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SENATE BILL NO. 1353

Offered January 13, 2025

Prefiled January 13, 2025

A BILL to amend the Code of Virginia by adding a section numbered 10.1-1186.7, relating to Department of Environmental Quality; high-energy facilities; water and energy usage information reports; statewide clearinghouse established; work group.

Patrons—Srinivasan and Hashmi; Delegate: Simonds

Referred to Committee on Agriculture, Conservation and Natural Resources

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 10.1-1186.7 as follows:

§ 10.1-1186.7. High-energy facilities; water and energy usage information reports; statewide clearinghouse established.

A. As used in this section, unless the context requires a different meaning:

"Energy reuse factor" means a calculation of waste heat reused divided by total energy consumption.

"High-energy facility" means a facility that requires an energy load of over 30 megawatts uninterrupted capacity and is located in an urban, suburban, exurban, or rural environment in the Commonwealth. "High-energy facility" includes any data center as defined in subdivision A 43 of § 58.1-3506.

"Power usage effectiveness" means a calculation of a facility's total energy consumption divided by the total energy consumption of its information technology equipment.

"Renewable energy factor" means a calculation of a facility's total renewable energy consumption divided by its total energy consumption.

"Total renewable energy" means the sum of total renewable energy certificates (RECs), total renewable energy consumption from power purchasing agreements (PPAs), and total renewable energy consumption from on-site renewable energy generating resources or power supplies.

"Waste heat reused" means any heat that is used or reused outside the boundary of a high-energy facility and that substitutes, partly or entirely, energy needed outside the boundary of such facility.

"Water usage effectiveness" means a calculation of a facility's total water input divided by the total energy consumption of its information technology equipment.

B. Any owner or operator of a high-energy facility in the Commonwealth shall submit to the Department no later than May 1, 2026, and on a quarterly basis thereafter, a disaggregated report that contains at a minimum the following information for each high-energy facility:

1. Basic information relating to such high-energy facility, including:

a. The name of such high-energy facility;

b. The owner or operator of such high-energy facility;

c. The address of such high-energy facility;

d. The nature or purpose of such high-energy facility, which may include an enterprise data center, colocation data center, cohosting data center, or cloud provider; and

e. The month and year such high-energy facility commenced operation.

2. Information related to energy and water usage of such high-energy facility, including:

a. The total energy consumption in kilowatt-hours, including the use of electricity, fuels, and other energy sources used for cooling;

b. The name of the electric utility serving such high-energy facility and any electric service agreements between such utility and such high-energy facility;

c. All on-site power supplies, including (i) any primary power on site and emergency backup power supply and (ii) any permit information such as permit numbers, capacity, tier level, fuel type, total permitted emissions for such facility, and any other relevant information;

d. The total energy consumption of information technology equipment in kilowatt-hours measured as the value of the combined annual energy consumption at every uninterruptible power system connected to information technology equipment;

e. The total water input in cubic meters that includes all water volumes that enter such facility's boundary that are used for the functions of such facility including information technology, security, power, and environment; and

f. The source of water for such high-energy facility including a municipal water supply, groundwater, surface water, and whether water from such sources is potable or reclaimed. If a high-energy facility utilizes more than one water source, such facility shall provide information regarding water usage from each source as a percentage of total water usage.

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3. Performance calculations and indicators for such high-energy facility including the energy reuse factor, power usage effectiveness, renewable energy factor, and water usage effectiveness.

4. Sustainability indicators for such high-energy facility including:

a. The average set point information technology equipment intake air temperature in degrees Fahrenheit, which shall be measured as the average set point temperature in all of such facility's computer rooms over a 12-month period;

b. The average waste heat temperature in degrees Fahrenheit, which shall be measured as the temperature of the fluid used to cool any information and communication technology equipment, averaged over a 12-month period and across every measurement point. Individual waste heat temperature readings shall be measured at the point where heated fluid enters a heat exchanger in such facility's computer rooms;

c. The amount of total renewable energy in kilowatt-hours; and

d. The amount of waste heat reused in kilowatt-hours.

5. Any other information as required by the Department.

C. The Department shall determine whether information submitted pursuant to subsection B has met the requirements of this section.

D. All information required in subsection B shall be expressly excluded from any exemption provided under the Virginia Freedom of Information Act (§ 2.2-3700 et seq.).

E. No later than July 1, 2026, the Department shall, with the assistance of any relevant state agency as requested by the Department, design, implement, and maintain a publicly accessible website to serve as a statewide clearinghouse for information relating to water and energy usage of all high-energy facilities operating in the Commonwealth that contains the information required in subsection B.

1. In publishing information on the clearinghouse website, the Department may, in its discretion, (i) aggregate certain information submitted pursuant to subsection B or (ii) publish any other nonconfidential information relating to a high-energy facility. However, any information related to air emissions permits, total energy usage, and total water usage shall not be aggregated but remain tied to each high-energy facility location.

2. After July 1, 2026, the Department shall publish any information received pursuant to subsection B to the statewide clearinghouse within 30 days of receiving such information.

F. In order to fully cover the costs of designing, implementing, and maintaining the statewide clearinghouse pursuant to subsection E, the Department (i) shall assess an initial fee to each owner or operator of a high-energy facility to be paid at the time such owner or operator initially submits to the Department the information required in subsection B and (ii) may assess an annual fee to each owner or operator of a high-energy facility that is in active use for each year following the initial submission of the information required in subsection B.

G. Any owner or operator of a high-energy facility shall notify the Department of any substantial change in operations or technologies that would require an update to the information required in subsection B at least 60 days prior to making such change.

2. That the Department of Environmental Quality shall convene a work group of stakeholders, including relevant subject matter experts and state agency personnel, for the purpose of identifying additional information to be required pursuant to subdivision B 5 of § 10.1-1186.7 of the Code of Virginia, as created by this act, that is necessary for establishing a comprehensive statewide clearinghouse of information necessary or relevant in evaluating industry trends and assessing potential benefits and negative impacts of high-energy facilities, including data centers, on the people and resources of the Commonwealth. Such work group shall convene at least three times by July 1, 2026, in a manner that is open to the public and each such meeting shall include a public comment period of no less than 60 days following such meeting.