

## TESLA: THE SOLARCITY ACQUISITION<sup>1</sup>

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*Tomiwa Ademidun wrote this case under the supervision of Professor Zhichuan (Frank) Li solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.*

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I think it's really kind of a no-brainer, if we didn't do this it would make Tesla's execution harder and worse.

Elon Musk, Tesla's chief executive officer, on the SolarCity Acquisition, June 2016<sup>2</sup>

It was a sunny Friday in December 2016 in Southern California when Brad Buss, a member of Tesla's board of directors, received a phone call from Elon Musk, Tesla's chief executive officer (CEO). Musk was interested in acquiring a solar panel manufacturer, SolarCity. The board had agreed to seek a fairness opinion from an independent investment bank, Evercore Partners (Evercore), which then performed a valuation and offered an opinion on what it thought SolarCity was worth. Musk had announced the deal to the media; however, significant uproar emerged from Wall Street regarding the value of SolarCity to Tesla. Tesla shares dropped 10 per cent after the announcement while SolarCity shares popped more than 15 per cent. As a board member, Buss had the ability to give his opinion on whether SolarCity was a strategic fit for Tesla, and if it was, Buss could advise Musk on a fair final price that Tesla could pitch to the shareholders of both companies.

### THE SOLAR POWER INDUSTRY

The diminishing supply and soaring price of fossil fuels, combined with a rising global interest in clean, renewable energy sources, led to the U.S. solar industry's significant growth in the last two decades (see Exhibit 1). In 2006, 30,000 U.S. homes had solar systems, which increased to 400,000 in 2013 and was expected to reach 3,800,000 homes by 2020.<sup>3</sup> The U.S. solar industry included solar power plants and photovoltaic (PV) solar panels connected to local electrical grids. In 2015, the United States had 25 gigawatts of installed photovoltaic capacity and solar power generated 51.7 terawatt-hours, or 1.27 per

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<sup>1</sup> This case has been written based on published sources only. Consequently, the interpretation and perspectives presented in this case are not necessarily those of Tesla or SolarCity, or any of their employees.

<sup>2</sup> "Tesla Motors Conference Call," Tesla, June 22, 2016, accessed April 20, 2017, <http://edge.media-server.com/m/p/makhvjt8>.

<sup>3</sup> Laura Wisland, "How Many Homes Have Rooftop Solar? The Number Is Growing..." Union of Concerned Scientists blog, September 4, 2014, accessed December 10, 2014, <http://blog.ucsusa.org/laura-wisland/how-many-homes-have-rooftop-solar-6447>.

cent of total U.S. electricity.<sup>4</sup> The United States had been a pioneer in PVs and solar power research, with several of the world's largest installations located in the California and Nevada deserts. The U.S. Department of Energy (DOE) had also invested heavily in clean energy, and many companies had recently entered this industry due to the DOE's favourable loans and various subsidies.

While most companies in the solar power industry were large utilities that also held diversified investments in other fields, such as hydro and natural gas, many of the start-ups entering the solar industry, such as SolarCity, had assets only in the solar industry and were unprofitable. These start-ups were desperate for government subsidies and loans to finance their operations, hoping to reach profitability after becoming large and realizing economies of scale.

## **SOLARCITY**

In 2006, brothers Peter and Lyndon Rive were discussing ideas to start a company when their cousin, Elon Musk, suggested a solar company concept. Since then the company the Rive brothers founded had grown rapidly, becoming the number-one solar panel installer in the United States with more than 100,000 installations in 2015.<sup>5</sup> The company had an industry leading five-year compounded annual growth rate of 65.25 per cent in revenue. SolarCity also entered into long-term financing agreements with customers, which provided the company with recurring revenue. As SolarCity grew from a start-up to an actual utility, it became increasingly dependent on large amounts of debt to finance its large capital expenditures. Despite going public in 2012, the company had never experienced a profitable year. In fiscal year 2015, it reported losses of \$769 million on \$400 million sales (see Exhibits 2, 3, 4, and 5). The encouraging news was that, according to a consensus of analysts, SolarCity would finally turn profitable in 2017 for the first time in its history (see Exhibits 13).

