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March 31, 2011

Stock Rating
Overweight

Industry View
In-Line

Tesla Motors Inc.

America's Fourth Automaker

What's Changed

Rating	**Equal-weight to Overweight**
Price Target	**NA to $70.00**

Flipping the chessboard: The confluence of structural industry change, disruptive technology, changing consumer tastes and heightened national security creates an opportunity for significant new entrants in the global auto industry. California dreaming? We don't think so. In our view, the conditions are ripe for a shake-up of a complacent, century-old industry heavily invested in the status quo of internal combustion. The risks are high. So is the opportunity. Enter Tesla.

xEV market entering higher volume and it's happening right now: We are convinced electric cars will comprise a significant minority of global light vehicle sales medium-term and the majority longer term. Our global xEV model suggests penetration of 5.5% globally by 2020 and >15% by 2025. Even on our forecasts, the Internal Combustion Engine (ICE) remains by far the dominant form of propulsion for a very long time.

Tesla moves from rich man's toy to mass market: We believe Tesla's long-term independence can only be secured through the commercialization of mass market EVs in the $30k price range. Premium offerings like the Model S and its derivatives are important stepping stones to the company's full volume potential of 500k units by 2025. We see a path to a company with $9.5bn of sales, >$1.2bn of operating profit and >$1.0bn of FCF by 2020, based on Tesla capturing 3.6% of the global xEV market by that time. The risks of lagging EV adoption, launch delays and balance sheet difficulties make Tesla a highly speculative investment.

$70 PT offers almost 200% upside, on revenue est. roughly 3x consensus in the out years. On our forecasts, Tesla's biggest financial challenge comes in 2013 when gross liquidity falls to $146mm. As is not uncommon with start-ups, the biggest question is if Tesla can remain solvent long enough to capitalize on the forthcoming technological break-throughs.

Key Ratios and Statistics

Reuters: TSLA.O Bloomberg: TSLA US
Autos & Auto-Related / United States of America

Price target	**$70.00**
Shr price, close (Mar 30, 2011)	$23.71
Mkt cap, curr (mm)	$2,256
52-Week Range	$36.42-14.98

Fiscal Year ending	**12/09**	**12/10**	**12/11e**	**12/12e**
ModelWare EPS ($)	**-**	**(3.04)**	**(2.33)**	**(2.80)**
Prior ModelWare EPS ($)	**-**	**-**	**-**	**-**
P/E	**-**	**NM**	**NM**	**NM**
Consensus EPS ($)§	**(1.59)**	**(2.53)**	**(2.05)**	**(1.38)**
Div yld (%)	-	-	-	-

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework (please see explanation later in this note).
§ = Consensus data is provided by FactSet Estimates.
e = Morgan Stanley Research estimates

Quarterly ModelWare EPS

Quarter	**2009**	**2010 Prior**	**2010 Current**	**2011e Prior**	**2011e Current**
Q1	-	-	(4.04)	-	(0.57)
Q2	-	-	(5.04)	-	(0.56)
Q3	-	-	(0.38)	-	(0.59)
Q4	-	-	(0.54)	-	(0.60)

e = Morgan Stanley Research estimates

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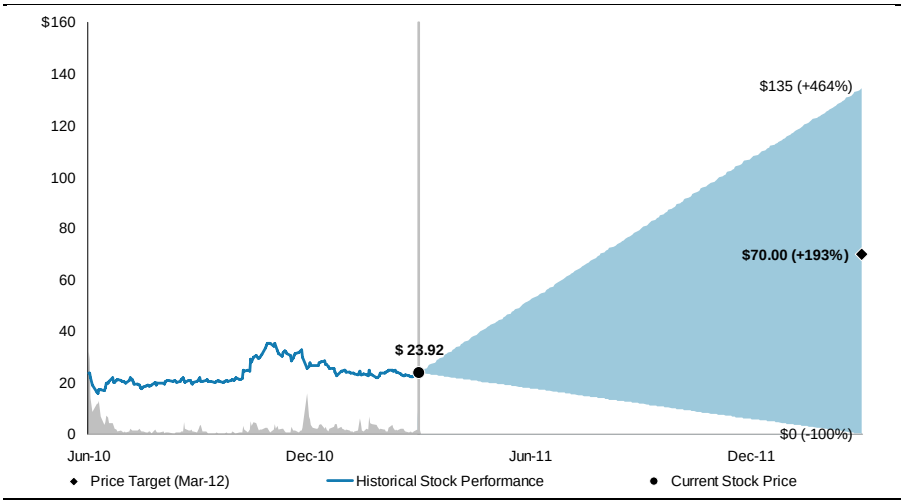
Risk-Reward Snapshot: Tesla Motors (TSLA, OW, PT $70)

There are few things in business as risky as starting an auto company – especially one that relies on entirely new technology that is not likely to be competitive vs. the established internal combustion engine for more than a decade. However, conditions are ripe for new entrants and we believe Tesla can be a significant volume player in the auto industry. We believe the market for xEVs (plug-in-hybrids or PHEVs and pure EVs) is underestimated as rising oil prices and government support accelerate the shift away from the internal combustion engine. This shift has made room for entirely new players to join the ranks of currently entrenched OEMs, and has afforded Tesla the opportunity to establish itself as America's fourth automaker. The biggest risk remains Tesla's own execution of its plan. Despite its extremely risky profile, the almost 200% upside to our base case $70 price target is enough to justify an Overweight rating.



Source: FactSet (historical share price data), Morgan Stanley Research estimates

We argue Tesla cannot be valued on near-term multiple metrics like traditional auto companies given that we expect Tesla to multiply revenues by over 20x from 2010 to 2015, by more than 80x by 2020 and over 150x by 2025. We have thus chosen a 15-year time horizon for our DCF which captures the full utilization of Tesla's manufacturing capacity in Fremont, the full maturation of the Model S, Model X (and top-hat derivatives) and also the ramp up of its mass market electric vehicle (the Gen 3). We have applied a 12% WACC with a range of 10% to 14%. The terminal value accounts for around 60% to 70% of the total DCF value across the range of methodologies we have applied to arrive at our $70 PT.

Bull Case $135	**Production far beyond Fremont.** Global car market runs at 3.4% CAGR through 2025. Global xEV penetration at 7% by 2020 and 21% by 2025. Tesla EV share peaks at 11% and >8% long term. Pricing similar to base case. Mix stable over time due to higher contribution from Model S and Model X and higher content uptake on Gen 3. Break-even OP reached in 2013, OP margin peak at 23%, normalize at just under 20%.
Base Case $70	Significant EV player, fully utilizes Fremont. Global car market runs at 3.2% CAGR through 2025. Global EV penetration at 5.5% by 2020 and 15% by 2025. Tesla xEV share peaks at <4% and runs at 2.5% long term. Pricing grows slightly - up in the early years, down in the later years. Mix driven down over time by growth in mass market with Gen 3 dominating the volume. Break-even OP reached in early 2014, OP margins peak at 17%, normalize at 13%.
Bear Case $0	Cash burn exceeds available liquidity by 2013/2014. Global car market runs at 1.9% CAGR through 2025. Global xEV penetration at 2.5% by 2020 and 6.2% by 2025. Delays to Model S lead to cost overruns not adequately funded by additional capital sources. A not uncommon outcome for many new technology start-ups.

Why Overweight?

- We forecast grid-enabled vehicles (plug-in hybrids and pure electric vehicles) will comprise 5.5% of global car sales by 2020 and 15% by 2025.
- A high oil price helps sway both consumer and political forces to support widespread electrification of the automotive fleet.
- No attachments to the established belt-driven internal combustion technology allows 100% focus on new technological challenges.
- Strategic cooperation and ownership relationships with Daimler, Toyota and Panasonic lend credibility and validation to Tesla's strategy.
- Acquisition of former NUMMI facility from Toyota enables manufacturing scale to be a high volume producer.

Key Investment Risks

- Missteps in the execution of the Model S sedan (and derivatives) could jeopardize the ability of Tesla to participate in the mass EV market.
- Evolution of cost and performance of battery technology vs. ever-improving internal combustion engines.
- Stiff competition from other OEMs as they develop their own xEVs.
- Significant long-term government coordination required to provide incentives to foster the application of new battery technologies, consumer taste and grid infrastructure necessary for EV adoption.
- Significant delays to Model S and inability to raise new equity could challenge min. liquidity thresholds.

Current Valuation

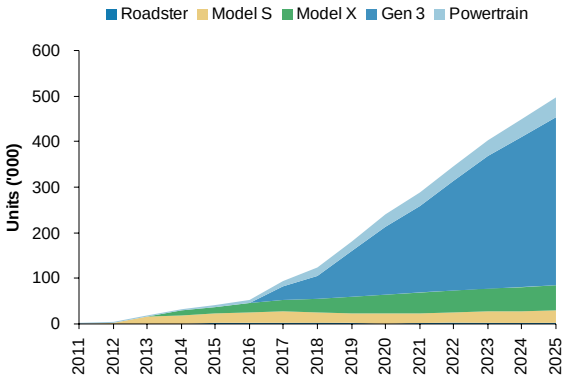
- Tesla trades on 93% EV/Sales and 8.4x EBITDA on our 2015 estimate. Tesla trades at 18.5x 2015e P/E and 3.5x 2020e P/E.

Potential Catalysts

- Strategic tie-ups, Model S milestones, quarterly results, estimated 2H capital increase.

Tesla Market Position and Strategic Snapshot

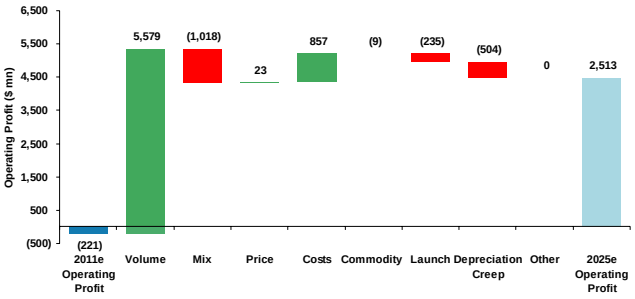
Tesla unit volume by model line, 2011 to 2025e



Tesla Liquidity vs. Cash Burn through 2015e ($mm)

	2010	2011	2012	2013	2014	2015
Liquidity vs. Burn Profile						
Cash	100	169	173	146	200	200
Restricted Cash	74	0	0	0	0	0
Undrawn DOE Loan	393	193	0	0	0	65
Other	0	0	0	0	0	0
End-of-Period Liquidity	**566**	**362**	**173**	**146**	**200**	**265**
Beginning-of-Period Liquidity		566	362	173	146	200
Free Cash Flow (Burn)		-354	-189	-27	54	65
Capital Increase		150	0	0	0	0
End-of-Period Liquidity	**566**	**362**	**173**	**146**	**200**	**265**

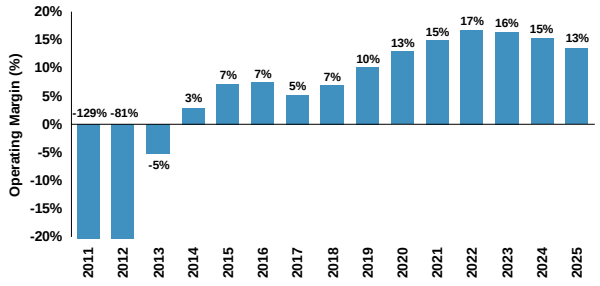
Tesla Operating Profit Bridge, 2011 to 2025e ($m)



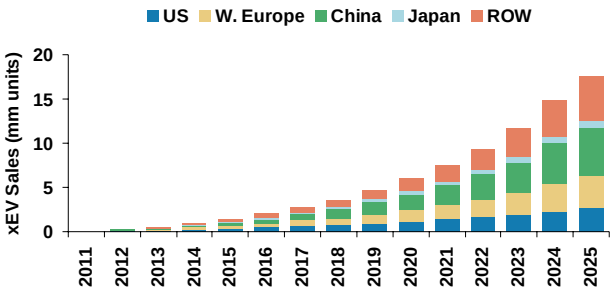
Tesla: DCF Sensitivity to WACC and EV/EBITDA ($)

WACC \ EV/EBITDA	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0
6.0%	95	108	120	132	144	156	168	180	192
8.0%	74	83	93	102	111	120	129	139	148
10.0%	58	65	72	79	86	93	100	107	114
12.0%	45	51	56	61	**67**	**72**	78	83	88
14.0%	36	40	44	48	52	56	60	65	69
16.0%	28	31	34	38	41	44	47	50	54
18.0%	22	24	27	29	32	34	37	39	42
20.0%	17	19	21	23	25	27	29	31	33
22.0%	13	15	17	18	20	21	23	24	26
24.0%	10	12	13	14	15	16	18	19	20
26.0%	8	9	10	11	12	13	14	15	16

Tesla: Operating Margin, 2011e to 2025e (%)



Global EV Sales Penetration by through 2025



e = Morgan Stanley Research estimates

Source: Company data, FactSet, Morgan Stanley Research

Key Tesla Debates

Debates	Our take
1. **How big is the global xEV market?** *Market View: Maybe 5% of US sales and substantially less than 5% of global sales by 2020.*	**xEV sales to reach 7% of US market and 5.5% of global volume by 2020.** The death of the internal combustion engine? Far from it. We still expect 85% of global car sales to be based on the internal combustion engine in 2025. We believe it would take the better part of 30 years to have the majority of the world's cars powered by electrons.
2. **Is there room for new entrants into the global light vehicle market?** *Market View: Industry is consolidating. The big players will get bigger. Smaller players die or are gobbled up.*	**Electric vehicles represent a disruptive technology that can lead to new players in the market with significant global scale.** Traditional automakers face an increasingly daunting regulatory burden for internal combustion vehicles while investing in competing technology. If Tesla can execute through the Model S launch and ramp-up, we think they can be a major player in alternative mobility.
3. **How big a player can Tesla be in the auto industry?** *Market View: A niche player focusing on high-end electric vehicles and the supply of EV engineering competence and powertrains to larger manufacturers.*	**Tesla's goal is to be an independent, mass market electric car company selling hundreds of thousands of units by early next decade.** Investments in the Fremont facility (where Toyota had produced upwards of 500k units), efforts to increase manufacturing flexibility (all Model S volume made on one line) and vertical integration suggest Tesla plans to be a higher volume player.
4. **How does one put a value on Tesla?** *Market View: Heavily sentiment driven. Take a 3 to 5 year view based on execution of 'milestones' like Roadster sales and Model S launch deliverables. Tough to take a long-term view.*	**Must take a long-term view to value Tesla. The company either succeeds as a high-volume EV player or faces significant challenges as a stand-alone company.** We expect to receive some criticism for taking a 15 year forecast horizon for the company's valuation. In our opinion, there's just no way to value Tesla that makes better sense. Most auto companies may have over 50% of their value beyond year 5 of a DCF. Tesla has more than 97% of its value beyond 2020.

N. American Autos and Auto-Related Industry View: In-Line.

- Sharp volume recovery expected in N. America driven by pent-up demand, aging car parc and historical recovery patterns. Financial sub profits boosted by high residual values and improving risk-loss could trigger far greater release of pent-up demand. Dealer network has been rationalized and inventories are still low.

- Industry is in a sweet spot of high capacity utilization and low cost structure due to unprecedented capacity exit and legacy cost reduction. We believe capacity can chase production rather than the other way around in this cycle, leading to higher sustainable margins for the supplier group.

- We prefer secular stories vs. cyclical stories given the market's expectation for a V-shaped volume recovery now appears to be consensual. Many of our top N. American auto picks have built-in oil hedges that enable them to benefit from permanently higher fuel prices. BorgWarner is the best way to play the greening of the internal combustion engine while Tesla and Johnson Controls are plays on electrification.

Californ-Electrification

We view Tesla as an auto company first and foremost - not just a 'clean-tech' company. The key difference between our investment view on Tesla vs. that of the prevailing market is that we believe Tesla has a viable opportunity to be a significant volume player in the global auto industry. The transformation from California startup to global auto player may require well more than a decade to achieve - not unlike the genesis of many of today's established automotive companies.

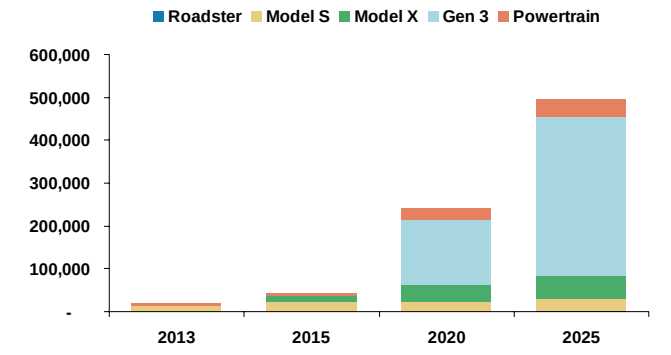
We believe the market is greatly underestimating three drivers of the Tesla story: (1) The electric car market is larger than you think; (2) The room for entirely new market players is greater than you think; and (3) Tesla has the attributes to be a disruptive force in the auto industry longer term. The biggest risk will be Tesla's own execution of its plan, particularly over the next 3 years.

The prevailing market view is that Tesla will be a niche player in a fringe EV market with a high chance of failure.

Our view is that Tesla will be a significant player in a more widely adopted EV market with a high chance of success.

We have taken a bottom-up approach to our xEV forecast, focusing on key metropolitan areas. Our global xEV model is based on key cities like New York, Los Angeles, London, Paris and Beijing achieving xEV penetration of 15-20% by 2020 and 25-35% by 2025. We forecast both Plug-in Hybrid (PHEV) and pure EV (EV) sales with PHEV dominating our forecast in the early years peaking at 75% of the total xEV market in 2015.

Exhibit 1
Tesla moves from premium/niche to volume player



Source: Company data, Morgan Stanley Research

Key drivers of our Overweight rating on Tesla:

1. **Size of the global electric vehicle market is underestimated.** We forecast grid-enabled vehicles (plug-in hybrids and pure electric vehicles) will comprise 5.5% of global car demand by 2020 and over 15% by 2025.

2. **First mover advantage – scarcity of pure-play ways to play the electrification of the automobile.** At this early stage of product development, attracting the best people is critical. We are encouraged by the balance of electrical engineering, automobile design and retailing talent at Tesla, supporting our view of the company ultimately becoming a higher volume player.

3. **Beneficiary of US and geo-political climate (oil hedge).** A high oil price helps sway both consumer and political forces to support widespread electrification of the automotive fleet. Higher fuel prices also improve the pay-back period for an electric vehicle to the consumer.

4. **Pure play EV company without investment in internal combustion.** While virtually all traditional auto manufacturers are funding electric vehicle programs, we believe a key Tesla advantage is that it has no attachments to the established belt-driven internal combustion technology and can focus 100% of its efforts on the new technological challenges.

5. **Validation from key auto industry players.** Tesla has established strategic cooperation and an ownership relationship with Daimler, Toyota and Panasonic. The US Department of Energy and the state of California (world's 8th largest economy) have also made financial and fiscal commitments. In our view, it is unusual for start-up companies to have garnered such direct forms of credibility from established industry participants with tacit government support.

6. **Manufacturing scale to be a high volume producer.** Tesla acquired the former NUMMI facility from Toyota for $42mm. It is capable of producing 500k units per year or approximately 1% of total worldwide passenger car production. This factory demonstrates Tesla's intention and capability to produce a far higher level of volume than that currently anticipated by the market.

Our valuation philosophy is radically different from consensus. Using a 15 year DCF approach is a highly unorthodox way to value an auto company. However, we argue one simply cannot conduct a valuation for such an early-stage applied technology startup without taking a long-term view. A traditional auto company may have >50% of its DCF value accounted for within the first 5 years. For Tesla, we estimate 97% of its value occurs > year 10. The risks inherent in taking such a long-term approach to valuation may be too great for most auto investors to stomach. For those who form a valuation thesis based on nearer-term news flow such as strategic tie-ups and milestones on the Model S, we cannot recommend owning the stock with high conviction.

Venture cap upside brings high risk: The technology hurdles and the execution risks are high. As such, investors must demand out-sized returns relative to other auto stocks. Tesla is the only stock under our coverage with a $0 bear case. In our view, a $70 price target is sufficient to support an Overweight rating on the stock, but is not high enough to make Tesla rank amongst our very highest picks in N. American autos, given the execution risk.

Biggest risks are near-term: We forecast Tesla liquidity will decline to $146mm from $566m today even after raising $150mm through a capital increase in 2H11. While we can make a fundamental case for Tesla's place in the auto industry to be substantially higher than currently anticipated by the market, we must acknowledge that, like many early stage enterprises, Tesla faces enormous challenges to their success – many of which are systematically outlined in Tesla's 2010 Form 10-K which includes a risk factor section that runs a full 40 pages (from page 30 to page 70).

Exhibit 2

Key Tesla valuation sensitivities

Variable	Impact	MS Estimate
1% xEV Share of Global Market	40k units by 2020 $1.6bn revenue $10 to share price	5.5% by 2020 15.1% by 2025
1% Tesla Share of EV Market	110k units from 2020-25 $4.3bn revenue $20 to share price	3.6% by 2020 2.6% by 2025
100k Units of Tesla Volume	$3.9bn revenue $0.9bn OP $18 to share price	240k by 2020 496k by 2025
100bp of Operating Margin	$140m to 2020-2025 OP $4 to share price	17% peak in 2022 13% exit in 2025
1x EBITDA Multiple for DCF	$6 to share price	8.0x
1% WACC for DCF	$8 to share price	12%

Source: Morgan Stanley Research.

Key risks to our view on Tesla:

1. **Execution risk on near term milestones.** A serious misstep on the costs and commercial appeal of the Model S sedan (and derivatives) could jeopardize Tesla's ability to participate in the mass EV market longer term. We anticipate a Model S production launch in mid 2012 with 2,000 deliveries by the end of that year. Our forecasts through 2013 have Tesla burning through approx. 75% of today's available liquidity even including a $150mm cap increase.

2. **Evolution of battery technology.** Our forecast for global EV growth is dependent on a significant improvement in battery performance at a sharply reduced cost. A path to a $200 per KWh battery with a 200 to 300 mile range and fast recharging will be required to make EVs a competitive option vs. advanced internal combustion technology.

3. **Competition from new entrants and existing OEMs.** Tesla will face a raft of new EV competition. Most of the world's largest OEMs are devoting billions in investment and engineering resources to developing their own EVs. Too much capacity chasing insufficient demand could threaten smaller-resourced companies like Tesla. Another key risk is the pace of improvement for internal combustion engines, which could conceivably achieve average fuel economy 2x to 3x higher than they do today.

4. **Charging infrastructure / electric power sector.** Our assumptions of global EV growth, particularly beyond 2020, will require both significant investment in upgrades of the electric grid and related IT infrastructure, requiring a coordinated effort from utilities, regulators, and government at the local and federal level.

5. **Consumer acceptance.** EVs must offer consumers significant advantages over prevailing internal combustion technology without policies to artificially encourage purchase. Hard core enthusiasts and deep-pocketed environmentalists are not enough to ensure the sustainable place of the electric car. The product must be safe, reliable, convenient, enjoyable and provide a substantial cost/benefit to make meaningful inroads.

6. **Lack of government support.** America's leadership in electric mobility requires significant government coordination over at least the next 10 to 15 years. Washington must remain focused on national security, energy security and job security to provide the early incentives to foster the application of new battery technologies, consumer adoption and grid infrastructure.

Debate 1: How big is the global xEV market opportunity?

Market View: Maybe 5% of US sales and substantially <5% of global sales by 2020.

Our view: PHEV + EV sales to reach 7% of US market and 5.5% of global volume by 2020. The death of the internal combustion engine? Not at all. We expect more than 85% of global car sales to be powered solely by an internal combustion engine by 2025. We believe it would take the better part of 30 years to have the majority of the world's cars powered by electrons.

We expect significant adoption of electric vehicles will require a full engineering cycle of 10 to 15 years. Key requirements to foster xEV development include:

- Battery costs must decline
- Charging infrastructure upgraded
- Reliability and safety proven in the market
- Fuel prices remain high
- Costs of internal combustion cars rising on regulatory pressures
- Government incentives remain in place

Exhibit 3

Easter morning 1900: 5th Ave, New York City. Spot the automobile.

Source: US National Archives.

Exhibit 4

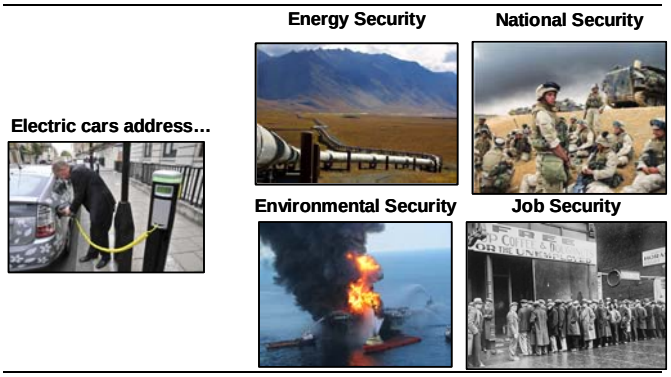
Easter morning 1913: 5th Ave, New York City. Spot the horse.

Source: George Grantham Bain Collection.

The key push for EVs: Governments worldwide have a strategic interest in reducing transportation dependence on foreign oil. The statistics speak for themselves. At $3.60 per gallon, Americans spend roughly $0.5 trillion on gasoline for personal transport each year. This amount accounts for approximately 3.4% of US GDP. Personal transport accounts for the largest portion of the $1tn in total US oil demand (half of which is imported). By comparison, the US Department of Education annual budget is less than $50bn. Such an enormous dependence of the US economy on foreign oil alone creates a great incentive for the Federal government to have a hand in creating conditions for grid-enabled-vehicles to thrive. The incentive to create green manufacturing jobs is augmented by sluggish growth and high unemployment.

