The Community Grid Compact (CGC)

A Replicable Policy Model for Turning Data Center Investment into Community Energy and Grid Benefits · Focus States: Virginia · Texas · Georgia · Arizona · North Carolina · 2026

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Enacted Law Validation: Enacted Law Validation — New Jersey Data Center Fair Share Act (Signed July 7, 2026): New Jersey became the first state to enact comprehensive data center accountability legislation, creating a new ratepayer class, cost ring-fencing, and demand flexibility requirements. This law independently validates the CGC's core cost causation principle. Critically, it creates no direct community energy benefits — no solar, no batteries, no VPP revenue to households. The CGC fills that gap. Pennsylvania HB 2650 (passed House June 2026, pending Senate) goes further, requiring a community benefit agreement as a condition of state tax incentives.

EXECUTIVE SUMMARY

American communities are facing a data center construction wave unlike anything in recent infrastructure history. Over 268 local opposition groups have formed across the country with combined membership exceeding 360,000 people as of early 2026. Sixty-six percent of protested projects were blocked or delayed in 2025 alone, representing an estimated $98 billion in stalled investment.

The two leading community concerns are concrete and energy-specific: rising electricity rates and grid strain. Both are legitimate and both are addressable if communities, governments, and developers negotiate proactively.

The Community Grid Compact (CGC) is a replicable model that converts a share of data center project investment into direct community energy benefits: battery storage paired with solar PV, heat pump HVAC, or an efficiency package for residents and small businesses, aggregated into a community-managed Virtual Power Plant (VPP) that reduces grid strain and returns revenue to participants.

Core Mechanism (Illustrative): As a condition of local approval, the developer contributes approximately 1% of total project investment (negotiable) to a Community Energy Fund (CEF). The fund co-invests with participants: 100% coverage for LMI households (at or below 80% AMI), 75% for moderate-income households (80–120% AMI), and 50% for market-rate participants (above 120% AMI). All batteries enroll in a community VPP with a

20% resilience reserve. Community group purchase procurement reduces costs 15–25%. Equipment is sourced with a preference for domestically manufactured products.

Data centers help build the distributed energy infrastructure the grid they depend on needs.

THE PROBLEM: A CONSTRUCTION WAVE MEETING COMMUNITY RESISTANCE

Data centers are the physical infrastructure of the AI economy. Global investment reached $250 billion in 2023 and is projected to reach $1 trillion by 2027. In the United States, utilities in some regions are projecting over 20% load growth by 2035 driven primarily by data centers.

In the Focus States

- Virginia hosts over 650 data centers; the largest concentration on Earth. Data centers account for over a quarter of some utilities' total electric demand.
- Georgia saw intense opposition in 2025, with over 100 people gathering at the state Capitol to protest data center proposals statewide.
- Texas faces accelerating interconnection requests; ERCOT reported a 300% year-over-year increase in 2025.
- Arizona saw a landmark community victory in Tucson, where a proposed data center was rejected unanimously by the city council after sustained opposition over water and energy impacts.
- North Carolina is actively addressing data center policy through the Governor's Energy Policy Task Force, focused on affordability and large load growth.

What Communities Are Actually Worried About

- Rising electricity rates as data center-driven grid expansion costs are socialized across all ratepayers
- Grid strain on local distribution infrastructure not designed for concentrated industrial-scale loads
- Public health impacts: urban heat island effects, air quality degradation from diesel backup generators and gas-fired prime power generation, and risks to medically vulnerable populations
- Water consumption for cooling (particularly acute in Arizona and Texas)
- Limited local benefit: large tax incentives, few local jobs, and no meaningful return to the surrounding community

THE STRATEGIC REFRAME

Old framing: *"Data centers should compensate communities for the problems they create."*

CGC framing: **"Data centers should help build the distributed energy infrastructure the grid they depend on needs."**

This shift: aligns affordability with reliability, avoids punitive perception, broadens coalition appeal to utilities and regulators, and positions distributed energy as infrastructure rather than subsidy.

THE MODEL: CGC

1. Community Energy Agreement (CEA)

A legally binding Community Energy Agreement, negotiated between the developer, local government, and a community coalition that includes meaningful representation from resident and neighborhood leaders, establishes the developer's obligation to fund the CEF. The contribution is structured as a percentage of total project investment; 1% is used as an illustrative example throughout this document, with the understanding that the specific percentage is negotiable.

