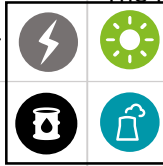




## Energy sector trends

### Texas consumers increase investment in distributed energy resources<sup>1</sup>

Many Texas homeowners, small business owners, and large industrial users are increasing investment in distributed energy resources (DER) and actively managing their energy consumption. According to a recent report completed by the Texas Clean Energy Coalition, consumers in Texas have increased their spend 62 percent on DER in the past two years, particularly on solar installation and natural gas-powered microgrids.



### US oil production simmers down in Q1<sup>3</sup>

The Energy Information Administration (EIA) released its production report showing US oil production was likely flat from December 2018 through March 2019, due mainly to a shortfall in shale production within the Permian basin. January 2018 production fell 91 thousand barrels a day from the final month of December. The EIA now projects the US will produce 12.39 million barrels per day in 2019, up from their previous estimate of 12.30 million barrels per day.

### Corporate investments in renewable energy surge<sup>2</sup>

The total solar market received \$2.8 billion in corporate funding in Q1 2019. Public markets, venture capital, and debt financing for solar projects were up by 10 percent as compared to Q1 2018. Announced large-scale solar funding soared to \$5.68 billion across 43 deals, which is up from the 47 deals worth \$2.8 billion in Q4 2018. The 2018 struggles related to tariffs, subsidy/installation cuts, and module oversupply situation has rebounded. The market is poised for growth, as shown by the rebound in solar equities in Q1 2019.

### Private buyouts deals to surge in oil and gas pipeline M&A<sup>4</sup>

M&A activity for midstream energy was dominated by reorganizations in 2018. M&A analysts expect pipeline companies to join in operations as public equity funding for the sector remains scarce. Private Equity firms, who are sitting on a lot of investable capital, are expected to play a large roll in selling non-core assets for these energy companies in 2019. These firms are often willing to pay more than industry players as many believe multiples are rising given the upbeat trading environment.

## In the news

**March 25<sup>th</sup>, 2019<sup>5</sup>** – Royal Dutch Shell Plc (Shell) took a large step forward when it announced that it has a fixed rate power-supply for UK customers of ~\$1,278 USD a year. Shell made this move in order to undercut the former cheapest suppliers of energy: Bulb Energy Ltd. Centrica Plc. Shell is aiming to become the world's largest power producer within 15 years, and is committing large amounts of capital (~\$2 billion USD) to its renewable division. The company plans to spend roughly 5 percent of its CapEx in its Shell New Energies business. This move is expected to shake up the UK power market, as customers leave traditional utility providers in search of smaller, less expensive suppliers.

**March 27<sup>th</sup>, 2019<sup>6</sup>** – Secretary of Energy Rick Perry announced in late March that the US Department of Energy will be committing \$130 million of funding for new research into advancing early-stage solar technologies. The funding will be aimed at five key topics of research including concentrated solar power (CSP), innovations in manufacturing, and solar systems integration. The announcement also included an additional \$33 million committed to CSP research and development in an effort to bring the price per kWh of CSP generated electricity down to \$0.05. Another \$17 million will be allocated to develop solar markets and address permitting issues.

## In this update

- Energy trends
- Economic outlook
- Industry analysis
- Select M&A transactions
- Appendix

This update will focus on news and trends in the following areas:

- Mid-stream Oil Services
- Renewable Energy
- Power & Utilities

## Who we are

Deloitte Corporate Finance LLC is a leading global middle market M&A adviser. The firm's professionals have extensive knowledge within various sectors of the Energy space.

