercial) (Published: 6/22/2023. Comments due to DOE: 8/21/2023)

Final Rules sent by DOE to the White House Office of Management & Budget (OMB) that are still under Review as of 7/13/2023.
- Energy Conservation Standards for Commercial Water Heating-Equipment (Received by OMB on March 17, 2023)
- Energy Conservation Standards for Dedicated-Purpose Pool Pump Motors (Received by OMB on April 18, 2023) **OIRA review completed 7/20/2023
- Energy Conservation Standards for Residential Non-Weatherized Gas Furnaces and Mobile Home Gas Furnaces (Received by OMB on June 5, 2023)

Proposed Rules sent by DOE to OMB that are still under Review as of 7/13/2023
- Energy Conservation Standards for Consumer Water Heaters (Received by OMB on February 6, 2023) **OIRA review completed 7/14/2023
- Energy Conservation Standards for Consumer Boilers (Received by OMB on March 17, 2023) **OIRA review completed 7/21/2023
- Energy Conservation Standards for Walk-In Coolers and Freezers (Received by OMB on May 4, 2023)
- Energy Conservation Standards for Dehumidifiers (Received by OMB on May 15, 2023)
- Energy Conservation Standards for Commercial Refrigeration Equipment (Received by OMB on June 12, 2023)

Other significant rulemakings that will be finalized by next summer include the following that have been published as proposed rules with comment periods closing between March 27 and May 2, 2023:
- Consumer Clothes Washers
- Consumer Conventional Cooking Products (including gas and electric stoves)
- Consumer Refrigerators/Freezers
- Distribution Transformers
- General Service Lamps

The Bottom Line

DOE has continued to accelerate its appliance standards rulemakings. Many of the decisions will have significant impact on EEI member companies and their energy efficiency programs, especially for residential programs, as nearly all major appliances used by consumers are near or at the final rule stage.

Relative to past standards, for some of these appliances a larger share of customers will not realize direct net benefits. For example, DOE’s analysis of its residential pool heater standards shows 45 percent of electric customers and 39 percent of gas customers facing higher net costs as the final rule bans electric resistance units and requires very high efficiency heat pumps for electric and “near condensing” for gas units. Electric units that meet the new standard will likely cost at least $1,000 more than gas units.

U.S. EPA PROPOSES SIGNIFICANT CHANGES TO RESIDENTIAL ENERGY STAR APPLIANCE PROGRAM TO FOCUS ON ELECTRIC HEAT PUMP TECHNOLOGIES

In letters sent to stakeholders on May 18 and June 5, 2023, the U.S. Environmental Protection Agency (EPA) proposed to remove residential furnaces, central air conditioning units, and commercial boilers from its voluntary Energy Star certification program. This means that fossil-fueled heating systems would no longer qualify for the program’s efficiency standards and that electric heat pumps would be the only ones to receive recognition.
EPA wrote that “This proposal involves sunsetting the ENERGY STAR Version 4.1 Specification for Furnaces and removing central air conditioners (CACs) from the ENERGY STAR V6.1 Specification for CAC and Heat Pump Equipment. A similar sunset proposal will be considered for gas and oil appliances in the context of forthcoming revisions of the ENERGY STAR V3.0 Specification for Boilers, the Version 1.0 Specification for Dryers, and the ENERGY STAR V1.0 for Commercial Packaged Boilers.”

In terms of timing, “The Agency proposes to sunset the ENERGY STAR Version 4.1 Specification for Furnaces and remove CAC from the ENERGY STAR V6.1 Specification for CAC and Heat Pump Equipment effective December 30, 2024, with no new certifications accepted after December 30, 2023.”

EPA also wrote: “We propose two actions: sunsetting the ENERGY STAR Boilers specification and launching a new specification to cover heat pump hydronic heating appliances, for which EPA and DOE will develop test methods.”

These proposed changes “will allow EPA to evolve the Energy Star portfolio of product specifications toward identifying the most efficient electric equipment now available to consumers.”

**The Bottom Line**

The proposed changes are some of the most significant updates for the nearly 30-year-old Energy Star program. For EEI member companies that use the Energy Star specifications for their residential HVAC programs, these changes could have a significant impact on the market for these products if and when these changes are finalized.