## **TESLA**

The U.S. automotive industry was a notoriously difficult industry to break into: the last U.S. auto manufacturer to go public was the Ford Motor Company in 1956.<sup>6</sup> Five bold entrepreneurs planned to disrupt the auto industry in a major way. In 2003, Musk and four other entrepreneurs—Martin Eberhard, Marc Tarpenning, J. B. Straubel, and Ian Wright—founded Tesla Motors as an electric car manufacturer.<sup>7</sup> Tesla initially made headlines after producing the first electric sports car, the Tesla Roadster. Led by the mercurial CEO Elon Musk, who was also the CEO of a space exploration company called SpaceX, the company went public in the first quarter of 2013, and had since experienced constant news coverage and a growing loyal fan base. SpaceX had its own monumental challenges to overcome, such as entering the U.S. defence space industry which had been a monopoly dominated by the United Launch Alliance for nearly a decade.<sup>8</sup> Many industry analysts were worried that despite Musk's reputation as a genius, running a company in the auto industry was too difficult and demanding for one person to do as a "part-time CEO."

<sup>4</sup> U.S. Energy Information Administration, Electric Power Monthly with Data for March 2017, report, May 2017, accessed May 27, 2017, [www.eia.gov/electricity/monthly/monthly/pdf/eia.pdf](http://www.eia.gov/electricity/monthly/monthly/pdf/eia.pdf), 15–16.

<sup>5</sup> United States Securities and Exchange Commission, SolarCity form 10K, December 31, 2015, accessed June 1, 2017, [www.sec.gov/Archives/edgar/data/1408356/000156459016012549/scty-10k\\_20151231.htm](http://www.sec.gov/Archives/edgar/data/1408356/000156459016012549/scty-10k_20151231.htm).

<sup>6</sup> Matt Andrejczak, "Tesla Motors Revs up \$244 Million, IPO," MarketWatch, June 28, 2010, accessed May 12, 2017, [www.marketwatch.com/story/tesla-motors-revs-up-244-million-ipo-2010-06-28](http://www.marketwatch.com/story/tesla-motors-revs-up-244-million-ipo-2010-06-28).

<sup>7</sup> Martin LaMonica, "Tesla Motors Founders: Now There Are Five," cnet.com, September 21, 2009, accessed May 12, 2017, [www.cnet.com/news/tesla-motors-founders-now-there-are-five/](http://www.cnet.com/news/tesla-motors-founders-now-there-are-five/).

<sup>8</sup> Petersen, Melody, "SpaceX may upset firm's monopoly in launching Air Force satellites," *Los Angeles Times*, November 25, 2015, accessed June 16, 2017, [www.latimes.com/business/la-fi-spacex-satellites-20141126-story.html#page=1](http://www.latimes.com/business/la-fi-spacex-satellites-20141126-story.html#page=1).

Musk had always set wildly ambitious goals for the company, and often had investors and customers wonder whether he would be able to meet these goals. The company seemed to oscillate between amazing successes and embarrassing failures. In 2015, the Model S sold more than 150,000 units and was the bestselling plug-in vehicle of the year.<sup>9</sup> Yet, despite revenues of \$4.05 billion, the company reported a loss of \$889 million (see Exhibits 6, 7, 8, and 9). However, shareholders showed tremendous faith in Musk and Tesla's altruistic mission to "accelerate the world's transition to sustainable energy."<sup>10</sup> It seemed the more faith the shareholders had in him, the more ambitious and seemingly bizarre some of his decisions appeared to the public. For example, in November 2013 Tesla announced plans for the joint SolarCity-Tesla Gigafactory, a lithium-ion battery factory. The Gigafactory would have a projected capacity in 2020 of producing more lithium-ion batteries in a year than were produced in the entire world in 2013, the equivalent to supplying 500,000 Tesla cars per year. The factory would cost over \$5 billion to build.<sup>11</sup>

## **PROBLEMS AT SOLARCITY**

As the CEO of a start-up in the solar power industry, the first couple of years were expected to be difficult for Lyndon Rive. However, the business proved to be exceptionally challenging. Some critics claimed that SolarCity, unlike larger competitor utilities, did not have an asset base large enough to secure favourable credit terms. The company had a market debt-to-equity ratio of 1.45, which was drastically higher than the utilities industry average of 1.1. To reduce bankruptcy risk, the company hoped to move towards industry norm, achieving a more balanced capital structure of half debt and half equity (both in market value) while maintaining the current 97.59 million shares. Thus, SolarCity would be able to maintain its interest expense at a safe and sustainable level of \$100 million from 2017 onwards. In 2015, it was struggling with \$1.2 billion<sup>12</sup> in current liabilities, yet only \$902 million in current assets. In early 2016, the company was still starving for cash. Many investors wondered whether the company would declare bankruptcy and liquidate its assets to a larger utility company, following the fate of so many other solar energy companies. Some analysts, on the other hand, believed they had seen the light at the end of the tunnel: the SolarCity-Tesla Gigafactory would begin mass production of cells in 2017; Tesla model 3 pre-sales would top half a million by August 2016, many of which would be powered by SolarCity installed roofs and Powerwall. Both projects were expected to significantly increase profits for SolarCity.

