



# Investor Presentation

NASDAQ: ACPW

# Who We Are

- » **Active Power** is a global leader in flywheel energy and power technology for mission critical applications
- » Products built on elegant and proven **flywheel and power electronics technology**
- » Combined benefits of products' **power density, reliability, and total cost of ownership** are unmatched in the market
- » Chosen by **marquee customers and partners** around the world



# Active Power...By the Numbers

- » Founded 1992; IPO 2000
- » HQ in Austin, TX, with operations centers in UK, Germany, and China
- » 230+ employees
- » 4,000+ flywheels in systems shipped worldwide
- » 150+ infrastructure modules deployed worldwide
- » 50+ country deployments
- » 150+ million hours of field runtime
- » 900+ megawatts deployed
- » 100+ global patents issued



## Global Partners



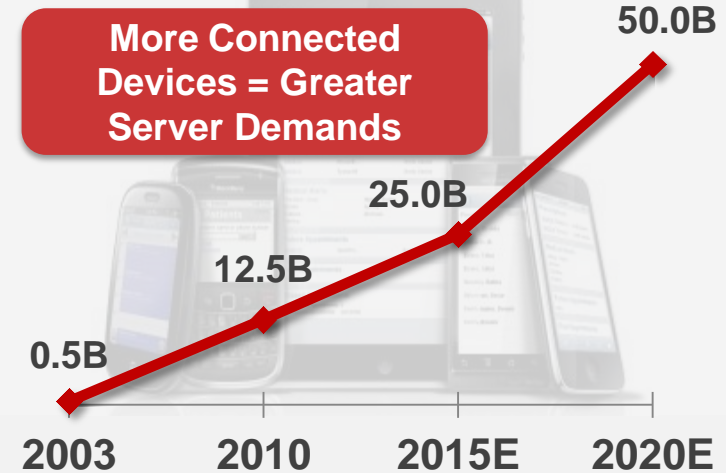
## Global Customers



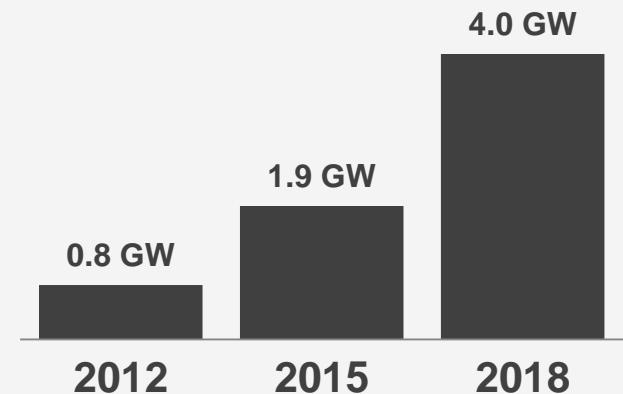
# Key Market Drivers

- » **Constant creation and usage of data** increases data center IT capacity which requires more power
- » Number of devices connected to internet forecasted to reach **25 billion** by 2015,<sup>1</sup> increasing data center server demands
- » **IT and power capacity demands** – outpacing traditional lengthy construction schedules, driving demand for modular systems
- » **Expansion of microgrids** – global revenue for distribution generation and energy storage technologies forecasted to increase – **\$4B to \$15.6B** (2012 to 2018)<sup>2</sup>

Increasing Number of Connected Devices<sup>1</sup>



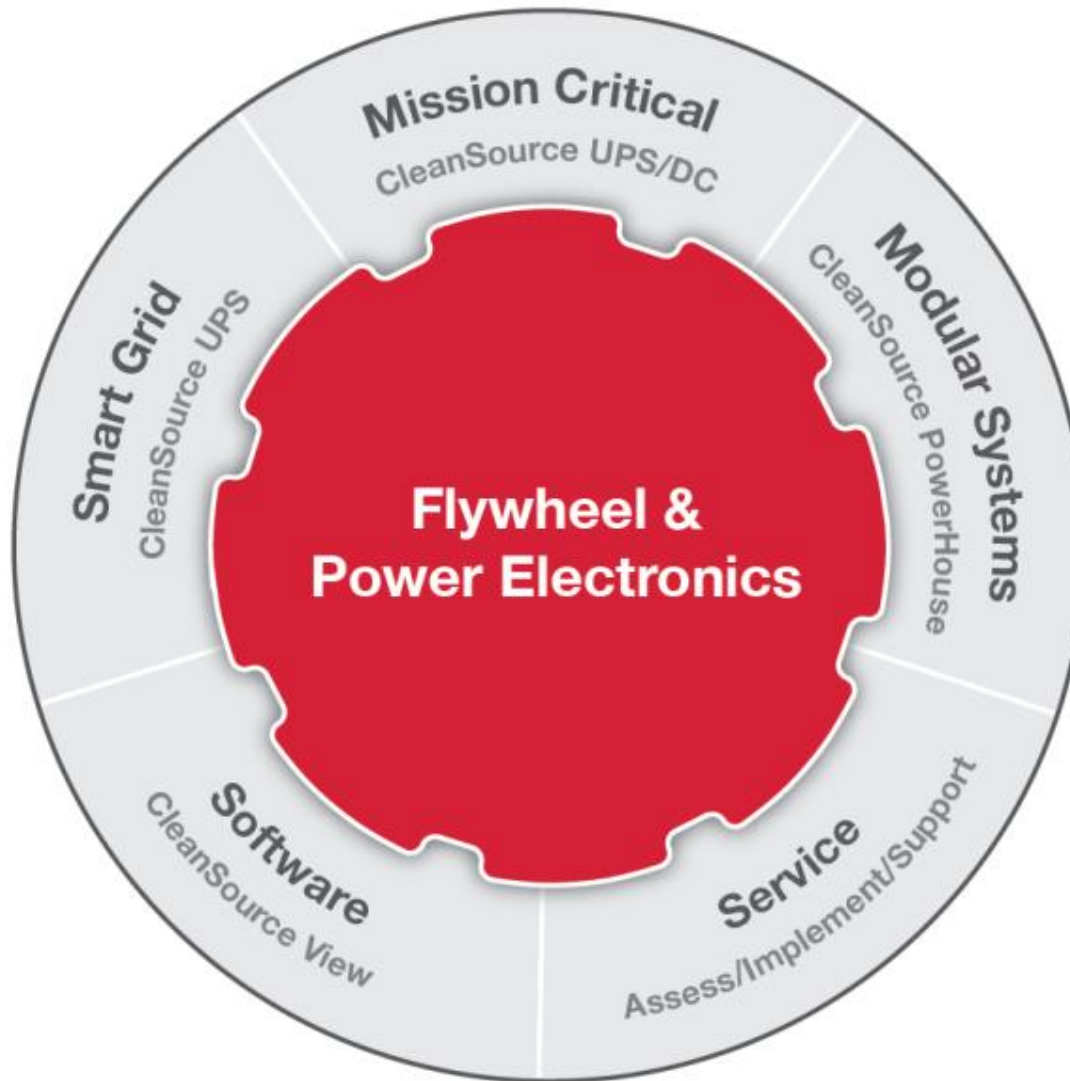
Microgrid Distributed Generation<sup>2</sup>  
Gigawatts (GW) = Million Kilowatts (kW)