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**BUILDING ENERGY CODE ACTION UPDATE**

**DOE PROVIDES $90 MILLION IN RESILIENT AND EFFICIENT CODES IMPLEMENTATION GRANTS**

On July 12, 2023, DOE announced that $90 million in competitive awards were granted to help states, cities, tribes, and partnering organizations implement updated building energy codes. This funding was part of the $225 million authorized by the Infrastructure and Jobs Act that was signed into law in November 2021.

These grants will support 27 projects in 26 states and the District of Columbia. Some of the largest awards went to the following entities:

- American Council for an Energy-Efficient Economy (Washington, D.C.) will establish a National Energy Codes Collaborative, which is a nationwide capacity-building network that empower states and jurisdictions to effectively and sustainably implement updated cost-effective building energy codes through technical assistance, community engagement, focused local strategy development, and peer-to-peer collaboration and convenings. (Award amount: $9.6 million)

- Massachusetts Department of Energy Resources (Boston) will use funds to develop a comprehensive plan to support the adoption, implementation, and compliance of updated Stretch building energy code and Specialized “net zero” opt-in code throughout the state. (Award amount: $3.9 million)

- ASHRAE (Peachtree Corners, Ga.) will develop and deploy education and training resources targeted to Energy Code Officials in this nationwide multi-year project. This project will increase energy code enforcement activities through a multi-module training targeted to building energy code officials. An important component of the project will include connecting with disadvantaged and rural communities through new communication channels to expand the workforce and providing career opportunities to those populations. (Award amount: $2.85 million)

**ICC INTERNATIONAL ENERGY CONSERVATION CODE “ROUND 3” CHANGES TO BE DETERMINED STARTING IN JULY/AUGUST 2023**

On May 15, 2023, the International Code Council (ICC) published the “Round 3” changes of the Residential and Commercial International Energy Conservation Code (IECC) for public input. The public comment period for the Residential and Commercial IECC closed on June 30, 2023. Unlike the previous two rounds of public comment periods, only changes made to the IECC in “Round 2” were open for public review. All other updates and changes were “locked in” for the 2024 version of the IECC.

The ICC received 288 comments in “Round 3” (120 for the IECC Residential and 168 for the IECC Commercial). Multiple comments were received on proposed minimum levels of EV charging infrastructure and on-site building renewable energy requirements.

Deliberations on the proposed changes that are within scope will begin by late July or early August and continue into the fall. Any further changes that are made will require consensus approval by the full committees by fall of 2023 and will be included in the 2024 version of the IECC, without any further public review.

**The Bottom Line**

There are still many controversial issues that may be discussed during the “Round 3” deliberations. After the 2024 version is published, the IECC will be on a “continuous maintenance” process that has not been published as of July 2023.
STATES CONTINUE TO TAKE DIVERGENT PATHS RELATED TO THE USE OF FOSSIL FUELS IN NEW AND/OR EXISTING BUILDINGS

Over the past several months, several states have taken significant regulatory and legislative actions related to the use of energy in new and/or existing buildings.

California

On April 6, 2023, the California Public Utilities Commission (CPUC) issued a proposed decision and framework that significantly lowers incentives for natural gas energy efficiency measures in residential and commercial new construction to align the programs more closely with the state’s greenhouse gas reduction, climate change mitigation, and decarbonization goals.

The new framework includes factors such as cost-effectiveness, availability of electric alternatives, program types, and exemptions for equipment that support state decarbonization goals. As a first step in this framework, starting in 2024, customer-funded incentives for residential and commercial new construction projects will only be allowed for measures that do not combust natural gas or that are cost-effective.

However, the new rules will continue to fund “exempt measures”, such as energy efficient equipment that produce natural gas savings but do not use natural gas, such as building insulation, sealing, smart thermostats, faucet aerators, and building envelope measures like high-efficiency windows and doors.

Minnesota

In May 2023, Minnesota Governor Tim Walz signed several climate and clean energy bills into law that included commercial building energy code updates along with major investments in weatherization, public transit, and electric vehicle incentives. Beginning in 2024, the state is required to adopt each new published edition of ASHRAE 90.1 or a more efficient commercial energy building code.