## **THE ACQUISITION OFFER**

As the chairman of the SolarCity board, Musk was frequently consulted whenever SolarCity had problems. Tesla had collaborated with SolarCity in the past on various energy initiatives. After hearing about the issues that the Rive brothers were facing and the possibility of the business closing down, Musk may have believed that an acquisition would be the best course of action for both companies. Tesla encouraged customers to charge their cars using the Tesla Powerwall and Tesla's global network of Superchargers, both of which were to be powered by solar panels. An acquisition of SolarCity would allow both Tesla and SolarCity to experience significant cost synergies and provide access to more and cheaper financing. However, considering Tesla's cash and profitability problems, investors could be

<sup>9</sup> Jeff Cobb, "Tesla Model S Is World's Best-Selling Plug-in Car for Second Year in a Row," HybridCars, January 26, 2017, accessed April, 20, 2017, [www.hybricars.com/tesla-model-s-is-worlds-best-selling-plug-in-car-for-second-year-in-a-row](http://www.hybricars.com/tesla-model-s-is-worlds-best-selling-plug-in-car-for-second-year-in-a-row).

<sup>10</sup> Tesla Motors, "About Tesla", January 9, 2015, accessed June 14, 2017, [www.tesla.com/about](http://www.tesla.com/about).

<sup>11</sup> Tesla Motors, "Planned 2020 Gigafactory Production Exceeds 2013 Global Production," February 26, 2014, accessed June 14, 2017, [www.teslamotors.com/sites/default/files/blog\\_attachments/gigafactory.pdf](http://www.teslamotors.com/sites/default/files/blog_attachments/gigafactory.pdf).

<sup>12</sup> All currency amounts are in U.S. dollars unless otherwise specified.

reluctant to approve the purchase of an even more financially unstable company.<sup>13</sup> Musk would first need a third-party investment bank to provide an opinion on a fair price for SolarCity, and then he would need to convince the shareholders that this purchase would be a wise decision.

Tesla hired the investment bank Evercore Partners, while SolarCity hired Lazard et Freres, to value the deal and provide a fairness opinion (see Exhibits 10, 11, and 12).<sup>14</sup> If the deal was successful, SolarCity expected to realize cost synergies of 20 percent of its capital expenditures although some investors believe 10 percent synergies would be more realistic. Because the deal was to be structured as a stock swap,<sup>15</sup> the challenge was to calculate a fair exchange ratio. Tesla instructed Evercore to create a discounted cash flow analysis based on publicly available consensus estimates of The Goldman Sachs Group, Inc. and the Institutional Brokers' Estimate System (see Exhibit 13). These forecasts assumed that SolarCity had successfully reduced its market debt-to-equity ratio to 1:1 from 2017 onwards. At that time, the 30 year U.S. Treasury rate was 2.5 per cent. A market risk premium of 5 per cent and a terminal growth rate of 4 per cent were commonly used for the solar power industry.<sup>16</sup> For SolarCity, its beta was estimated between 1.95–2.40 from different sources. The cost of debt 6.8 per cent, much higher than the industry average of 5.8 per cent due to high default risk, could drop to 6.5 per cent in 2017 with a lower debt level. The expected tax rate would be 20 per cent when SolarCity had stable taxable income. After the merger, SolarCity would be able to maintain more stable capital expenditure, depreciation and amortization, and net working capital, as 23 per cent, 3.5 percent, and 10 per cent of revenue respectively. Both banks felt that an offer of 0.082 Tesla shares for each SolarCity share would be a good deal for the shareholders of both companies. This ratio was based on the analysts' valuation of both Tesla and SolarCity stocks. Tesla was valued at \$358.60 per share, and all parties felt comfortable with this valuation. However, whether SolarCity's share price of \$29.35, with a 35 per cent premium, was a reasonable estimate was open to some debate. With the backing of a credible third-party bank and the support of loyal Tesla shareholders, Musk felt confident that the deal would go through.

