



**sunnova™**

# **Grid Services Overview**





# Who We Are

Sunnova is a leader in residential solar, battery storage, energy management and system protection services. With an industry-leading network of local installation partners and best in class hardware suppliers, Sunnova provides exceptional services with more options to more customers in more markets, powering energy independence for those looking for clean, affordable, and reliable energy.



**207K+**  
CUSTOMERS



**19%**  
BATTERY  
ATTACHMENT RATE  
\* in Q4 2021



**915**  
DEALERS &  
SUB-DEALERS &  
NEW HOME  
INSTALLERS



Founded  
in 2012



Publicly traded  
on NYSE



High-credit,  
quality customers



Experienced  
dealer network



Comprehensive  
service offerings

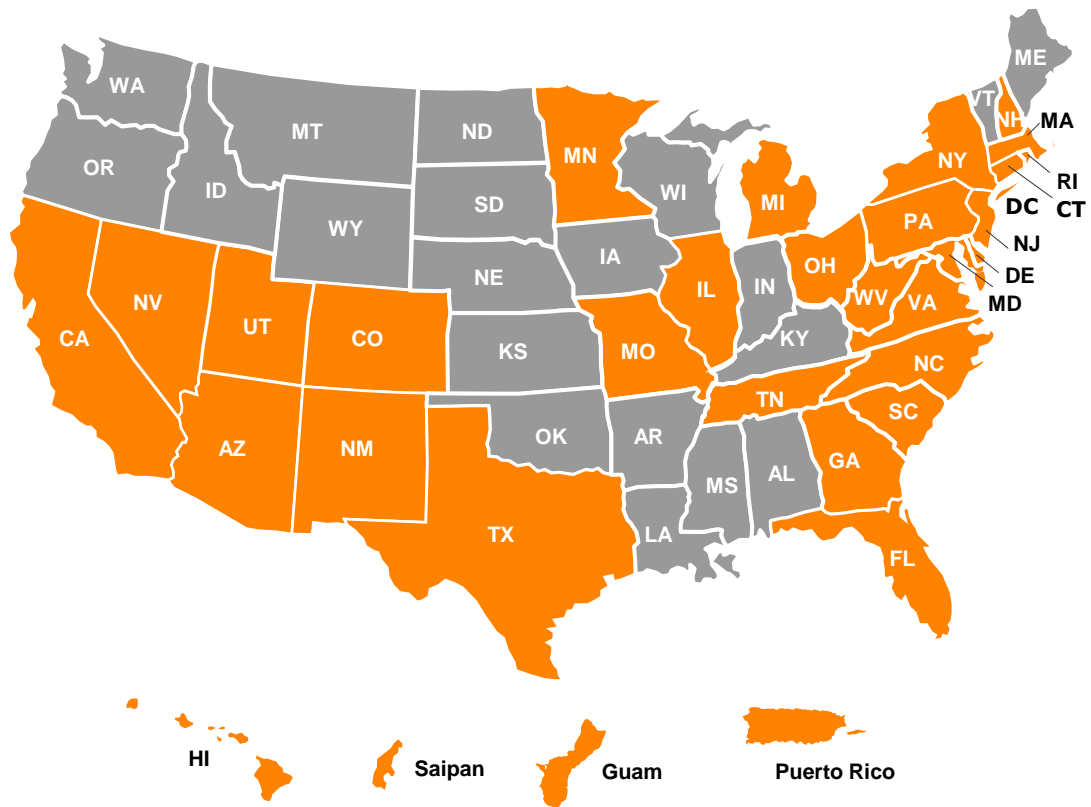


Monitoring and  
maintenance  
services

Our growing fleet of customers across the country creates a unique capability for Grid Services which can benefit both load serving entities and ultimately the ratepayer.

# By the Numbers

*Sunnova has the broadest footprint of solar services providers. We currently are in all high value solar markets and are pursuing full national coverage with our continued expansion through 2022.*



## Sunnova Facts



Founded  
**2012**

Public on NYSE  
**2019**

Customers\*  
**207K+**

Markets  
**33**

Dealers, Sub-dealers & New Homes  
Installers\*  
**915+**

Employees\*  
**785+**

As of 3/31/2022



# A Superior Customer Experience

Sunnova's partnership with dealers drives long-term customer relationships.



Customer Acquisition



Design & Installation



Monitoring



Service

**Dealers:** adhere to Sunnova's underwriting criteria, strict consumer compliance standards, and installation framework.

