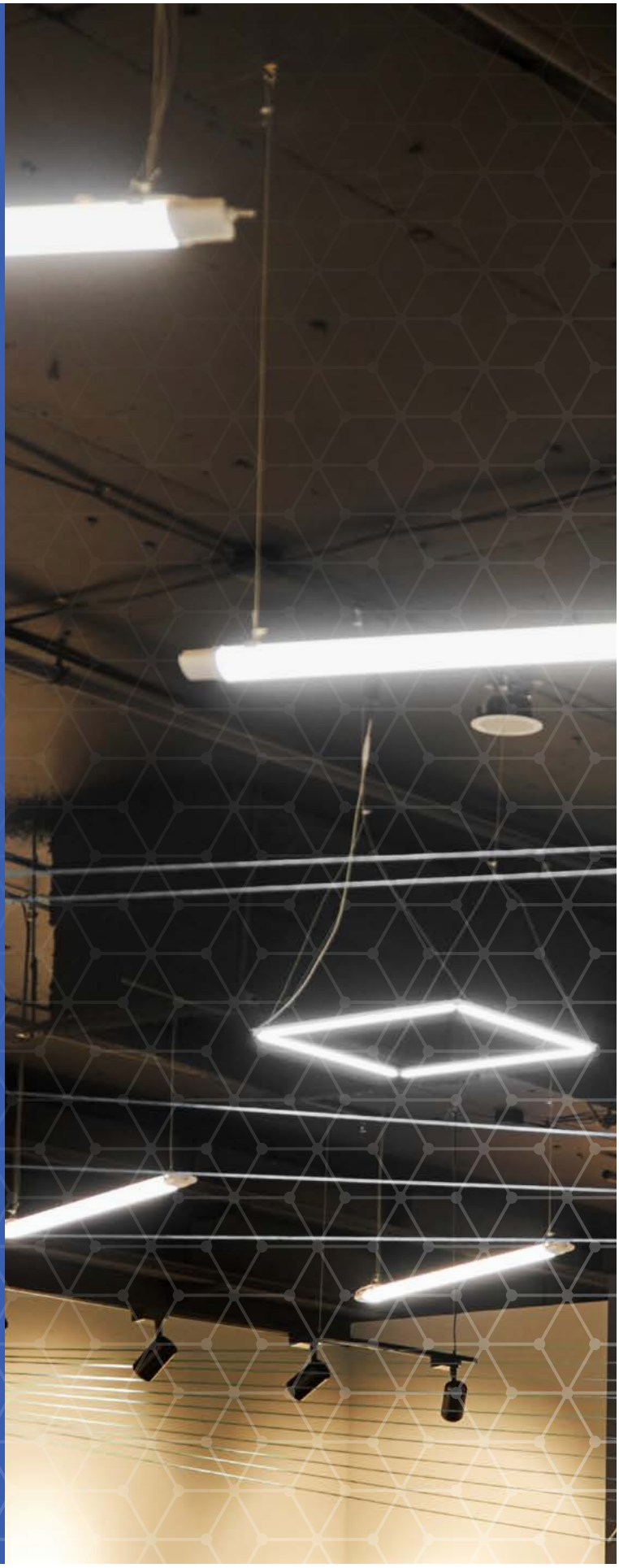
RETAIL INDUSTRY LEADERS ASSOCIATION

LIGHTBULB EFFICIENCY STANDARDS: AN INTRODUCTION FOR RETAIL

This Lightbulb Standards factsheet is a part of a series on Energy Efficiency in Buildings - Standards and Codes for Retail.



BACKGROUND AND EXECUTIVE SUMMARY

In the U.S., more than 40 percent of the total energy consumed, and 70 percent of electricity is used for operating buildings. Appliances and building-related equipment such as electric motors, lighting, refrigerators, and water heaters account for almost all the energy used in buildings—the U.S. Department of Energy (DOE) estimates that these products represent about 90 percent of residential energy use, 60 percent of commercial building energy use, and 30 percent of industrial energy use. [EESI Fact Sheet: Energy Efficiency Standards for Appliances, Lighting and Equipment] Making these processes more efficient in buildings saves businesses billions of dollars on energy bills, avoids unnecessary pollution, creates jobs, improves U.S. competitiveness, and reinvigorates domestic manufacturing [EERE: Energy-Saving Homes, Buildings & Manufacturing].

