Energy, Power & Infrastructure

Quarterly Energy Management Sector Review | 1Q 2019

Harris Williams
Harris Williams ("HW") Overview

**Global Advisory Platform**
- Founded in 1991
- 300+ professionals across eight offices globally
- 160+ closed transactions in the last 24 months
- 21st record year in 2018
- 10 industry groups

**Energy, Power, & Infrastructure ("EPI") Group**
- 15 professionals based in Richmond, VA
- 15+ closed transactions in the last 24 months

**Vertical Focus Areas**
- Energy Management
- Renewables and Distributed Energy
- Industrial and Infrastructure Services
- Outsourced Utility Services
- Oilfield Services
- Engineering and Construction
- Environmental Services
- TIC & Integrity Services

**Energy Management**
- ESCOs
- Utility Program Management
- Building Optimization
- Energy Management Systems
- LED and Smart Lighting Systems
- Energy Storage
- Electric Submeters
- Demand Response / Smart Grid
- Billing & Workforce Management
- Distribution Automation
- Microgrids / Asset Management
- EV charging

**Observations on Energy Management Trends**
- The energy management market continues to garner significant interest from financial investors and strategic acquirers alike, as companies and investors continue to seek opportunities to capitalize growth.
- Disruption of traditional energy business models continue to drive interest and urgency for energy services as incumbent providers seek integrated offering with significant focus on C&I end users, driven by the convergence of energy efficiency, demand response, storage, and on-site generation.
- PV cost reductions and continuation of the investment tax credit continue to drive the solar and renewable energy markets with over 100 US cities planning to be carbon-free by 2050.
- Due to favorable payback economics, companies and facility managers have increased focus on implementation of smart building technology to upgrade existing energy management systems.
- With only a small portion of the U.S. utility scale generating capacity attributable to utility-scale battery capacity, utilities have increased their focus on battery storage as they look towards storage to manage grid supply and demand, peak shaving, and demand charges. Decreased lithium ion battery prices have provided a near-term opportunity to expand current storage capacity.

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Energy Management Taxonomy

**ENERGY EFFICIENCY**

Providers of energy efficiency services and technologies for utility, commercial, industrial, and residential customers

- **UTILITY PROGRAM MANAGEMENT**
- **FACILITY ENERGY MANAGEMENT**
- **SMART LIGHTING SYSTEMS**
- **BUILDING OPTIMIZATION**
- **HOME ENERGY MANAGEMENT**
- **ENERGY PROCUREMENT**

Select Market Participants

![Partnerships Image](image)

**ENERGY TECHNOLOGY**

Providers of technologies and services to optimize, enhance, and support energy infrastructure

- **DEMAND RESPONSE**
- **UTILITY WORKFORCE MANAGEMENT**
- **ELECTRIC SUBMETER**
- **SMART METER & COMMUNICATIONS**
- **SMART METER NETWORKS**
- **UTILITY BILLING SYSTEMS**

Select Market Participants

![Partnerships Image](image)

**SELECT HW TRANSACTIONS**

- **CPower**: Provider of demand response capabilities, energy efficiency projects, and distributed generation assets to identify, optimize, and monetize across distributed energy assets. Has been acquired by **LS POWER**.

- **drillinginfo**: Provider of integrated software, data and analytics solutions to the global energy market including financial services, capital markets, and trading and risk professionals. Has been acquired by **GENSTAR**.

- **trafficware**: Developer of transportation analysis software for improving traffic flow. Has been acquired by **CUBIC**.

- **comverge**: Provider of integrated cloud-based demand response, energy efficiency, and customer engagement solutions for utility customers. Has been acquired by **ITRON**.

- **AM CONSULTING GROUP INC**: Leading implementer and administrator of energy efficiency programs. Has been acquired by **FRANKLIN ENERGY**.

- **NARESCO**: Leading independent ESCO serving the Federal, MUSH, and commercial and industrial end markets. Has been acquired by **Carrier**.

- **TEN DRL**: Leading cloud-based provider of Energy Services Management software and Behavioral Energy Efficiency solutions. Has been acquired by **SUNPOWER**.

- **APS ENERGY SERVICES**: Leading provider of energy efficiency and renewable energy services in the Southwestern U.S. Has been acquired by **AMERESCO**.

- **E-Mon**: Leading designer of smart submeter systems and integrated energy intelligence software. Has been acquired by **HONEYWELL**.