2. Community Energy Fund (CEF)

The CEF is an independently governed co-investment fund. In states with an existing green bank or state energy finance institution, the CEF shall be nested within that institution. Where no suitable green bank exists, the CEF is administered by a community board with majority community seats. The developer has no governance role after making the contribution.

Household Income Tier	AMI Range	Fund Coverage	Participant Contribution	LMI Qualification
LMI	At or below 80% AMI	100%	$0 upfront	Categorical: SNAP / WIC / Medicaid / utility assistance = automatic
Moderate-Income	80–120% AMI	75%	25% (financing available)	Income documentation or categorical eligibility
Market-Rate	Above 120% AMI	50%	50% (out of pocket, loan, or VPP revenue-share)	No documentation required

The co-investment model roughly doubles the systems deployed and VPP capacity compared to a 100% subsidy model — at no additional developer cost.

3. The Deployment: Multiple Package Options

- Solar Package: Battery storage + rooftop solar PV. Battery is the anchor DER; solar charges the battery, reduces daytime grid draw, and exports to the stressed circuit.
- Heat Pump Package: Battery storage + heat pump HVAC. Battery is the anchor DER; heat pump pre-conditions home before peak and cycles off during peak, providing demand response.
- Package 4 — Grid Flexibility Package: Smart thermostat + demand response enrollment + optional EV charger or smart panel. No battery or rooftop work required. Renter-eligible. ~$75–$500 installed. $80/kW-yr annualized VPP capacity cost (Brattle Group / NRDC, June 2026). Broadest reach; fastest to deploy; effective entry point to the full battery package. Heat pump HVAC in Package 2 also functions as an additional DR asset via pre-conditioning and load shift, complementing the battery.
- Efficiency Package: Plug-in solar + smart thermostat + home sealing/insulation (for renters and homes where solar/heat pump is not feasible)
- Community Solar Subscription: For multifamily residents and renters who cannot host onsite systems
- Weatherization and energy efficiency upgrades as a precursor to solar and storage for LMI households

Renters are explicitly eligible. Landlords participating in tenant-benefiting installations may not increase rent for 12 months following installation. Community group purchase procurement reduces costs 15–25%. Trusted community messengers including churches, HBCUs, food banks, and social service organizations serve as outreach and enrollment partners.

4. The Grid Asset: Community Virtual Power Plant

All CEF-funded systems are enrolled in a community VPP operated by the local utility, a community choice aggregator, or a qualified third-party aggregator. Third-party aggregator access is explicitly required to ensure the VPP can function in rural electric cooperative and municipal utility territories. The VPP aggregates distributed storage to provide grid services, reduces peak demand, defers distribution infrastructure upgrades, generates revenue returned to participants as bill credits (minimum 70%), and recycles 15%+ of revenue back to the CEF for reinvestment.

DOMESTIC CONTENT PREFERENCE

The CEF Board and Program Administrator shall use commercially reasonable efforts to source domestically manufactured equipment for all CGC-funded installations, including battery energy storage systems, solar photovoltaic panels and racking, inverters, and heat pump HVAC systems. This domestic content preference does not apply where domestically manufactured equipment meeting the applicable technical specifications is not available within a commercially reasonable timeframe. Any such exception shall be documented in writing and included in the Board's annual public report.

Where CEF-funded systems qualify for IRA domestic content bonus credits (up to +10 ITC percentage points), the CEF Board shall pursue and reinvest those credits in additional deployments.

FUND SIZING — CO-INVESTMENT MODEL

DC Investment	1% Fund	Systems (co-invest)	VPP Capacity	Annual Savings/HH	vs. 100% Subsidy
$500M	$5M	195–280	1.5–2.7 MW	$900–1,400/yr	vs. 125–175 systems
$1B	$10M	390–560	3.0–5.4 MW	$900–1,400/yr	vs. 250–350 systems
$2B	$20M	780–1,120	5.9–10.8 MW	$900–1,400/yr	vs. 500–700 systems
$3B	$30M	1,170–1,680	8.9–16.2 MW	$900–1,400/yr	vs. 750–1,050 systems

VPP revenue adds an estimated $150–$300/yr per household on top of solar savings. Market-rate participants using the VPP revenue-share option may recover their 50% contribution over time at no upfront cost.