Exhibit 5

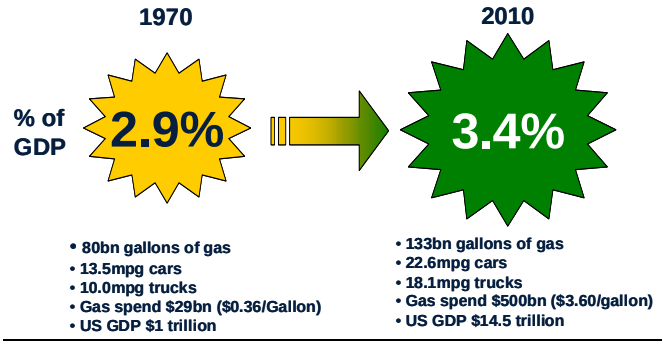
Things that should keep Congress up at night…



Source: Library of Congress, www.army.mil

Exhibit 6

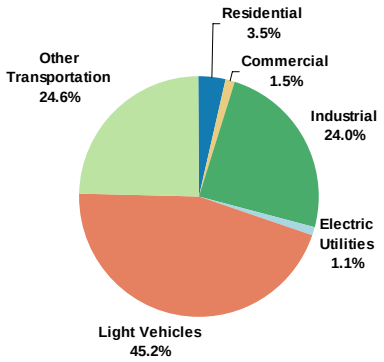
US economy, environment and national security threatened by dependence on oil (gas spend/GDP)



Source: US Transportation Energy Book, Morgan Stanley Research.

Exhibit 7

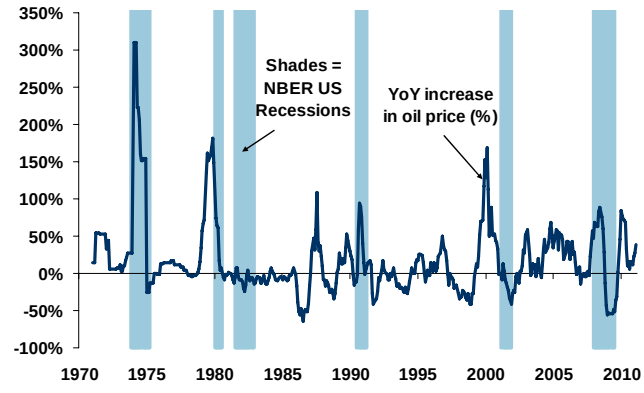
Light vehicles for personal use accounts for nearly ½ of US oil consumption



Source: US Transportation Databook, Morgan Stanley Research.

Exhibit 8

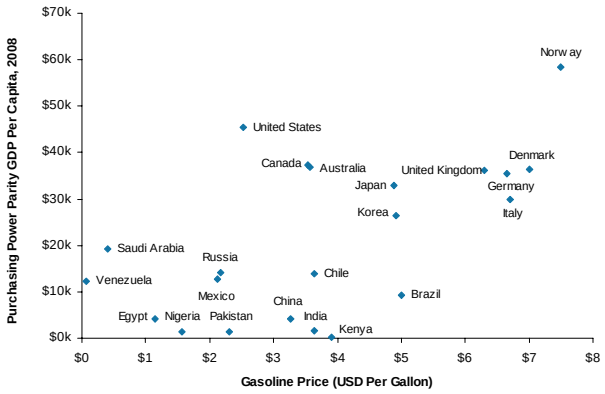
Every recession since 1970 has been preceded by an oil price spike



Source: Department of Commerce, Bureau of Economic Analysis. Uses inflation adjusted GDP.

Exhibit 9

The United States of America: Wealthy nation with a 3rd world gas price (2009)



Source: World Bank, International Energy Agency.

The key impediment for EVs: Battery costs are too high and today's cars are too good. While the initial uptake of xEVs will be driven by early adopters, long-term demand will depend on whether xEVs can become financially viable. Viability can be defined as (1) upfront cost premium: if the cost of entry is too high, operating cost savings will not even matter. It is encouraging to see many initial EV launches in the $25-50k range before radical technology breakthroughs. (2) ability to reach breakeven vs. running cost savings.

Prevailing gasoline prices and fuel economy of internal combustion engine will significantly influence the payback period for xEVs. All else equal, a $1 increase in gas price per gallon would reduce the payback period of purchasing an xEV by roughly 2.5 years. Each 5mpg increase in ICE fuel economy extends the payback by >2 years.

Exhibit 10

Payback (years) at various battery cost vs. gas price at 25.0 mpg of ICE

		Battery Cost ($/KWh)					
		600	500	400	300	200	100
Gas Price ($/gal)	1.50	41.7	34.7	27.8	20.8	13.9	6.9
	2.00	25.0	20.8	16.7	12.5	8.3	4.2
	2.50	17.9	14.9	11.9	8.9	6.0	3.0
	3.00	13.9	11.6	9.3	6.9	4.6	2.3
	3.50	11.4	**9.5**	7.6	5.7	3.8	1.9
	4.00	9.6	8.0	6.4	4.8	3.2	1.6
	4.50	8.3	6.9	5.6	4.2	2.8	1.4
	5.00	7.4	6.1	4.9	3.7	2.5	1.2
	5.50	6.6	5.5	4.4	3.3	2.2	1.1
	6.00	6.0	5.0	4.0	3.0	**2.0**	1.0
	6.50	5.4	4.5	3.6	2.7	1.8	0.9
	7.00	5.0	4.2	3.3	2.5	1.7	0.8
	7.50	4.6	3.9	3.1	2.3	1.5	0.8
	8.00	4.3	3.6	2.9	2.2	1.4	0.7

Source: Company data, Morgan Stanley Research. Assumes electricity cost of $0.12/KWh, 4 miles/KWh and average annual driving distance of 12,000 miles/year.

Exhibit 11

Payback (years) at various battery cost vs. mpg of ICE at $3.50 gas price

		Battery Cost ($/KWh)					
		600	500	400	300	200	100
ICE Efficiency (mpg)	65	52.4	43.7	34.9	26.2	17.5	8.7
	60	44.1	36.8	29.4	22.1	14.7	7.4
	55	37.2	31.0	24.8	18.6	12.4	6.2
	50	31.3	26.0	20.8	15.6	10.4	5.2
	45	26.2	21.8	17.4	13.1	**8.7**	4.4
	40	21.7	18.1	14.5	10.9	7.2	3.6
	35	17.9	14.9	11.9	8.9	6.0	3.0
	30	14.4	12.0	9.6	7.2	4.8	2.4
	25	11.4	**9.5**	7.6	5.7	3.8	1.9
	20	8.6	7.2	5.7	4.3	2.9	1.4
	15	6.1	5.1	4.1	3.1	2.0	1.0
	10	3.9	3.3	2.6	2.0	1.3	0.7
	5	1.9	1.6	1.2	0.9	0.6	0.3

Source: Company data, Morgan Stanley Research. Assumes electricity cost of $0.12/KWh, 4 miles/KWh and average annual driving distance of 12,000 miles/year.

xEVs are not cost effective at current prices. With battery costs north of $600/kWh, it will take over 10 years for an EV to break-even, even with gas prices around $3.50/gallon. If gas prices rise to $7/gallon or higher or when battery costs decline to under $300/kWh, the breakeven period will drop below 5 years, which is the typical length of an auto loan today.

We believe OEMs should try to keep the cost premium for EVs at 10% above the cost of an equivalent ICE car. Anything above that could make it hard to recover the premium through operating cost savings and may even tempt the consumer to trade up to a higher segment.

The cost equation is heavily dependent on battery costs, particularly the cost of raw materials and production efficiencies. Most battery manufacturers and automakers expect prismatic lithium ion batteries to be the chemistry and format of choice for volume xEVs. Prismatic lithium ion batteries are still in early stages of development and cost per kWh is in the $800-1,000 range. This means a typical 15 kWh battery that can propel a vehicle for 50-60 miles costs $12k to $15k or about 50% of the cost of the vehicle. An EV could require a larger battery to give it a more useful range...such a battery could cost as much as $30-40k today.

Scale production, optimized manufacturing processes and material substitution that reduce the reliance on expensive, exotic metals like cobalt should help significantly reduce this price premium in the coming years. Battery makers have targeted reducing cost per kWh to about $500 by 2012-13 and halving that further in the next 5 years. We expect a 10% per year decline in battery costs. At $200 per kWh an EV battery would cost $5-8k, only slightly more than a typical automotive powertrain today, and potentially be more competitive vs. the higher cost of advanced internal combustion engines.

Exhibit 12

Remember Moore's Law?

Osborne Executive Portable Computer (1982) vs. Apple iPhone (2007)

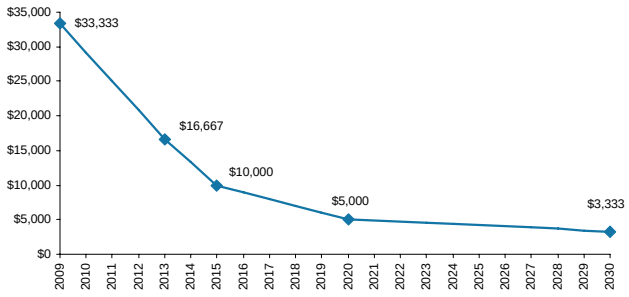
The Executive is…

- **100x the weight**
- **500x the volume**
- **10x the cost**
- **1/100th the processing power**

Source: Lexikon's History of Computing

Exhibit 13

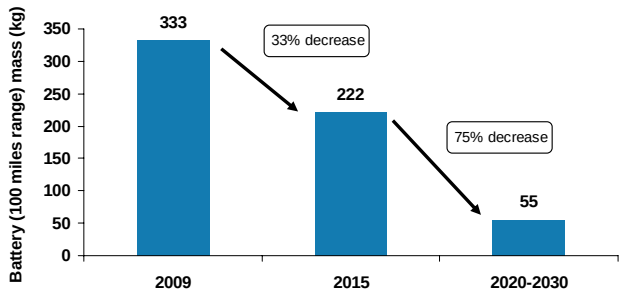
Battery costs expected to collapse, increasing the addressable market



Source: US Department of Energy. Assumes 3 miles per kWh and 100 mile range.

Exhibit 14

Battery weight expect to plummet, reducing cost and complexity



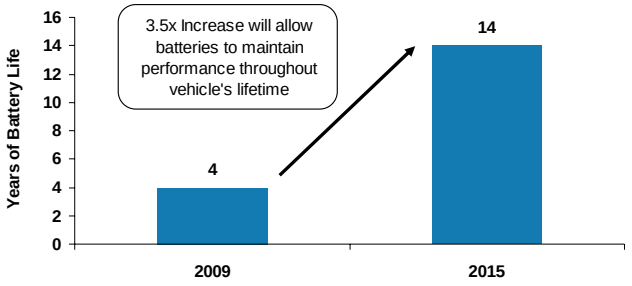
Source: US Department of Energy.

PHEV can be an effective bridge between ICE and EV. PHEVs use a much smaller battery than EVs since they have a smaller all-electric range. This reduces the upfront cost premium but operating costs are still as low as EVs for short-range applications like daily commuting. PHEVs also have an ICE powered on-board 'range extender' which eliminates 'range anxiety' – one of the key obstacles to adoption of EVs today. We expect the majority of xEV uptake

in the near-term to be PHEV until battery technology evolves significantly and costs decline. We see proliferation of traditional hybrids and PHEVs helping to improve the manufacturing scale required for mass adoption of EVs.

Exhibit 15

Battery life will grow, as should equal useful life of vehicle



Source: US Department of Energy.

Tesla is in a unique position with regard to battery costs. Tesla uses a battery comprised of 18650 form factor cells, which are closely related to existing laptop batteries. These cells are much farther along the scale and cost ramp curve than other form-factors, which allows Tesla to build its batteries at a much lower cost than competitors. We assume Tesla's battery packs are in the $350-400 / kWh range today. We note however, that Tesla claims to be chemistry agnostic and will be ready and willing to switch to any chemistry/form-factor that may prove to be more cost effective or have better performance than its current cells.

Will EV adoption crash the US electrical grid? We don't think so. Bottlenecks will exist on the local (neighbourhood) level. Our utilities team see the increased penetration of electric vehicles as a key driver of overall long-term electricity demand growth. Given the relative price of oil to natural gas, we believe the economic argument for owning EVs is becoming more compelling. The limiting factors seem to be the cost of advanced battery systems and the availability and cost of fast charging infrastructure. As the technology improves and manufacturing processes achieve scale, we believe that an increasing proportion of new vehicle sales will be either plug-in hybrids or pure electric vehicles. In the meantime, federal and state tax incentives are filling the gap.

2011 will see a number of high profile electric vehicle launches, including the Chevy Volt and the Nissan Leaf. The number of commercially viable electric vehicle manufacturers now exceeds ten.

Assuming 4 miles per KWh, each additional pure electric vehicle sold in the US will increase annual demand by 3 MWh (based on an average of 12,000 miles driven each year). In 2008, the average annual electricity consumption for a U.S. residential utility customer was 11 MWh, so adding an electric car would increase demand for the average residence by ~30%.

At a cost of $0.12/ kWh, the annual electric bill for a residence with an electric vehicle would increase by around $350. This compares to a total gasoline bill of $1,700 assuming 25 mpg and a $3.50/ gallon gas price. Thus, the annual fuel savings for an electric vehicle could surpass $1,300/yr. Discounted at 7%, this amounts to a $9,000 total savings over the life of the vehicle. All else equal, If the incremental cost (after incentives) for an electric vehicle is significantly less than $9,000, an economically rational customer may be willing to buy.

We do a quick back of the envelope calculation to determine the potential impact to electricity demand. Our analysis assumes 245m light duty vehicles, a 14 year average fleet turnover, and 3 Trillion light duty vehicle miles driven annually (12,000 miles per vehicle) In the table below we show what annual sales penetration rates would mean for total US electricity demand after 10 years and after 20 years. Assuming 15% of annual new vehicles sales are electric vehicles, total power demand would increase by 776 TWh after 10 years (~2% of total current demand). At 25% penetration, power demand would increase by 127 TWh after 10 years (~3% of total current demand).

In our global EV model, we forecast 13.8 million EVs and PHEVs on US roads by 2025, equal to 4.8% of the total projected light vehicle population. At an annual electricity consumption of 3 MWh per vehicle, this would imply 41 TWh of demand on the grid, slightly more than 1% of the total 4,000 TWh of US demand.

We also note that we expect vehicles powered by conventional internal combustion engines to be the dominant powertrain of choice for the next decade and comprise a majority of new car sales for the next two decades at least. Our global xEV model estimates that 85% of new vehicles sold will be powered by an ICE (ICE only or hybrid) by 2025. While we expect virtually all new vehicles sold to eventually be electric vehicles one day, at least in developed markets, we do not see this happening at least for another 3-4 decades. We expect about 40% of the *incremental* growth in global vehicle sales from the 72 mm units today to 116 mm units by 2025 to come from xEVs.

Exhibit 16

Potential US electricity demand impact from EVs

	Million EV's Cumulative Sales Pentration Rate			Annual TWh of Demand Sales Pentration Rate			Percent of Total US Demand Sales Pentration Rate		
	5%	15%	25%	5%	15%	25%	5%	15%	25%
Year 1	1	3	4	2.5	7.6	12.7	0.1%	0.2%	0.3%
Year 2	2	5	8	5.1	15.2	25.4	0.1%	0.4%	0.6%
Year 3	3	8	13	7.6	22.9	38.1	0.2%	0.6%	1.0%
Year 4	3	10	17	10.2	30.5	50.8	0.3%	0.8%	1.3%
Year 5	4	13	21	12.7	38.1	63.5	0.3%	1.0%	1.6%
Year 6	5	15	25	15.2	45.7	76.2	0.4%	1.1%	1.9%
Year 7	6	18	30	17.8	53.4	88.9	0.4%	1.3%	2.2%
Year 8	7	20	34	20.3	61.0	101.6	0.5%	1.5%	2.5%
Year 9	8	23	38	22.9	68.6	114.3	0.6%	1.7%	2.9%
Year 10	**8**	**25**	**42**	**25.4**	**76.2**	**127.0**	**0.6%**	**1.9%**	**3.2%**
Year 11	9	28	47	27.9	83.8	139.7	0.7%	2.1%	3.5%
Year 12	10	30	51	30.5	91.5	152.4	0.8%	2.3%	3.8%
Year 13	11	33	55	33.0	99.1	165.1	0.8%	2.5%	4.1%
Year 14	12	36	59	35.6	106.7	177.8	0.9%	2.7%	4.4%
Year 15	13	38	64	38.1	114.3	190.5	1.0%	2.9%	4.8%
Year 16	14	41	68	40.6	121.9	203.2	1.0%	3.0%	5.1%
Year 17	14	43	72	43.2	129.6	215.9	1.1%	3.2%	5.4%
Year 18	15	46	76	45.7	137.2	228.6	1.1%	3.4%	5.7%
Year 19	16	48	80	48.3	144.8	241.4	1.2%	3.6%	6.0%
Year 20	**17**	**51**	**85**	**50.8**	**152.4**	**254.1**	**1.3%**	**3.8%**	**6.4%**

Source: Company data, Morgan Stanley Research

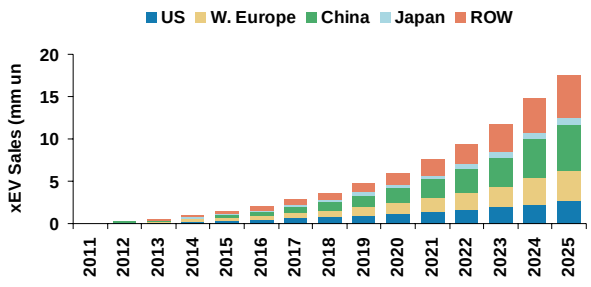
Introducing Our Global xEV Forecast Model

Our xEV forecast model is based on our analyses of xEV penetration within the largest MSAs (metropolitan statistical area) in each of the 4 largest auto markets in the world: China, USA, Western Europe, and Japan, which together account for roughly two thirds of global sales. We believe that xEV adoption will be fuelled in large part by dense, urbanized areas with higher average wealth, optimal commuting distances, significant charging infrastructure and high fleet penetration (including taxi fleets).

Our xEV model includes sales of both Plug-In Hybrid Electric Vehicles (PHEVs) and Electric Vehicles (EVs). We have had to make a broad number of assumptions across each metropolitan and non-metropolitan area in each country in our model. Future xEV sales and parc penetration will be dependent on numerous factors such as national and local government incentives, local consumer demographics and tastes, commuting patterns, local fuel prices, charging infrastructure, congestion charging schemes and many other factors.

Exhibit 17

Global xEV sales

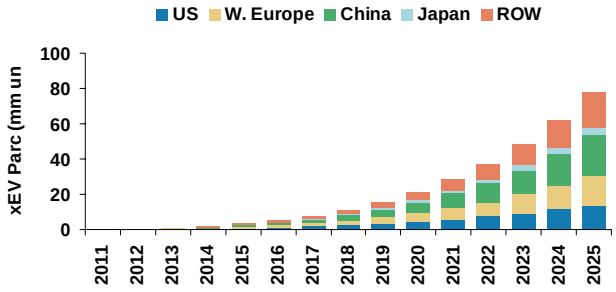


Source: Company data, Morgan Stanley Research

Our model may prove more useful as a yard-stick of xEV progress rather than a precise forecasting tool. We do not pretend to have an exact grasp over the evolution of the factors that can influence xEV sales over the next 15 years. But we do expect that alternative propulsion will experience growth rates within a metropolitan 'ecosystem' that significantly exceed the broader automotive market. As metropolitan areas achieve various milestones in terms of annual xEV sales and number of xEVs on the road, we can make continuous improvements to our global model.

Exhibit 18

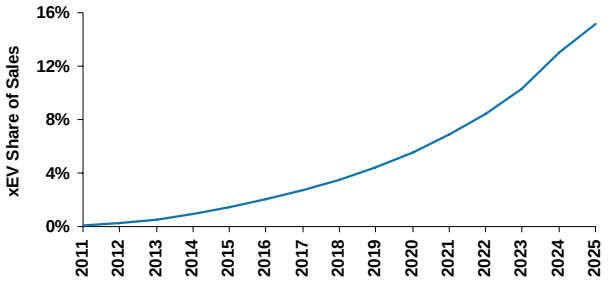
Global xEV parc



Source: Company data, Morgan Stanley Research

Exhibit 19

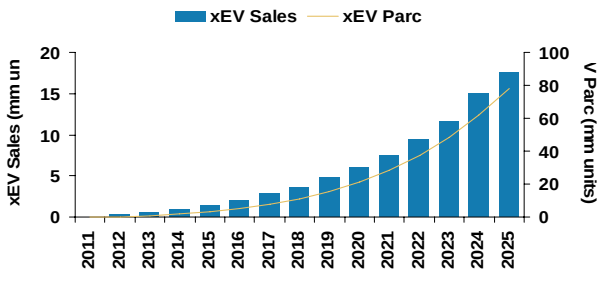
Global xEV share of sales



Source: Company data, Morgan Stanley Research

Exhibit 20

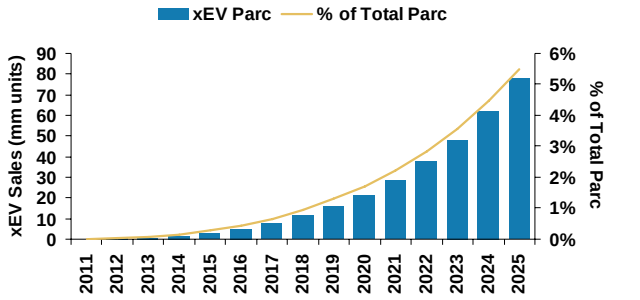
Global xEV sales vs. parc



Source: Company data, Morgan Stanley Research

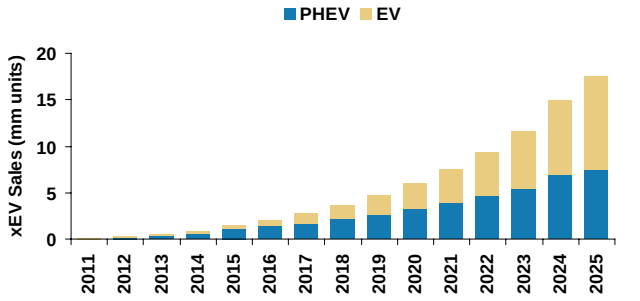
We expect xEV sales to account for 15% of global auto sales by 2025. Of this amount, we expect PHEV sales to account for up to 75% of xEV sales through 2015, falling to 54% by 2020 and to 43% by 2025. We expect China becomes the world's largest xEV market by 2017. By 2025, we estimate xEV penetration hits 15% in the US, 22% in W. Europe, 18% in China, 20% in Japan, and 11% in ROW. We estimate sales of ICE vehicles begin to decline globally from 2021.

Exhibit 21
Global xEV parc as % of total



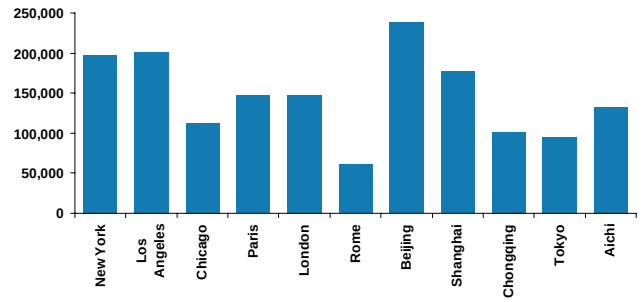
Source: Company data, Morgan Stanley Research

Exhibit 22
Global PHEV vs. EV breakdown



Source: Company data, Morgan Stanley Research

Exhibit 23
Top global cities xEV sales by 2025 (units)



Source: Company data, Morgan Stanley Research. City = Metropolitan Statistical Area.
Example: New York MSA = 10.1m unit light vehicle parc, equal to 4.1% of total US parc.

Our US xEV penetration forecasts are in alignment with the more aggressive scenarios outlined by the EPA and Department of Transportation Joint Rulemaking. These scenarios are based on different levels of annual CO2 and fuel reductions for the lifetime of MY2025 vehicles. For the 3% and 4% scenario (for their aggressive Path D) the combined PHEV + EV penetration is 0% and 4% respectively with a much greater emphasis on hybrids (HEVs) at 25% and 41% respectively. For the 5% and 6% annual savings scenarios, the agencies forecast xEV penetration of 10% and 16% respectively. We assume 15% total xEV penetration with PHEV at 6% and EV at 9%.

Exhibit 24
Technology penetration for MY 2025 vehicle fleet

CO2 Emission Reduction Scenario	Technology Path	New Vehicle Fleet Technology Penetration				
		Mass Reduction (1)	Gasoline & Diesel Vehicles	HEVs (2)	PHEVs (2)	EVs (2)
3%/year	Path A	15%	89%	11%	0%	0%
	Path B	18%	97%	3%	0%	0%
	Path C	18%	97%	3%	0%	0%
	Path D	15%	75%	25%	0%	0%
4%/year	Path A	15%	65%	34%	0%	0%
	Path B	20%	82%	18%	0%	0%
	Path C	25%	97%	3%	0%	0%
	Path D	15%	55%	41%	0%	4%
5%/year	Path A	15%	35%	65%	0%	1%
	Path B	20%	56%	43%	0%	1%
	Path C	25%	74%	25%	0%	0%
	Path D	15%	41%	49%	0%	10%
6%/year	Path A	14%	23%	68%	2%	7%
	Path B	19%	48%	43%	2%	7%
	Path C	26%	53%	44%	0%	4%
	Path D	14%	29%	55%	2%	14%

Source: EPA and US Department of Transportation Notics of Upcoming Joint Rulemaking to Establish 2017 and Later MY Light Duty Vehicle GHG Emissions and CAFÉ Standards.
(1) Mass reduction is the overall reduction of the 2025 fleet relative to MY2008 vehicles.
(2) The assessment considered both PHEVs and EVs. These initial results indicate a higher relative percent of EVs compared to PHEVs. The agencies that performed this analysis believe that PHEV technology may be used more broadly than what the analysis indicates.

Our estimates for US xEV penetration start off slow through 2015 before accelerating by 2020 and 2025. On our calculations, the number of xEVs on US roads by 2015 will be just over 800k units, below President Obama's target of 1 million units and well below the Dept. of Energy sales build-up.