- **GRONHANN ENGINEERING**: Manufacturing process automation technologies for energy storage and other applications. Has been acquired by **TESLA**.
Case Study: CPower

HW’s EP&I Group advised CPower on its pending acquisition by LS Power

COMPANY OVERVIEW

CPower Holdings is an energy management company that develops and implements strategies to maximize revenues generated by distributed energy resource assets ("DERs") for leading commercial and industrial ("C&I") customers

CPower helps C&I customers and DER vendors identify, optimize, and monetize a broad range of distributed energy assets, including demand response capabilities, energy efficiency projects, and distributed generation assets

Utilizing proprietary leading-edge technologies and strong differentiated capabilities, Cpower delivers valuable and flexible energy resources to grid operators and utilities, who use them to balance electricity supply and demand in a cost-effective and environmentally sustainable manner

RELEVANT SUB-SECTORS

DEMAND RESPONSE  UTILITY PROGRAM MGMT  ENERGY EFFICIENCY

DISTRIBUTED GENERATION  ENERGY STORAGE  BUILDING OPTIMIZATION

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Select Energy Management M&A Transactions

**Tendril secures majority investment from Rubicon Technology Partners**

- Tendril, a leading provider of Home Energy Management ("HEM") solutions to the utility industry, has secured a majority investment from Rubicon Technology Partners, a private equity firm specializing in enterprise software companies.
- Tendril's HEM platform spans consumer engagement through to revolutionary smart home orchestration. It is proven to help utilities engage increasingly discerning customers, activate them to purchase energy-related products and services, and orchestrate energy usage through devices like smart thermostats and smart speakers.
- Rubicon's investment will accelerate Tendril’s growth through technology innovation, sales expansion, and acquisition opportunities.

**LSIS acquires Parker Hannifin’s Energy Grid Tie division**

- LSIS, a USD 2bn Korea-based global leader in power, automation and smart energy solutions, has acquired the Charlotte-based Energy Grid Tie (EGT) Division of Parker-Hannifin, creating a new U.S.-based company, LS Energy Solutions.
- LS Energy Solutions will operate as a separate North American organization under LSIS, and the new investment will provide for further expansion and innovation for a full range of products, systems and services.
- LS Energy Solutions will continue to focus on Energy Storage solutions for utility scale applications, as well as behind-the-meter applications including microgrids.

**American Industrial Partners to Acquire Current, powered by GE**

- American Industrial Partners, a New York-based private equity firm has signed a proposal agreement to acquire Current.
- Current is a leading provider of energy efficiency and digital productivity solutions for commercial offices, retail stores, industrial facilities and cities. Its commercial technology portfolio includes LED and traditional lighting solutions, plus a wide variety of connected sensors, controls and software. As part of the proposed sale, Current would maintain use of the GE brand under a licensing agreement.
- The Transaction is expected to close in early 2019.

**Smart Buildings acquired by ENGIE**

- ENGIE, the leading energy, services & regeneration group, has announced its acquisition of Smart Buildings Ltd, a company that specializes in smart buildings solutions.
- The company will now be able to combine its facilities management experience with Smart Building expertise in developing Internet of Things (IoT) technology and integration of devices to give customers an improved building management experience.
- The acquisition supports ENGIE's goal of achieving 50 per cent of its UK revenues from business which combine energy and services activities by 2020.

**Willdan acquires Lime Energy**

- Lime Energy designs and implements direct install energy efficiency programs for utilities that target energy savings for commercial customers.
- Lime Energy’s programs help these businesses use less energy through the upgrade of existing equipment and installation of new, more energy efficient equipment.
- Willdan believes the acquisition of Lime Energy will further expand Willdan’s presence in the energy services market and enhance Willdan’s offerings.
Significant Strategic Interest in Sector

Disruption of traditional energy business models is driving interest and urgency for energy management M&A.

Energy Management Acquisitions Completed by Strategic Buyers in 2017 and 2018
Public Market Observations

**Market Observations**

It’s been over nine months since ENGIE North America acquired three companies in succession — turning Green Charge Networks into ENGIE Storage, OpTerra Energy Services into Engie Services U.S., and Ecova to ENGIE Insight.

At the time, the French energy company said the rebrand would broaden the portfolio of options available to its growing customer base in the U.S. and Canada.

**ENGIE’s Distributed-Energy Acquisition Spree**

**Transaction Spotlight**

November 5, 2018

Transaction TEV: NA

**Market Observations**

Over the next decade and a half, Duke Energy plans to spend $500 million on energy storage across the Carolinas. After looking extensively at pricing and tech trends, the utility realized energy storage would play an extremely important role on the grid.

