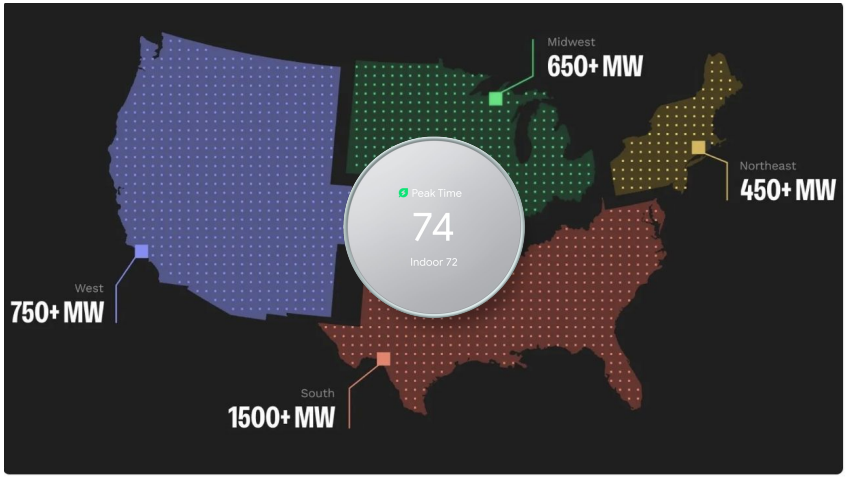
2026 Midwest Energy Solutions Conference

Jan 2026

Renew Home

Building the world's largest residential virtual power plant



Proven DR resource

4+ GW

shiftable residential load in the United States

Largest residential VPP platform

5+ million

shiftable smart homes in North America

650+ MW

flexible Nest capacity available across the Midwest

Virtual Power Plant

A coordinated collection of devices in homes that make small changes in the background to save and shift energy, and can reduce demand on the grid without sacrificing customer comfort

Utilities need fast, flexible, & scalable demand solutions.

200 GW

Incremental peak capacity needed by 2030[1]

12%

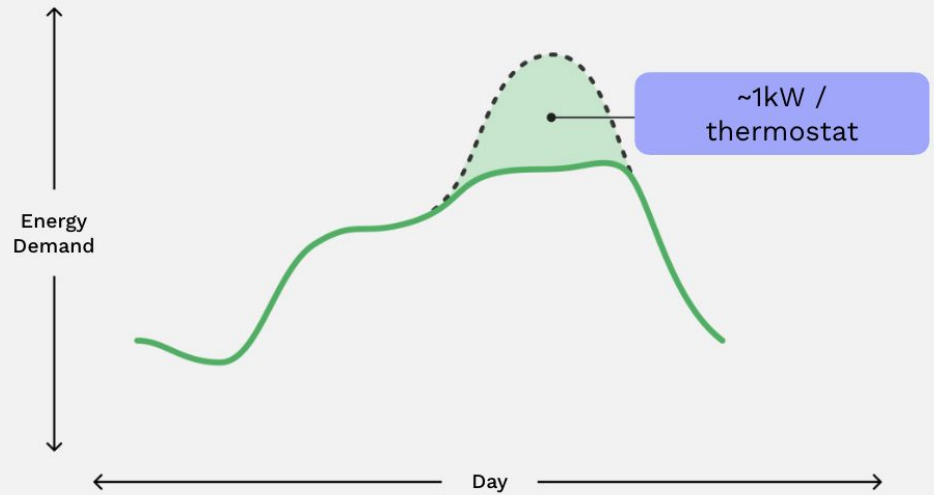
CAGR for DER adoption but most utilities still lack aggregation capabilities.[3]

50%

Increase in capital expenditures over last 5 years - $139B to $208B[2]

1. US Department of Energy (2023)
2. Investor-Owned Utilities to Spend $1.1T in Grid Boost as Power Demand Spirals (2025)
3. Distributed Energy Resources (DER) Technology Market Size and Forecast 2025 to 2034 (2025)