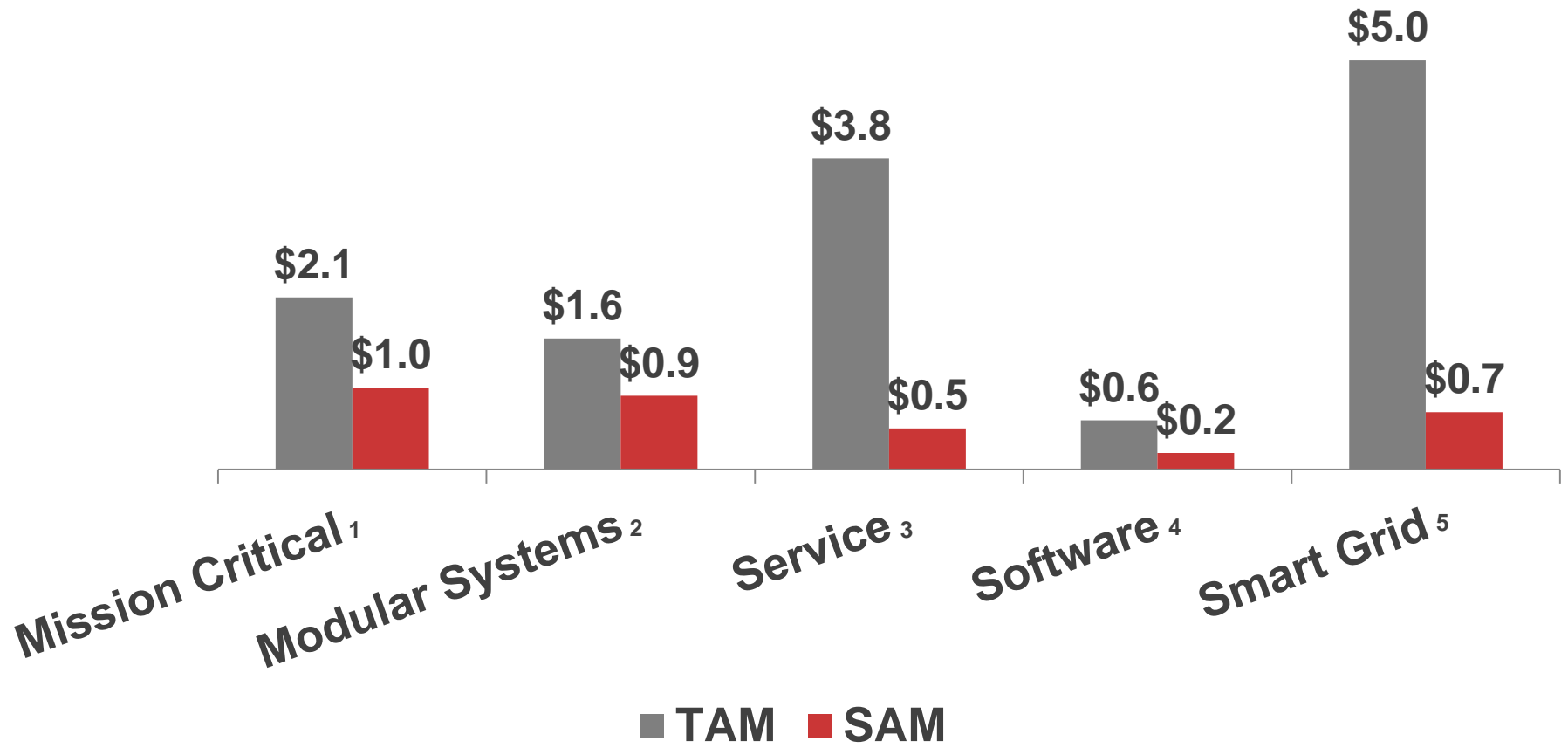
<sup>1</sup> Dave Evans, Cisco Internet Business Solutions Group, "The Internet of Things: How the Next Evolution of the Internet is Changing Everything," at page 3, April 2011

<sup>2</sup> Navigant Research, "Microgrid Enabling Technologies," Q4 2012

# Flywheel and Power Electronics Support Five Core Solutions



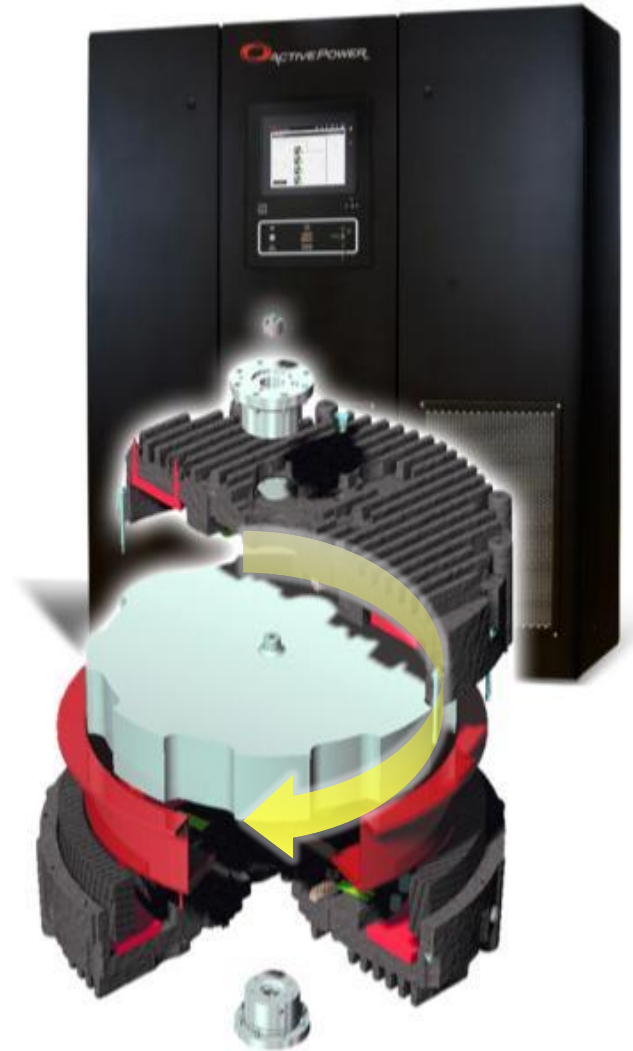
# Pursuing a \$3.3 Billion Served Addressable Market



<sup>1</sup> IHS Research, "World Market for UPS – 2013 Edition" Sept 2013  
<sup>2</sup> 451 Research, "Datacenter Technologies: Sector Report II – Prefabricated Modular Datacenters," May 2012  
<sup>3</sup> 451 Research, "Next Generation Datacenter Management: From DCIM to DCSO," Jan 2014  
<sup>4</sup> IHS Research, "World Market for UPS – 2013 Edition," Sept 2013  
<sup>4</sup> 451 Research, "Datacenter Technologies: Sector II Report – Prefabricated Modular Datacenters, May 2012  
<sup>4</sup> Active Power estimates  
<sup>5</sup> Navigant Research, "Microgrid Enabling Technologies," Q4 2012

# Key Enabler – The Flywheel

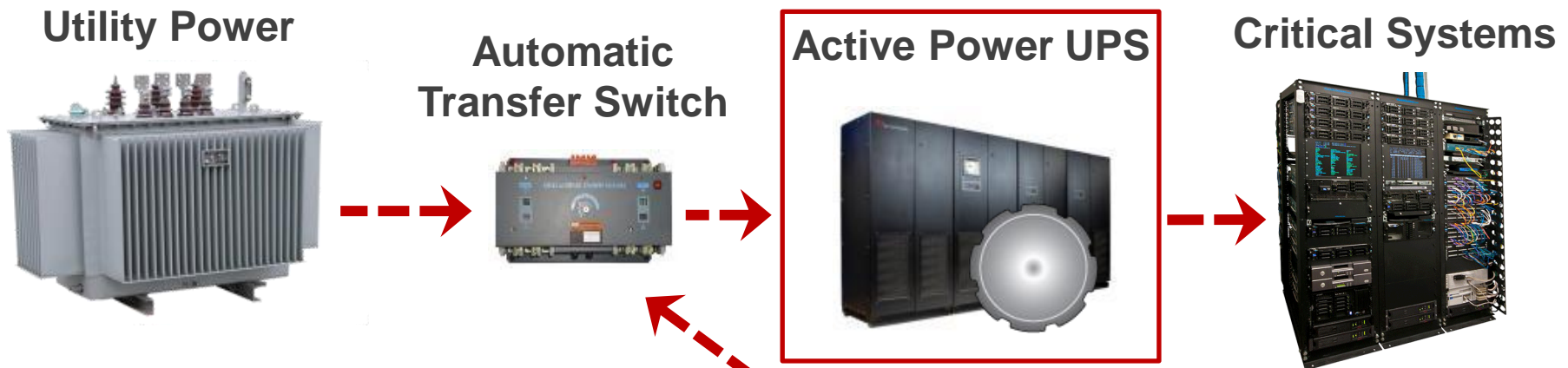
- » Patented flywheel technology that provides **elegant, efficient, and economical energy storage** in mission critical and smart grid applications
- » Within a low friction environment, the spinning flywheel is a **motor**, converting electrical energy into **kinetic energy** when utility power is flowing
- » When power is interrupted, flywheel becomes a **generator**, converting kinetic energy into electrical energy to support mission critical load
- » Supported by long tenured, world class engineering and R&D staff with **more than 300 years** of collective experience at Active Power



**Patented Flywheel Technology**

# Bridging the Power Gap

Our UPS conditions utility power, protecting mission critical loads against all types of power disturbances (i.e., surges, brownouts, etc.)



