AN ACT

RELATING TO PUBLIC UTILITIES AND CARRIERS- MINIMUM ENERGY AND WATER EFFICIENCY STANDARDS

Introduced By: Representatives Handy, Bennett, Cortvriend, Carson, Felix, and Ruggiero

Date Introduced: February 26, 2021

Referred To: House Environment and Natural Resources

It is enacted by the General Assembly as follows:

SECTION 1. Title 39 of the General Laws entitled "PUBLIC UTILITIES AND CARRIERS" is hereby amended by adding thereto the following chapter:

CHAPTER 27.1

MINIMUM ENERGY AND WATER EFFICIENCY STANDARDS FOR CERTAIN PRODUCTS SOLD IN THE STATE


This chapter establishes minimum efficiency standards for certain products sold or installed in the state.


The legislature finds and declares that:

1. Efficiency standards for certain products sold or installed in the state assure consumers and businesses that such products meet minimum efficiency performance levels, thus reducing energy and water waste and saving consumers and businesses money on utility bills.

2. Such efficiency standards save energy and thus reduce climate-changing emissions and other environmental impacts associated with the production, distribution, and use of electricity, natural gas, and other fuels.

3. Such efficiency standards save water, mitigating the effects of short- and long-term droughts and helping to conserve fresh water supplies.
(4) Bill savings resulting from more-efficient products benefit all consumers but are especially important to low-income families, who spend a disproportionate share of their income on utilities. Efficiency standards also help the state and local economies because bill savings can be spent on local goods and services.

(5) Energy and water savings help reduce or delay the need for expensive investments in new power plants, transmission lines, and distribution system upgrades, new and expanded gas pipelines, and water and sewer infrastructure improvements.


As used in the chapter:

(1) "Air purifier," also known as "room air cleaner," means an electric, cord-connected, portable appliance with the primary function of removing particulate matter from the air and which can be moved from room to room.

(2) "Cold temperature fluorescent lamp" means a fluorescent lamp that is not a compact fluorescent lamp that:

(i) Is specifically designed to start at minus twenty degrees (Fahrenheit -20°) when used with a ballast conforming to the requirements of ANSI C78.81 and ANSI C78.901; and

(ii) Is expressly designated as a cold temperature lamp both in markings on the lamp and in marketing materials, including catalogs, sales literature, and promotional material.

(3) "Commercial dishwasher" means a machine designed to clean and sanitize plates, pots, pans, glasses, cups, bowls, utensils, and trays by applying sprays of detergent solution (with or without blasting media granules) and a sanitizing rinse.

(4) "Commercial fryer" means an appliance, including a cooking vessel, in which oil is placed to such a depth that the cooking food is essentially supported by displacement of the cooking fluid rather than by the bottom of the vessel. Heat is delivered to the cooking fluid by means of an immersed electric element of band-wrapped vessel (electric fryers) or by heat transfer from gas burners through either the walls of the fryer or through tubes passing through the cooking fluid (gas fryers).

(5) "Commercial hot-food holding cabinet" means a heated, fully enclosed compartment with one or more solid or transparent doors designed to maintain the temperature of hot food that has been cooked using a separate appliance. "Commercial hot-food holding cabinet" does not include heated glass merchandizing cabinets, drawer warmers, or cook-and-hold appliances.

(6) "Commercial oven" means a chamber designed for heating, roasting, or baking food by conduction, convection, radiation, and/or electromagnetic energy.

(7) "Commercial steam cooker," also known as "compartment steamer," means a device
with one or more food-steaming compartments in which the energy in the steam is transferred to
the food by direct contact. Models may include countertop models, wall-mounted models, and floor
models mounted on a stand, pedestal, or cabinet-style base.

(8) "Compensation" means money or any other valuable thing, regardless of form, received
or to be received by a person for services rendered.

(9) "Commissioner" means the commissioner of the Rhode Island office of energy
resources.