Exhibit 25
Estimated US supply of electric vehicles from 2011 through 2015 (units)

Estimated US Supply of Electric Vehicles from 2011 through 2015						
Manufacturer and Model	2011	2012	2013	2014	2015	Cum Total
Ford Focus EV	0	10,000	20,000	20,000	20,000	70,000
Ford Transit Connect EV	400	800	1,000	1,000	1,000	4,200
GM Chevrolet Volt	15,000	120,000	120,000	120,000	120,000	495,000
Navistar eStar EV (truck)	200	800	1,000	1,000	1,000	4,000
Nissan LEAF EV	25,000	25,000	50,000	100,000	100,000	300,000
Smith Electric Newton EV (truck)	1,000	1,000	1,000	1,000	1,000	5,000
Tesla Motors Model S EV	0	5,000	10,000	20,000	20,000	55,000
Tesla Motors Roadster EV	1,000	0	0	0	0	1,000
Think City EV	2,000	5,000	10,000	20,000	20,000	57,000
Other	1,000	10,000	50,000	85,000	85,000	231,000
Total	**45,600**	**177,600**	**263,000**	**368,000**	**368,000**	**1,222,200**

Source: US Department of Energy February 2011 Status Report.
Note: The above numbers have been taken from announced production figures and media reports. In some cases more conservative estimates have been used due to: delays that have occurred since announced production levels, ramp rates to reach full production, consideration of the size of the market segment for that vehicle, and possible exportation of vehicles manufactured in the US.

Geographic xEV Analysis

United States. For the US, we analyzed the 20 largest MSAs by car parc, with New York, Los Angeles, Chicago, Dallas, and Houston being the five largest. We analyze the rest of the US as a consolidated region with xEV penetration at 34% of the New York benchmark average through 2025. US xEV growth is helped by low fuel economy of the fleet and high miles travelled while hurt by relatively low fuel prices, long trip length and relatively low density of population.

- By 2015, 2020, and 2025 we estimate that xEVs will account for 2.1%, 6.6%, and 15.0% of total US light vehicle sales, respectively.
- By 2015, 2020, and 2025 we estimate that xEVs will account for 0.3%, 1.7%, and 4.8% of light vehicles on the road in the US, respectively.
- We forecast that the US will account for 25%, 19%, and 15% of global xEV sales by 2015, 2020, and 2025, respectively.

W. Europe. We considered the 15 largest MSAs by car parc, with Paris, London, Ruhrgebiet (Westphalia, Germany), Rome and Athens the five largest. We included the rest of W. Europe as one region with penetration at 41% of the Paris benchmark average. W. European xEV growth is helped by high fuel prices and dense population centres while hurt by high average fleet fuel economy and relatively low average miles driven. A recent European Commission White Paper recommended a 50% reduction in internal combustion powered vehicles in cities by 2030 and a complete city ban by 2050.

- By 2015, 2020 and 2025 we forecast that xEVs will account for 2.1%, 8.0%, and 21.6% of total W. Europe LV sales, respectively.
- By 2015, 2020, and 2025 we estimate that xEVs will account for 0.3%, 1.9%, and 6.1% of light vehicles on the road in W. Europe, respectively.
- We forecast that W. Europe will account for 24%, 22%, and 21% of global xEV sales by 2015, 2020, and 2025, respectively.

China. For the world's biggest car market, we analyzed the 10 largest cities by car parc, with Beijing, Shanghai, Chongqing, Shenzhen, and Guangzhou being the five largest. We analyze the rest of China as a consolidated region with penetration at 44% of the Beijing benchmark average. Chinese xEV growth is helped by effective central government planning and rampant growth in the car parc, while it is hurt by relatively low average income levels.

- By 2015, 2020, and 2025 we estimate that xEVs will account for 1.5%, 6.3%, and 17.5% of total China light vehicle sales, respectively.
- By 2015, 2020, and 2025 we estimate that xEVs will account for 0.5%, 2.9%, and 8.4% of light vehicles on the road in China, respectively.
- We forecast that China will account for 23%, 30%, and 31% of global xEV sales by 2015, 2020, and 2025, respectively.

Japan. We analyzed the 5 largest prefectures by car parc, including Aichi, Tokyo, Kanagawa, Saitama, and Osaka. We analyze the rest of Japan as a consolidated region with penetration at 40% of the Tokyo benchmark average. Japanese xEV growth is helped by high population density and high fuel price while hurt by low miles driven and a structurally declining vehicle ownership.

- By 2015, 2020, and 2025 we estimate that xEVs will account for 2.1%, 7.9%, and 20.1% of total Japan light vehicle sales, respectively.
- By 2015, 2020, and 2025 we estimate that xEVs will account for 0.3%, 1.9%, and 6.0% of light vehicles on the road in Japan, respectively.
- We forecast that Japan will account for 7.4%, 5.9%, and 5.0% of global xEV sales by 2015, 2020, and 2025, respectively.

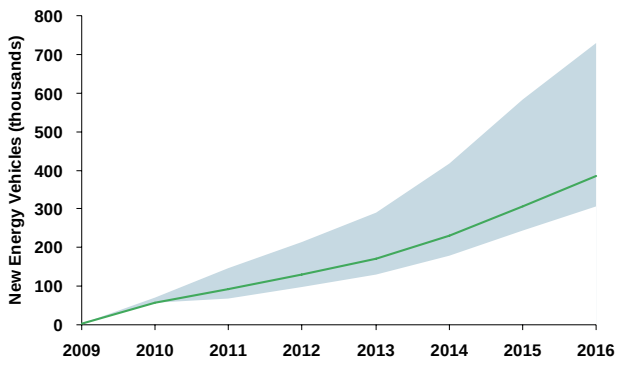
Rest of World. For the Rest of World, we assume that the 25% of remaining auto markets are in metro areas with xEV penetration rates less than half that of New York MSA. We assume the other 75% experience even slower penetration rates.

- By 2015, 2020, and 2025 we estimate that xEVs will account for 0.8%, 3.4%, and 10.7% of total RoW light vehicle sales, respectively.
- By 2015, 2020, and 2025 we estimate that xEVs will account for 0.1%, 1.1%, and 4.0% of light vehicles on the road in Japan, respectively.
- We forecast that RoW will account for 21%, 24%, and 28% of global xEV sales by 2015, 2020, and 2025, respectively.

United States in EV 'arms race' with China

China set to be the world's largest xEV market. Most forecasts have total Chinese light vehicle sales doubling by the end of the decade to around 35m units, making China account for more than 30% of projected global light vehicle demand. What is less noticed is that this level of demand growth would multiply the number of cars in Chinese roads by nearly 4x current levels to 270 million units. China is on a course to create an installed vehicle parc even larger than the United States, exposing its economy and population to at least as high a dependency on foreign oil. If you thought traffic and pollution was bad in Beijing today…imagine a China with 4x as many cars on the road in 2020. Allowing for further improvements in infrastructure and fuel economy may not be enough to maintain a balanced relationship between middle-class mobility and the demand for finite natural resources.

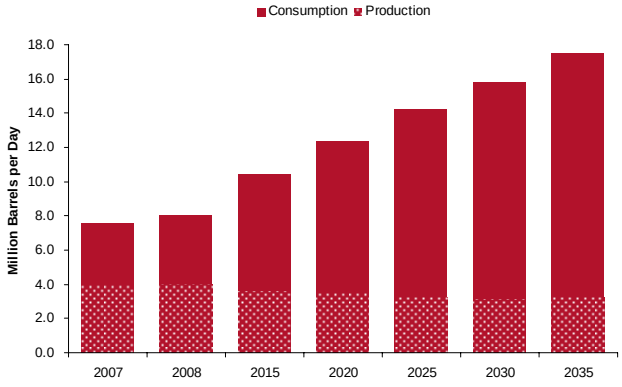
Exhibit 26
China: New Energy Vehicle (Hybrid + PEV + PHEV) 2010 – 2016 Forecast



Source: PriceWaterhouseCoopers

The Chinese government has been extremely vocal about the country's intentions to become the world's EV leader. China's Ministry of Industry and Information Technology estimates that the number of vehicles in operation in China will more than triple by 2020. China currently imports over half of its petroleum from overseas. By 2020, the EIA estimates 75% of Chinese oil consumption will be imported. It is clearly in China's strategic and national security interest to reduce its ever-growing dependence on foreign oil through the use of alternative fuel vehicles.

Exhibit 27
China oil consumption vs. production

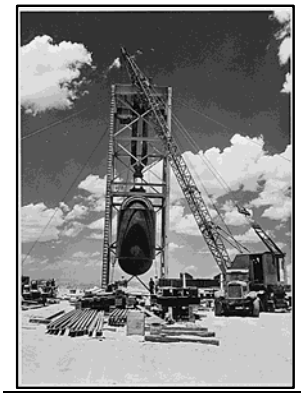


Source: EIA

Recognizing this, China has announced plans to invest 115 billion yuan ($17.5bn) over the next 10 years into the development of the EV industry. In a pilot program that launched last June, China offered subsidies in 5 cities (Shanghai, Hangzhou, Changchun, Shenzhen, and Hefei) of up to 60,000 yuan ($9,100) to buyers of pure EVs, and up to 50,000 yuan ($7,600) to buyers of certain PHEVs. New energy vehicle buyers would also pay no sales tax. In its latest draft of EV development plans, the government is targeting 500,000 EVs and PHEVs on the road by 2015, and 5 million by 2020. It also aims to build 4,000 recharging stations by 2015, with an additional 6,000 by 2020. On our forecasts, Chinese xEV parc reaches 650k units by 2015 vs. the government target of 500k. By 2020, we expect Chinese xEV parc to hit 5.9 million, modestly above the government target of 5 million. By 2025, we expect Chinese xEV parc to be just over 8% of total Chinese vehicles on the road.

Exhibit 28
We've been here before…

1939: Manhattan Project



1962: Space Program

Source: NASA, Atomic Energy Commission

Debate 2: Is there room for new entrants in the global car market?

Market View: The auto industry has been consolidating for 100 years. The big players will keep getting bigger. Smaller players die or are gobbled up.

Our view: Electric vehicles represent a disruptive technology that can lead to new players in the market with significant global scale. Traditional automakers face an increasingly daunting regulatory burden for internal combustion vehicles while investing in competing technology. If Tesla can remain viable through the Model S launch and ramp-up, we think they can be a major player in alternative mobility.

We believe radical changes brought on by new propulsion technology and the related evolution of vehicle design and marketing offer good opportunities for new players. New entrants may actually have several key advantages over incumbent automotive players:

- Can concentrate 100% of resources on EVs.
- No legacy exposure to the diminishing incumbent technology.
- Can attract talent to a smaller organization, which prioritizes advanced technology.
- Can operate without the added costs sometimes associated with organized labor that larger manufacturers must contend with.
- Captures federal and local government interest in employment by creating blue-collar jobs in green industries.

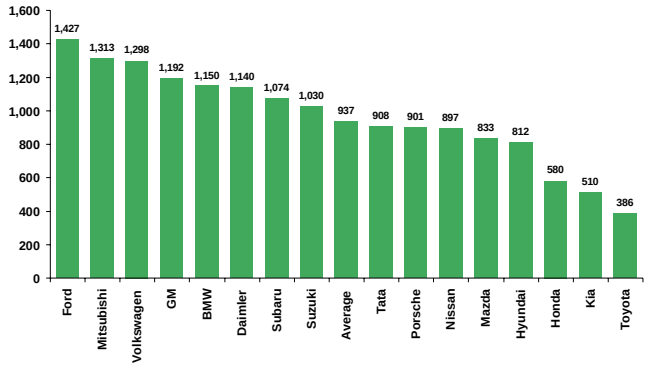
Incumbent OEMs must fight multiple fires at the same time. A new entrant only needs to fight one. The transition to electric vehicles will not be a smooth one. More likely, it will experience its doses of failed policies and industrial turmoil. Today's global auto companies combined for roughly $1.5 trillion of annual new vehicle revenues, directly employs approximately 3 million workers and indirectly employs many times this amount when including the supply chain, distribution channel, aftermarket and related support industries.

Traditional OEMs have a disincentive to innovate too quickly. Radical changes in propulsion and vehicle design offer good opportunities for new players.

Costs for internal combustion engine regulatory compliance are rising significantly, tilting the economics towards EV. While we expect electric vehicle penetration to evolve materially faster than the market expects, we have little doubt that the internal combustion engine will account for the vast majority of propulsion for light vehicle sales through 2035. But this comes at a significant cost to the OEMs. More stringent regulations demand a substantial investment in technology that must be absorbed by the manufacturers through higher costs or by the consumer through higher end prices. Taken to the extreme, the evolution and eventual displacement of today's internal combustion engine will put great strain on various parts of the supply base, becoming an even greater burden on OEMs. Most auto companies are forced to place multiple bets on widely varying technologies ranging from hydrogen fuel-cells to electric vehicles to biofuels in order to hedge the risk of technology obsolescence.

Exhibit 29

Incremental cost per US vehicle by 2016: average of NHTSA and EPA estimates ($)



Source: NHTSA, EPA, Morgan Stanley Research. Incremental cost per unit vs. MY2011.

Why Tesla?

As electric vehicles begin to take share from internal combustion engines, we think Tesla is well-positioned to become a successful new entrant for five reasons:

1) Engineering excellence and the resulting lowest-cost battery system
2) No compromise high performance electric vehicles
3) Brand recognition and technology validation
4) Low cost financing and low capex
5) Strong management team with ability to execute

1) The best engineers and the lowest cost batteries. Tesla's goal of being the first successful new auto maker in a century starts with a focus on engineering. The company's core technology is an efficient electric powertrain that takes advantage of low-cost small form-factor "18650" lithium-ion batteries – the same used in laptops but with a chemistry and internal geometry customized for automotive use.

Tesla's engineering team is at least 80% smaller than a typical OEM team, but many argue that in most engineering environments, the top 10% of the engineers do 90% of the work. Tesla hopes they can beat much larger teams by hiring the best engineers. Similar to other OEMs, Tesla uses computer-aided-design (CAD) at all stages of the engineering and design process – but Tesla pushes CAD further, relying on it heavily for early-stage crash tests and for aerodynamics.

Batteries are a major differentiator. Tesla's battery pack architecture is different from other electric vehicles in that Tesla uses a much larger number (nearly 7,000) of smaller cells and liquid cools them to increase density. Tesla's design takes advantage of the scale built for the consumer electronics industry of >1 billion cells/year. Other auto makers are using custom-designed "prismatic" battery cells that contain roughly 10x the energy as Tesla's cells on a *per cell* basis. Currently, production volumes for prismatic cells are miniscule compared to cylindrical 18650 cells and the lack of scale raises cost. We estimate that Tesla's battery costs less than half of typical competitors' batteries at the pack level and likely has the lowest pack cost per kWh of any electric vehicle.

Tesla's critics claim that Tesla's battery pack design is not reliable, but to date, the over 1,500 Roadsters that use this design have not experienced problems related to the battery pack design and have driven over 10 million miles collectively. For the Model S, Tesla has refined the battery chemistry and internal geometry of the cells compared to the Roadster, enabling a significant increase in energy and power density.

2) No compromise high-performance electric vehicles. Tesla's vehicle design strategy is different from other OEMs with a focus on long-range. Most OEMs are targeting 100 miles of range for an all electric vehicle, and using plug-in hybrids with dual electric and gasoline-powered drivetrains to achieve ranges above 100 miles, if desired. The Nissan Leaf has a range of approximately 100 miles and the GM Volt uses a gasoline engine to extend the ~40-mile all-electric range.

Tesla plans to offer the Model S in three range options: 160, 230, and 300 miles, all above the typical range for a pure electric vehicle. New EPA testing methodology may reduce the advertised range for all xEVs. We expect each range option to add approximately $10,000 to the price of the vehicle, putting the 300-mile Model S at approximately $70,000 in the US after Federal subsidies and before options packages. With the longer range options, Tesla hopes to mitigate consumers' range anxiety.

Tesla is also very focused on vehicle performance. The Roadster Sport offers 0-60 mph acceleration in 3.7 seconds and Tesla has promised that the Model S 0-60 mph acceleration will be less than 6 seconds. The Model S acceleration is comparable to that of a BMW 5-series and Tesla believes that some consumers will choose the Model S for its superior performance *in spite* of it being an electric vehicle, not because it is electric.

3) Brand recognition and technology validation
Even with only 1500 cars on the road, Tesla's brand is well-known and nearly synonymous with electric vehicles. This is no accident: Tesla has managed to create this brand recognition with almost no advertising spend through strategic product placement and marketing.

What's more, Tesla's battery system design is in Daimler's Smart ForTwo and A-class electric vehicles and Toyota plans to use a Tesla-designed powertrain in the new version of the electric RAV4 small SUV. Daimler, Toyota, and Panasonic have all invested in Tesla and their investment helps validate Tesla's technology and systems.

4) Low cost financing and low capex
Tesla has taken advantage of excess capacity in US auto manufacturing to purchase a factory and manufacturing equipment at very low costs. For example, Tesla acquired the former NUMMI facility, which has an annual vehicle capacity of 500,000 cars, for $42mm. Tesla also claims they have

acquired manufacturing equipment such as a stamping line for "cents on the dollar." The development cost to design and begin Model S production is ~$500mm, incl. capex. We estimate that a typical OEM would have spent over $2bn to purchase or build manufacturing and design a new vehicle.

Tesla also has access to $465 million in low-interest loans from the US Department of Energy to fund vehicle production and manufacturing. The interest rate on these loans is set at the time Tesla draws down the loan and is the same rate at which the US Treasury borrows. On average, Tesla's loans are below 3.5% and have flexible repayment schedules.

5) Strong management team with ability to execute
Tesla's management team includes managers with years of experience in the auto industry, as well as executives from other industries who bring best-in-class performance to Tesla. For example:

CEO, Elon Musk, an engineer by training, a co-founder of a precursor to PayPal, and the CEO and CTO of SpaceX, which develops rockets and spacecraft for missions to Earth orbit and beyond. Elon co-founded Tesla and became CEO in 2008.

CTO, JB Straubel, a co-founder of Tesla, helped develop the highly efficient AC-induction motor that powers Tesla vehicles.

VP of Sales and Ownership Experience, George Blankenship came to Tesla from Apple Computer, where he was the strategist behind Apple's retail strategy for Apple-branded stores.

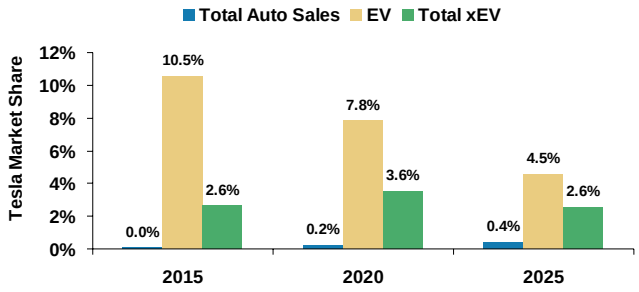
VP of Human Resources, Arnnon Geshuri came to Tesla from Google, were he directed staffing operations and helped Google grow from 2,500 employees to 20,000.

Tesla's CFO, Chief Designer, VP of Manufacturing, and VP of Vehicle Engineering all come from the automotive industry.

We believe Tesla's strong management team and focus on hiring top talent is a key differentiator that will enable the team to succeed against long odds.

Our forecasts imply Tesla would have a modest share of the xEV market and remain a minnow in the global light vehicle market by 2025. While our assessment of xEV adoption may be more positive than consensus, it is worth noting that we still anticipate the internal combustion to be the dominant form of light vehicle propulsion, accounting for 94% of global sales by 2020 and 85% of sales by 2025. By 2025, we estimate Tesla will have 4.5% of the EV market, 2.6% of the xEV market and a mere 0.4% of the total global light vehicle market. For perspective, 0.4% is roughly the market share that Renault's Dacia brand commands of the global light vehicle market.

Exhibit 30
Tesla Global Market Share (%)



Source: Company data, Morgan Stanley Research

Will Tesla run out of money? We don't think so. But there's also not much room for error. Few things are as risky as launching a new company – especially a new auto company. Tesla will have to run the gauntlet through 2014 as it spends heavily on capex and launch costs for the Model S. We forecast Tesla will burn an accumulated $570mm of free cash flow from 2011 through 2013 vs. $716mm of liquidity (including $566mm of gross liquidity at the start of 2011 plus an assumed $150mm of proceeds from a capital increase we expect in 4Q11). On our calculations, Tesla will use up all but $146mm of available liquidity (including an expected capital increase) by the end of 2013. While Tesla makes it through on paper under this scenario, we cannot rule out additional fund-raising activities in the capital markets to provide a greater liquidity cushion. This puts even more importance on accomplishing early production and launch milestones for the Model S and Model X to provide the market with confidence if more capital is required. The DOE loans are subject to a variety of covenants including min. cash balances and leverage ratios outlined in the 10-K.

Exhibit 31
Tesla Liquidity vs. FCF through 2015e ($mm)

	2010	2011	2012	2013	2014	2015
Liquidity vs. Burn Profile						
Cash	100	169	173	146	200	200
Restricted Cash	74	0	0	0	0	0
Undrawn DOE Loan	393	193	0	0	0	65
Other	0	0	0	0	0	0
End-of-Period Liquidity	**566**	**362**	**173**	**146**	**200**	**265**
Beginning-of-Period Liquidity		566	362	173	146	200
Free Cash Flow (Burn)		-354	-189	-27	54	65
Capital Increase		150	0	0	0	0
End-of-Period Liquidity	**566**	**362**	**173**	**146**	**200**	**265**

Source: Company data, Morgan Stanley Research

Debate 3: How big can Tesla be?

Market View: A niche player focusing on high-end electric vehicles and the supply of EV engineering competence and powertrains to larger manufacturers.

Our view: Tesla's goal is to be an independent, mass market electric car company selling hundreds of thousands of units by the middle of next decade. The Model S is just the beginning. Adding Model X and variant volume from 2014 takes the company volume to more than 40k units on our forecasts by 2015. The introduction of a mass-market EV (the Gen 3) takes Tesla global volume to over 240k units by 2020 and to nearly 500k units by 2025.

Tesla is a top-line story driven by their ability to capture a modest share of a growing EV market. We believe our assumptions for unit volume by 2020 and 2025 are roughly 3x higher than consensus, commensurate with our fair valuation that is 2x to 3x consensus. Our long term forecasts for operating profit are almost entirely dependent on volume and productivity improvement, offset by mix, pricing, launch costs, commodity costs, SG&A/R&D cost inflation and depreciation creep. **Key assumptions that drive our top line assumptions for Tesla include:**

- Global xEV (grid-enabled vehicles including pure EVs and plug-in hybrids) market penetration of 1.5% by 2015, 5.5% by 2020 and 15.1% by 2025.
- We assume Tesla captures 5.5% of the global xEV market by 2015, 7.3% by 2020 and 6.0% by 2025.
- By 2020, we estimate 19% of Tesla's unit volume is sold in N. America, 22% in Europe and 49% rest of world.
- We assume the Model S reaches customers by the very end of 2012 (2,000 units), Model X launched by 2014, and Gen 3 launched by 2017. By 2020, we estimate less than 1% of Tesla volume is comprised by the new Roadster, 9% comprised by the Model S, 17% from Model X, 62% from Gen 3 and 11% from the supply of 3rd party power trains.

The Tesla factory – Combining Silicon Valley engineering with Toyota production know how

Plant Background: The Fremont plant was built and operated by General Motors between 1962 and 1982 before NUMMI (New United Motor Manufacturing, Inc JV between GM and Toyota) took over in 1984 and was producing vehicles until April 2010. The plant has been home to cars including the Voltz, Nova, Prizm, Hilux, Vibe and most recently Tacoma and Corolla. On the capacity front, it is capable of producing half a million vehicles per year or nearly 1 percent of total worldwide car production and once employed 5,500 union autoworkers. The plant was Toyota's first in North America and set an industry benchmark for manufacturing flexibility and quality improvements.

Tesla's purchase covers 210 acres or roughly 55% of the available 380 acres of the former NUMMI facility and includes all the manufacturing facility on it. The plant will be home to Model S and its future variants. According to the management, 80% of the 5.5 million-square-foot plant will remain closed until demand for the electric car grows implying that the plant size leaves enough room for production expansion until ramp up of their mass model begins. The Company also concluded purchase of certain manufacturing equipment and spare parts located at the facility.

Plant features:

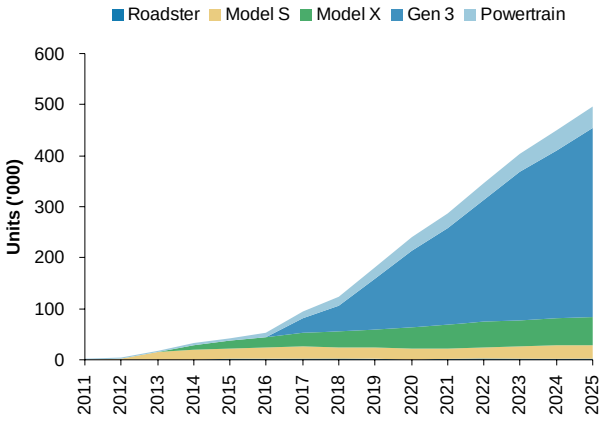
- **Location**: Within 15 miles of the Company's Palo Alto engineering facility
- **Facilities**: Integrated manufacturing facility includes stamping, plastics, paint and body assembly shops and manufacturing of powertrain components, leveraging the inherited Toyota infrastructure
- **Capacity**: Model S production layout finalized for 20,000 units on a single shift. Optionality to expand production to 40,000-50,000 units annually without any re-tooling. Structural capacity of 500k units.
- **Headcount**: Initial target headcount of 500 for Model S production, including a number of former NUMMI employees. The Company intends to employ 5,000 as subsequent new models roll out and production ramps up.

Exhibit 32
The Tesla Factory in Fremont (former GM/Toyota NUMMI facility), aerial view

Source: Tesla Motors

We forecast that Tesla will have unit sales of 42k by 2015, 240k by 2020, and just under 500k by 2025. The lower-priced Gen 3 model range accounts for the vast majority of our volume growth projections from 2017, accounting for nearly two-thirds of our 2025 Tesla revenue projection. To achieve such volume, we believe Tesla would need to successfully launch a number of derivatives and body styles of the Gen 3, requiring the continued investment in tooling, capex and R&D we have projected in our earnings forecasts.

