



DRAFT ORDINANCE FRAMEWORK

City of Charlotte – Responsible Data Center Siting, Energy, Water, and Community Protection Ordinance

SECTION 1. PURPOSE AND FINDINGS

The Charlotte City Council finds that:

1. Large-scale data centers impose extraordinary demands on the electric grid, water systems, and surrounding neighborhoods.
2. These facilities can increase electricity rates, strain water supplies, elevate noise pollution, and accelerate diesel emissions from backup generators.
3. Communities closest to industrial development — disproportionately Black, Brown, working-class, and historically under-resourced neighborhoods — bear the greatest burden when regulations are weak.
4. Cities across the United States have adopted stronger protections than temporary moratoriums, including mandatory renewable energy requirements, water-use permitting, zoning buffers, and public approval for incentives.
5. Charlotte has a responsibility to ensure that any data center development aligns with public health, environmental justice, climate goals, and community well-being.

Therefore, the City of Charlotte enacts the following ordinance to establish the strongest local protections in North Carolina.

SECTION 2. DEFINITIONS

- “Data Center” means any facility exceeding 10,000 sq. ft. designed to house computing, networking, or storage equipment with continuous power loads above 1 MW.
- “On-Site Renewable Energy” means solar, geothermal, battery storage, or other non-fossil energy systems located on the parcel.
- “Water-Intensive Cooling System” means any cooling method requiring more than 1 million gallons per month.
- “Environmental Justice Community” means any census tract identified by the City as historically overburdened by pollution or underinvestment.

SECTION 3. CREATION OF A DATA CENTER ZONING DISTRICTS

3.1 Establishment of “Data Center Districts”

No data center may be constructed or expanded except within the newly created Data Center zoning districts.

3.2 Minimum Standards

- Minimum parcel size: 20 acres
- Setback from residential property lines: 300 feet
- Maximum noise level: 65 dB at property line, measured continuously
- Backup generator testing limited to 9 AM–5 PM weekdays only
- Mandatory landscaping and visual screening requirements

SECTION 4. ENERGY REQUIREMENTS

4.1 On-Site Renewable Energy Mandate

All new data centers must generate or store at least 20% of peak load through on-site renewable energy or battery storage.

4.2 Carbon and Grid Impact Certification

Prior to approval, the applicant must obtain from Duke Energy:

- A Grid Impact Statement certifying that the project will not increase residential electricity rates.

- A Carbon Impact Assessment demonstrating alignment with Charlotte’s Strategic Energy Action Plan.

4.3 Prohibition on Fossil-Fuel-Only Designs

No data center may rely solely on diesel or natural gas for backup power.

SECTION 5. WATER USE AND COOLING REGULATION

5.1 Water-Use Permit Required

Any data center using more than 1 million gallons per month must obtain a City Water-Use Permit, renewed annually.

5.2 Water Caps and Reporting

- Annual water-use cap established by Charlotte Water.
- Monthly public reporting of water consumption.
- Mandatory disclosure of cooling technology and discharge impacts.

5.3 Prohibition on Water-Intensive Cooling in Drought Conditions

During Stage 1 drought or higher, water-intensive cooling systems must cease operations or switch to air-based cooling.

SECTION 6. ENVIRONMENTAL IMPACT REVIEW

6.1 Full Environmental Impact Statement (EIS)

All proposed data centers must complete an EIS covering:

- Air quality and diesel emissions
- Noise impacts
- Water consumption and discharge
- Grid reliability
- Climate impacts
- Cumulative impacts on environmental justice communities

6.2 Public Comment Requirement

A minimum 60-day public comment period and at least two community meetings must be held before approval.

SECTION 7. COMMUNITY BENEFITS AND ACCOUNTABILITY

7.1 Community Benefits Agreement (CBA)

Developers must negotiate a binding CBA with affected neighborhoods, including:

- Local hiring commitments
- Community investment funds
- Air and noise monitoring
- Emergency response plans

7.2 Incentive Transparency and Public Approval

No tax incentive, land subsidy, or infrastructure support may be granted unless:

- The full incentive package is published publicly for 30 days, and
- Approved by a two-thirds vote of City Council.

SECTION 8. ENFORCEMENT AND PENALTIES

- Violations of this ordinance may result in:
- Suspension of operations
- Revocation of permits
- Fines up to \$10,000 per day
- The city can require a corrective action plan for violations.

SECTION 9. EFFECTIVE DATE

This ordinance shall take effect immediately upon adoption.