**Utilities Committed to Investment in Energy Storage**

**How Sense Is Building Energy Disaggregation Into the Smart Home Ecosystem**

Energy disaggregation technologies are unique in their specific methods of parsing out the energy usage. In broad terms, the technologies tend to fall into two categories: low cost and lower accuracy, or high cost and higher accuracy.

Mass. startup, Sense with the backing of Schneider Electric looks to tackle this problem.

**Market Observations**

**Are Smart Federal Buildings ‘A Reasonable Goal?’**

The Energy Department and the General Services Administration see an uptick in energy savings performance contracts (ESPCs) and utility energy service contracts (UESCs), while the Army, the biggest adopter of ESPCs, looks to strengthen the resiliency of its electrical grid through these smart energy projects.

**Transaction Spotlight**

November 27, 2018

Transaction TEV: NA

**Market Observations**

Battery energy storage system uses Artificial Intelligence to lower energy bills and provide utility grid services.

This project, funded through Con Edison’s EE program represents one of the largest energy storage installations in a commercial building in New York. It features Lockheed Martin’s Gridstar 2.0 energy storage technology and Peak Power’s intelligent software platform, Synergy7M.

**AI Introduced in Energy Storage Program**

**Transaction Spotlight**

October 3, 2018

Transaction TEV: $14.4M
Public Valuation Multiples by Sector\(^1\)

### Stock Performance (1- & 3-Year)

<table>
<thead>
<tr>
<th>Sector</th>
<th>1-Year Performance</th>
<th>3-Year Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Services</td>
<td>(25.7%)</td>
<td>1.8%</td>
</tr>
<tr>
<td>Building Technical Services</td>
<td>(19.8%)</td>
<td>25.1%</td>
</tr>
<tr>
<td>Utilities/IPPs</td>
<td>(8.7%)</td>
<td>19.0%</td>
</tr>
<tr>
<td>Facility Services</td>
<td>(19.4%)</td>
<td>8.6%</td>
</tr>
<tr>
<td>International Energy Services</td>
<td>(9.4%)</td>
<td>15.9%</td>
</tr>
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### EBITDA Multiple Comparison 4Q 2017 vs. 4Q 2018E

<table>
<thead>
<tr>
<th>Sector</th>
<th>4Q 2017</th>
<th>4Q 2018</th>
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<tbody>
<tr>
<td>Professional Services</td>
<td>12.8x</td>
<td>11.3x</td>
</tr>
<tr>
<td>Building Technical Services</td>
<td>13.7x</td>
<td>11.0x</td>
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<tr>
<td>Utilities/IPPs</td>
<td>11.3x</td>
<td>10.1x</td>
</tr>
<tr>
<td>Facility Services</td>
<td>14.3x</td>
<td>10.6x</td>
</tr>
<tr>
<td>International Energy Services</td>
<td>8.0x</td>
<td>6.0x</td>
</tr>
</tbody>
</table>

### EBITDA Multiple Comparison NTM Q4 2017 vs. NTM Q4 2018

<table>
<thead>
<tr>
<th>Sector</th>
<th>NTM 2017</th>
<th>NTM 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Services</td>
<td>12.4x</td>
<td>10.6x</td>
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<tr>
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<td>11.3x</td>
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<td>International Energy Services</td>
<td>6.1x</td>
<td>5.0x</td>
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</table>
What We’re Reading

**Demand Response | Integration Is the Next Step in Demand Side Management**

Utilities are developing holistic strategies to take advantage of energy efficiency, demand response and distributed resources and are utilizing a range of new resources and connected devices to balance the grid and meet demand, drawing on everything from smart thermostats to large-scale batteries in order to most efficiently supply electricity. The next step is the coordination of all these resources into an integrated strategy.

Enter: Integrated Demand Side Management (IDSM) — an approach that joins together all the resources utilities have at their disposal to plan, generate and supply electricity in the most efficient manner possible. The Association of Energy Services Professionals and Peak Load Management Alliance recently hosted a webinar discussing the IDSM approach with experts in the field, including representatives from three large investor-owned utilities: Consolidated Edison, Eversource and Pacific Gas & Electric. All three are taking varied approaches to IDSM and their current strategies.

Utility Dive

**Energy Storage | 5 Predictions for the Global Energy Storage Market in 2019**

2018 has been a big, yet bumpy, year for the U.S. energy storage market. Huge increases in behind-the-meter installations in homes and businesses were present, but supply bottlenecks and policy uncertainties restrained larger-scale battery installations.

