

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 June 30, 2017, the median 52-week share price return of the Energy Storage industry was -6.0%. Between June 30, 2016 and June 30, 2018, the median EV/EBITDA multiple increased from 10.0 to 13.5. Furthermore, the median price-to-earnings multiple increased from 18.9 to 26.2 over the same period. The median revenue growth and EBITDA margins for the industry for the quarter were 4.4% and 10.6%, respectively.

Public Company Key Statistics

Median 52-Week
Return

-6%

Median 3-Year CAGR
Return

-2.5%

Median EV/Revenue
Multiple

1.4x

Median EV/EBITDA
Multiple

13.5x

Median Price/Earnings
Multiple

26.2x

Median EV/Gross CF
Multiple

17.6x

Comparable Public Company Market Price Returns as of June 30, 2018

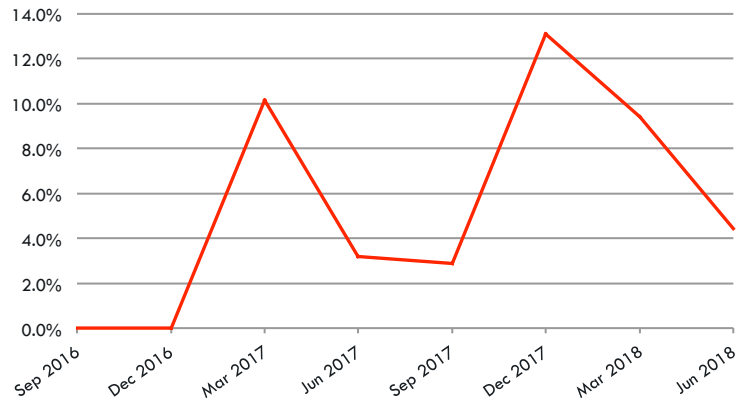
	YTD	3 Month	1 Year	2 Year	3 Year	2016	2015	2014
CBAK Energy Technology, Inc.	-37.6%	-31.9%	-31.9%	-40.5%	-34.3%	-49.9%	51.9%	-16.7%
EnerSys	7.2%	7.6%	3.0%	12.0%	2.0%	39.6%	-9.4%	-11.9%
Goldstar Power Limited	-23.4%	-14.7%	N/A	N/A	N/A	N/A	N/A	N/A
Highpower International, Inc.	-16.2%	-17.3%	-15.1%	27.1%	-7.0%	-21.7%	-39.6%	94.1%
mPLUS Corp.	11.5%	-29.3%	N/A	N/A	N/A	N/A	N/A	N/A
Shanghai Putailai New Energy Technology Co., Ltd.	13.5%	52.6%	N/A	N/A	N/A	N/A	N/A	N/A
Shin Heung Energy & Electronics Co.,Ltd.	65.1%	1.2%	N/A	N/A	N/A	N/A	N/A	N/A
Ultralife Corporation	46.6%	-4.0%	33.3%	38.4%	31.8%	-23.4%	106.4%	-11.8%
Varta AG	4.5%	14.9%	-11.5%	-14.3%	-18.6%	-17.0%	N/A	N/A
Median of Industry Public Companies	-15.9%	-3.0%	4.8%	0.7%	-7.3%	-21.7%	-9.4%	-11.8%

Multiple year periods are calculated as the average annual return.

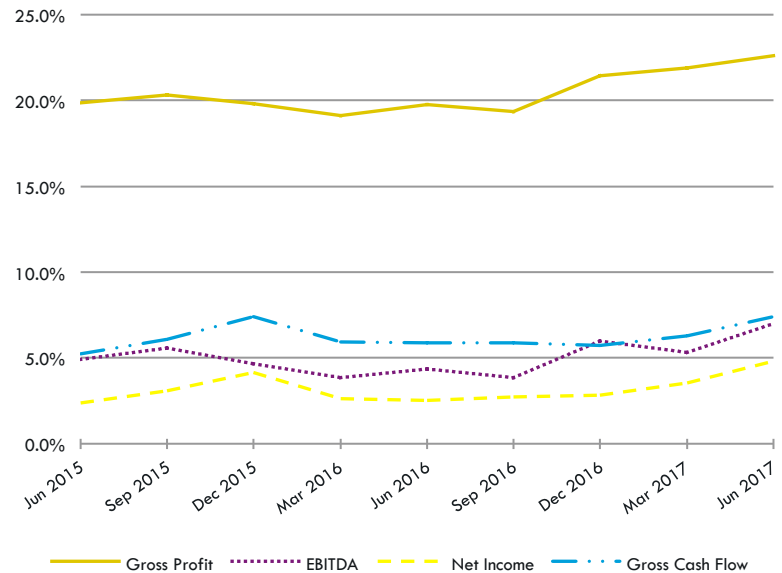
■ Highest Return
 ■ Lowest Return
 ■ Median Return

Industry Revenue Growth and Profit Margins for the Past Two Years

Median Quarterly Revenue Growth of All Energy Storage Companies



Median Gross Profit, EBITDA, Net Income, and Gross Cash Flow Margins



Median Public Companies

The chart below illustrates Public Company Multiples.

