

EnSync, Inc.  
(NYSE MKT: ESNC)

April 2016



# Forward Looking Statements

THIS PRESENTATION INCLUDES FORWARD-LOOKING STATEMENTS THAT ARE MADE PURSUANT TO THE "SAFE HARBOR" PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995. FORWARD-LOOKING STATEMENTS INVOLVE INHERENT RISKS AND UNCERTAINTIES WHICH COULD CAUSE ACTUAL RESULTS TO DIFFER MATERIALLY FROM THOSE IN THE FORWARD-LOOKING STATEMENTS, AS A RESULT OF VARIOUS FACTORS INCLUDING THOSE RISKS AND UNCERTAINTIES DESCRIBED IN THE RISK FACTORS AND IN MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS SECTIONS OF OUR MOST RECENTLY FILED ANNUAL REPORT ON FORM 10-K AND OUR SUBSEQUENTLY FILED QUARTERLY REPORTS ON FORM 10-Q.

WE URGE YOU TO CONSIDER THOSE RISKS AND UNCERTAINTIES IN EVALUATING OUR FORWARD-LOOKING STATEMENTS. WE CAUTION READERS NOT TO PLACE UNDUE RELIANCE UPON ANY SUCH FORWARD-LOOKING STATEMENTS, WHICH SPEAK ONLY AS OF THE DATE MADE.

IN THIS DOCUMENT, WE REFER TO INFORMATION REGARDING POTENTIAL MARKETS FOR PRODUCTS AND OTHER INDUSTRY DATA. WE BELIEVE THAT ALL SUCH INFORMATION HAS BEEN OBTAINED FROM RELIABLE SOURCES THAT ARE CUSTOMARILY RELIED UPON BY COMPANIES IN OUR INDUSTRY. HOWEVER, WE HAVE NOT INDEPENDENTLY VERIFIED ANY SUCH INFORMATION.

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# The Transformation of Our Business

## Battery Sales



## Integrated System Sales

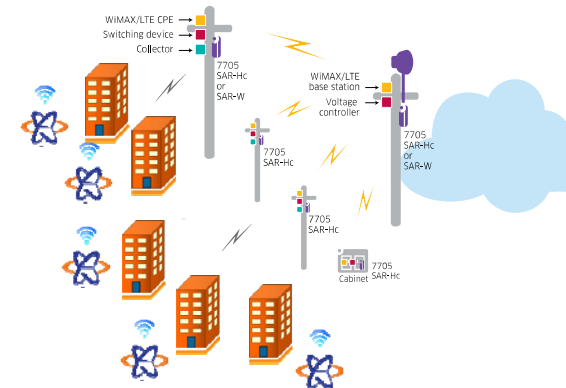
- Utility Storage and Energy Management Systems
- Commercial and Industrial Building Energy Management and Storage Systems
- Service Contracts

## Electricity Sales

- Power Purchase Agreements, including EnSync products, EPC and 3<sup>rd</sup> Party Products (eg. solar)
- Initial cash intake from sale of equipment and services into PPA
- Sale of high yield PPA

## Electricity Supply Response on Demand

- Move from Demand Response to Supply Response
- Spot Market Electricity Sales
- Enable the "Internet of Energy"



