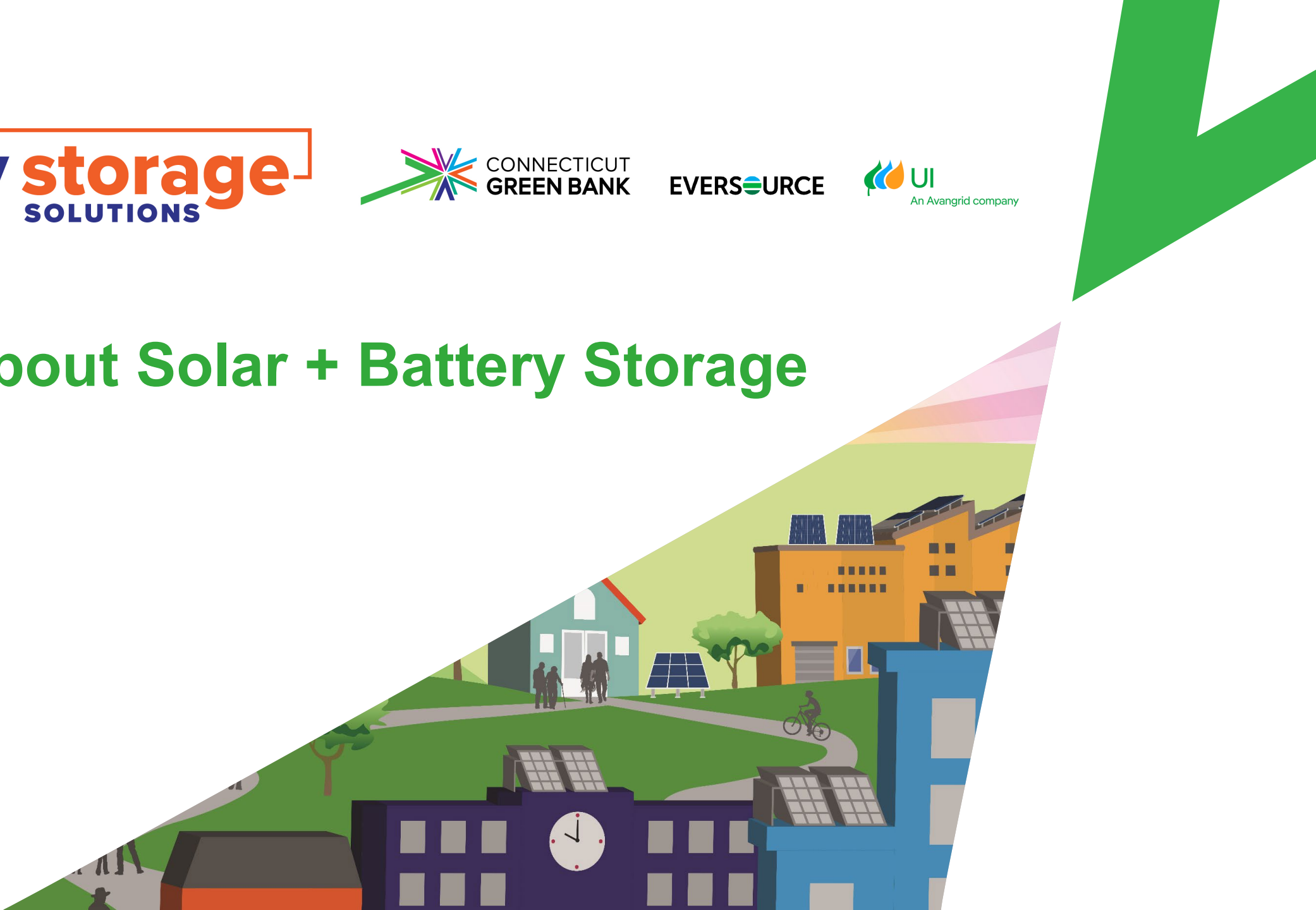




Learn about Solar + Battery Storage

11/20/2024



Agenda



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



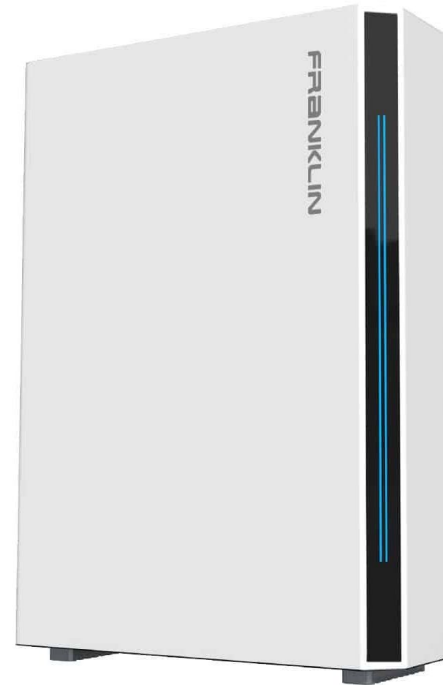
Before we begin...



What are Home Batteries?



Refrigerator for approximate size comparison

