

Update on Federal Codes and Regulations and Other Policies

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Overview

- Federal / National Policy Issues
- Federal Incentives for Efficiency
- DOE Rulemakings and Executive Orders
- Building Energy Codes / Standards Updates
- Q&A



Federal / National Policy Issues

Status of Federal Efficiency, EV, and Renewable Energy Tax Incentives

- When were project(s) installed, purchased, or "placed in service"?
- If projects were completed by December 31, 2024:
 - They receive the federal tax incentives that they qualified for if they met all of the rules that were finalized between 2022 and 2024.
- For projects installed or placed in service on or after January 1, 2025:
 - ???

Federal Tax Laws "in play" in 2025

- Tax Cut & Jobs Act of 2017 (several provisions expire at the end of 2025)
- Inflation Reduction Act of 2022 (tax provisions in play for potential repeal or modification).
- Efficiency tax incentive changes could be:
 - Retroactive to January 1, 2025.
 - Effective on the date of passage / signed into law.
 - Effective on a future "date certain".
 - Phased in/out over a certain time period.



2025 Projects and Federal Incentives

- The status of federal incentives has no impact on the status of state or energy company incentives.
- If possible, do a "sensitivity analysis".
 - One analysis assuming federal incentives are in place for 2025.
 - A 2nd analysis assuming federal incentives are reduced by 50% (e.g., a phaseout approach).
 - A 3rd analysis that removes the federal incentives.
 - Do the numbers still work?

IRS / Treasury Comm / Ind Tax Credit Information / Regulation Web Sites

- Web site links for 2024 projects (accessed 5/8/25):
- https://www.irs.gov/credits-deductions/prevailing-wageand-apprenticeship-requirements
- https://www.govinfo.gov/content/pkg/FR-2024-06-25/pdf/2024-13331.pdf
- https://www.irs.gov/pub/irs-pdf/p5886.pdf
- https://www.irs.gov/credits-deductions/businesses
- https://www.irs.gov/creditsdeductions/businesses/advanced-energy-project-credit

Tariff Updates on Chinese Products

Here are values from 2024 and March 2025 rulings:

Product	2024	March 2025
Battery Parts	7.5% to 25% (9/27)	35% / 45%
Electric Vehicles	25% to 100% (9/27)	110% / 120%
Li-Ion EV Batteries	7.5% to 25% (9/27)	35% / 45%
Steel / Aluminum	7.5% to 25% (9/27)	35% / 45%
Solar Cells/Modules	25% to 50% (9/27)	60% / 70%
Semiconductors	25% to 50% (1/1/25)	60% / 70%

Tariff News Headlines

- "Trump tariffs to hit HVAC, plumbing hard, analysts say"
 - "With President Trump's announcement of tariffs on eight of the top 10 exporters of HVACR and water-heating equipment to the United States going as high as 46%, we expect to see price increases passed on to consumers"
 - (Alex Ayers, VP of Government Affairs at Heating, Airconditioning and Refrigeration Distributors International)
- Source: <a href="https://www.facilitiesdive.com/news/trump-tariffs-to-hit-hvac-plumbing-hard-analysts-say/744333/?utm_campaign=Yahoo-Licensed-Content&utm_source=yahoo&utm_medium=referral



Tariff News Headlines (2)

- "Housing Starts Decline Amid Economic Uncertainty"
 - "Constrained housing affordability conditions due to elevated interest rates, rising construction costs and labor shortages led to a reduction in housing production in March."
 - "Overall housing starts decreased 11.4% in March to a seasonally adjusted annual rate of 1.32 million units, according to a report from the U.S. Department of Housing and Urban Development and the U.S. Census Bureau."
- Source: <a href="https://www.nahb.org/news-and-economics/press-releases/2025/04/housing-starts-decline-amid-economic-uncertainty?utm_source=newsletter&utm_medium=0421&utm_campaign=MMB2025

Tariff Updates on Products from Other Countries

- See the following web sites:
- https://www.tradecomplianceresourcehub.com/

https://hts.usitc.gov/

Question on Tariffs

- What was the total percentage of all imported products (in terms of their market value) that come to the US from Canada, China, and Mexico in 2024?
- a. 14 percent
- b. 28 percent
- c. 42 percent
- d. 56 percent

Question on Tariffs

Answer: c. 42 percent

Mexico: \$510 billion

China: \$463 billion

Canada: \$422 billion

(sources: https://www.aa.com.tr/en/americas/us-imports-last-year-from-major-trade-partners-facing-tariff-threats-totaled-14t/3480016)

