

An aerial photograph of a residential neighborhood featuring a prominent, winding canal. The houses are densely packed, with many having swimming pools and lush green lawns. The canal is dark and reflects the surrounding greenery and buildings. The overall scene is bright and sunny, suggesting a clear day.

SUNRUN®

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Chief Policy Officer

NECPUC 2019

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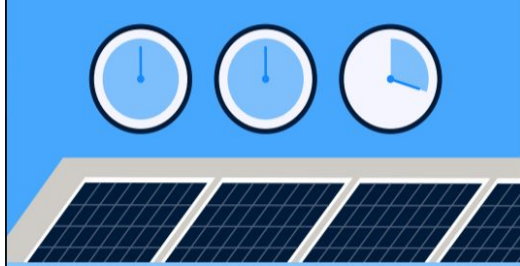
# Sunrun

The national leader in solar, storage, & home energy management.

23 states + DC & Puerto Rico

Active in policy throughout country.

More than a quarter million customers nationwide



On average, every  
**2.3 minutes**  
a new system is installed



Sunrun customers have saved over  
**\$300 million**  
on electricity bills



And produced  
**5 billion**  
kWh of clean energy

More than  
**5,000**



Brightbox home batteries  
are providing back up power  
during outages.

The solar  
installer is  
the fastest  
growing job  
in America.

Sunrun alone has  
created more than  
**4,000**  
jobs & thousands more  
through our partners.



# Brightbox: Product and Markets



Back-Up Power  
(Island during Outage)

Grid Services  
(Capacity, Voltage,  
Active/Passive)

Bill Management  
(TOU, CPP, Hourly)

Energy Self-Supply

## Brightbox solves for market and customer needs:

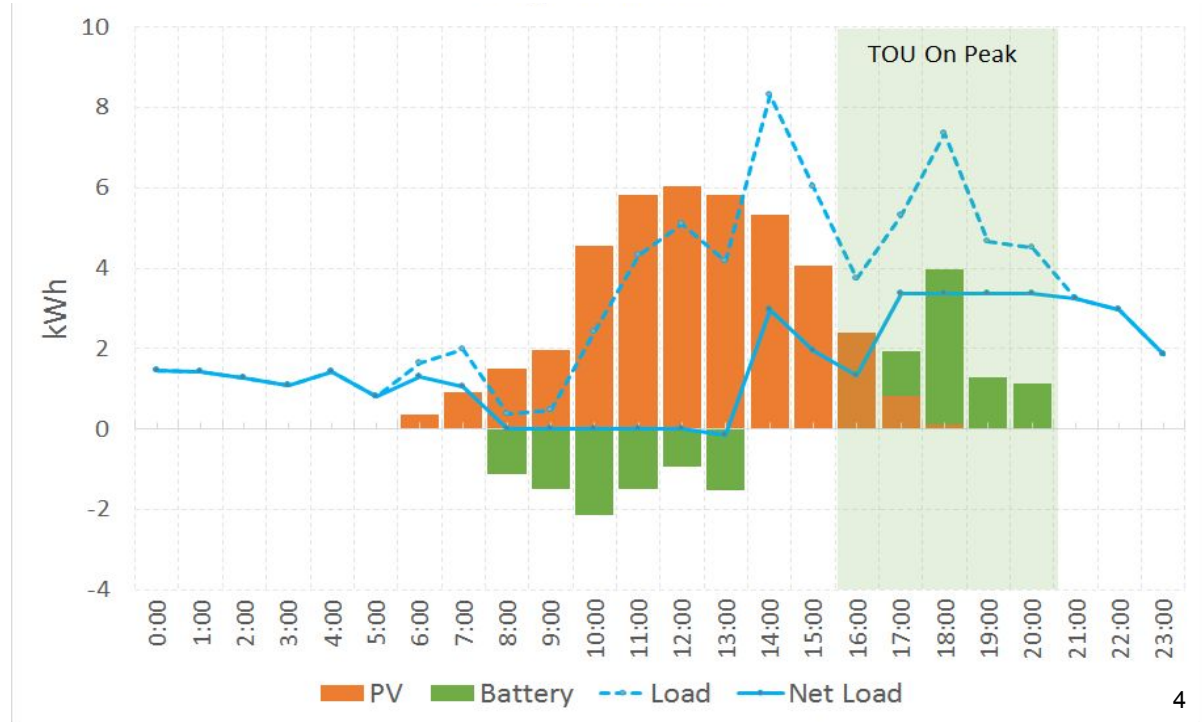
- HI: Backup Power and Solar Self Supply
- CA: Backup Power, TOU Bill Management, Grid Services
- AZ: Backup Power, TOU Bill Management
- NY: Backup Power, Grid Services
- MA: Backup Power, Grid Services
- FL: Backup Power
- Puerto Rico: Backup Power

Brightbox meets customer needs and grid needs to provide lowest cost solution.