## Upon Loss of Utility Power:

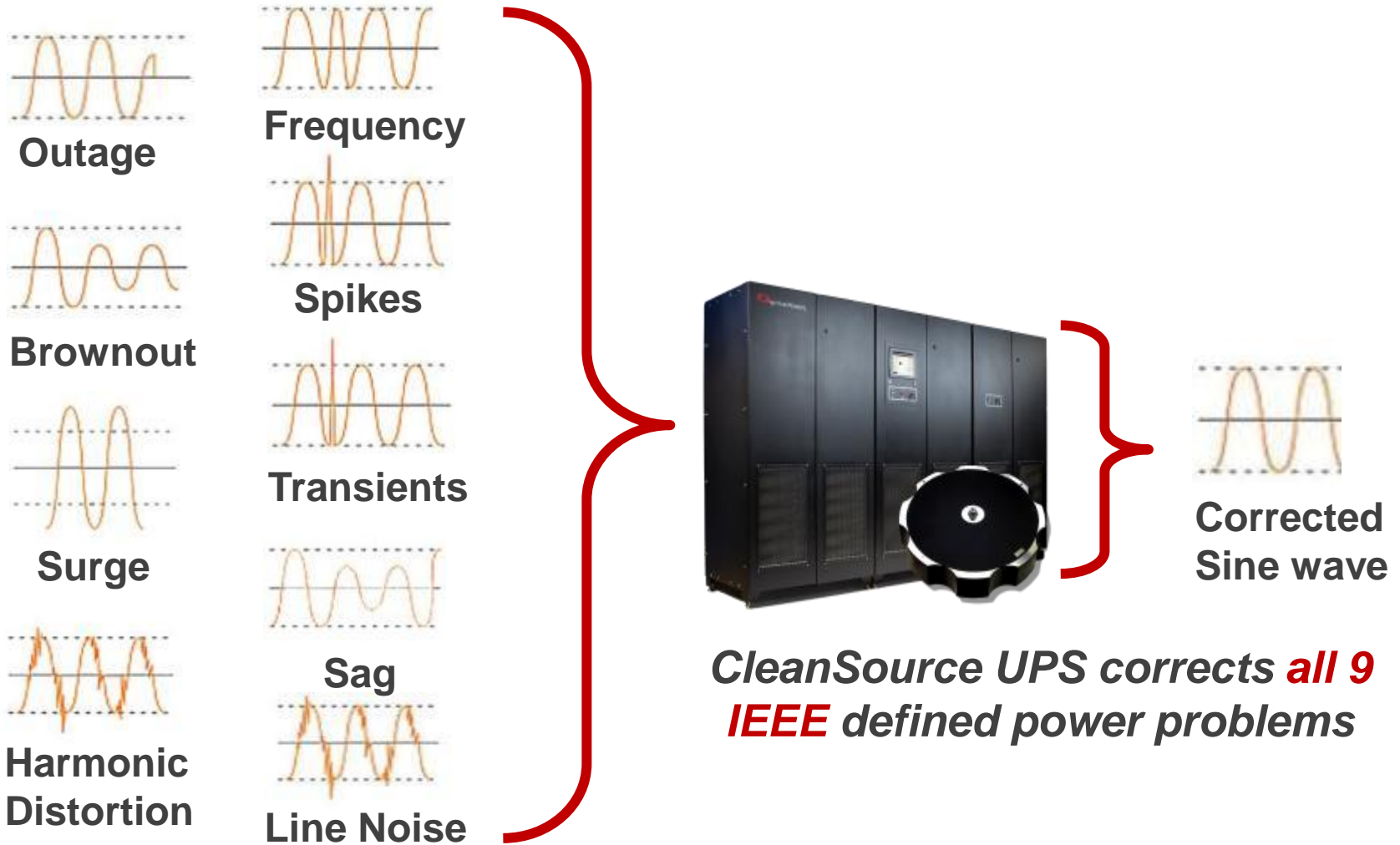
1. Active Power UPS instantly supports the load
2. Transfer switch signals generator to start
3. Generator carries load until utility power is restored

## Diesel Generator



# Power Conditioning

***CleanSource UPS Provides Clean, Reliable Power,  
Protecting Against All Types of Power Disturbances***



# A Highly Differentiated Product and Service Set



## Mission Critical

## Modular Systems

## Service

## Software

## Smart Grid

- ◉ CleanSource® UPS/HD and DC products
- ◉ UPS products protect mission critical applications from downtime
- ◉ DC products replace batteries or combines with legacy UPS with batteries
- ◉ End users include data centers; manufacturing facilities; hospitals; and broadcast sites
- ◉ **4,000+ flywheels** in systems shipped worldwide

- ◉ CleanSource PowerHouse™ (modular power) and modular IT solutions
- ◉ Replaces conventional electrical room in a rapid, capital efficient manner
- ◉ End users include hyperscale, colocation, and large enterprise data centers
- ◉ **150+ infrastructure modules** deployed worldwide

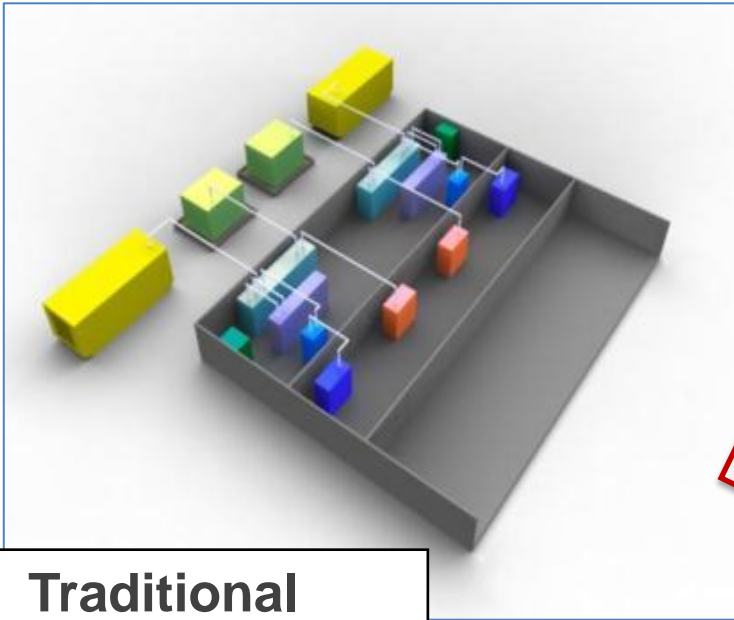
- ◉ Expanded suite of project and implementation services
- ◉ Post install training, technical support, and maintenance services

- ◉ Delivers operational data on flywheel UPS
- ◉ Offering has evolved into data center management and analytics platform

- ◉ CleanSource PD products
- ◉ Provides short term backup power for grid regulation and smoothing
- ◉ End users include microgrids and smart grids

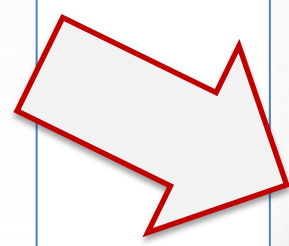
# Modular Infrastructure Solutions

CleanSource PowerHouse contains a complete mission critical electrical room, reducing time and cost compared to constructing a building