(10) "Cold temperature fluorescent lamp" means a fluorescent lamp that is not a compact
fluorescent lamp that:

(i) Is specifically designed to start at minus twenty degrees (Fahrenheit -20°) when used
with a ballast conforming to the requirements of ANSI C78.81 and ANSI C78.901; and

(ii) Is expressly designated as a cold temperature lamp both in markings on the lamp and
in marketing materials, including catalogs, sales literature, and promotional material.

(11) "Commercial dishwasher" means a machine designed to clean and sanitize plates, pots,
pancakes, glasses, cups, bowls, utensils, and trays by applying sprays of detergent solution (with or
without blasting media granules) and a sanitizing rinse.

(12) "Commercial fryer" means an appliance, including a cooking vessel, in which oil is
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immersed electric element of band-wrapped vessel (electric fryers) or by heat transfer from gas
burners through either the walls of the fryer or through tubes passing through the cooking fluid (gas
fryers).

(13) "Commercial hot-food holding cabinet" means a heated, fully enclosed compartment
with one or more solid or transparent doors designed to maintain the temperature of hot food that
has been cooked using a separate appliance. "Commercial hot-food holding cabinet" does not
include heated glass merchandizing cabinets, drawer warmers, or cook-and-hold appliances.

(14) "Commercial oven" means a chamber designed for heating, roasting, or baking food
by conduction, convection, radiation, and/or electromagnetic energy.

(15) "Commercial steam cooker," also known as "compartment steamer," means a device
with one or more food-steaming compartments in which the energy in the steam is transferred to
the food by direct contact. Models may include countertop models, wall-mounted models, and floor
models mounted on a stand, pedestal, or cabinet-style base.

(16) "Compensation" means money or any other valuable thing, regardless of form,
received or to be received by a person for services rendered.
(17) "Decorative gas fireplace" means a vented fireplace, including appliances that are freestanding, recessed, zero clearance, or a gas fireplace insert, that is fueled by natural gas or propane, is marked for decorative use only, and is not equipped with a thermostat or intended for use as a heater.

(18) Dual-flash effective flush volume" means the average flush volume of two reduced flashes and one full flush.

(19) "Dual-flash water closet" means a water closet incorporating a feature that allows the user to flush the water closet with either a reduced or a full volume of water.

(20) Industrial air purifier" means an indoor air-cleaning device manufactured, advertised, marketed, labeled, and used solely for industrial use that is marketed solely through industrial supply outlets or businesses and prominently labeled as "Solely for industrial use potential health hazard emits ozone."

(21) "Faucet" means a private lavatory faucet, residential kitchen faucet, metering faucet, public lavatory faucet, or replacement aerator for a private lavatory, public lavatory or residential kitchen faucet.

(22) "Gas fireplace" means a decorative gas fireplace or a heating gas fireplace.

(23) "Heating gas fireplace" means a vented fireplace, including appliances that are freestanding, recessed, zero clearance, or a gas fireplace insert, that is fueled by natural gas or propane and is not a decorative fireplace.

(24) "High color rendering index (CRI) fluorescent lamp" means a fluorescent lamp with a color-rendering index of eighty-seven (87) or greater that is not a compact fluorescent lamp.

(25) "Impact-resistant fluorescent lamp" means a fluorescent lamp that is not a compact fluorescent lamp that:

(i) Has a coating or equivalent technology that is compliant with NSF/ANSI 51 and is designed to contain the glass if the glass envelope of the lamp is broken; and
(ii) Is designated and marketed for the intended application with:
(A) The designation on the lamp packaging; and
(B) Marketing materials that identify the lamp as being impact-resistant, shatter-resistant, shatterproof, or shatter-protected.

(26) "Metering faucet" means a fitting that, when turned on, will gradually shut itself off over a period of several seconds.

(27) "Plumbing fixture" means an exchangeable device, which connects to a plumbing system to deliver and drain away water and waste.

(28) Portable electric spa" means a factory-built electric spa or hot tub which may or may
not include any combination of integral controls, water heating or water circulating equipment.

(29) "Public lavatory faucet" means a fitting designed to be installed in nonresidential
bathrooms that are exposed to walk-in traffic.

