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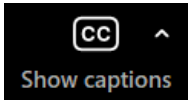
Energy Affordability in the Face of Data Center Load Growth

October 29, 2026

Webinar Logistics

All attendees are in **“listen only” mode** – your webcam and microphone are disabled.
The Chat function is also disabled.

Submit questions and comments via the Q&A panel 

Automated **captions** are available 

Speaker bios will be made available in the Chat

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Affordable, reliable, clean energy for all.



Climate Resilience and Community Health



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Data Center Energy Accountability Initiative

Protecting energy affordability and community health in the era of data center expansion.

CLEAN AIR COUNCIL

ALLIANCE FOR AFFORDABLE ENERGY

PSR Pennsylvania



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www.cleanegroup.org/initiatives/data-center-energy-accountability-initiative/

WEBINAR SPEAKERS

Energy Affordability in the Face of Data Center Load Growth



Kristin Eberhard
Rewiring America



Miki Verma
Rewiring America



Abbe Ramanan
Clean Energy Group
(Moderator)

REWIRING AMERICA

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Building Inclusive Clean Energy Markets: Award-Winning Programs in Connecticut and New York (November 18)

Community Power in Action: Designing Equitable Virtual Power Plant Programs (December 8)

Expanding Solar Market Participation and Consumer Confidence: Two Award-Winning Programs by the Illinois Power Agency (December 9)

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Homegrown energy

Households as energy infrastructure









REWIRING AMERICA











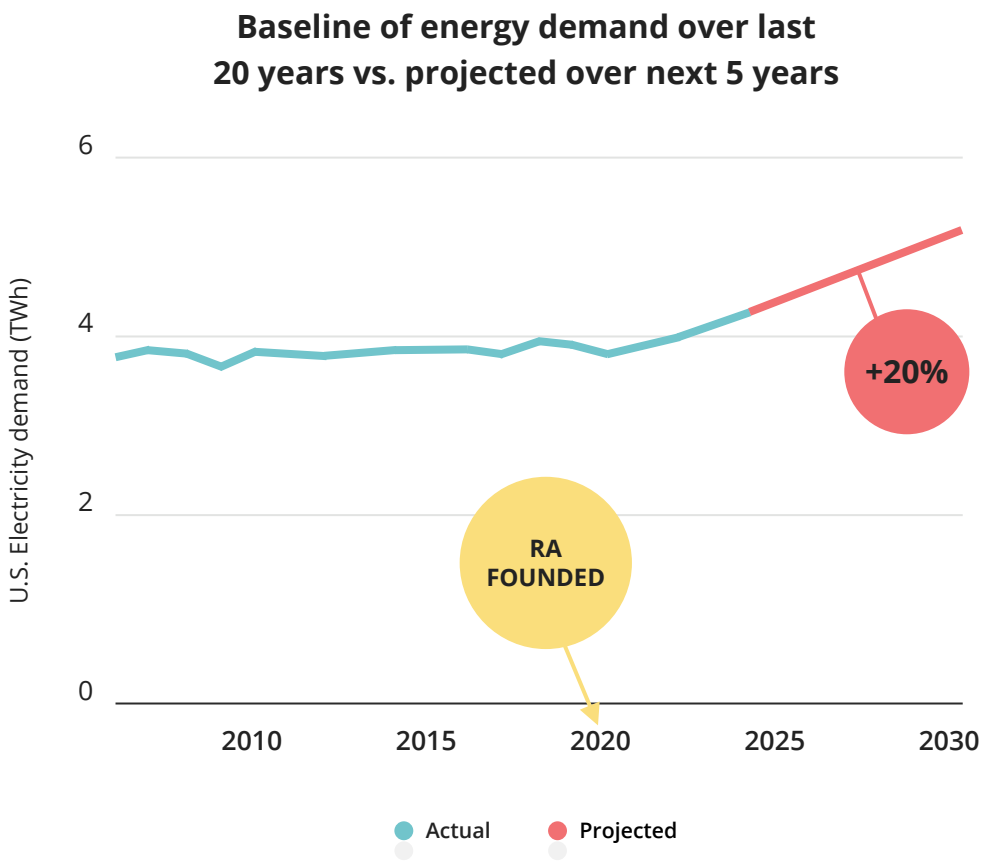
Rewiring America is the leading electrification nonprofit, focused on electrifying our homes, communities, and businesses.

