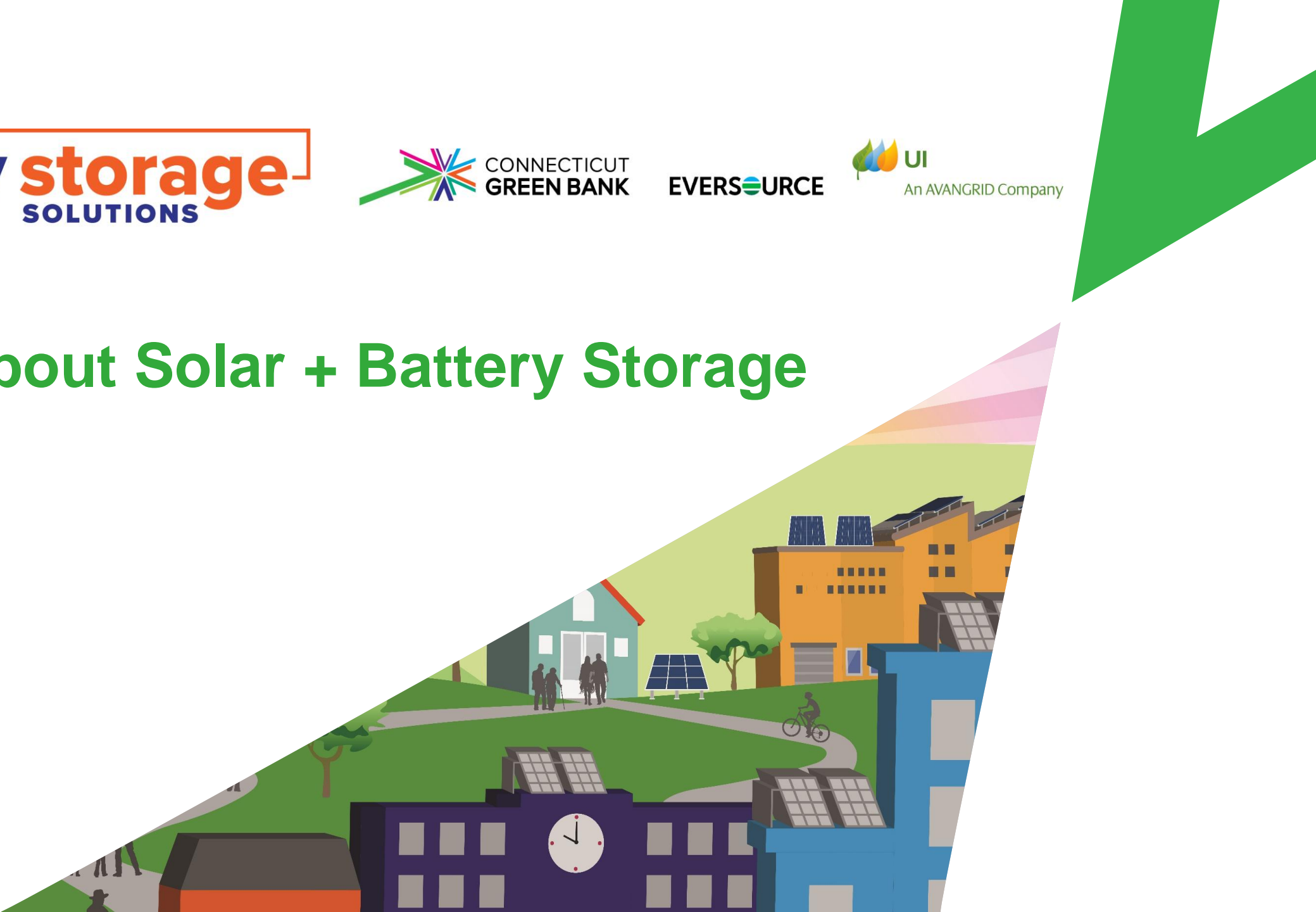




Learn about Solar + Battery Storage

3/26/2025



Agenda



- Batteries 101
- Why Does Connecticut Need Energy Storage?
- How Does Energy Storage Solutions Work?
- Questions