# Brightbox = Time Shifted Solar

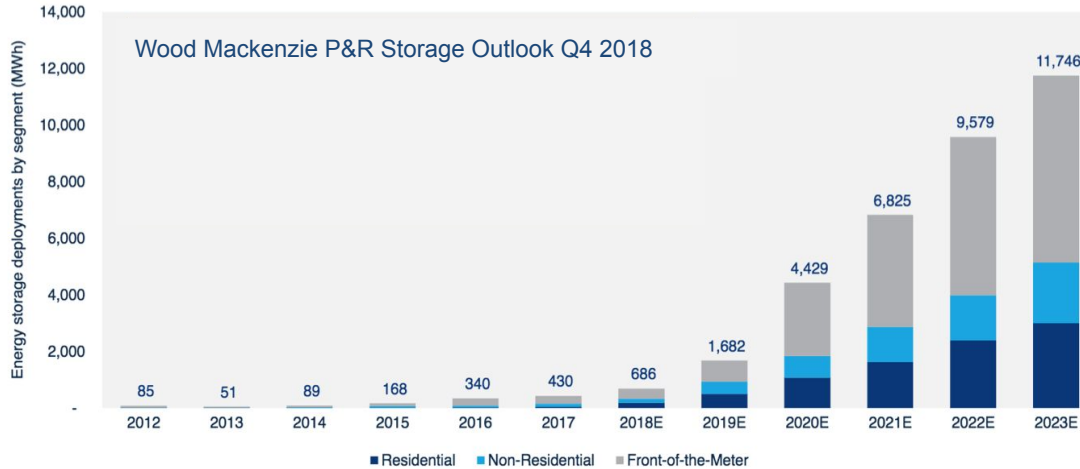
## Illustrative Residential Solar+Storage & Load Curve

Brightbox managing residential load shift in CA - managed for TOU, to minimize midday solar exports, and to flatten evening load - with flexibility for DR or other targeted shift, while maintaining charge for backup



# Resi solar + storage is rapidly scaling. Customers demand it.

U.S. energy storage annual deployment forecast, 2012-2023E (MWh)



Continued rapid growth in residential storage means new planning, operational, and customer experience opportunities.

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It also means rapidly scaling grid value potential.

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- ❑ Residential storage market up 198% on average YOY between 2012-2018
- ❑ Market to **triple** in annual deployment between 2019-2020 and then again between 2020-2023. Residential storage accounts for a **quarter** of the market, reaching ~1 GWh annually by 2020 and ~2 GWh annually by 2022.

**Let's harness this potential**

# What do we do with all of these home batteries & solar?

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## Wholesale: e.g., ISO-NE

- 20 MW bid won in 2019 Forward Capacity Auction
- Spread through number of New England states & ~5,000 homes
- First in nation
- Still providing backup power!

## Retail: e.g., BYOD

- Bring Your Own Device
- Utility program reducing wholesale or utility costs
- MA, VT, NH, NY
- Low risk, pay for performance
- Still providing backup power!

## Utility: e.g., Aggregation Contract

- Virtual Power Plant Procurement
- NWA - locational
- Peaker replacement
- Low-income/multifamily
- Still providing backup power!



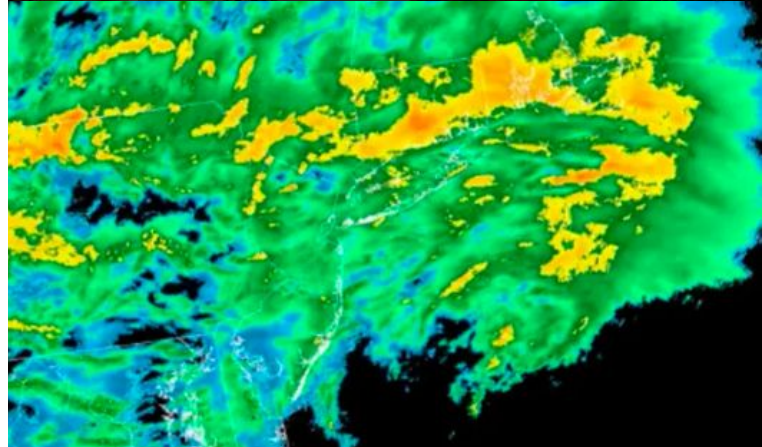
# Rising to the Challenge

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## Utility Business Model Undergoing Stress Test

- Increasing demand for DERs
- Puerto Rico - extreme example of broken utility model
- PG & E wildfires - climate threat
- Los Angeles gas peaker replacement
- Increasing awareness by customers and political leaders for sustainable climate solutions

*Let's partner for a cleaner, more resilient, less expensive grid.*



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# New England's Leadership

- ISO-NE leading the nation
- Bedrock state policy
  - NEM
  - BYOD
  - Clean Peak
- Resiliency Value
- Resi PV the platform for Electrify Everything





Thank You.