(30) "Replacement aerator" means an aerator sold as a replacement, separate from the
faucet to which it is intended to be attached.

(31) "Residential ventilating fan" means a ceiling or wall-mounted fan, or remotely
mounted in-line fan, designed to be used in a bathroom or utility room for the purpose of moving
air from inside the building to the outdoors.

(32) "Showerhead" means a device through which water is discharged for a shower bath
and includes a hand-held showerhead but does not include a safety shower showerhead.

Showerhead includes:

(i) "Hand-held showerhead" means a showerhead that can be held or fixed in place for the
purpose of spraying water onto a bather and that is connected to a flexible hose; and

(ii) "Pressure regulator" means a device that maintains constant operating pressure
immediately downstream from the device, given higher pressure upstream.

(33) "Spray sprinkler body" means the exterior case or shell of a sprinkler incorporating a
means of connection to the piping system designed to convey water to a nozzle or orifice.

(34) "State-regulated general service lamp" means any of the following medium-based
incandescent light bulbs:

(i) Reflector lamps that are:

(A) ER30, BR30, BR40, or ER40 lamps rated at fifty watts (50W) or less;
(B) BR30, BR40, or ER40 lamps rated at sixty-five watts (65W) watts; or
(C) R20 lamps rated at forty-five (45W) or less.

(D) B, BA, CA, F and G shape lamps as defined in ANSI C79.1:2002 with a lumen output
of greater than or equal to two hundred (200) and rated at forty watts (40W) or less.

(E) A and C shape lamps as defined in ANSI C79.1:2002 with lumen output greater than
or equal to two hundred (200) and less than three hundred ten (310).

(F) Shatter-resistant lamps.

(G) Three (3) way lamps.

(35) "Trough-type urinal" means a urinal designed for simultaneous use by two or more
persons.

(36) "Urinal" means a plumbing fixture that receives only liquid body waste and conveys
the waste through a trap into a drainage system.

(37) "Water closet" means a plumbing fixture having a water-containing receptor that
receives liquid and solid body waste through an exposed integral trap into a drainage system.

(38) “Water cooler” means a freestanding device that consumes energy to cool and/or heat potable water. Water coolers include:

(i) "Cold only units" dispense cold water only;

(ii) "Hot and cold units" dispense both hot and cold water. Some units also offer room-temperature water;

(iii) "Cook and cold units" dispense both cold and room-temperature water;

(iv) "Storage-type" means thermally conditioned water is stored in a tank in the water cooler and is available instantaneously. Point-of-use, dry storage compartment, and bottled water coolers are included in this category; and

(v) "On demand" means the water cooler heats water as it is requested, which typically takes a few minutes to deliver.


(a) The provisions of this chapter apply to:

(i) Air purifiers;

(ii) Commercial dishwashers;

Commercial fryers;

Commercial hot-food holding cabinets;

Commercial ovens;

Commercial steam cookers;

Computers and computer monitors;

Faucets;

Gas fireplaces;

High CRI, cold temperature, and impact-resistant fluorescent lamps;

Portable electric spas;

Residential ventilating fans;

Showerheads;

Spray sprinkler bodies;

State-regulated general service lamps;

Urinals;

Water closets;

Water coolers; and

Any other products as may be designated by the commissioner in accordance with § 39-27.1-7.
(b) The provisions of this chapter do not apply to:

(i) New products manufactured in the state and sold outside the state;

(ii) New products manufactured outside the state and sold at wholesale inside the state for final retail sale and installation outside the state;

(iii) Products installed in mobile manufactured homes at the time of construction or

(iv) Products designed expressly for installation and use in recreational vehicles.


(a) Not later than one year after the date of enactment of this chapter, the commissioner, in consultation with other appropriate agencies, shall adopt rules and regulations establishing minimum efficiency standards for the types of new products set forth in § 39-27.1-4.