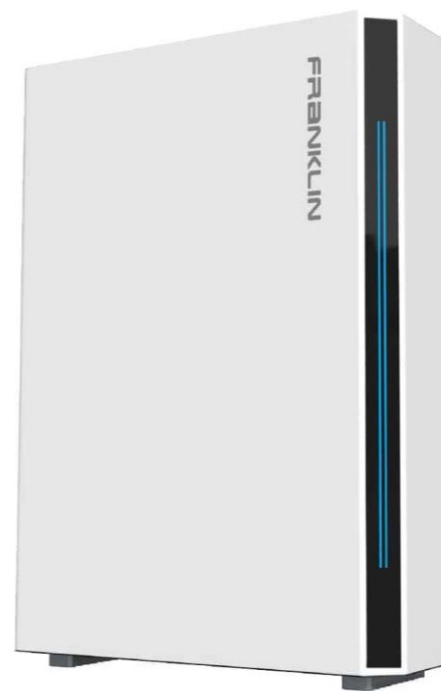
Before we begin...



What are Home Batteries?

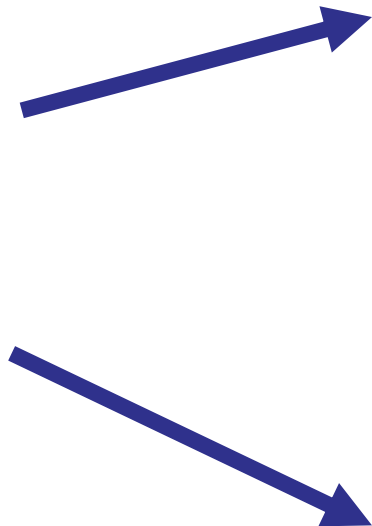


Refrigerator for approximate size comparison



All batteries shown have a capacity of about 12-18 hours of home backup. Additional electrical equipment not shown.

Why Batteries?