**Pre-2013**

**2013**

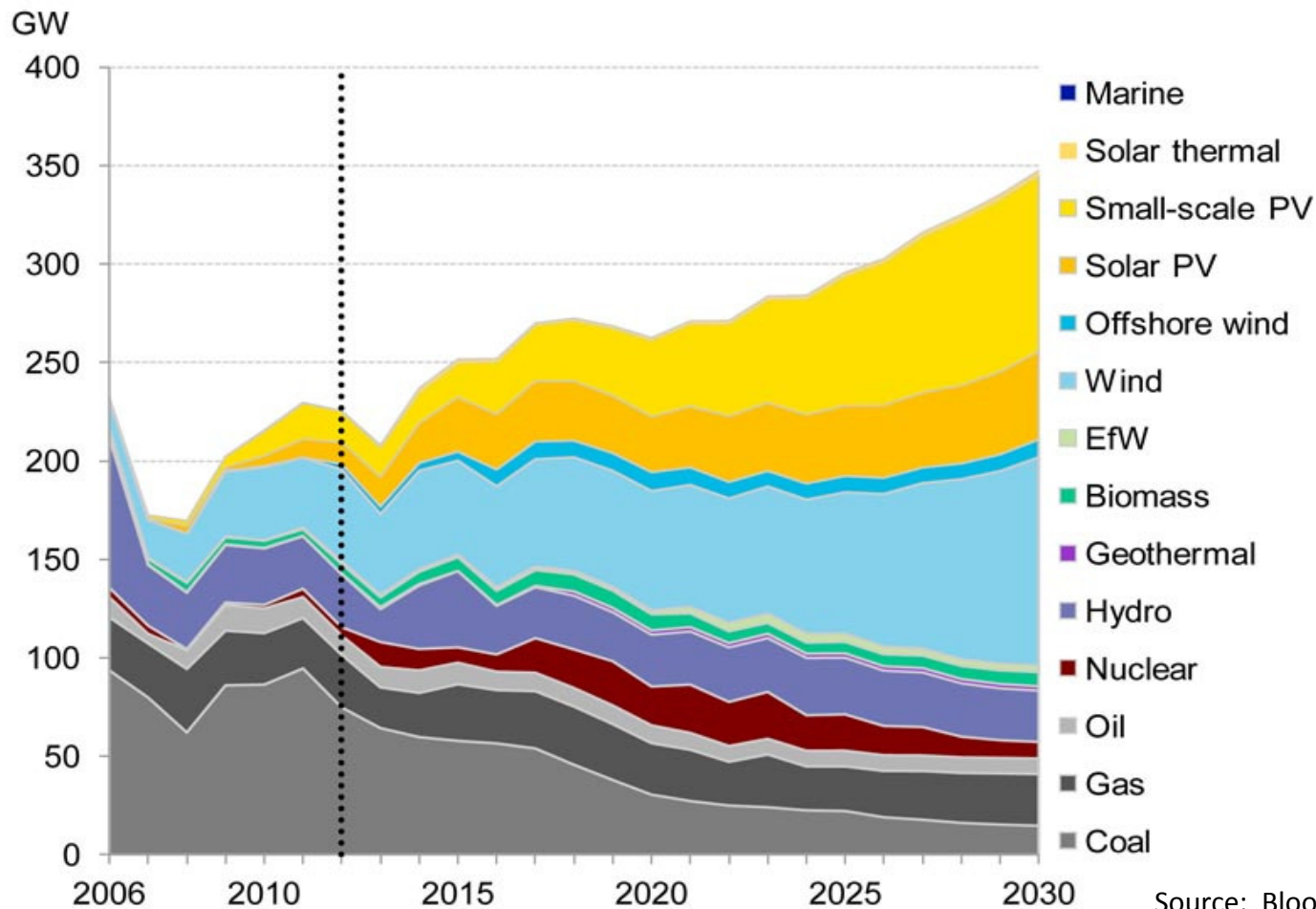
**2015**

**2016 and Beyond**



Favorable Policy and  
Demand Trends

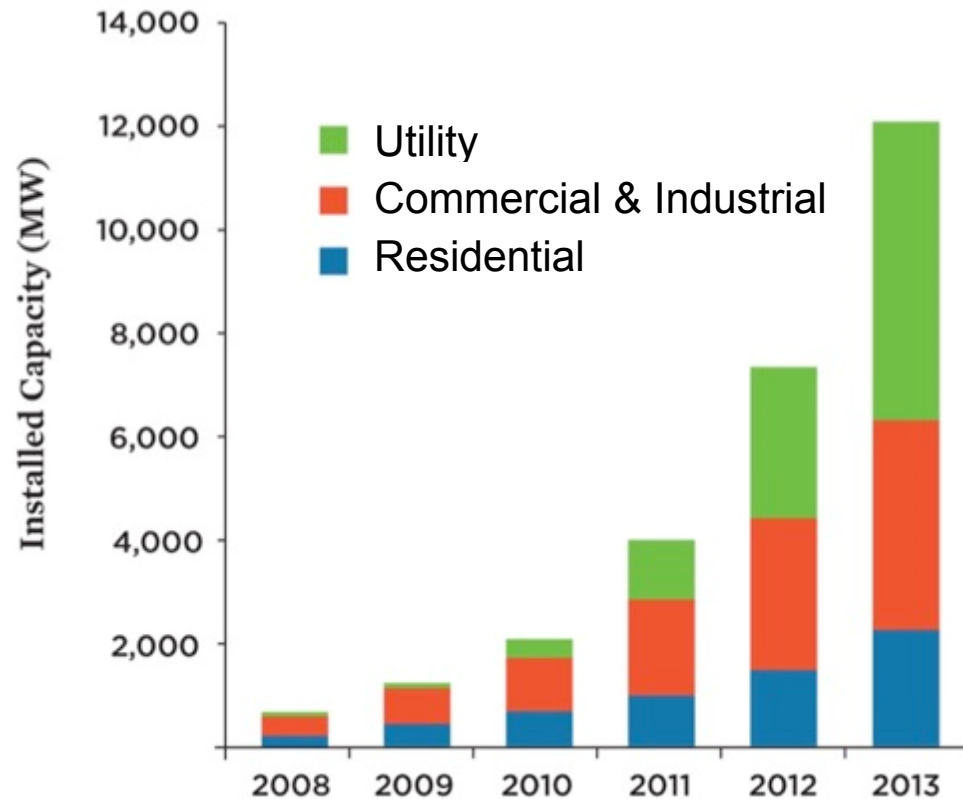
# Global, National and Local Policies will Drive the Renewable Energy to be >50% of the Added Generation Capacity from 2020 through 2030



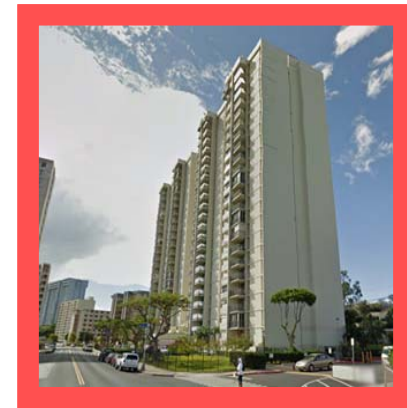
# EnSync Addresses the Growing Solar Market

The Utility and Commercial & Industrial solar markets require EnSync system solutions to maintain their phenomenal growth trajectory

