Tesla Motors, Inc. (TSLA: NNM; \$32.26)

Sell | Target: \$22

December 22, 2010

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TSLA: INITIATE WITH SELL AND \$22 TARGET; PRICED FOR PERFECTION

- Initiate coverage of Tesla Motors with a SELL rating and \$22 target price. Tesla designs, manufactures and sells high-performance electric vehicles (EVs) and electric power train components including battery packs.
- Market for EVs will not grow in the time frame anticipated. We believe the premium cost and range anxiety will limit adoption of EVs. Tesla has sold ~1,400 vehicles since 2008 primarily because of a high sales price (\$109K base price) but also because of the lack of recharging infrastructure, range limitations versus conventional vehicles and lack of a brand name. We expect that hybrid EVs (HEVs) and plug-in hybrid EVs (PHEVs) will continue to take the lion's share of green conscious automobile consumers given their lower price points, better driving ranges and availability from brand name OEMs such as General Motors, Nissan and Toyota.
- Competition limits Tesla's addressable market to the small luxury car segment. Tesla admits its target market, at least for the first Model S (due in mid-2012), is the mid-to-high tier luxury markets with total global sales of less than 2M units globally for 2009. Not only will Tesla compete with these more established OEMs conventional vehicles but also their HEVs and EVs as well.
- Good battery technology but it is not a stand alone business. We believe Tesla's competitive advantage in battery technology for EVs will begin to decline as key OEM partners become competitors as EV adoption begins to accelerate. We acknowledge their battery packs are among the best and lowest cost in the industry today. Longer-term we are skeptical Tesla can drive the next leg of growth as they must convince OEMs to utilize their powertrain technology as well as battery packs.
- **Reception of Model S is crucial.** We believe the niche market, competitive threats and substantial capital intensity will deliver margins below consensus expectations. Despite delivering the first federally compliant all-EV the Roadster in 2008 Tesla has never produced an EV at commercial production levels (nor profitably) and we do not believe they will achieve economies of scale to reach their projected EBIT targets of 14-16%. Delays in introducing the Model S would cause significant cash flow reductions. Investing in Tesla is a bet that the Model S will be on time and on budget and that customer adoption is robust and consistent. A lot of strong execution has to occur to justify the current valuation and management provides limited visibility.
- **Risks include** leveraging its competitive advantage in battery technology to OEMs, increased government financial and regulatory support and faster than expected introduction and/or adoption of the Model S.
- **Priced for perfection.** Profitability is several years away yet the stock trades at a premium on EV/Sales, EV/EBITDA and our 5-year DCF analysis. Given our concerns we believe the stock is overvalued and the risks outweigh the positives.



Tesla Motors, Inc. 3500 Deer Creek Road Palo Alto, CA 94304 phn: 650-413-4000 http://www.tesla.com

| Rating | SELL | il | | | | |
|---|--|---|---|----------|--|----------|
| Target Price | \$22.00 | Earnings Per Share | | | | |
| Ticker Symbol | TSLA | FYE - December | 2008A | 2009A | 2010E | 2011E |
| Market | NASDAQ | 1Q - March | NA | (\$0.77) | (\$1.35)A | (\$0.53) |
| Stock Price | \$32.36 | 2Q - June | NA | (\$0.52) | (\$1.68)A | (\$0.53) |
| 52 wk High | \$36.42 | 3Q - Sept | NA | (\$0.22) | (\$0.38)A | (\$0.51) |
| 52 wk Low | \$14.98 | 4Q - Dec | NA | (\$1.15) | (\$0.60)E | (\$0.51) |
| | | Year | (\$4.15) | (\$2.65) | (\$2.76)E | (\$2.09) |
| Shares Outstanding: | 93.1 M | | | | | |
| Public Market Float: | 15.5 M | P/E | NM | NM | MM | NM |
| Avg. Daily Volume | 1,115,733 | No. of Parameter | | | | POST DAY |
| Market Capitalization: | \$3,013 M | Revenue (\$M) | \$15 | \$112 | \$118 | \$166 |
| Institutional Holdings: | 15.3% | EV/Sales | 201.7x | 26.6x | 25.1x | 18.0x |
| | | Common Institutional Owner | ship Profile (9/30/10) | | | |
| | | | | | CT . I | |
| Senior Executives | | Shareholder | Shares ('000) | % | of Total | |
| Senior Executives Elon Musk | CEO, Product Architect | | Shares ('000) 25,930 | % | 27.8% | |
| Elon Musk | CEO, Product Architect CFO | Shareholder | 20. 93. 20.000.00000.00 | % | neuversers | |
| Water State on | | Shareholder 5% Shareholders | 25,930 | % | 27.8% | |
| Elon Musk Deepak Ahuja Jeffrey Straubel | CFO | Shareholder 5% Shareholders Elon Musk (CEO) | 25,930 27,394 | % | 27.8% 29.4% | |
| Elon Musk Deepak Ahuja | CFO CTO | Shareholder 5% Shareholders Elon Musk (CEO) Directors & Other Officers | 25,930 27,394 6,410 | % | 27.8% 29.4% 6.9% | |
| Elon Musk Deepak Ahuja Jeffrey Straubel George Blankenship Franz von Holzhausen | CFO CTO SVP, Sales | Shareholder 5% Shareholders Elon Musk (CEO) Directors & Other Officers Toyota | 25,930 27,394 6,410 2,941 | % | 27.8% 29.4% 6.9% 3.2% | |
| Elon Musk Deepak Ahuja Jeffrey Straubel George Blankenship | CFO CTO SVP, Sales Chief Designer | Shareholder 5% Shareholders Elon Musk (CEO) Directors & Other Officers Toyota Gilder, Gagnon, Howe | 25,930 27,394 6,410 2,941 2,063 | % | 27.8% 29.4% 6.9% 3.2% 2.2% | |