After seeing a drop in utility-scale energy storage installations, compared to last year, experts predict installations will pick up in the new year. Secondly, falling solar and battery prices, combined with a continuation of the federal Investments Tax Credit for Solar, solar-plus-storage is projected to surpass 2018 deployments.

Energy Storage research director Ravi Manghani sketched out the key developments of 2018 and made five “bold and not-so-bold” predictions for what will be different in 2019.

Greentech Media

**Renewable Energy | Big Tech Companies Are Becoming the Top Green Energy Buyers**

As more tech companies commit to renewable energy, they are increasingly driving green power adoption. Google, in particular, is leading through its efforts to run all of its data centers with renewable energy.

Google has now purchased over 3 GW of renewable energy, followed by Facebook (2 GW), and Microsoft, Amazon and Apple (1 GW each). The firm's data showed the tech sector leading the year with renewable energy corporate procurements. Companies were already on pace to lead clean energy development: an earlier BNEF report found corporate purchases by August had already topped the 2017 amount by almost 2 GW, with 7.2 GW of clean energy.

And with the IoT expected to continue growing, experts see the renewable purchasing trend continuing.

Utility Dive
## Select Recent M&A Transactions

<table>
<thead>
<tr>
<th>Date</th>
<th>Target</th>
<th>Target Description</th>
<th>Acquirer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-21</td>
<td>WaveTech Global</td>
<td>U.S. based provider of energy management services, specializing in asset lifecycle extension, intellectual property development, and implementation services.</td>
<td>InterCloud Systems</td>
</tr>
<tr>
<td>Dec-13</td>
<td>Sempra Energy (Solar Division)</td>
<td>U.S. based operator of solar assets and developer of solar and battery storage development projects.</td>
<td>Con Edison</td>
</tr>
<tr>
<td>Dec-10</td>
<td>8minutenergy</td>
<td>U.S. based solar and storage developer that is the largest independent in the country</td>
<td>Management Buyout</td>
</tr>
<tr>
<td>Dec-4</td>
<td>Parker Hannifin (Energy Grid Tie Division)</td>
<td>U.S. based provider of energy storage solutions.</td>
<td>LSIS</td>
</tr>
<tr>
<td>Dec-4</td>
<td>Tendril</td>
<td>U.S. based provider of home energy management solutions to the utility industry.</td>
<td>Rubicon Technology Partners</td>
</tr>
<tr>
<td>Dec-2</td>
<td>TerraNavigator</td>
<td>U.S. based company specializing in the origination and development of solar assets on environmentally-impacted sites throughout the country</td>
<td>Ameresco</td>
</tr>
<tr>
<td>Nov-29</td>
<td>CPower</td>
<td>U.S. based provider of energy management and demand response services.</td>
<td>LS Power</td>
</tr>
<tr>
<td>Nov-27</td>
<td>Taylor Consulting &amp; Contracting</td>
<td>U.S. based provider of energy consulting and brokerage services. Its services include energy budgeting, energy benchmarking, and energy efficiency.</td>
<td>Albireo Energy</td>
</tr>
<tr>
<td>Nov-6</td>
<td>Current</td>
<td>U.S. provider of energy efficiency and digital productivity solutions for commercial offices, retail stores, industrial facilities, and cities</td>
<td>American Industrial Partners</td>
</tr>
<tr>
<td>Nov-5</td>
<td>Engie</td>
<td>U.K. based provider of smart building solutions.</td>
<td>Smart Buildings</td>
</tr>
<tr>
<td>Oct-3</td>
<td>ValuD Consulting</td>
<td>U.S. based provider of workplace management software solutions.</td>
<td>JLL</td>
</tr>
<tr>
<td>Oct-3</td>
<td>Lime Energy</td>
<td>U.S. based energy efficiency firm.</td>
<td>Willdan Group</td>
</tr>
</tbody>
</table>
Select HW EPI Transactions
Our Firm

Harris Williams has a broad range of industry expertise, which create powerful opportunities. Our clients benefit from our deep-sector experience, integrated industry intelligence and collaboration across the firm, and our commitment to learning what makes them unique. For more information, visit our website at www.harriswilliams.com/industries.

Industry Group Expertise

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- **Building Products & Materials**
- **Business Services**
- **Energy, Power & Infrastructure**
- **Specialty Distribution**
- **Transportation & Logistics**
- **Consumer**
- **Healthcare & Life Sciences**
- **Industrials**
- **Technology, Media & Telecom**

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