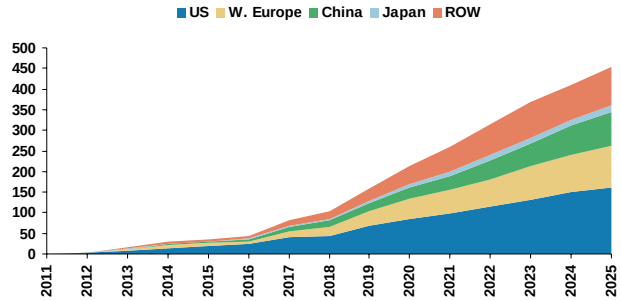
Exhibit 33
Tesla unit volume by model line, 2011 to 2025e



Source: Company data, Morgan Stanley Research

North America will make up the majority of Tesla's volumes, accounting for roughly 53% by 2015. Western Europe will account for 18%, Asia 11%, and RoW 17%.

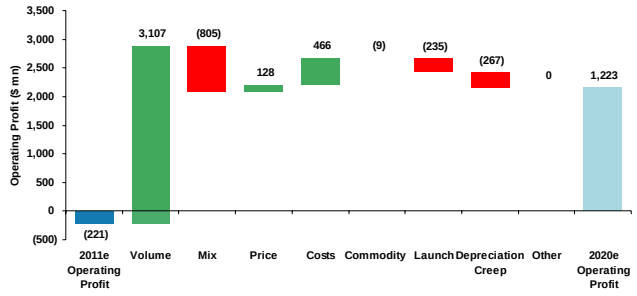
Exhibit 34
Tesla unit volume by region, 2011 to 2025e



Source: Company data, Morgan Stanley Research

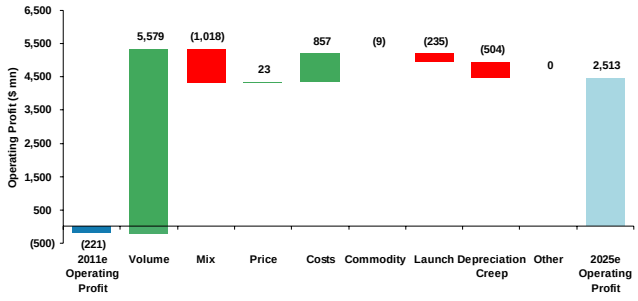
Driven almost entirely by volume, we expect Tesla's operating profit to reach above $1.2bn by 2020, and then more than double to $2.5bn by 2025.

Exhibit 35
Tesla operating profit bridge, 2011 to 2020e ($m)



Source: Company data, Morgan Stanley Research

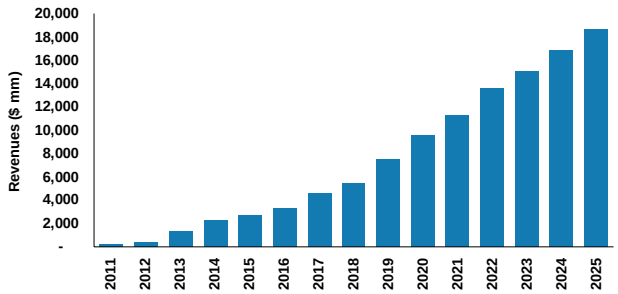
Exhibit 36
Tesla operating profit bridge, 2011 to 2025e ($m)



Source: Company data, Morgan Stanley Research

Starting at a relatively meager $171mm in revenue in 2011, we forecast Tesla's top line to grow at a 40% CAGR over the next 15 years, with over $18.6bn of revenue by 2025.

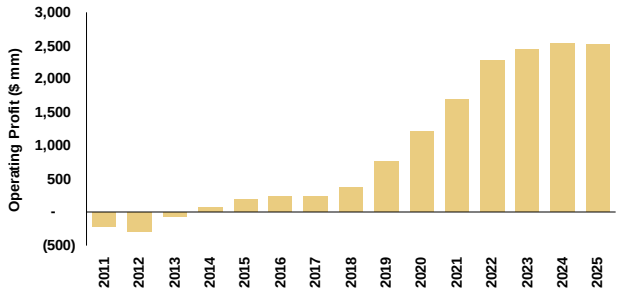
Exhibit 37
Tesla: Revenues, 2011 to 2025e ($m)



Source: Company data, Morgan Stanley Research

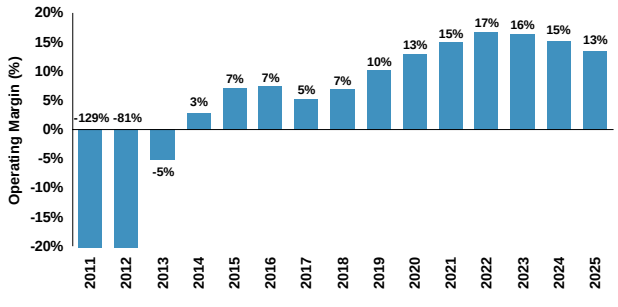
We expect Tesla to first become profitable on an operating profit basis in 2014. Operating profit is then projected to grow at a 36% CAGR through 2025 with peak margins of 17% in 2022 and over $2.5bn by 2025.

Exhibit 38
Tesla: Operating Profit, 2011 to 2025e ($m)



Source: Company data, Morgan Stanley Research

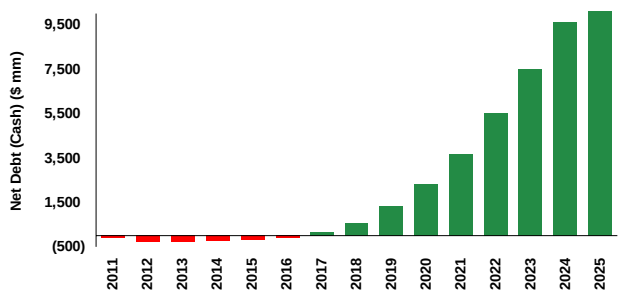
Exhibit 39
Tesla: Operating Margin, 2011 to 2025e (%)



Source: Company data, Morgan Stanley Research

We expect Tesla's net debt to swell to $319mm in 2013 before gradually turning into net cash in 2017. By 2025, we project Tesla will have net cash of almost $12bn.

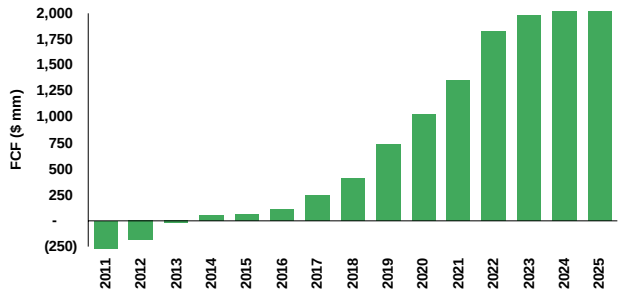
Exhibit 40
Tesla: Net Cash (Debt), 2011 to 2025e ($m)



Source: Company data, Morgan Stanley Research

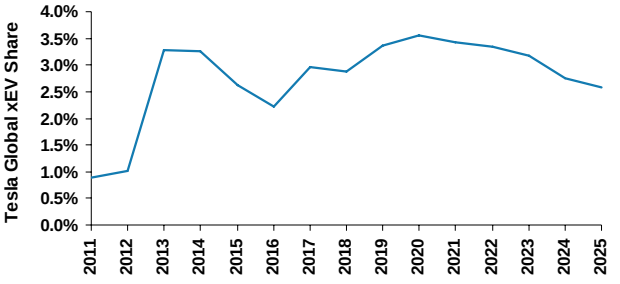
We estimate Tesla will burn cash for years until the Model S is running at full production and we do not expect Tesla to be cash flow positive until 2014, 2 years after we expect the Model S to launch. By 2025, we expect Tesla to generate more than $2bn in cash per year.

Exhibit 41
Tesla: Free Cash Flow, 2011 to 2025e ($m)



Source: Company data, Morgan Stanley Research

Exhibit 42
Tesla share of global xEV market

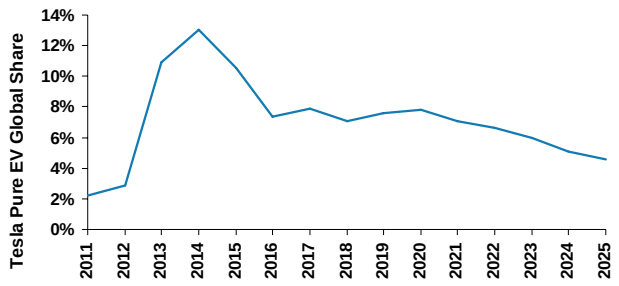


Source: Company data, Morgan Stanley Research

Tesla can capture a significant portion of the pure EV market, while having modest share of the broader xEV market and a miniscule share of the total global light vehicle market.

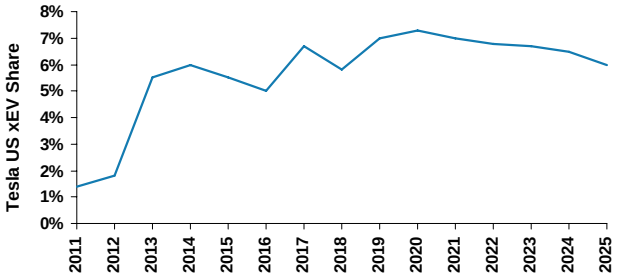
- Global pure EV share peaks at 13% in 2014 (full year of Model S) declining over time to 4.5%.
- xEV share peaks at 3.6% in 2020, falling to 2.6%.
- Share of US EV market approaches 25% before falling to 10% long term.

Exhibit 43
Tesla share of global pure EV market



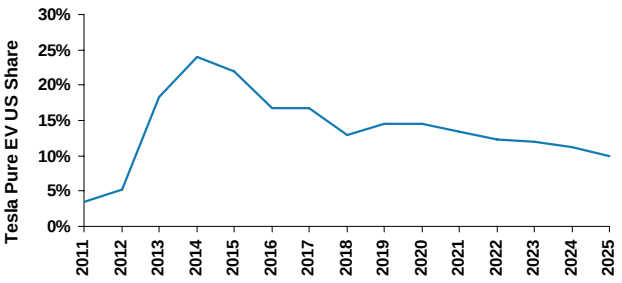
Source: Company data, Morgan Stanley Research

Exhibit 44
Tesla share of US xEV market



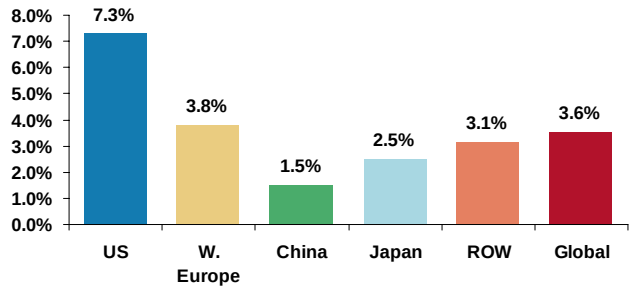
Source: Company data, Morgan Stanley Research

Exhibit 45
Tesla share of US pure EV market



Source: Company data, Morgan Stanley Research

Exhibit 46
Tesla xEV market share by region, 2020e



Source: Company data, Morgan Stanley Research. E = Morgan Stanley Research estimate.

To achieve the levels of sales volume projected in our model, Tesla must continue to invest in its manufacturing capacity, and may have to adapt its distribution methods. Tesla's near term manufacturing strategy is dependent on a rather limited number of company-owned dealers and utilizing only a portion of its recently acquired manufacturing capacity. In our view, Tesla must, over time, execute:

- **High spend on capex / tooling.** We expect significant capital expenditures at Fremont and potentially another manufacturing facility outside of N. America will be required to achieve our volume targets. From 2011 through 2025, we forecast Tesla capex to exceed $5.5bn with an average spend of almost $460mm per annum from 2015-2025.
- **Dramatic headcount growth.** At the end of 2010, Tesla had just under 900 employees including only 213 in manufacturing. By 2025, we would expect Tesla's total headcount could be in excess of 10,000 employees with approximately half in manufacturing.
- **Multiple variants of the Gen 3 vehicle platform.** The 370k units of Gen 3 volume we forecast by 2025 (nearly 2/3 of total Tesla revenues that year) would require several variants offered globally, increasing demands on R&D, tooling and related expenses.
- **Commensurate growth in number of dealers.** Tesla currently has 17 company owned stores with plans to expand to 50 within the next 'several years'. By 2025, we estimate Tesla could potentially require several times this number of stores to support our volume forecast.
- **Consider using franchise or 3rd party dealer model.** We appreciate Tesla's desire to control the customer experience in its early ramp-up, but expect this to evolve over time to achieve broader reach.

We expect Tesla to introduce an array of new products over the next 2 to 5 years. A review of Tesla's upcoming model launch cadence includes:

Roadster: 2-seat high-performance sports car based on a modified Lotus Elise 'sled' with Tesla's proprietary electric motor, battery and related engineering content. Tesla's only fully assembled model in production for the past 3 years.

- **Timing:** Current roadster volume limited to 2,500 of limited series lifetime production. We expect an all-new roadster based on the Model S platform by 2014.
- **Volume:** 567 delivered in 2010, representing a 33% decrease vs. 2009. We expect unit sales to be flat in 2011 at 570 units. For 2012, we expect volume to drop 25% to 425 units as production of the current model comes to an end. We expect an all-new Roadster to reach 765 units by 2014 with volume surpassing 1,100 units by 2015 and averaging roughly 1,300 units of annual volume thereafter.
- **Price:** The current Roadster achieves a revenue per unit of more than $130,000. Base MSRP starts at $109,000 (excluding options) with the Sport version costing $128,500.

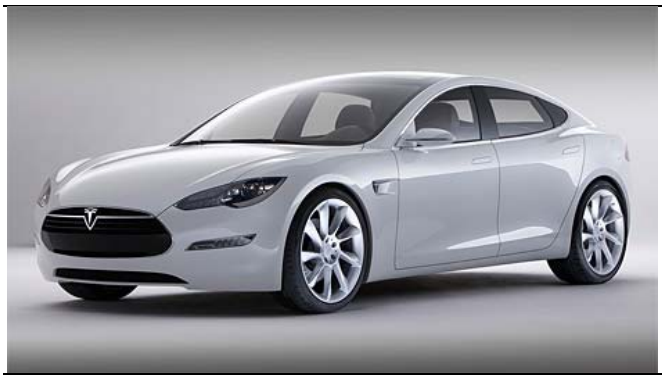
Exhibit 47
Tesla Roadster

Source: Tesla Motors

Model S: Tesla's first fully developed from-scratch model, built in the Fremont facility in northern California. A fully electric, 5-seater luxury sedan featuring sports car performance (0 to 60mph in 5.6 seconds), massive torque and an expected battery range of up to 300 miles per charge. Management ultimately anticipates a 25% gross margin (15% operating margin) from the product upon its full ramp-up. Tesla has earmarked a total spend of $500mm for the development of the Model S.

- **Timing:** Tesla plans to launch the vehicle by the end of 2012 and has reported that progress is on schedule. The company has produced a fleet of Model S alpha vehicles currently under testing which management says are performing better than their expectations. Beta testing will commence later this year following the installation of the large hydraulic press line, which should be fully assembled by 2Q11. We see a reasonable chance of a delay to 2013 to correct unforeseen quality and testing disruption, typical for the auto industry ahead of such a high profile launch. While we have no reason at this time to anticipate a substantial delay of the Model S that could threaten the viability of the company, we wanted to remain on the conservative side given Tesla is a new company, producing its first new model, and applying cutting-edge technology in a new plant. We note that since last summer's IPO, Tesla has so far met or exceeded our expectations in terms of pre-production milestones.
- **Volume:** We expect 2,000 Model S units to be sold in 2012, which is materially below market expectations of around 5,000 units. We forecast 15,000 deliveries in 2013, growing to 18,000 in 2014, and peaking at more than 26,000 by 2017. We would have modeled in a higher peak were it not for anticipated cannibalization from the Model X which we expect to be launched around 18 months later.
- **Price**: The base version Model S starts at a net price of under $50,000 (including customer incentives). The Sport version with the larger battery may cost upwards of $80,000. We assume a blended revenue per unit to Tesla of roughly $65,000, rising to almost $70,000 by the latter part of the decade.

Exhibit 48
Tesla Model S



Source: Tesla Motors

Model X: A variant of the Model S, built in Fremont. The Model X is positioned as a crossover SUV with the functionality of a minivan. Would share powertrain/battery characteristics with the evolving Model S. Tesla plans to spend $100mm to develop the Model X.

- **Timing:** Launch still several years away, but Tesla plans to unveil the design prototype by the end of the current year. We expect the Model X to launch in mid 2014, around 18 months after the Model S.
- **Volume:** We forecast Model X volume to be slightly greater than the 20k-25k units we expect of Model S. The addition of further variants takes total Model X volume to 30k units by 2018, surpassing that of Model S. By 2025, we expect 55k units of Model X and variants vs. just under 28k units for Model S.
- **Price:** We have assumed blended revenue per unit starting near $89,000, similar to what we believe will be the price of a more luxurious and higher contented Model S flagship.

Exhibit 49
Tesla Model X

Source: Motor Authority

Model X Derivatives: Tesla is planning a range of 'top-hat' derivatives based on the Model S/X shared platform. Models include a light-duty delivery van, pickup truck and other body styles and applications.

- **Timing:** Derivatives gradually introduced within 2 to 3 years after the launch of the Model X from late 2017 or early 2018.
- **Volume:** Model X derivatives can reasonably achieve volume on par with the main Model X variant – on the order of 20k to 25k units per annum.
- **Price:** Will vary considerably depending on the application. At this stage, we have assumed the derivatives come in at a slightly lower average price point of the core Model X of $70,000.

Gen 3: Represents the future of Tesla as a sustainable, independent high-volume manufacturer of electric vehicles. We view the Roadster, Model S and Model X as necessary building blocks for the company's long term goal of providing electric vehicles to the broader market at an affordable price.

- **Timing:** We expect the launch of the Gen 3 in 2017, achieving 30k units in that year.
- **Volume:** We forecast Gen 3 volume to ramp from 30k units in 2017 to 150k units by 2020 and 370k units by 2025 with multiple derivatives on offer.
- **Price:** We've assumed an average revenue per unit of the Gen 3 range of $30,000, peaking at a little over $33,000 in 2022.

Powertrain supply: Tesla's fastest growing business today is the supply of battery packs and motors to 3rd party partners. Tesla currently has 3 main projects under development and production including the Smart car and A Class for Mercedes-Benz and the Toyota RAV4.

- **Timing:** Daimler recently increased its order for the 3rd time to 1,800 Smart cars from 1,000 units originally. Tesla shipped a record number of packs and chargers in 4Q10 and is now shipping units for the A Class. For Toyota, Tesla has been supplying RAV4 prototypes since July and will move to commercial shipments in the current year.
- **Volume:** Following 975 powertrain units shipped in 2010, we expect 1,850 units shipped in 2011. By

2015, we expect this business to surpass 5,000 units. Longer-term, allowing for broader adoption of EVs globally, we forecast Tesla's 3rd party powertrain supply to reach 26k units by 2020 and 42k units by 2025.

- **Price:** We assume roughly $20k revenue per unit for this business line in the early years before dropping to $9k to $10k between 2015 - 2025.

Development services: This business includes payments for engineering consulting services and compensation for early-stage development of future powertrain production for 3rd parties. Tesla says the development service revenue from the Toyota contract would be around $69mm spread out over the next 4 to 5 quarters.

Further mass market EV validation from the world's leading engineer of internal combustion engines – BMW.

BMW i – Megacity Mobility Redefined. The sub-brand marks BMW's foray into alternative drivetrains complemented with mobility services being developed since 2007. The sub-brand will initially roll out two models by 2013 and expand its mobility services portfolio over the years ahead.

The Chemistry and Geometry. The Lifedrive architecture, consisting of aluminum chassis and carbon fiber-reinforced plastic (CFRP) passenger cells can allow up to 50% reduction in material weight offsetting the extra weight of the batteries. The Life module offers progressive shapes and more space for its size while the CFRP offers longer life span than conventional steel due to its better rust and corrosion resistant characteristics. Advanced charging solutions remains the key to the adaptability of EVs and PHEVs. The BMW Group is working on balancing charging time and access to green electricity under the 'smart charging' project. Features may include the ability to control the charging process remotely via mobile phones and setting a time preference by which the vehicle should be recharged, thereby providing for flexibility between speed and environmental friendliness.

BMW Megacity Vehicle Project Specifics:

- **Models**: Two models to be rolled out by 2013 – BMW i3 and BMW i8. The i3 will be the first series produced car and will be all electric followed by the i8 which will be a plug in hybrid.
- **Capex & Headcount**: Both models will be built at BMW's Leipzig plant. The plant would require capex of about €400mm for new facilities and will create 800 jobs by 2013.
- **Parts**: Both models are expected to use the same component sets for the electric motors, power electronics, and high-voltage lithium-ion batteries driving development and production synergies.
- **CFRP Production**: BMW, together with SGL Automotive Carbon Fibers, develops and produces carbon fibers and carbon fiber sheets. After a three-month testing period, production of carbon fibers for processing at the BMW joint venture plant in Wackersdorf, Germany, will start in mid-July 2011. Another modern, renewably powered carbon fiber production plant is being built at Moses Lake, USA with a target operational date of mid-July 2011
- **Mobility Services**: Develop mobility solutions including intelligent navigation systems with local information, intermodal route planning, premium car-sharing with information on public transportation, parking availability, and local entertainment. Solutions would be offered independently of cars. BMW i Ventures, with an initial investment of $100mm, has been founded to grow this business segment.

Exhibit 50
BMW i3 and BMW i8

Source: Company data, Morgan Stanley Research

Debate 4: How do you value Tesla?

Market View: Heavily sentiment driven. Take a 3 to 5 year view based on execution of 'milestones' like Roadster sales and Model S launch deliverables. Tough to take a long-term view.

Our view: Must take a long-term view to value Tesla. The company either succeeds as a high-volume EV player or may ultimately not be viable as a stand-alone company.

We value Tesla on a 15-year DCF: At some level, Tesla is an exercise in investment fundamentalism – you either believe in the wide spread adoption of electric vehicles, or you don't. Clearly, we believe in the adoption of electric vehicles as an increasingly viable competitor to the internal combustion engine. However, even in our more optimistic scenarios, we have to allow for the gradual ramp-up of xEV penetration through at least 1 or 2 engineering cycles, particularly given the early stage development of applied battery technology, as well as the radical changes required to the regulatory environment, the electric utility industry and consumer perceptions.

At the current price, Tesla valuation does not begin to make sense until 2015. That is, unless you think 16x 2014e EBITDA is cheap - which we do not. Tesla currently trades at almost 2x 2013e EV/Sales. We'd have to roll forward to 2015 before the first "reasonable" P/E multiple of 18.5x. On our forecast, by 2016 Tesla will have achieved a debt-neutral position and an EV/EBITDA multiple (on today's balance sheet) of 6.4x. Interpolating through our 15-year DCF, we believe the current Tesla price assigns the company a viable 4%-type share of an emerging/niche EV market who's long term independence may be questioned. Among any number of scenarios, we believe the current price discounts Tesla sales reaching 100 to 150k units with operating margins peaking at 12% and normalizing at 5.5%, roughly one-third the company's long term OP margin target of 15%.

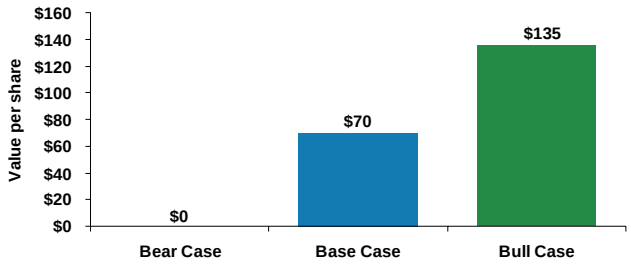
Our valuation on near term earnings figures looks even more expensive. On our forecasts, Tesla equity is worth over $9bn, an amount roughly equal to a level of sales we expect Tesla to achieve by 2020. On any valuation metric one would use to value a traditional auto company over a typical earnings horizon of 2 to 3 years, Tesla will appear anything but cheap.

Our DCF valuation is highly sensitive to a number of key variables:

- **Discount rate.** Every 200bps of discount rate is worth roughly $20 to Tesla's share price around the 12% level we have applied. In its most recent employee stock option pricing exercise (June 9th, 2010), Tesla applied a range of discounts from 14.5% to 20.0%, trending down from the 30% to 40% range applied in 2008 and early 2009.
- **EV/EBITDA multiple.** Each 1 turn of EV/EBITDA multiple is worth around $6 of Tesla share price at the 12% WACC level.
- We can account for Tesla's current market cap with our cash flow from 2011 to 2024. This triangulates to the fact that two-thirds of our DCF valuation for Tesla is accounted for by the terminal value.
- In our opinion, the next 3 years will be critical to determining Tesla's long term viability. The following 7 years will determine if Tesla is a winner.

Exhibit 51

Tesla: Valuation by scenario analysis ($)



Source: Morgan Stanley Research

Exhibit 52

Tesla: DCF sensitivity to WACC and EV/EBITDA ($)

	EV/EBITDA								
WACC	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0
6.0%	95	108	120	132	144	156	168	180	192
8.0%	74	83	93	102	111	120	129	139	148
10.0%	58	65	72	79	86	93	100	107	114
12.0%	45	51	56	61	67	72	78	83	88
14.0%	36	40	44	48	52	56	60	65	69
16.0%	28	31	34	38	41	44	47	50	54
18.0%	22	24	27	29	32	34	37	39	42
20.0%	17	19	21	23	25	27	29	31	33
22.0%	13	15	17	18	20	21	23	24	26
24.0%	10	12	13	14	15	16	18	19	20
26.0%	8	9	10	11	12	13	14	15	16

Source: Morgan Stanley Research

Key assumptions behind our 15-year DCF for Tesla. Given the very early-stage time in the company's lifecycle, we believe it is imperative to value Tesla on long-term basis that captures the transformational developments to the top line. We expect Tesla to multiply revenues by over 20x from 2010 to 2015, by more than 80x by 2020 and over 150x by 2025. Needless to say, we argue Tesla cannot be valued on traditional multiple metrics like traditional auto companies. We have chosen a 15-year time horizon for our DCF which captures the full utilization of Tesla's manufacturing capacity in Fremont, the full maturation of the Model S, Model X (and top-hat derivatives) and also the ramp up of its mass market electric vehicle (the Gen 3). We have applied a 12% WACC with a range of 10% to 14%. The terminal value accounts for around 60 to 70% of the total DCF value across the range of methodologies we have applied. We have treated stock-based compensation as a cash expense in the forecast period.

