

## Tesla Motors

### 1Q Revenue and Margin Upside; Model S Bookings Grow; Equity Deal Likely

**Key messages from Q1 results:** Overweight-rated Tesla reported encouraging revenues and gross margin in Q1, saw acceleration in Model S reservations, and reaffirmed that it could opportunistically tap equity markets. We raise our 2011e revenues to \$179MM (\$161MM earlier), which is now in line with TSLA's revised revenue guidance of \$170-185MM (\$160-175MM earlier). We also nudge up EPS estimates to -\$1.98 in 2011 (-\$2.14 previously) and -\$1.51 in 2012 (-\$1.56 earlier). We revise our DCF-based Dec 2011 price target to \$35 (\$30 earlier).

- **Stock View:** TSLA remains one of our top medium-term stock picks despite its high risk profile. In addition to being able to deliver an impressive ~300 mile pure EV driving range for the pending Model S (aided by what we think is a ~30-50% battery costs/kWh advantage versus industry peers), we think many are underestimating TSLA's non-powertrain related vehicle engineering prowess in areas such as safety, handling, and interior design, all critical differentiators in the luxury market. Our \$35 revised price target is still based on a relatively conservative terminal value operating margin assumption of 9.0% (8.5% previously), still substantially below management's long-term guidance of around 15% (which, all else equal, would imply a low-\$50 DCF based fair value).
- **Model-S update:** TSLA has now secured 4,600 advance registrations for the Model S that will be launched in mid 2012 (vs. 4,300 by March-end, 3,700 by mid February, and 3,000 by mid November 2010). Management believes reservations saw an upward inflection after the company participated in the Detroit Auto Show in January 2011. TSLA will also be participating in the upcoming Frankfurt Auto Show this September, which could further boost Model S advance bookings. It is worth noting that all reservations to date are being done with minimal (Model S) marketing efforts. TSLA has capacity to manufacture *only* 5K Model S vehicles in 2012 (20K in 2013), suggesting 2012 production capacity will soon be sold out.

## Overweight

TSLA, TSLA US

Price: \$26.69

▲ **Price Target: \$35.00**  
Previous: \$30.00

### Automobile Manufacture

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### Price Performance



### Tesla Motors, Inc. (TSLA;TSLA US)

	2011E (Old)	2011E (New)	2012E (Old)	2012E (New)	2013E	2014E
EPS Reported (\$)						
Q1 (Mar)	(0.52)A	(0.45)A				
Q2 (Jun)	(0.53)	(0.48)				
Q3 (Sep)	(0.53)	(0.51)				
Q4 (Dec)	(0.54)	(0.54)				
FY	(2.14)	(1.98)	(1.56)	(1.51)	1.45	1.15

Source: Company data, J.P. Morgan estimates.

### Company Data

Price (\$)	26.69
Date Of Price	04 May 11
52-week Range (\$)	36.42 - 14.98
Mkt Cap (\$ mn)	2,515.27
Fiscal Year End	Dec
Shares O/S (mn)	94
Price Target (\$)	35.00
Price Target End Date	31 Dec 11

See page 5 for analyst certification and important disclosures.

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- **Thoughts on funding requirement:** Mgmt. stated that it will evaluate fundraising needs and may seek to opportunistically tap *equity* capital markets. While maintaining that currently available cash resources are sufficient, additional capital would likely help the company to accelerate the launch timing of Model X (crossover variant of Model S), perhaps to within 3-4 quarters of the Model S launch. Alpha version of Model X will be unveiled this December, soon after the release of Beta version of Model S in September. We believe Model X will require \$150MM of capital investment, significantly below Model S' (~\$500MM) as capital required to develop platforms, powertrain, etc. will not be carried over. Further, additional capital may be required to expand production capacity from one shift to two shifts. All things considered, this suggests any potential secondary dilution would be relatively modest compared to the company's current \$2.6B equity market cap.
- **1Q earnings details:** TSLA reported 1Q EPS of -\$0.45 (JPMe -\$0.52) on higher revenues (\$49MM vs. JPMe \$37MM and 4Q:10 of \$36MM) and lower than expected operating loss of -\$47MM (vs. JPMe -\$52MM and 4Q:10 of -\$52MM). Revenues were stronger at both Automotive (\$34MM vs. JPMe \$30MM) and Development Services (\$15MM vs. JPMe \$7MM). TSLA delivered 145 Roadster units in 1Q, roughly in line with the past three quarters and notably above 1Q:10's 126. Gross margin in the quarter was 37% (obviously aided by upside to high-margin Development Services sales), ahead of JPMe 30% and 4Q:10's 31%. Average selling prices were roughly flat with the prior quarter. Capex for the quarter was \$20MM, and TSLA guided full-year capex to be within the range of \$190-215MM, with quarterly expenditures in the balance of the year to be roughly equal. Further, Daimler continued to increase its battery pack orders for the *Smart fortwo* in FY2011 to 2,100 units (+300 vs. last quarter), the same magnitude of increase seen in 4Q:10.