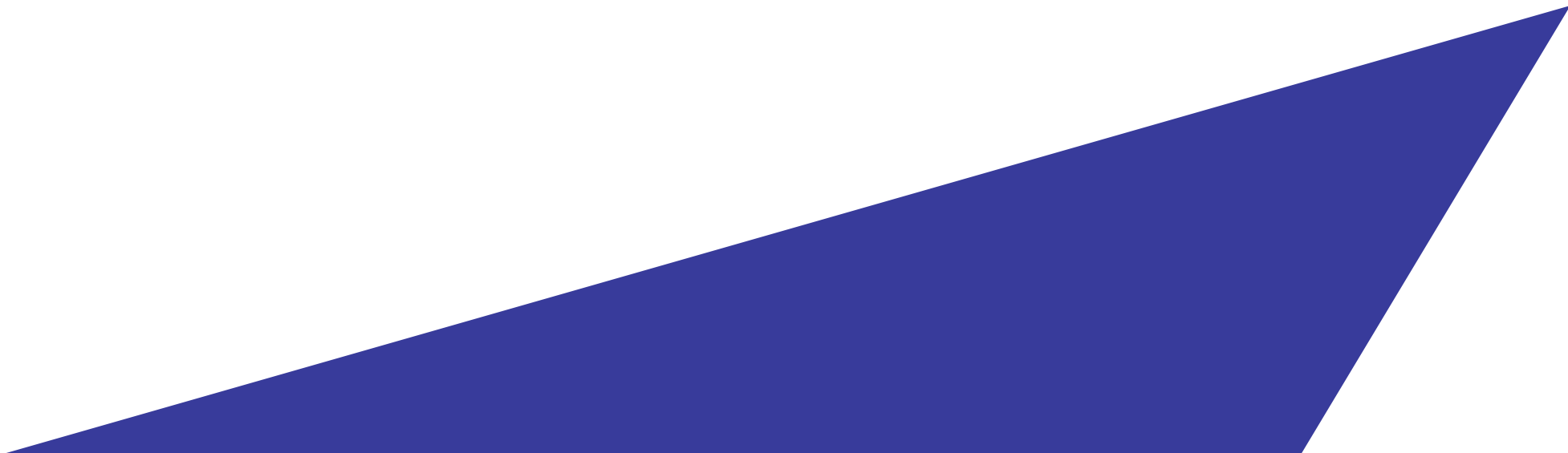
Smooth out peak demand for the grid



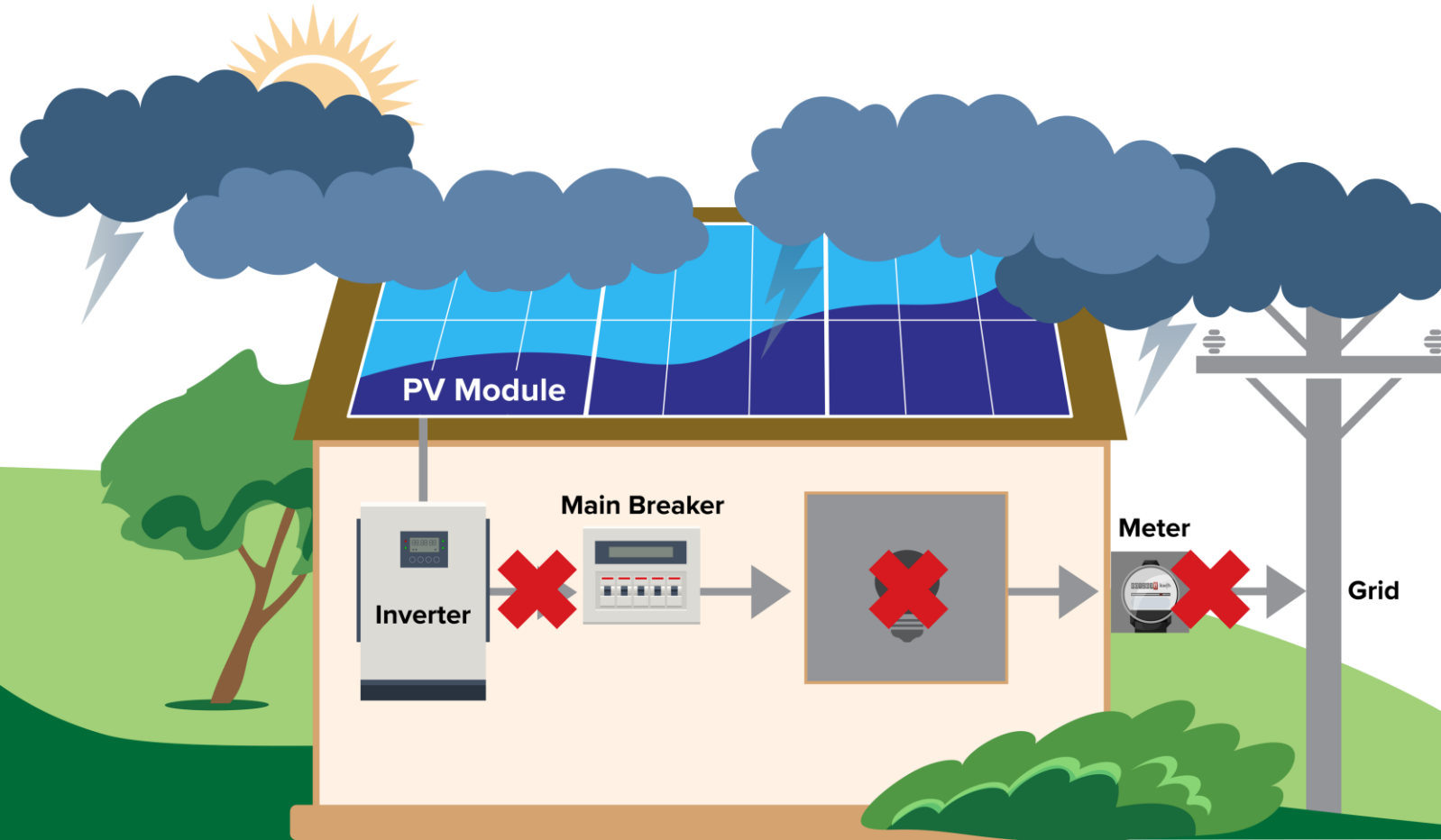
Provide on-site backup power when needed



