
Green Charge is now
ENGIE Storage



ENGIE Storage



Forging Sustainable Solar (and Storage) Incentives for New England

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Who is ENGIE Storage?

We're focused on bringing energy storage solutions to market through innovations in...



Energy Site Analysis & System Design



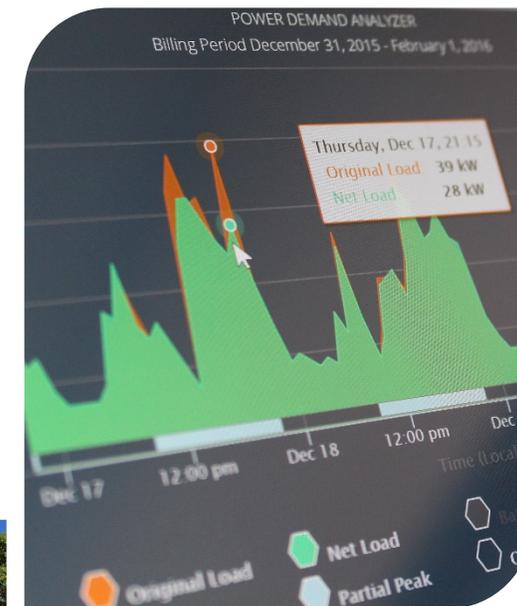
Hardware Integration, Interconnection & Operations



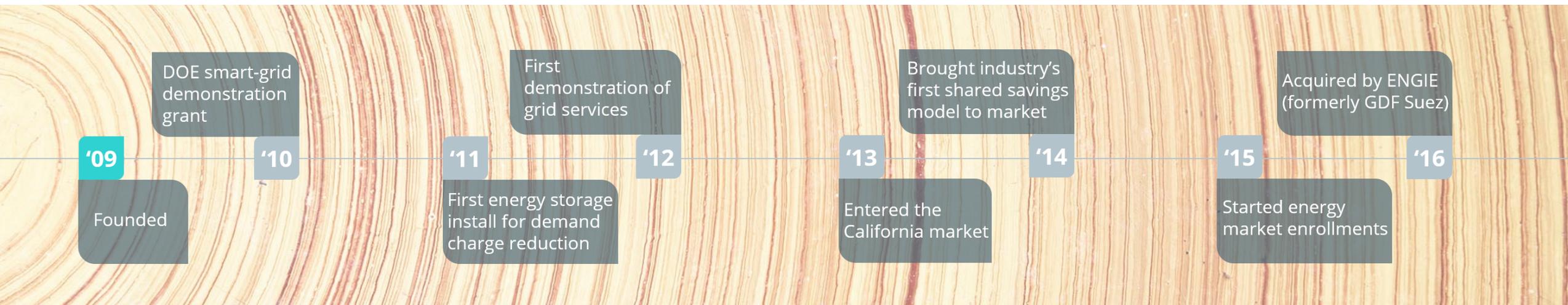
Software Service Stacking & Aggregation



Performance-based Financing Options & Guarantees



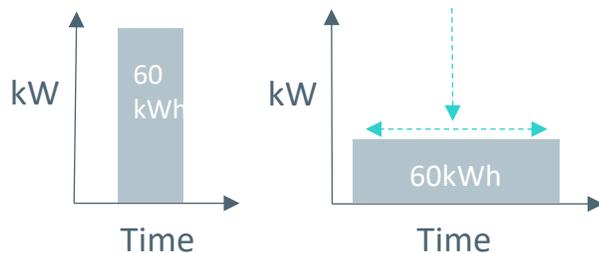
- In Business over 150 years
- \$150 billion in energy assets
- Largest independent power producer
- Largest provider of energy services
- Over 75+ MWh energy storage projects
- Extensive operating track record (7+ years)
- Industry's first shared saving model
- US Storage Division HQ in Silicon Valley & Boston



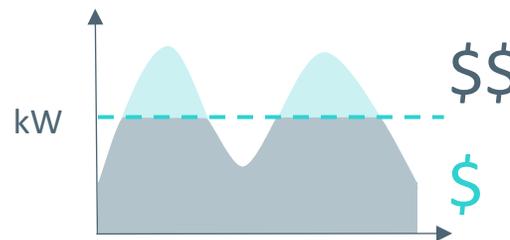
Solar Plus Storage is a Game Changer

Adding storage to solar enables dispatchable and reliable renewable energy resources that are no longer time constrained

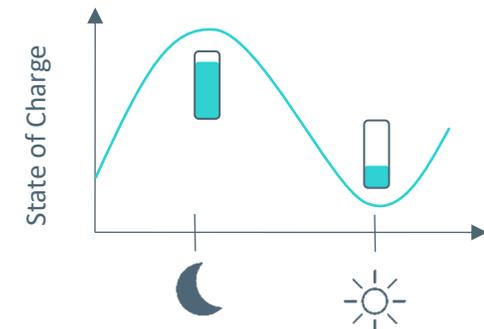
Flatten Generation & Load



Reduce Peak Demand



Shift Generation & Load



In addition:

- Mitigate locational constraints and congestion
- Increase capacity supply in high load zones
- High performance participation in FCM and ancillary service markets

Market Barriers to Solar Plus Storage Deployment

Policy Barriers

- Non-monetizable value streams
- Markets not designed to value storage performance capabilities
- Multi-use restrictions
- Interconnection processes view storage as a risk rather than asset
- Siting and permitting constraints

Financial Barriers

- Financial markets unfamiliar with storage, high cost of capital and undervaluation of projects
- ESS hardware costs still high, continuing to move down experience curve
- Commercial contractual structures difficult to value evolving market opportunities and developing upside

Structure New England Incentives to Remove Solar Plus Storage Market Barriers

Monetize existing value streams to drive ratepayer value

- Optional tariffs with increased transparency to wholesale value (i.e. solar plus storage tariff)
- Load shift market products & Clean Peak Standard
- Pay-for-Performance ISO market signals

Utilize storage as an interconnection asset

- Storage can reshape DER generation and load profiles, address grid constraints
- Re-imagine interconnection process to utilize DER storage

Incentives designed for bankability and commercial contracting

- Revenue clarity and program certainty
- Program length and/or valuation match industry contract standards

Massachusetts SMART Program Case Study

SMART Program Design

- Fixed tariff structure \$/kwh solar production
- Storage adder
- 10-year & 20-year terms
- Multi-use revenue streams allowed
- ESS performance requirements drive add. ratepayer value



Market Barriers Removed

- Revenue certainty over asset lifetime increases project bankability
- Storage adder covers market entry cost gap
- Performance requirements further monetize existing value streams
- Multi-use and flexible market optimization*



Market Response

- DOER received 200+ solar MW applications w/ storage in first week
- Applications across industry sectors
- Diverse business models: wholesale market participation, resiliency, solar optimization & peak shaving

* Pending DPU 17-146 docket decision on developer access to project wholesale capacity rights