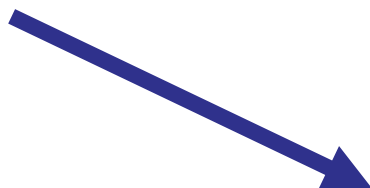


All batteries shown have a capacity of about 12-18 hours of home backup. Additional electrical equipment not shown.

Why Batteries?



**Smooth out peak
demand for the grid**



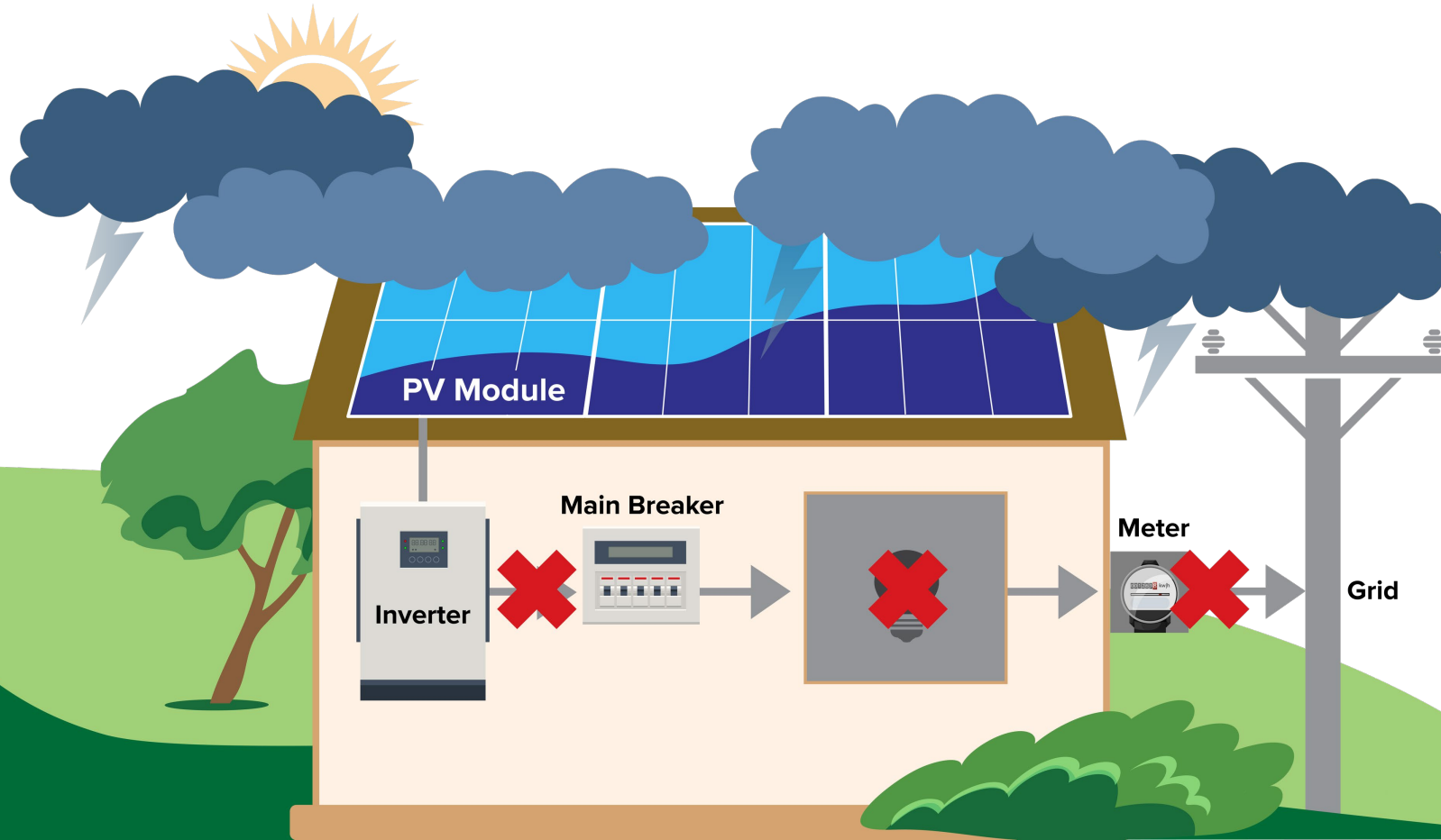
**Provide on-site
backup power when
needed**