We develop accessible data and tools and build coalitions and partnerships to make going electric easier for households and communities.

Rewiring America helps Americans save money, tackle nationwide emissions goals, improve health, and build the next generation of the clean energy workforce.

Electricity demand
was flat for decades —

But is now rising.



Data centers are straining the grid and communities.



3,000

AI data center projects underway or proposed by 2029.



~255 GW

Projection of data center energy needs by 2029.



$100B

Annual spending by tech companies on energy generation and infrastructure investment.

The existing grid cannot handle this much growth.

So utilities have to build.



Who gets stuck paying in the end?

Houesholds on their bills.



Americans are concerned — and open to a better bargain

58%

of registered voters oppose a data center being built in their local area

60%

think a local data center would increase their electricity bills

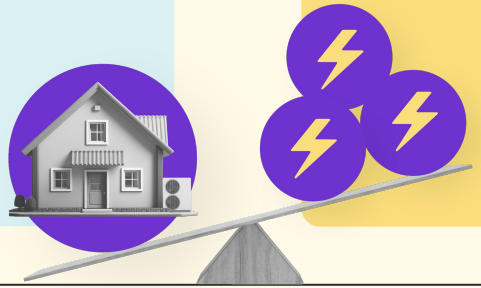
73%

support a proposal requiring new data centers to offset their electricity use by installing rooftop solar on, and/or helping to weatherize and insulate nearby homes

Communities are asking a fundamental question: **Who pays for this growth, and who benefits?**

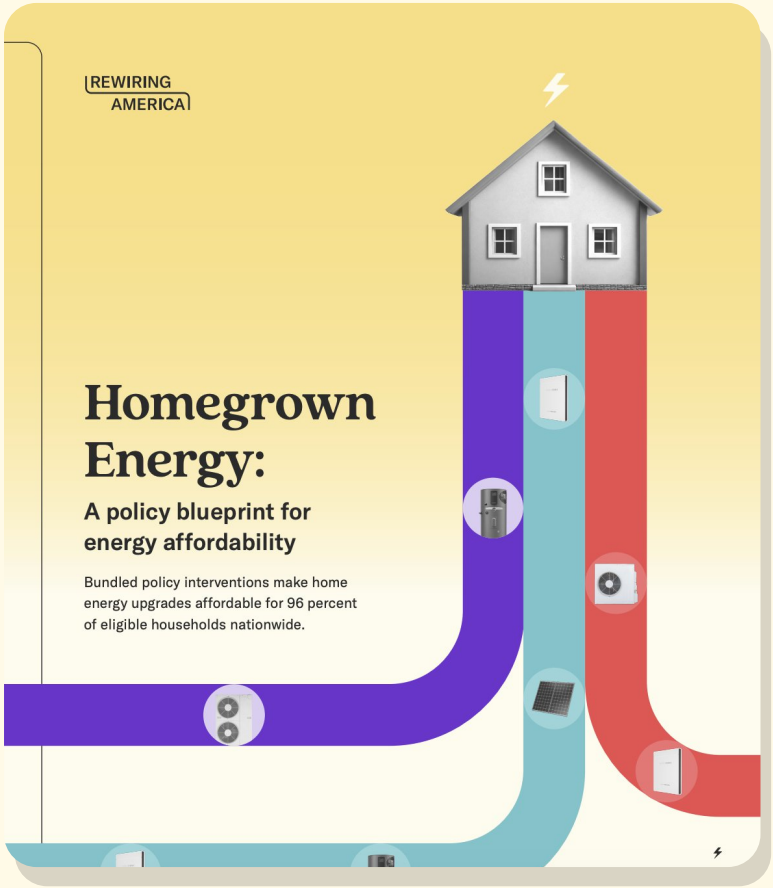
Households have historically been seen as **passive energy consumers**

But we see them as **essential energy infrastructure** that can be leveraged to solve our energy challenges.