Batteries 101



Solar Panels Turn off During a Power Outage

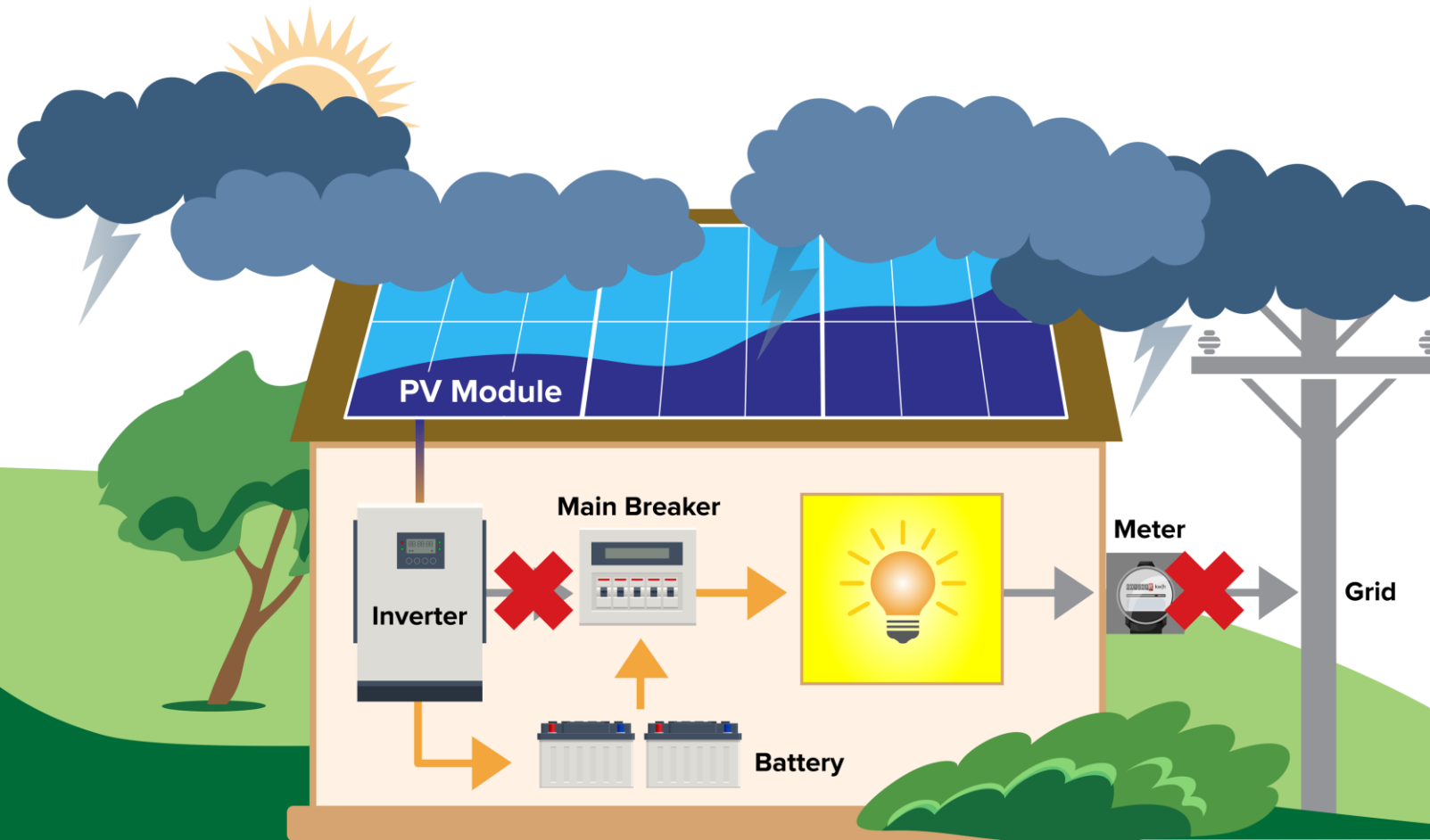


Solar panels are not designed to power your home when the grid goes down! This is for two reasons:

1. It is dangerous for your solar panels to put electricity on the grid when line workers may be fixing power lines.
2. The power output from solar panels isn't steady enough to reliably run everything in your home (clouds, tree shading, etc.)

Solar + Home Batteries Stay Connected

You can charge your home battery using your solar panels, safely disconnect from the grid during a power outage, and run your home on battery power for several hours... and recharge using the sun!



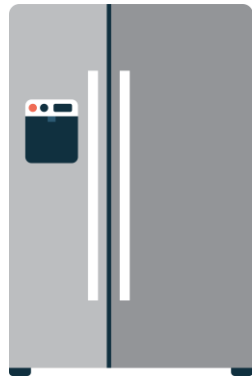
When the grid goes down in a power outage, the solar panels and battery will automatically switch over to backup mode – no action needed from you!

What Can Home Batteries Power?

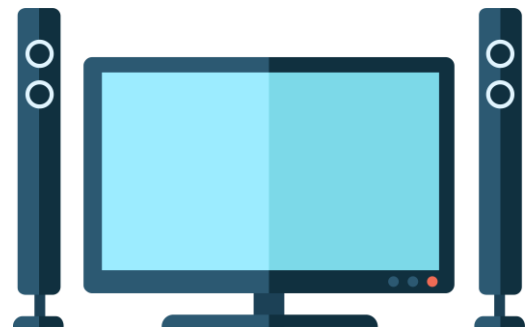
Essentials



Low Demand



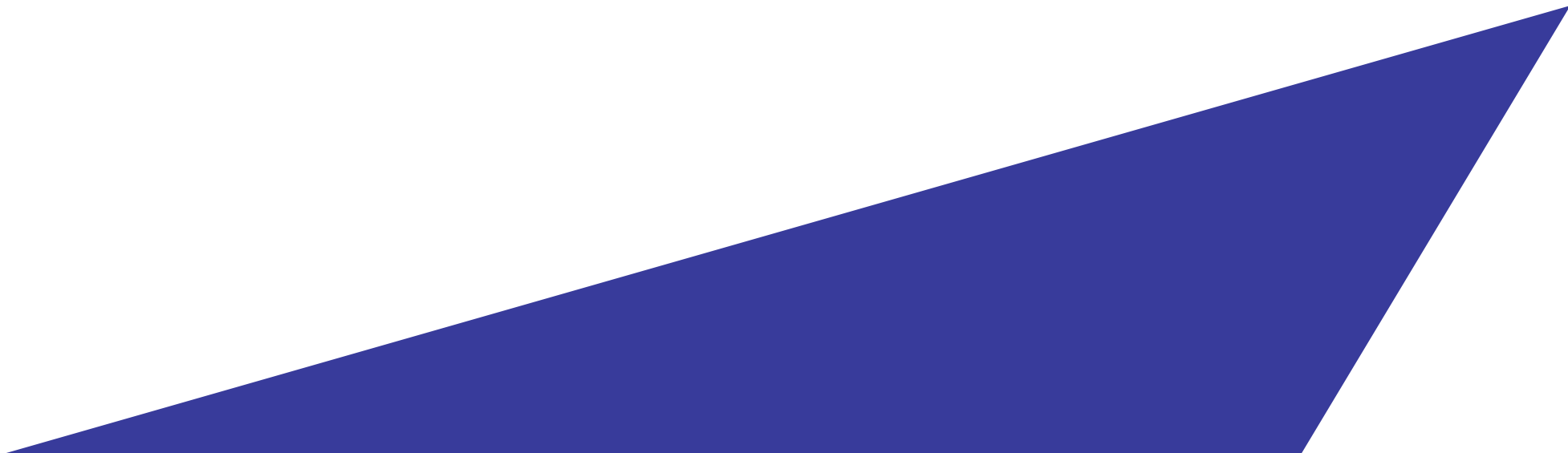
High Demand



Nice to Have

*Assuming 8 kW / 18 kWh

How Will Your Battery Perform in Energy Storage Solutions?



