



Proposed Key Components of Frederick County Data Center Sustainability Ordinance December 14, 2025

1. Data center facilities should be planned, constructed, and operated in accordance with energy and environmental sustainability plans that reflect best-in-class industry practices, and should be certified and operated to be in compliance with LEED BD+C and O&M Gold or Green Globes Level 3 standards.
2. Acoustic enclosures that maximize sound reduction (65 dBA at the property line) should be required for all back-up generators.
3. Buildings should be equipped with roof top solar and back-up battery storage, or where there is sufficient space, ground mount solar systems coupled with agrivoltaic and/or regenerative land management practices and back-up battery storage.
4. Data center facilities without roof top solar arrays should be equipped with either cool or green roofs.
5. Clean alternatives to diesel backup power sources such as solar with battery storage should be employed whenever feasible.
6. Data center facilities should meet a power usage effectiveness (PUE) standard of 1.2 and a water usage effectiveness (WUE) standard of .2L per kWh.
7. Data center facility operators should be required to enter into renewable energy Power Purchase Agreements, purchase locally produced SRECs, and/or invest in community solar or other clean energy alternatives to offset electricity use.
8. Data Centers should be required to develop and implement a plan to achieve net zero greenhouse gas emissions by 2035.
9. Pervious surfaces at data center facilities should be maximized.
10. Non-Disclosure Agreements with Frederick County should be prohibited.
11. Data Center developers should be required to publicly disclose projected electricity use and water consumption as part of the site development plan approval process.
12. There should be a requirement to secure written approval from the electricity service provider that adequate electricity is available to serve the data center when fully built out without adverse impacts to other industrial, commercial, and residential customers.

13. Open loop cooling water systems should be prohibited, and data centers should use advanced cooling techniques, e.g., liquid cooling, free air cooling, or geothermal systems.
14. Use of potable water for cooling purposes should not be permitted. Use of gray water should be required where feasible.
15. Performance of a water assessment and feasibility study to determine whether there is adequate water capacity for the new use and what, if any, impact the water use will have on neighboring wells, perennial and intermittent streams, and other surface and ground waters should be required as part of the site plan approval process.
16. Where applicable, submerged ground wetlands should be constructed for cooling water runoff.
17. Documentation of the capture, storage, and discharge mechanisms for all stormwater derived from the data center campus should be required.
18. Native plant landscapes that are designed for maximum water quality benefits (e.g., to ensure water percolation and retention, maximize efficiency of outdoor water use, and reduce pesticide use) should be required.
19. Submission of nutrient management plans should be required for use and capture of any fertilizers, soil enrichments, or other applied compounds in native or other landscapes.
20. Independent auditing of data center water consumption, discharges, stormwater management, and electricity use should be required and publicly reported.
21. Escrow accounts, security deposits, or bonds should be required to fund any needed soil or groundwater cleanup of spilled hazardous waste and the repair or replacement of impacted private wells, lost riparian buffers for perennial and intermittent streams, or floodplains damaged by stormwater runoff or discharges from the data center.
22. Frederick County should regularly inspect data center facilities/sites for compliance with oil control permits, stormwater management requirements, and sewer discharge limitations.