HOMEGROWN ENERGY II POLICY BLUEPRINT

Our report shows how a coordinated set of policies can make whole-home electrification, rooftop solar, and battery storage affordable for **96 percent of eligible U.S. households**, delivering **$26,000 in average lifetime savings** per home, or **$1.5 trillion nationwide**.



Today, those same upgrades are affordable for only about **9 percent** of households under current market conditions, without incentives. Home electrification alone is affordable for roughly **40 percent** of U.S. households.

Closing this gap is the central challenge — and opportunity — for energy affordability policy.



What do we mean by “affordability”?

We define affordability as a household’s ability to adopt home energy upgrades at the same or lower total cost — accounting for both upfront and operating costs — as replacing existing equipment with new like-for-like systems.

Replacing existing equipment

Replace existing heating, cooling, water heating, cooking, and clothes drying equipment with new systems of the same type.



Home energy upgrades

Upgrade to high-efficiency electric equipment for those same household needs. We evaluate electrification alone and electrification paired with rooftop solar and battery storage.

We compare the cost of installing and financing equipment, plus the energy needed to run it.
Upgrades are affordable when those combined costs are no higher than replacing existing systems.

WHAT WE MODELED

What would make home upgrades affordable?

Households

We modeled energy use and upgrade options representing 68 million eligible single-family households, accounting for differences in location, size, and existing equipment.

Cost comparison

We estimated installation, financing, and energy costs for three options. Like-for-like replacement, whole-home electrification, and electrification with solar and storage.

Policy scenarios

We tested how lower upfront costs, improved financing, and lower electric heating costs affect affordability, individually and in combination.

Our findings show where upgrades could be affordable, not how many households will adopt them.



Read our technical methodology for more information.

THE HOMEGROWN ENERGY POLICY BLUEPRINT

This roadmap focuses on three interlocking strategies to advance energy affordability:



Remove barriers to electrification.