Source: Company reports and CapStone Investments estimates.

Company Description

Founded in 2003 and headquartered in Palo Alto, CA, Tesla Motors designs, manufactures and sells high-performance electric vehicles (EV) and electric powertrain technology including battery packs. Launched in 2008, Tesla's Roadster was the first commercial EV that complied with federal standards with ~ 1,300 vehicles sold through 3Q10. Tesla's next-generation EV called the Model S is set to launch in 2012 with extended range features. The company also sells battery packs to Daimler for use in their smart and A-class EVs and recently agreed to jointly develop batteries for Toyota's RAV4 model.

Technical Commentary

After failing to break resistance at the \$22 level from the July IPO through September, TSLA shares recently broke out to the upside. However, this rally has now faded. Under the change in polarity principle, we see downside support at the \$22 level, which is our price target.

Initiating Coverage of TSLA with SELL and \$22 Target; Price for Perfection

We are initiating coverage of Tesla Motors with a Sell rating and \$22 target price. Tesla designs, manufactures and sells high-performance fully electric vehicles and advanced electric vehicle powertrain components. In general, the bull case for Tesla centers around the rapid adoption of electric vehicles (EV), particularly their Model S series, at sufficient volumes to produce positive EBITDA margins through fixed cost absorption. These EVs must be delivered on budget and with performance characteristics that rival conventional luxury vehicles at similar price points. In addition the bull case generally calls for increasing OEM partnerships that add powertrain / battery pack volumes. We believe that the more exciting part of Tesla's story is their battery technology. Dramatically reducing the cost curve for battery technology (by far the most expensive power train component) has long been the holy grail for EVs and Tesla appears ahead of the curve. The bear case is that at the current valuation the stock has priced in stellar execution on all these fronts. We believe (1) EV adoption rate is overstated because of high total cost of ownership and range limitations (2) lower than expected production volumes will lead to higher COGS (3) competition from established automobile OEMs is becoming fierce (4) luxury EV positioning limits market opportunity (5) lack of brand name subjects Tesla to higher degree of exposure to product recalls / failure (6) lack of near-term profitability. We believe EVs have a place on U.S. roads but believe there are better ways to gain exposure. Therefore, we initiate coverage of Tesla Motors with a SELL rating and \$22 target price.

| Figure 1: Revenues at a Glance | | | | | | | | | |
|--|--------------------------|---|--|--|--|--|--|--|--|
| | '09A Revenue - \$111.9M | 1 st 3 Qtrs '10A Revenue - \$80.5M | | | | | | | |
| 1. Electric Vehicles | \$111.9M (100% of total) | \$67.9M (84% of total) | | | | | | | |
| 2. Development Services - | \$0M | \$12.6M (16% of total) | | | | | | | |
| Battery Packs, Powertrain | | | | | | | | | |
| Source: Company reports and CapStone Investments estimates | | | | | | | | | |

Reasons for Sell

Cost and range limitations will limit appeal of EVs

Cost: Tesla's focus on electric vehicles (EVs) limits itself to a niche market. Hybrid EVs (HEV) and plug-in HEVs (PHEVs), in particular, address a far wider audience of auto buyers. The "green" appeal of EV and PHEVs is clearly growing but economic reality (average MSRP for a light-duty vehicle, i.e. a non-commercial automobile, is ~\$21,500) will limit their appeal. Tesla is targeting the luxury market, which is under 2M vehicles in total and an average price of \$65,500.

Fewer than 2M luxury vehicles limits Tesla's TAM

| Figure 2: Fewer | than 2M | Luxury Vehicles | Limits Tesla's T | AM |
|-----------------|-------------------|-----------------|------------------|----|
| | (17 - 11 - 14 - 1 | (16-11-14-) | (617) | |

| | (Ks Units) | (Ks Units) | | (\$K) | |
|------------------|--------------|--------------|-------------|---------------|---|
| Luxury Segments | 2009 U.S. | 2009 Europe | Approximate | Blended | |
| Categories | Segment Size | Segment Size | Price Range | Average Price | Model Examples |
| Middle Tier | 194 | 954 | \$40-\$67K | ~\$55K | Mercedes E Class, BMW Series 5, Infiniti GS, Porsche Cayman |
| Upper Tier | 65 | 149 | \$75-\$110K | ~\$85K | Mercedes S Class, BMW Series 7, Infiniti LS, Lexus LS |
| Expensive Tier | 12 | 14 | \$210K+ | \$250K | Lexus LFA, Ferrari HY-KERS, Bentley Continental GT |
| Specialty | 65 | 34 | \$40-\$150K | ~\$67K | Mercedes CLK Class, BMW Series 6, Infiniti G |
| Sport Editions | 89 | 109 | \$40-\$135K | ~\$77K | Porsche 911, Infiniti 350Z |
| Total Luxury Mkt | 425 | 1.260 | | ~\$65.5K | |

Source: CSM Auto, Company reports and CapStone Investments estimates

Competitors are not just luxury sedans rather cheaper EV and PHEVs.

