

# Q4: Quarterly Industry Update

AS OF December 31, 2019

**cogent** valuation  
FINANCIAL OPINIONS

## Energy Storage

### INDUSTRY SUMMARY

**COGENT VALUATION** identified **Energy Storage** publicly traded companies, IPOs, and recent M&A transactions within the Energy Storage industry, which provides a basis for market and transaction pricing that can be used by your firm in estimating market sentiment and its impact on your firm's value. Over the last year since December 31, 2018, the median 52-week share price return of the Energy Storage industry was 23.9%. Between December 31, 2017 and December 31, 2019, the median EV/EBITDA multiple increased from 9.4 to 18.1. Furthermore, the median price-to-earnings multiple increased from 22.7 to 37.4 over the same period. The median revenue growth and EBITDA margins for the industry for the quarter were 1.2% and 11.3%, respectively.

### Public Company Key Statistics

Median 52-Week  
Return

23.9%

Median 3-Year CAGR  
Return

14.5%

Median EV/Revenue  
Multiple

2x

Median EV/EBITDA  
Multiple

18.1x

Median Price/Earnings  
Multiple

37.4x

Median EV/Gross CF  
Multiple

22.4x

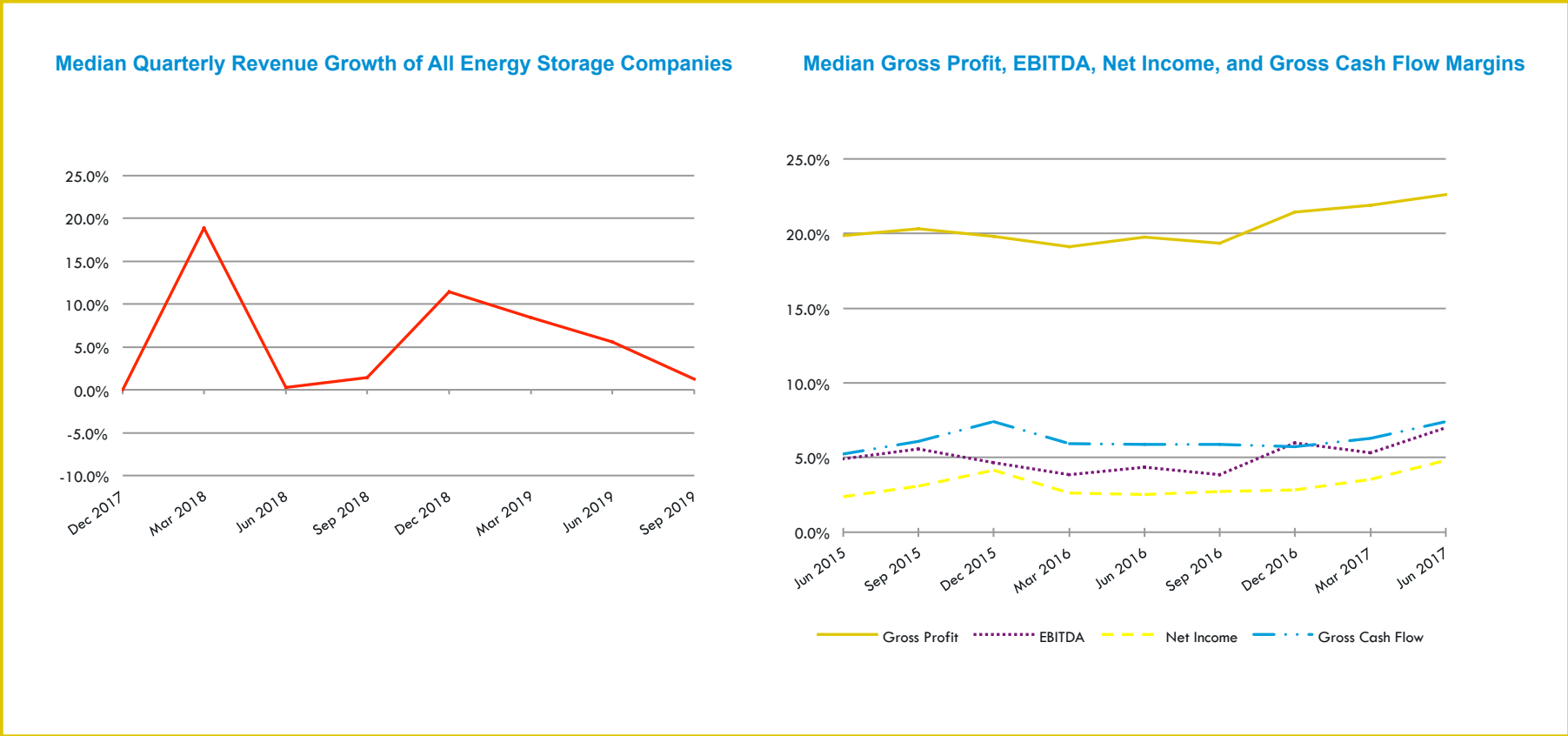
## Comparable Public Company Market Price Returns as of December 31, 2019