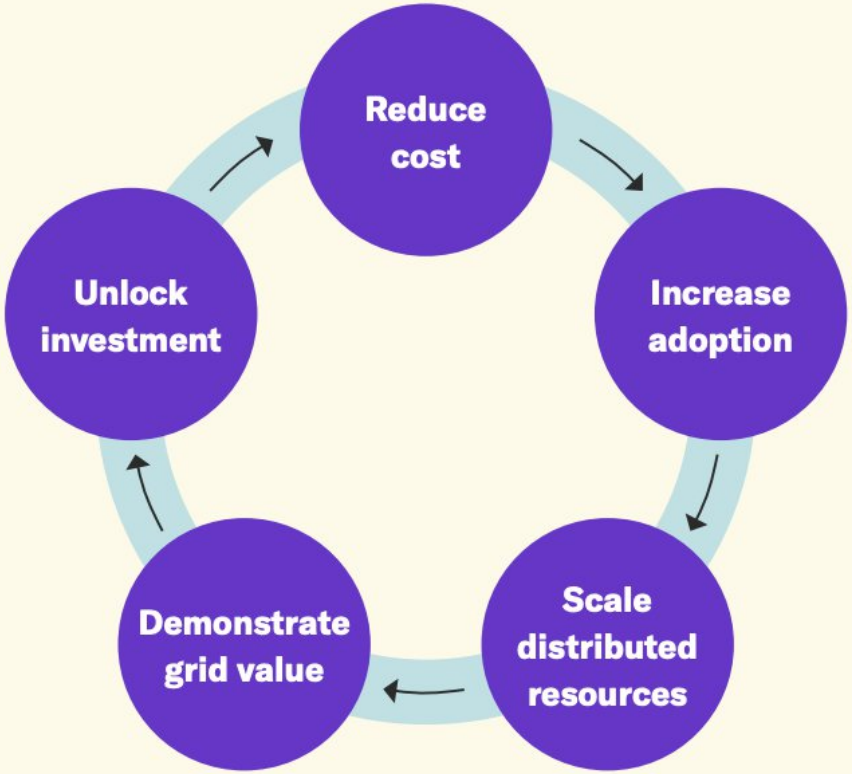


Recognize households as grid assets.



Drive energy investment toward households.

These three strategies reinforce one another, creating a virtuous cycle



SIX PRIORITY POLICIES

Homegrown Energy identifies six policy levers that work together:

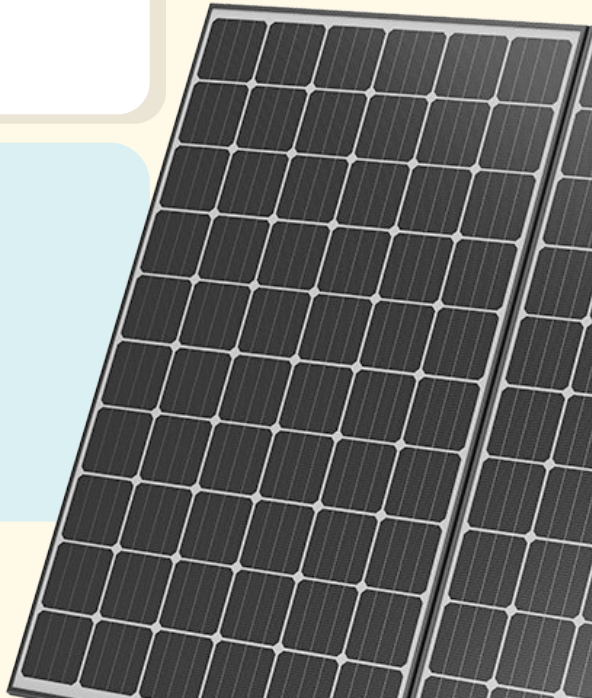
1. Reducing permitting and soft costs
2. Requiring large new energy users to invest in distributed resources
3. Enabling inclusive utility investment
4. Electrification-friendly rate reform
5. Non-pipeline alternatives (NPAs)
6. Scaling virtual power plants



1

Reducing permitting and soft costs

Soft costs make up over half the price of home solar and storage. Simpler permitting, inspections, and grid connections could make upgrades affordable for 14 million more households.

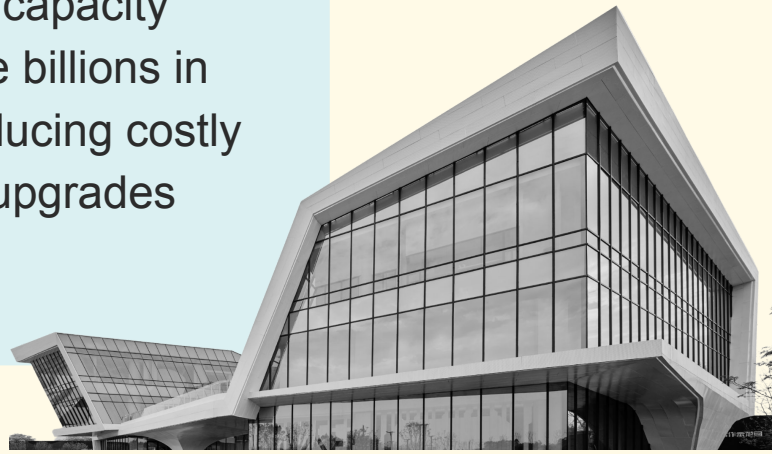


AI data centers are projected to add more than 100 GW of new electricity demand to the grid by 2030.