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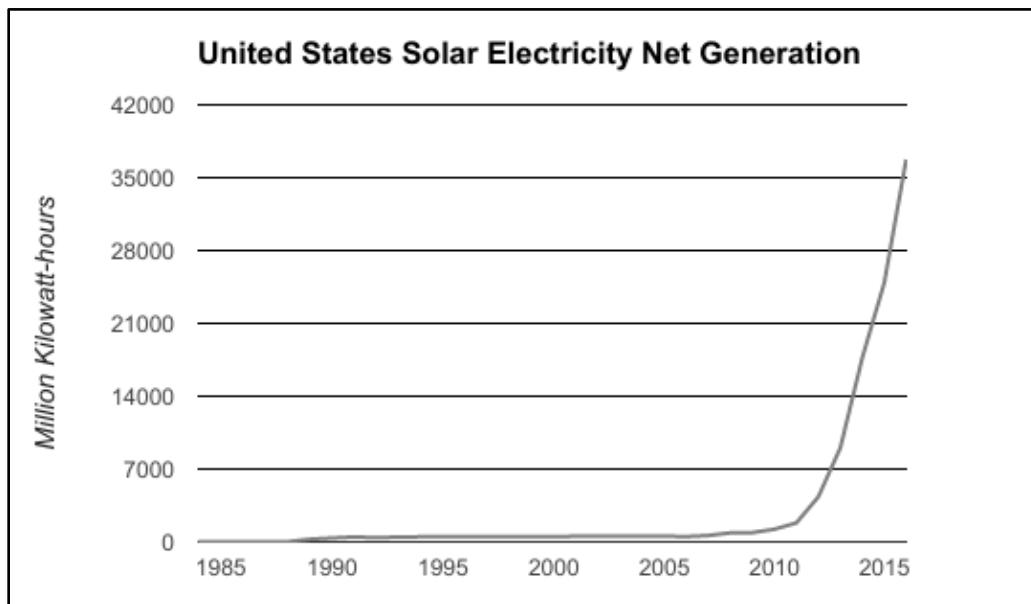
<sup>13</sup> "Tesla Motors Conference Call," op. cit.

<sup>14</sup> Aswath Damodaran, "Keystone Kop Valuations: Lazard, Evercore and the TSLA/SCTY Deal," Musings on Markets, blog, September 6, 2016, accessed April 20, 2017, <http://aswathdamodaran.blogspot.ca/2016/09/keystone-kop-valuations-lazard-evercore.html>.

<sup>15</sup> "Tesla Makes Offer to Acquire SolarCity," Tesla, blog post, June 21, 2016, accessed April 20, 2017, [www.tesla.com/blog/tesla-makes-offer-to-acquire-solarcity](http://www.tesla.com/blog/tesla-makes-offer-to-acquire-solarcity).

<sup>16</sup> The Henry Fund Research, "First Solar Inc. (FSLR)", November 26, 2016, accessed June 14, 2017, [www.biz.uiowa.edu/henry/download/research/FSLR\\_f16.pdf](http://www.biz.uiowa.edu/henry/download/research/FSLR_f16.pdf).

## EXHIBIT 1: U.S. SOLAR ELECTRICITY PRODUCTION SINCE 1985



Source: "Monthly Energy Review May 2017," U.S. Energy Information Administration, Table 7.2a, accessed May 27, 2017, [www.eia.gov/totalenergy/data/monthly/pdf/sec7\\_5.pdf](http://www.eia.gov/totalenergy/data/monthly/pdf/sec7_5.pdf), 109.

## EXHIBIT 2: SOLARCITY INCOME STATEMENTS, 2014-2016

In millions of US\$ (except for per share items)	2014	2015	2016
<b>Revenue:</b>			
Operating leases and solar energy systems incentives	174	294	422
Solar energy systems and components sales	81	106	308
<b>Total revenue</b>	255	400	730
<b>Cost of revenue:</b>			
Solar energy systems sales and operating leases	79	114	170
Depreciation and amortization	98	167	309
Total cost of revenue	176	281	479
<b>Gross profit</b>	79	119	251
<b>Operating expenses:</b>			
Sales and marketing	239	457	443
General and administrative	156	245	229
Restructuring, Pre-production and other	0	0	175
Research and development	19	65	55
Total operating expenses	414	767	902
<b>Loss from operations</b>	-336	-648	-650
Interest expenses	66	118	170
Loss before income taxes	-402	-765	-821
Income tax benefit (provision)	27	-3	0
<b>Net loss</b>	-375	-769	-820

Note: EPS = earnings per share

Source: SolarCity SEC 10K Filings, Tesla Motors Inc., accessed June 14, 2017, <http://ir.tesla.com/secfiling.cfm?filngID=1564590-17-3084&CIK=1408356>.