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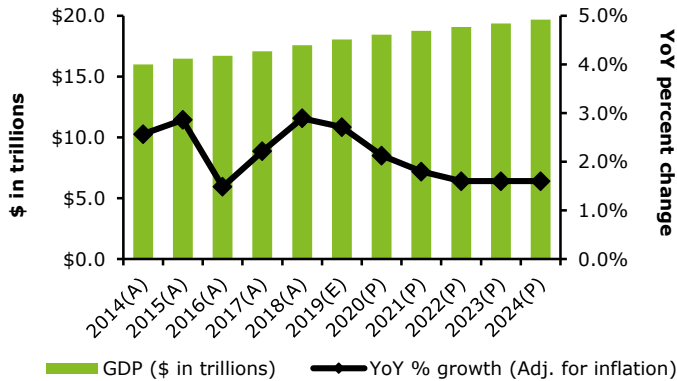
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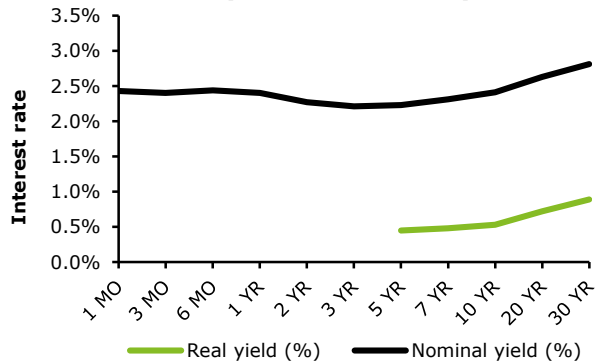
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## Macroeconomic outlook

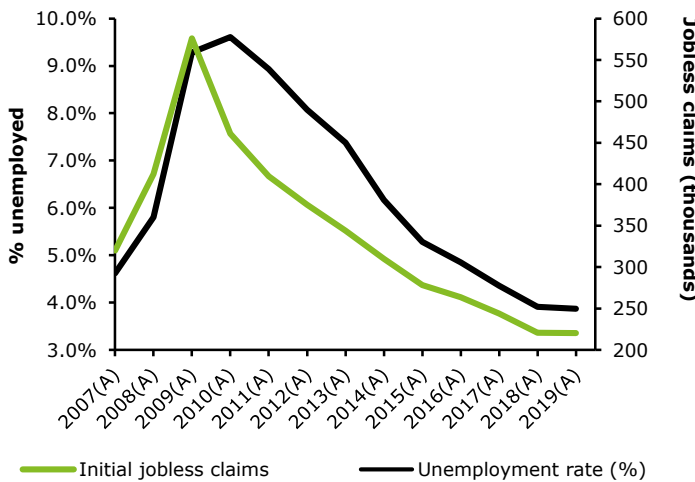
**US gross domestic product (\$ in trillions)<sup>1</sup>**



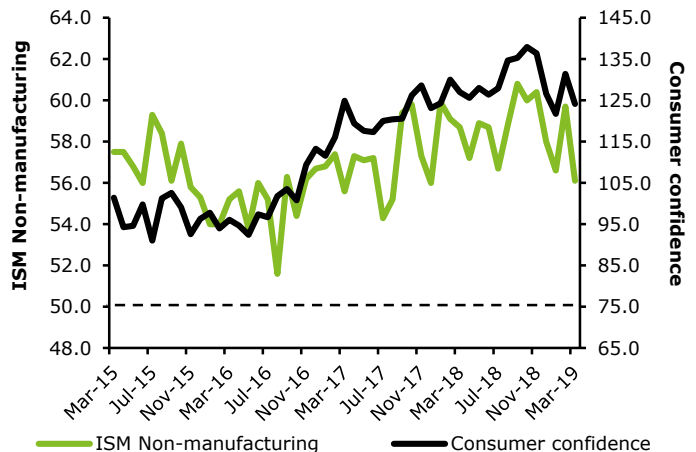
**US Treasury yield curve (nominal vs. real)<sup>2</sup>**



**US unemployment rate (% unemployed)<sup>3</sup>**



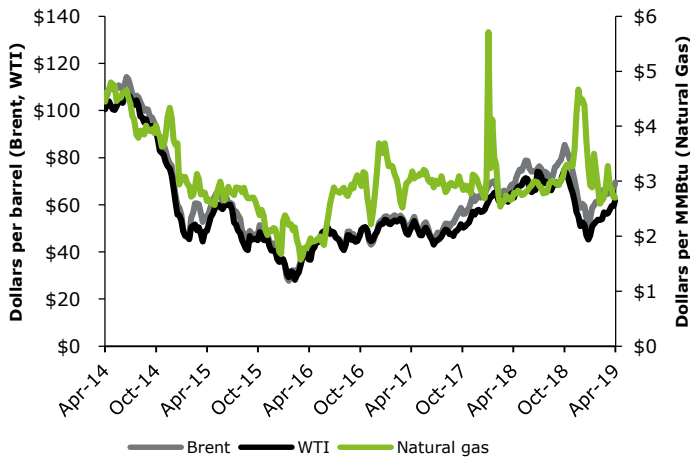
**ISM non-manufacturing index and consumer confidence index<sup>4</sup>**