### Installed Capacity



### Commercial & Industrial



### Utility



# Favorable Policy and Demand Trends Driving Adoption of EnSync Solutions

## ✧ Paris Climate Accord

- ✧ Global incentives by individual countries to meet compliance targets

## ✧ Supreme Court endorsed Federal Energy Regulatory Commission (FERC) jurisdiction over demand side management

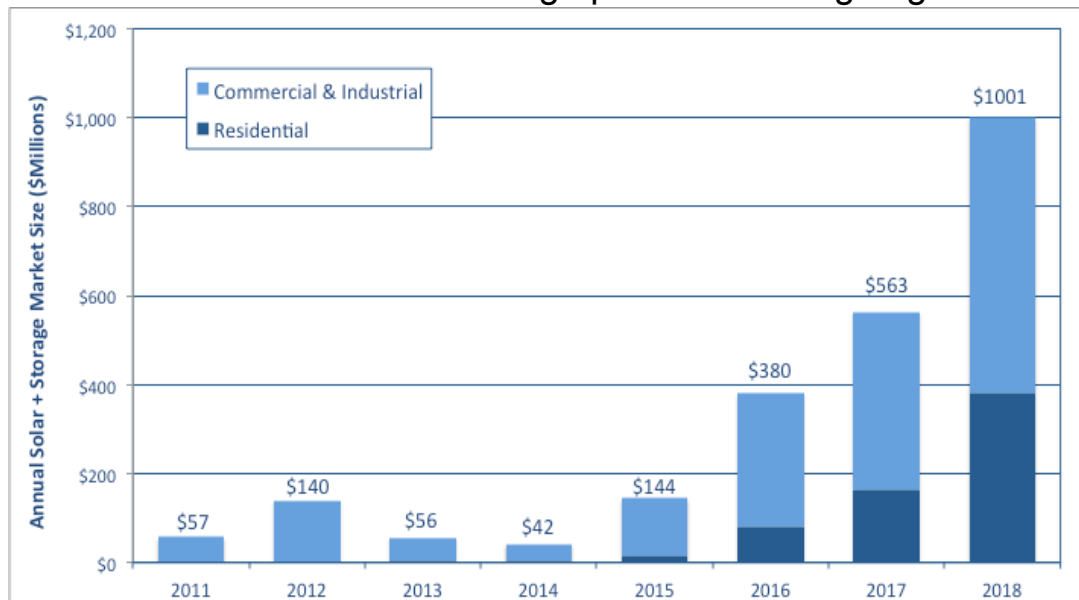
- ✧ Ruling clears the way for FERC to designate behind the meter energy as a grid resource

## ✧ State commissions continue to adjust Net Metering programs with reductions or eliminations

- ✧ Removes the “grid as a free battery”, a barrier to robust energy storage deployment, and makes incorporation of storage almost mandatory for solar installations

## ✧ Solar PPA investors understand need for storage

- ✧ Majority view energy storage systems and solar as being the best solution for the future, and as a safer investment because storage provides a hedge against uncertainty.



✧ Favorable policies are driving demand growth. Example: ITC, net metering elimination and time of use rates are driving growth in U.S. Solar + Storage market for C&I and Residential. \$1.0B combined market by 2018.

Source: GTM

# Trends in Energy Generation and Distribution

<b>Market</b>	<b>Trends</b>
<b>Utility Scale</b>	<b>DG/Renewables at utility level are driven by government policies</b>
<b>Residential, C&amp;I</b>	<b>DG at residential, commercial &amp; industrial are driven by rates and policies</b>
<b>Smart Grid Transition to Supply Response</b>	<b>Shift from consumer demand reduction to DG + “supply response” for spot market electricity sales</b>
<b>Energy Storage</b>	<b>EnSync’s systems foundational because it enables all the above to transact</b>

**EnSync products and solutions will both enable and capitalize on each of these energy generation and distribution trends**

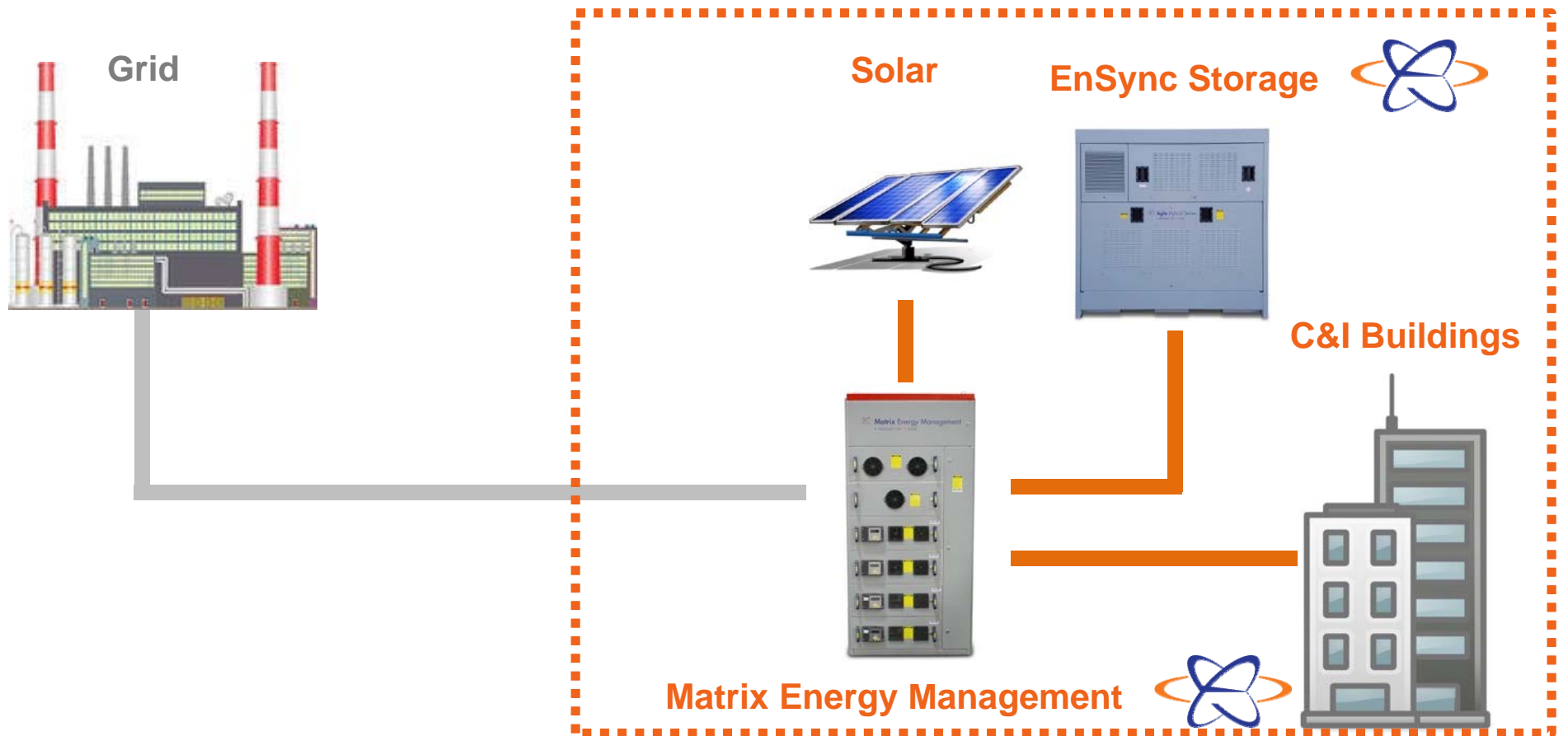




Solutions that Enable the  
Shift to Renewable Energy

# Solutions that Enable the Shift to Renewable Energy

- ⚡ **EnSync is a leading distributed energy systems and service provider**
  - ⚡ Allow for the effective integration of various energy sources (grid + solar + storage)
  - ⚡ Ensure real-time optimal mix to decrease overall electricity costs and increase reliability
  - ⚡ Focused primarily on commercial, industrial, and multi-tenant buildings and microgrids