Eligible Equipment

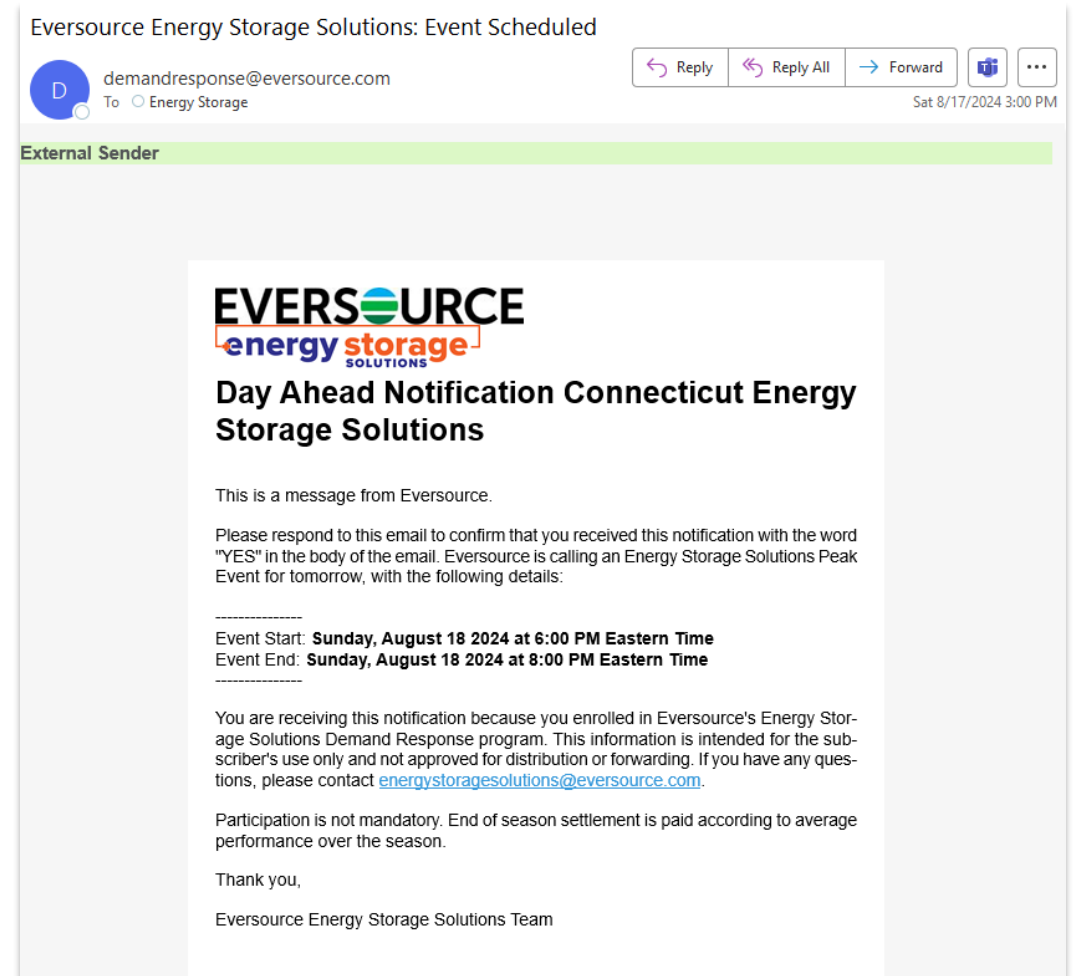
- ✓ Briggs & Stratton
- ✓ Cadenza Innovation
- ✓ EndurEnergy Systems
- ✓ Enphase Energy
- ✓ Fortress Power
- ✓ FranklinWH
- ✓ Generac PWRcell
- ✓ Homegrid Energy
- ✓ Panasonic
- ✓ PylonTech
- ✓ Qcells
- ✓ SolarEdge
- ✓ StackRack Battery Systems
- ✓ Tesla (Active Dispatch only)