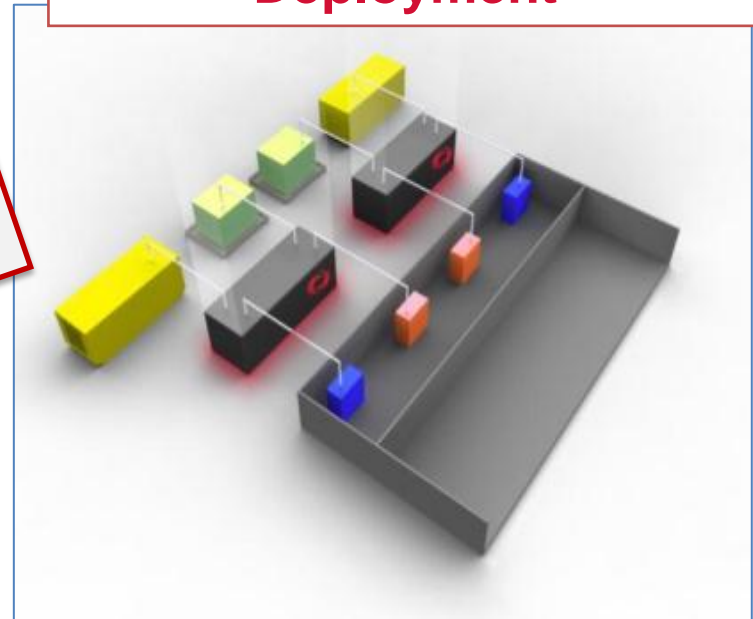


**Traditional  
Electrical Room**

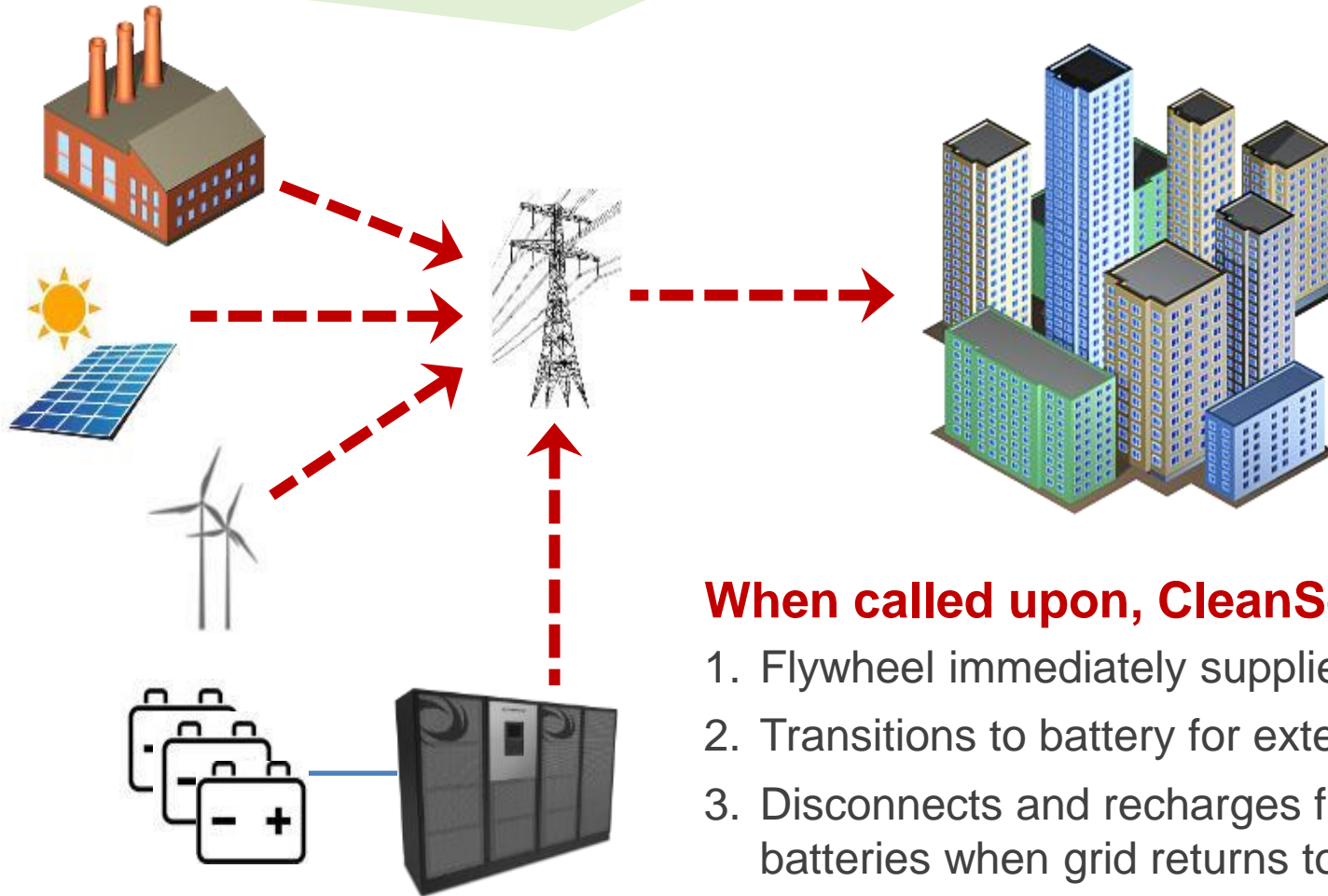
**60% less time to deploy  
25% less capex than traditional infrastructure**



**CleanSource PowerHouse  
Deployment**



CleanSource UPS stores energy and supplies power to grid on demand, smoothing transitions among sources and responding to frequency issues



## When called upon, CleanSource UPS:

1. Flywheel immediately supplies power to grid
2. Transitions to battery for extended response
3. Disconnects and recharges flywheel and batteries when grid returns to nominal

# Delivering a Set of Tangible Operational Advantages



## POWER DENSITY

- **Superior power density:** critical power delivered in about ½ the space of legacy UPS
- Frees up more floor space for revenue generating equipment



## RELIABILITY

- **Proven to reduce failure risk by 80%** versus legacy UPS<sup>1</sup>
- Unique patented design delivers **predictable, consistent, and continuous** operation



## TOTAL COST OF OWNERSHIP

- **Lower opex** through superior energy efficiency, reduced cooling needs, lower maintenance costs, and no required battery changes
- Delivers **up to 60%** in TCO savings to customers

<sup>1</sup> MTechnology, "Reliability Analysis: Active Power CleanSource 750HD UPS," Feb 2014

# Global Marquee Customer Base

## Our customers include:

- » 14 of the 30 Dow Jones Industrial Average companies
- » 5 of the top Fortune 10 and 15 of the top Fortune 50
- » World's third largest retailer (Tesco)
- » Largest wireless carrier in the U.S.
- » Company that ships the most servers in the world (HP)
- » World-leading search engine providers

**ORACLE**<sup>®</sup>

**Datum** | BUSINESS CRITICAL  
DATA CENTRES

**CORNING**

  
**Brookhaven**

Memorial Hospital Medical Center

 **KEYE TV**

**BROOKHAVEN**  
NATIONAL LABORATORY

 **Schiphol**  
Amsterdam Airport

  
**COMLINK**

  
**HEINEKEN**



Parkland

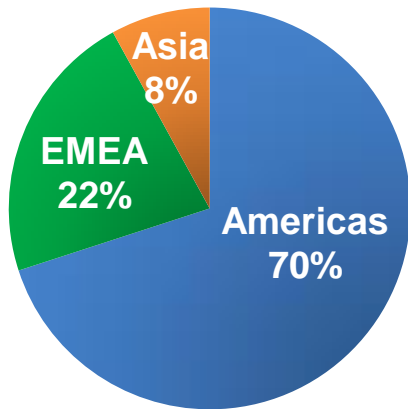
 **NEW YORK**

  
**Cherokee**  
CASINO · RESORT

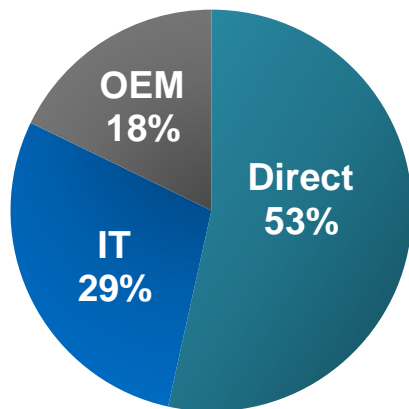


# Financial Highlights

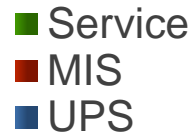
## Revenue by Geography 2009 – 2013



## Revenue by Channel 2009 – 2013



## Annual Revenue \$ millions



## Gross Margin percentage

## Adjusted EBITDA<sup>1</sup> \$ millions

	2009	2010	2011	2012	2013
Annual Revenue (\$ millions)	\$40.3	\$65.0	\$75.5	\$76.3	\$61.7
Gross Margin (percentage)	18.6%	27.6%	23.7%	32.4%	31.4%
Adjusted EBITDA (\$ millions)	\$(7.8)	\$(0.8)	\$(3.8)	\$1.3	\$(5.1)

<sup>1</sup> Refer to Reconciliation to GAAP in Appendix

# A Focused Growth Strategy

**Three-part strategy using our core flywheel and power electronics to grow the business and achieve consistent profitability**

- Generate increased bookings through more consistent sales performance
- Leverage products and solutions in place now to expand customer base including federal and smart grid/microgrid
- Position business as a mission critical and energy storage company

# Contact Us

## Executives

**Mark A. Ascolese**, President and CEO

**Jay Powers**, CFO and VP of Finance

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## Investor Relations

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## Global Operation Centers

Austin, Texas (HQ)