2

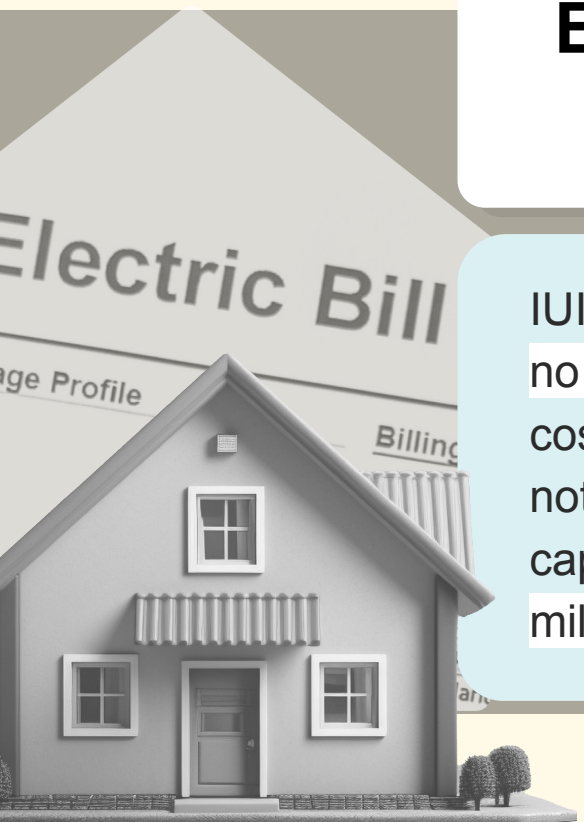
Requiring large new energy users to invest in distributed resources

Incentivizing data centers to fund a portion of their capacity needs through distributed resources could mobilize billions in private capital for home energy upgrades while reducing costly infrastructure expansion. This intervention makes upgrades affordable for an additional 19 million households.



3

Enabling inclusive utility investment (IUI)



IUI enables utilities to pay for home improvements with low or no upfront cost or credit check to the household, recovering costs through a monthly bill charge that is tied to the property, not the individual. These programs expand access to low-cost capital and make upgrades affordable for an additional 18 million households.

Seasonal rates, time-of-use structures, and heat pump tariffs can reduce bills by 10 to 50 %.

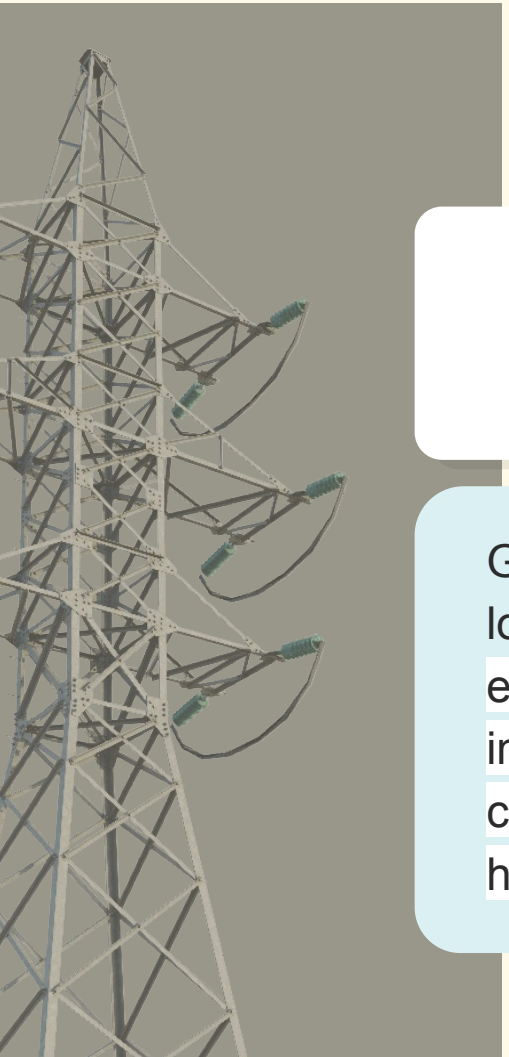
4

Electrification-friendly rate reform



Lower heat pump bills have a limited effect when upgrades include solar and storage, because upfront costs remain high.