	2019	3 Month	1 Year	2 Year	3 Year	2018	2017	2016
<b>EnerSys</b>	25.1%	25.1%	0.4%	-40.5%	-34.3%	4.8%	-49.9%	51.9%
<b>Goldstar Power Limited</b>	-32.3%	-32.3%	-12.1%	12.0%	2.0%	-10.8%	39.6%	-9.4%
<b>Highpower International, Inc.</b>	-27.0%	-27.0%	-5.1%	N/A	N/A	57.4%	-21.7%	-39.6%
<b>mPLUS Corp.</b>	6.0%	6.0%	83.5%	27.1%	-7.0%	32.3%	-23.4%	106.4%
<b>Shanghai Putailai New Energy Technology Co., Ltd.</b>	-17.6%	-17.6%	-1.8%	N/A	N/A	-11.5%	-17.0%	-26.5%
<b>Median of Industry Public Companies</b>	<b>25.1%</b>	<b>25.1%</b>	<b>-1.8%</b>	<b>0.7%</b>	<b>-7.3%</b>	<b>4.8%</b>	<b>-21.7%</b>	<b>-9.4%</b>

Multiple year periods are calculated as the average annual return.

■ Highest Return
 ■ Lowest Return
 ■ Median Return

# Industry Revenue Growth and Profit Margins for the Past Two Years



## Public Company Median Multiples by Quarter

	12/31/19	9/30/19	6/30/19	3/31/19	12/31/18	9/30/18	6/30/18	3/31/18
<b>EV/Revenues Multiple</b>	2.0x	1.6x	1.7x	1.3x	1.2x	0.8x	0.8x	0.7x
<b>EV/EBITDA Multiple</b>	18.1x	14.3x	15.5x	10.0x	9.3x	8.6x	8.9x	7.3x
<b>Price/Earnings Multiple</b>	37.4x	30.2x	28.7x	29.5x	18.3x	19.8x	20.0x	20.0x
<b>EV/Gross Cash Flows Multiple</b>	22.4x	20.6x	21.0x	21.2x	11.9x	10.6x	9.9x	11.3x

■ Highest Multiple   
 ■ Lowest Multiple   
 ■ Median Multiple

## Industry Initial Public Offerings – Energy Storage (dollars in millions, except share prices)

Offer Date	Company Name	Offer Price	Shares Offered	Amount Raised	Total Assets	Debt	LTM Revenues	LTM EBITDA	LTM Net Income	LTM Cash Flows
12/11/19	<b>NIO Inc.</b>	\$6.26	0.5	\$1.7	\$51.9	\$15.7	\$318.9	\$6.4	\$2.9	\$7.0
11/27/19	<b>Akasol AG</b>	\$56.23	15.0	\$285.0	\$1,410.5	\$1,057.1	\$279.7	\$142.0	(\$26.1)	\$182.0
11/8/19	<b>Contemporary Amperex Technology Co., Limited</b>	\$3.93	3.0	\$21.0	\$32.0	\$11.7	\$35.4	\$3.3	\$1.4	\$3.4
10/26/18	<b>Shanghai Putailai New Energy Technology Co.</b>	\$2.49	12.0	\$4.6	\$8.1	\$4.2	\$8.5	(\$3.5)	(\$4.0)	(\$3.3)
10/18/18	<b>Varta AG</b>	\$20.60	7.0	\$84.0	\$6.7	\$4.1	\$94.1	N/A	N/A	N/A
10/10/17	<b>Voltabox AG</b>	\$15.90	8.0	\$136.0	\$23.3	\$0.0	\$43.3	(\$15.4)	(\$18.8)	(\$14.7)
10/5/17	<b>Highpower International, Inc.</b>	\$3.25	5.0	\$70.0	\$78.3	\$39.5	\$79.6	\$15.7	\$5.3	\$18.0
	<b>Median of all IPOs</b>	<b>nm</b>	<b>nm</b>	<b>\$70.0</b>	<b>\$32.0</b>	<b>\$11.7</b>	<b>\$79.6</b>	<b>\$4.8</b>	<b>(\$1.3)</b>	<b>\$5.2</b>