One of the key questions for Tesla is – can they produce and sell enough cars before its better-funded, more diversified competitors, introduce their own EVs and PHEVs at far low price points? We do not think so. Why? First, the Chevy Volt was introduced in 4Q10 and the all-EV Nissan Leaf will be introduced in 1Q11. Both cars are slated to be between \$10-\$15K cheaper than the Tesla Model S, which is not due to be introduced until 2Q12 at the earliest. Tesla will introduce the Model S at \$57,400 vs. (\$41,000 for the Volt and \$32,780 for the Leaf). Tesla may not be targeting the luxury market, and its limited total vehicle size, but we continue to believe the appeal is the EV market where the typical consumer remains very cost-focused.

Profitability is driven by cost reductions, which will be largely volume driven. Tesla may be one of the first all electric vehicle OEMs, which is progressive and environmentally friendly, but that does not equate to profitability. Look at the market for automobiles. Sales correlate most strongly with economic activity and disposable income. We contend that the market for the Roadster and Model S is very narrow so manufacturing economies of scale will prove difficult to achieve.

The keys to achieving profitability driven by the Model S are:

- (1) Delivering a better battery that is more modular and easier to manufacture at a low enough cost that its higher energy density does not offset other cost savings.
- (2) Source more components in-house to achieve better pricing.
- (3) Produce dramatically higher vehicle units to cover higher fixed costs with new manufacturing facility

Tesla's profitability depends largely on the company cutting vehicle production costs by ~40% as it moves from the Roadster to the Model S. However, we lack visibility into exactly how Tesla will lower production costs so we project them based on management commentary.

Figure 3: Model S – Projected Cost Reductions from Roadster to Model S

| Roadster – Starting Point | 100% | Comments: |
|---|--------------|--|
| Battery – better energy density (lower cost per kW/hr.) | + 7-10% | Energy density increase from 53kW/Hr. to 73 kW/hr. (estimated 20-25% price decline kW/hr.) |
| Improved design | -10-15% | Less expensive power train; modular battery |
| Pull manufacturing in-house | - 10-15% | Remove Lotus margin; source more components itself |
| Fixed cost absorption | - 20%+ | 20x higher units lowers component costs |
| Model S Cost (vs. Roadster) | -30% to -43% | |

Source: Company reports and CapStone Investments estimates

<u>Battery</u>: The battery pack must have greater energy density because the Model S is heavier which must be offset by a reduction in the cost per kW/hr. at the cell level. Even with the reduction the battery cost is forecast to add to production costs not lower them.

<u>Design improvements</u>: The Roadster was built on a conventional chassis with a more modular battery, an integrated drive train unit and aluminum body (vs. hand built carbon fiber).

Projected cost reductions are heavily dependent on economies of scale

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<u>In-house manufacturing</u>: Eliminating the Lotus glider and moving chassis production in-house is an easy margin enhancement but how they determine whether to source components vs. building them in-house will also play a role in potential cost reductions.

<u>Fixed cost absorption</u>: How Tesla can achieve economies of scale will play a crucial role in its ability to reduce costs. We estimate that Tesla must produce at least 15K units annually to achieve purchasing discounts and reach operating profitability.

Battery cost and ZEV credits are primary margin differences. Tesla has indicated they believe they can achieve EBIT margins ~13-15% EBIT margins, vs. auto OEMs typically between 5-8%. So a company that has never mass manufactured vehicles is now going to produce a luxury vehicle with ~2x the industry's operating margins? We believe the primary cost advantage will stem from Tesla's ability to drive down battery cost. In exhibit 4 we break down the expected cost structure for the Model S against a conventional luxury sedan.

Figure 4: Battery Cost and ZEV Credit are the Primary Margin Differences

Battery cost and ZEV credit are the primary margin differences between Tesla's Model S and typical conventional luxury sedan