In addition, the law requires that the commercial energy code in effect in 2036 and thereafter must achieve an 80 percent reduction in annual net energy consumption or greater, using the ASHRAE 90.1-2004 standard as a baseline. By January 15 of the year following each new code adoption, the state agency in charge of building energy codes is required to make a report on the progress under the law to the legislative committees with jurisdiction over the energy code.

In terms of EV charging infrastructure, the state code “shall require a minimum number of electric vehicle ready spaces, electric vehicle capable spaces, and electric vehicle charging stations either within or adjacent to new commercial and multifamily structures that provide on-site parking facilities.

Residential structures with fewer than four dwelling units are exempt from this subdivision.”

New York

On May 3, 2023, New York Governor Kathy Hochul signed into law the first statewide restrictions on natural gas and fossil fuel use in new homes and businesses, a day after the state legislature approved the policy as part of New York’s annual budget process.

The law prohibits fossil fuel equipment and systems in new construction with seven floors or fewer by 2026. The requirement expands to all new construction in New York state construction by 2029. New York will enact and enforce the policy through an update to its building energy codes, and the law includes various exemptions.

The new law does not apply to repairs, alterations and additions, nor does it apply to existing buildings.

For new buildings, the law allows fossil fuel combustion for backup power and will not apply to manufacturing facilities, restaurants, laboratories, car washes, laundromats, hospitals and certain critical infrastructure. It will also permit fossil fuel equipment in mobile homes.

It should be noted that the exemptions are not “locked in for good”. The bill authorizes the state building code council to periodically review exemptions to determine whether they still help achieve the state’s clean energy and climate goals.

There are also limits on the exemptions. Fossil fuel equipment will only be allowed in the part of a building that contains an activity qualified for the exemption. Also, in building spaces that secure an exemption, builders will have to make the areas “electric ready” by including enough electric capacity to accommodate the future installation of electric appliances and systems, except for manufacturing or industrial processes.

New buildings are also required to minimize emissions from that equipment, provided mitigation efforts do not impact health, safety, security, or fire protection.

In addition, the law includes an exemption for construction projects where new or expanded electric service would be required and the grid cannot reasonably provide that service. The law grants the New York State Public Service Commission the power to determine whether the exemption is reasonable.

North Carolina

On June 26, 2023, North Carolina became the 25th state in the United States to prohibit cities and counties from banning the use of fossil fuels in buildings. The bill, HB 130 (SL 2023-58) became law without Governor Roy Cooper’s signature after passing in the House by a vote of 74-36 and passing in the Senate by a vote of 36-7.
The law in North Carolina went further than other states by also prohibiting local bans of “The sale, purchase, or installation of an appliance utilized for cooking, space heating, water heating, or any other appliance included under the definition of "white goods" pursuant to G.S. 130A-290(a).” The new law also contains a section with requirements for decommissioning of universal-scale solar electricity production facilities upon cessation of operations.

Texas
In May and June, 2023, Texas Governor Greg Abbott signed two new laws related to the use of fossil fuels in the state. Texas was already one of the 25 states that prohibited local bans of fossil fuel usage in buildings. SB 1017, signed into law on May 13, 2023, and effective as of September 1, 2023, prohibits localities from restricting the use of fossil fuels in engines, as shown:

“Sec. 247.003. RESTRICTION ON REGULATION OF ENGINES. (a) A political subdivision may not adopt or enforce an ordinance, order, regulation, or similar measure that directly prohibits or restricts the use, sale, or lease of an engine based on its fuel source.”

In addition, the law states “A political subdivision may not adopt or enforce an ordinance, order, regulation, or similar measure that limits access to or use of an energy source or that results in the effective prohibition of infrastructure that is necessary to provide access to a specific energy source, including a wholesaler, retailer, energy producer, or related infrastructure, including a retail service station.”

However, the law does allow rebate programs for alternatively-fueled engines: “This section does not limit the authority of a political subdivision to adopt an ordinance, order, regulation, resolution, policy, or other similar measure to encourage, promote, or provide rebates for engines and fuel sources from alternative sources such as electricity, hydrogen, gas, or biofuels and that does not directly or effectively ban, restrict, or prohibit the use, sale, or lease of an engine based on the engine's fuel source.”

HB 2263 was signed into law on June 12, 2023 and went into immediate effect. It specifically addresses natural gas energy conservation programs and prohibits localities from restricting gas companies from offering efficiency programs. It also prohibits localities from restricting customers from participating in natural gas energy conservation programs.