## Size of Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

Transaction Date	Target	Acquirer	Transaction Size	% Bought
12/30/19	<b>Fuelcon AG</b>	HORIBA Automotive Test Systems GmbH	\$18.1	100%
11/20/19	<b>ACCURATE Smart Battery Solutions GmbH</b>	Voltabox AG	\$5.9	100%
9/19/19	<b>Zhejiang Youchuang Solar Technology Co., Ltd.</b>	Zhejiang Youchuang Venture Capital Co., Ltd.	\$84.6	100%
9/12/19	<b>Liyang Yuequan Electric Energy Co.</b>	Shanghai Putailai New Energy Technology Co., Ltd.	\$39.5	51%
7/5/19	<b>Pure Vanadium Corp.</b>	Stina Resources Ltd. (nka:CellCube Energy Storage Systems Inc.)	\$0.1	100%
1/3/18	<b>IABÖ Global Holding</b>	J2L	\$4.4	100%
9/20/18	<b>Jinhua An Kao Power</b>	Zhejiang Kandi Vehicles Co.	\$21.8	100%
9/19/18	<b>Wuhan Fanso Technology</b>	EVE Energy Co., Ltd	\$167.0	100%
9/12/18	<b>Tohoku Murata Manufacturing</b>	Murata Manufacturing	\$19.5	100%
11/22/17	<b>Go Power! Electric Inc.</b>	Valterra Products, LLC	\$46.1	45%
9/1/17	<b>Magna Steyr Battery</b>	Samsung SDI Co. Ltd.	\$120.0	100%

■ USA
 ■ International

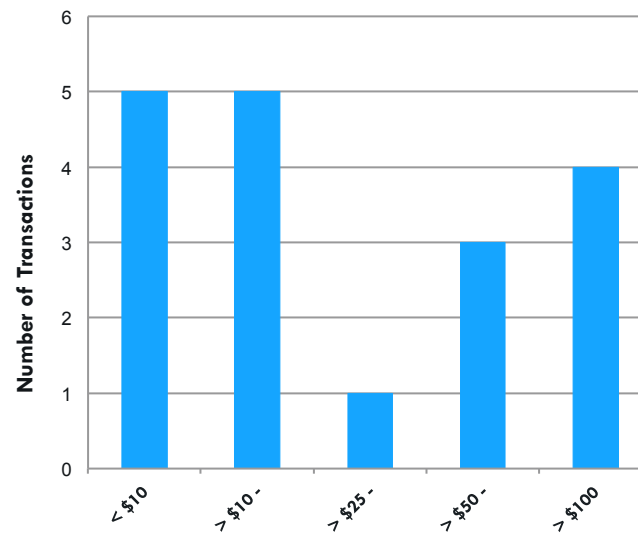
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## Size of Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

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Transaction Date	Target	Acquirer	Transaction Size	% Bought
4/8/16	SK Continental E-motion	SK Innovation Co., Ltd.	\$14.9	100%
6/30/15	Ener-tek International, Inc.	OM Group Inc.	\$24.0	100%
5/5/15	A123 Energy Solutions	NEC Corporation	\$100.0	100%
12/30/14	Shenzhen Eyang Energy	N/A	\$1.7	100%
11/24/14	Quallion LLC	EnerSys	\$30.0	100%
9/30/13	Eltek Electric Vehicles	Valeo SA	\$20.3	100%
8/23/13	Millennium Power Solutions	Blue Earth Inc.	\$15.2	100%
Median of the 18 M&A Transaction Targets			\$14.9	100%

## Size of Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)





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**Definitions of Financial Terms Used in this Quarterly Industry Update:**

**Enterprise Value (EV):** Market Value of Equity + Market Value of Debt —Cash

**Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA):** referred to as operating profit or operating earnings.

**Gross Cash Flows:** Net Income + Depreciation and Amortization Expense

**Latest Twelve Months (LTM):** Financial information is as of the latest twelve months through the date of this Quarterly Industry Update.

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