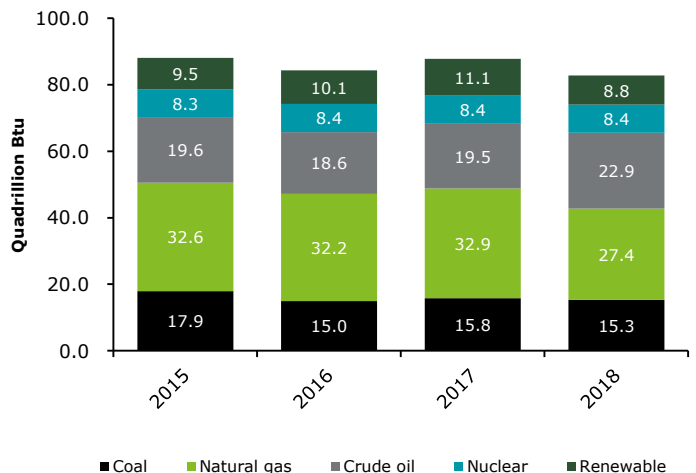
\*An ISM non-manufacturing index value above 50 signals economic expansion.

## Energy sector outlook

**Brent, WTI, and natural gas prices (2014 – 2010 YTD)<sup>5</sup>**



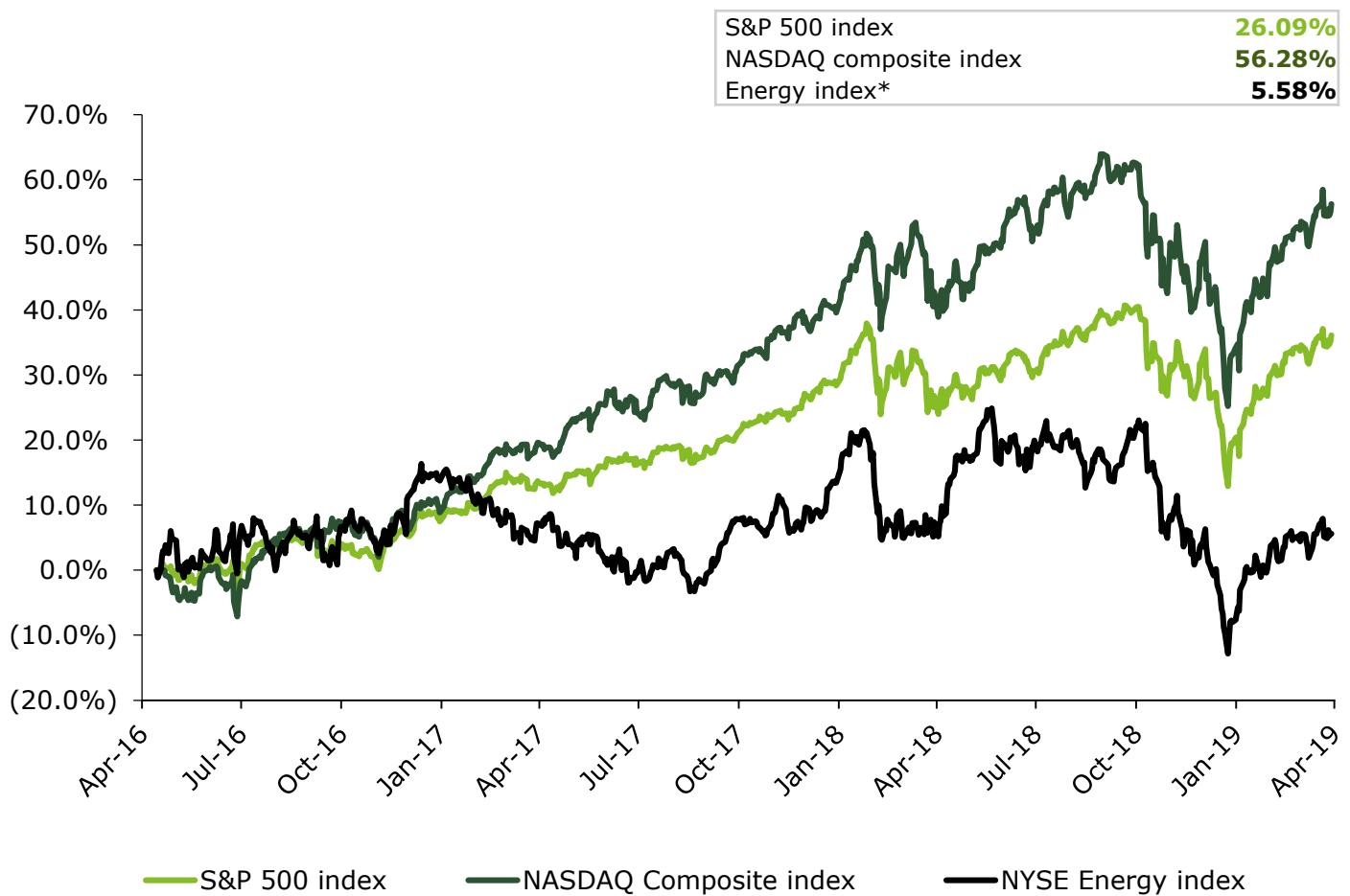
**US energy production by source<sup>6</sup>**