For electrification alone, better electric rates could make upgrades affordable for 5 million more households.



5

Non-pipeline alternatives (NPAs)

Gas utilities spend billions annually on pipelines that lock in long-term rate increases. Redirecting that spending toward electrification and efficiency avoids unnecessary capital investment and protects households from rising gas system costs, making upgrades affordable for an additional 20 million households.

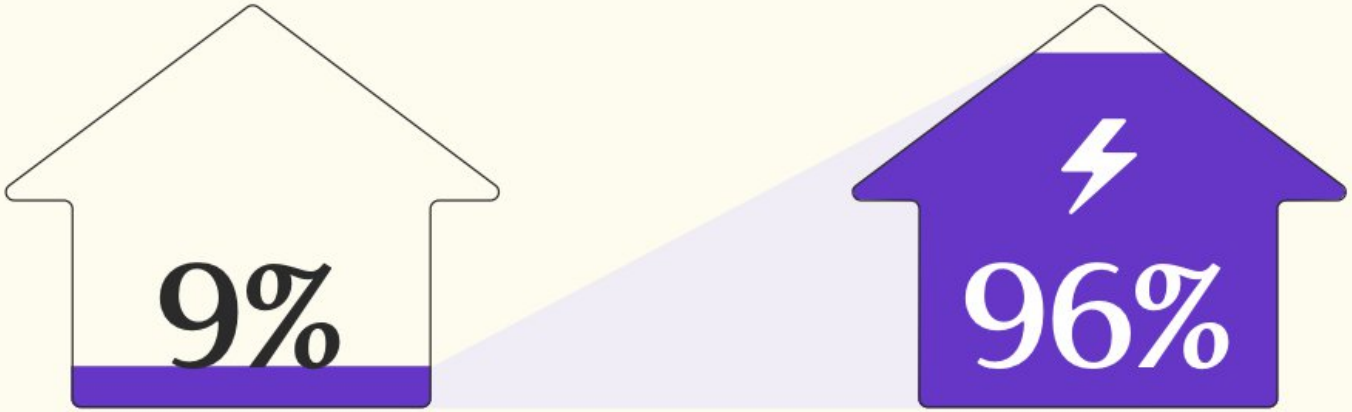
6

Scaling virtual power plants



Aggregating household-based energy resources is a faster, lower-cost way to meet rising electricity demand than building new power plants. The six policies mentioned make home energy upgrades affordable for approximately 59 million additional households, all of which could participate in VPPs — turning homes into a scalable source of grid capacity.

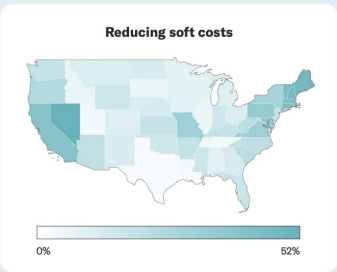
Together, these policies expand access from 9 percent to 96 percent of eligible households, lower system costs, and turn homes into a scalable resource for meeting rising demand.