Batteries 101



Solar Panels Turn off During a Power Outage

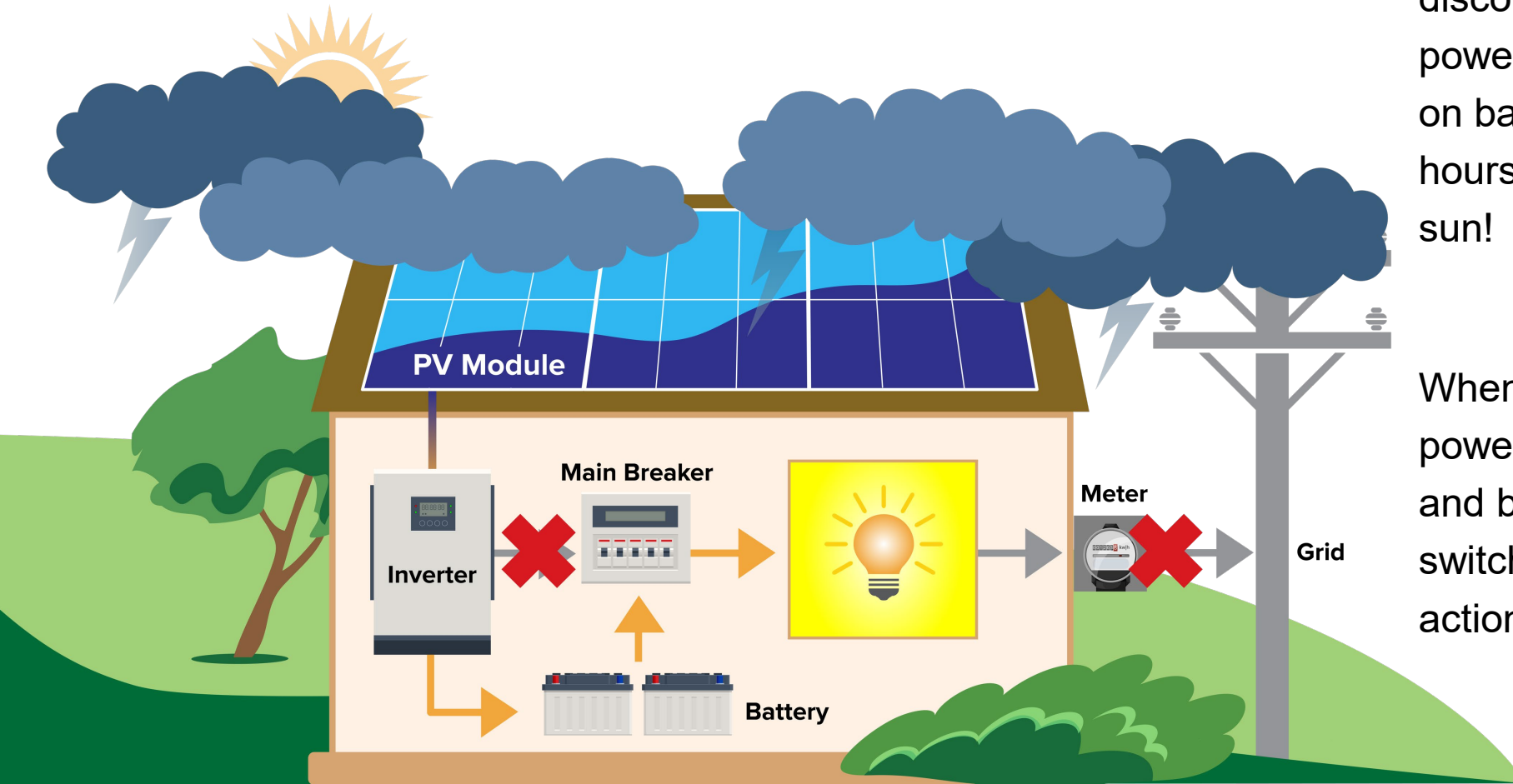


Solar panels are not designed to power your home when the grid goes down! This is for two reasons:

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

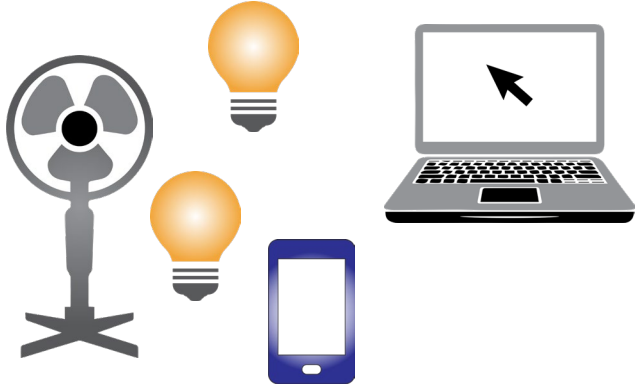
You can charge your home battery using your solar panels, safely disconnect from the grid during a power outage, and run your home on battery power for several hours... and recharge using the sun!