DOE Rulemakings News

DOE Commercial Appliance Standards – Key Compliance Dates

- **2025**
 - Air Compressors
- **2027 / 2028**
 - Ice Makers
 - Beverage Vending Machines
 - Walk-in Coolers & Freezers*
 - Electric Motors rated at 1 750 horsepower
- **2029**
 - Commercial AC / HP Packaged Units 65,000 760,000 Btu/h
 - Commercial Refrigeration Equipment*

DOE Residential Appliance Standards – Key Compliance Dates

- **2025**
 - Dedicated Pool Pump Motors (certain horsepower sizes)
- **2026**
 - Microwave Ovens (standby power)
 - Room Air Cleaners (Tier 2; Tier 1 started in 2024)
 - Room Air Conditioners
- **2027**
 - Dedicated Pool Pump Motors (other horsepower sizes)
 - Dishwashers

DOE Residential Appliance Standards – Key Compliance Dates (cont'd)

- **2028**
 - Clothes Washers
 - Clothes Dryers (gas and electric)
 - Cooking Products (gas and electric ovens, stoves, cooktops)
 - General Service Lamps
 - Pool Heaters
- **2029**
 - Miscellaneous Refrigeration Products (wine chillers, etc.)
 - Water Heaters (gas and electric)
 - Refrigerators / Freezers

DOE Appliance Standards Actions

- By January 20, 2025, DOE also finalized rules for:
 - Miscellaneous Refrigeration Products
 - Residential Clothes Washers* and Clothes Dryers
 - Residential Cooking Products*
 - Residential Dishwashers*
 - Residential Gas Instantaneous Water Heaters*
 - (*DOE has been sued over the final rules for these products)
- DOE also "pre-published" a final rule for "expanded scope electric motors".

More DOE Appliance Standards Actions

- By January 20, 2025, DOE also issued "no new standard" final rules for:
 - Residential furnaces (electric, weatherized gas, and three types of oil-fired)
 - Residential furnace fans

 The Biden Administration issued 14 "no new standard" final rules.

Even More DOE Appliance Standards Actions

- By January 20, 2025, DOE also withdrew final rules for the following:
 - Battery Chargers
 - Commercial Fans and Blowers
 - Residential Boilers
 - Note: Current efficiency standards for battery chargers and boilers remain in place. The standards for commercial fans and blowers would have been brand new.
- Other final rules (ceiling fans, dehumidifiers) and one proposed rule (portable electric spas) were "in limbo".

DOE Rulemakings and the Social Cost of Carbon

- In the last two final rules published by January 20, 2025, DOE:
 - Presented estimates using the 2021 IWG values (about \$51 per ton in 2020 \$) and the 2023 EPA values (about \$190 per ton in 2020 \$).
 - In previous rules, DOE had only used the 2021 values.
 - They also said that "In future rulemakings, DOE will continue to evaluate the applicability in context and use our professional judgment to apply the SC-GHG estimates that are most appropriate to use at that time." (emphasis added)

DOE Actions On/After January 20, 2025

- Many Executive Orders have been put in place since January 20, 2025. Among the action items are:
 - The IWG (Inter-Agency Working Group) has been abolished.
 - Agencies have been directed not to use the social cost of carbon in future rulemakings.
 - DOE is initiating a comprehensive review of the Appliance Standards Program.

DOE Delayed *Effective Dates* in January 2025

- Until March 21, 2025, for the following:
- Efficiency Test Procedures (Final Rules)
 - Residential Central Air Conditioners and Heat Pumps
 - General Service Lamps
 - Residential Clothes Washers & Clothes Dryers
 - Commercial Clothes Washers
- Energy Conservations Standards (Final Rules)
 - Residential Gas Instantaneous Water Heaters*
 - Commercial Walk-in Coolers and Freezers*
 - Commercial Refrigeration Equipment*



DOE Delayed *Effective Dates* in March 2025

- In March, DOE again delayed the effective dates for the following until May 20, 2025:
- Efficiency Test Procedures (Final Rules)
 - Residential Central Air Conditioners and Heat Pumps

- Energy Conservations Standards (Final Rules)
 - Residential Gas Instantaneous Water Heaters*
 - Commercial Walk-in Coolers and Freezers*

DOE Withdraws Standards in March 2025

- In March, DOE withdrew new or updated energy conservation standards for the following appliances:
- Expanded scope electric motors (new standards)
- Ceiling fans (updated standards)
- Dehumidifiers (updated standards)
- External power supplies (updated standards)

 For the last 3 appliances, the current standards remain in place.