UK

Germany

China



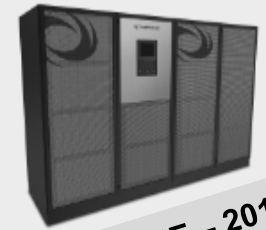
# Appendix

# Mission Critical: CleanSource UPS and DC Products

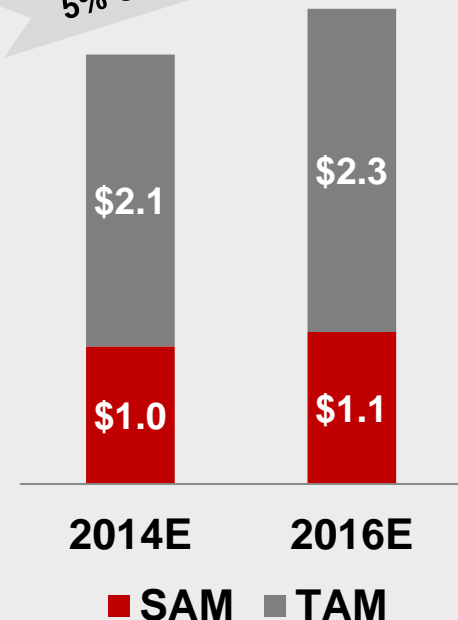
## CleanSource 300 UPS and CleanSource 750HD UPS CleanSource 250DC and CleanSource 500DC

- UPS protects data centers and other mission critical applications from downtime due to power disturbances
- DC energy storage replaces batteries or combines with legacy UPS with batteries
- Delivers an unmatched combination of:
  - Power density:** half the space of battery-based competitors
  - Reliability:** proven 80% less likely to fail versus legacy systems<sup>2</sup>
  - TCO:** competitive first cost, less expensive over life due to higher energy efficiency, reduced cooling required, lower maintenance costs
- End users include hyperscale, enterprise, and colocation data centers; industrial and process control operations
- Over 4,000 flywheels shipped / 900 MW power protection

### Global UPS > 100 kVA Market Growth<sup>1</sup> (\$ billions)



5% CAGR 2014E – 2016E



<sup>1</sup>IHS Research, "UPS – World – 2014," June 2014

<sup>2</sup>MTechnology, "Reliability Analysis: Active Power CleanSource 750HD UPS," Feb 2014

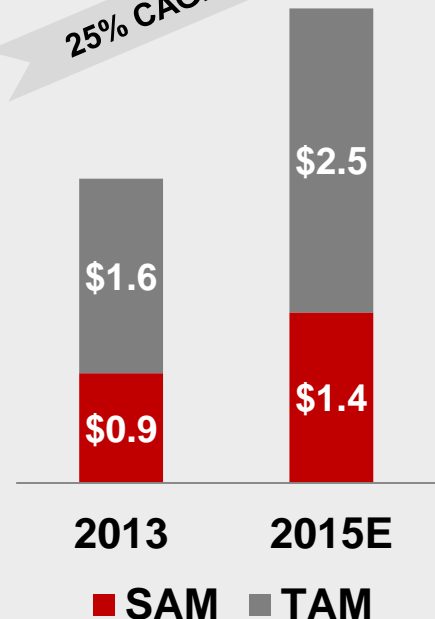
# Modular Systems: CleanSource PowerHouse

- Standard and customized prefabricated IT and power infrastructure solutions for data centers
  - Engineered and sold by Active Power under CleanSource PowerHouse brand
  - OEM manufacturer for partners such as HP and Dell
- Key differentiators:
  - Less cost:** up to 25% less capex than traditional infrastructure
  - Less time:** reduces time to deploy by 9-12 months
  - Total control:** engineered as a system and packaged with software to enhance management and performance
- End users include extreme scale, colocation, high-performance computing, and enterprise data centers; rental / mobile power protection
- Over 150 infrastructure modules deployed worldwide

## Prefabricated Modular Data Center Growth<sup>1</sup> (\$ billions)



25% CAGR 2013 – 2015E

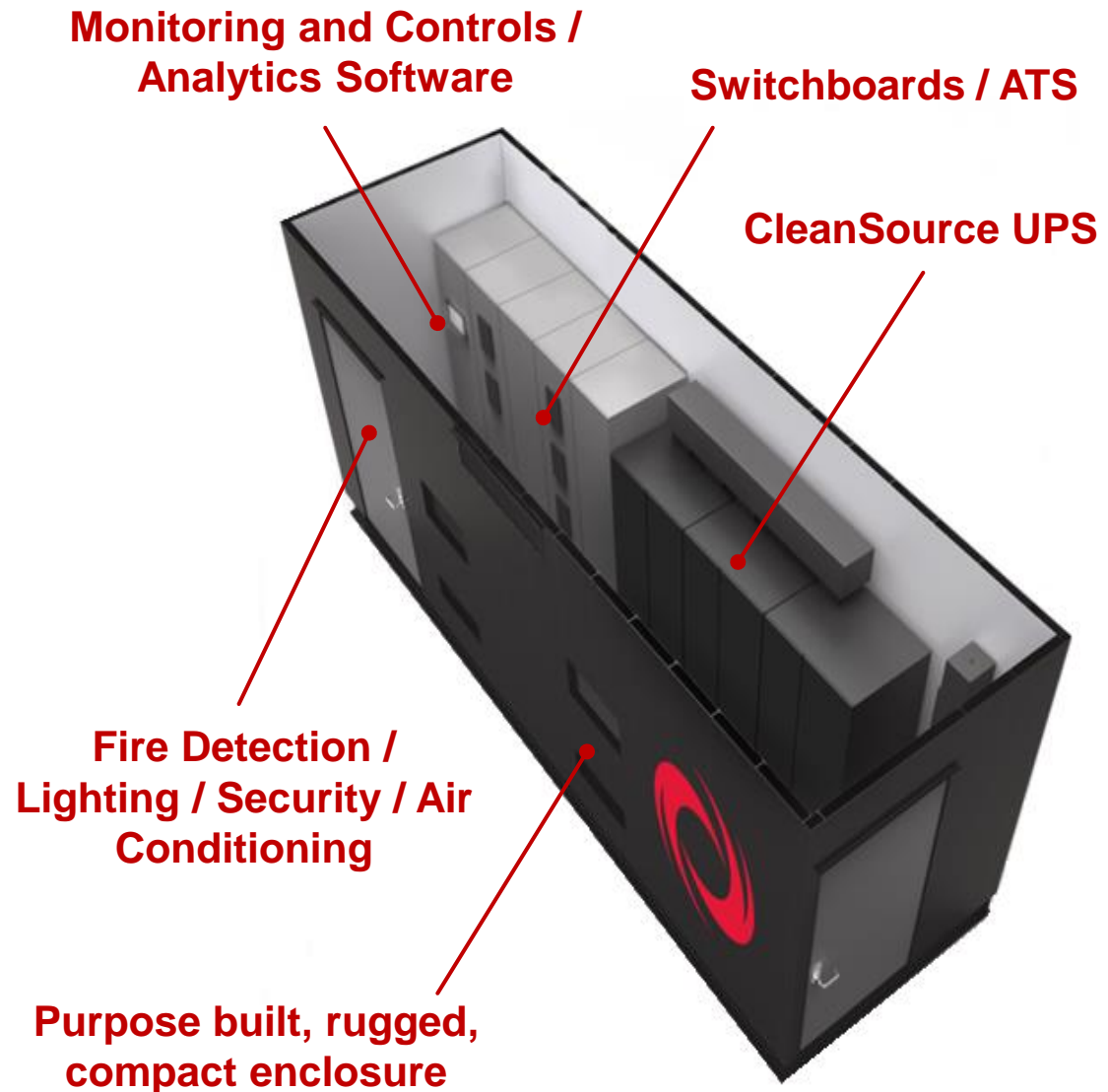


<sup>1</sup>451 Research, "Datacenter Technologies: Sector Report II – Prefabricated Modular Datacenters," May 2012, at 14

# CleanSource PowerHouse: A Complete Modular Power System



- » Industry's most complete modular power system
- » All critical elements of a traditional data center electrical room, packaged in a purpose-built enclosure
- » Assembled and tested at our factory and delivered as an integrated system



# Comprehensive Service Offerings

**Global customers served via Austin, Texas (HQ) and three regional operations centers, providing service coverage worldwide with a suite of monitoring and control software for complete system visibility and control**

## » Assess

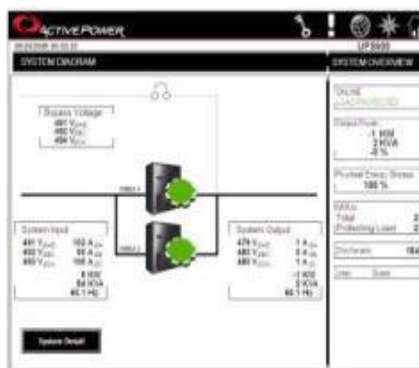
- Site survey
- Site validation
- System design