WHY IT WORKS FOR EACH STAKEHOLDER

State Legislators and Regulators

- Directly addresses cost causation: developer bears 100% of grid interconnection costs
- Codifiable standard reducing ad hoc negotiations and legal uncertainty
- Advances DER and grid modernization goals simultaneously
- NC: direct fit for Governor's Energy Policy Task Force

Local Governments and Planning Officials

- Defensible, structured basis for CEA negotiation
- Visible constituent benefit reduces political risk of approvals
- Model zoning language and ordinance templates available

Data Center Developers and Hyperscalers

- 1% contribution unlocks approval vs. 66% chance of delay or block
- Bounded, predictable cost — not open-ended litigation risk
- Co-investment model is grid partnership framing, not punitive
- Reputational differentiation in environment of intense scrutiny

Utilities and Grid Operators

- VPP defers costly distribution infrastructure upgrades
- Co-investment model grows VPP ~50% larger than subsidy model
- Third-party aggregator pathway works for co-ops and munis
- Developer-funded interconnection ring-fences costs from ratepayers

Community Organizations and Advocates

- LMI: 100% coverage, $0 upfront, categorical SNAP/WIC eligibility
- Weatherization and efficiency before solar for LMI homes
- Renters explicitly included; 12-month rent increase prohibition
- Community-controlled fund, no developer governance role

STATE-SPECIFIC IMPLEMENTATION NOTES

Virginia

Virginia's 2025 VPP legislation provides the regulatory infrastructure for CEF-funded systems. Recommended vehicle: amendment to Virginia's data center incentive tax credit statute requiring a CGC-compliant CEA as a condition of incentive eligibility. Highest-priority state given concentration of data centers and political urgency.

Texas

Texas's deregulated ERCOT market creates strong VPP revenue opportunities. Third-party aggregators are essential in rural co-op territory. Recommended vehicle: local ordinance as a condition of rezoning or tax abatement, with CEF operating through a nonprofit community energy organization or CDFI.

Georgia

Georgia Power's 2025 IRP solar+storage pilot is a direct programmatic fit for CEF deployments. A Georgia-specific appendix should address interconnection reform (transformer disputes, delta-service denials, demand ratchets, meter collars), PSC pathway, and co-op/MEAG territory aggregator access. Recommended vehicle: PSC proceeding or county ordinance in data center-heavy counties.

Arizona

Pair energy fund with water recycling requirements and data center waste heat capture commitments. Urban heat island framing is especially important. Recommended vehicle: Maricopa County and Pima County zoning ordinances.

North Carolina

Statewide legislation is the preferred vehicle given restrictions on local data center incentives. Present to the Governor's Energy Policy Task Force as a concrete framework for the large load growth and affordability mandate. Use 'Community Energy Fund' not 'Community Clean Energy Fund' in NC materials. Third-party aggregator access provisions are especially important given Duke Energy's dominant market position.

IMPLEMENTATION ROADMAP

Phase 1 — Pilot (Year 1)

Select one data center project per focus state as a pilot CEA negotiation. Engage utility, CCA, or third-party aggregator as VPP operator. Execute first CGC-compliant CEAs. Document co-investment ratios, categorical eligibility verification, and VPP enrollment for replication.

Phase 2 — Codify (Years 1–2)

Refine model term sheet from pilot learnings. Introduce enabling legislation in each focus state. Present to NC Governor's Energy Policy Task Force. Engage utility commissions on VPP interconnection, compensation, and third-party aggregator access rules.

Phase 3 — Scale (Years 2–4)

Expand to all new data center approvals in focus states. Build national clearinghouse of CGC negotiations, outcomes, and fund performance data. Extend model to Ohio, Illinois, Nevada, and other high-growth states.

New Polling: Direct Benefits Change Public Opinion Dramatically

New Polling Validates the CGC Approach — Direct Benefits Change Public Opinion Dramatically: Yale Program on Climate Change Communication / Rewiring America (June 2026) found that while 58% of registered voters oppose building data centers in their area, 74% support requiring new data centers to offset their electricity use by installing rooftop solar and weatherizing local homes. That support is bipartisan: 88% of liberal Democrats, 77% of moderate Democrats, 71% of liberal and moderate Republicans, and 63% of conservative Republicans. Separately, Rainey Center / Embold Research polling (May 2026, n=1,010 registered voters across all 50 states) found that solar and battery storage generates the strongest positive voter response of any data center message tested, at +44 net favorability. Water recycling, ratepayer pledges, and community benefits all move voters toward support by double digits. The CGC delivers exactly the tangible, direct benefits that polling shows convert opposition into support.