

HB3658



101ST GENERAL ASSEMBLY

State of Illinois

2019 and 2020

HB3658

by Rep. Robyn Gabel

SYNOPSIS AS INTRODUCED:

New Act

Creates the Minimum Energy and Water Efficiency Standards Act. Provides that the Agency shall adopt rules establishing minimum efficiency standards for the types of new products. Provides that the rules shall provide for specified minimum efficiency standards. Provides specified dates for the implementation of efficiency standards relating to particular products. Provides that the Agency may adopt new rules increasing efficiency standards. Provides protection against repeal of federal standards. Provides penalties for noncompliance with the Act. Provides that the Act's provisions are severable.

LRB101 09564 CPF 54662 b

A BILL FOR

1 AN ACT concerning safety.

2 **Be it enacted by the People of the State of Illinois,**
3 **represented in the General Assembly:**

4 Section 1. Short title. This Act may be cited as the
5 Minimum Energy and Water Efficiency Standards Act.

6 Section 5. Findings. The General Assembly finds that:

7 (1) Efficiency standards for certain products sold or
8 installed in the State assure consumers and businesses that
9 such products meet minimum efficiency performance levels,
10 thus reducing energy and water waste and saving consumers
11 and businesses money on utility bills.

12 (2) Efficiency standards contribute to the economy of
13 this State by helping to better balance supply and demand
14 for both energy and water, thus reducing pressure that
15 creates higher natural gas, electricity, and water prices.
16 By saving consumers and businesses money on utility bills,
17 efficiency standards help the State and local economy,
18 since utility bill savings can be spent on local goods and
19 services.

20 (3) Such efficiency standards save energy and thus
21 reduce pollution and other environmental impacts
22 associated with the production, distribution, and use of
23 electricity, natural gas, and other fuels.

1 (4) Such water efficiency standards save water and thus
2 reduce the strain on the water supply. Furthermore,
3 improved water efficiency can reduce or delay the need for
4 water and sewer infrastructure improvements.

5 (5) Such efficiency standards can make electricity and
6 natural gas systems more reliable by reducing the strain on
7 systems during peak demand periods. Furthermore, improved
8 efficiency can reduce or delay the need for new power
9 plants, power transmission lines, and power distribution
10 system upgrades as well as new and expanded gas pipelines.

11 Section 10. Definitions. In this Act:

12 "Agency" means the Illinois Environmental Protection
13 Agency.

14 "Air compressor" means a compressor designed to compress
15 air that has an inlet open to the atmosphere or other source of
16 air, and is made up of a compression element (bare compressor),
17 driver(s), mechanical equipment to drive the compressor
18 element, and any ancillary equipment.

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

23 "Cold only units" means units that dispense cold water
24 only.

25 "Commercial dishwasher" means a machine designed to clean

1 and sanitize plates, pots, pans, glasses, cups, bowls,
2 utensils, and trays by applying sprays of detergent solution
3 (with or without blasting media granules) and a sanitizing
4 rinse.

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

14 "Commercial hot-food holding cabinet" means a heated,
15 fully enclosed compartment with one or more solid or
16 transparent doors designed to maintain the temperature of hot
17 food that has been cooked using a separate appliance.

18 "Commercial hot-food holding cabinet" does not include heated
19 glass merchandizing cabinets, drawer warmers, or cook-and-hold
20 appliances.

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

1 "Compensation" means money or any other valuable thing,
2 regardless of form, received or to be received by a person for
3 services rendered.

4 "Compressor" means a machine or apparatus that converts
5 different types of energy into the potential energy of gas
6 pressure for displacement and compression of gaseous media to
7 any higher-pressure values above atmospheric pressure and has a
8 pressure ratio at full-load operating pressure greater than
9 1.3.

10 "Cook and cold units" means units that dispense both cold
11 and room-temperature water.

12 "Dual-duct portable air conditioner" means a portable air
13 conditioner that draws some or all of the condenser inlet air
14 from outside the conditioned space through a duct attached to
15 an adjustable window bracket, may draw additional condenser
16 inlet air from the conditioned space, and discharges the
17 condenser outlet air outside the conditioned space by means of
18 a separate duct attached to an adjustable window bracket.

19 "Dual-flush effective flush volume" means the average
20 flush volume of two reduced flushes and one full flush.

21 "Dual-flush water closet" means a water closet
22 incorporating a feature that allows the user to flush the water
23 closet with either a reduced or a full volume of water.