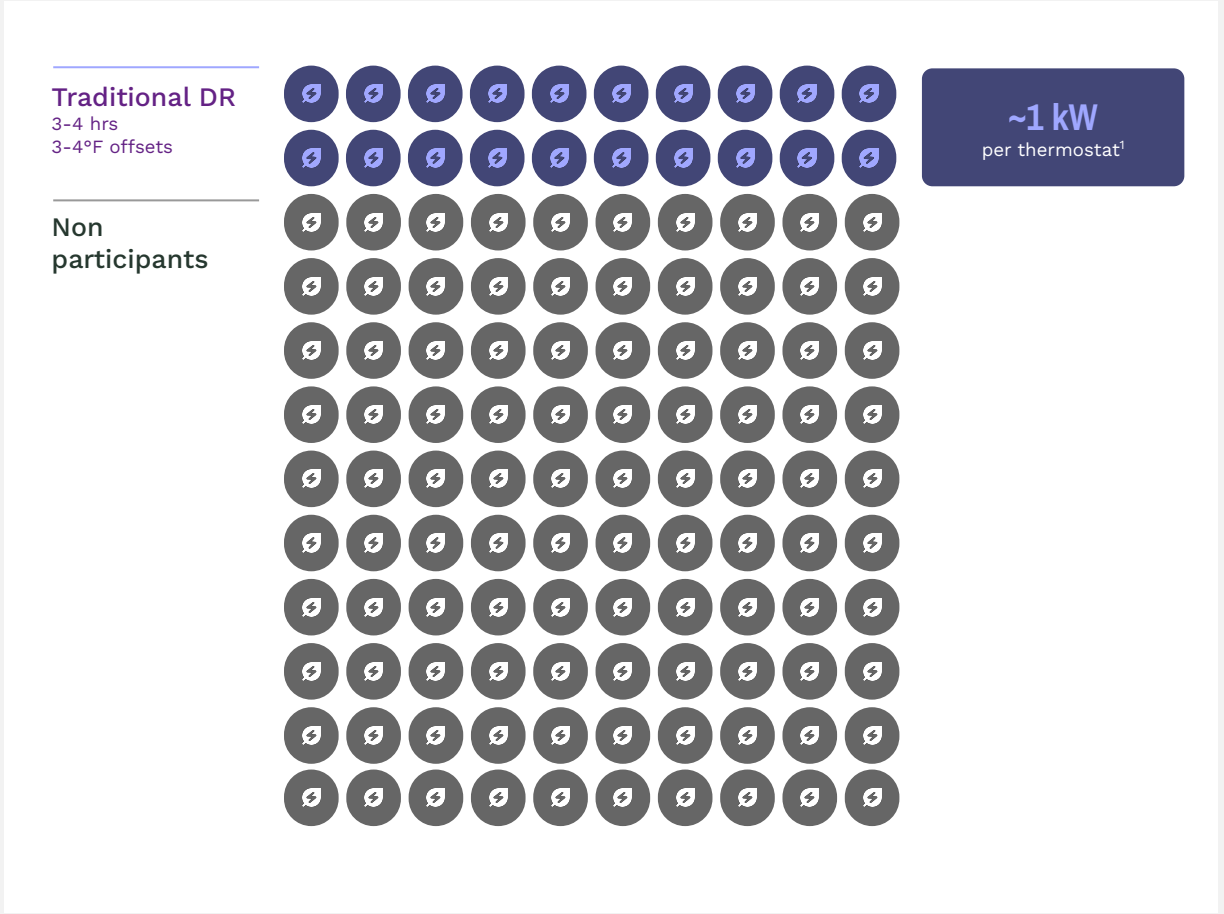
Traditional DR has served the industry well for the last decade



Duration	4 hour events	Frequency	15 events/season
Magnitude	± 4°F setback	Incentive	bill credits/rewards

1. *Smart Thermostats and the Future of VPPs.* (Renew Home, August 2024): Average summer peak savings across 10 utility programs evaluated in 2019 & 2020 studies conducted by Cadmus, Navigant, and state PUC filings.