Passive Dispatch – Upfront Incentives

- If you received an Upfront Incentive (most customers do), your battery will be pre-programmed to discharge its energy on **weekdays** in **June, July, and August** (except for Juneteenth and the Fourth of July)
- “Set it and forget it!” ensures batteries will help offset peak demand without additional input.

Active Dispatch – Performance Incentives

- If the utility predicts the peak will occur at a different time – **any time in June, July, August, or September**, your battery will switch to dispatch during that time frame and **earn an additional performance incentive.**
- Active Events are called 24 hours in advance and override Passive Events
- Customers are notified by email
- Active Events are optional – you can opt-out using your battery's app or website

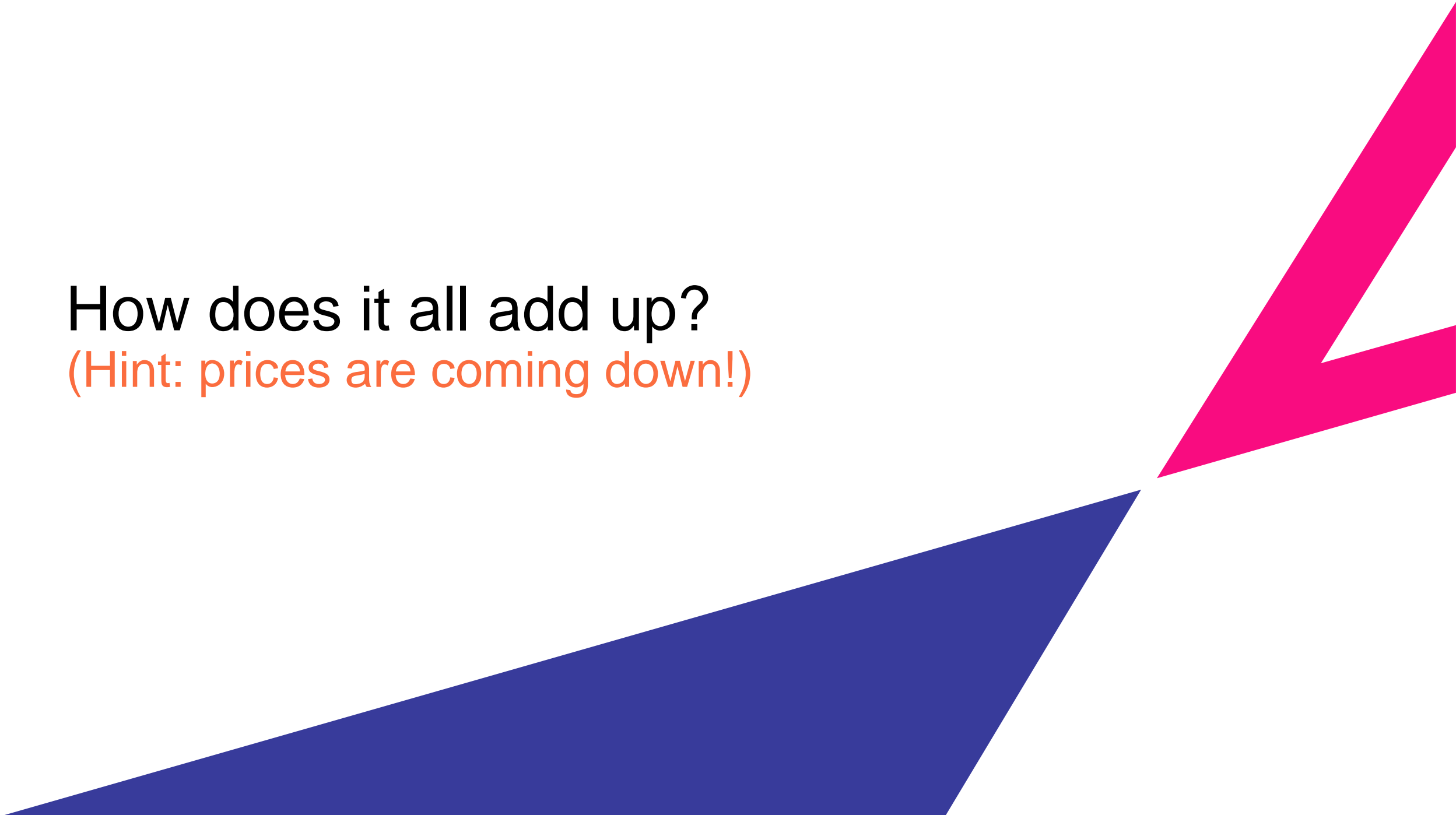


What about Outages?

- Many battery systems have software that prevents discharge when major weather events are predicted by NWS:
 - **Storm Guard** (Enphase)
 - **Storm Hedge** (Franklin WH)
 - **Outage Guard** (Generac)
- The utility will cancel any planned events
- No dispatch in April, May, or October
- Typically 2-3 events called between November to March



How does it all add up?
(Hint: prices are coming down!)





Standard Rate Example

Average system size:	10.3 kW / 23.4 kWh
Cost before incentives:	\$29,887
Upfront Rebate:	(\$5,850) / (\$8,775)*
30% Federal Tax Credit:	(\$7,211) / (\$6,334)
10 Years of Performance Incentives:	(\$8,062) (estimated)

Net Cost of Backup Power: \$8,764 or \$6,716*

Talk to an Eligible Contractor to see what you qualify for!

* indicates Grid-Edge. See map for more information
Source: Energy Storage Solutions residential project data



Underserved Rate Example