# Two Breakthrough Product Solutions

**Matrix Energy Management**

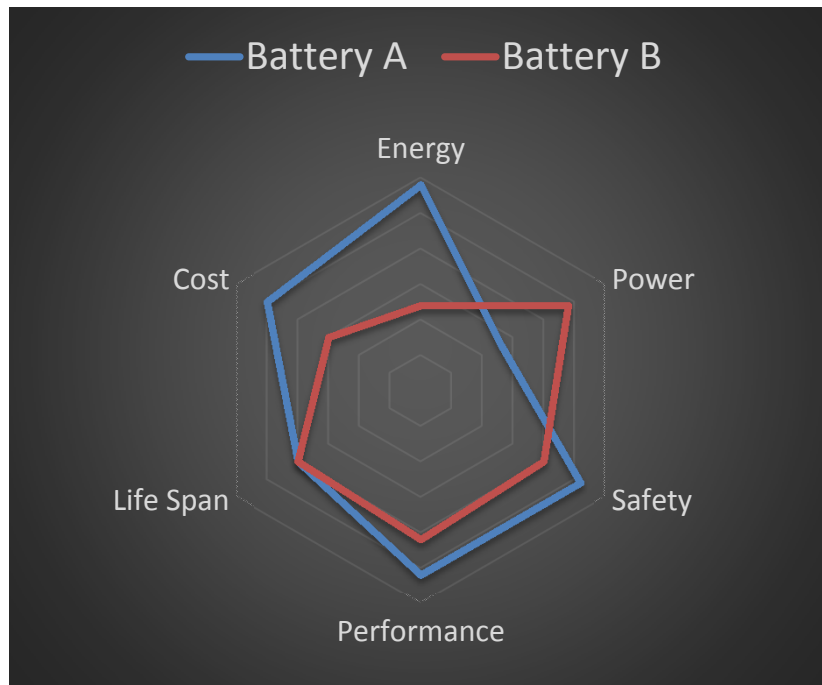


**Agile Hybrid Storage System™**



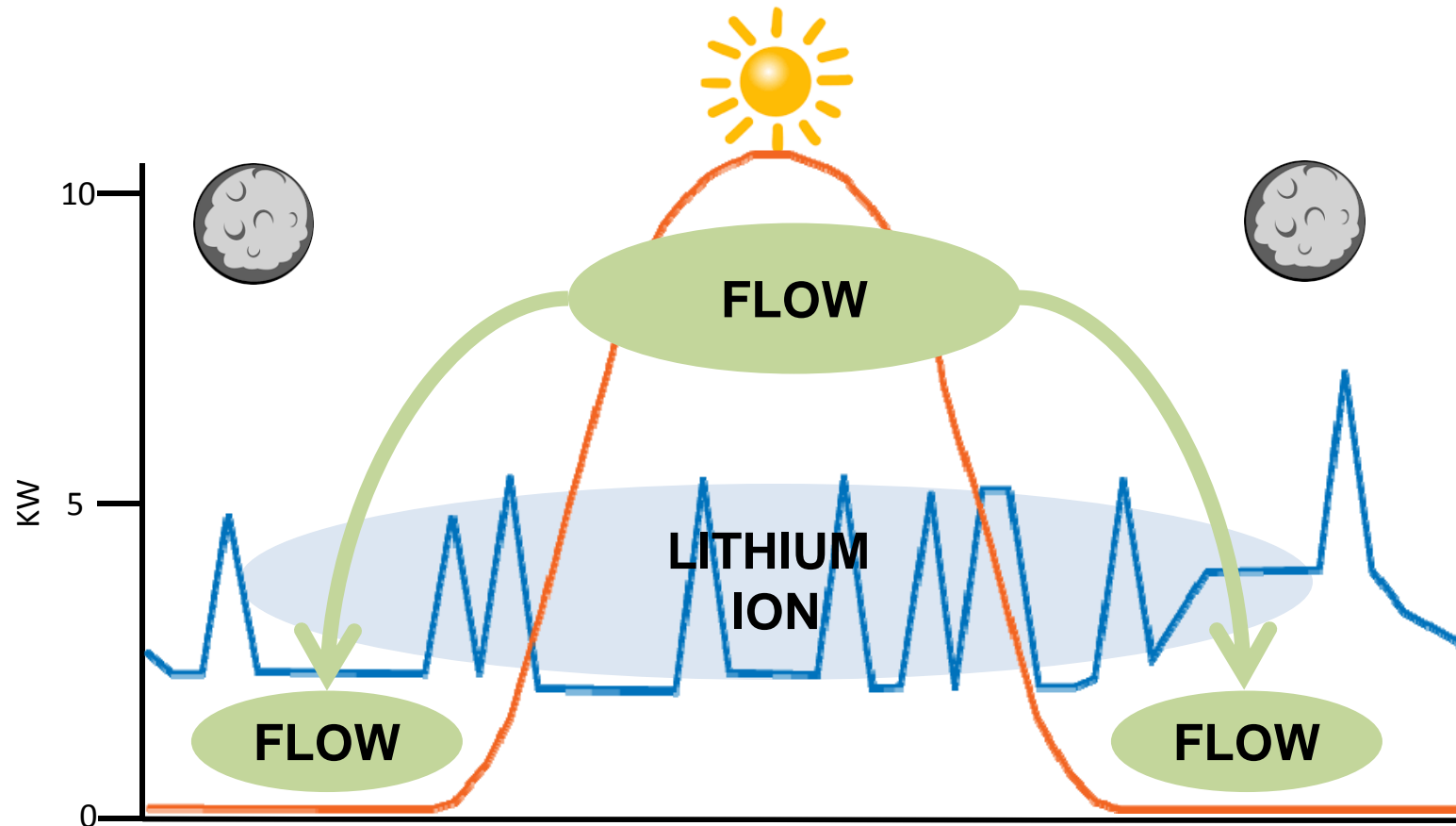
# Why Hybridize

- EnSync is an integrated power systems and energy solutions company, not a stand alone battery manufacturer
- We are applications driven - we select the right energy storage and power technologies for the application or group of applications



- No “Silver bullet” battery for every case.