(b) The regulations shall provide for the following minimum efficiency standards:

(i) Air purifiers, except industrial air purifiers, shall meet the following requirements as measured in accordance with the ENERGY STAR Program Requirements Product Specification for Room Air Cleaners, Version 2.0:

(A) Clean air delivery rate for smoke shall be thirty (30) or greater;

(B) For models with a clean air delivery rate for smoke less than one hundred (100), clean air delivery rate per watt for smoke shall be greater than or equal to one and seven-tenths (1.7);

(C) For models with a clean air delivery rate for smoke greater than or equal to one hundred (100) and less than one hundred fifty (150), clean air delivery rate per watt for smoke shall be greater than or equal to one and nine-tenths (1.9);

(D) For models with a clean air delivery rate for smoke greater than or equal to one hundred fifty (150), clean air delivery rate per watt for smoke shall be greater than or equal to two (2.0);

(E) For ozone-emitting models, measured ozone shall be less than or equal to fifty parts per billion (50 ppb);

(F) For models with a Wi-Fi network connection enabled by default when shipped, partial on mode power shall not exceed two (2) watts; and

(G) For models without a Wi-Fi network connection enabled by default when shipped, partial on mode power shall not exceed one watt.

(H) Commercial dishwashers included in the scope of the ENERGY STAR Program Requirements Product Specification for Commercial Dishwashers, Version 2.0, shall meet the qualification criteria of that specification.

(I) Commercial fryers included in the scope of the ENERGY STAR Program Requirements Product Specification for Commercial Fryers, Version 2.0, shall meet the qualification criteria of that specification.
(J) Commercial hot-food holding cabinets shall meet the qualification criteria of the ENERGY STAR Program Requirements Product Specification for Commercial Hot Food Holding Cabinets, Version 2.0.

(K) Commercial ovens included in the scope of the ENERGY STAR Program Requirements Product Specification for Commercial Ovens, Version 2.2, shall meet the qualification criteria of that specification.

(L) Commercial steam cookers shall meet the requirements of the ENERGY STAR Program Requirements Product Specification for Commercial Steam Cookers, Version 1.2.

(M) Computers and computer monitors shall meet the requirements of § 1605.3(v) of Title 20 of the California Code of Regulations (C.C.R.) and compliance with those requirements shall be as measured in accordance with test methods prescribed in § 1604(v) of those regulations.

(I) The rules shall define "computer" and "computer monitor" to have the same meaning as set forth in 20 C.C.R. § 1602(v).

(c) The referenced portions of the C.C.R. shall be those adopted on or before the effective date of this chapter. However, the commissioner shall have authority to amend the rules so that the definitions of "computer" and "computer monitor" and the minimum efficiency standards for computers and computer monitors conform to subsequently adopted modifications to the referenced sections of the C.C.R.

(d) Faucets, except for metering faucets, shall meet the standards shown in this paragraph when tested in accordance with Appendix S to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations and compliance with those requirements shall be "Uniform Test Method for Measuring the Water Consumption of Faucets and Showerheads" as in effect on January 1, 2020.

(e) Lavatory faucets and replacement aerators shall not exceed a maximum flow rate of one and five-tenths gallons per minute (1.5 gpm) at sixty pounds per square inch (60 psi).

(f) Residential kitchen faucets and replacement aerators shall not exceed a maximum flow rate of one and eight-tenths gallons per minute (1.8 gpm) at sixty pounds per square inch (60 psi), with optional temporary flow of two and two-tenths gallons per minute (2.2 gpm), provided they default to a maximum flow rate of one and eight-tenths gallons per minute (1.8 gpm) at sixty pounds per square inch (60 psi) after each use.

(g) Public lavatory faucets and replacement aerators shall not exceed a maximum flow rate of five-tenths gallons per minute (0.5 gpm) at sixty pounds per square inch (60 psi).

(h) Gas fireplaces shall comply with the following requirements:

(i) Gas fireplaces shall be capable of automatically extinguishing any pilot flame when the main gas burner flame is established and when it is extinguished;
(j) Gas fireplaces must prevent any ignition source for the main gas burner flame from operating continuously for more than seven (7) days;

(k) Decorative gas fireplaces must have a direct vent configuration, unless marked for replacement use only; and

(l) Heating gas fireplaces shall have a fireplace efficiency greater than or equal to fifty percent (50%) when tested in accordance with CSA P.4.1-15, "Testing Method for Measuring Annual Fireplace Efficiency."