Traditional DR programs have historically only reached customers willing to sacrifice comfort, and participation tends to decay in longer events.



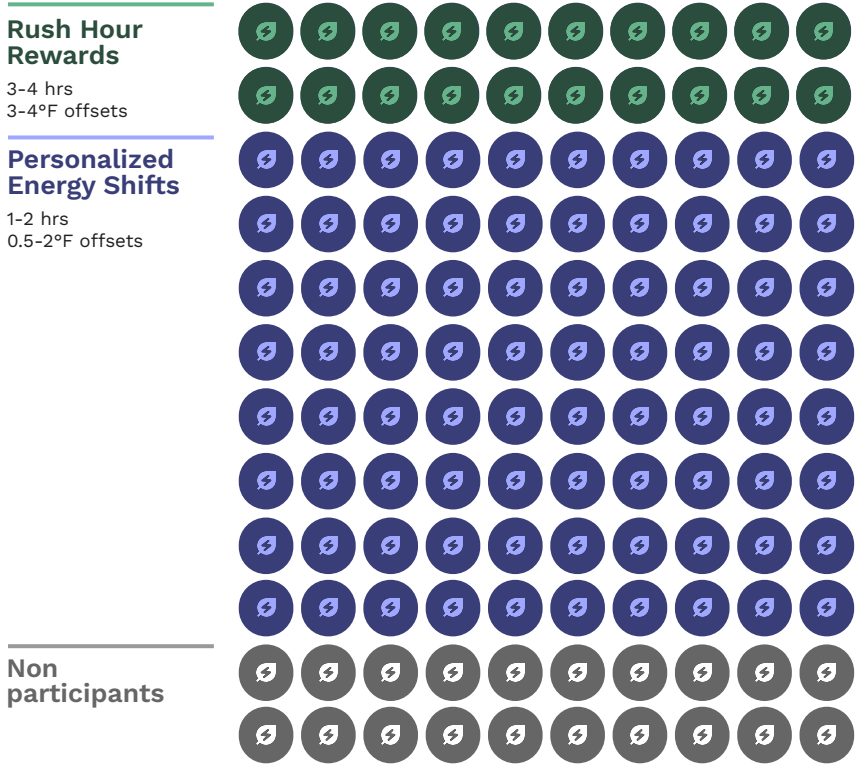
1. "2021-06-01 CECo Application and Testimony and Exhibits," Consumers Energy Company filing at the Michigan PSC. 1 June 2021. https://mi-psc.my.site.com/s/filing/a00t00000 0O8ypAAAR/u210800001

■ Participation at scale

We've successfully enrolled 1.5M+ devices in Rush Hour Rewards

↓

And, can now reach a separate and incremental pool of 6M+ devices and 4GW of load reduction with Energy Shift Capacity[1]



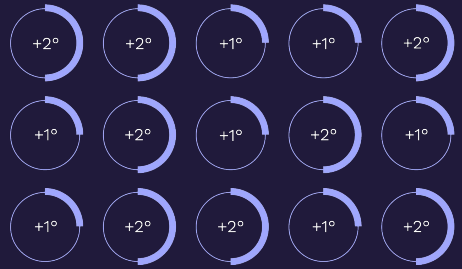
1. Renew Home Technical White Paper - Scaling Residential Demand Response by Prioritizing Comfort: Evidence from 25 Million Energy Shifts

Energy Shift Capacity

Typically, Energy Shifts occur based on an individual user's personalized attributes.