## » Implement

- Turnkey installation or installation assistance
- Start up and commissioning
- Project Management

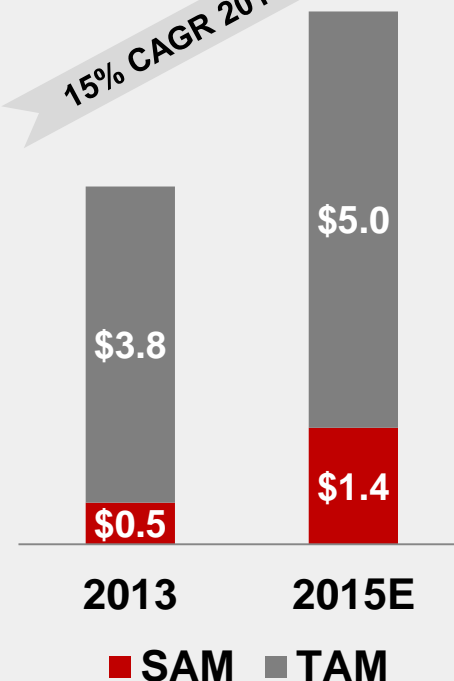
## » Support

- Maintenance and warranty programs
- Training and technical support
- Remote monitoring and power management



**Global Service Market<sup>1</sup>**  
(\$ billions)

15% CAGR 2013 – 2015E



<sup>1</sup>IHS Research, "UPS – World – 2014," June 2014

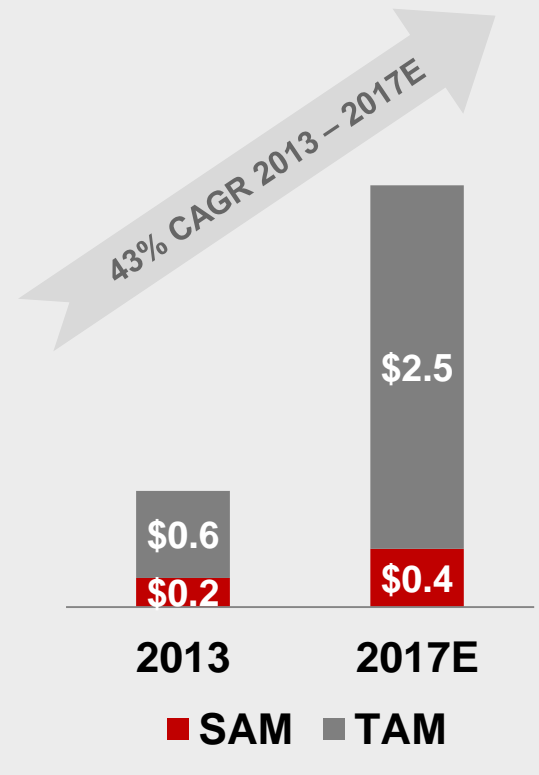
<sup>1</sup>451 Research, "Research Datacenter Technologies: Sector Report II – Prefabricated Modular Datacenters," May 2012, at 14

<sup>1</sup>Active Power estimates

# Data Center Software

- ⦿ Data center management and analytics software platform based on IO.OS from partner IO
  
- ⦿ Initially used to demonstrate integration of CleanSource PowerHouse, long-run scope to support customer IT
  
- ⦿ Key functions:
  - ⦿ Real-time status/telemetry alarms
  - ⦿ Real-time performance metrics and charting
  - ⦿ Data archival
  - ⦿ Multi-site support
  
- ⦿ Critical for corporate data center CleanSource PowerHouse customers without sophisticated management tools for their infrastructure

**Data Center Infrastructure Mgmt Software<sup>1</sup>**  
(\$ billions)

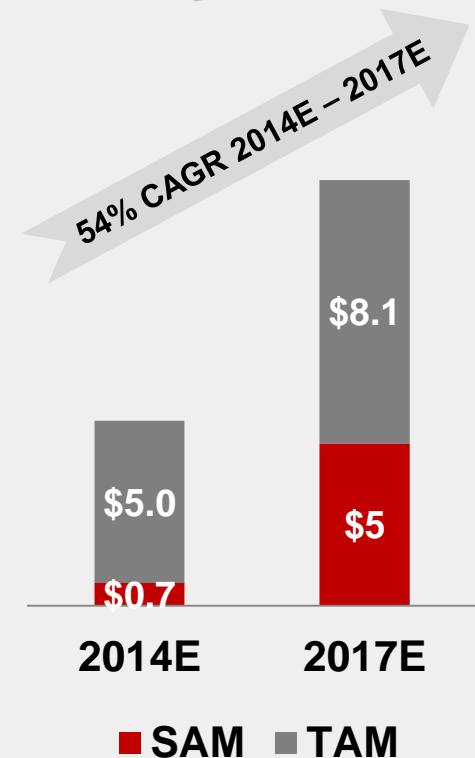


<sup>1</sup>451 Research, "Next Generation Datacenter Management: From DCIM to DCSO," Jan 2014, at 13

# Smart Grid: CleanSource UPS

- Product used for short term power requirements to provide grid regulation and smoothing
- Augments long run energy storage (batteries)
  - Superior duty cycle:** supports frequent discharge and recharge
  - Rapid response:** millisecond response to output keeps energy flowing
  - Lower TCO:** reduced first cost (fewer batteries to buy), reduced maintenance, less frequent battery replacements
- Applications include smart grids and microgrids
- Early stages / demonstrations to prove out market and application

## Microgrid Market<sup>1</sup> (\$ billions)



<sup>1</sup> Navigant Research, "Microgrid Enabling Technologies," Q4 2012

# CleanSource HD UPS Advantages



	Legacy Battery UPS	CleanSource 750HD UPS
<b>Efficiency (avg.)<sup>1</sup></b>	94%	97%
<b>Footprint<sup>2</sup></b>	77 sq ft	36 sq ft
<b>Reliability<sup>3</sup></b>	Unpredictable	80% less likely to fail
<b>Operating Temperature</b>	77°F	0° – 104°F
<b>Useful Life</b>	Battery Replacement Every 4-5 Years	20 Years
<b>Maintenance Events/Per Year</b>	2-4	1
<b>Maintenance Parts</b>	Costly battery replacement	4 year bearing change out
<b>10 year TCO<sup>4</sup></b>	~ \$2.1M	~ \$1.6M