## EXHIBIT 3: SOLARCITY BALANCE SHEETS, 2014-2016

In millions of US\$ (except for per share items)	2014	2015	2016
<b>Assets</b>			
Current assets:			
Cash and cash equivalents	504.38	382.54	290.71
Short-term investments	138.31	11.31	0.00
Restricted cash	20.88	39.86	74.72
Accounts and Rebates receivable -net	52.73	45.55	77.29
Inventories	217.22	342.95	172.71
Prepaid expenses and other current assets	64.10	79.93	77.50
Total current assets	997.62	902.14	692.93
Long Term Assets	3,553.61	6,384.98	8,437.84
<b>Total assets</b>	<b>4,551.22</b>	<b>7,287.12</b>	<b>9,130.76</b>
<b>Liabilities and equity</b>			
Current liabilities:			
Accounts payable	237.81	364.97	619.55
Current portion of financing obligation	328.70	828.39	899.76
Total current liabilities	566.51	1,193.36	1,519.31
Deferred revenue	557.41	1,010.49	1,086.42
Long-term debt and Solar bonds, net of current portion	1,442.97	2,402.93	2,759.18
Deferred U.S. Treasury grant income	397.49	382.28	343.26
Other liabilities and deferred credits	244.47	563.51	1,147.54
<b>Total liabilities</b>	<b>3,208.85</b>	<b>5,552.56</b>	<b>6,855.70</b>
Common stock:	0.01	0.01	0.01
Additional paid-in capital	1,600.72	2,051.23	2,352.97
Accumulated deficit	-258.36	-316.69	-77.92
<b>Total equity</b>	<b>1,342.37</b>	<b>1,734.55</b>	<b>2,275.06</b>
<b>Total liabilities and equity</b>	<b>4,551.22</b>	<b>7,287.11</b>	<b>9,130.76</b>

Source: SolarCity SEC 10K Filings, Tesla Motors Inc., accessed June 14 2017, <http://ir.tesla.com/secfiling.cfm?filngID=1564590-17-3084&CIK=1408356>.

## EXHIBIT 4: SOLARCITY CASH FLOW STATEMENTS, 2014–2016

In Millions of US\$ (except for per share items)	2014	2015	2016
<b>Operating activities:</b>			
Net loss	−375.23	−768.82	−820.35
Depreciation, amortization and write-offs	11.07	14.05	14.85
Accounts receivable	0.95	−11.05	−32.95
Inventories	−97.35	−125.34	170.58
Accounts payable	112.48	125.47	−149.69
Other Operating Activities	130.23	−24.20	308.78
Net cash used in operating activities	−217.85	−789.88	−508.78
<b>Investing activities:</b>			
Payments for the cost of solar energy systems, leased and to be leased	−1,162.96	−1,665.64	−1,611.01
Purchase of property, plant and equipment	−22.89	−176.54	−62.90
Purchases of short-term investments	−167.40	−44.59	0.00
Proceeds from sales and maturities of short-term investments	28.76	170.74	11.24
Acquisitions and Other investments	−20.33	−10.70	−26.67
Net cash used in investing activities	−1,344.81	−1,726.73	−1,689.33
<b>Financing activities:</b>			
Borrowings under long-term debt	369.80	1,093.26	1,376.18
Repayments of long-term debt	−336.56	−215.93	−866.95
Other Financing Cash Flow Items	287.73	342.03	332.66
Proceeds from investments by non-controlling interests and redeemable	777.96	1,097.49	1,420.82
Distributions paid to non-controlling interests and redeemable	−117.13	−109.51	−148.86
Net cash provided by financing activities before equity and convertible	982.15	2,207.33	2,113.85
Proceeds from Convertibles and Options	507.82	187.45	−7.58
Net cash provided by financing activities	1,489.97	2,394.78	2,106.27
Net increase in cash and cash equivalents	−72.70	−121.84	−91.83

Source: SolarCity SEC 10K Filings, Tesla Motors Inc., accessed June 14 2017, <http://ir.tesla.com/secfiling.cfm?filngID=1564590-17-3084&CIK=1408356>.