24 "Faucet" means a lavatory faucet, kitchen faucet, metering
25 faucet, public lavatory faucet, or replacement aerator for a
26 lavatory, public lavatory or kitchen faucet.

1 "General service lamp" has the same meaning as set forth in
2 the action published at 82 Fed. Reg. 7276, 7321-22 (January 19,
3 2017) and modified by the action published at 82 Fed. Reg.
4 7322, 7333 (January 19, 2017).

5 "Hand-held shower" means a showerhead that can be held or
6 fixed in place for the purpose of spraying water onto a bather
7 and that is connected to a flexible hose.

8 "High color rendering index fluorescent lamp" or "CRI
9 fluorescent lamp" means a fluorescent lamp with a color
10 rendering index of 87 or greater that is not a compact
11 fluorescent lamp.

12 "Hot and cold units" means units that dispense both hot and
13 cold water. Some units also offer room- temperature water.

14 "Industrial air purifier" means an indoor air cleaning
15 device manufactured, advertised, marketed, labeled, and used
16 solely for industrial use that are marketed solely through
17 industrial supply outlets or businesses and prominently
18 labeled as "Solely for industrial use. Potential health hazard:
19 emits ozone."

20 "Metering faucet" means a fitting that, when turned on,
21 will gradually shut itself off over a period of several
22 seconds.

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

25 "Plumbing fixture" means an exchangeable device, which
26 connects to a plumbing system to deliver and drain away water

1 and waste.

2 "Portable air conditioner" means a portable encased
3 assembly, other than a packaged terminal air conditioner, room
4 air conditioner, or dehumidifier, that delivers cooled,
5 conditioned air to an enclosed space, and is powered by
6 single-phase electric current. It includes a source of
7 refrigeration and may include additional means for air
8 circulation and heating and may be a single-duct or a dual-duct
9 portable air conditioner.

10 "Portable electric spa" means a factory-built electric spa
11 or hot tub which may or may not include any combination of
12 integral controls, water heating or water circulating
13 equipment.

14 "Pressure regulator" means a device that maintains
15 constant operating pressure immediately downstream from the
16 device, given higher pressure upstream.

17 "Public lavatory faucet" means a fitting intended to be
18 installed in nonresidential bathrooms that are exposed to
19 walk-in traffic.

20 "Replacement aerator" means an aerator sold as a
21 replacement, separate from the faucet to which it is intended
22 to be attached.

23 "Residential ventilating fan" means a ceiling,
24 wall-mounted, or remotely mounted in-line fan designed to be
25 used in a bathroom or utility room, whose purpose is to move
26 air from inside the building to the outdoors.

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

4 "Single-duct portable air conditioner" means a portable
5 air conditioner that draws all of the condenser inlet air from
6 the conditioned space without the means of a duct and
7 discharges the condenser outlet air outside the conditioned
8 space through a single duct attached to an adjustable window
9 bracket.

10 "Spray sprinkler body" means the exterior case or shell of
11 a sprinkler incorporating a means of connection to the piping
12 system designed to convey water to a nozzle or orifice.

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

17 "Trough-type urinal" means a urinal designed for
18 simultaneous use by two or more persons.

19 "Uninterruptible power supply" means a battery charger
20 consisting of a combination of convertors, switches and energy
21 storage devices (such as batteries), constituting a power
22 system for maintaining continuity of load power in case of
23 input power failure.

24 "Urinal" means a plumbing fixture that receives only liquid
25 body waste and conveys the waste through a trap into a drainage
26 system.

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

4 "Water cooler" means a freestanding device that consumes
5 energy to cool or heat potable water.

6 Section 15. Scope.

7 (a) The provisions of this Act apply to:

- 8 (1) air compressors;
- 9 (2) air purifiers;
- 10 (3) commercial dishwashers;
- 11 (4) commercial fryers;
- 12 (5) commercial hot-food holding cabinets;
- 13 (6) commercial steam cookers;
- 14 (7) computers and computer monitors;
- 15 (8) faucets;
- 16 (9) general service lamps;
- 17 (10) high CRI fluorescent lamps;
- 18 (11) portable air conditioners;
- 19 (12) portable electric spas;
- 20 (13) residential ventilating fans;
- 21 (14) showerheads;
- 22 (15) spray sprinkler bodies;
- 23 (16) uninterruptible power supplies;
- 24 (17) urinals;
- 25 (18) water closets;

1 (19) water coolers; and

2 (20) any other products as may be designated by the
3 Agency in accordance with Section 30 or under Section 40.