(m) High CRI, cold temperature, and impact-resistant fluorescent lamps shall meet the minimum efficacy requirements contained in Section 430.32(n)(4) of Title 10 of the Code of Federal Regulations, as in effect on January 1, 2020, as measured in accordance with Appendix R to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations "Uniform Test Method for Measuring Average Lamp Efficacy (LE), Color Rendering Index (CRI), and Correlated Color Temperature (CCT) of Electric Lamps" as in effect on January 1, 2020.

(n) Portable electric spas shall meet the requirements of the "American National Standard for Portable Electric Spa Energy Efficiency" (ANSI/APSP/ICC 14-2019).

(o) In-line residential ventilating fans shall have a fan motor efficacy of no less than two and eight-tenths (2.8) cubic feet per minute per watt. All other residential ventilating fans shall have a fan motor efficacy of no less than one and four-tenths (1.4) cubic feet per minute per watt for airflows less than ninety (90) cubic feet per minute and no less than two and eight-tenths (2.8) cubic feet per minute per watt for other airflows when tested in accordance with Home Ventilation Institute Publication 916 "HVI Airflow Test Procedure."

(p) Showerheads shall not exceed a maximum flow rate of two gallons per minute (2 gpm) at eighty pounds per square inch (80 psi) when tested in accordance with Appendix S to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations and compliance with those requirements shall be "Uniform Test Method for Measuring the Water Consumption of Faucets and Showerheads" as in effect on January 1, 2020.

(q) Spray sprinkler bodies that are not specifically excluded from the scope of the WaterSense Specification for Spray Sprinkler Bodies, Version 1.0, shall include an integral pressure regulator and shall meet the water efficiency and performance criteria and other requirements of that specification.

(r) State-regulated general service lamps shall meet or exceed a lamp efficacy of forty-five (45) lumens per watt, when tested in accordance with the federal test procedures for general service lamps, prescribed in Section 430.23(gg) of Title 10 of the Code of Federal Regulations, as in effect on January 1, 2020.
(s) Urinals and water closets, other than those designed and marketed exclusively for use at prisons or mental health facilities, shall meet the standards shown in subsections (1) to (4) when tested in accordance with Appendix T to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations "Uniform Test Method for Measuring the Water Consumption of Water Closets and Urinals" as in effect on January 1, 2020, and water closets shall pass the waste extraction test for water closets (Section 7.9) of the American Society of Mechanical Engineers (ASME) A112.19.2/CSA B45.1-2018. Provided further:

(i) Wall-mounted urinals, except for trough-type urinals, shall have a maximum flush volume of five-tenths (.5) gallons per flush.

(ii) Floor-mounted urinals, except for trough-type urinals, shall have a maximum flush volume of five-tenths (.5) gallons per flush.

(iii) Water closets, except for dual-flush tank-type water closets, shall have a maximum flush volume of one and twenty-eight hundredths (1.28) gallons per flush.

(iv) Dual-flush tank-type water closets shall have a maximum dual flush effective flush volume of one and twenty-eight hundredths (1.28) gallons per flush.

(i) Water coolers included in the scope of the ENERGY STAR Program Requirements Product Specification for Water Coolers, Version 2.0, shall have on mode with no water draw energy consumption less than or equal the following values as measured in accordance with the test requirements of that program:

(i) Sixteen hundredths (0.16 KWh) kilowatt-hours per day for cold-only units and cook and cold units;

(ii) Eighty-seven hundredths (0.87 KWh) kilowatt-hours per day for storage type hot and cold units; and

(iii) Eighteen hundredths (0.18 KWh) kilowatt-hours per day for on demand hot and cold units.