**EXHIBIT 5: SOLARCITY FINANCIAL RATIOS, 2014-2016**

	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>LIQUIDITY RATIOS</b>			
Cash to Total Assets	0.11	0.05	0.03
Current Ratio	1.76	0.76	0.46
<b>EFFICIENCY</b>			
Days of Inventory	450.48	445.47	131.61
Days Receivables	75.48	41.56	38.65
Days Payables	493.19	474.07	158.22
<b>FINANCIAL LEVERAGE</b>			
LT Debt to Total Assets	0.32	0.33	0.30
Equity to Total Assets	0.29	0.24	0.25
<b>PROFITABILITY</b>			
Net Profit Margin	-1.47	-1.92	-1.12
Return on Equity	-0.28	-0.44	-0.36
Return on Assets	-0.08	-0.11	-0.09
<b>GROWTH</b>			
Sales	56.44%	56.86%	82.50%
Operating Income	-124.83%	-92.86%	-0.31%
Net Income	-146.71%	-105.07%	-6.63%

Note: LT = long-term

Source: Author's calculations.

## EXHIBIT 6: TESLA INCOME STATEMENTS, 2014–2016

<u>In millions of US\$ (except for per share items)</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Total automotive revenue	3,007	3,741	6,351
Energy generation and storage	4	14	181
Services and other	187	291	468
<b>Total revenues</b>	<b>3,198</b>	<b>4,046</b>	<b>7,000</b>
Total automotive cost of revenues	1,914	2,400	3,803
Energy generation and storage	4	12	178
Services and other	167	287	472
Depreciation and Amortization	232	423	947
Total cost of revenues	2,317	3,123	5,401
<b>Gross profit</b>	<b>882</b>	<b>924</b>	<b>1,599</b>
Research and development	465	718	834
Selling, general and administrative	604	922	1,432
Total operating expenses	1,068	1,640	2,267
<b>Loss from operations</b>	<b>-187</b>	<b>-717</b>	<b>-667</b>
Interest income	1	2	9
Interest expense	-101	-119	-199
Other income (expense), net	2	-42	111
<b>Loss before income taxes</b>	<b>-285</b>	<b>-876</b>	<b>-746</b>
Provision for income taxes	9	13	27
<b>Net loss</b>	<b>-294</b>	<b>-889</b>	<b>-773</b>

Note: EPS = earnings per share

Source: Tesla SEC 10K Filings, Tesla Motors Inc., accessed June 14 2017,  
<http://ir.tesla.com/secfiling.cfm?filingsid=1564590-17-3118&cik=1318605>.

## EXHIBIT 7: TESLA BALANCE SHEETS, 2014–2016

In millions of US\$ (except for per share items)	2014	2015	2016
<b>Assets</b>			
Cash and cash equivalents	1,906	1,197	3,393
Restricted cash	18	23	106
Accounts receivable, net	227	169	499
Inventory	954	1,278	2,067
Prepaid expenses and other current assets	76	116	194
Total current assets	3,180	2,782	6,260
Property, plant and equipment, net	2,596	5,195	15,037
Other assets	55	78	1,367
<b>Total assets</b>	<b>5,831</b>	<b>8,068</b>	<b>22,664</b>
<b>Liabilities and Equity</b>			
Accounts payable	778	916	1,860
Accrued liabilities and other	526	843	2,053
Deferred revenue	192	424	763
Current portion of long-term debt and capital leases	611	628	1,150
Total current liabilities	2,107	2,811	5,827
Deferred revenue, net of current portion	292	446	852
Long-term debt and capital leases, net of current portion	1,819	2,021	5,970
Resale value guarantees, net of current portion	488	1,294	2,210
Other long-term liabilities	155	365	1,891
<b>Total liabilities</b>	<b>4,861</b>	<b>6,937</b>	<b>16,750</b>
Redeemable noncontrolling interests in subsidiaries	0	0	367
Convertible senior notes	58	42	9
<b>Stockholders' equity:</b>			
Common stock	0.1	0.1	0.1
Additional paid-in capital	2,345	3,409	7,774
Accumulated deficit	-1,434	-2,322	-2,997
Other equity	0	-45	-400
<b>Total stockholders' equity</b>	<b>970</b>	<b>1,084</b>	<b>4,753</b>
<b>Total liabilities and equity</b>	<b>5,831</b>	<b>8,068</b>	<b>22,664</b>

Source: Tesla SEC 10K Filings, Tesla Motors Inc., accessed June 14, 2017,  
<http://ir.tesla.com/secfiling.cfm?filenid=1564590-17-3118&cik=1318605>.