## Energy sector breakdown & trading statistics<sup>1</sup>

Sector	Number of companies	% of 52 week high	Median revenue CAGR (3 Yr)	Median LTM EBITDA	Median EBITDA Margin	Median enterprise value	Last twelve months		NTM	
							EV/Revenue	EV/EBITDA	EV/EBITDA	
(\$ in millions)										
Oil and gas, general (14)	14	83.1 %	7.3 %	\$3,710.5	18.9 %	\$46,769.5	2.1 x	9.3 x	7.6 x	
Power & utilities (19)	19	88.9	3.1	3,599.0	33.1	32,201.9	3.6	10.9	10.6	
Renewable energy (13)	13	79.8	6.5	237.6	14.7	2,698.3	3.7	10.9	13.7	
Nuclear (3)	3	93.9	5.2	456.2	19.9	6,632.9	2.8	13.8	13.4	
<b>Energy index</b>	<b>49</b>	<b>87.1 %</b>	<b>5.0 %</b>	<b>\$2,169.0</b>	<b>28.5 %</b>	<b>\$22,331.5</b>	<b>2.7 x</b>	<b>10.5 x</b>	<b>10.0 x</b>	

## Public comparables three-year stock market performance<sup>2</sup>

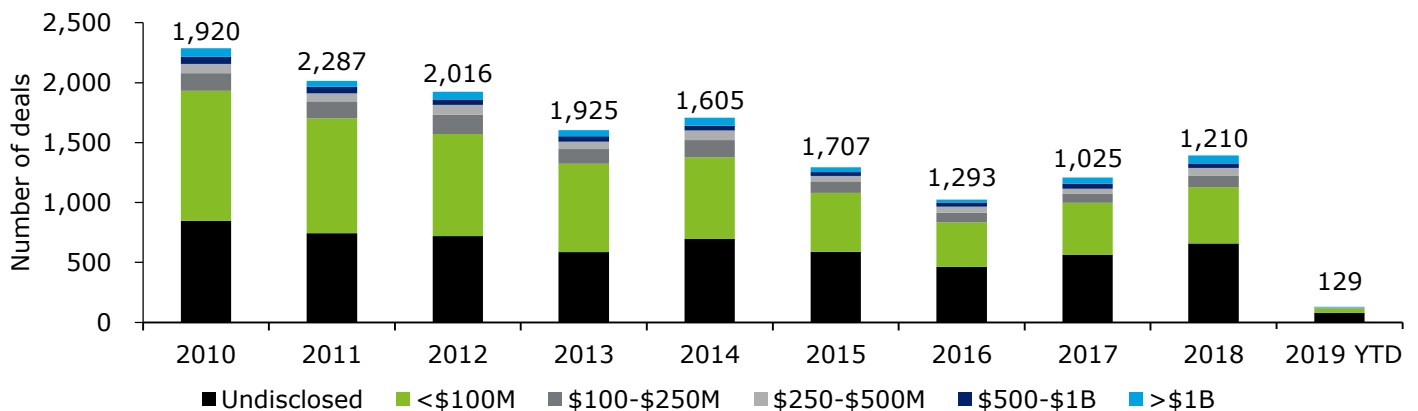


\*Energy index companies listed on page 5 in the appendix.