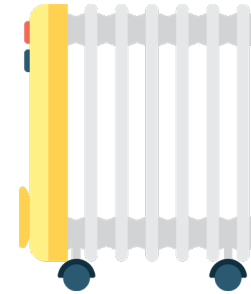
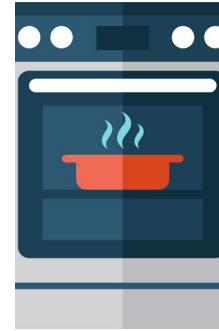
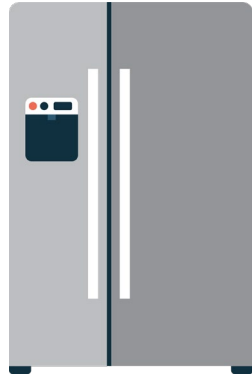
When the grid goes down in a power outage, the solar panels and battery will automatically switch over to backup mode – no action needed from you!

What Can Home Batteries Power?

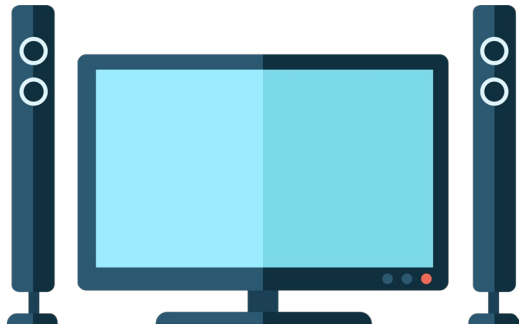
Essentials



Low Demand



High Demand



Nice to Have

*Assuming 8 kW / 18 kWh

How Will Your Battery Perform in Energy Storage Solutions?