| Convential High Volu | me Luxu | ry Sedan | | Model S | | | | | |
|--|------------------|--------------------------|-----------------------|--------------------|---|--------------------------|-----------------------|--|--|
| Auto part: | (\$) Cost | (%) Component Cost | (%) Sales Price | | (\$) Cost | (%) Component Cost | (%) Sales Price | | |
| Engine / Electric Motor | \$9,750 | 30% | 15% | Power Elec, Module | \$3.100 | 6% | 4% | | |
| Transmission HVAC | \$2,850 \$950 | 9% 3% | 4% 1% - | HVAC | \$2,250 | 4% | 3% | | |
| Body Chassis | \$4,850 | 15% | 7% | TIVAC | Ψ2,230 | 470 | 3 /0 | | |
| Interior design | \$3,250 | 10% | 5% | | | | | | |
| Suspension | \$2,260 | 7% | 3% | All other | \$19,875 | 37% | 25% | | |
| Electronics | \$1,900 | 6% | 3% | | | | | | |
| Other | \$6,330 | 20% | 10% | | | | | | |
| Battery | \$60 | 0.2% | 0% | Battery | \$29,000 | 53% | 36% | | |
| Total bill of materials | \$32,200 | | 49% | | \$54,225 | | 68% | | |
| Non-component variable costs (warranty, freight, labor, selling, mktg) | \$10,975 | | 17% | | \$10,900 | | 14% | | |
| Total variable costs (VC) | \$43,175 | | 66% | | \$65,125 | | 81% | | |
| Estimated fixed costs (FC) | \$17,000 | | 26% | | \$11,200 | | 14% | | |
| Total VC & FC | \$60,175 | | 92% | | \$76,325 | | 95% | | |
| ZEV Credit Average sales price Sales price with ZEV Credit | \$65,500 | | | | \$7,500 \$80,000 \$87,500 | | | | |
| Operating profit / margin | \$5,325 | | 8% | | \$11,175 | | 13% | | |
| Operating profit / margin ex-Z | FV | | | > | \$3.675 | | 4% | | |

Source: Company reports and CapStone Investments estimates

The primary difference for the component costs are the engine vs. electric motor and battery cost. Our estimate uses a battery cost \$400 kW/hr. assumption, which admittedly is higher than the ~\$300 kW/hour that Tesla estimates. While it is true that Tesla is not burdened with traditional OEM legacy cost structures but also lacks their scale advantages in the bill of material costs. However, the margin difference arises primarily from the zero emission vehicle (ZEV) credit. Without it we believe Tesla is at best even with traditional OEMs operating margins.

Total cost of ownership is understated. Given that so few Roadsters are on the road we also believe the total cost of ownership will include higher repair and maintenance costs and higher insurance rates due to increased mechanical **CapStone Investments Trading Desk: 1-858-875-4550**5

complexity, somewhat offset by the difference between paying for greater electricity usage versus the absence of a gas bill. For example, we were quoted two auto insurances rate for our "hypothetical" Roadster at 4-5x our own \$45,000 MSRP sedan (\$109K Roadster is only 2.4x more expensive).

Range: One of the main arguments in favor of EV adoption is that the ~80% of daily car usage is under 40 miles and therefore, a lack of range versus conventional vehicles is largely negated. However, we find two problems with that argument. First, there is a decided lack of infrastructure (electric charging stations at gas stations) once a user leaves their home. The workplace infrastructure is not yet available nor is there the retail distribution of fuel as for conventional vehicles. We believe that at a minimum the primary pace for charging one's EV will be the home, and to a lesser extent, the workplace, so "range anxiety" is a very real hindrance to EV adoption. Tesla's Roadster achieves ~245 miles of range on a single charge and one version of the Model S is expected to achieve up to 300 miles, which does help mitigate some of these range limitations but at a far higher price point that conventional vehicles.

Conventional ICEs have dramatically higher driving ranges

| Figure 5: Conventional ICE Dramatic Range Differences Are Not Offset by Fuel Cost Savings | | | | | | | | | | |
|---|------------------|-----------------------|----------------------|---------------------------|------------------|--|--|--|--|--|
| Conventional ICE: | | | | | | | | | | |
| Model – 2011 | Tank | Avg. MPG | Range (mi.) | Range vs. Exp. Model S | Price | | | | | |
| BMW Series 5 550I | 18.4 | 17 | 313 | 196% | \$59,700 | | | | | |
| Porsche Boxster Spyder | 22 | 14.3 | 315 | 197% | \$61,200 | | | | | |
| Lexus LS 460 | 22.4 | 19 | 426 | 266% | \$65,380 | | | | | |
| Infiniti M56 | 20 | 21 | 420 | 263% | \$57,600 | | | | | |
| HEVs / EVs: | | | | | | | | | | |
| Model - 2011 | Туре | Advertised Range (mi) | Expected Range (mi.) | Range vs. Model S | (w/ZEV) Price | | | | | |
| Tesla Model S – 230 mi | EV | 230 | 160 | 100% | \$60,500 | | | | | |
| Chevy Volt | EV/Gas Hybrid | 300 | 300 | 188% | \$33,500 | | | | | |
| Nissan Leaf | EV | 100 | 70 | 44% | \$25,280 | | | | | |
| Tovota Prius v5 | Hybrid | 595 | 595 | 372% | \$20.570 | | | | | |

Source: Company reports and CapStone Investments estimates

We do not see the fuel savings (figure 6) offsetting the dramatic range differences offered by conventional vehicles at similar price points. Additionally, competing PHEVs and EVs soon to be on the road ahead of the mid-range Model S also offer lower prices points and better driving ranges (except the Nissan Leaf).

Figure 6: EV Fuel Costs are Lower but Enough to Offset Price and Gasoline Infrastructure?