## Recent Energy M&A transactions<sup>1</sup>

Close date	Target/acquiror	Target business description	Enterprise Value (EV)	EV/ EBITDA
Pending	<b>Anadarko Petroleum Corporation</b> Chevron Corporation	Engages in the exploration, development, production, and marketing of oil and gas properties.	\$51,391.5	6.9 x
Pending	<b>Universal Coal Plc</b> Afrimat Limited	Universal Coal Plc, a coal mining company, engages in acquisition, exploration, development, and commercialization of coal projects in the Republic of South Africa.	192.0	3.0
3/18/2019	<b>Epic Gas Ltd.</b> BW Group Limited	Epic Gas Ltd., together with its subsidiaries, owns and operates a fleet of pressurized gas carriers in Singapore.	371.3	8.5
Pending	<b>QEP Resources, Inc.</b> Elliott Management Corporation	Operates as a crude oil and natural gas exploration and production company.	4,629.8	3.6
2/13/2019	<b>Newfield Exploration Company</b> Encana Oil & Gas (USA) Inc.	Newfield Exploration Company, an independent energy company, engages in the exploration, development, and production of crude oil, natural gas, and natural gas liquids.	7,795.3	6.7
Pending	<b>Penn Virginia Corporation</b> Denbury Resources Inc.	Penn Virginia Corporation, an independent oil and gas company, engages in the onshore exploration, development, and production of crude oil, natural gas liquids, and natural gas.	1,698.6	12.5
2/18/2019	<b>KenolKobil Plc</b> Rubis Energie SAS	As of February 18, 2019, operates as a subsidiary of Rubis Energie SAS.	422.8	11.2
Pending	<b>MEG Energy Corp.</b> Husky Energy Inc.	Provides midstream infrastructure that links the producers of natural gas, crude oil, natural gas liquids (NGLs) to various intermediate and end-use markets.	4,916.3	11.4
Pending	<b>American Midstream Partners, LP</b> ArcLight Capital Partners, LLC	Provides midstream infrastructure that links the producers of natural gas, crude oil, natural gas liquids (NGLs), condensate, and specialty chemicals to various intermediate and end-use markets and Mexico. Its Gas Gathering and Processing Services segment offers services to producers of natural gas and crude oil, including transporting raw natural gas and crude oil from various receipt points through gathering systems, treating the raw natural gas, processing raw natural gas to separate the NGLs from the natural gas, fractionating NGLs, and selling or delivering pipeline-quality natural gas and NGLs.	1,576.2	13.4
9/19/2018	<b>Santos Limited</b> ENN Group International Investment Limited	Explores for, develops, produces, transports, and markets hydrocarbons for homes and businesses in Australia and Asia.	11,678.5	35.6
1/25/2019	<b>EnLink Midstream Partners, LP</b> Prairie Provident Resources Inc.	EnLink Midstream Partners, LP, through its subsidiary, EnLink Midstream Operating, LP, provides midstream energy services.	12,923.5	12.1