- Even good batteries can be bad batteries, if operated improperly.
- Multiple application systems may require multiple battery types in hybrid operation.

# Matrix + Agile Hybrid System: Effectively Managing the Shortfalls of Solar Power Generation

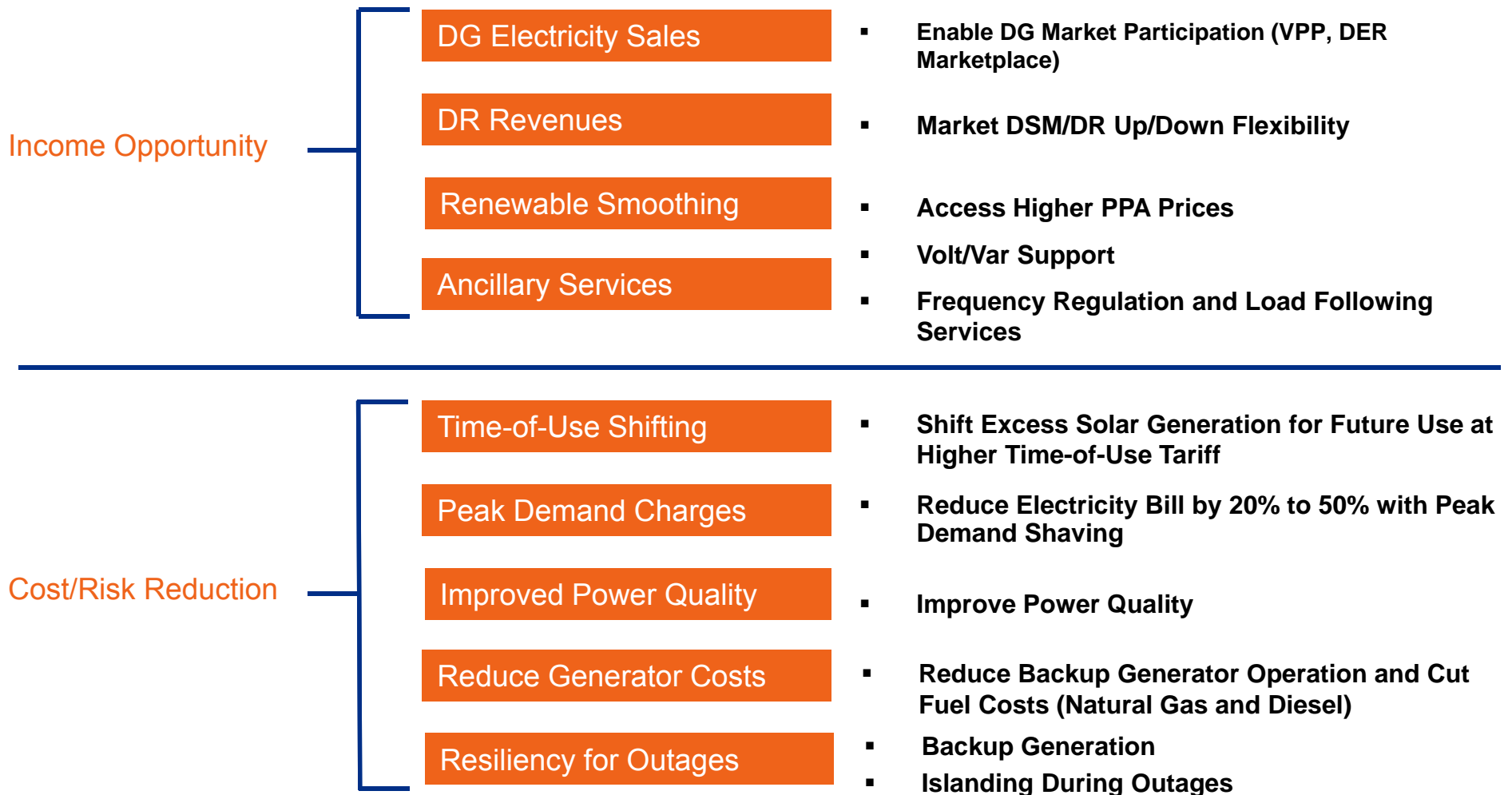


- ✧ The Agile Hybrid Storage System approach to managing the imbalances of energy consumption compared solar demand is the most effective solution on the market.
- ✧ Leverages the best capabilities of Flow and Lithium Ion Battery.