(a) On or after January 1, 2023, no new air purifier, cold temperature fluorescent lamp, commercial dishwasher, commercial fryer, commercial hot-food holding cabinet, commercial oven, commercial steam cooker, computer or computer monitor, faucet, gas fireplace, high CRI fluorescent lamp, impact-resistant fluorescent lamp, portable electric spa, residential ventilating fan, showerhead, spray sprinkler body, state-regulated general service lamp, urinal, water closet, or water cooler may be sold or offered for sale, lease, or rent in the state unless the new product meets the requirements of the standards provided in § 39-27.1-5.

(b) One year after the date upon which the sale or offering for sale of certain products...
becomes subject to the requirements of subsection(a) of this section, no such products may be
installed for compensation in the state unless the efficiency of the new product meets or exceeds
the efficiency standards provided in § 39-27.1-5.

The commissioner may adopt regulations, to establish increased efficiency standards for
the products listed or incorporated in § 39-27.1-4. The commissioner may also establish standards
for products not specifically listed in § 39-27.1-4. In considering such new or amended standards,
the commissioner shall set efficiency standards upon a determination that increased efficiency
standards would serve to promote energy or water conservation in the state and would be cost
effective for consumers who purchase and use such new products, provided that no new or
increased efficiency standards shall become effective within one year following the adoption of
any amended regulations establishing such increased efficiency standards.

(a) The manufacturers of products covered by this chapter shall test samples of their
products in accordance with the test procedures adopted pursuant to this chapter. The commissioner
may adopt updated test methods when new versions of test procedures become available.
(b) Manufacturers of new products covered by § 39-27.1-4 of this chapter shall certify to
the commissioner that such products are in compliance with the provisions of this chapter. Such
certifications shall be based on test results. The commissioner shall promulgate regulations
governing the certification of such products and shall coordinate with the certification programs of
other states and federal agencies with similar standards.
(c) Manufacturers of new products covered by § 39-27.1-4 of this chapter shall identify
each product offered for sale or installation in the state as in compliance with the provisions of this
chapter by means of a mark, label, or tag on the product and packaging at the time of sale or
installation. The commissioner shall promulgate regulations governing the identification of such
products and packaging, which shall be coordinated to the greatest practical extent with the labeling
programs of other states and federal agencies with equivalent efficiency standards. The
commissioner shall allow the use of existing marks, labels, or tags, which connote compliance with
the efficiency requirements of this chapter.
(d) The commissioner may test products covered by § 39-27.1-4. If products so tested are
found not to be in compliance with the minimum efficiency standards established under § 39-27.1-
5, the commissioner shall:
(1) Charge the manufacturer of such product for the cost of product purchase and testing,
(2) Make information available to the attorney general and the public on products found not to be in compliance with the standards.

(e) With prior notice and at reasonable and convenient hours, the commissioner may cause periodic inspections to be made of distributors or retailers of new products covered by § 39-27.1-4 in order to determine compliance with the provisions of this chapter. The commissioner shall also coordinate with the [head of building code administration] regarding inspections prior to occupancy of newly constructed buildings containing new products that are also covered by chapter 27.3 of title 23.

(f) The commissioner shall investigate complaints received concerning violations of this chapter and shall report the results of such investigations to the attorney general. The attorney general may institute proceedings to enforce the provisions of this chapter. Any manufacturer, distributor, or retailer, or any person who installs a product covered by this chapter for compensation, who violates any provision of this chapter shall be issued a warning by the commissioner for any first violation and subject to a civil penalty of up to one hundred dollars for each offense. Repeat violations shall be subject to a civil penalty of not more than five hundred dollars for each offense. Each violation shall constitute a separate offense, and each day that such violation continues shall constitute a separate offense. Penalties assessed under this paragraph are in addition to costs assessed under subsection (d) of this section.

(g) The commissioner may adopt such further regulations as necessary to ensure the proper implementation and enforcement of the provisions of this chapter.


The provisions of this chapter shall be severable, and if the application of any clause, sentence, paragraph, subdivision, section, or part of this chapter shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the application of any other clause, sentence, paragraph, subdivision, section, or part of this chapter.

SECTION 2. This act shall take effect upon passage.
This act would establish efficiency standards for selected residential and commercial products. This act would take effect upon passage.