When this is coordinated to align with a utility's ideal timeframe (e.g., peak period) **- It becomes Energy Shift Capacity.**

Personalized adjustments



Based on personalization inputs

- User energy preferences
- Cleaner energy availability
- Energy rate plan
- Weather
- Grid needs

Typical event parameters

Magnitude	**Personalized, typically ±0.5-2°F setback**	Availability	**100 hrs / annually (year-round)**
Duration	**1-2 hrs recommended (3-4 hrs if needed)**	Notice	**Day Ahead** *(Winter '25)* **5-minutes** *(Summer '26)*
Enrollment	**Opt-Out**	Incentive	**not required**

Optimal M&V Approach

1 **Randomized Control Trials**

- The Gold Standard in statistical sampling
- Connected Thermostat impacts are highly weather dependent
- RCTs minimize negative program impacts & noise

Measure the impact

2 **Aggregated Anonymized Data**

- Verification at scale without the need to ask existing customers to reaffirm enrollment
- Can be verified with a sample of AMI data

Use big numbers

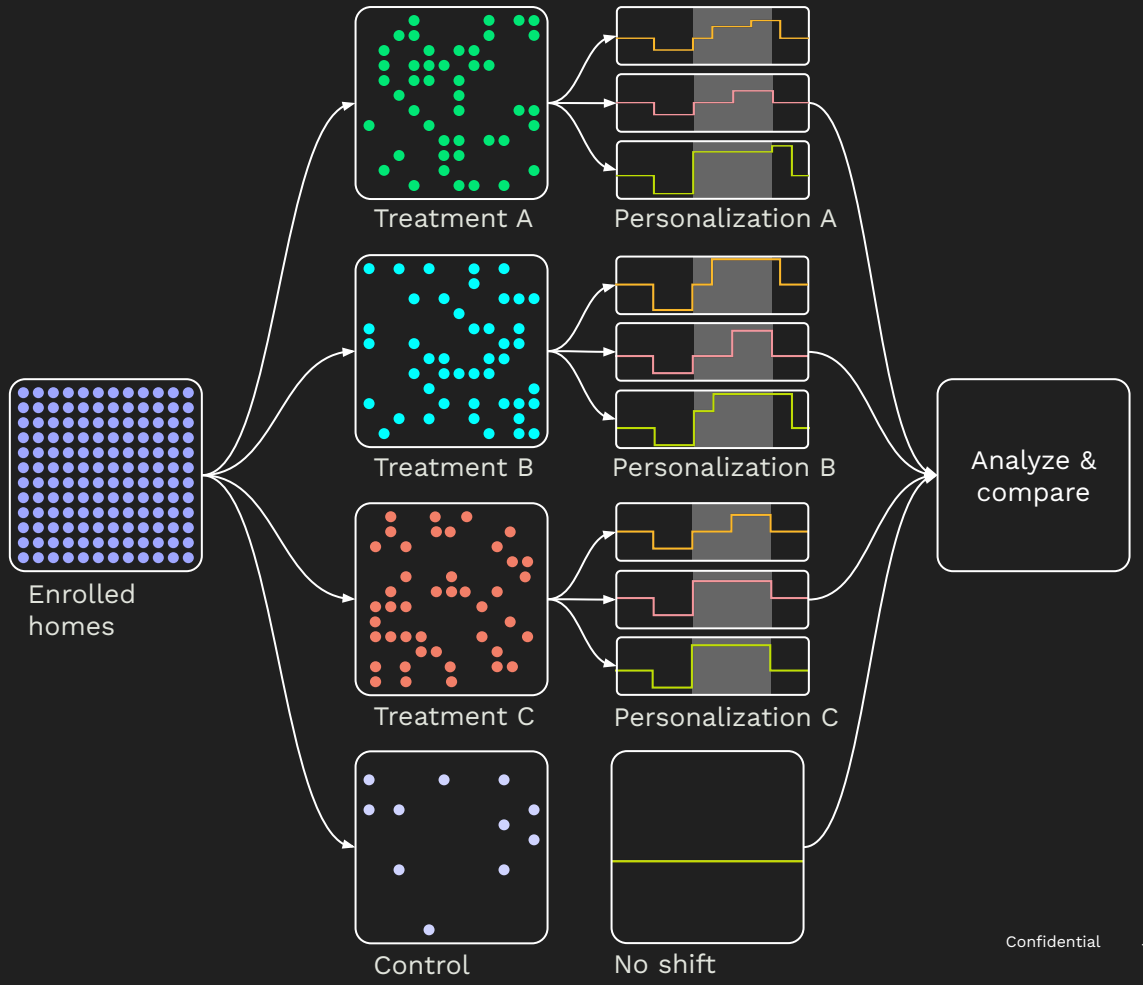
3 **Measure the Value of the Resource**

- Locational & Temporal value of the load that is shed
- Not all load reduction is equal
- Flexibility; doesn't need to be against a standard 4 hour window.
- Short, targeted dispatches can be more effective

How much is it worth?