# Agile Hybrid Storage System™:

## Benefits of Storage in C&I Solar DG System

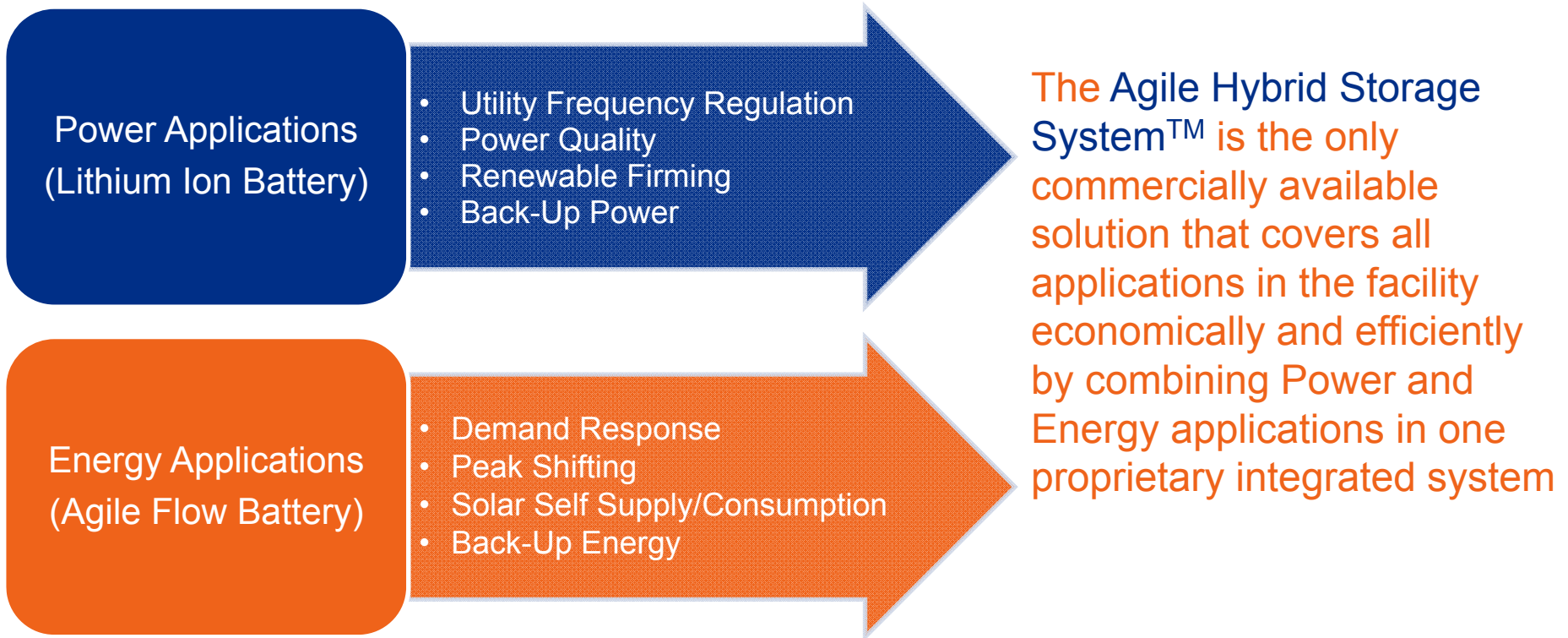
### End-Customer Benefits:



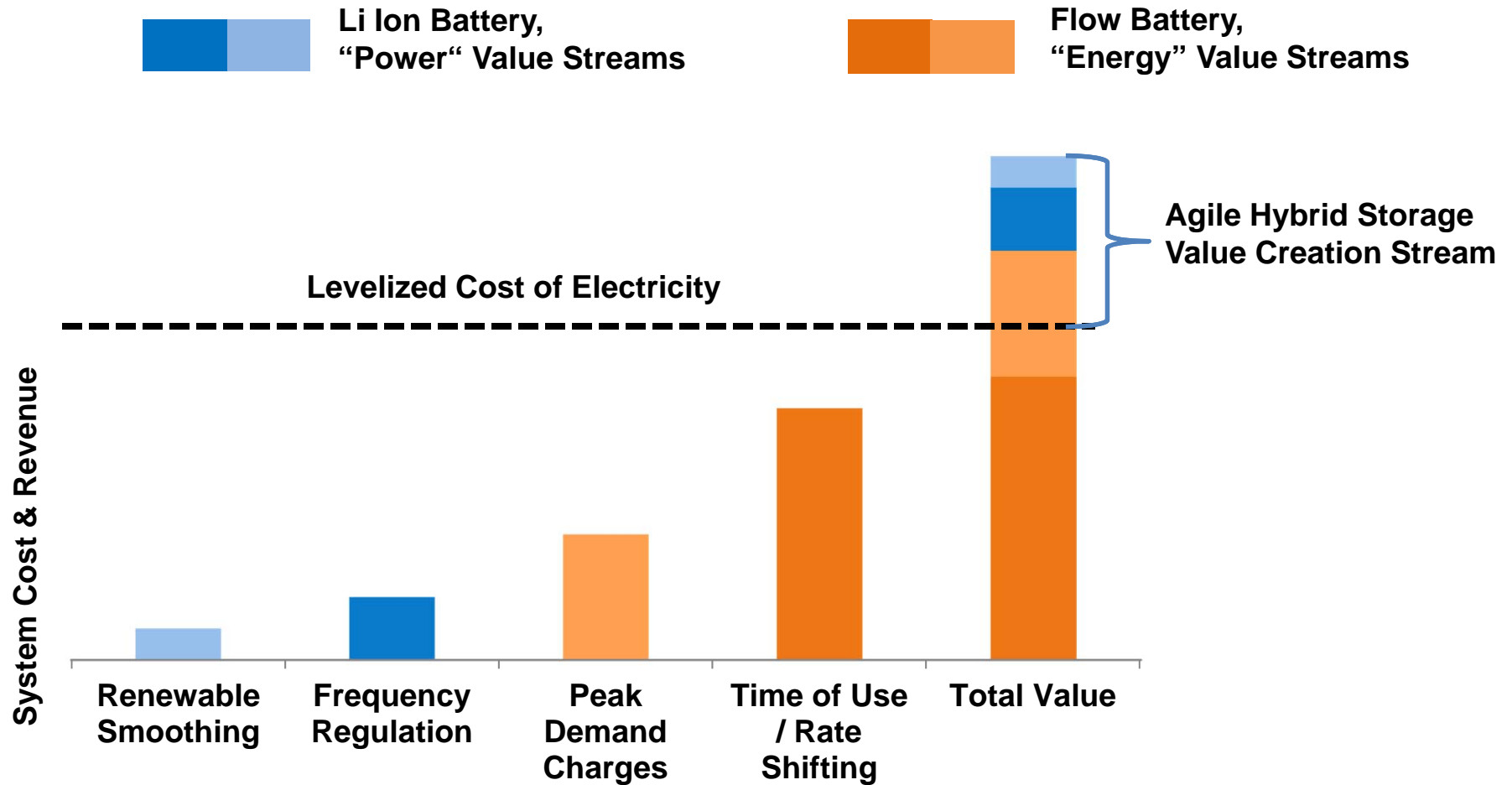
Source: GTM, EnSync

# Agile Hybrid Storage System™:

## Integration of Leading Storage Technologies



# Agile Hybrid Storage System™: Value Creation Streams



Source: EnSync, Lazard

- Applications are example only and highly dependent upon actual market conditions and regions of the country
- For example, Frequency Regulation can possibly achieve all your savings with one application



# Our Energy Storage Product Portfolio

C&I (50-500kWh)		C&I (600kWh-2MWh)	Utility (MWh+)
<p><b>EnSync Agile</b></p> <ul style="list-style-type: none"> <li>Zn-Br Flow Battery</li> <li>60kWh Max</li> <li>Rated Discharge – 12.5-25kW</li> <li>100% DOD for “Energy” Applications</li> </ul>	<p><b>EnSync Li-ion</b></p> <ul style="list-style-type: none"> <li>Safest Chemistry</li> <li>30kW/22kWh “modules” for “Power” Applications</li> <li>&gt;30 to &lt;90% DOD for maximum lifetime and economics</li> </ul>	<p><b>EnSync Agile 600 Hybrid</b></p> <ul style="list-style-type: none"> <li>450kWh ZnBr Flow</li> <li>160kWh Li-ion</li> <li>250kW</li> <li>Integrated Hybrid Control Logic</li> <li>Supports 400kW of PV</li> <li>For Larger C&amp;I and Microgrid installations</li> </ul>	<p><b>EnSync Agile 1000 Flow</b></p> <ul style="list-style-type: none"> <li>ZnBr Flow</li> <li>250kW</li> <li>1000kWh</li> <li>Utility scale energy applications</li> <li>4-6 hour applications</li> </ul>
<p><b>EnSync Agile Hybrid</b></p> <ul style="list-style-type: none"> <li>Integrated EnSync ZnBr + Li-ion energy storage system</li> <li>For up to 500kWh installations</li> <li>Best possible economics for power and energy applications in a C&amp;I or microgrid installation</li> </ul>			<p><b>EnSync 1000 Li Ion</b></p> <ul style="list-style-type: none"> <li>1000kW-1500kW</li> <li>1000kWh</li> <li>Utility scale power applications -2 hours or less discharge</li> </ul>

# Matrix Energy Management Platform: Fully Differentiated C&I and Microgrid Solution

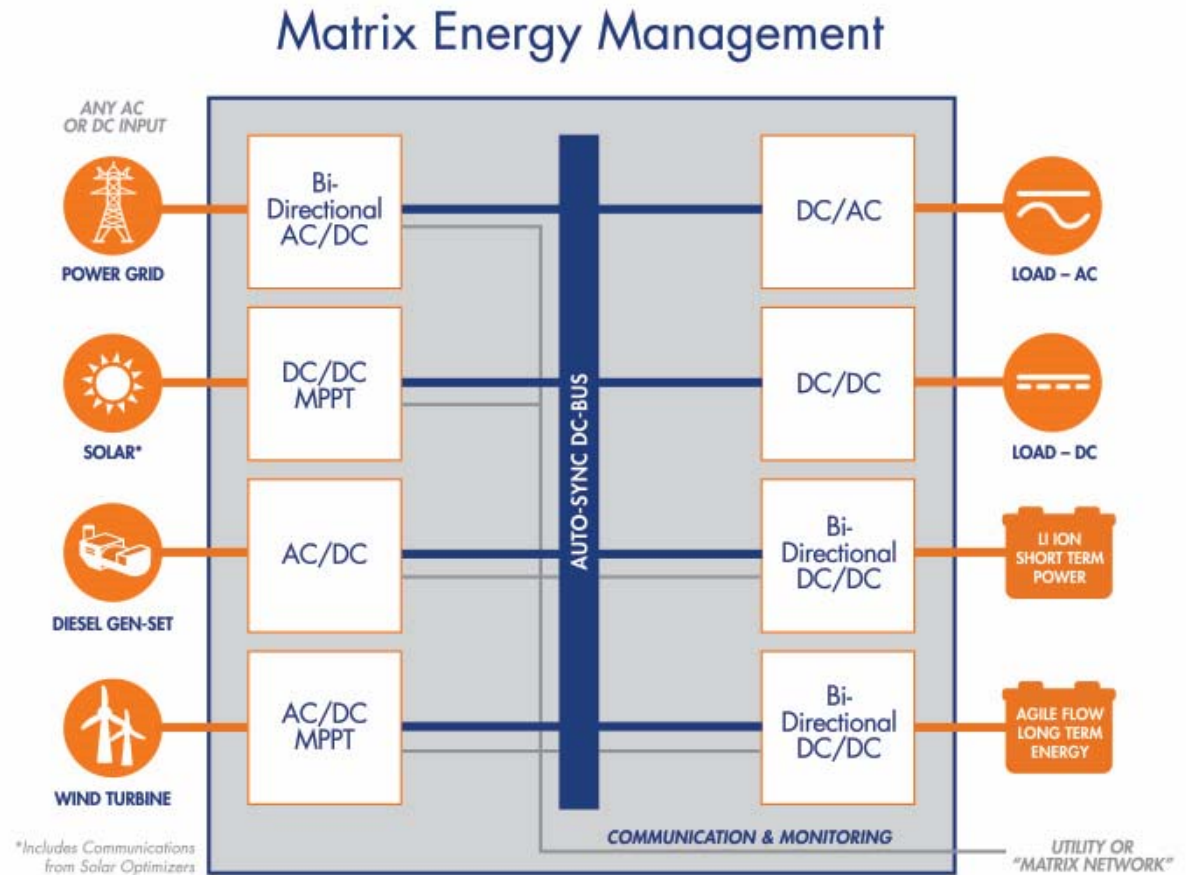
- ⚡ Differentiated platform technology for Commercial and Industrial Building and Microgrid energy control
- ⚡ “Drawer-based” modules allow configurability for *any* building specific load, PV system, storage technology and storage size.
- ⚡ Active prioritization of grid, renewables and storage produces electricity based on most efficient and economic result, without the requirement for fixed algorithms and a central controller.
- ⚡ Simple, scalable, reconfigurable and future proof
- ⚡ Highest efficiency energy management platform available
- ⚡ UL1741 and Hawaii “Smart Inverter” requirement compliant