4 (b) The provisions of this Act do not apply to:

5 (1) new products manufactured in the State and sold
6 outside the State;

7 (2) new products manufactured outside the State and
8 sold at wholesale inside the State for final retail;

9 (3) sale and installation outside the State;

10 (4) products installed in mobile manufactured homes at
11 the time of construction; or

12 (5) products designed expressly for installation and
13 use in recreational vehicles.

14 Section 20. Standards.

15 (a) Not later than one year after the effective date of
16 this Act, the Agency shall adopt rules establishing minimum
17 efficiency standards for the types of new products set forth in
18 Section 15.

19 (b) The rules shall provide for the following minimum
20 efficiency standards:

21 (1) Air compressors that meet the twelve criteria
22 listed on page 350 to 351 of the "Energy Conservation
23 Standards for Air Compressors" final rule issued by the
24 U.S. Department of Energy on December 5, 2016 shall meet
25 the requirements in Table 1 on page 352 following the

1 instructions on page 353 and as measured in accordance with
2 Appendix A to Subpart T of Part 431 of Title 10 of the Code
3 of Federal Regulations—"Uniform Test Method for Certain
4 Air Compressors"—as in effect on July 3, 2017.

5 (2) Air purifiers, except industrial air purifiers,
6 shall meet the following requirements as measured in
7 accordance with the ENERGY STAR Program Requirements
8 Product Specification for Room Air Cleaners, Version 1.2:

9 (A) clean air delivery rate (CADR) for dust shall
10 be 50 or greater;

11 (B) CADR/Watt for dust shall be equal to or greater
12 than 2.0;

13 (C) for ozone-emitting models, measured ozone
14 shall be less than or equal to 50 parts per billion
15 (ppb); and

16 (D) standby power shall not exceed 2 watts.

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

21 (4) Commercial fryers included in the scope of the
22 ENERGY STAR Program Requirements Product Specification for
23 Commercial Fryers, Version 2.0, shall meet the
24 qualification criteria of that specification.

25 (5) Commercial hot-food holding cabinets shall have a
26 maximum idle energy rate of 40 watts per cubic foot of

1 interior volume, as determined by the "idle energy rate-dry
2 test" in ASTM Standard F2140-11, "Test Method for the
3 Performance of Hot Food Holding Cabinets", published by
4 ASTM International. Interior volume shall be measured as
5 prescribed in the ENERGY STAR Program Requirements Product
6 Specification for Commercial Hot Food Holding Cabinets,
7 Version 2.0.

8 (6) Commercial steam cookers shall meet the
9 requirements of the ENERGY STAR Program Requirements
10 Product Specification for Commercial Steam Cookers,
11 Version 1.2.

12 (7) Faucets, except for metering faucets, shall meet
13 the standards shown in this paragraph when tested in
14 accordance with Appendix S to Subpart B of Part 430 of
15 Title 10 of the Code of Federal Regulations and compliance
16 with those requirements shall be - "Uniform Test Method for
17 Measuring the Water Consumption of Faucets and
18 Showerheads"-as in effect on January 3, 2017.

19 (A) Lavatory faucets and replacement aerators
20 shall not exceed a maximum flow rate of 1.5 gallons per
21 minute at 60 pounds per square inch.

22 (B) Residential kitchen faucets and replacement
23 aerators shall not exceed a maximum flow rate of 1.8
24 gpm at 60 pounds per square inch, with optional
25 temporary flow of 2.2 gallons per minute, provided they
26 default to a maximum flow rate of 1.8 gallons per

1 minute at 60 pounds per square inch after each use.

2 (C) Public lavatory faucets and replacement
3 aerators shall not exceed a maximum flow rate of 0.5
4 gallons per minute at 60 pounds per square inch.

5 (8) General service lamps shall meet or exceed a lamp
6 efficacy of 45 lumens per watt, when tested in accordance
7 with the applicable federal test procedures for general
8 service lamps, prescribed in Section 430.23(gg) of Title 10
9 of the Code of Federal Regulations as in effect on January
10 3, 2017.

11 (9) High CRI fluorescent lamps shall meet the minimum
12 efficacy requirements contained in Section 430.32(n) (4) of
13 Title 10 of the Code of Federal Regulations as in effect on
14 January 3, 2017, as measured in accordance with Appendix R
15 to Subpart B of Part 430 of Title 10 of the Code of Federal
16 Regulations—"Uniform Test Method for Measuring Average
17 Lamp Efficacy, Color Rendering Index, and Correlated Color
18 Temperature of Electric Lamps"—as in effect on January 3,
19 2017.