Average system size:	10.3 kW / 23.4 kWh
Cost before incentives:	\$29,887
Upfront Rebate:	(\$10,530) / (\$14,944)*
30% Federal Tax Credit:	(\$5,807) / (\$4,483)
10 Years of Performance Incentives:	(\$8,062) (estimated)

Net Cost of Backup Power: \$5,448 or \$2,399*

Talk to an Eligible Contractor to see what you qualify for!

* indicates Grid-Edge. See map for more information

Source: [Energy Storage Solutions residential project data](#)



Underserved Rate Example

Average system size:	10.3 kW / 23.4 kWh
Cost before incentives:	\$29,887
Upfront Rebate:	(\$14,040) / (\$14,944)*
30% Federal Tax Credit:	(\$4,754) / (\$4,483)
10 Years of Performance Incentives:	(\$8,062) (estimated)

Net Cost of Backup Power: \$3,031 or \$2,399*

Talk to an Eligible Contractor to see what you qualify for!

* indicates Grid-Edge customer. See map for more information
Source: [Energy Storage Solutions residential project data](#)

Get Started



www.energystorageCT.com

- Learn about the Program
- Explore program data
- Find an Eligible Contractor
- Is your preferred contractor not on the list? Email us at energystorage@ctgreenbank.com

Questions?



Home Batteries vs Generators - Benefits

Low cost

Portable

**Professional
installation for home
backup**



Silent

No fuel or emissions

**Store and use your
solar energy**

On standby



High output

Mid-range price

Plumbed fuel supply

On standby



Incentives available

Home Batteries vs Generators - Drawbacks

Buy / transport fuel

Loud / Dangerous emissions

Requires maintenance

Low output

Not on standby

No incentives



Upfront cost

Professional installation

Interconnection and permitting

Not portable



Fuel supply / cost

Professional installation

Permitting

Requires maintenance

Not portable

No incentives