Annual fuel costs are lower for EVs but enough to offset sticker price and lack of recharging

infrastructure?

| g 0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | | | | | | | |
|---|--------------------|---|--|--|--|--|--|
| Gasoline Powere | d ICE | Electricity | | | | | |
| Unit cost of energy | \$2.75 (\$/gallon) | \$0.13 kW/hour (avg. across US.) | | | | | |
| Energy consumer per mile | 25 | 3.3 miles per kW/hr. (~300w to move an | | | | | |
| (avg. fleet mpg) | | EV one mile so (0.3kW.hr. = 3.3mi./kW/hr. | | | | | |
| Cost of energy per mile | \$0.11 | \$0.04 | | | | | |
| Avg. miles driven per year | 12,000 / 15,000 | 12,000 / 15,000 | | | | | |
| Annual energy costs | \$1,320 / \$1,650 | \$480 / \$600 | | | | | |
| Fuel Savings for EVs | | \$840 / \$1,050 | | | | | |
| | | | | | | | |

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Source: BYD, DoE, NREL, CapStone Investments estimates

Model S manufacturing delays and/or insufficient demand would prove costly

Tesla sources ~2,000 parts from 150 suppliers. When they were developing the Roadster the company did suffer some supply issues. Tesla's small size likely pushed the company to the back of the line. Delays in sourcing parts could push out the introduction of the Model S, which is critical to Tesla's future growth. It is difficult to gauge whether Tesla is ahead or behind on its targets for the Model S since they do not provide reservation figures on a quarterly basis. In addition the more important development and production targets are fairly vague.

Vague deadlines to track model S developments = limited visibility

| Figure 7: Vague Deadlines | to Track Model S Developments |
|---------------------------|---|
| YE10 | Alpha build Supplier sourcing Engineering and external body design |
| YE11 | Beta build Stamping facility, paint shop operational Tooling equipment in place Regulatory validation – crash & other safety tests |
| YE12 | Production testing Start production and vehicle delivery |
| Source: Tesla | |

Tesla has no experience with mass production. Tesla has never mass produced automobiles. They have sold a very limited number of EVs since first introducing the Roadster in 2008. We believe one of the biggest risks for Tesla is the delivering the Model S and next-generation models on time and at sufficient volumes to produce positive gross margins. Currently potential customers reserve a yet-to-be produced Model S by paying a reservation deposit. In mid-2009 the original timeline to deliver the Model S was by the end of 2011, so Tesla has already missed one date. We calculate a delay of one year in introducing the Model S could cost \$300M in cash flow.

The commitment to building the model S increases the capital base, raises capital intensity and makes Tesla closer to traditional OEMs (more than management may believe). Tesla spent ~\$100M to develop the Roadster and expects to spend ~\$400M to develop the Model S. Part of that expenditure is for in-house manufacturing. In May 2010, Tesla purchased the former NUMMI (New United Motor Manufacturing) plant in Fremont, CA for \$42M and \$17M in equipment. NUMMI was established at the site of a former General Motors Fremont Assembly site that closed in 1982. GM and Toyota reopened the factory as a joint venture in 1984 to manufacture vehicles to be sold under both brands. The joint venture ended in 2009 as GM pulled and several months later Toyota announced plans to pull out as well. GM wanted to learn about lean manufacturing from Toyota and Toyota gained its first manufacturing base in North America. Through May 2010, NUMMI built almost 8M cars and trucks (averaging 6K vehicles per week). Tesla and Toyota will collaborate on the development of EVs, components, and production systems. The plant will first be used to produce the Tesla Model S sedan and can produce ~200,000 vehicles a year to start but could be expanded.

Automobile start-ups have failed with regularity

Automotive OEMs face a capital intensive hurdle as designing, manufacturing and selling vehicles is inherently so. Automobile production requires substantial investments in manufacturing, equipment, R&D, product design, engineering, technology and marketing in order to meet both consumer preferences and regulatory requirements. Large OEMs are able to benefit from economies of scale by leveraging their investments and activities on a global basis across brands and models. The automotive industry is also cyclical and tends to track changes in the general economic environment. OEMs that have a diversified revenue base across geographies and products and have access to capital are well positioned to withstand industry downturns and to capitalize on industry growth. The largest automotive OEMs are GM, Toyota, Volkswagen and Ford, all of which operate on a global basis and produce cars and trucks across a broad range of vehicle segments. Tesla Motors is not a large OEM, it is a tiny one. Tesla is the first car company to go public since Ford in 1952! There is a reason why so few do so. It is a very difficult business to achieve profitability. Do these names ring a bell?

Automotive startups have short life spans

| 939-1952, R.I.P. 944-1949, R.I.P. |
|--------------------------------------|
| 944-1949, R.I.P. |
| |
| 950-1955, R.I.P. |
| 974-1976, R.I.P. |
| 975-1982, R.I.P. |
| 971-1993, R.I.P. |
| 97 |

Outside of DeLorean, made famous through Hollywood's use in motion picture *Back-to-the Future*, do these name evoke brand names like GM and Ford? Coke or Pepsi? We did not think so either. Tesla has sold ~1,400 Roadsters to date. That figure is about 2 days total production from any major auto OEM so Tesla clearly lacks its competitors' selling prowess.