Randomized Control Trials

- Built upon millions of homes opted-in to load shifting.
- Rapid learning from hundreds of variants.
- Randomized Control Trials provide causal proof of impact.



VPPs + EE can bring accelerated savings, control and comfort to customers.

Program Harmony

Cross-enrollments through “whole home” thinking can expand customer savings and grid relief opportunities.

Enhanced Comfort

Envelope measures firm up performance, ensuring shifts are less noticeable as the building holds temperature longer.

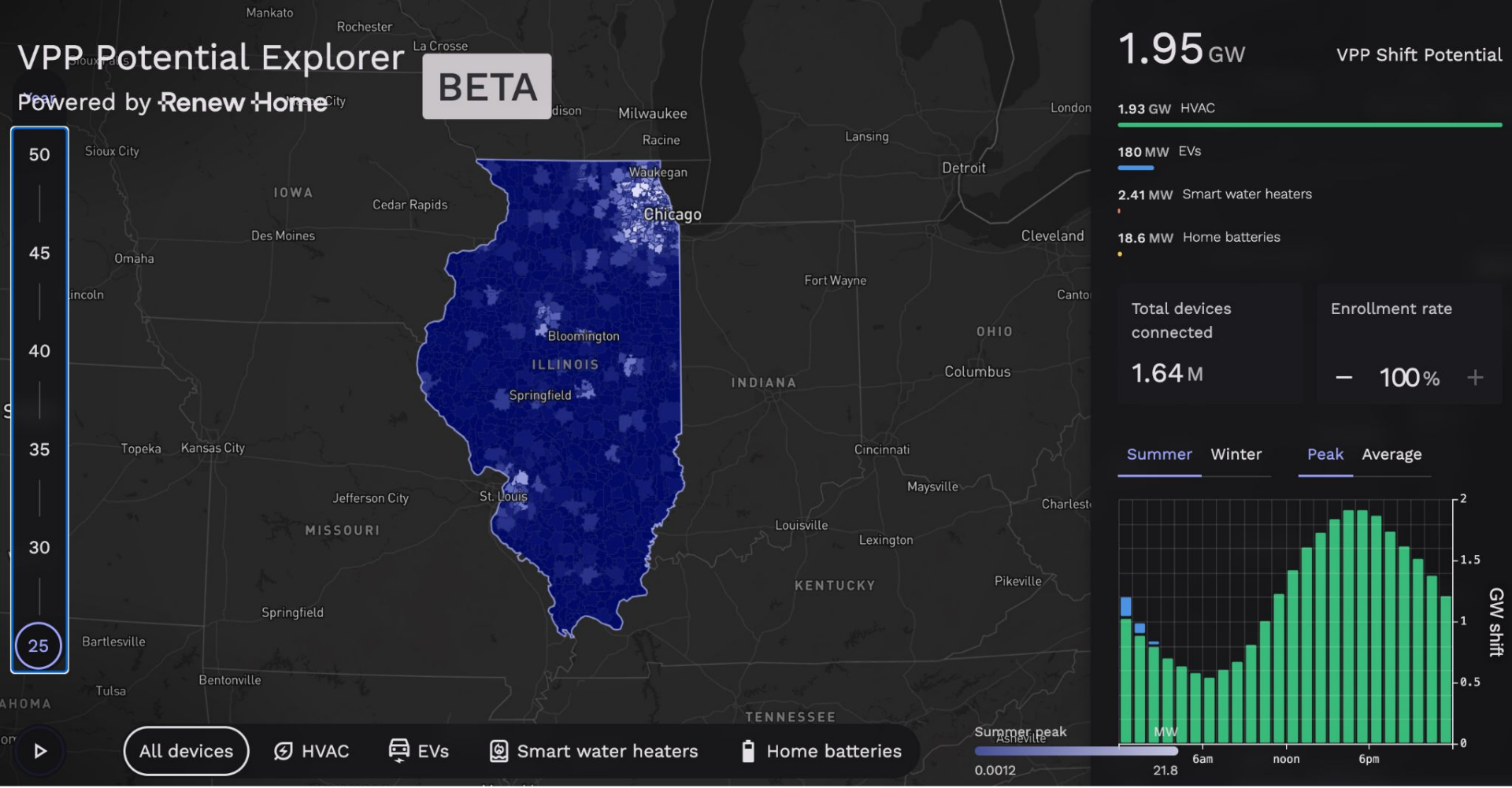
Avoided Cost Stack

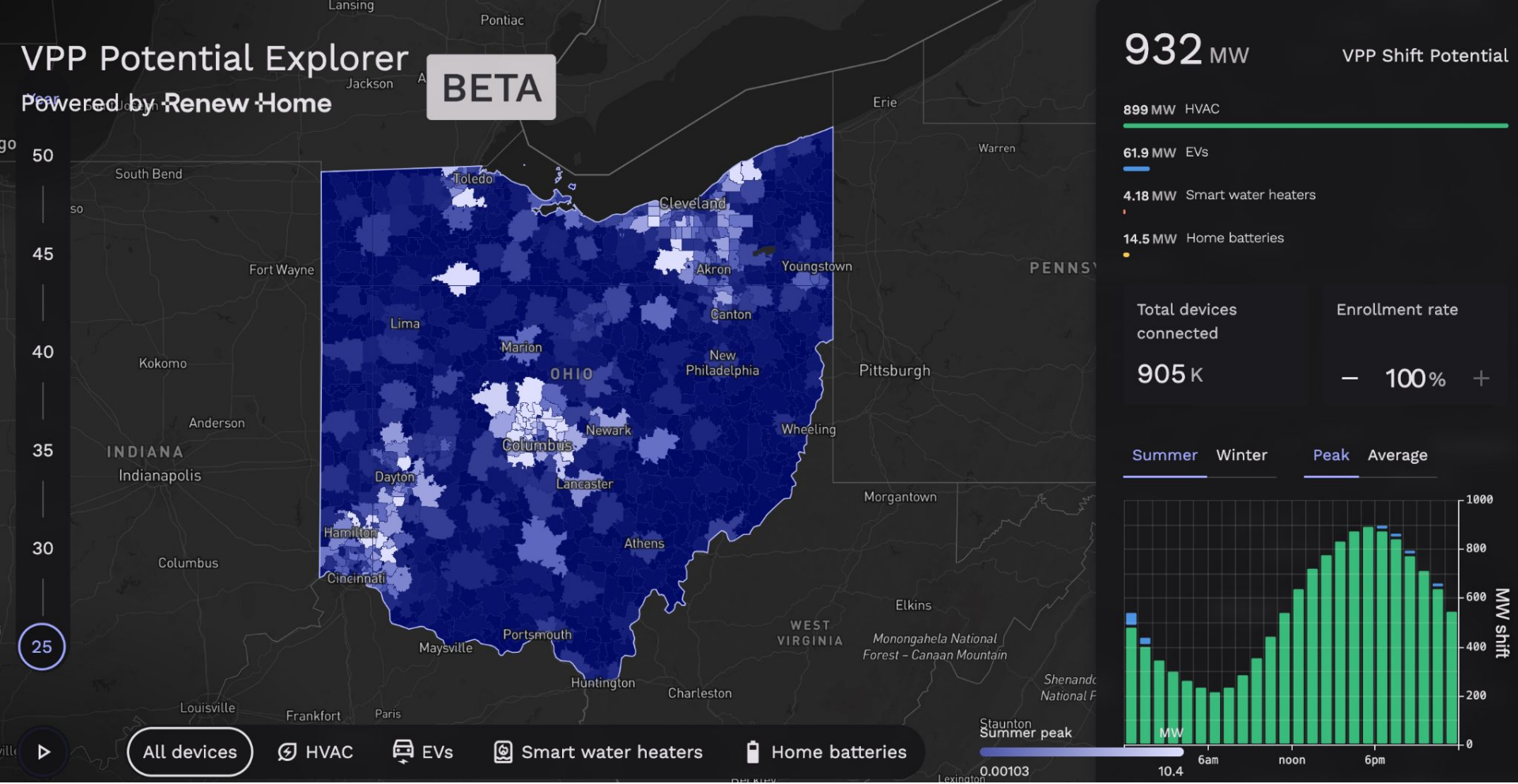
Combined focus increases equipment deferral and other locational grid solutions.