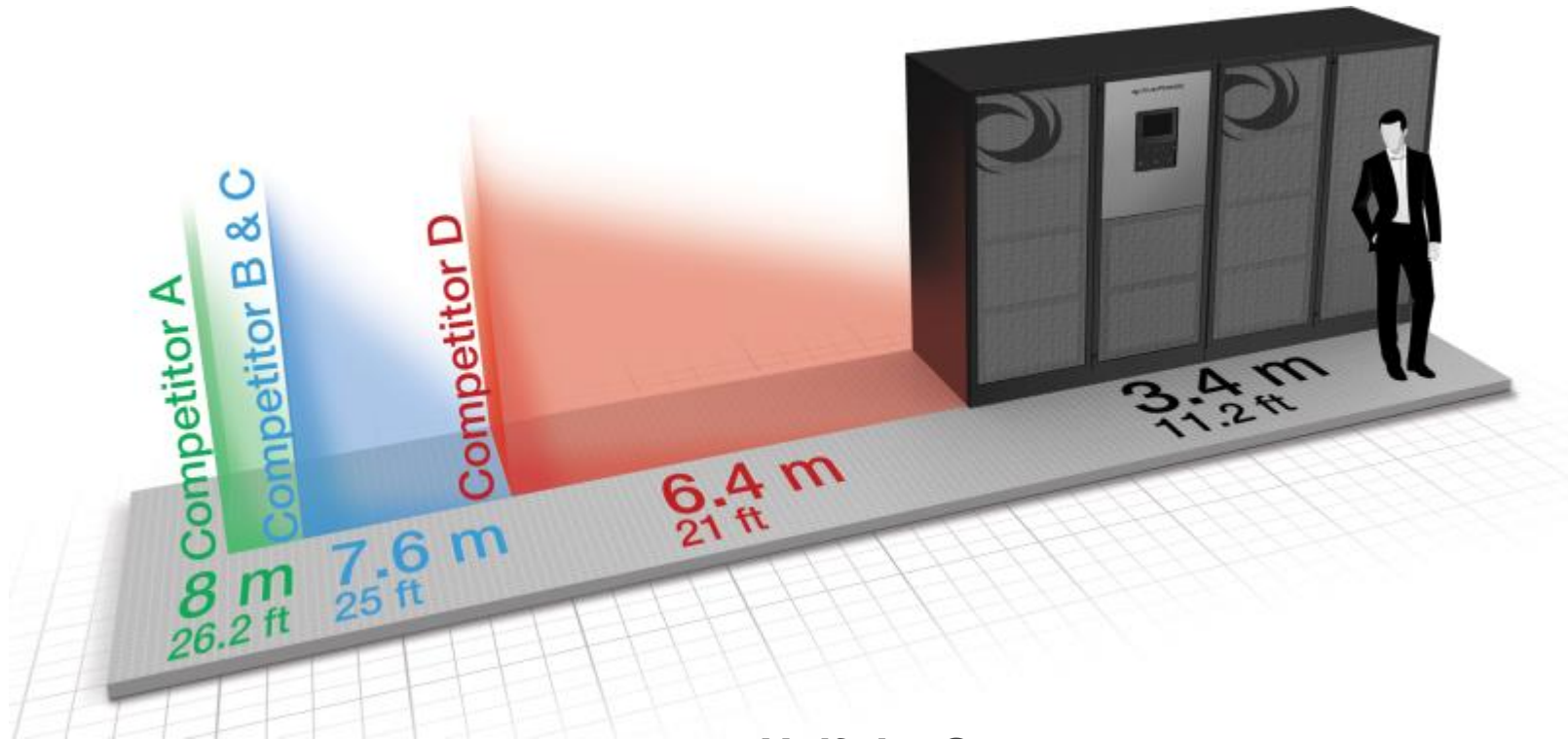
<sup>1</sup> Efficiency at 60% load

<sup>2</sup> Comparison to legacy UPS based on equivalent rated double conversion UPS with four standard battery cabinets

<sup>3</sup> MTechnology, "Reliability Analysis: Active Power CleanSource 750HD UPS," Feb 2014

<sup>4</sup> Key assumptions: 1MW load with 2N design; CleanSource HD UPS: 97% efficient; Legacy UPS: 94% efficient; 6 minute VRLA batteries w/ 5 year replacement cycle; \$0.10/kWh energy cost

# Power Density



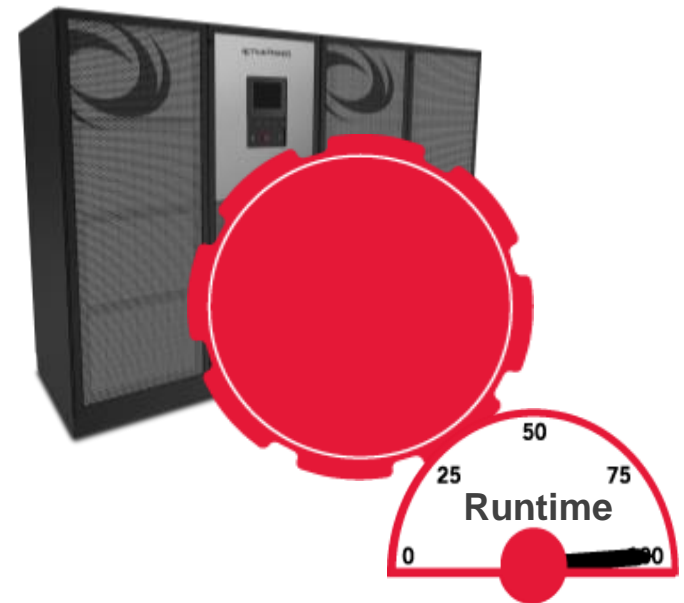
## *Half the Space*

- The most power dense UPS on the market today
- Patented integrated flywheel UPS design
- Driven by market demand for space efficiency
- More space for IT loads

Footprint comparison based on published specifications of equivalent 750 kVA units with four standard battery cabinets versus CleanSource 750HD UPS

# Inherently Reliable

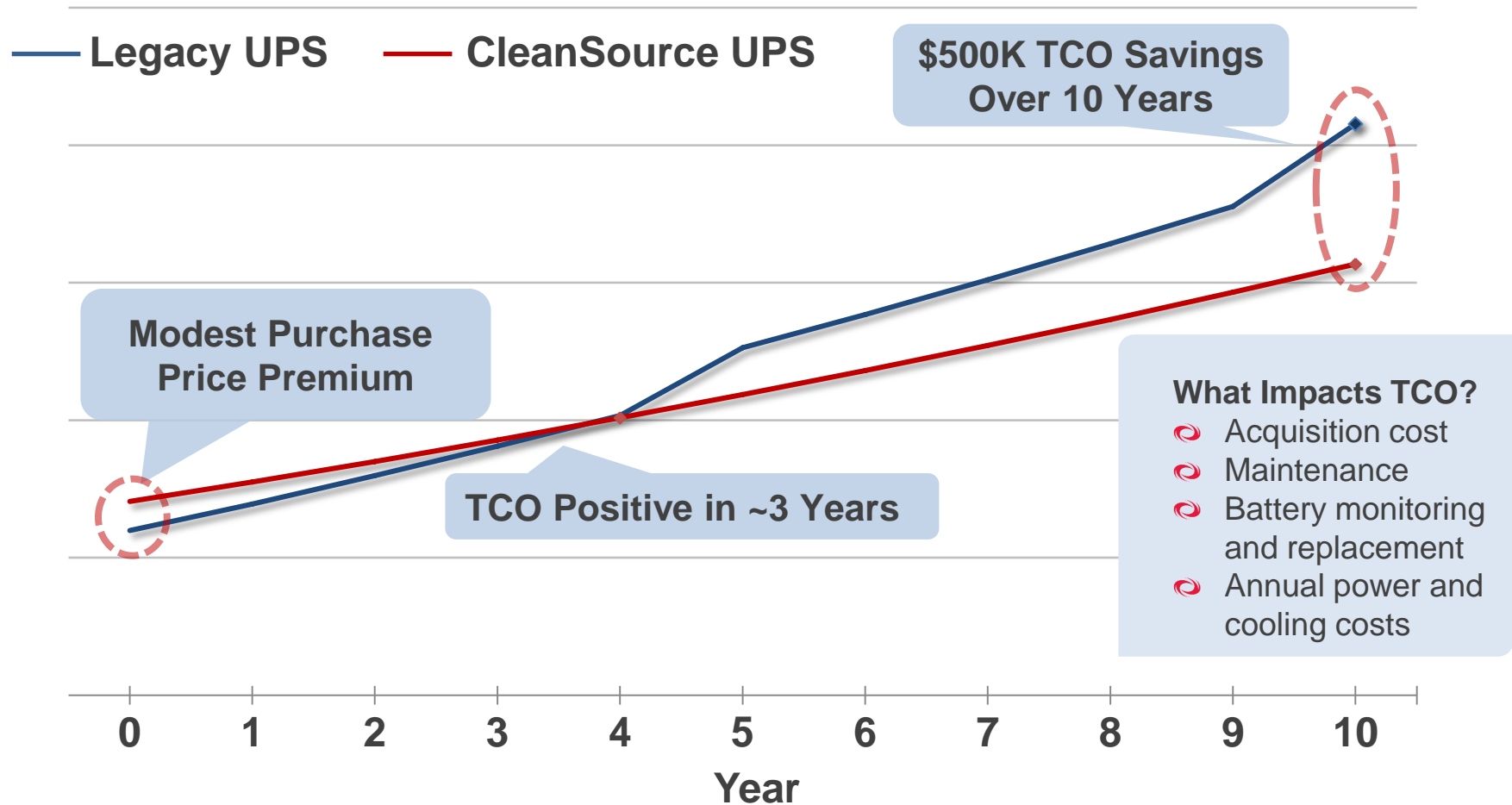
- » Proven to reduce failure risk by 80% versus legacy UPS with batteries<sup>1</sup>
- » With flywheels, *“If its spinning, its working...”*
- » But with batteries, due to aging and wear down from recharging cycles, you can never be certain if batteries will respond in a demand situation



<sup>1</sup> MTechnology, “Reliability Analysis: Active Power CleanSource 750HD UPS,” Feb 2014