Competition from integrated OEMs is becoming fierce

We believe one of the biggest obstacles for Tesla will be the number of choices auto consumers face when the Model S becomes available in 2H12. In exhibit 7 we show several HEV models and EV models that are slated to be available before the Model S. The Model S would have extended range versus all these models but at a higher price point than most as well.

Examples of EV and PHEV launches likely before Tesla's Model S

Figure 9: Examples of EV and PHEV Vehicle Launches Likely Before Tesla's Model S
PHEV and EV Competitor Launches are Proliferating



Source: Company reports and CapStone Investments estimates

The first all-EV competitor to Tesla's Roadster is likely to be the Nissan Leaf. Nissan was a major beneficiary of the DoE loan program under the *Advanced Technology Vehicle Manufacturing Program*. At the same time that Tesla received \$465M in loan commitments in January 2010, Nissan (North America) received \$1.6Bn to retool its Smyrna, Tennessee factory to build EVs and batteries. We believe Nissan has a head start over Tesla. Nissan has aggressive plans to produce mass market EVs as do General Motors, Ford, Toyota, Honda, BMW, Porsche, etc.

The best judge of future demand for Model S is the number of reservation payments. At the end of 2Q10 and 3Q10 we believe there were ~2,600 and over ~3,000 reservations, respectively, approximately 1 ½ years before production is slated to begin. We estimate 5,500 vehicles will be produced in 2012. Contrast this with Nissan's plans to build 100,000 EVs by 2012. Not only will the learning curve be steep but we simply cannot believe each company they will have similar cost structures at such drastically different production output.

As mentioned Nissan plans to build as many as 100,000 vehicles by 2012 and believes it will do so at prices competitive with conventional vehicles (partly by leasing the battery pack, which is by far the most expensive component of EVs). Nissan has a joint venture with battery maker NEC, and a decade-old alliance with France-based Renault (who has long been an industry leaders partnering for EVs and conducting trials for charging infrastructure.

Lack of rechargeable infrastructure feeds range anxiety

As of September 2010 there were 25 Tesla electric vehicle charger sites in California according to EV Charger News. The cities include Atascadero, Coalinga, Davis, Dixon, Fairfield, Goleta, Los Angeles, Menlo Park, Newport Beach, Orland, Rocklin, Salinas, San Luis Obispo, San Ramon, Santa Maria, Vacaville, Vallejo, Woodland and Yreka. Clearly the infrastructure does not remotely exist to support

Lack of rechargeable infrastructure limits vehicle range and adds to "range anxiety"

EV recharging for Tesla vehicles even in the green-conscious state of California. The total number of EV commercially available charging infrastructure stations is clearly on the rise (perhaps few hundred stations to date) due to efforts such as General Motors, Nissan, Ecotality (E.V. Project believes 6,500 commercial charging sites could be in place by the summer of 2011). General Electric plans to deploy 25K-30K public and private WattStation chargers by 2015.

Ambitious projects are increasingly announced such as E.V. Project and Project Get Ready but charging station deployments are still scattered.





Source: EV Charger News

On a positive note, the newly passed tax cut extension bill includes a one-year extension of a federal tax credit towards the purchase and installation of electric car charging stations. ON a negative note the credit was reduced from 50% of the purchase price up to \$2,000 (\$50K commercial) to 30% of the cost up to \$1,000 (we do not know the commercial rate yet). The lack of charging infrastructure only adds to the "range anxiety" some cite as a primary reason that EV adoption will be slower than expected. Until a recharging infrastructure is in place we would expect EVs to be limited to the second car for most households.

Limited addressable customer base

We believe Tesla's customer base is limited to (1) luxury vehicle purchasers (2) progressive, "green-conscious" consumers seeking to bolster a lifestyle image. One would need to believe an overwhelming number of the HEV owners would switch to an EV rather than a hybrid, pay a far higher price than their current automobile (50-150% higher), deal with the lack of infrastructure and rely on a still commercially unproven technology (if it breaks, could a mechanic even fix it?).