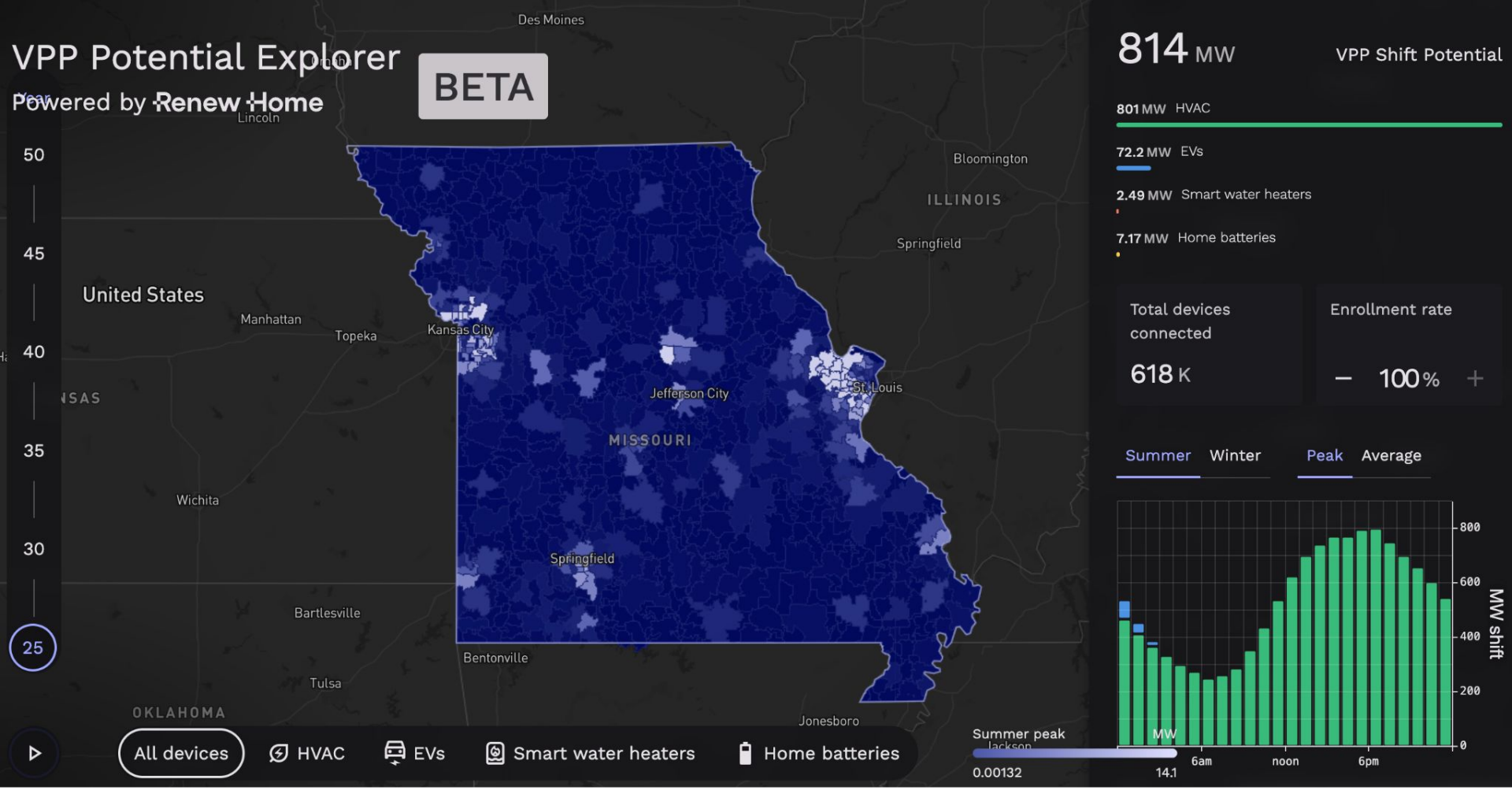
Carbon Intensity

Alignment whereby EE reduces total emissions, but VPPs can target the dirtiest hours.

Source: Renew Home US consumer research survey (Aug 2025)


VPP Potential Explorer
BETA
Powered by Renew Home
50
45
40
35
30
25
Mankato
Rochester
La Crosse
Milwaukee
Racine
Waukegan
Chicago
London
Lansing
Detroit
Cleveland
Fort Wayne
Sioux City
IOWA
Cedar Rapids
Des Moines
Omaha
Lincoln
Bloomington
ILLINOIS
Springfield
INDIANA
OHIO
Columbus
Cincinnati
Topeka
Kansas City
Jefferson City
St. Louis
MISSOURI
Maysville
Louisville
Lexington
KENTUCKY
Pikeville
Springfield
Bartlesville
Tulsa
Bentonville
TENNESSEE
Asheville
All devices
HVAC
EVs
Smart water heaters
Home batteries
Summer peak
0.0012
21.8
MW
6am
noon
6pm
2
1.5
1
0.5
0
GW shift
1.95 GW
VPP Shift Potential
1.93 GW HVAC
180 MW EVs
2.41 MW Smart water heaters
18.6 MW Home batteries
Total devices connected
1.64 M
Enrollment rate
100 %
Summer
Winter
Peak
Average


VPP Potential Explorer
Powered by Renew Home
BETA
932 MW
VPP Shift Potential
899 MW HVAC
61.9 MW EVs
4.18 MW Smart water heaters
14.5 MW Home batteries
Total devices connected
905 K
Enrollment rate
100 %
Summer
Winter
Peak
Average