20 (10) Portable air conditioners shall have a Combined
21 Energy Efficiency Ratio, as measured in accordance with
22 Appendix CC to Subpart B of Part 430 of Title 10 of the
23 Code of Federal Regulations—"Uniform Test Method for
24 Measuring the Energy Consumption of Portable Air
25 Conditioners"—as in effect on January 3, 2017, that is
26 greater than or equal to:

1 1.04 x (SACC/(3.7117 x SACC^{0.6384}))

2 where SACC is Seasonally Adjusted Cooling Capacity in
3 Btu/h.

4 (11) Portable electric spas shall meet the
5 requirements of the "American National Standard for
6 Portable Electric Spa Energy Efficiency".

7 (12) Residential ventilating fans shall meet the
8 qualification criteria of the ENERGY STAR Program
9 Requirements Product Specification for Residential
10 Ventilating Fans, Version 3.2.

11 (13) Showerheads shall not exceed a maximum flow rate
12 of 2.0 gallons per minute at 80 pounds per square feet when
13 tested in accordance with Appendix S to Subpart B of Part
14 430 of Title 10 of the Code of Federal Regulations and
15 compliance with those requirements shall be "Uniform Test
16 Method for Measuring the Water Consumption of Faucets and
17 Showerheads"—as in effect on January 3, 2017.

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

24 (15) Uninterruptible power supplies that utilize a
25 NEMA 1-15P or 5-15P input plug and have an AC output shall
26 have an average load adjusted efficiency that meets or

1 exceed the values shown on page 193 of the pre-publication
2 final rule "Energy Conservation Program: Energy
3 Conservation Standards for Uninterruptible Power Supplies"
4 issued by the U.S. Department of Energy on December 28,
5 2016, as measured in accordance with test procedures
6 prescribed in Appendix Y to Subpart B of Part 430 of Title
7 10 of the Code of Federal Regulations—"Uniform Test Method
8 for Measuring the Energy Consumption of Battery
9 Chargers"—as in effect on January 11, 2017.

10 (16) Urinals and water closets, other than those
11 designed and marketed exclusively for use at prisons or
12 mental health facilities, shall meet the standards shown in
13 paragraphs (1) through (4) when tested in accordance with
14 Appendix T to Subpart B of Part 430 of Title 10 of the Code
15 of Federal Regulations—"Uniform Test Method for Measuring
16 the Water Consumption of Water Closets and Urinals"—as in
17 effect on January 3, 2017, and water closets shall pass the
18 waste extraction test for water closets of the American
19 Society of Mechanical Engineers A112.19.2/CSA B45.1-2013.

20 (A) Wall-mounted urinals, except for trough-type
21 urinals, shall have a maximum flush volume of 0.5
22 gallons per flush.

23 (B) Floor-mounted urinals, except for trough-type
24 urinals, shall have a maximum flush volume of 0.5
25 gallons per flush.

26 (C) Water closets, except for dual-flush tank-type

1 water closets, shall have a maximum flush volume of
2 1.28 gallons per flush.

3 (D) Dual-flush tank-type water closets shall have
4 a maximum dual flush effective flush volume of 1.28
5 gallons per flush.

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

12 (A) 0.16 kilowatt-hours per day for cold-only
13 units and cook and cold units;

14 (B) 0.87 kilowatt-hours per day for storage type
15 hot and cold units; and

16 (C) 0.18 kilowatt-hours per day for on demand hot
17 and cold units.

18 Section 25. Implementation.

19 (a) On or after January 1, 2021, no new air purifier,
20 commercial dishwasher, commercial fryer, commercial hot-food
21 holding cabinet, commercial steam cooker, computer or computer
22 monitor, faucet, high Color Rendering Index (CRI) fluorescent
23 lamp, portable electric spa, residential ventilating fan,
24 showerhead, spray sprinkler body, uninterruptible power
25 supply, urinal, water closet, or water cooler may be sold or

1 offered for sale, lease, or rent in the State unless the
2 efficiency of the new product meets or exceeds the efficiency
3 standards provided in Section 20.

4 (b) No later than 6 months from the effective date of this
5 Act, and as necessary thereafter, the Agency shall determine
6 which general service lamps are subject to federal preemption.
7 On or after January 1, 2020, no general service lamp that is
8 not subject to federal preemption may be sold or offered for
9 sale in the State unless the efficiency of the new product
10 meets or exceeds the efficiency standards provided in Section
11 20.