- **Unit volume:** We expect Tesla's unit volumes to grow at a CAGR 46% over the next 15 years. By 2015, we forecast unit volumes of over 42,000, ballooning to almost 500,000 by 2025.
- **Revenues:** We expect revenue to grow at a 40% CAGR over the next 15 years. As Tesla introduces more mainstream models such as the Model S, Model X, and eventually the Gen 3, we forecast average selling price (ASP) will drop 41% from $62,956 in 2010 to $37,283 in 2025.
- **Operating Profit:** We project Tesla to first achieve positive operating profit in 2014, with margins peaking at 17% in 2022.
- **Free Cash Flow:** We project Tesla to first generate positive free cash flow in 2014 and to grow at a 40% CAGR thereafter.

Exhibit 53

Tesla: Summary 15-year DCF Analysis

	FY 2010A	FY 2011E	FY 2012E	FY 2013E	FY 2014E	FY 2015E	FY 2016E	FY 2017E	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E
Unit Volume	1,542	2,420	5,325	18,608	32,941	42,276	53,210	94,726	123,281	181,739	240,144	287,457	346,118	403,157	449,539	496,385
% Growth		*57%*	*120%*	*249%*	*77%*	*28%*	*26%*	*78%*	*30%*	*47%*	*32%*	*20%*	*20%*	*16%*	*12%*	*10%*
Automotive Revenue Per Unit ($)	62,956	45,993	54,496	68,477	67,382	62,599	60,482	47,724	43,985	40,753	39,163	38,948	38,884	37,014	37,102	37,283
% Growth		*-27%*	*18%*	*26%*	*-2%*	*-7%*	*-3%*	*-21%*	*-8%*	*-7%*	*-4%*	*-1%*	*0%*	*-5%*	*0%*	*0%*
Automotive Sales	97	111	290	1,274	2,220	2,646	3,218	4,521	5,423	7,406	9,405	11,196	13,459	14,922	16,679	18,507
Development Service Sales	20	60	60	63	66	69	73	77	80	84	89	93	98	103	108	113
Total Sales	**117**	**171**	**350**	**1,337**	**2,286**	**2,716**	**3,291**	**4,597**	**5,503**	**7,491**	**9,493**	**11,289**	**13,556**	**15,025**	**16,786**	**18,620**
% Growth		*47%*	*104%*	*282%*	*71%*	*19%*	*21%*	*40%*	*20%*	*36%*	*27%*	*19%*	*20%*	*11%*	*12%*	*11%*
EBITDA	**(143)**	**(181)**	**(137)**	**17**	**162**	**302**	**393**	**431**	**606**	**1,045**	**1,530**	**2,028**	**2,667**	**2,888**	**3,030**	**3,057**
% Margin	*-122%*	*-106%*	*-39%*	*1%*	*7%*	*11%*	*12%*	*9%*	*11%*	*14%*	*16%*	*18%*	*20%*	*19%*	*18%*	*16%*
D&A	11	40	73	86	93	110	146	192	224	284	307	343	386	441	489	544
% of Capex	*26%*	*20%*	*87%*	*64%*	*51%*	*41%*	*44%*	*60%*	*82%*	*79%*	*72%*	*71%*	*68%*	*73%*	*73%*	*73%*
EBIT	**(153)**	**(221)**	**(210)**	**(69)**	**68**	**192**	**246**	**240**	**382**	**760**	**1,223**	**1,685**	**2,281**	**2,447**	**2,541**	**2,513**
% Margin	*-131%*	*-129%*	*-60%*	*-5%*	*3%*	*7%*	*7%*	*5%*	*7%*	*10%*	*13%*	*15%*	*17%*	*16%*	*15%*	*13%*
Net Interest Income (Expense)	(1)	(6)	(11)	(13)	(12)	(17)	(10)	2	12	26	47	74	111	150	192	235
Other Income	(7)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pretax Income	**(161)**	**(226)**	**(221)**	**(82)**	**56**	**175**	**236**	**242**	**393**	**787**	**1,270**	**1,759**	**2,391**	**2,597**	**2,734**	**2,748**
Income Taxes	0	0	0	0	3	11	17	20	38	162	294	417	571	622	655	659
% Effective Rate	*0%*	*0%*	*0%*	*0%*	*6%*	*6%*	*7%*	*8%*	*10%*	*21%*	*23%*	*24%*	*24%*	*24%*	*24%*	*24%*
Net Income	**(161)**	**(226)**	**(221)**	**(82)**	**53**	**165**	**219**	**221**	**355**	**624**	**976**	**1,342**	**1,820**	**1,975**	**2,078**	**2,089**
Plus																
After-tax Interest Expense (Income)	1	6	11	13	12	17	10	(2)	(12)	(26)	(47)	(74)	(110)	(150)	(192)	(235)
Depreciation of PP&E	11	40	73	86	93	110	146	192	224	284	307	343	386	441	489	544
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less																
Change in Working Capital	11	(5)	(11)	(70)	(53)	(24)	(35)	(113)	(60)	(141)	(126)	(99)	(124)	(110)	(146)	(190)
% of Change in Sales		*-10%*	*-6%*	*-7%*	*-6%*	*-6%*	*-6%*	*-9%*	*-7%*	*-7%*	*-6%*	*-6%*	*-5%*	*-8%*	*-8%*	*-10%*
Capital Expenditures	40	200	84	134	183	272	329	322	275	360	427	485	569	601	671	745
% of Sales	*34%*	*117%*	*24%*	*10%*	*8%*	*10%*	*10%*	*7%*	*5%*	*5%*	*5%*	*4%*	*4%*	*4%*	*4%*	*4%*
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unlevered Free Cash Flow	**(201)**	**(376)**	**(210)**	**(47)**	**28**	**44**	**81**	**202**	**353**	**664**	**934**	**1,225**	**1,650**	**1,775**	**1,850**	**1,843**

EBITDA	3,057
Sales	18,620
Net Debt (Cash)	(28)
Tesla Diluted Shares	107

Exit EBITDA High	10.5 x	Exit PPG High	5.0%	Exit P/Sales High	180%
Exit EBITDA Low	6.5 x	Exit PPG Low	2.0%	Exit P/Sales Low	100%

Discount Rate High	14.0%	FY Month of Valuation	4.0 (Beginning of this Month)
Discount Rage Low	10.0%	Month of FY End	12.0 (End of this Month)

Source: Company data, Morgan Stanley Research. e = Morgan Stanley research estimates.

Exhibit 54

Tesla: DCF Fair Value Analysis Based on Various Terminal Value Methodologies

EV/EBITDA Terminal Value

Exit EBITDA Multiple	6.5			8.5			10.5		
Discount Rate	*10.0%*	*12.0%*	*14.0%*	*10.0%*	*12.0%*	*14.0%*	*10.0%*	*12.0%*	*14.0%*
PV of 1st Year Cash Flow	(272)	(270)	(268)	(272)	(270)	(268)	(272)	(270)	(268)
PV of Cash Flows 2 thru 15	3,428	2,782	2,265	3,428	2,782	2,265	3,428	2,782	2,265
Terminal Value	**19,868**	**19,868**	**19,868**	**25,982**	**25,982**	**25,982**	**32,095**	**32,095**	**32,095**
PV of Terminal Value	4,871	3,734	2,876	6,370	4,883	3,761	7,869	6,032	4,646
Enterprise Value	**8,027**	**6,246**	**4,873**	**9,526**	**7,395**	**5,758**	**11,024**	**8,544**	**6,643**
% Value in Terminus	*60.7%*	*59.8%*	*59.0%*	*66.9%*	*66.0%*	*65.3%*	*71.4%*	*70.6%*	*69.9%*
% Value in Cash Flows	*39.3%*	*40.2%*	*41.0%*	*33.1%*	*34.0%*	*34.7%*	*28.6%*	*29.4%*	*30.1%*

Enterprise Value	**6,246**	**--**	**8,544**
Equity Value Per Share	**59**	**--**	**80**

EV/Sales Terminal Value

Exit EV/Sales Multiple	100%			140%			180%		
Discount Rate	*10.0%*	*12.0%*	*14.0%*	*10.0%*	*12.0%*	*14.0%*	*10.0%*	*12.0%*	*14.0%*
PV of 1st Year Cash Flow	(272)	(270)	(268)	(272)	(270)	(268)	(272)	(270)	(268)
PV of Cash Flows 2 thru 15	3,428	2,782	2,265	3,428	2,782	2,265	3,428	2,782	2,265
Terminal Value	18,620	18,620	18,620	26,068	26,068	26,068	33,516	33,516	33,516
PV of Terminal Value	4,565	3,500	2,695	6,391	4,899	3,774	8,217	6,299	4,852
Enterprise Value	**7,721**	**6,011**	**4,692**	**9,547**	**7,411**	**5,770**	**11,373**	**8,811**	**6,849**
% Value in Terminus	*59.1%*	*58.2%*	*57.4%*	*66.9%*	*66.1%*	*65.4%*	*72.3%*	*71.5%*	*70.8%*
% Value in Cash Flows	*40.9%*	*41.8%*	*42.6%*	*33.1%*	*33.9%*	*34.6%*	*27.7%*	*28.5%*	*29.2%*
Implied Exit EBITDA Multiple	**6.1**			**8.5**			**11.0**		
Implied Perpetual Growth Rate	**1.4%**			**4.2%**			**5.8%**		

Enterprise Value	**6,011**	**--**	**8,811**
Equity Value Per Share	**57**	**--**	**83**

Perpetual GrowthTerminal Value

Perpetual Growth Rate	2.0%			3.5%			5.0%		
Discount Rate	*10.0%*	*12.0%*	*14.0%*	*10.0%*	*12.0%*	*14.0%*	*10.0%*	*12.0%*	*14.0%*
Implied Exit EBITDA Multiple	*8.1*	*6.5*	*5.5*	*10.1*	*7.8*	*6.4*	*13.3*	*9.6*	*7.5*
PV of 1st Year Cash Flow	(272)	(270)	(268)	(272)	(270)	(268)	(272)	(270)	(268)
PV of Cash Flows 2 thru 15	3,428	2,782	2,265	3,428	2,782	2,265	3,428	2,782	2,265
Terminal Value	24,735	19,967	16,787	30,891	23,837	19,468	40,741	29,364	23,042
PV of Terminal Value	6,064	3,753	2,430	7,573	4,480	2,818	9,988	5,519	3,336
Enterprise Value	**9,220**	**6,264**	**4,427**	**10,729**	**6,992**	**4,815**	**13,144**	**8,030**	**5,332**
% Value in Terminus	*65.8%*	*59.9%*	*54.9%*	*70.6%*	*64.1%*	*58.5%*	*76.0%*	*68.7%*	*62.6%*
% Value in Cash Flows	*34.2%*	*40.1%*	*45.1%*	*29.4%*	*35.9%*	*41.5%*	*24.0%*	*31.3%*	*37.4%*

Enterprise Value	**6,264**	**--**	**8,030**
Equity Value Per Share	**59**	**--**	**75**

Source: Company data, Morgan Stanley Research. e = Morgan Stanley research estimates.

Base case. Tesla is a significant EV player, but still one of the smallest auto companies in the world. Global car market runs at 3.2% CAGR through 2025 with Global xEV penetration at 5.5% by 2020 and 15.1% by 2025. Tesla xEV share peaks at 3.6% before reaching 2.6% by 2025. Assembled units of 214k by 2020 and 454k by 2025. Model S in 2H12 reaches 20k units by 2015. Model X volume grows begins in 2014 and reaches >40k by 2020. Gen 3 starts in 2017 and reaches 370k units. Pricing stable to up in the early years, down slightly in later years. Mix driven down over time by growth in mass market Gen 3 dominating the volume. Reasonable launch burden with peaks in 2014 and 2017. Tens of millions in a heavy launch year. Break-even OP reached in late 2013, with margin peaking at 17%, normalize at 13%.

Bull case. Tesla is a major EV player, producing well above the limits of the Fremont plant by 2025. Global car market runs at 3.4% CAGR through 2025. Global xEV penetration at 7% by 2020 and 22% by 2025. Tesla xEV share peaks at 4% and at 2.6% long term. Units of 329k by 2020 and 681k by 2025. Model S peaks at 50k. Model X volume hits 80k. Gen 3 surpasses 500k units. Pricing similar to base case. Mix stable over time due to higher contribution from Model S and Model X and higher content uptake on Gen 3 with a less onerous launch burden. Break-even OP reached in mid 2013, normalizing at just under 20%, well above the company's own long term target of 15%.

Bear case. A scenario of negative equity on our 15-year DCF. Global car market runs at 1.9% CAGR through 2025. Global xEV penetration at 2% by 2020 and 6% by 2025. Tesla xEV share peaks at 3% and <2% long term. Assembled units of <50k by 2020. Model S a year late peaks at 10k. Mass market model peaks at no more than 50k units. Pricing moderately worse than base case without substantial tailwinds on mix. Launch costs run higher as a % of sales. Break-even OP reached just after 2015, margins normalize at around 1%. Accumulated cash burn exceeds available liquidity in the early years, necessitating reorganization of capital structure.

Exhibit 55

Tesla: Bull/Bear/Base Scenario Analysis

	2011	2012	2013	2014	2015	2020	2025	15-year DCF Valuation
Bear Case								
Global Light Vehicle Market (Units)	72,994,307	74,559,493	79,423,671	83,624,370	86,932,798	87,170,236	92,860,023	
xEV Share of Global Market (%)	0.0%	0.1%	0.2%	0.4%	0.5%	2.3%	6.3%	
Global xEV Market (Units)	21,219	79,724	154,112	293,419	466,884	2,004,357	5,845,856	
Tesla Share of Global xEV Market (%)	2.1%	0.5%	2.9%	2.3%	1.8%	2.5%	1.8%	
Tesla Units (ex Powertrain)	456	404	4,538	6,712	8,598	49,877	105,908	
Pricing (% YoY)	0.0%	-1.0%	-1.0%	-1.0%	-1.0%	-1.0%	-1.0%	
Mix ($/unit)	-6,274	1,656	1,669	-486	-1,205	-154	60	
Launch + Structural Costs ($m)	-76	-87	-52	219	4	-35	-134	
Operating Margin (%)	-143.8%	-114.0%	-63.2%	-6.5%	-0.7%	4.0%	0.7%	
Free Cash Flow ($m)	**-357**	**-213**	**-240**	**-33**	**-26**	**134**	**62**	**0**
Base Case								
Global Light Vehicle Market (Units)	76,836,113	82,843,881	88,248,523	92,915,967	96,591,998	108,962,796	116,075,029	
xEV Share of Global Market (%)	0.1%	0.3%	0.5%	0.9%	1.5%	5.5%	15.1%	
Global xEV Market (Units)	63,658	239,171	462,336	880,256	1,400,652	6,013,070	17,537,567	
Tesla Share of Global xEV Market (%)	0.9%	1.0%	3.3%	3.3%	2.6%	3.6%	2.6%	
Tesla Units (ex Powertrain)	570	2,425	15,128	28,765	36,848	213,760	453,893	
Pricing (% YoY)	0.0%	0.0%	0.5%	1.0%	0.5%	0.5%	-0.5%	
Mix ($/unit)	-5,089	2,551	4,194	-328	-1,435	-477	54	
Launch + Structural Costs ($m)	-76	-90	-66	-115	28	-40	-354	
Operating Margin (%)	-128.9%	-81.3%	-5.1%	3.0%	7.1%	12.9%	13.5%	
Free Cash Flow ($m)	**-354**	**-189**	**-27**	**54**	**65**	**1,030**	**2,144**	**70**
Bull Case								
Global Light Vehicle Market (Units)	78,372,835	86,986,075	92,660,949	97,561,765	101,421,598	114,410,935	121,878,780	
xEV Share of Global Market (%)	0.1%	0.3%	0.6%	1.1%	1.9%	7.4%	21.6%	
Global xEV Market (Units)	79,572	298,963	577,920	1,100,320	1,890,880	8,418,298	26,306,351	
Tesla Share of Global xEV Market (%)	0.9%	1.1%	4.3%	4.2%	3.2%	3.9%	2.6%	
Tesla Units (ex Powertrain)	677	3,334	24,582	46,743	59,693	329,191	680,839	
Pricing (% YoY)	0.0%	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	
Mix ($/unit)	-4,074	4,402	2,503	181	-1,915	-363	42	
Launch + Structural Costs ($m)	-76	-93	-72	-408	67	-31	-383	
Operating Margin (%)	-117.0%	-43.1%	6.2%	4.0%	8.0%	15.5%	19.7%	
Free Cash Flow ($m)	**-353**	**-147**	**127**	**120**	**236**	**1,762**	**4,340**	**135**

Source: Company data, Morgan Stanley Research

What's in the price? Tesla exists as only a marginal player with 4%-type share of an emerging/niche xEV market but may face significant strategic challenges as a stand-alone company. This trading level suggests the Street sees a potential take-out candidate before mass adoption of xEVs. Global car market runs at 3.2% CAGR through 2025. Global xEV penetration at 4% by 2020 and 11% by 2025. Tesla xEV share peaks at 4% and runs at 1% longer term. Tesla unit volume of assembled vehicles (excluding powertrain units) reaches of 28k by 2015, 78k by 2020 and 121k by 2025. Model S in 2013, peaks at 15k while Model X volume hits 10k. Gen 3 reaches 85k units by 2025. Pricing is similar to our base case assumptions (relatively stable). Mix is stable over time due to higher contribution from Model S and Model X and higher content uptake on Gen 3. Still onerous launch burden, similar to our base case assumptions, but on far lower volumes. Break-even OP reached in late 2014, with OP margins peaking at 12% and normalizing at <6%.

Exhibit 56

Tesla: What's in the Price?

What's in the Price?	2011	2012	2013	2014	2015	2020	2025	
Global Light Vehicle Market (Units)	76,836,113	82,843,881	88,248,523	92,915,967	96,591,998	108,962,796	116,075,029	
xEV Share of Global Market (%)	0.1%	0.2%	0.4%	0.6%	1.0%	3.9%	10.7%	
Global Electric Vehicle Market (Units)	42,997	163,876	316,786	603,139	959,706	4,259,258	12,422,444	
Tesla Share of Global xEV Market (%)	1.6%	2.0%	3.8%	2.7%	2.9%	1.8%	1.0%	
Tesla Units (ex Powertrain)	677	3,334	12,128	16,165	27,708	77,946	121,472	
Pricing (% YoY)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.5%	
Mix ($/unit)	-5,089	2,551	3,524	-1,465	38	-509	1,664	
Launch + Structural Costs ($m)	-76	-90	-74	96	-106	16	859	
Operating Margin (%)	-128.9%	-81.3%	-13.7%	-0.1%	4.8%	9.1%	5.5%	
Free Cash Flow ($m)	**-355**	**-190**	**-109**	**-3**	**61**	**471**	**-65**	**23**

Source: Company data, Morgan Stanley Research

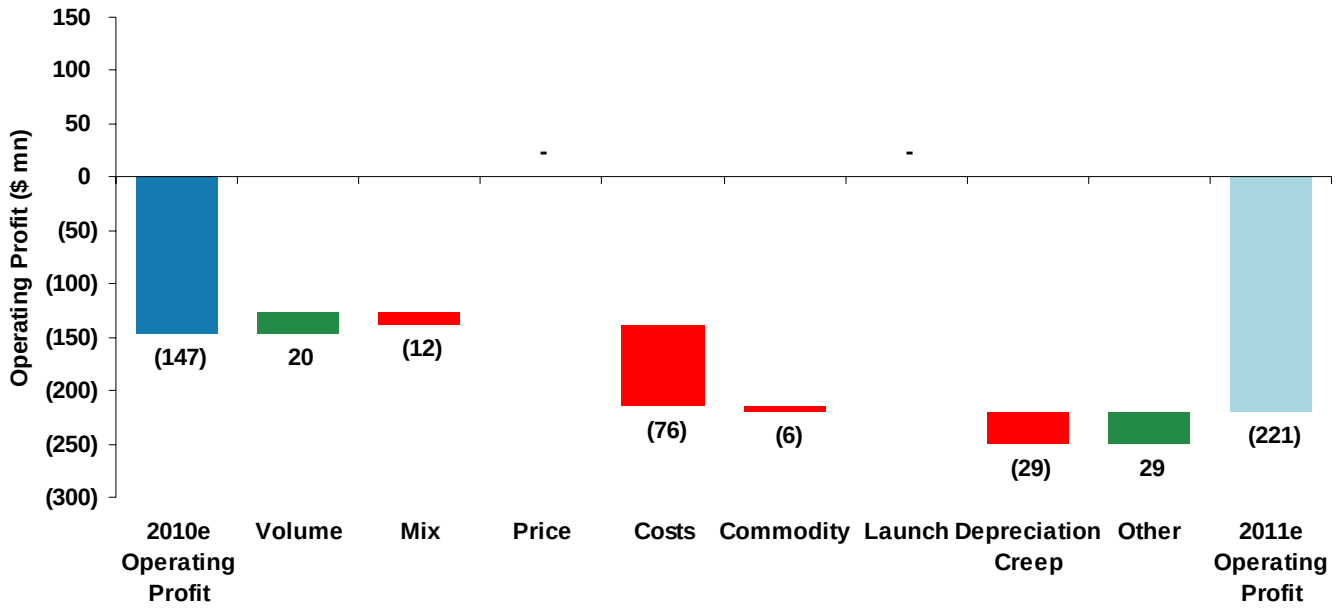
Exhibit 57

Tesla: Valuation Matrix on 2015 and 2020 projections

Share Price ($)	Market Value ($m)	Enterprise Value ($m)	Price/Sales (%)		EV/Sales (%)		EV/EBITDA (x)		PE (x)	
			2015e	2020e	2015e	2020e	2015e	2020e	2015e	2020e
10.00	1,068	1,040	39%	11%	38%	11%	3.4	0.7	7.8	1.5
15.00	1,602	1,574	59%	17%	58%	17%	5.2	1.0	11.6	2.2
20.00	**2,136**	**2,108**	**79%**	**22%**	**78%**	**22%**	**7.0**	**1.4**	**15.5**	**2.9**
25.00	**2,669**	**2,642**	**98%**	**28%**	**97%**	**28%**	**8.7**	**1.7**	**19.4**	**3.7**
30.00	3,203	3,176	118%	34%	117%	33%	10.5	2.1	23.3	4.4
35.00	3,737	3,709	138%	39%	137%	39%	12.3	2.4	27.1	5.2
40.00	4,271	4,243	157%	45%	156%	45%	14.0	2.8	31.0	5.9
45.00	4,805	4,777	177%	51%	176%	50%	15.8	3.1	34.9	6.6
50.00	5,339	5,311	197%	56%	196%	56%	17.6	3.5	38.8	7.4
55.00	5,873	5,845	216%	62%	215%	62%	19.3	3.8	42.6	8.1
60.00	6,407	6,379	236%	67%	235%	67%	21.1	4.2	46.5	8.8
65.00	6,940	6,913	256%	73%	255%	73%	22.9	4.5	50.4	9.6
70.00	**7,474**	**7,447**	**275%**	**79%**	**274%**	**78%**	**24.6**	**4.9**	**54.3**	**10.3**
75.00	8,008	7,981	295%	84%	294%	84%	26.4	5.2	58.1	11.1
80.00	8,542	8,514	315%	90%	314%	90%	28.2	5.6	62.0	11.8
85.00	9,076	9,048	334%	96%	333%	95%	29.9	5.9	65.9	12.5
90.00	9,610	9,582	354%	101%	353%	101%	31.7	6.3	69.8	13.3
95.00	10,144	10,116	373%	107%	372%	107%	33.5	6.6	73.6	14.0
100.00	10,678	10,650	393%	112%	392%	112%	35.2	7.0	77.5	14.7

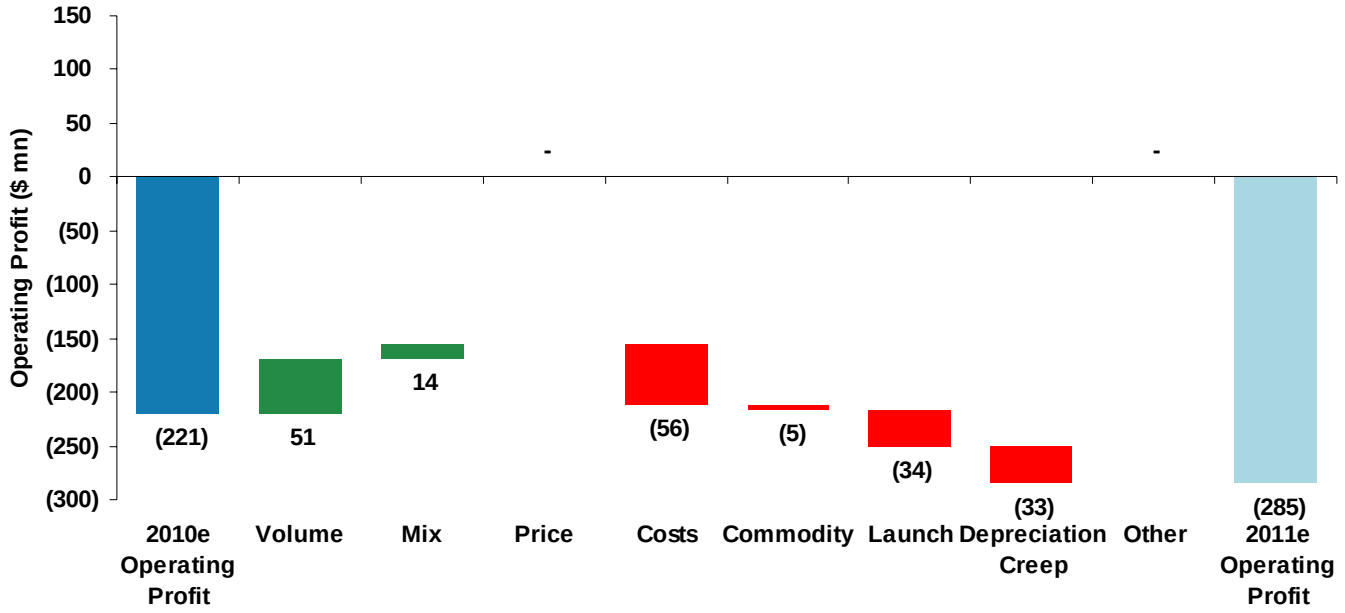
Source: Company data, Morgan Stanley Research