## Annual Energy M&A transaction volume<sup>2</sup>



## Appendix

Public comparables analysis<sup>1</sup>

Company (ticker)	% of 52 week high	LTM Revenue	Revenue CAGR (3 Yr)	LTM EBITDA	EBITDA Margin	Enterprise Value (EV) <sup>(1)</sup>	Last twelve months	
							EV/Revenue	EV/EBITDA
(\$ in Millions)								
<b>Oil and gas, general (13)</b>								
Chevron Corporation (NYSE:CVX)	91.4	158,902.0	9.0	33,641.0	21.2	255,255.7	1.6	7.6
ConocoPhillips (NYSE:COP)	82.1	37,491.0	7.5	15,709.0	41.9	81,913.9	2.2	5.2
Devon Energy Corporation (NYSE:DVN)	72.1	10,456.0	(6.9)	3,472.0	33.2	18,088.9	1.7	5.2
Diamond Offshore Drilling, Inc. (NYSE:DO)	51.8	1,060.0	(23.4)	269.6	25.4	3,104.9	2.9	11.5
DCP Midstream, LP (NYSE:DCP)	67.6	9,863.0	10.5	767.0	7.8	10,733.3	1.1	14.0
Exxon Mobil Corporation (NYSE:XOM)	92.9	279,332.0	5.0	39,584.0	14.2	386,189.7	1.4	9.8
Halliburton Company (NYSE:HAL)	56.7	23,995.0	0.5	4,338.0	18.1	36,041.6	1.5	8.3
Hess Corporation (NYSE:HES)	88.0	6,152.0	(1.8)	2,579.0	41.9	25,215.5	4.1	9.8
Marathon Petroleum Corporation (NYSE:MPC)	67.6	96,706.0	14.5	7,659.0	7.9	76,235.5	0.8	10.0
Phillips 66 (NYSE:PSX)	77.0	111,461.0	9.4	6,511.0	5.8	54,467.8	0.5	8.4
Southwestern Energy Company (NYSE:SWN)	66.6	3,862.0	7.2	1,439.0	37.3	4,517.7	1.2	3.1
Transocean Ltd. (NYSE:RIG)	61.1	3,018.0	(25.8)	1,155.0	38.3	13,129.0	4.4	11.4
Valero Energy Corporation (NYSE:VLO)	69.3	111,407.0	10.8	6,662.0	6.0	44,534.0	0.4	6.7
<b>Median</b>	<b>69.3 %</b>	<b>\$23,995.0</b>	<b>7.2 %</b>	<b>\$4,338.0</b>	<b>21.2 %</b>	<b>\$36,041.6</b>	<b>1.5 x</b>	<b>8.4 x</b>
<b>Mean</b>	<b>72.6 %</b>	<b>\$65,669.6</b>	<b>1.3 %</b>	<b>\$9,522.0</b>	<b>23.0 %</b>	<b>\$77,648.3</b>	<b>1.8 x</b>	<b>8.5 x</b>
<b>Power &amp; utilities (19)</b>								
Ameren Corporation (NYSE:AEE)	94.1 %	\$6,009.0	0.7 %	\$2,389.0	39.8 %	\$26,491.0	4.4 x	11.1 x
ALLETE, Inc. (NYSE:ALE)	94.4	1,498.6	0.3	395.2	26.4	5,535.7	3.7	14.0
American Electric Power Company, Inc. (NYSE:AEP)	96.4	16,195.7	(0.5)	4,956.6	30.6	66,294.4	4.1	13.4
Avangrid, Inc. (NYSE:AGR)	94.6	6,478.0	14.0	1,885.2	29.1	22,525.4	3.5	11.9
Black Hills Corporation (NYSE:BKH)	95.4	1,754.3	11.6	590.2	33.6	7,529.7	4.3	12.8
CenterPoint Energy, Inc. (NYSE:CNP)	96.4	10,589.0	12.8	2,103.0	19.9	21,181.2	2.0	10.1
Consolidated Edison, Inc. (NYSE:ED)	97.3	12,337.0	(0.6)	3,801.0	30.8	47,359.8	3.8	12.5
Dominion Energy, Inc. (NYSE:D)	96.7	13,366.0	4.6	6,533.0	48.9	97,146.7	7.3	14.9
DTE Energy Company (NYSE:DTE)	97.7	14,212.0	11.2	2,460.0	17.3	37,151.6	2.6	15.1
Duke Energy Corporation (NYSE:DUK)	97.2	24,116.0	3.1	10,058.0	41.7	122,321.7	5.1	12.2
Energys Corporation (NYSE:ETR)	96.5	11,009.5	(1.5)	2,792.7	25.4	35,565.7	3.2	12.7
Eversource Energy (NYSE:ES)	96.8	8,448.2	2.0	2,573.0	30.5	36,957.0	4.4	14.4
Exelon Corporation (NYSE:EXC)	97.2	35,985.0	6.9	9,379.0	26.1	84,906.0	2.4	9.1
PG&E Corporation (NYSE:PCG)	42.5	16,759.0	(0.1)	5,199.0	31.0	32,116.2	1.9	6.2