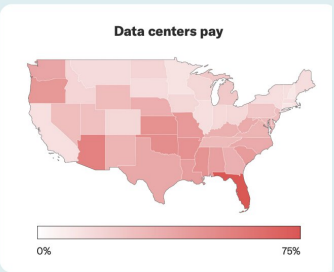


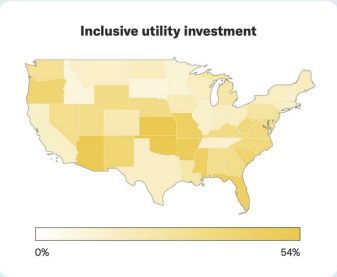
Eligible households that can afford upgrades **without energy affordability policies**

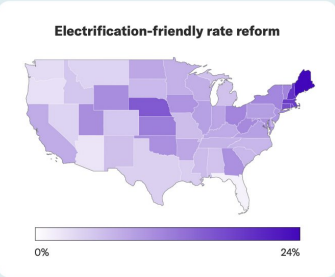
Eligible households that can afford upgrades **with energy affordability policies**

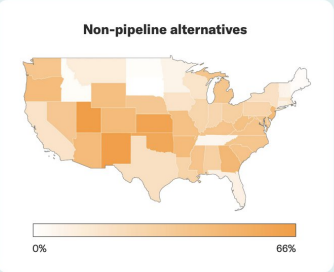
Regional impacts of policy interventions on home energy upgrade affordability











Color scale shows percentage point increase in households where upgrades are affordable

States can begin by setting clear goals for how new demand will be met. For example, states could aim to:

Meet at least half of new data center electricity demand through distributed resources, including household, community, and commercial programs.

Direct a substantial portion of that investment (e.g., ~25 percent of total capacity) toward household upgrades, including weatherization, energy-efficient electrification, solar, and storage.

New Jersey shows the politics moving into policy.

In July 2026, Governor Mikie Sherrill signed the Data Center Fair Share Act, establishing that data centers should not shift their costs onto existing customers and creating a pathway for them to support verified demand flexibility.



Make data centers pay their fair share

Create a new ratepayer class and rate structure so data centers pay for their energy use and associated grid infrastructure.

Protect households when the grid is strained

Incentivize data centers to bring cheap, clean power to the grid and require them to cut back before residential ratepayers are impacted.

Turn new demand into investment

Create a retail program allowing large loads to offset capacity obligations by paying to reduce demand elsewhere on the system.

DIFFERENT STATES, SAME QUESTION

Other states are working through the same problem:

Virginia
Created a pathway for large energy users to fund weatherization, heat pumps, batteries, demand response, and virtual power plants.

New York
Paused construction of the largest data centers for up to a year while the state writes new development rules.

Texas
Gov. Abbott's August 2026 moratorium paused new grid connections pending a state audit of power and water use.

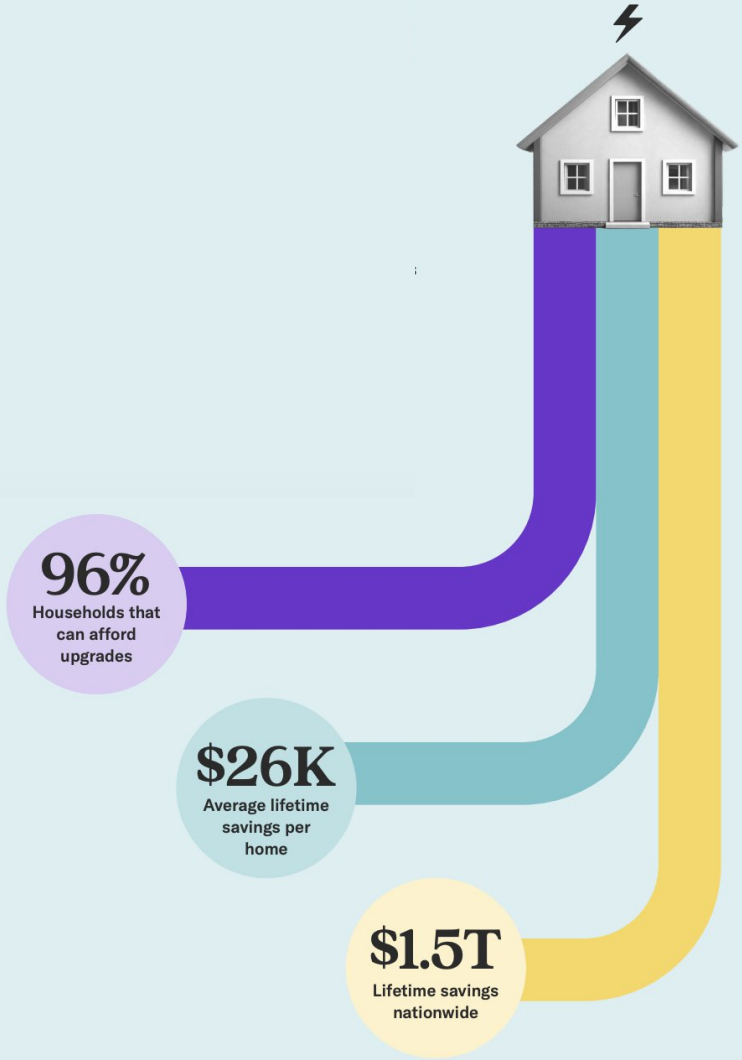
Colorado
Focused on making large new loads pay the costs they impose rather than shifting them onto existing customers.