## EXHIBIT 8: TESLA CASH FLOW STATEMENTS, 2014–2016

In millions of US\$ (except for per share items)	2014	2015	2016
<b>Cash Flows from Operating Activities</b>			
Net loss	-294	-889	-773
Depreciation and amortization	232	423	947
Non-cash interest and other operating activities	262	435	485
Gain on the acquisition of SolarCity	0	0	-89
Other assets and Receivables	-1,299	-1,582	-2,675
Accounts payable and accrued liabilities	980	1,065	1,849
Other long-term liabilities	62	24	132
Net cash used in operating activities	-57	-524	-124
<b>Cash Flows from Investing Activities</b>			
Purchases of property and equipment excluding capital leases, net of sales	-970	-1,635	-1,281
Purchase of solar energy system, leased to be leased	0	0	-160
Other Investing Activities	-21	-26	-189
Cash acquired through (used in) business combinations	0	-12	214
Net cash used in investing activities	-990	-1,674	-1,416
<b>Cash Flows from Financing Activities</b>			
Proceeds from issuance of common stock in public offering	0	730	1,702
Proceeds from issuance of convertible and other debt	2,300	319	2,853
Repayments of convertible and other debt	0	0	-1,858
Other Financing Cash Flow Items	-157	475	1,047
Net cash provided by financing activities	2,143	1,524	3,744
Effect of exchange rate changes on cash and cash equivalents	-36	-34	-7
Net increase in cash and cash equivalents	1,060	-709	2,196

Source: Tesla SEC 10K Filings, Tesla Motors, Inc., accessed June 14, 2017, <http://ir.tesla.com/secfiling.cfm?filingsid=1564590-17-3118&cik=1318605>.

**EXHIBIT 9: TESLA FINANCIAL RATIOS, 2014-2016**

	2014	2015	2016
<b>LIQUIDITY RATIOS</b>			
Cash to Total Assets	0.33	0.15	0.15
Current Ratio	1.51	0.99	1.07
<b>EFFICIENCY</b>			
Days of Inventory	150.25	149.37	139.72
Days Receivables	25.86	15.24	26.03
Days Payables	122.57	107.09	125.72
<b>FINANCIAL LEVERAGE</b>			
LT Debt to Total Assets	0.31	0.25	0.26
Equity to Assets	0.17	0.14	0.26
<b>PROFITABILITY</b>			
Net Profit Margin	-0.09	-0.22	-0.11
Return on Equity	-0.30	-0.79	-0.13
Return on Assets	-0.05	-0.11	-0.03
<b>GROWTH</b>			
Sales	58.87%	26.50%	73.01%
Operating Income	-204.91%	-283.86%	6.88%
Net Income	-297.30%	-202.23%	13.01%

Note: LT = long-term

Source: Author's calculations.

**EXHIBIT 10: FINANCIAL INDICATORS FOR FIRMS COMPARABLE TO SOLARCITY, 2016**

Company Name	Price Jan 3	Shares (M)	Market Cap	Debt	Debt Equity Ratio	Beta	Sales (\$M)	5-Year Sales Growth (%)			EV/ EBITDA	EV/ Sales
								PE Ratio	EV/ EBITDA	EV/ Sales		
First Solar	33.88	104	3,520	787	22%	2.04	3,413	0.07	6.95	3.83	1.26	
GCL-Poly Energy Holdings Ltd.	0.12	18,588	2,253	3,414	152%	0.93	3,464	6.22	7.20	7.13	1.64	
Canadian Solar Inc.	12.61	57	724	775	107%	1.79	3,468	18.32	8.57	7.06	0.43	
Trina Solar Ltd.-Spon Adr	9.46	92	875	762	87%	1.12	3,036	10.32	11.28	6.38	0.54	
<b>Shanghai Aerospace Automobile Electromechanical</b>												
Average					74%	1.43	2,804	9.00	24.70	16.65	5.78	

Note: M = millions; PE = price/earnings; EV/EBITDA = enterprise value ÷ earnings before interest, taxes, depreciation, and amortization; EV = enterprise value

Source: "Solar Energy Industry Companies," S&P Capital IQ database (2016), accessed January 6, 2017, [www.capitaliq.com](http://www.capitaliq.com).