DOE Proposal on Portable Electric Spas

- DOE is proposing to withdraw its prior determination that portable electric spas ("PESs") qualify as covered products under Part A of Title III of the Energy Policy and Conservation Act, as amended ("EPCA").
- This notice was published in the Federal Register on April 18, 2025.
- Comments are due to DOE by May 19, 2025.

Portable Electric Spas Background

- DOE published proposed determination on 2/16/2022.
- DOE finalized the coverage determination on 9/2/2022.
- DOE sent proposed rule to OMB/OIRA on 10/27/2023.

List of Regulatory Actions Currently Under Review

(Agency: ALL; Rule Stage: ALL; Length of Review: ALL; Section 3(f)(1) Significant: ALL; International Impact: ALL)

Department of Energy

AGENCY: DOE-EE RIN: 1904-AF36 Status: Pending Review Request EO Meeting

TITLE: Energy Conservation Standards for Portable Electric Spas

STAGE: Proposed Rule SECTION 3(f)(1) SIGNIFICANT: Yes

RECEIVED DATE: 10/27/2023 LEGAL DEADLINE: None

DOE Withdrawal of Determination for Miscellaneous Gas Products

- On May 7, 2025, DOE withdrew its prior determination that certain miscellaneous gas products (such as decorative hearths and outdoor heaters) are "covered" products for energy conservation standards.
- Here is a link to the Federal Register notice: https://www.govinfo.gov/content/pkg/FR-2025-05-07/pdf/2025-07950.pdf
- The *effective date* of this withdrawal is June 6, 2025.

DOE Has Not Changed Any of the Compliance Dates

- The "effective date" is when a final rule officially goes into effect and becomes part of federal law (as published in the US Code of Federal Regulations).
 - Before the *effective date*, interested parties can file appeals to a federal agency or file lawsuits in court under the federal Administrative Procedures Act.
- The "compliance date" is the first date when appliance manufacturers have to meet the new or updated energy conservation standard(s).
 - No compliance dates have been changed as of 5/8/2025.

DOE Appliance Standards Rulemaking Process RFI on April 17, 2025

- DOE has released an RFI to update their appliance energy conservation standards rulemaking process.
- Unlike the process during the 2017-2018 RFI (which led to a final rule in 2020, which was revised again in 2021), there will not be a public meeting.

- Comments are due to DOE on June 2, 2025. Link:
- https://www.govinfo.gov/content/pkg/FR-2025-04-17/pdf/2025-06330.pdf

Final Rule Overturned by Congress (1)

- On February 27, 2025, the US House passed H.J. Res. 20 that rescinds the final rule for residential gas instantaneous water heaters under the Congressional Review Act (CRA). It passed by a vote of 221-198.
- The identical bill passed on April 10, 2025, by a vote of 53-44 in the US Senate. It was sent to the President on May 5, 2025.
- If signed by the President, this would be the first time an appliance efficiency standard was rescinded by the CRA.

Final Rule Overturned by Congress (2)

- On March 27, 2025, the US House passed H.J. Res. 24 that rescinds the final rule for commercial walk-in coolers and freezers under the Congressional Review Act (CRA). It passed by a vote of 203-182.
- The identical bill passed on April 3, 2025, by a vote of 53-42 in the US Senate. It was also sent to the President on May 5, 2025.
- If signed by the President, this would be the second time an appliance efficiency standard was rescinded by the CRA.

Final Rule Overturned by Congress (3)

- On March 5, 2025, the US House passed H.J. Res. 42 that rescinds a final rule for certification requirements, labeling requirements, and enforcement provisions of appliance standards under the Congressional Review Act (CRA). It passed by a vote of 222-203.
- The identical bill passed on April 30, 2025, by a vote of 52-46 in the US Senate. It was sent to the President on May 6, 2025.
- If signed by the President, this would be the first time that this type of rule was rescinded by the CRA.

Final Rule Overturned by Congress (4)

- On March 27, 2025, the US House passed H.J. Res. 75 that rescinds a final rule for commercial refrigerators / freezers under the Congressional Review Act (CRA). It passed by a vote of 214-193.
- The identical bill passed on May 1, 2025, by a vote of 52-45 in the US Senate. It was also sent to the President on May 6, 2025.
- If signed by the President, this would be the third time an appliance efficiency standard was rescinded by the CRA.

