



General Assembly

January Session, 2025

Raised Bill No. 1292

LCO No. 4310



Referred to Committee on ENERGY AND TECHNOLOGY

Introduced by:
(ET)

***AN ACT CONCERNING ENERGY AND WATER EFFICIENCY
REQUIREMENTS FOR ARTIFICIAL INTELLIGENCE DATA CENTERS.***

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. (NEW) (*Effective October 1, 2025*) (a) For the purposes of this
2 section:

3 (1) "Artificial intelligence" has the same meaning as provided in
4 section 51-10e of the general statutes;

5 (2) "Artificial intelligence data center" or "data center" means a facility
6 that is developed, acquired, constructed, rehabilitated, renovated,
7 repaired or operated to house a group of networked computer servers
8 in one physical location or multiple contiguous locations to centralize
9 the storage, management and dissemination of data and information
10 pertaining to artificial intelligence that requires an energy load of not
11 less than one megawatt of uninterrupted capacity;

12 (3) "Commissioner" means the Commissioner of Energy and
13 Environmental Protection;

14 (4) "Energy reuse factor" means a calculation of waste heat reused
15 divided by total energy consumption;

16 (5) "Power usage effectiveness" means a calculation of an artificial
17 intelligence data center's total energy consumption divided by the total
18 energy consumption of its information technology equipment;

19 (6) "Renewable energy factor" means a calculation of an artificial
20 intelligence data center's total renewable energy consumption divided
21 by its total energy consumption;

22 (7) "Total renewable energy" means the sum of total renewable
23 energy certificates, total renewable energy consumption from power
24 purchasing agreements and total renewable energy consumption from
25 on-site renewable energy generating resources or power supplies;

26 (8) "Waste heat reused" means any heat that is used or reused outside
27 the boundary of an artificial intelligence data center and that substitutes,
28 partly or entirely, energy needed outside the boundary of such data
29 center; and

30 (9) "Water usage effectiveness" means a calculation of an artificial
31 intelligence data center's total water input divided by the total energy
32 consumption of its information technology equipment.

33 (b) Not later than July 1, 2026, and quarterly thereafter, any owner or
34 operator of an artificial intelligence data center shall submit a report to
35 the commissioner that contains at a minimum the following information
36 for each such data center:

37 (1) Basic information relating to such data center, including: (A) The
38 name of such data center; (B) the owner or operator of such data center;
39 (C) the address of such data center; (D) the nature or purpose of such
40 data center; and (E) the month and year such data center commenced
41 operation;

42 (2) Information related to energy and water usage of such data center,

43 including: (A) The total energy consumption in kilowatt-hours,
44 including the use of electricity, fuels and other energy sources used for
45 cooling; (B) the name of the electric distribution company serving such
46 data center and any electric service agreements between such utility and
47 such data center; (C) any on-site power supply, including (i) any
48 primary power on site and emergency backup power supply, and (ii)
49 any permit information such as permit numbers, capacity, tier level, fuel
50 type, total permitted emissions for such data center and any other
51 relevant information; (D) the total energy consumption of information
52 technology equipment in kilowatt-hours measured as the value of the
53 combined annual energy consumption at every uninterruptible power
54 system connected to information technology equipment; (E) the total
55 water input in cubic meters that includes all water volumes that enter
56 such data center's boundary that are used for the functions of such data
57 center, including information technology, security, power and
58 environment; and (F) the source of water for such data center, including
59 a municipal water supply, groundwater, surface water and whether
60 water from such sources is potable or reclaimed. If an artificial
61 intelligence data center utilizes more than one water source, the owner
62 or operator of such data center shall provide information regarding
63 water usage from each source as a percentage of total water usage;

64 (3) Performance calculations and indicators for such data center,
65 including the energy reuse factor, power usage effectiveness, renewable
66 energy factor and water usage effectiveness;

67 (4) Sustainability indicators for such data center, including: (A) The
68 average set point information technology equipment intake air
69 temperature in degrees Fahrenheit, which shall be measured as the
70 average set point temperature in all of such data center's computer
71 rooms over a twelve-month period; (B) the average waste heat
72 temperature in degrees Fahrenheit, which shall be measured as the
73 temperature of the fluid used to cool any information and
74 communication technology equipment, averaged over a twelve-month
75 period across every measurement point which shall be measured at the

76 point where heated fluid enters a heat exchanger in such data center's
77 computer rooms; (C) the amount of total renewable energy in kilowatt-
78 hours; and (D) the amount of waste heat reused in kilowatt-hours; and

79 (5) Any other information as required by the commissioner.

80 (c) Any information reported to the commissioner pursuant to
81 subsection (b) of this section shall be expressly excluded from any
82 exemption provided in section 1-210 of the general statutes.

83 (d) Not later than January 1, 2027, the commissioner shall, with the
84 assistance of any state agency as determined by the commissioner,
85 design, implement and maintain a publicly accessible Internet web site
86 to serve as a state-wide clearinghouse for information relating to water
87 and energy usage of all artificial intelligence data centers operating in
88 the state.

89 (e) Any owner or operator of an artificial intelligence data center shall
90 notify the commissioner of any substantial change in operations or
91 technologies that would require an update to the information required
92 in subsection (b) of this section not less than sixty days prior to making
93 such change.

94 (f) The commissioner shall adopt regulations, in accordance with the
95 provisions of chapter 54 of the general statutes, to establish energy and
96 water efficiency performance standards for artificial intelligence data
97 centers. Such regulations shall: (1) Prioritize cost-effectiveness,
98 technological feasibility and alignment with the state's greenhouse gas
99 emission reduction targets adopted pursuant to section 22a-200a of the
100 general statutes and the state water plan adopted pursuant to section
101 22a-352 of the general statutes, (2) consider best practices for energy and
102 water usage effectiveness, energy and water management systems and
103 the use of renewable energy resources, and (3) require new artificial
104 intelligence data centers and substantial alterations to existing data
105 centers to incorporate load-management and load-shifting capabilities,
106 including the ability to participate in demand response programs.

This act shall take effect as follows and shall amend the following sections:		
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Section 1	<i>October 1, 2025</i>	New section
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Statement of Purpose:

To require (1) an owner or operator of an artificial intelligence data center to submit quarterly reports to the Commissioner of Energy and Environmental Protection, and (2) the commissioner to adopt regulations concerning water and energy efficiency standards for such data centers.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]