

Data Centers, Residents, and Proximity

The Problem

Data centers are valuable infrastructure. They can also be hot, noisy, power-hungry, and water-intensive, and capital wants to build them where land is cheap and electricity is abundant. That is often where poor people live.

This is a classic externality: the company captures the profit, and the residents absorb the noise, the heat, the water stress, and the suppressed property values. The residents have no leverage. Regulation is slow, weak, and easily litigated into irrelevance.

That should change. Externalities should be priced honestly, the people who bear them should be counted, and those people should have real control.

The Mechanism

If a company wants to operate a data center within 100 miles of anyone's home, the people who live there own part of it.

Define:

- **D** = the distance, in miles, from the data center to the nearest residence.
- **R** = $100 - D$, the percentage of the data center owned by residents. R also sets the share of board seats residents hold. It applies only when $D < 100$.
- **N** = the number of shares each resident of a given ward receives, determined by that ward's distance from the data center. The decay curve is a policy choice still to be settled; closer wards get more.

How it works:

- **Residence confers shares, not property.** Everyone who lives in the zone gets N shares by virtue of living there: renters, owners, and homeless people alike. Owning a building confers nothing, so landlords can't capture the dividend.
- **Wards define the zone.** By default, the zone is the set of voting wards that approved the measure, so the people making the decision are exactly the people affected by it. A ward can be split where that fits reality better.
- **Shares follow residence.** Shares are non-transferable. When you move out, your shares pass to whoever moves into your old residence, and you keep them until someone does. The benefit stays local and can't be bought up cheaply from people in need.
- **Residents hold R% of the board by fiat.** Residents may also appoint additional members as needed, such as engineers, lawyers, and environmental specialists.
- **Residents control the board when $D < 50$.** At that distance R exceeds 50, and residents hold a majority. Farther out, they still hold R% of the seats and their dividends, but not control.
- **If the board votes to shut the data center down, it shuts down.**

What It Requires

- **A resident registry** for the zone, updated as people move.
- **A governance trust or co-op** to hold shares on residents' behalf and make board appointments.
- **Expert capacity.** Residents need access to people who understand data center operations. The company should fund this as a cost of imposing an externality.
- **Clear externality standards**, such as noise limits, water use, heat rejection, and operating hours, written into the operating license upfront.
- **Periodic audits** comparing measured harms to the value of residents' stakes. If harms outrun compensation, the company increases dividends or changes how it operates.

Who This Affects

Residents: They get profit-sharing, governance power, and the ability to end operations if the externalities become intolerable.

The company: It gets terms known upfront in place of years of regulatory uncertainty and litigation, and it can price the governance cost into its plans.

Employees: Their jobs depend on the board approving operations. That gives residents leverage and gives the company a reason to negotiate.

Residents who can't afford to move: These are the hardest case. Today they bear the externality with no say. Under this mechanism they own part of the company and, near enough to the facility, control it.

Speculators: They get nothing. Shares can't be bought, sold, or accumulated.

The Operator's Risk

An operator that builds within 50 miles of a home accepts that residents can vote to shut it down. That is a real political risk, and the operator is choosing it. If the location's advantages outweigh the risk, it builds there. If not, it builds at least 50 miles from the nearest residence and never faces a resident majority. At 100 miles, these rules don't apply at all.

An operator that accepts the risk can manage it by:

- Agreeing explicit operating thresholds with residents upfront (for example, no shutdown vote as long as noise stays under a set level).
- Offering richer dividend terms to build goodwill.
- Negotiating a buyout option in case a shutdown vote looks likely.

What the operator doesn't get is the ability to push the costs of its operations onto people who never agreed to bear them.

Conclusion

Capital wants cheap land, abundant power, and good infrastructure. Residents want the costs of that arrangement priced honestly and a say in whether they are worth bearing. This mechanism lets both happen: the company gets its location, and the people who live nearby get ownership, governance, and the final word on whether the facility keeps running. Neither party gets to simply extract from the other.

It asks a lot of everyone involved, including honest governance, engaged residents, and real expert support. But the choice stays with the operator. A company that wants freedom from resident control can build far enough away that it can't hear anyone complaining.