Exhibit 58
Tesla: Operating Profit Walk-Down from 2010 to 2011e ($m)



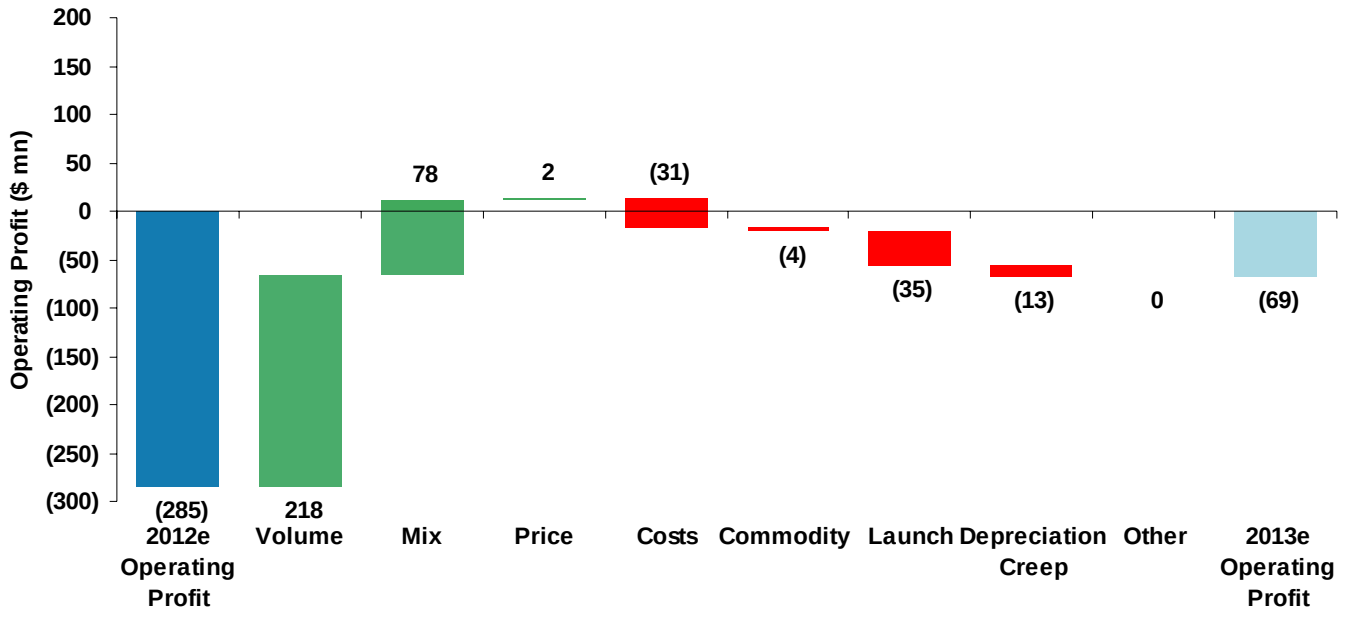
Source: Company data, Morgan Stanley Research

Exhibit 59
Tesla: Operating Profit Walk-Down from 2011 to 2012e ($m)



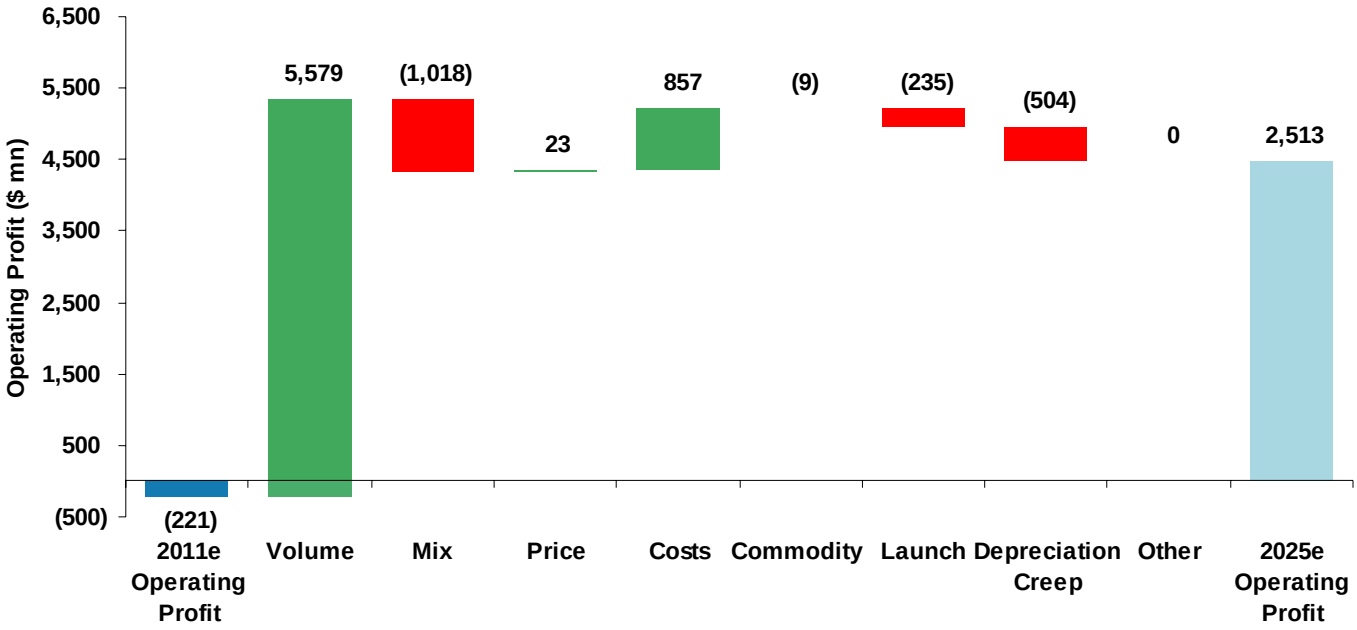
Source: Company data, Morgan Stanley Research

Exhibit 60
Tesla: Operating Profit Walk-Down from 2012 to 2013e ($m)



Source: Company data, Morgan Stanley Research

Exhibit 61
Tesla: Operating Profit Walk-Down from 2011 to 2025e ($m)



Source: Company data, Morgan Stanley Research

Exhibit 62

N. American Auto Stock Order of Preference

Stock	Rating	Current Pricing	Valuation	Sales by Region	Investment Thesis	Investment Risks	Consensus
Ford	OW	PT: $21.00 Current Price: $14.84 Market Cap: $53,023.3m	Net Debt/EBITDA: 0.7x 2011e P/E: 6.0x 2011e EV/EBITDA: 3.2x	NA: 58% Europe: 27% Other: 16%	• Operating Leverage + Volume • Large deferred tax attributes	• Lack of EM exopsure • Overdependence on pickups and SUVs	Buy: 67% Hold: 28% Sell: 6%
GM	OW	PT: $50.00 Current Price: $31.10 Market Cap: $50,506.4m	Net Debt/EBITDA: NM 2011e P/E: 5.6x 2011e EV/EBITDA: 3.0x	NA: 58% Europe: 17% Other: 26%	• Highly leveraged to both North America and BRIC sales • Large tax attributes mean no cash taxes until 2018	• Lack of sizeable captive finance sub • European business still structurally challenged	Buy: 74% Hold: 21% Sell: 5%
Johnson Controls	OW	PT: $50.00 Current Price: $41.93 Market Cap: $28,319.5m	Net Debt/EBITDA: 1.1x 2011e P/E: 15.5x 2011e EV/EBITDA: 9.2x	NA: 42% Europe: 35% Other: 24%	• Long term secular growth in green buildings • Increased content per vehicle and volume growth in Europe	• Slow recovery in commercial construction • High capex in near term	Buy: 65% Hold: 35% Sell: 0%
BorgWarner	OW	PT: $88.00 Current Price: $78.00 Market Cap: $9,043.5m	Net Debt/EBITDA: 0.8x 2011e P/E: 17.0x 2011e EV/EBITDA: 8.4x	NA: 26% Europe: 55% Other: 19%	• Attractive technology portfolio, industry leading margins • Increased penetration of fuel-efficient technologies	• Europe could see macro risks (50% of revs) • New fuel eco/CO2 regs could be delayed in the event of macro slowdown	Buy: 37% Hold: 58% Sell: 5%
Tesla	OW	PT: $70.00 Current Price: $23.92 Market Cap: $2,276.5m	Net Debt/EBITDA: NM 2011e P/E: NM 2011e EV/EBITDA: NM	NA: 36% Europe: 60% Other: 4%	• xEV set to grow to 5.5% of global sales by 2020 and 15% by 2025 • Gen 3 drives near 500k volume by 2025	• Execution of the Model S sedan • Government support required to foster xEV adoption	Buy: 50% Hold: 33% Sell: 17%
TRW	OW	PT: $75.00 Current Price: $54.05 Market Cap: $7,194.5m	Net Debt/EBITDA: 0.5x 2011e P/E: 7.2x 2011e EV/EBITDA: 4.3x	NA: 30% Europe: 51% Other: 19%	• Increased active safety CPV and passive safety in emerging markets • Geographic and customer diversification leverages production recovery	• Mature "legacy" businesses could keep growth in check • Safety legislation mandates delayed in some regions	Buy: 100% Hold: 0% Sell: 0%
Cooper Tires	OW	PT: $30.00 Current Price: $25.64 Market Cap: $1,603.7m	Net Debt/EBITDA: NM 2011e P/E: 9.9x 2011e EV/EBITDA: 5.1x	NA: 71% Europe: 11% Other: 18%	• Import tariffs on Chinese tires should help share and pricing power • Restructuring initiatives continue to boost manufacturing productivity	• Chinese import tariff ruling could be reversed • Price competition in the low end segments could intensify	Buy: 75% Hold: 25% Sell: 0%
Goodyear	OW	PT: $20.00 Current Price: $14.74 Market Cap: $3,611.3m	Net Debt/EBITDA: 1.8x 2011e P/E: 47.8x 2011e EV/EBITDA: 5.8x	NA: 44% Europe: 34% Other: 22%	• Strong brand, superior product/techonology and high share • Plant closures should improve utilization	• Price increases may not stick • Raw materials will still be a large headwind in 2011+	Buy: 67% Hold: 33% Sell: 0%
ArvinMeritor	OW	PT: $22.00 Current Price: $19.53 Market Cap: $1,822.1m	Net Debt/EBITDA: 3.0x 2011e P/E: 23.6x 2011e EV/EBITDA: 9.9x	NA: 50% Europe: 21% Other: 29%	• High growth in NA and Europe end markets through 2012 • Profitability boosted by capacity rationalization	• Company has had weak execution in past upcycles • Industrial/defense business may be choppy	Buy: 73% Hold: 27% Sell: 0%
Magna	UW	PT: $56.00 Current Price: $47.77 Market Cap: $11,159.1m	Net Debt/EBITDA: NM 2011e P/E: 10.1x 2011e EV/EBITDA: 4.1x	NA: 47% Europe: 49% Other: 4%	• Cyclical rather than secular growth story • Little potential for near term margin improvement	• Low EM exposure could crimp growth prospects • Less leveraged to re-invention or growth trends	Buy: 65% Hold: 29% Sell: 6%
Lear	UW	PT: $47.50 Current Price: $48.41 Market Cap: $5,247.6m	Net Debt/EBITDA: NM 2011e P/E: 10.4x 2011e EV/EBITDA: 4.2x	NA: 34% Europe: 42% Other: 24%	• More excess capacity than others, esp. in the Electrical business • Backlog impressive but has unusually high share of Electrical business	• Backlog growth could come at the cost of pricing • Lower capacity utilization	Buy: 80% Hold: 13% Sell: 7%
AutoNation	UW	PT: $32.00 Current Price: $34.67 Market Cap: $5,503.0m	Net Debt/EBITDA: 2.3x 2011e P/E: 17.3x 2011e EV/EBITDA: 10.8x	NA: 100% Europe: 0% Other: 0%	• Balanced brand footprint, sunbelt states • Better SG&A leverage than peers	• Sunbelt footprint still a risk • Inventory rebuild and capex could pressure FCF	Buy: 0% Hold: 83% Sell: 17%
Penske Automotive	UW	PT: $19.00 Current Price: $19.83 Market Cap: $1,822.2m	Net Debt/EBITDA: 3.0x 2011e P/E: 13.9x 2011e EV/EBITDA: 8.7x	NA: 63% Europe: 37% Other: 0%	• Diversified, high quality operator /w strong management team and brand • Could see pressure on luxury share in the US (65% of revs)	• Share of luxury brands in the US may decline • smart under pressure	Buy: 42% Hold: 50% Sell: 8%
Group 1 Automotive	UW	PT: $34.00 Current Price: $41.68 Market Cap: $959.8m	Net Debt/EBITDA: 2.9x 2011e P/E: 13.0x 2011e EV/EBITDA: 7.3x	NA: 95% Europe: 5% Other: 0%	• Small exposure to economically weak CA and FL markets • Large Used vehicle and Parts businesses	• Smaller size • Recent low capex could see payback in future	Buy: 67% Hold: 25% Sell: 8%
Tenneco	UW	PT: $34.00 Current Price: $42.31 Market Cap: $2,479.5m	Net Debt/EBITDA: 1.9x 2011e P/E: 16.3x 2011e EV/EBITDA: 5.7x	NA: 48% Europe: 41% Other: 11%	• CV push is an attractive opportunity but carries execution risk. • Substrate and Aftermarket businesses reduce leverage to OE production ramp	• Improving fuel economy reduced need for emissions content • Push to grow into CV carries execution risk	Buy: 58% Hold: 33% Sell: 8%

Source: Company data, Morgan Stanley Research
For valuation methodology and risks associated with any price targets above, please email morganstanley.research@morganstanley.com

Electric Vehicle Projections and Earnings Model

Exhibit 63
Global PHEV + EV Sales Projections (000s)

	2011	2012	2013	2014	2015	2020	2025
PHEV +EV SALES							
US							
PHEV	11	51	90	176	266	574	1,068
EV	7	28	39	59	89	574	1,601
Total	19	79	129	234	355	1,148	2,669
PHEV % of Total	*60%*	*65%*	*70%*	*75%*	*75%*	*50%*	*40%*
% of Global xEV Sales	*29.2%*	*33.1%*	*27.9%*	*26.6%*	*25.3%*	*19.1%*	*15.2%*
W. Europe							
PHEV	19	53	97	180	255	652	1,450
EV	13	29	42	60	85	652	2,174
Total	31	82	139	239	341	1,305	3,624
PHEV % of Total	*60%*	*65%*	*70%*	*75%*	*75%*	*50%*	*40%*
% of Global xEV Sales	*49.1%*	*34.1%*	*30.0%*	*27.2%*	*24.3%*	*21.7%*	*20.7%*
China							
PHEV	6	34	72	136	236	1,160	2,718
EV	4	18	31	45	79	625	2,718
Total	9	52	103	182	315	1,785	5,435
PHEV % of Total	*60%*	*65%*	*70%*	*75%*	*75%*	*65%*	*50%*
% of Global xEV Sales	*14.6%*	*21.8%*	*22.2%*	*20.6%*	*22.5%*	*29.7%*	*31.0%*
Japan							
PHEV	2	11	29	54	77	177	349
EV	1	6	12	18	26	177	524
Total	3	17	41	72	103	355	873
PHEV % of Total	*60%*	*65%*	*70%*	*75%*	*75%*	*50%*	*40%*
% of Global xEV Sales	*4.7%*	*7.0%*	*8.9%*	*8.1%*	*7.4%*	*5.9%*	*5.0%*
ROW							
PHEV	1	6	36	115	215	710	1,975
EV	1	3	15	38	72	710	2,962
Total	2	9	51	153	287	1,421	4,937
PHEV % of Total	*60%*	*65%*	*70%*	*75%*	*75%*	*50%*	*40%*
% of Global xEV Sales	*2.4%*	*3.9%*	*11.0%*	*17.4%*	*20.5%*	*23.6%*	*28.1%*
Global							
PHEV	38	155	324	660	1,050	3,274	7,559
EV	25	84	139	220	350	2,739	9,979
Total	**64**	**239**	**462**	**880**	**1,401**	**6,013**	**17,538**
PHEV % of Total	*60%*	*65%*	*70%*	*75%*	*75%*	*54%*	*43%*

Source: Company data, Morgan Stanley Research. e = Morgan Stanley research estimates.

Cost-benefit methodology behind our xEV model. We have attempted to determine the financial inflection point for operating costs, which is one of the objective factors driving our US xEV demand model. We note that several other factors also drive EV demand, some of which are more subjective including image, political will etc. These subjective factors could be even more influential than the cost factor in determining xEV demand. For our model, we assume the average car drives 12,000 miles/year and gets 25 mpg, and we estimate a weekly gasoline consumption of 8-9 gallons/week. We note that US consumers tend to feel the pain of high gas prices between $3.50-$4 per gallon. This means the average consumer would be comfortable spending no more than $30 per week on gasoline costs. As part of our xEV model, we have tried to maintain the weekly gasoline/electricity spend at $30 per week by substituting more PHEVs and EVs in the car fleet, as gasoline prices get to $5, $6 and higher between now and 2025.

Exhibit 64

Global PHEV + EV Share of Total Market (%)

	2011	2012	2013	2014	2015	2020	2025
PHEV + EV SHARE %							
US							
PHEV	0.1%	0.3%	0.6%	1.1%	1.6%	3.3%	6.0%
EV	0.1%	0.2%	0.2%	0.4%	0.5%	3.3%	9.0%
Total	0.1%	0.5%	0.8%	1.4%	2.1%	6.6%	15.0%
W. Europe							
PHEV	0.1%	0.4%	0.6%	1.1%	1.6%	4.0%	8.7%
EV	0.1%	0.2%	0.3%	0.4%	0.5%	4.0%	13.0%
Total	0.2%	0.5%	0.9%	1.5%	2.1%	8.0%	21.6%
China							
PHEV	0.0%	0.2%	0.4%	0.7%	1.1%	4.1%	8.7%
EV	0.0%	0.1%	0.2%	0.2%	0.4%	2.2%	8.7%
Total	0.1%	0.3%	0.5%	0.9%	1.5%	6.3%	17.5%
Japan							
PHEV	0.0%	0.2%	0.6%	1.1%	1.6%	3.9%	8.0%
EV	0.0%	0.1%	0.3%	0.4%	0.5%	3.9%	12.0%
Total	0.1%	0.4%	0.8%	1.5%	2.1%	7.9%	20.1%
ROW							
PHEV	0.0%	0.0%	0.1%	0.3%	0.6%	1.7%	4.3%
EV	0.0%	0.0%	0.0%	0.1%	0.2%	1.7%	6.4%
Total	0.0%	0.0%	0.2%	0.4%	0.8%	3.4%	10.7%
Global							
PHEV	0.0%	0.2%	0.4%	0.7%	1.1%	3.0%	6.5%
EV	0.0%	0.1%	0.2%	0.2%	0.4%	2.5%	8.6%
Total	0.1%	0.3%	0.5%	0.9%	1.5%	5.5%	15.1%

Source: Company data, Morgan Stanley Research. e = Morgan Stanley research estimates.

Exhibit 65

Global PHEV + EV Parc Analysis

	2011	2012	2013	2014	2015	2020	2025
PHEV + EV PARC							
US	19	98	225	455	802	4,587	13,814
W. Europe	31	112	249	484	816	4,924	16,663
China	9	61	162	341	649	5,883	23,226
Japan	3	20	60	131	232	1,386	4,361
ROW	2	11	61	213	495	4,673	20,056
Global	**64**	**301**	**757**	**1,623**	**2,994**	**21,452**	**78,120**
% Change		*371.4%*	*151.4%*	*114.4%*	*84.5%*	*36.3%*	*26.0%*
PHEV + EV PARC SHARE %							
US	0.0%	0.0%	0.1%	0.2%	0.3%	1.7%	4.8%
W. Europe	0.0%	0.0%	0.1%	0.2%	0.3%	1.9%	6.1%
China	0.0%	0.1%	0.2%	0.3%	0.5%	2.9%	8.4%
Japan	0.0%	0.0%	0.1%	0.2%	0.3%	1.9%	6.0%
ROW	0.0%	0.0%	0.0%	0.1%	0.1%	1.1%	4.0%
Global	**0.0%**	**0.0%**	**0.1%**	**0.2%**	**0.3%**	**1.7%**	**5.5%**
TOTAL VEHICLE SALES							
US	14,000	15,000	16,033	16,645	17,136	17,488	17,788
W. Europe	14,345	14,863	15,620	16,190	16,125	16,263	16,743
China	15,845	17,372	18,711	20,125	21,451	28,335	31,128
Japan	4,742	4,783	4,862	4,876	4,814	4,498	4,346
ROW	27,904	30,827	33,023	35,080	37,065	42,378	46,070
Global	**76,836**	**82,844**	**88,249**	**92,916**	**96,592**	**108,963**	**116,075**
% Change		*7.8%*	*6.5%*	*5.3%*	*4.0%*	*1.2%*	*1.0%*
TOTAL VEHICLE PARC							
US	247,046	248,944	251,728	254,954	258,486	274,686	288,568
W. Europe	238,502	240,697	243,500	246,706	249,690	262,513	274,281
China	82,091	93,524	105,532	118,149	131,256	203,860	276,161
Japan	75,395	75,367	75,415	75,474	75,471	74,645	73,000
ROW	311,523	321,809	333,542	346,504	360,555	437,494	506,186
Global	**954,557**	**980,340**	**1,009,717**	**1,041,787**	**1,075,457**	**1,253,196**	**1,418,196**
% Change		*2.7%*	*3.0%*	*3.2%*	*3.2%*	*2.9%*	*2.3%*

Source: Company data, Morgan Stanley Research. e = Morgan Stanley research estimates.

Exhibit 66

Internal Combustion Engine Share of Auto Market

	2011	2012	2013	2014	2015	2020	2025
ICE Sales Share %							
US	99.9%	99.5%	99.2%	98.6%	97.9%	93.4%	85.0%
W. Europe	99.8%	99.5%	99.1%	98.5%	97.9%	92.0%	78.4%
China	99.9%	99.7%	99.5%	99.1%	98.5%	93.7%	82.5%
Japan	99.9%	99.6%	99.2%	98.5%	97.9%	92.1%	79.9%
ROW	100.0%	100.0%	99.8%	99.6%	99.2%	96.6%	89.3%
Global	99.9%	99.7%	99.5%	99.1%	98.5%	94.5%	84.9%
ICE PARC Share %							
US	100.0%	100.0%	99.9%	99.8%	99.7%	98.3%	95.2%
W. Europe	100.0%	100.0%	99.9%	99.8%	99.7%	98.1%	93.9%
China	100.0%	99.9%	99.8%	99.7%	99.5%	97.1%	91.6%
Japan	100.0%	100.0%	99.9%	99.8%	99.7%	98.1%	94.0%
ROW	100.0%	100.0%	100.0%	99.9%	99.9%	98.9%	96.0%
Global	100.0%	100.0%	99.9%	99.8%	99.7%	98.3%	94.5%
ICE SALES							
US	13,981	14,921	15,904	16,411	16,781	16,340	15,119
W. Europe	14,313	14,781	15,481	15,951	15,785	14,959	13,120
China	15,836	17,320	18,609	19,943	21,136	26,550	25,693
Japan	4,739	4,766	4,821	4,804	4,711	4,143	3,474
ROW	27,902	30,817	32,972	34,926	36,778	40,958	41,133
Global	**76,772**	**82,605**	**87,786**	**92,036**	**95,191**	**102,950**	**98,537**
% Change		*7.6%*	*6.3%*	*4.8%*	*3.4%*	*0.0%*	*-1.5%*
ICE PARC							
US	247,027	248,846	251,503	254,499	257,683	270,099	274,753
W. Europe	238,471	240,584	243,252	246,222	248,874	257,589	257,618
China	82,081	93,463	105,370	117,808	130,607	197,977	252,935
Japan	75,392	75,347	75,355	75,343	75,239	73,259	68,639
ROW	311,521	321,798	333,480	346,291	360,060	432,821	486,130
Global	**954,493**	**980,039**	**1,008,960**	**1,040,164**	**1,072,463**	**1,231,744**	**1,340,076**
% Change		*2.7%*	*3.0%*	*3.1%*	*3.1%*	*2.4%*	*1.2%*

Source: Company data, Morgan Stanley Research

Exhibit 67

Tesla: Quarterly Revenue Driver Analysis, 2009-2012e

Revenues	FY 2009	FY 2010	1Q11E	2Q11E	3Q11E	4Q11E	FY 2011E	1Q12E	2Q12E	3Q12E	4Q12E	FY 2012E
Unit Volume												
Roadster	840	567	145	145	140	140	570	140	140	100	45	425
Growth		*-32.5%*	*15.1%*	*2.8%*	*-7.3%*	*-6.0%*	*0.5%*	*-3.4%*	*-3.4%*	*-28.6%*	*-67.9%*	*-25.4%*
Model S	-	-	-	-	-	-	-			750	1,250	2,000
Growth												
Model X	-	-	-	-	-	-	-	-	-	-	-	-
Growth												
Gen 3	-	-	-	-	-	-	-	-	-	-	-	-
Growth												
Powertrain	-	975	450	450	450	500	1,850	650	700	750	800	2,900
Growth			*328.6%*	*125.0%*	*87.5%*	*16.3%*	*89.7%*	*44.4%*	*55.6%*	*66.7%*	*60.0%*	*56.8%*
Total Units	**840**	**1,542**	**595**	**595**	**590**	**640**	**2,420**	**790**	**840**	**1,600**	**2,095**	**5,325**
Growth												
Revenue/Unit ($000s)												
Roadster	133,251	133,437	126,378	125,087	126,702	125,906	126,013	126,378	125,087	126,702	125,906	125,979
Growth		*0.1%*	*-12.0%*	*-8.0%*	*5.0%*	*-7.0%*	*-5.6%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Model S	-	-	-	-	-	-	-			89,000	89,000	89,000
Growth												
Model X	-	-	-	-	-	-	-	-	-	-	-	-
Growth												
Gen 3	-	-	-	-	-	-	-	-	-	-	-	-
Growth												
Powertrain	-	21,968	22,529	22,800	20,302	19,884	21,338	21,402	21,660	19,287	18,890	20,224
Growth			*-5.0%*	*-5.0%*	*-5.0%*	*-5.0%*	*-2.9%*	*-5.0%*	*-5.0%*	*-5.0%*	*-5.0%*	*-5.2%*
Total Revenue/Unit	**133,265**	**62,956**	**47,836**	**47,727**	**45,550**	**43,076**	**45,993**	**40,005**	**38,898**	**58,679**	**63,020**	**54,496**
Growth												
Revenues												
Roadster	112	76	18	18	18	18	72	18	18	13	6	54
Growth		*-32.4%*	*1.3%*	*-5.4%*	*-2.6%*	*-12.6%*	*-5.1%*	*-3.4%*	*-3.4%*	*-28.6%*	*-67.9%*	*-25.5%*
Model S	-	-	-	-	-	-	-	-	-	67	111	178
Growth												
Model X	-	-	-	-	-	-	-	-	-	-	-	-
Growth												
Gen 3	-	-	-	-	-	-	-	-	-	-	-	-
Growth												
Powertrain	-	21	10	10	9	10	39	14	15	14	15	59
Growth			*307.1%*	*113.8%*	*78.1%*	*10.5%*	*84.3%*	*37.2%*	*47.8%*	*58.3%*	*52.0%*	*48.6%*
Total Automotive Revenues	**112**	**97**	**28**	**28**	**27**	**28**	**111**	**32**	**33**	**94**	**132**	**290**
Growth		*-13.3%*	*38.3%*	*18.5%*	*15.1%*	*-5.5%*	*14.7%*	*11.0%*	*15.1%*	*249.4%*	*378.9%*	*160.7%*
Developmental Services Sales	**-**	**20**	**15**	**15**	**15**	**15**	**60**	**15**	**15**	**15**	**15**	**60**
Growth			*NM*	*238.3%*	*90.1%*	*110.9%*	*205.1%*	*NM*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Total Tesla Revenue	**112**	**117**	**43**	**43**	**42**	**43**	**171**	**47**	**48**	**109**	**147**	**350**
Growth		*4.3%*	*108.8%*	*52.8%*	*34.0%*	*17.3%*	*46.7%*	*7.2%*	*9.9%*	*160.0%*	*245.4%*	*104.4%*

Source: Company data, Morgan Stanley Research. E = Morgan Stanley Research estimates.