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

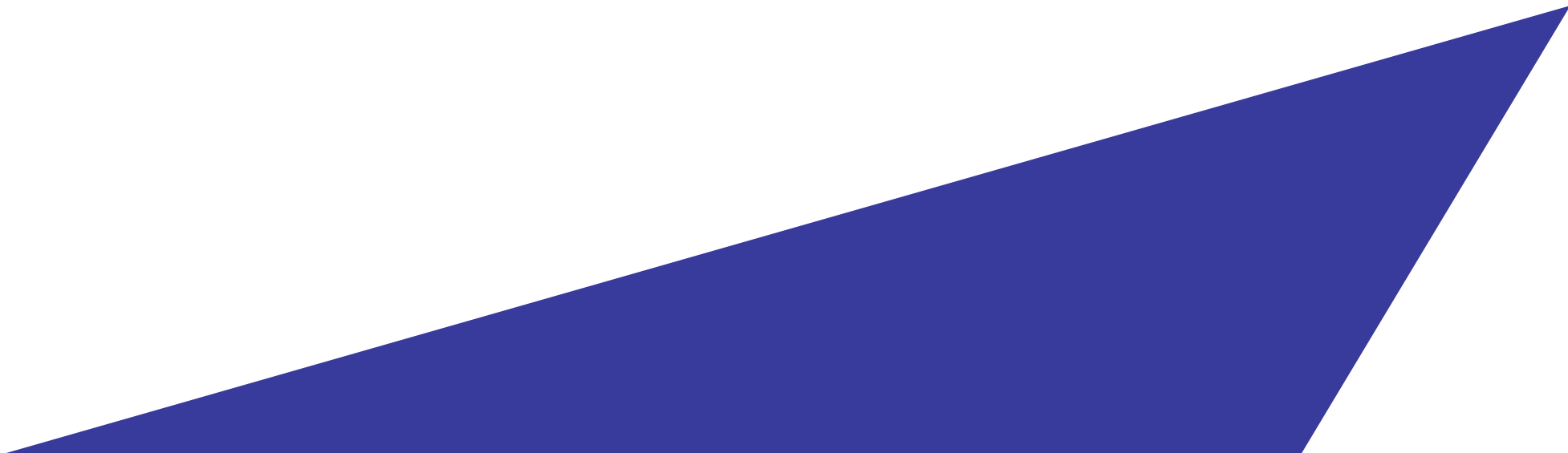
- If the utility predicts the peak will occur at a different time – **any time in June, July, August, or September**, your battery will switch to dispatch during that time frame and **earn an additional performance incentive**.
- All residential Energy Storage Solutions customers are eligible for Active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

What about Outages?

- Your electric utility will cancel any planned events when a severe weather event can potentially cause outages
- Most batteries have software that prevents discharge when major weather events are predicted by NWS:
 - Storm Guard** (Enphase)
 - Storm Hedge** (Franklin WH)
 - Outage Guard** (Generac)



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)
30% Federal Tax Credit ¹ :	(\$7,211)
10 Years of Performance Incentives:	(\$8,062) (estimated)

**10-Year Net Cost of Backup Power
as low as **\$8,764** (**\$6,716** for Grid-Edge²)**

Talk to an eligible contractor to see what you qualify for!

¹ Consult a qualified accountant to see if you qualify for the Federal Investment Tax Credit (ITC)

² See Grid-Edge map for more information

Source: [Energy Storage Solutions residential project data](#) November 2024



Underserved Rate Example

Average system size:	10.3 kW / 23.4 kWh
Cost before incentives:	\$29,887
Upfront Rebate:	(\$10,530)
30% Federal Tax Credit ¹ :	(\$5,807)
10 Years of Performance Incentives:	(\$8,062) (estimated)

**10-Year Net Cost of Backup Power
as low as \$5,448 (\$2,399 for Grid-Edge²)**

Talk to an eligible contractor to see what you qualify for!

¹ Consult a qualified accountant to see if you qualify for the Federal Investment Tax Credit (ITC)

² See Grid-Edge map for more information

Source: [Energy Storage Solutions residential project data](#) November 2024



Low-Income Rate Example

Average system size:	10.3 kW / 23.4 kWh
Cost before incentives:	\$29,887
Upfront Rebate:	(\$14,040)
30% Federal Tax Credit ¹ :	(\$4,754)
10 Years of Performance Incentives:	(\$8,062) (estimated)

**10-Year Net Cost of Backup Power
as low as **\$3,031** (**\$2,399** for Grid-Edge²)**

Talk to an eligible contractor to see what you qualify for!

¹ Consult a qualified accountant to see if you qualify for the Federal Investment Tax Credit (ITC)

² See Grid-Edge map for more information

Source: [Energy Storage Solutions residential project data](#) November 2024



Just like with solar panels, lease options are available!

- Good for customers who can't utilize the Federal tax credit
- Simplify incentives and bundle into one monthly price
- Talk to your contractor about your payment options!

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?