To inform retailers and other commercial businesses on the latest updates in building efficiency standards and energy codes at both the national and state levels, RILA's Retail Compliance Center (RCC) is producing a series of factsheets covering:

- DOE Appliance and Equipment Standards
- Light Bulb Efficiency Standards
- Building Energy Codes: ASHRAE vs. IECC
- State Energy Efficiency Laws and Codes

This fact sheet provides a starting point and quick reference tool for retailers on U.S. lightbulb efficiency standards. The summary table below provides an overview of several states enacting lightbulb standards in light of the federal standard rollback, with links to external sources for additional information. This fact sheet is relevant for retail store operations, distribution centers, and other commercial buildings, and includes particular information on general service lamp (GSL) requirements for buildings.

LIGHT BULB STANDARDS

Lighting restrictions in the U.S. were supposed to go into effect for every state on January 1, 2020, as part of the Energy Independence and Security Act (EISA). EISA was set to apply a federal minimum energy efficiency standard of 45 lumens per watt (lpw) for all general service lamps (GSLs), which would have phased out halogen and incandescent bulbs unable to meet that efficiency requirement. However, in 2019, the Department of Energy issued a final rule deciding not to increase the efficiency requirements for general service incandescent lamps, which led to environmental groups filing lawsuits petitioning the rollback of the standard [DOE: Energy Conservation Program: Definition for General Service Lamps]. Analysis conducted by the Appliance Standards Awareness Project (ASAP) and the American Council for an Energy-Efficient Economy (ACEEE) estimates that eliminating the 2020 efficiency standards for light bulbs will cost U.S. consumers up to $14 billion annually— or more than $100 in lost bill savings per year per household. [ASAP/ACEEE Brief: US Light Bulb Standards Save Billions for Consumers But Manufacturers Seek a Rollback]

Therefore, some states have taken matters into their own hands:

STATE	STANDARD	STATUS
California	On November 13, 2019, the California Energy Commission adopted clarifying regulations confirming that the January 19, 2017, definitional rules for GSLs remain applicable to the existing California requirement that GSLs have an efficacy greater than or equal to 45 lpw.	In effect as of January 1, 2020
Colorado (pending)	Colorado passed a law to move forward with the 45 lpw restriction but cannot enforce it because of a pending lawsuit. A ruling is expected in late 2020 or early 2021. If the lawsuit is decided in the state's favor, the law passed in May 2019 says general service lamps must meet or exceed the efficacy standard of 45 lpw.	In effect as of January 1, 2020 but no enforcement due to pending lawsuit
Nevada (pending)	Nevada could enforce the 45 lumen per watt exemption because the DOE gave the state authority to adopt it, just like California. Nevada's governor signed bill AB54 into law in May 2019 to raise the minimum efficacy of 45 lumens per watt. However, the bill does not lay out specific restrictions, so the state is not currently enforcing the law.	In effect as of January 1, 2020 but no enforcement
Vermont (pending)	Enacted Act 139 of 2018, which states Vermont shall adopt a minimum efficacy standard for general service lamps of 45 lumens per watt. Currently, Vermont cannot enforce the 45 lumen per watt standard because of the pending lawsuit, similar to Colorado. A ruling is expected in late 2020 or early 2021.	In effect as of January 1, 2020 but no enforcement due to pending lawsuit
Washington	Governor Inslee signed HB 1444 into law in 2019 which included a provision to adopt the federal light bulb efficiency standards. Despite a pending lawsuit, the state's Department of Commerce will begin to enforce some of the 45 lpw standards to specific lighting products.	In effect as of January 1, 2020

RETAIL COMPLIANCE CENTER:

- The Retail Compliance Center (RCC) provides resources on environmental compliance and sustainability for all types and sizes of retailers. The RCC's goal is to develop retail-specific resources, tools and innovative solutions to help companies cost-effectively improve their compliance and environmental performance.
- Visit the Retail Compliance Center