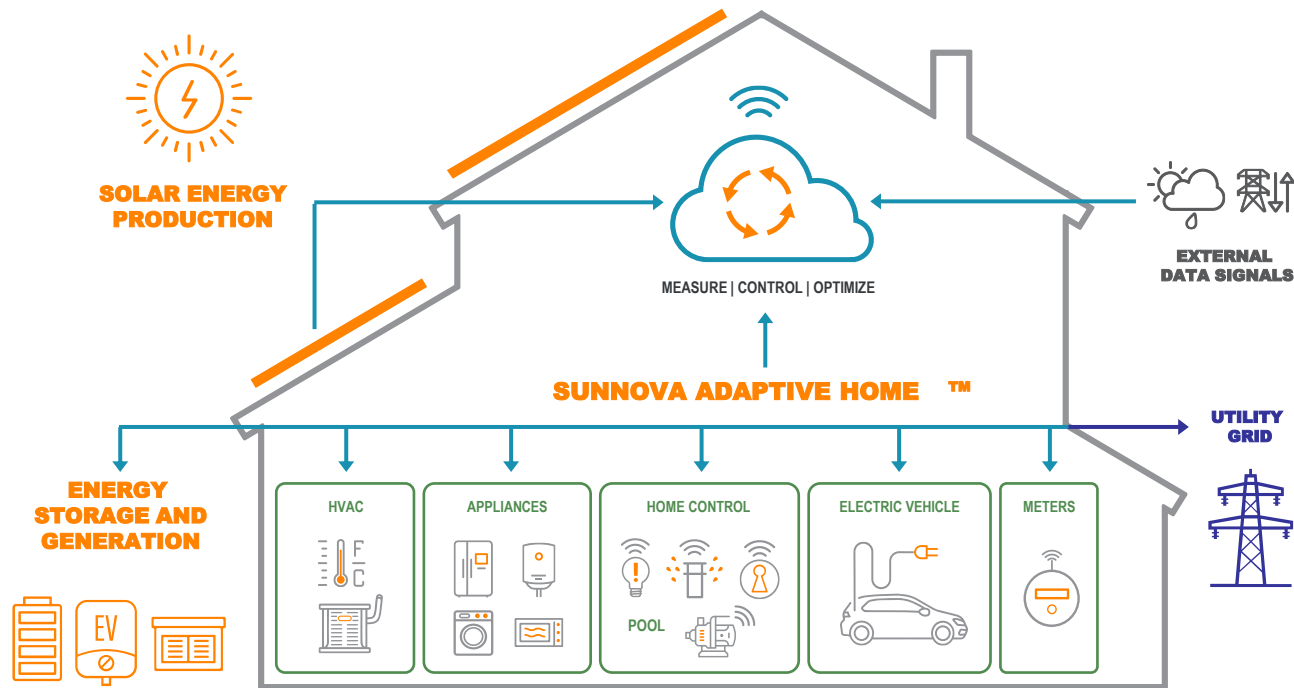
**Sunnova:** owns the long-term customer relationship, positioning us to meet the evolving needs of our customers, including upsell and additional product offerings.

Entire customer experience managed via Sunnova's scalable technology platform



The Sunnova Adaptive Home™ creates solutions that integrate the use of solar, battery storage, EV charging, additional energy generation, control and management technologies to make clean energy even more affordable, reliable, and resilient.