	6/30/18	9/30/17	6/30/17	3/31/17	12/31/16	9/30/16	6/30/16	3/31/16
EV/Revenues Multiple	1.4x	1.1x	1.2x	0.9x	0.8x	0.7x	0.9x	1.0x
EV/EBITDA Multiple	13.5x	10.0x	11.2x	10.6x	10.3x	9.8x	12.5x	11.2x
Price/Earnings Multiple	26.2x	18.3x	19.6x	21.4x	21.6x	22.7x	17.8x	14.1x
EV/Gross Cash Flows Multiple	17.6x	13.4x	14.9x	14.9x	15.3x	15.0x	15.5x	14.8x

■ Highest Multiple
 ■ Lowest Multiple
 ■ Median Multiple

Industry Initial Public Offerings—Industry: 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
6/27/18	Akasol AG	\$56.23	0.5	\$1.7	\$51.9	\$15.7	\$79.6	\$6.4	\$2.9	\$7.0
6/8/18	Contemporary Amperex Technology Co., Limited	\$3.93	15.0	\$285.0	\$1,410.5	\$1,057.1	\$491.9	\$142.0	(\$26.1)	\$182.0
10/26/17	Shanghai Putailai New Energy Technology Co.	\$2.49	3.0	\$21.0	\$32.0	\$11.7	\$89.3	\$3.3	\$1.4	\$3.4
6/27/18	Goldstar Power Limited	\$20.60	12.0	\$4.6	\$8.1	\$4.2	\$0.2	(\$3.5)	(\$4.0)	(\$3.3)
9/22/17	Shin Heung Energy & Electronics Co., Ltd.	\$28.34	7.0	\$84.0	\$6.7	\$4.1	N/A	N/A	N/A	N/A
9/15/17	mPLUS Corp.	\$17.00	8.0	\$136.0	\$23.3	\$0.0	\$3.4	(\$15.4)	(\$18.8)	(\$14.7)
6/19/08	Highpower International, Inc.	\$14.00	5.0	\$70.0	\$78.3	\$39.5	\$82.1	\$15.7	\$5.3	\$18.0
Median of all IPOs		nm	nm	\$70.0	\$32.0	\$11.7	\$80.8	\$4.8	(\$1.3)	\$5.2


Multiple year periods are calculated as the average annual return.


■ Highest Return
 ■ Lowest Return
 ■ Median Return


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

Transaction Date	Target	Acquirer	Transaction Size	% Bought
2/21/18	IABÖ Global Holding	J2L	\$5.3	100%
1/3/18	Jinhua An Kao Power	Zhejiang Kandi Vehicles Co.	\$2.3	100%
11/22/17	Wuhan Fanso Technology	EVE Energy Co., Ltd	\$651.5	100%
9/1/17	Tohoku Murata Manufacturing	Murata Manufacturing	\$92.2	51%
6/2/17	Go Power! Electric Inc.	Valterra Products, LLC	\$3.3	100%
4/13/17	Ebonex IPR Limited	Juline-Titans LLC	\$1,368.3	100%
1/24/17	Mitsumi Electric Co., Ltd.	Platypus Minerals Ltd (nka:Lepidico Ltd)	\$11.2	100%
6/1/16	Fiamm Batterie S.r.l.	Solid State plc	\$2.2	100%
4/8/16	T&t Ener techno Co., Ltd.	Shenzhen Selen Science	\$86.4	100%
6/30/15	Leclanché SA	Oakridge Global Energy Solutions, Inc.	\$46.1	45%
5/5/15	Magna Steyr Battery	Samsung SDI Co. Ltd.	\$120.0	100%

 USA

 International

 Highest

 Lowest

 Median

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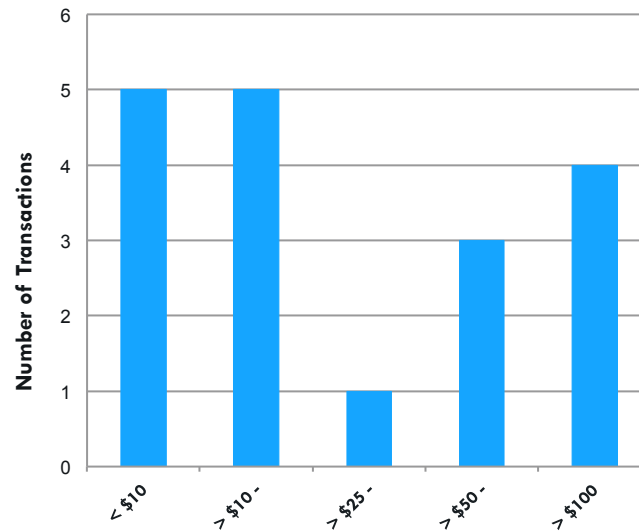
Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

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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 28 M&A Transaction Targets			\$14.9	100%

USA
 International
 Highest
 Lowest
 Median

Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions) as of June 30, 2018



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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): Profitability metric sometimes also 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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