Fast Growth Rate for PHEVs & EVs but Very Small Total Sales

Peaking market share forecast for Tesla in 2014 at 1.8%

U.S. HEVs sales shows adoption rates growing but unit sales remain low

Figure 11: Fast Growth Rate for PHEVs & EVs but Very Small Total Sales

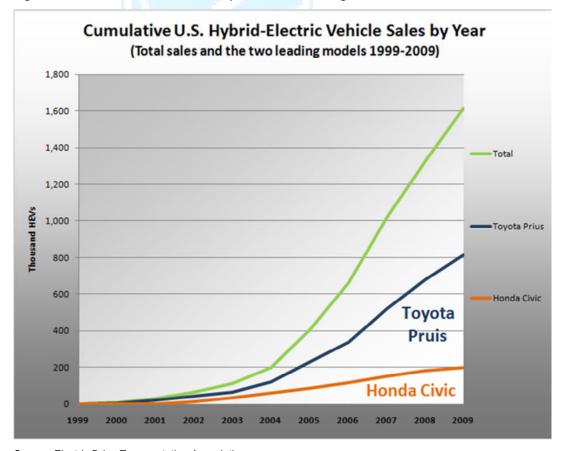
Global Vehicle Sales

in Ks of vehicles

| | | | | | | | | | | | CAGR |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Total Units | 2006 | 2007 | 2008 | 2009 | 2010E | 2011E | 2012E | 2013E | 2014E | 2015E | '10-'15 |
| Coventional vehicles | 64,549 | 67,825 | 64,326 | 54,706 | 59,433 | 60,334 | 62,233 | 64,472 | 65,482 | 65,859 | 2% |
| HEVs | 416 | 793 | 1,133 | 2,309 | 4,891 | 8,785 | 11,867 | 15,127 | 17,440 | 18,835 | 31% |
| PHEVs | 1 | 1 | 4 | 4 | 30 | 103 | 348 | 625 | 688 | 1,305 | 113% |
| EVs | 0 | 0 | 3 | 4 | 20 | 50 | 100 | 250 | 435 | 525 | 92% |
| Total | 64,966 | 68,619 | 65,466 | 57,023 | 64,374 | 69,272 | 74,548 | 80,474 | 84,045 | 86,524 | 6% |
| | | | | | | | | | | | |
| % of Total | | | | | | | | | | | |
| HEVs | 0.6% | 1.2% | 1.7% | 4.0% | 7.6% | 12.7% | 15.9% | 18.8% | 20.8% | 21.8% | |
| PHEVs | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.5% | 0.8% | 0.8% | 1.5% | |
| EVs | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.3% | 0.5% | 0.6% | |
| | | | | | | | | | | | |
| Tesla's Unit Volume: | 0.00 | 0.00 | 0.10 | 0.83 | 0.55 | 0.55 | 6.00 | 16.05 | 20.45 | 31.80 | 125% |
| % of EVs & PHEVs | 0.0% | 0.0% | 1.4% | 10.4% | 1.1% | 0.4% | 1.3% | 1.8% | 1.8% | 1.7% | |
| % of EVs | 0.0% | 0.0% | 3.3% | 20.8% | 2.8% | 1.1% | 6.0% | 6.4% | 4.7% | 6.1% | |
| Source: CSM Auto | | | | | | | | | | | |

The total market size is forecast for PHEVs and EVs is only expected to reach ~150,000 vehicle in 2011 and 448,000 in 2012, ~ one-half of 1%. The typical auto plant makes 10,000 vehicles per month, which means 1-2 typical auto plants could make the entire production for 2011, highlighting the limited opportunity addressable market through 2012. Cumulatively only 1.6M HEVs were sold from 1999-2009.

Figure 12: U.S. HEVs Sales - U.S. Adoption Rates Growing but Unit Sales Remain Low



Source: Electric Drive Transportation Association

Lack of brand name (not cache) subjects Tesla to greater risk of product failure / recalls

In early October 2010 Tesla was faced with a recall of 439 Roadsters with a minor electrical problem with voltage system. The mechanical fix was minor and easily covered under Tesla's warranty reserve. We understand that recalls are a cost of doing business in the automobile industry but with such a small installed base of Roadsters 439 of out of ~1,400 is almost 33% of their total unit sales. The effect while not quantifiable could serve to dent Tesla's image if such recall become more common, as could be the case with a mass s produced vehicle such as the Model S.

Lockup ends December 27th, unleashing 3x current free floating shares

On December 27th the IPO lock up period ends, which will add ~3x the current free floating shares. Free float will be ~55M shares up from ~15M. While we do not expect to see massive selling pressure with so many shares held by insiders, partners and employees/directors the mere fact that they are available could add some selling pressure.

Reasons to Buy

OEM support validates technology; could it become marriage?

One of the strongest reasons for the bull case for Tesla is the increasing OEM support for its battery packs and EV development. Tesla has relationships/partnerships with Toyota (3% equity stake, joint development for RAV4 model), Daimler (invested \$50M in 2009, battery purchaser) and Panasonic (1.5% equity stake, powertrain development). Additional OEM partnerships and/or battery purchases would add scale, revenue growth and enhance market acceptance of Tesla's technology and system design. However, we believe the ultimate reason to buy Tesla is its attractiveness as an acquisition candidate. So many Silicon Valley companies see this route as the ultimate goal. Any of the three OEMs highlighted below could be potential takeover candidates.

<u>Toyota investment</u>: Toyota invested \$50 million in Tesla in May 2010 (2.9M common shares or 3%+ equity stake) and has since invested another \$60M to partner with Tesla in developing an all-electric powertrain for its RAV4 small SUV.