Exhibit 68

Tesla: Consolidated Quarterly Income Statement, 2009 to 2012

Income Statement	FY 2009	FY 2010	1Q11E	2Q11E	3Q11E	4Q11E	FY 2011E	1Q12E	2Q12E	3Q12E	4Q12E	FY 2012E
Revenues												
Automotive	112	97	28	28	27	28	111	32	33	94	132	290
Growth		*-13.3%*	*-2.4%*	*-0.2%*	*-5.4%*	*2.6%*	*14.7%*	*14.6%*	*3.4%*	*187.3%*	*40.6%*	*160.7%*
Development services	-	20	15	15	15	15	60	15	15	15	15	60
Growth			*110.9%*	*0.0%*	*0.0%*	*0.0%*	*205.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Total Revenues	**112**	**117**	**43**	**43**	**42**	**43**	**171**	**47**	**48**	**109**	**147**	**350**
Growth		*4%*	*19.8%*	*-0.1%*	*-3.5%*	*1.7%*	*46.7%*	*9.5%*	*2.3%*	*128.4%*	*35.0%*	*104.4%*
Total Cost of Revenues	**102**	**86**	**30**	**29**	**30**	**32**	**121**	**30**	**30**	**72**	**102**	**308**
Growth												
Total Gross Profit	**10**	**31**	**13**	**14**	**11**	**11**	**50**	**17**	**18**	**37**	**45**	**42**
Gross Margin	*8.5%*	*26.3%*	*31.0%*	*33.4%*	*27.4%*	*25.3%*	*29.3%*	*35.9%*	*37.6%*	*33.7%*	*30.8%*	*12.1%*
Research and Development	19	93	38	38	35	35	145	40	40	40	40	160
R&D/Sales	*17.2%*	*79.7%*	*86.3%*	*86.4%*	*83.6%*	*82.2%*	*84.6%*	*85.8%*	*83.9%*	*36.7%*	*27.2%*	*45.7%*
SG&A	42	85	30	30	32	34	126	38	41	43	46	167
SG&A/Sales	*37.7%*	*72.4%*	*69.0%*	*69.1%*	*76.4%*	*79.9%*	*73.6%*	*81.5%*	*85.0%*	*39.5%*	*30.9%*	*47.7%*
Stock-based Compensation	1	21	7	7	7	7	27	8	8	8	9	33
% of Operating Expense	*2.3%*	*11.9%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*
Operating Profit (GAAP)	**(52)**	**(147)**	**(54)**	**(53)**	**(56)**	**(58)**	**(221)**	**(61)**	**(63)**	**(46)**	**(40)**	**(285)**
Operating Margin	*-46.4%*	*-125.8%*	*-124.3%*	*-122.1%*	*-132.6%*	*-136.8%*	*-128.9%*	*-131.5%*	*-131.3%*	*-42.5%*	*-27.4%*	*-81.3%*
Operating Profit (Non-GAAP excl. Stock Comp)	**(50)**	**(126)**	**(47)**	**(46)**	**(49)**	**(51)**	**(194)**	**(53)**	**(55)**	**(38)**	**(32)**	**(252)**
Operating Margin	*-45.1%*	*-107.7%*	*-108.8%*	*-106.6%*	*-116.6%*	*-120.6%*	*-113.1%*	*-114.7%*	*-114.4%*	*-34.9%*	*-21.6%*	*-72.0%*
Interest income	0	0	0	0	0	0	0	0	0	0	0	1
Rate		0.14%	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.1%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.4%*
Interest expense	3	1	1	1	2	2	6	2	3	3	3	12
Rate		1.4%	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*2.2%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*2.5%*
Other income (expense), net	(1.4)	(6.6)	-	-	-	-	-	-	-	-	-	-
Pretax Profit	**(56)**	**(154)**	**(55)**	**(54)**	**(57)**	**(60)**	**(226)**	**(63)**	**(65)**	**(49)**	**(44)**	**(296)**
Pretax Margin	*-49.8%*	*-132.0%*	*-126.2%*	*-125.0%*	*-136.5%*	*-141.4%*	*-132.2%*	*-136.1%*	*-136.6%*	*-45.2%*	*-29.6%*	*-84.4%*
Provision for income taxes	0	0	-	-	-	-	-	-	-	-	-	-
Effective Tax Rate	*0.0%*	*-0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Ongoing Net Income	**(56)**	**(154)**	**(55)**	**(54)**	**(57)**	**(60)**	**(226)**	**(63)**	**(65)**	**(49)**	**(44)**	**(296)**
Extraordinary gains (charges)												
Reported Net Income	**(56)**	**(154)**	**(55)**	**(54)**	**(57)**	**(60)**	**(226)**	**(63)**	**(65)**	**(49)**	**(44)**	**(296)**
Basic Weighted Average Shares	7	51	96	96	96	100	97	104	105	105	106	105
Diluted Weighted Average Shares	7	51	96	96	96	100	97	104	105	105	106	105
Basic EPS		(3.04)	(0.57)	(0.56)	(0.59)	(0.60)	(2.33)	(0.61)	(0.62)	(0.47)	(0.41)	(2.80)
Diluted EPS Reported		(3.04)	(0.57)	(0.56)	(0.59)	(0.60)	(2.33)	(0.61)	(0.62)	(0.47)	(0.41)	(2.80)
Diluted EPS (GAAP)	**(7.94)**	**(3.04)**	**(0.57)**	**(0.56)**	**(0.59)**	**(0.60)**	**(2.33)**	**(0.61)**	**(0.62)**	**(0.47)**	**(0.41)**	**(2.80)**
Diluted EPS (Non-GAAP excl. Stock Comp)	**(7.73)**	**(2.63)**	**(0.50)**	**(0.49)**	**(0.52)**	**(0.53)**	**(2.05)**	**(0.53)**	**(0.54)**	**(0.39)**	**(0.33)**	**(2.49)**

e = Morgan Stanley Research estimates

Source: Company data, Morgan Stanley Research

Exhibit 69

Tesla: Consolidated Quarterly Balance Sheet, 2009-2012e

Balance Sheet	FY 2009	FY 2010	1Q11E	2Q11E	3Q11E	4Q11E	FY 2011E	1Q12E	2Q12E	3Q12E	4Q12E	FY 2012E
Cash & Cash Equivalents	70	100	91	80	62	169	169	135	132	145	173	173
Restricted Cash - Current	-	74	49	25	-	-	-	-	-	-	-	-
Account Receivable	3	7	12	12	11	12	12	13	13	30	40	40
Inventory	23	45	41	40	42	44	44	36	33	87	123	123
Prepaid expenses and other current assets	4	11	11	11	11	11	11	11	11	11	11	11
Total Current Assets	**101**	**236**	**204**	**166**	**126**	**235**	**235**	**195**	**188**	**273**	**347**	**347**
Operating lease vehicles, net	-	8	8	8	8	8	8	8	8	8	8	8
Property and equipment, net	24	115	147	188	232	275	275	300	302	294	286	286
Restricted cash	4	5	5	5	5	5	5	5	5	5	5	5
Other assets	3	23	23	23	23	23	23	23	23	23	23	23
Total Assets	**130**	**386**	**386**	**390**	**394**	**545**	**545**	**530**	**526**	**602**	**669**	**669**
Accounts payable	15	29	33	32	33	35	35	33	33	79	112	112
Accrued liabilities	15	21	12	12	12	13	13	12	12	29	41	41
Deferred development compensation	0	-	-	-	-	-	-	-	-	-	-	-
Deferred revenue	1	5	5	5	5	5	5	5	5	5	5	5
Capital lease obligations, current portion	0	0	0	0	0	0	0	0	0	0	0	0
Reservation payments	26	31	34	37	39	42	42	45	48	52	56	56
Total Current Liabilities	**57**	**86**	**84**	**85**	**89**	**94**	**94**	**94**	**97**	**165**	**213**	**213**
Common stock warrant liability	-	6	6	6	6	6	6	6	6	6	6	6
Convertible preferred stock warrant liability	2	-	-	-	-	-	-	-	-	-	-	-
Capital lease obligations, less current portion	1	0	0	0	0	0	0	0	0	0	0	0
Deferred revenue, less current portion	1	3	3	3	3	3	3	3	3	3	3	3
Long-term debt	-	72	122	172	222	272	272	312	362	412	465	465
Other long-term liabilities	3	12	12	12	12	12	12	12	12	12	12	12
Total Liabilities	**65**	**179**	**227**	**278**	**333**	**388**	**388**	**428**	**481**	**598**	**699**	**699**
Total convertible preferred stock	319	-	-	-	-	-	-	-	-	-	-	-
Common Stock	*0*	0	0	0	0	0	0	0	0	0	0	0
Additional paid-in capital	*7*	622	629	635	642	799	799	807	815	823	832	832
Accumulated deficit	*(261)*	(415)	(470)	(524)	(581)	(641)	*(641)*	(705)	(770)	(819)	(863)	*(863)*
Total stockholders' equity (deficit)	(254)	207	159	111	61	158	158	102	45	4	(31)	(31)
Total Liabilities and Equity	**130**	**386**	**386**	**390**	**394**	**545**	**545**	**530**	**526**	**602**	**669**	**669**
check	-	-	-	-	-	-	-	-	-	-	-	-
Total Debt	**-**	**72**	**122**	**172**	**222**	**272**	**272**	**312**	**362**	**412**	**465**	**465**
Net Debt (Cash)	**(70)**	**(28)**	**31**	**92**	**160**	**103**	**103**	**177**	**230**	**266**	**291**	**291**
Net Debt/EBITDA		0.2 x	(0.2 x)	(0.5 x)	(0.9 x)	(0.6 x)	(0.6 x)	(1.0 x)	(1.3 x)	(1.7 x)	(2.1 x)	(2.1 x)

e = Morgan Stanley Research estimates

Source: Company data, Morgan Stanley Research

Exhibit 70

Tesla: Consolidated Quarterly Cash Flow Statement, 2009-2012e

Cash Flow	FY 2009	FY 2010	1Q11E	2Q11E	3Q11E	4Q11E	FY 2011E	1Q12E	2Q12E	3Q12E	4Q12E	FY 2012E
Cash flows from operating activities												
Net Income (Loss)	(56)	(154)	(55)	(54)	(57)	(60)	(226)	(63)	(65)	(49)	(44)	(221)
Depreciation and amortization	7	11	8	9	11	12	40	17	19	19	18	73
Change in fair value of warrant liabilities	1	5	-	-	-	-	-	-	-	-	-	-
Gain on cvt notes and warrants	(1)	-	-	-	-	-	-	-	-	-	-	-
Stock-based compensation	1	21	7	7	7	7	27	8	8	8	9	33
Inventory write-downs	0	1	-	-	-	-	-	-	-	-	-	-
Interest on convertible notes	1	-	-	-	-	-	-	-	-	-	-	-
Changes in operating assets and liabilities	3	(11)	(3)	3	3	3	5	7	6	(4)	2	11
Accounts receivable	*(0)*	*(3)*	*(5)*	*0*	*0*	*(0)*	*(5)*	*(1)*	*(0)*	*(17)*	*(10)*	*(29)*
Inventory	*(8)*	*(20)*	*4*	*1*	*(2)*	*(2)*	*2*	*8*	*3*	*(54)*	*(36)*	*(79)*
Prepaid expenses and other current assets	*(2)*	*(5)*	-	-	-	-	-	-	-	-	-	-
Operating lease assets	-	*(8)*	-	-	-	-	-	-	-	-	-	-
Other assets	*(0)*	*(0)*	-	-	-	-	-	-	-	-	-	-
Accounts payable	*1*	*(0)*	*4*	*(1)*	*2*	*2*	*6*	*(2)*	*(0)*	*46*	*32*	*77*
Accrued liabilities	*3*	*13*	*(9)*	*(0)*	*1*	*1*	*(8)*	*(1)*	*(0)*	*17*	*12*	*28*
Deferred development compensation	*(10)*	*(0)*	-	-	-	-	-	-	-	-	-	-
Deferred revenue	*(1)*	*5*	-	-	-	-	-	-	-	-	-	-
Reservation payments	*(22)*	*5*	*3*	*3*	*2*	*3*	*11*	*3*	*3*	*4*	*4*	*14*
Other long-term liabilities	*2*	*4*	-	-	-	-	-	-	-	-	-	-
Net cash used in operating activities	**(81)**	**(128)**	**(43)**	**(36)**	**(37)**	**(38)**	**(154)**	**(32)**	**(32)**	**(26)**	**(14)**	**(105)**
Cash flows from investing activities												
Acquisition of Fremont and related assets	-	(65)	-	-	-	-	-	-	-	-	-	-
Purchases of PP&E excl capital leases	(12)	(40)	(40)	(50)	(55)	(55)	(200)	(42)	(21)	(11)	(11)	(84)
Increase in restricted cash in DOE account	-	(74)	25	25	25	-	74	-	-	-	-	-
Increase in other restricted cash	(2)	(1)	-	-	-	-	-	-	-	-	-	-
Net cash used in investing activities	**(14)**	**(180)**	**(15)**	**(25)**	**(30)**	**(55)**	**(126)**	**(42)**	**(21)**	**(11)**	**(11)**	**(84)**
Cash flows from financing activities												
Proceeds from issuance of common stock	-	269	-	-	-	150	150	-	-	-	-	-
Proceeds from issuance of cvt preferred	132	-	-	-	-	-	-	-	-	-	-	-
Principal paid on capital leases and other debt	(0)	(0)	-	-	-	-	-	-	-	-	-	-
Proceeds from long-term debt	-	72	50	50	50	50	200	40	50	50	53	193
Proceeds from cvt notes and warrants	25	-	-	-	-	-	-	-	-	-	-	-
Proceeds from exercise of stock options	0	1	-	-	-	-	-	-	-	-	-	-
Common stock and loan facility issuance costs	(2)	(4)	-	-	-	-	-	-	-	-	-	-
Net cash provided by financing activities	**155**	**338**	**50**	**50**	**50**	**200**	**350**	**40**	**50**	**50**	**53**	**193**
Net increase in cash and cash equivalents	**60**	**30**	**(9)**	**(11)**	**(18)**	**107**	**69**	**(34)**	**(3)**	**14**	**28**	**4**
Cash and equivalents at beginning of period	9	70	100	91	80	62	100	169	135	132	145	169
Cash and cash equivalents at end of period	**70**	**100**	**91**	**80**	**62**	**169**	**169**	**135**	**132**	**145**	**173**	**173**
FCF	(93)	(168)	(83)	(86)	(92)	(93)	(354)	(74)	(53)	(36)	(25)	(189)

Drivers	FY 2009	FY 2010	1Q11E	2Q11E	3Q11E	4Q11E	FY 2011E	1Q12E	2Q12E	3Q12E	4Q12E	FY 2012E
Depreciation/PP&E		45%	28%	24%	23%	21%	35%	25%	25%	25%	25%	27%
Depreciation/Sales		9.1%	18.5%	20.3%	25.8%	28.6%	23.2%	36.9%	39.3%	17.3%	12.5%	20.9%
Capex/Sales		34.4%	92.0%	115.2%	131.3%	129.2%	116.8%	90.1%	44.0%	9.6%	7.1%	24.0%
Days Receivables		21	25	25	25	25	25	25	25	25	25	42
Days Payables		123	100	100	100	100	105	100	100	100	100	132
Inventory Days' Supply		192	125	125	125	125	131	110	100	110	110	145
Accrued Liabilities		24%	10%	10%	10%	10%	11%	10%	10%	10%	10%	13%
EBIT	-53	-153	-54	-53	-56	-58	-221	-61	-63	-46	-40	-210
EBITDA	-46	-143	-46	-44	-45	-46	-181	-44	-44	-27	-22	-137
LTM												
EBITDA		-143	-162	-170	-183	-181	-181	-179	-179	-161	-137	-137

e = Morgan Stanley Research estimates

Source: Company data, Morgan Stanley Research

Exhibit 71

Tesla: Annual Revenue Driver Analysis, 2009-2025e

Revenues	FY 2009	FY 2010	FY 2011E	FY 2012E	FY 2013E	FY 2014E	FY 2015E	FY 2016E	FY 2017E	FY 2018E	FY 2019E	FY 2020E	FY 2025E
Unit Volume													
Roadster	840	567	570	425	128	765	1,148	1,262	1,325	1,392	1,364	1,091	1,528
Growth		*-32.5%*	*0.5%*	*-25.4%*	*-70.0%*	*500.0%*	*50.0%*	*10.0%*	*5.0%*	*5.0%*	*-2.0%*	*-20.0%*	*5.0%*
Model S	-	-	-	2,000	15,000	18,000	20,700	23,805	26,186	23,567	22,389	21,269	27,626
Growth					*650.0%*	*20.0%*	*15.0%*	*15.0%*	*10.0%*	*-10.0%*	*-5.0%*	*-5.0%*	*5.0%*
Model X	-	-	-	-	-	10,000	15,000	20,000	25,000	30,000	36,000	41,400	54,739
Growth						*NM*	*50.0%*	*33.3%*	*25.0%*	*20.0%*	*20.0%*	*15.0%*	*3.0%*
Gen 3	-	-	-	-	-	-	-	-	30,000	50,000	100,000	150,000	370,000
Growth									*NM*	*66.7%*	*100.0%*	*50.0%*	*12.1%*
Powertrain	-	975	1,850	2,900	3,480	4,176	5,429	8,143	12,215	18,322	21,987	26,384	42,492
Growth			*89.7%*	*56.8%*	*20.0%*	*20.0%*	*30.0%*	*50.0%*	*50.0%*	*50.0%*	*20.0%*	*20.0%*	*10.0%*
Total Units	**840**	**1,542**	**2,420**	**5,325**	**18,608**	**32,941**	**42,276**	**53,210**	**94,726**	**123,281**	**181,739**	**240,144**	**496,385**
Growth													
Revenue/Unit ($000s)													
Roadster	133,251	133,437	126,013	125,979	128,499	96,374	98,301	100,268	102,273	104,318	106,405	108,533	119,829
Growth		*0.1%*	*-5.6%*	*0.0%*	*2.0%*	*-25.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*
Model S	-	-	-	89,000	80,100	72,090	64,881	66,179	66,840	67,509	68,184	68,866	72,379
Growth					*-10.0%*	*-10.0%*	*-10.0%*	*2.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*
Model X	-	-	-	-	-	80,100	76,095	72,090	64,881	66,179	66,840	67,509	70,952
Growth							*-5.0%*	*-5.3%*	*-10.0%*	*2.0%*	*1.0%*	*1.0%*	*1.0%*
Gen 3	-	-	-	-	-	-	-	-	30,000	30,600	31,212	31,836	32,473
Growth										*2.0%*	*2.0%*	*2.0%*	*2.0%*
Powertrain	-	21,968	21,338	20,224	16,179	11,326	9,060	9,151	9,243	9,335	9,428	9,523	10,008
Growth			*-2.9%*	*-5.2%*	*-20.0%*	*-30.0%*	*-20.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*	*1.0%*
Total Revenue/Unit	**133,265**	**62,956**	**45,993**	**54,496**	**68,477**	**67,382**	**62,599**	**60,482**	**47,724**	**43,985**	**40,753**	**39,163**	**37,283**
Growth													
Revenues													
Roadster	112	76	72	54	16	74	113	127	136	145	145	118	183
Growth		*-32.4%*	*-5.1%*	*-25.5%*	*-69.4%*	*350.0%*	*53.0%*	*12.2%*	*7.1%*	*7.1%*	*0.0%*	*-18.4%*	*7.1%*
Model S	-	-	-	178	1,202	1,298	1,343	1,575	1,750	1,591	1,527	1,465	2,000
Growth					*575.0%*	*8.0%*	*3.5%*	*17.3%*	*11.1%*	*-9.1%*	*-4.0%*	*-4.1%*	*6.1%*
Model X	-	-	-	-	-	801	1,141	1,442	1,622	1,985	2,406	2,795	3,884
Growth							*42.5%*	*26.3%*	*12.5%*	*22.4%*	*21.2%*	*16.2%*	*4.0%*
Gen 3	-	-	-	-	-	-	-	-	900	1,530	3,121	4,775	12,015
Growth										*70.0%*	*104.0%*	*53.0%*	*14.4%*
Powertrain	-	21	39	59	56	47	49	75	113	171	207	251	425
Growth			*84.3%*	*48.6%*	*-4.0%*	*-16.0%*	*4.0%*	*51.5%*	*51.5%*	*51.5%*	*21.2%*	*21.2%*	*11.1%*
Total Automotive Revenues	**112**	**97**	**111**	**290**	**1,274**	**2,220**	**2,646**	**3,218**	**4,521**	**5,423**	**7,406**	**9,405**	**18,507**
Growth		*-13.3%*	*14.7%*	*160.7%*	*339.1%*	*74.2%*	*19.2%*	*21.6%*	*40.5%*	*19.9%*	*36.6%*	*27.0%*	*11.0%*
					1,139	*1,231*							
Developmental Services Sales	**-**	**20**	**60**	**60**	**63**	**66**	**69**	**73**	**77**	**80**	**84**	**89**	**113**
Growth			*205.1%*	*0.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*
Total Tesla Revenue	**112**	**117**	**171**	**350**	**1,337**	**2,286**	**2,716**	**3,291**	**4,597**	**5,503**	**7,491**	**9,493**	**18,620**
Growth		*4.3%*	*46.7%*	*104.4%*	*281.8%*	*70.9%*	*18.8%*	*21.2%*	*39.7%*	*19.7%*	*36.1%*	*26.7%*	*10.9%*

Source: Company data, Morgan Stanley Research

Exhibit 72

Tesla: Annual Operating Profit Bridge Analysis, 2009-2025e

	FY 2009	FY 2010E	FY 2011E	FY 2012E	FY 2013E	FY 2014E	FY 2015E	FY 2016E	FY 2017E	FY 2018E	FY 2019E	FY 2020E	FY 2025E
Beginning of period OP			-147	-221	-285	-69	68	192	246	240	382	760	2,541
Volume			20	51	218	258	162	176	642	346	652	602	437
Mix			-12	14	78	-11	-61	-34	-363	-138	-176	-115	27
Pricing			0	0	2	13	11	14	0	23	28	37	-84
Productivity/Structural Costs			18	0	0	40	69	54	33	87	55	127	-134
R&D Delta			-52	-15	-8	-54	-16	-35	-43	-36	-18	-6	-73
SG&A Delta			-41	-41	-23	-61	-47	-57	-132	-85	-102	-161	-147
Commodity Costs			-6	-5	-4	0	0	0	0	0	0	0	0
Launch Costs			0	-34	-35	-40	23	-27	-99	-23	0	0	0
Depreciation Creep			-29	-33	-13	-8	-17	-36	-46	-32	-60	-23	-55
Other			29	0	0	0	0	0	0	0	0	0	0
End of period OP	-52	-147	-221	-285	-69	68	192	246	240	382	760	1,223	2,513
Inputs:													
Units	840	1,542	2,420	5,325	18,608	32,941	42,276	53,210	94,726	123,281	181,739	240,144	496,385
Revenues	112	117	171	350	1,337	2,286	2,716	3,291	4,597	5,503	7,491	9,493	18,620
Revenue/Unit	133,265	62,956	45,993	54,496	68,477	67,382	62,599	60,482	47,724	43,985	40,753	39,163	37,283
Period-over-Period Unit Volume Change (%)			57%	120%	249%	77%	28%	26%	78%	30%	47%	32%	10%
Variable Margin on Volume (%)			30%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Mix Impact per Unit ($)			(5,089)	2,551	4,194	(328)	(1,435)	(635)	(3,827)	(1,122)	(970)	(477)	54
YoY price change (%)			0%	0%	0.5%	1.0%	0.5%	0.5%	0.0%	0.5%	0.5%	0.5%	-0.5%
Productivity/Structural Costs/Sales (%)			15%	0%	0%	3%	3%	2%	1%	2%	1%	2%	-1%
R&D ($)		-74	-52	-15	-8	-54	-16	-35	-43	-36	-18	-6	-73
SG&A ($)		-42	-41	-41	-23	-61	-47	-57	-132	-85	-102	-161	-147
Commodity Impact per Unit ($)			-2,375	-1,000	-200	-	-	-	-	-	-	-	-
Launch Cost/Sales (%)			0%	-20%	-10%	-3%	1%	-1%	-3%	-1%	0%	0%	0%

OP Margin (%)	**-126%**	**-129%**	**-81%**	**-5%**	**3%**	**7%**	**7%**	**5%**	**7%**	**10%**	**13%**	**13%**
Variable OP Margin (%)		*-136%*	*-36%*	*22%*	*14%*	*29%*	*9%*	*-1%*	*16%*	*19%*	*23%*	*-2%*

Source: Company data, Morgan Stanley Research. E = Morgan Stanley Research estimates.