Illinois
Wrestling with how to pair rapid load growth with distributed energy resources and ratepayer protections.

The mechanisms differ; the political question is the same: if enormous new demand is coming, how do communities benefit from the investment needed to serve it?

Affordability is a policy design choice. When deployed at scale, they make modern energy upgrades affordable for the vast majority of households — unlocking tens of thousands of dollars in savings per family and and over a trillion dollars nationwide.

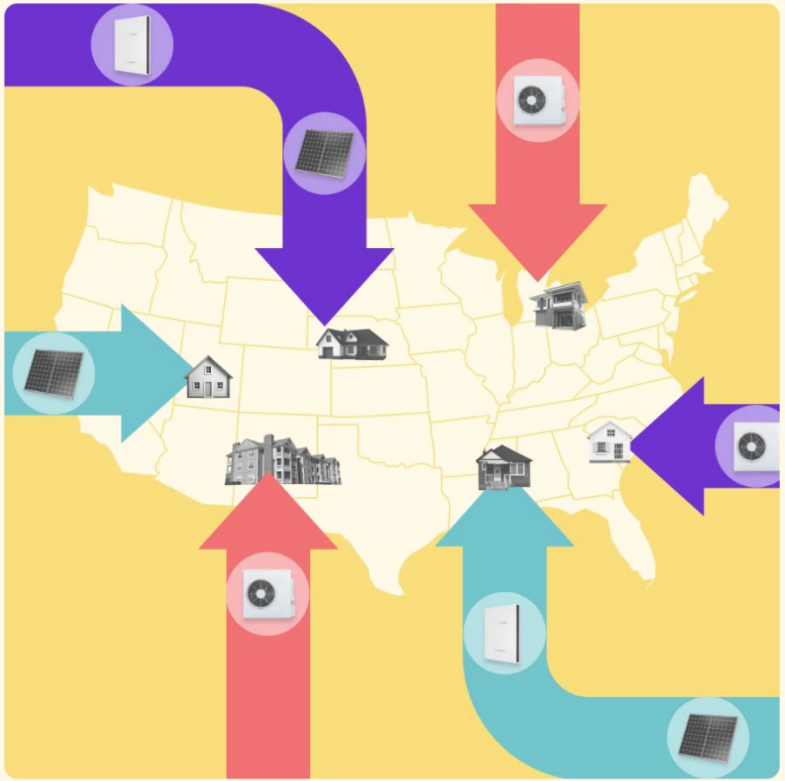
States that act now can turn this moment of disruption into an opportunity to lower costs, strengthen the grid, and deliver immediate, visible benefits to millions of American families.



Make home energy upgrades affordable in your state

See how bundled policy changes can lower costs and expand access for households.

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