Building Energy Codes & Standards News

DOE Makes Final Determination on IECC 2024 (1)

- In August, the ICC published the official version of the IECC 2024 (Residential and Commercial).
- Under federal law, DOE had 1 year to make a determination whether IECC 2024 saves more energy than IECC 2021.
- DOE sent their determination to the White House OMB/OIRA for final review on December 4, 2024.
- By December 20, 2024, the review was complete.

DOE Makes Final Determination on IECC 2024 (2)

- On December 30, 2024, DOE published their final determination in the Federal Register. DOE estimated the following savings for residential buildings:
 - 7.80 percent site energy savings
 - 6.80 percent source energy savings
 - 6.60 percent energy cost savings
 - 6.51 percent carbon emissions savings
- Under federal law, states now have 2 years (until Dec. 30, 2026) to update their <u>residential</u> building energy codes to meet or exceed IECC 2024.

Key Changes in IECC 2024 Commercial

- Renewable Energy Requirements
 - On-site or off-site
- Updates to HVAC, Lighting, and Envelope efficiency tables
 - Nearly all match ASHRAE 90.1-2022 tables
- Energy Submetering if building is > 10,000 square ft.
 - Required to submeter electric and fossil fuel end-uses
- Energy Credits required for prescriptive path
 - Based on building type and climate zone
- Nice <u>summary</u> of changes from CO Energy office.



Status of DOE Final Positive Determination of ASHRAE 90.1-2022



On March 6, 2024, DOE published its determination that ASHRAE 90.1-2022 is more energy efficient than ASHRAE 90.1-2019.



States now have until <u>March 6, 2026</u>, to update their state <u>commercial</u> energy codes and submit certification statements to DOE.



(More states use the IECC Commercial than ASHRAE 90.1, since the IECC includes Residential and allows building designers and owners to use 90.1 to comply)

Impact of Energy Codes on Energy Usage (DOE Analysis)



Estimated Improvement in Residential & Commercial Energy Codes (1975 - 2024)

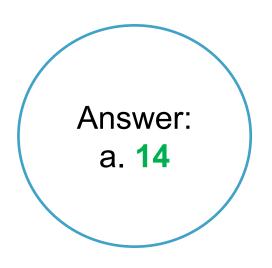




DOE Determinations and State Energy Code Updates

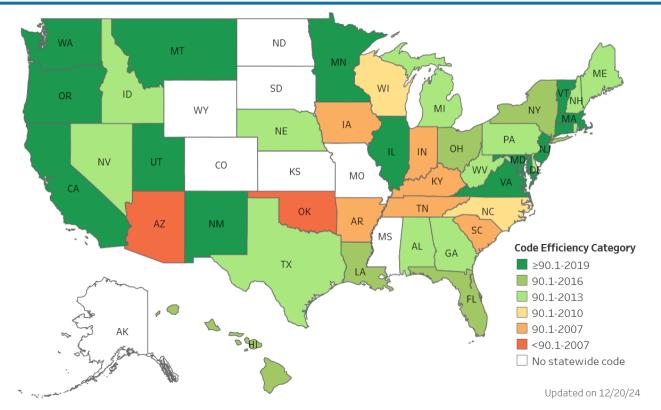
- Question: On March 6, 2024, DOE made a positive final determination for ASHRAE 90.1-2022, starting the "two-year clock" for state compliance.
- How many states have updated their commercial energy codes to meet or exceed the <u>2019</u> version (as of December 20, 2024)?
 - a. 14
 - b. 24
 - c. 34
 - d. 44

DOE Determinations and State Energy Code Updates



 Source: US Department of Energy, available at: https://public.tableau.com/ app/profile/doebecp/viz/B ECPStatusofStateEnergy CodeAdoptionWeb/Comm ercialPortal

Status of State Commercial Building Energy Codes (December 2024)



ICC and ASHRAE Goals for Minimum Energy Codes are Still Active

- ICC Board of Directors has declared that the IECC Residential and Commercial Energy Codes will be "net zero energy" by 2030.
- In February 2025, the ASHRAE Board of Directors reaffirmed its goal that Standard 90.1, by 2030, will be:
 - "Net Zero Energy" (declared in 2010) and
 - "Net Zero Emissions" (declared in 2022)
- Recall that these are <u>minimum</u> energy codes for all new / renovated buildings.

Summary







Summary

- Projects placed in service by December 31, 2024, will receive federal tax incentives.
 - For 2025, entities should perform a sensitivity analysis that excludes federal tax incentives and accounts for impacts of tariffs.
- The federal government is on a deregulation path, but no appliance standards compliance dates have been changed - yet.
- No federal impacts on state/local building codes.
- More and more lawsuits = Even More Uncertainty

Q & A

The floor is open!

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