The Bottom Line
In terms of building energy laws and regulations, different states are going in completely different directions. Customers with facilities in multiple states will need to be aware of the differences in state policies for their new and existing buildings, and EEI member companies will be affected by the actions in different states.

9TH CIRCUIT COURT RULES AGAINST BERKELEY, CALIF. GAS BAN; CITY FILES AN EN BANC APPEAL
On April 17th, 2023, the U.S. Ninth Circuit Court of Appeals ruled against the gas ban enacted by the City of Berkeley California in 2019.

The city was sued by the California Restaurant Association in October 2019, and its gas ban was upheld in District Court in 2022. The case was then brought to the Ninth Circuit Court, which ruled against Berkeley.

In its ruling, the Ninth Circuit Court stated “The panel held that the [federal] Energy Policy and Conservation Act preempts the Berkeley ordinance. The panel wrote that, in this express preemption case, it addressed the plain meaning of the Act without any presumptive thumb on the scale for or against preemption. The Act expressly preempts State and local regulations concerning the energy use of many natural gas appliances, including those used in household and restaurant kitchens. Instead of directly banning those appliances in new buildings, Berkeley took a more circuitous route to the same result and enacted a building code that prohibits natural gas piping into those buildings, rendering the gas appliances useless. The panel held that, by its plain text and structure, the Act’s preemption provision encompasses building codes that regulate natural gas use by covered products. By preventing such appliances from using natural gas, the Berkeley building code did exactly that. The panel reversed and remanded for further proceedings.”

The ruling raises concerns about the legality and viability of gas bans and building electrification requirements in California, Oregon, and Washington, which are located within the region served by the Ninth Circuit. On May 24, 2023, the Washington State Building Code Council delayed implementation of statewide electric space and water heating requirements in order to adjust the state building energy code language to conform with the panel’s decision.

On May 31, 2023, the City of Berkeley filed a petition for rehearing en banc of the Ninth Circuit panel’s decision, saying that decision reflected a “grievous misinterpretation” of federal law, improperly preempted local authority, and disregarded tenets of federalism.

In the Ninth Circuit, an en banc rehearing entails a review of a panel’s decision by 10 of the circuit’s randomly selected appeals court judges and its chief judge. Lawyers for Berkeley argued that “the need to maintain uniformity in this court’s decisions and the exceptional importance of the issues demand rehearing en banc.” They said the 9th Circuit panel’s decision was based on “fundamental legal errors that threaten vital health, safety, and environmental regulations throughout the Circuit.”

Part of the Berkeley petition for rehearing directly addresses the panel’s interpretation. The petition argues that the chief
goal of the federal preemption provision was to avoid a patchwork of appliance energy efficiency standards.

“The panel decision misinterpreted a modest provision of EPCA, designed to smooth the operation of Congress's energy-conservation standard-setting regime, as instead enacting a preemptive juggernaut,” lawyers for Berkeley said. “On the panel's reading, Section 6297(c) provides that when the energy secretary establishes an energy conservation standard, she renders unenforceable every state and municipal rule that limits the use of a covered appliance — including health, safety, and environmental measures wholly unconcerned with energy conservation or efficiency.”

The City of Berkeley stated that its gas ban did not seek to regulate the energy efficiency of gas appliances but to prohibit their use in new construction as a matter of public health and safety due to the climate-warming impacts of combusting gas and other considerations. Since EPCA did not give the U.S. energy secretary authority to regulate these health and safety interests, the panel's decision leaves cities and states unable to address them through land use and building safety measures, the lawyers for Berkeley said.

On June 12, 2023, multiple entities filed briefs in support of Berkeley, including the New York Public Service Commission, the National League of Cities, 10 states (Arizona, California, Hawaii, Maryland, Massachusetts, New Jersey, New York, New Mexico, Oregon, and Washington) plus New York City, Washington, D.C., and DOE.

The Ninth Circuit has not yet revealed whether it will re-hear the case en banc.

The Bottom Line

The eventual outcome of this case could have a significant impact on local and state restrictions on the use of fossil fuels in buildings. After the en banc hearing, the last remaining step would be an appeal to the U.S. Supreme Court.

Comments or Questions?

For questions or more information, please contact Steve Rosenstock at srosenstock@eei.org.