MW shift
1000
800
600
400
200
0
MW
6am
noon
6pm
Summer peak
0.00103
10.4
50
45
40
35
30
25
All devices
HVAC
EVs
Smart water heaters
Home batteries
Lansing
Pontiac
Jackson
Erie
Warren
South Bend
Toledo
Cleveland
Fort Wayne
Akron
Youngstown
Lima
Canton
Marion
New Philadelphia
OHIO
Kokomo
Pittsburgh
Anderson
Newark
Wheeling
Columbus
INDIANA
Indianapolis
Dayton
Lancaster
Morgantown
Hamilton
Athens
Columbus
Cincinnati
Elkins
Portsmouth
WEST VIRGINIA
Monongahela National Forest – Canaan Mountain
Maysville
Huntington
Charleston
Louisville
Frankfort
Paris
Staunton
Lexington


VPP Potential Explorer
BETA
Powered by Renew Home
814 MW
VPP Shift Potential
801 MW HVAC
72.2 MW EVs
2.49 MW Smart water heaters
7.17 MW Home batteries
Total devices connected
618 K
Enrollment rate
100 %
Summer
Winter
Peak
Average
MW shift
Summer peak
0.00132
14.1
6am
noon
6pm
All devices
HVAC
EVs
Smart water heaters
Home batteries
Des Moines
Lincoln
Bloomington
ILLINOIS
Springfield
United States
Manhattan
Topeka
Kansas City
Jefferson City
St. Louis
MISSOURI
Wichita
Springfield
Bartlesville
Bentonville
Tulsa
OKLAHOMA
Jonesboro

There's Big Power in Small Changes

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