 Matrix Energy Management

# Matrix Energy Management Platform: Synchronizes the Load, Dist. Generation and Utility Grid

- ❖ Proprietary “Auto-Sync” DC-Bus modular control platform for integrating grid, renewable and energy storage inputs with the facility load.
- ❖ No algorithms or central controller required – simple and scaleable.
- ❖ Complete utility / ISO connectivity for “Supply Response on Demand”
- ❖ Secure building to utility connectivity
- ❖ Platform enables “Internet of Energy”



No Central System Controller Required.  
All Control is Active, Real Time and Efficient.  
Modular and Scalable.

# Matrix Energy Management Platform: Significant Advantages Over Competition

Function or Application	EnSync Matrix	Product A	Product B
Active Energy Synchronization for any or all DC and AC Inputs and Outputs without System Controller / Complex Algorithms	✓		
Can manage every power and energy storage application under simultaneous operation	✓		
Modular, Scalable, Efficient and “Future Proof” for 20 Year service life	✓		
Demand Response	✓	✓	✓
Frequency Regulation	✓		✓
“Rate Shifting”	✓		✓
“Peak Shaving”	✓		✓
Demand Charge “Clipping”	✓		✓
Renewable Firming	✓		✓
Full Data Logging and Forecasting of Generation and Storage	✓		
“Supply Response on Demand” between Building DG and Grid Network	✓		
DC Output Management and Control (eg. DC lighting, Building DC)	✓		
Microgrid Operation	✓		✓
Max. Power Point Tracking	✓		✓
Power Factor Correction and AC Bus Voltage Regulation	✓		✓
Islanding	✓		✓

# EnSync's Advantages



Conventional Generation



Distributed Generation



Energy Storage

- ✧ Cost Effective
- ✧ Reliability
- ✧ Availability
- ✧ Efficiency
- ✧ Sustainability
- ✧ Environmental Impact
- ✧ Safety
- ✧ Infrastructure Requirements
- ✧ Resiliency
- ✧ Ability to Monetize More Applications



Projects

# Current PPA Case Studies:

Each will save >\$2 million electricity spending over 20 year term

## Century West Condominium: Oahu, Hawaii

Multi-tenant Condominium

Customer will save >\$2.0M in electricity spending over the lifetime of the PPA

Configuration:

- 400kW PV; 460kWh EnSync Hybrid Storage
  - (6) EnSync Agile Flow Battery Systems
  - (5) EnSync Li Ion Systems
- EnSync Energy Management System

PPA Term: 20 Years



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## University of the Nations: Kona, Hawaii

Contract Signed July 2015

Customer will save >\$2.0M in electricity spending over the lifetime of the PPA

Configuration:

- 408kW PV; 400kWh EnSync Hybrid Storage
  - (4) EnSync Agile Flow Batteries
  - (5) EnSync Li Ion Batteries
- EnSync Energy Management System

PPA Term: 20 Years



# System Sales

## ❖ **Open Access Technology International (OATI) in Bloomington, Minnesota**

- ❖ Matrix Energy Management and Agile Hybrid Energy Storage Systems will be incorporated into the Microgrid South Campus and establishes a potential Key Channel for EnSync into North American Utilities.
- ❖ Business with >90% of USA and Canada utilities
- ❖ Targeting utility communication / control with DG assets
- ❖ 200kWh EnSync Energy Storage
  - ❖ (3) EnSync Agile Flow Batteries
  - ❖ (3) EnSync Li Ion Batteries
- ❖ Matrix Energy Management System
- ❖ Target Completion: May 2016



OATI South Campus  
(Bloomington, Minnesota)



Cayman Technology Center  
(Grand Cayman)

## ❖ **Cayman Technology Centre (CTC) in the Cayman Islands**

- ❖ Provide an advanced energy management and energy storage system for the largest "off-grid" renewable energy installation in the Cayman Islands
- ❖ Off-Grid Complex with PV, Hybrid Storage, Energy Management System & Gen Set
- ❖ Caribbean reference project



## ❖ **Current Project Backlog**

- ❖ \$2.5 million (a/o 12/31/15)



# Example of Operational Off-Grid Micro-Grid: Beachcomber Resort

- ✧ Located in Tetiaroa Atoll, Tahiti
- ✧ “Brando” Leed Platinum Luxury Eco Resort
  - ✧ 35 Private Villas
  - ✧ Pools and Spa
  - ✧ Multiple Restaurants
  - ✧ Staff residences
  - ✧ Water Desalination
- ✧ 100% Energy Independent
  - ✧ 2000kWh of EnSync V3.3 Flow and Li Ion Energy Storage
  - ✧ EnSync Power Electronics
  - ✧ PV
  - ✧ Diesel Gen Set
- ✧ In Operation in January 2016