12 (c) On or after January 1, 2022, no new air compressor may
13 be sold or offered for sale, lease, or rent in the State unless
14 the efficiency of the new product meets or exceeds the
15 efficiency standards provided in Section 20.

16 (d) On or after February 1, 2022, no new portable air
17 conditioner may be sold or offered for sale, lease, or rent in
18 the State unless the efficiency of the new product meets or
19 exceeds the efficiency standards provided in Section 20.

20 (e) One year after the date upon which the sale or offering
21 for sale of certain products becomes subject to the
22 requirements of subsections (a), (b), (c), or (d) of this
23 Section, no such products may be installed for compensation in
24 the State unless the efficiency of the new product meets or
25 exceeds the efficiency standards provided in Section 20.

1 Section 30. New and revised standards. The Agency may adopt
2 rules, in accordance with the provisions of Illinois
3 Administrative Procedure Act, to establish increased
4 efficiency standards for the products listed or incorporated in
5 Section 15. The Agency may also establish standards for
6 products not specifically listed in Section 15.

7 Section 35. Protection against repeal of federal
8 standards.

9 (a) If any of the energy or water conservation standards
10 issued or approved for publication by the Office of the United
11 States Secretary of Energy as of January 1, 2018, under the
12 federal Energy Policy and Conservation Act, are withdrawn,
13 repealed, or otherwise voided, the minimum energy or water
14 efficiency level permitted for products previously subject to
15 federal energy or water conservation standards shall be the
16 previously applicable federal standards, and no such new
17 product may be sold or offered for sale, lease or rent in the
18 State unless it meets or exceeds such standards.

19 (b) This Section shall not apply to any federal energy or
20 water conservation standard set aside by a court upon the
21 petition of a person who will be adversely affected, as
22 provided in Section 6306(b) of Title 42 of the United States
23 Code.

24 Section 40. Testing, certification, labeling, and

1 enforcement.

2 (a) The manufacturers of products covered by this Act shall
3 test samples of their products in accordance with the test
4 procedures adopted under this Act. The Agency may adopt updated
5 test methods when new versions of test procedures become
6 available.

7 (b) Manufacturers of new products covered by Section 15 of
8 this Act shall certify to the Agency that such products are in
9 compliance with the provisions of this Act. Such certifications
10 shall be based on test results. The Agency shall adopt rules
11 governing the certification of such products and shall
12 coordinate with the certification programs of other states and
13 federal agencies with similar standards.

14 (c) Manufacturers of new products covered by Section 15 of
15 this Act shall identify each product offered for sale or
16 installation in the State as in compliance with the provisions
17 of this Act by means of a mark, label, or tag on the product and
18 packaging at the time of sale or installation. The Agency shall
19 adopt rules governing the identification of such products and
20 packaging, which shall be coordinated to the greatest practical
21 extent with the labeling programs of other states and federal
22 agencies with equivalent efficiency standards. The Agency
23 shall allow the use of existing marks, labels, or tags, which
24 connote compliance with the efficiency requirements of this
25 Act.

26 (d) The Agency may test products covered by Section 15. If

1 products so tested are found not to be in compliance with the
2 minimum efficiency standards established under Section 20, the
3 Agency shall:

4 (1) charge the manufacturer of such product for the
5 cost of product purchase and testing; and

6 (2) make information available to the public on
7 products found not to be in compliance with the standards.

8 (e) With prior notice and at reasonable and convenient
9 hours, the Agency may cause periodic inspections to be made of
10 distributors or retailers of new products covered by Section 15
11 in order to determine compliance with the provisions of this
12 Act.

13 (f) The Agency shall investigate complaints received
14 concerning violations of this Act and shall report the results
15 of such investigations to the Attorney General. The Attorney
16 General may institute proceedings to enforce the provisions of
17 this Act. Any manufacturer, distributor, or retailer, or any
18 person who installs a product covered by this Act for
19 compensation, who violates any provision of this Act, shall be
20 issued a warning by the Agency for any first violation and
21 subject to a civil penalty of up to one hundred dollars for
22 each offense. Repeat violations shall be subject to a civil
23 penalty of not more than \$500 for each offense. Each violation
24 shall constitute a separate offense, and each day that such
25 violation continues shall constitute a separate offense.

26 (g) The Agency may adopt such further rules as necessary to

1 ensure the proper implementation and enforcement of the
2 provisions of this Act.

3 Section 97. Severability. The provisions of this Act are
4 severable under Section 1.31 of the Statute on Statutes.