# TCO Comparison: CleanSource UPS vs Legacy UPS

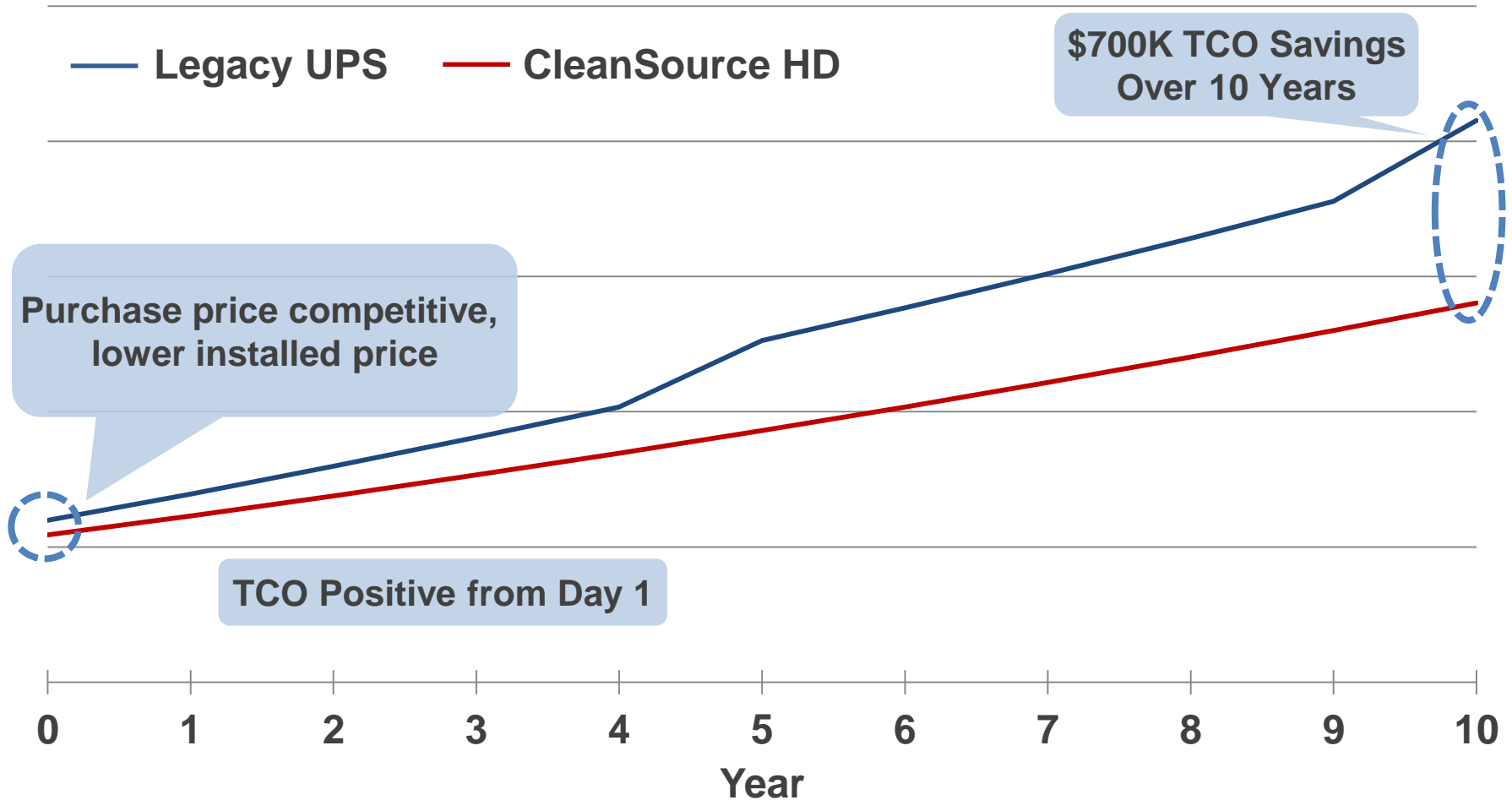
## CleanSource UPS Delivers Substantially Lower TCO



Key assumptions: 1MW load with 2N design; CSUPS: 97% efficient; Legacy UPS: 94% efficient; 6 minute VRLA batteries w/ 5 year replacement cycle; \$0.10/kWh energy cost

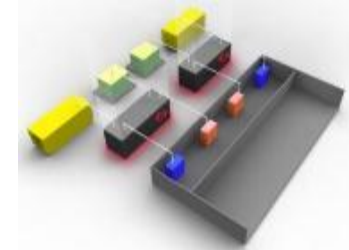
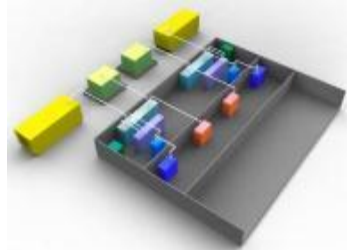
# TCO Comparison: CleanSource HD vs Legacy UPS

*Delivers Up to 30% Savings in Annual OpEx versus Legacy UPS*



Key assumptions: 1MW load with 2N design; CleanSource 750HD: 96% efficient; legacy UPS: 94% efficient, 6 minute VRLA batteries w/ 5 year replacement cycle; \$0.10/kWh energy cost

# CleanSource PowerHouse Advantages



	Legacy Data Center Electrical Room	CleanSource PowerHouse
<b>Total Installed Initial Cost</b>	~\$7.3M	~\$6.3M
<b>Deployment Schedule<sup>1</sup></b>	12+ Months	30 Weeks or Less
<b>Footprint</b>	5,000 sq ft Interior, Finished Space	12' x 10' x 40' Outdoor Enclosures
<b>Reliability</b>	Built in the Field, System Reliability Reduced	Engineered as a System, Factory Built and Tested
<b>Scalability</b>	Less Agile	Right-sized Units of Capacity
<b>Monitoring &amp; Controls</b>	Conventional Building Management System, Multiple Data Feeds	Superior Management and Control via PH.OS Platform
<b>10 year TCO<sup>2</sup></b>	~\$9.5 Million	~\$7.5 Million

<sup>1</sup> This figure is based on approximate duration of time to deploy modular infrastructure and modified to focus on build out of a conventional brick and mortar data center electrical room comparison. Data provided by a San Jose, Calif. based electrical contractor. <sup>2</sup> Key assumptions: 1MW load with 2N design; PowerHouse overall 92% efficient; legacy room overall 88% efficient; 6 minute VRLA batteries w/ 5 year replacement cycle; \$0.10/kWh energy cost; \$150/sq. ft. building construction cost cycle; \$0.10/kWh energy cost

# Reconciliation to GAAP

Adjusted EBITDA Reconciliation	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Q1 2014	Q2 2014	Q3 2014
Pre-tax Income/(Loss)	\$ (11,077)	\$ (3,966)	\$ (7,095)	\$ (1,922)	\$ (8,351)	\$ (3,874)	\$ (4,413)	\$ (2,496)
Interest Income/(Expense)	(69)	(122)	(225)	(328)	(370)	(101)	(106)	94
Depreciation	1,950	1,887	1,383	1,282	1,084	314	306	304
Stock Based Compensation	1,272	1,131	1,706	1,411	1,700	333	219	247
Impairment of Long-lived Assets	-	-	8	218	99	-	(19)	4
<b>Adjusted EBITDA</b>	<b>\$ (7,786)</b>	<b>\$ (826)</b>	<b>\$ (3,773)</b>	<b>\$ 1,316</b>	<b>\$ (5,098)</b>	<b>\$ (3,126)</b>	<b>\$ (3,801)</b>	<b>\$ (1,847)</b>

## About Presentation of Adjusted EBITDA

Adjusted EBITDA is not a financial measure calculated and presented in accordance with U.S. generally accepted accounting principles (GAAP), and should not be considered as an alternative to net income, operating income, or any other financial measures so calculated and presented, nor as an alternative to cash flow from operating activities as a measure of liquidity. The company defines adjusted EBITDA as net loss before impairment of long-lived assets, depreciation, interest, and non-cash stock based compensation. Other companies (including competitors) may define adjusted EBITDA differently. The exclusion of these items should not be interpreted as implying that these items are non-recurring, infrequent, or unusual. These excluded items could have a material impact on earnings. While management relies primarily on GAAP results, the company presents adjusted EBITDA because management believes it to be an important supplemental measure of performance that is commonly used by securities analysts, investors and other interested parties in the evaluation of companies in our industry. Management also uses this information internally as a supplemental measure for forecasting and budgeting. Adjusted EBITDA may not be indicative of the historical operating results of Active Power, Inc., nor is it intended to be predictive of potential future results. Investors should not consider adjusted EBITDA in isolation or as a substitute for analysis of the company's results as reported under GAAP.