Sempra Energy (NYSE:SRE)	98.0	11,687.0	4.5	3,927.0	33.6	64,626.7	5.5	16.5
The Southern Company (NYSE:SO)	98.1	23,495.0	10.3	7,659.0	32.6	104,349.9	4.4	13.6
Vectren Corporation	100.0	2,678.9	2.2	636.9	23.8	-	0.0	0.0
WEC Energy Group, Inc. (NYSE:WEC)	95.3	7,679.5	9.0	2,340.2	30.5	35,877.4	4.7	15.3
Xcel Energy Inc. (NasdaqGS:XEL)	95.1	11,537.0	1.5	3,632.0	31.5	45,234.3	3.9	12.5
<b>Median</b>	<b>96.5 %</b>	<b>\$11,537.0</b>	<b>3.1 %</b>	<b>\$2,792.7</b>	<b>30.6 %</b>	<b>\$36,957.0</b>	<b>3.9 x</b>	<b>12.7 x</b>
<b>Mean</b>	<b>93.7 %</b>	<b>\$12,412.3</b>	<b>4.9 %</b>	<b>\$3,858.4</b>	<b>30.7 %</b>	<b>\$47,009.0</b>	<b>3.7 x</b>	<b>12.0 x</b>
<b>Renewable energy (13)</b>								
Ballard Power Systems Inc. (TSX:BLDP)	78.3 %	\$96.6	19.6 %	(\$15.6)	NM %	\$614.3	6.4 x	NM x
Brookfield Renewable Partners L.P. (TSX:BEP.UN)	98.3	2,982.0	22.4	1,866.0	62.6	30,071.5	10.1	16.1
Canadian Solar Inc. (NasdaqGS:CSIQ)	73.4	3,744.5	2.6	463.9	12.4	2,539.1	0.7	5.5
Enphase Energy, Inc. (NasdaqGM:ENPH)	91.2	316.2	(4.0)	15.3	4.8	1,076.9	3.4	70.5
First Solar, Inc. (NasdaqGS:FSLR)	73.2	2,244.0	(18.3)	170.8	7.6	4,319.2	1.9	25.3
Avangrid, Inc. (NYSE:AGR)	94.6	6,478.0	14.0	1,885.2	29.1	22,525.4	3.5	11.9
Macquarie Infrastructure Corporation (NYSE:MIC)	84.8	1,761.5	2.4	497.3	28.2	6,061.9	3.4	12.2
Ormat Technologies, Inc. (NYSE:ORA)	95.7	719.3	6.5	323.0	44.9	4,205.6	5.8	13.0
ReneSola Ltd (NYSE:SOL)	55.8	96.9	(5.9)	20.0	20.6	253.1	2.6	12.6
Renewable Energy Group, Inc. (NasdaqGS:REGI)	70.9	2,383.0	19.8	350.8	14.7	881.4	0.4	2.5
SunPower Corporation (NasdaqGS:SPWR)	74.3	1,726.1	3.1	(114.7)	NM	2,301.2	1.3	NM
Sunrun Inc. (NasdaqGS:RUN)	95.2	760.0	35.6	34.1	4.5	4,268.1	5.6	125.1
Vivint Solar, Inc. (NYSE:VSLR)	73.7	290.3	65.4	(43.3)	NM	1,875.7	6.5	NM
<b>Median</b>	<b>78.3 %</b>	<b>\$1,726.1</b>	<b>6.5 %</b>	<b>\$170.8</b>	<b>17.7 %</b>	<b>\$2,539.1</b>	<b>3.4 x</b>	<b>12.8 x</b>
<b>Mean</b>	<b>81.5 %</b>	<b>\$1,815.3</b>	<b>12.6 %</b>	<b>\$419.4</b>	<b>23.0 %</b>	<b>\$6,230.3</b>	<b>4.0 x</b>	<b>29.5 x</b>
<b>Nuclear (3)</b>								
BWX Technologies, Inc. (NYSE:BWXT)	71.9 %	\$1,799.9	8.3 %	\$334.1	18.6 %	\$5,627.3	3.1 x	16.8 x
Curtiss-Wright Corporation (NYSE:CW)	78.4	2,411.8	3.0	492.5	20.4	5,219.9	2.2	10.6
Huntington Ingalls Industries, Inc. (NYSE:HII)	82.5	8,176.0	5.2	1,211.0	14.8	10,205.4	1.2	8.4
<b>Median</b>	<b>78.4 %</b>	<b>\$2,411.8</b>	<b>5.2 %</b>	<b>\$492.5</b>	<b>18.6 %</b>	<b>\$5,627.3</b>	<b>2.2 x</b>	<b>10.6 x</b>
<b>Mean</b>	<b>77.6 %</b>	<b>\$4,129.2</b>	<b>5.5 %</b>	<b>\$679.2</b>	<b>17.9 %</b>	<b>\$7,017.5</b>	<b>2.2 x</b>	<b>12.0 x</b>

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DCF provides deal execution and lead financial advisory services to large corporate, middle market, private equity and venture capital firms. DCF and its affiliates maintain a presence in key US financial centers.

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