# Sunnova Adaptive Home™



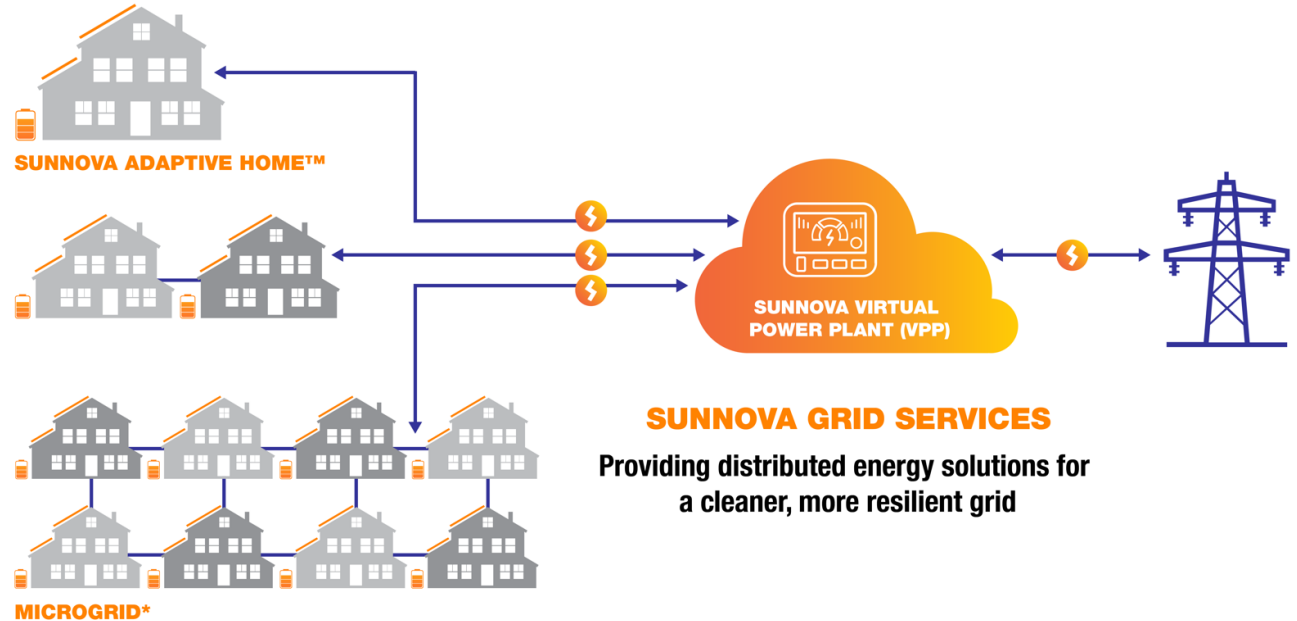
The Sunnova Adaptive Home™ is not only able to produce and store energy, it also “adapts” by optimizing energy sources and consumption predictively and in real time, making intelligent adjustments based on current energy needs, solar production, stored energy levels, grid health, time of day, energy price signals, and other inputs.





# The Sunnova Network

Sunnova is strengthening grid resiliency by offering aggregated distributed energy resources to support the need of the local utility by utilizing our virtual power plant solutions.



\* Where permitted by local regulations

# Sunnova Grid Services



# 150+

## Megawatts

Awarded & Bid into various capacity and energy structures

# 7

## Programs

Active with utilities, grid and retail partners and growing

# 13

## REC Programs

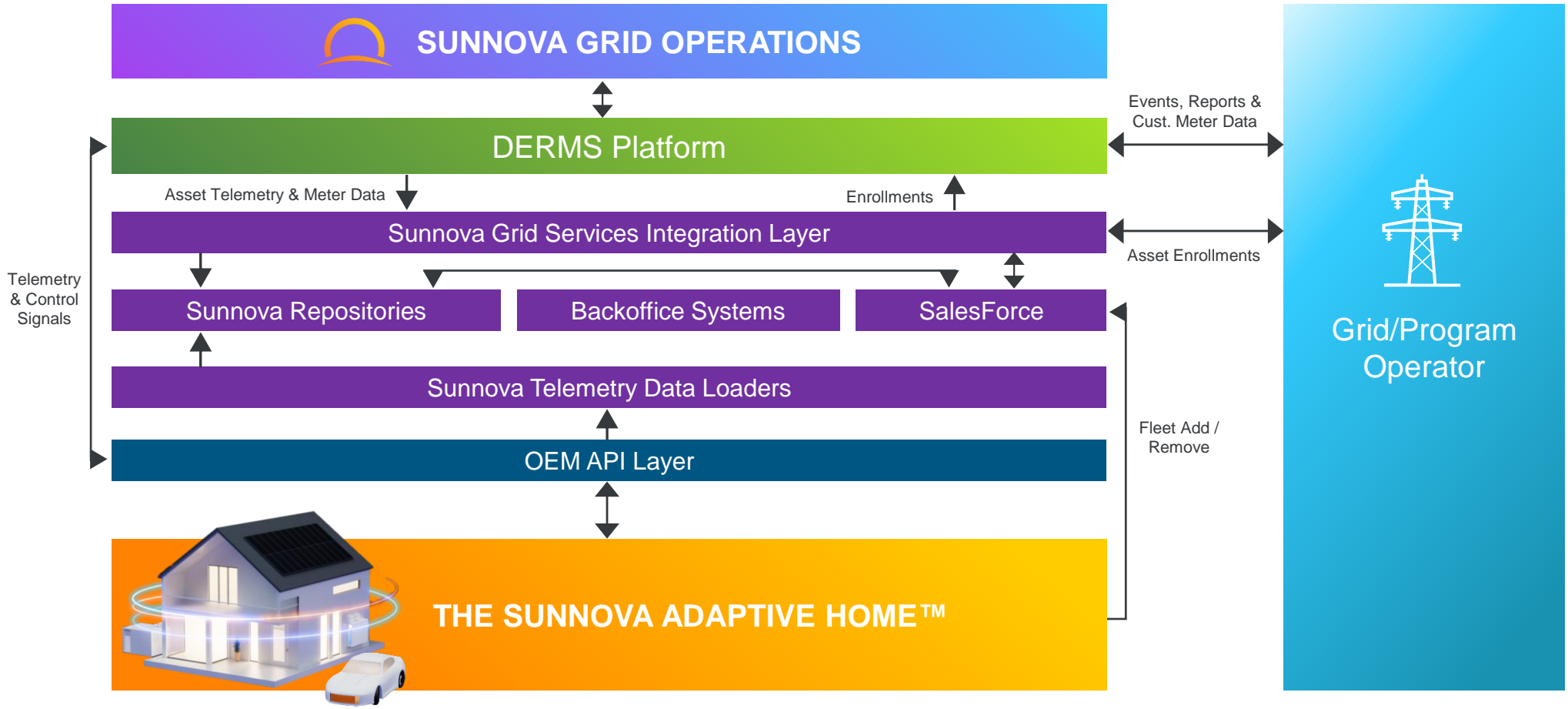
Participation in top markets in areas we serve