Exhibit 73

Tesla: Consolidated Annual Income Statement, 2009-2025e

Income Statement	FY 2009	FY 2010	FY 2011E	FY 2012E	FY 2013E	FY 2014E	FY 2015E	FY 2016E	FY 2017E	FY 2018E	FY 2019E	FY 2020E	FY 2025E
Revenues													
Automotive	112	97	111	290	1,274	2,220	2,646	3,218	4,521	5,423	7,406	9,405	18,507
Growth		*-13.3%*	*14.7%*	*160.7%*	*339.1%*	*74.2%*	*19.2%*	*21.6%*	*40.5%*	*19.9%*	*36.6%*	*27.0%*	*11.0%*
Development services	-	20	60	60	63	66	69	73	77	80	84	89	113
Growth			*205.1%*	*0.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*
Total Revenues	**112**	**117**	**171**	**350**	**1,337**	**2,286**	**2,716**	**3,291**	**4,597**	**5,503**	**7,491**	**9,493**	**18,620**
Growth		*4%*	*46.7%*	*104.4%*	*281.8%*	*71%*	*19%*	*21%*	*40%*	*20%*	*36%*	*27%*	*11%*
Total Cost of Revenues	**102**	**86**	**121**	**308**	**1,048**	**1,744**	**1,987**	**2,416**	**3,554**	**4,197**	**5,686**	**7,059**	**13,877**
Growth													
Total Gross Profit	**10**	**31**	**50**	**42**	**289**	**541**	**729**	**875**	**1,043**	**1,306**	**1,805**	**2,435**	**4,743**
Gross Margin	*8.5%*	*26.3%*	*29.3%*	*12.1%*	*21.6%*	*23.7%*	*26.8%*	*26.6%*	*22.7%*	*23.7%*	*24.1%*	*25.6%*	*25.5%*
Research and Development	19	93	145	160	168	222	238	274	316	352	370	376	740
R&D/Sales	*17.2%*	*79.7%*	*84.6%*	*45.7%*	*12.6%*	*10.0%*	*9.0%*	*8.5%*	*7.0%*	*6.5%*	*5.0%*	*4.0%*	*4.0%*
SG&A	42	85	126	167	190	251	299	355	487	572	674	835	1,490
SG&A/Sales	*37.7%*	*72.4%*	*73.6%*	*47.7%*	*14.2%*	*11.0%*	*11.0%*	*10.8%*	*10.6%*	*10.4%*	*9.0%*	*8.8%*	*8.0%*
Stock-based Compensation	1	21	27	33	32	38	38	38	48	46	52	48	67
% of Operating Expense	*2.3%*	*11.9%*	*10.0%*	*10.0%*	*9.0%*	*8.0%*	*7.0%*	*6.0%*	*6.0%*	*5.0%*	*5.0%*	*4.0%*	*3.0%*
Operating Profit (GAAP)	**(52)**	**(147)**	**(221)**	**(285)**	**(69)**	**68**	**192**	**246**	**240**	**382**	**760**	**1,223**	**2,513**
Operating Margin	*-46.4%*	*-125.8%*	*-128.9%*	*-81.3%*	*-5.1%*	*3.0%*	*7.1%*	*7.5%*	*5.2%*	*6.9%*	*10.2%*	*12.9%*	*13.5%*
Operating Profit (Non-GAAP excl. Stock Comp)	**(50)**	**(126)**	**(194)**	**(252)**	**(37)**	**106**	**230**	**284**	**288**	**428**	**813**	**1,271**	**2,580**
Operating Margin	*-45.1%*	*-107.7%*	*-113.1%*	*-72.0%*	*-2.7%*	*4.6%*	*8.5%*	*8.6%*	*6.3%*	*7.8%*	*10.8%*	*13.4%*	*13.9%*
Interest income	0	0	0	1	1	2	3	4	4	12	26	47	235
Rate		0.14%	*0.1%*	*0.4%*	*0.8%*	*1.0%*	*1.5%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*
Interest expense	3	1	6	12	14	14	20	15	2	-	-	-	-
Rate		1.4%	*2.2%*	*2.5%*	*3.0%*	*3.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*
Other income (expense), net	(1.4)	(6.6)	-	-	-	-	-	-	-	-	-	-	-
Pretax Profit	**(56)**	**(154)**	**(226)**	**(296)**	**(82)**	**56**	**175**	**236**	**242**	**393**	**787**	**1,270**	**2,748**
Pretax Margin	*-49.8%*	*-132.0%*	*-132.2%*	*-84.4%*	*-6.1%*	*2.5%*	*6.5%*	*7.2%*	*5.3%*	*7.1%*	*10.5%*	*13.4%*	*14.8%*
Provision for income taxes	0	0	-	-	-	3	11	17	20	38	162	294	659
Effective Tax Rate	*0.0%*	*-0.1%*	*0.0%*	*0.0%*	*0.0%*	*6.0%*	*6.0%*	*7.2%*	*8.4%*	*9.6%*	*20.6%*	*23.2%*	*24.0%*
Ongoing Net Income	**(56)**	**(154)**	**(226)**	**(296)**	**(82)**	**53**	**165**	**219**	**221**	**355**	**624**	**976**	**2,089**
Extraordinary gains (charges)													
Reported Net Income	**(56)**	**(154)**	**(226)**	**(296)**	**(82)**	**53**	**165**	**219**	**221**	**355**	**624**	**976**	**2,089**
Basic Weighted Average Shares	7	51	97	105	108	111	114	116	119	122	125	128	144
Diluted Weighted Average Shares	7	51	97	105	108	125	128	131	134	137	141	144	162
Basic EPS		(3.04)	(2.33)	(2.80)	(0.75)	0.48	1.45	1.88	1.86	2.91	4.99	7.61	14.46
Diluted EPS Reported		(3.04)	(2.33)	(2.80)	(0.75)	0.42	1.29	1.67	1.65	2.59	4.44	6.78	12.88
Diluted EPS (GAAP)	**(7.94)**	**(3.04)**	**(2.33)**	**(2.80)**	**(0.75)**	**0.42**	**1.29**	**1.67**	**1.65**	**2.59**	**4.44**	**6.78**	**12.88**
Diluted EPS (Non-GAAP excl. Stock Comp)	**(7.73)**	**(2.63)**	**(2.05)**	**(2.49)**	**(0.46)**	**0.71**	**1.57**	**1.94**	**1.98**	**2.90**	**4.74**	**7.04**	**13.19**

Source: Company data, Morgan Stanley Research

Exhibit 74

Tesla: Consolidated Annual Balance Sheet, 2009-2025e

Balance Sheet	FY 2009	FY 2010	FY 2011E	FY 2012E	FY 2013E	FY 2014E	FY 2015E	FY 2016E	FY 2017E	FY 2018E	FY 2019E	FY 2020E	FY 2025E
Cash & Cash Equivalents	70	100	169	173	146	200	200	200	200	572	1,314	2,344	11,754
Restricted Cash - Current	-	74	-	-	-	-	-	-	-	-	-	-	-
Account Receivable	3	7	12	40	55	56	67	81	113	136	185	234	434
Inventory	23	45	44	123	215	335	327	397	584	690	935	1,160	2,281
Prepaid expenses and other current assets	4	11	11	11	11	11	11	11	11	11	11	11	11
Total Current Assets	**101**	**236**	**235**	**347**	**427**	**602**	**604**	**689**	**908**	**1,408**	**2,444**	**3,749**	**14,479**
Operating lease vehicles, net	-	8	8	8	8	8	8	8	8	8	8	8	8
Property and equipment, net	24	115	275	286	334	423	585	768	898	948	1,023	1,144	2,013
Restricted cash	4	5	5	5	5	5	5	5	5	5	5	5	5
Other assets	3	23	23	23	23	23	23	23	23	23	23	23	23
Total Assets	**130**	**386**	**545**	**669**	**796**	**1,060**	**1,225**	**1,492**	**1,842**	**2,392**	**3,503**	**4,928**	**16,528**
Accounts payable	15	29	35	112	230	358	381	463	682	805	1,090	1,354	2,661
Accrued liabilities	15	21	13	41	105	174	199	242	355	420	569	706	1,388
Deferred development compensation	0	-	-	-	-	-	-	-	-	-	-	-	-
Deferred revenue	1	5	5	5	5	5	5	5	5	5	5	5	5
Capital lease obligations, current portion	0	0	0	0	0	0	0	0	0	0	0	0	0
Reservation payments	26	31	42	56	51	26	6	-	-	-	-	-	-
Total Current Liabilities	**57**	**86**	**94**	**213**	**390**	**564**	**590**	**710**	**1,042**	**1,229**	**1,664**	**2,065**	**4,054**
Common stock warrant liability	-	6	6	6	6	6	6	6	6	6	6	6	6
Convertible preferred stock warrant liability	2	-	-	-	-	-	-	-	-	-	-	-	-
Capital lease obligations, less current portion	1	0	0	0	0	0	0	0	0	0	0	0	0
Deferred revenue, less current portion	1	3	3	3	3	3	3	3	3	3	3	3	3
Long-term debt	-	72	272	465	465	465	400	291	39	-	-	-	-
Other long-term liabilities	3	12	12	12	12	12	12	12	12	12	12	12	12
Total Liabilities	**65**	**179**	**388**	**699**	**877**	**1,050**	**1,012**	**1,023**	**1,102**	**1,251**	**1,686**	**2,086**	**4,076**
Total convertible preferred stock	319	-	-	-	-	-	-	-	-	-	-	-	-
Common Stock	*0*	0	0	0	0	0	0	0	0	0	0	0	0
Additional paid-in capital	*7*	622	799	832	864	902	939	977	1,025	1,072	1,124	1,172	1,478
Accumulated deficit	*(261)*	(415)	*(641)*	*(863)*	(944)	(891)	(727)	(508)	(286)	69	693	1,669	10,974
Total stockholders' equity (deficit)	(254)	207	158	(31)	(80)	10	213	469	739	1,141	1,817	2,842	12,453
Total Liabilities and Equity	**130**	**386**	**545**	**669**	**796**	**1,060**	**1,225**	**1,492**	**1,842**	**2,392**	**3,503**	**4,928**	**16,528**
check	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Debt	**-**	**72**	**272**	**465**	**465**	**465**	**400**	**291**	**39**	**-**	**-**	**-**	**-**
Net Debt (Cash)	**(70)**	**(28)**	**103**	**291**	**319**	**265**	**200**	**91**	**(161)**	**(572)**	**(1,314)**	**(2,344)**	**(11,754)**
Net Debt/EBITDA		0.2 x	(0.6 x)	(2.1 x)	18.9 x	1.6 x	0.7 x	0.2 x	(0.4 x)	(0.9 x)	(1.3 x)	(1.5 x)	(3.8 x)

Source: Company data, Morgan Stanley Research

Exhibit 75

Tesla: Consolidated Annual Cash Flow Statement, 2009-2025e

Cash Flow	FY 2009	FY 2010	FY 2011E	FY 2012E	FY 2013E	FY 2014E	FY 2015E	FY 2016E	FY 2017E	FY 2018E	FY 2019E	FY 2020E	FY 2025E
Cash flows from operating activities													
Net Income (Loss)	(56)	(154)	(226)	(221)	(82)	53	165	219	221	355	624	976	2,089
Depreciation and amortization	7	11	40	73	86	93	110	146	192	224	284	307	544
Change in fair value of warrant liabilities	1	5	-	-	-	-	-	-	-	-	-	-	-
Gain on cvt notes and warrants	(1)	-	-	-	-	-	-	-	-	-	-	-	-
Stock-based compensation	1	21	27	33	32	38	38	38	48	46	52	48	67
Inventory write-downs	0	1	-	-	-	-	-	-	-	-	-	-	-
Interest on convertible notes	1	-	-	-	-	-	-	-	-	-	-	-	-
Changes in operating assets and liabilities	3	(11)	5	11	70	53	24	35	113	60	141	126	190
Accounts receivable	*(0)*	*(3)*	*(5)*	*(29)*	*(15)*	*(1)*	*(11)*	*(14)*	*(32)*	*(22)*	*(49)*	*(49)*	*(20)*
Inventory	*(8)*	*(20)*	*2*	*(79)*	*(93)*	*(119)*	*8*	*(71)*	*(187)*	*(106)*	*(245)*	*(226)*	*(270)*
Prepaid expenses and other current assets	*(2)*	*(5)*	-	-	-	-	-	-	-	-	-	-	-
Operating lease assets	-	*(8)*	-	-	-	-	-	-	-	-	-	-	-
Other assets	*(0)*	*(0)*	-	-	-	-	-	-	-	-	-	-	-
Accounts payable	*1*	*(0)*	*6*	*77*	*118*	*129*	*23*	*82*	*218*	*123*	*286*	*263*	*315*
Accrued liabilities	*3*	*13*	*(8)*	*28*	*64*	*70*	*24*	*43*	*114*	*64*	*149*	*137*	*164*
Deferred development compensation	*(10)*	*(0)*	-	-	-	-	-	-	-	-	-	-	-
Deferred revenue	*(1)*	*5*	-	-	-	-	-	-	-	-	-	-	-
Reservation payments	*(22)*	*5*	*11*	*14*	*(5)*	*(25)*	*(20)*	*(6)*	-	-	-	-	-
Other long-term liabilities	*2*	*4*	-	-	-	-	-	-	-	-	-	-	-
Net cash used in operating activities	**(81)**	**(128)**	**(154)**	**(105)**	**106**	**237**	**336**	**438**	**574**	**686**	**1,102**	**1,457**	**2,889**
Cash flows from investing activities													
Acquisition of Fremont and related assets	-	(65)	-	-	-	-	-	-	-	-	-	-	-
Purchases of PP&E excl capital leases	(12)	(40)	(200)	(84)	(134)	(183)	(272)	(329)	(322)	(275)	(360)	(427)	(745)
Increase in restricted cash in DOE account	-	(74)	74	-	-	-	-	-	-	-	-	-	-
Increase in other restricted cash	(2)	(1)	-	-	-	-	-	-	-	-	-	-	-
Net cash used in investing activities	**(14)**	**(180)**	**(126)**	**(84)**	**(134)**	**(183)**	**(272)**	**(329)**	**(322)**	**(275)**	**(360)**	**(427)**	**(745)**
Cash flows from financing activities													
Proceeds from issuance of common stock	-	269	150	-	-	-	-	-	-	-	-	-	-
Proceeds from issuance of cvt preferred	132	-	-	-	-	-	-	-	-	-	-	-	-
Principal paid on capital leases and other debt	(0)	(0)	-	-	-	-	-	-	-	-	-	-	-
Proceeds from long-term debt	-	72	200	193	-	-	(65)	(108)	(253)	(39)	-	-	-
Proceeds from cvt notes and warrants	25	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds from exercise of stock options	0	1	-	-	-	-	-	-	-	-	-	-	-
Common stock and loan facility issuance costs	(2)	(4)	-	-	-	-	-	-	-	-	-	-	-
Net cash provided by financing activities	**155**	**338**	**350**	**193**	**-**	**-**	**(65)**	**(108)**	**(253)**	**(39)**	**-**	**-**	**-**
Net increase in cash and cash equivalents	**60**	**30**	**69**	**4**	**(27)**	**54**	**-**	**-**	**-**	**372**	**742**	**1,030**	**2,144**
Cash and equivalents at beginning of period	9	70	100	169	173	146	200	200	200	200	572	1,314	9,610
Cash and cash equivalents at end of period	**70**	**100**	**169**	**173**	**146**	**200**	**200**	**200**	**200**	**572**	**1,314**	**2,344**	**11,754**
FCF	(93)	(168)	(354)	(189)	(27)	54	65	108	253	410	742	1,030	2,144

Drivers	FY 2009	FY 2010	FY 2011E	FY 2012E	FY 2013E	FY 2014E	FY 2015E	FY 2016E	FY 2017E	FY 2018E	FY 2019E	FY 2020E	FY 2025E
Depreciation/PP&E		45%	35%	27%	30%	28%	26%	25%	25%	25%	30%	30%	30%
Depreciation/Sales		9.1%	23.2%	20.9%	6.4%	4.1%	4.1%	4.4%	4.2%	4.1%	3.8%	3.2%	2.9%
Capex/Sales		34.4%	116.8%	24.0%	10.0%	8.0%	10.0%	10.0%	7.0%	5.0%	4.8%	4.5%	4.0%
Days Receivables		21	25	42	15	9	9	9	9	9	9	9	9
Days Payables		123	105	132	80	75	70	70	70	70	70	70	70
Inventory Days' Supply		192	131	145	75	70	60	60	60	60	60	60	60
Accrued Liabilities		24%	11%	13%	10%	10%	10%	10%	10%	10%	10%	10%	10%
EBIT	-53	-153	-221	-210	-69	68	192	246	240	382	760	1,223	2,513
EBITDA	-46	-143	-181	-137	17	162	302	393	431	606	1,045	1,530	3,057
LTM													
EBITDA		-143	-181	-137	17	162	302	393	431	606	1,045	1,530	3,057

Source: Company data, Morgan Stanley Research

Exhibit 76

Tesla: Annual Geographic Sales Forecasts, 2011-2025

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total xEV Market															
US	19	79	129	234	355	471	612	773	957	1,148	1,419	1,691	1,959	2,303	2,669
W. Europe	31	82	139	239	341	482	658	822	1,027	1,305	1,596	1,957	2,462	3,038	3,624
China	9	52	103	182	315	499	727	1,024	1,403	1,785	2,230	2,829	3,409	4,701	5,435
Japan	3	17	41	72	103	143	189	234	287	355	436	535	633	752	873
ROW	2	9	51	153	287	442	605	790	1,083	1,421	1,851	2,381	3,152	4,127	4,937
Global	**64**	**239**	**462**	**880**	**1,401**	**2,037**	**2,790**	**3,643**	**4,757**	**6,013**	**7,532**	**9,392**	**11,615**	**14,921**	**17,538**
Tesla Sales (ex Powertrain)															
US	0.3	1.4	7.1	14.0	19.5	23.5	41.0	44.8	67.0	83.8	99.3	115.0	131.3	149.7	160.1
W. Europe	0.3	0.7	4.2	7.4	6.8	7.2	13.2	20.5	35.9	49.6	55.9	66.5	81.3	91.2	101.5
China	0.0	0.0	1.0	1.8	3.1	5.0	10.9	15.4	21.0	26.8	33.4	45.3	54.5	70.5	81.5
Japan	0.0	0.0	0.4	0.7	1.0	1.4	2.8	3.5	5.7	8.9	10.9	12.3	14.6	15.0	17.5
ROW	0.0	0.3	2.4	4.8	6.3	7.9	14.6	20.7	30.0	44.7	58.9	75.1	86.4	84.5	93.3
Global	**0.6**	**2.4**	**15.1**	**28.8**	**36.8**	**45.1**	**82.5**	**105.0**	**159.8**	**213.8**	**258.4**	**314.2**	**368.0**	**410.9**	**453.9**
Tesla Share (%)															
US	1.4%	1.8%	5.5%	6.0%	5.5%	5.0%	6.7%	5.8%	7.0%	7.3%	7.0%	6.8%	6.7%	6.5%	6.0%
W. Europe	0.9%	0.9%	3.0%	3.1%	2.0%	1.5%	2.0%	2.5%	3.5%	3.8%	3.5%	3.4%	3.3%	3.0%	2.8%
China	0.0%	0.0%	1.0%	1.0%	1.0%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.6%	1.6%	1.5%	1.5%
Japan	0.0%	0.0%	1.0%	1.0%	1.0%	1.0%	1.5%	1.5%	2.0%	2.5%	2.5%	2.3%	2.3%	2.0%	2.0%
ROW	1.9%	2.8%	4.8%	3.1%	2.2%	1.8%	2.4%	2.6%	2.8%	3.1%	3.2%	3.2%	2.7%	2.0%	1.9%
Global	**0.9%**	**1.0%**	**3.3%**	**3.3%**	**2.6%**	**2.2%**	**3.0%**	**2.9%**	**3.4%**	**3.6%**	**3.4%**	**3.3%**	**3.2%**	**2.8%**	**2.6%**

Source: Company data, Morgan Stanley Research

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Not-Rated/Hold	**120**	**4%**	**23**	**2%**	**19%**
Underweight/Sell	**380**	**13%**	**109**	**11%**	**29%**
Total	**2,894**		**1034**		

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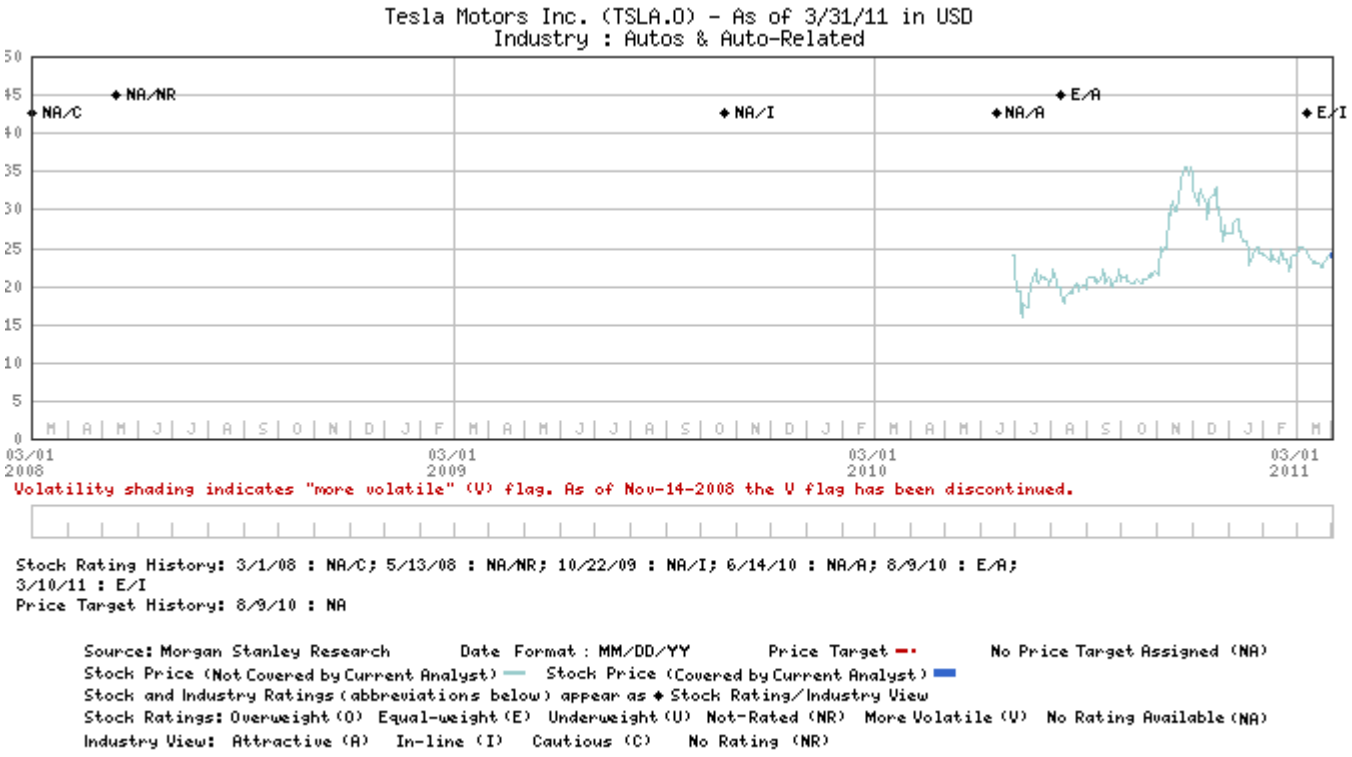

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Industry Coverage:Autos & Auto-Related

Company (Ticker)	Rating (as of)	Price* (03/30/2011)
Adam Jonas, CFA		
Ford Motor Company (F.N)	O (10/04/2010)	$14.86
General Motors Company (GM.N)	O (12/28/2010)	$31.55
Tesla Motors Inc. (TSLA.O)	O (03/31/2011)	$23.71
Ravi Shanker		
AutoNation Inc. (AN.N)	U (03/10/2011)	$35.71
BorgWarner Inc. (BWA.N)	O (10/22/2009)	$78.61
Cooper Tire & Rubber Company (CTB.N)	O (03/16/2010)	$25.99
Goodyear Tire & Rubber Company (GT.N)	O (03/10/2011)	$14.95
Group 1 Automotive, Inc (GPI.N)	U (10/22/2009)	$42.41
Johnson Controls, Inc. (JCI.N)	O (06/14/2010)	$41.6
Lear Corporation (LEA.N)	U (09/23/2010)	$48
Magna International Inc. (MGA.N)	U (03/10/2011)	$48.62
Meritor Inc (MTOR.N)	O (09/23/2010)	$20.02
Penske Automotive Group, Inc (PAG.N)	U (10/22/2009)	$20.41
TRW Automotive Holdings Corp. (TRW.N)	O (09/10/2010)	$54.24
Tenneco Inc. (TEN.N)	U (09/23/2010)	$42.96

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