## EXHIBIT 11: DESCRIPTIONS OF FIRMS COMPARABLE TO SOLARCITY

<b>First Solar</b>	First Solar, Inc. is a provider of photovoltaic (PV) solar energy solutions. The company designs, manufactures, and sells PV solar modules with thin-film semiconductor technology, and develops, designs, constructs, and sells PV solar power solutions.
<b>GCL-Poly Energy Holdings Ltd.</b>	GCL-Poly Energy Holdings Limited is an investment holding company principally engaged in solar material business. The company operates its business through three segments. The Solar Material Business segment is engaged in the manufacture and sales of polysilicon and wafer to companies operating in the solar industry.
<b>Canadian Solar Inc.</b>	Canadian Solar Inc. is a solar power company that provides solar power products, services, and system solutions with operations in North America, South America, Europe, Africa, the Middle East, Australia, and Asia.
<b>Trina Solar Ltd.-Spon Adr</b>	Trina Solar Limited is an integrated solar power products manufacturer and solar system developer based in China, with a global distribution network. The company has integrated the manufacturing of ingots, wafers, and solar cells for use in its PV module production.
<b>Shanghai Aerospace Automobile Electromechanical</b>	Shanghai Aerospace is a China-based company principally engaged in new energy development business. The company mainly provides new energy PV, including polycrystalline silicon, solar cell modules, and others: automobile components, including automobile air conditioning systems and others, as well as new materials.
<b>SolarCity</b>	SolarCity Corporation is a United States-based solar provider primarily engaged in the design, manufacture, installation, and sale or lease of solar energy systems to residential and commercial customers, or sale of electricity generated by solar energy systems to customers.

Source: "Solar Energy Industry Companies," S&P Capital IQ database (2016), December 1, 2016, accessed January 6, 2017, [www.capitaliq.com](http://www.capitaliq.com).

## EXHIBIT 12: PRECEDENT TRANSACTIONS

Date Effective	Target Name	Acquirer Name	Deal Value (\$M)	Implied Enterprise Value	Equity Value	Target Net Sales LTM	Net Income LTM	EBITDA LTM
07/30/14	Sun Team Group Ltd.	Procognia Israel Ltd.	20.17	47.44	19.83	36.10	7.4	11.45
02/10/15	Nexolon Co.	Creditors	91.94	608.66	78.81	239.63	-383.3	-23.97
12/21/15	Gestamp Asetym Solar	KKR & Co. LP	1,000.00	853.85	814.91	64.98	-6.6	8.81
12/22/15	Renewable Energy Generation	BlackRock Inc.	97.23	104.00	82.84	18.91	-8.3	24.15
03/31/16	Enel Green Power SpA	Enel SpA	10,893.95	18,787.79	9,707.55	3,438.76	233.6	2,255.25
12/02/16	Alerion Clean Power SpA	Eolo Energia Srl	116.32	329.48	102.49	48.10	-9.3	27.53

Note: M = millions; LTM = last twelve months; EBITDA = earnings before interest, taxes, depreciation, and amortization; Implied enterprise value is deal value plus interest-bearing debt; Equity value is market value of equity one month prior to acquisition announcement.  
 Source: "Solar Energy Industry Companies," S&P Capital IQ database (2016), December 1, 2016, accessed January 6, 2017, [www.capitaliq.com](http://www.capitaliq.com).

## EXHIBIT 13: SOLARCITY DISCOUNTED CASH FLOW ANALYSIS, 2015–2021

(\$ in millions)	FY 2015	FY 2016	FY 2017E	FY 2018E	FY 2019E	FY 2020E	FY 2021E
<b>Revenue</b>	400	730	969	1,274	2,066	3,295	5,003
<b>EBITDA</b>	-640.12	-634.67	347.13	456.51	740.38	1,180.91	1,793.12

Note: FY = fiscal year; E = estimated; EBITDA = earnings before interest, taxes, depreciation, and amortization.