- Secured position in largest participation of distributed renewables in a competitive auction
- Provide streamlined customer experience to ensure maximum participation and increased value for our utility partners
- Focus on customer care and long-term relationship ensures a high level of satisfaction and engagement from end-users
- Able to tailor customized solutions to the unique needs of the local grid

## Capabilities

- Active demand response for load curtailment
- System-wide or local energy peak shaving
- Distributed resource deployment for transmission and distribution deferral (non-wires alternatives)
- Optimized resiliency during forced weather-driven outage events
- Localized voltage support services
- Diversification of grid services via partnership approach
- Retrofit storage offerings to existing solar customers
- Insights and control into all the above

# Grid Services Integration Architecture







# Appendix

# Case Study #1



## Forward Capacity Auction: ISO-NE

- Awarded 85 megawatts of passive capacity in the ISO New England Forward Capacity Auction (“FCA 15”) in 2020
- Sunnova’s portfolio of distributed residential energy systems in New England is participating in the capacity markets in 2021
- Complete portfolio participation anticipated for the FCA 15 commitment year beginning June 2024 and contracted to participate for 20 years through 2044
- Sunnova’s fleet is supporting ISO-NE on their path to a clean resilient grid while providing homeowners with affordable and reliable energy



# Case Study #2



## Connected Solutions

- Located in Eversource territories; Massachusetts, Connecticut, Rhode Island, and New Hampshire
- Sunnova's fleet of energy storage assets provide a day ahead energy dispatch during periods of high demand and potential capacity need across the National Grid and Eversource territories
- Sunnova's VPP operations team ensures the batteries have the maximum state of charge ahead of the demand response window and will maximize discharging during events, powering loads in the home and exporting excess power
- Sunnova anticipates more than 2MW of enrolled customers by the end of 2022

nationalgrid

EVERSOURCE

# Case Study #3



## Demand Response Auction Mechanism (DRAM)

- Located in PG&E, SCE, and SDG&E territories; California
- Sunnova reduces customer baseload demand on the grid by maximizing the discharging of our fleet of batteries during the typical afternoon demand peak
- Sunnova's VPP is integrated into our third-party aggregator to streamline customer enrollment and dispatch notification
- Sunnova's VPP operations team and our Adaptive Home strategy ensures an optimal dispatches to maximize each individual home with proper M&V on incremental load reduction performance



# Case Study #4



## Voltage Support

- Located within National Grid's service territory in Massachusetts and Rhode Island
- Sunnova's distributed solar inverters provide critical volt/var optimization across the entire service territory or localized to areas of need
- Sunnova's capability to optimize power quality through reactive power management results in increased efficiency of the power grid and savings for the utility and ratepayers

**solar**edge

national**grid**

# Case Study #5



## Demand Response & LSE Peak Shaving

- Located in Clean Power Alliance's territory, Southern California
- Sunnova's growing fleet of solar and battery storage assets are providing much needed and reliable peak energy dispatch
- Sunnova's VPP is integrated into our third-party aggregator to streamline customer enrollment and dispatch notification







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