Table 1: TSLA: Discounted Cash Flow (DCF) Based Valuation

	2009	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Revenues	112	117	179	660	1,854	2,181	3,679	4,978	6,598	7,216	8,353	8,427
EBITDA	-46	-136	-195	-121	204	169	494	653	739	727	812	823
Less: D&A	-5	-11	-14	-25	-50	-50	-52	-55	-57	-60	-62	-65
EBIT	-51	-147	-209	-146	154	119	442	598	682	667	750	758
Interest Expense	-2	-1	-1	-14	-13	-10	-9	-7	-6	0	0	0
Taxes	0	0	0	0	0	0	-104	-141	-162	-160	-180	-182
Net Income	-54	-148	-210	-160	141	109	329	449	515	507	570	576
Add: D&A	+5	+11	+14	+25	+50	+50	+52	+55	+57	+60	+62	+65
Add: Stock based compensation		+21	+22	+16	+19	+20	+22	+24	+26	+28	+30	+30
Change in Working Capital	0	-5	98	25	87	35	101	96	117	59	91	27
Capital Expenditure	-68	-105	-206	-118	-136	-180	-350	-80	-128	-148	-185	-163
Free Cash Flow to Equity	-117	-227	-282	-212	161	33	155	544	587	506	568	536
PV of FCF to Equity				-171	117	22	90	285	275	213	214	182
Terminal Value												7,508
Implied Terminal Growth rate												14x
PV of Terminal Value												2,546

DCF Assumptions		Comments
(1) Risk-free rate*	3.216%	
(2) Beta	1.1	
(3) Risk Premium**	7.5%	
(1)+(2)*(3) = Cost of Equity	11.4%	
LT Growth Rate	4.0%	

\* US 10-yr Treasury yield

\*\* Source: Bloomberg's US Country Risk Premium

Equity Value Calculation	
PV of FCFs	1,226
PV of Terminal Value	2,546
Equity Value (fully distributed)	3,772
Implied Stock Price	35

Source: Company reports and J.P. Morgan estimates.

## Valuation

We raise our DCF-based Dec 2011 price target to \$35 (vs. \$30 earlier)—11.4% discount rate, 4% terminal growth, exclusive of 2011 burn. However, our \$35 target does imply a somewhat lofty 36x P/E on tax rate-adjusted 2013E EPS (versus its current multiple of 27x), although implied P/E is 29x if 10% EBIT margin is used (our margin forecast may be conservative at least in the initial years [guidance is 14-16%]). Since its 2003 start, Tesla has been singularly focused on developing pure electric vehicles (EVs). We think EVs and plug-in hybrids (PHEVs) both hold strong long-term promise given tightening environmental regulations and an increasingly green global consumer. Maintain Overweight.

## Risks to Rating and Price Target

**Downside risks:** (1) Established luxury carmakers introduce competing vehicles that eventually prove performance and cost competitive to Tesla's technology. Audi, for example, is targeting a 2012 launch of its E-tron EV ultra luxury sports car, and Mercedes and Porsche have pure EV sports car plans in the works as well. (2) The manufacturing ramp of Model S is delayed notably. (3) Model S sales start cannibalizing Roadster sales. (4) Elon Musk (CEO) is a key executive whose loss to the company could potentially be fairly detrimental (he has a history of moving on once companies become successful). We see him as a visionary who drives Tesla to high technical and commercial targets.

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### Tesla Motors (TSLA) Price Chart



Date	Rating	Share Price (\$)	Price Target (\$)
09-Aug-10	OW	19.59	25.00
10-Nov-10	OW	29.36	30.00

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.  
Initiated coverage Aug 09, 2010. This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.  
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