Panasonic investment: Japanese electronics giant Panasonic invested \$30M in Tesla to jointly develop powertrains for 1.4M shares or a 1.5% equity stake. Panasonic currently manufacturers batteries for gasoline HEVs. Tesla currently uses Panasonic battery cells (and cells from other OEMs), in its battery modules and has collaborated with Panasonic in developing next generation power packs, along with potential joint marketing efforts. We believe Panasonic is positioning itself as a top supplier of batteries for EVs and PHEVs vehicles. It has a joint venture with Toyota (called Primearth EV Energy), to make nickel-metal hydride and lithium ion batteries. Panasonic just completed its merger with rival Sanyo Electric this month, another major manufacturer of nickel-metal hydride and lithium ion batteries. So Panasonic's investment could be both a blessing and a curse if Panasonic is able to eventually use its size and scale to cut costs for its own lithium ion batteries in larger form factors.

<u>Daimler relationship</u>: Daimler invested \$50M for ~9.5% stake (Series E preferred stock now converted) in Tesla in May 2009. The investment came when Tesla was

OEM support validates technology

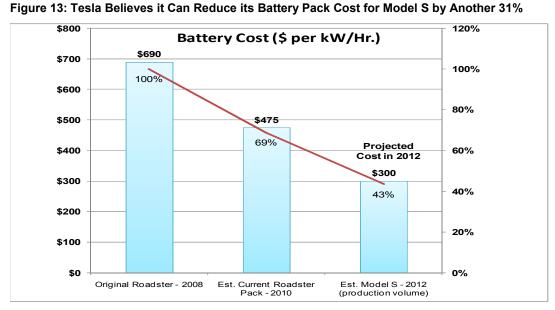
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close to depleting its cash position, providing a nice return on investment. Daimler is using Tesla's battery in its Smart fortwo EV program and is expected to use Tesla's battery packs and chargers for its A-class fleet expected to be introduced in Europe sometime in 2011. However, the battery pack technology may not be as important as Tesla's experience using them in EVs, specifically the battery management, charging technology and electric powertrain engineering. Daimler already holds a 49.1% share in Li-Tek, a battery subsidiary of the German firm Evonik, in a joint venture called Deutsche Accumotive. Daimler is working on both electric battery and hydrogen fuel cell technology.

Low cost of battery pack is a competitive advantage – for now

The biggest drawback to establishing electric vehicles has always been the electricity storage – the battery. The key technological development has been to deliver greater energy and power density (amount of energy that can be stored per unit of weight / volume), at an acceptable consumer cost. Typical battery solutions (lead acid, nickel cadmium, nickel metal hydride) have improved their energy densities but not enough to significantly improve driving range (mass of vehicles meant batteries had to be huge). Lithium-ion technology has emerged as the primary method of lessening (but not yet eliminating) the storage problem.

The most exciting part of Tesla's story is its battery technology. Unlike its primary competitors (ENER1, A123 and BYD) that use large form factors and different chemical compositions, Tesla's uses 6,831 "18650" cells typically used in consumer electronics products which in total has a mass of ~1,000 lbs.. 18650 refers to the ubiquitous form factor most consumer electronics devices utilize per cell (a cylindrical 18mm diameter X 65mm length; just larger than AA battery). Tesla's proprietary cathode geometry and different chemical compositions allow their batteries to have greater energy density at lower costs. Competitors' advanced automotive (large from factor) batteries achieve energy densities ~150-160 watt hours per kilogram (wh/kg) versus Tesla's consumer electronics type batteries at ~220-230 wh/kg (cell level not pack level). The cost difference is \$100-\$150 per kW/hr (\$350-400 for advance automotive vs. \$250 kW/hr. for Tesla's). These two main advantages allow for a lower BOM and better performance, all else equal.



Tesla believes it can reduce its battery pack cost for Model S by another 31%

Source: Company reports

We estimate the current battery pack for the Roadster (53kW/hr.) is \sim \$25-\$26K (minimum 1K units annually) which equates to \sim \$475 kW/hr. versus competitor at \$625-\$650 kW/hr. on higher unit volumes (over 10K units annually).

Model S reservations (pre-orders) exceed expectations

Given that the Model S launch is ~18 months away at the earliest the closest way to determine demand is through reservations. If Tesla can demonstrate it has reservations equal to or above the expected 5,000-6,000 for 2012 and/or 19,000-20,000 unit sales forecast for 2013 then investors will likely see this as evidence that Tesla will exceed expectations, providing a boost for the stock.

Government support for EVs is strong but also highlights lack of profitability

EVs do receive support from several government entities including federal and state incentives. The most prominent is the \$7,500 federal credit (direct subsidy) for the purchase of alternative fuel vehicles. We have identified another 20 federal programs that offer tax rebates, loan guarantees and cash grants for EVs. There are numerous state incentives as well. For example California has enacted ~29 laws to promote EV adoption from tax incentives for electric charging infrastructure development to mandating state purchase of EVs after commercial availability. California's Air Resources Board has a zero emission vehicle (ZEV) policy aimed at promoting zero tailpipe emissions over time.

Current Energy Secretary Stephen Chu just announced up to \$184M for advanced vehicle R&D. The funding opportunity addresses the development of key technologies required to achieve large scale adoption of advanced vehicles such as PHEVs and EVs. Although the first of a new generation of electric drive vehicles is now entering the market, advancements in batteries, power electronics, and lightweight materials are required to be fully competitive. The funding (solicitations by 2/28/11 and awards in the summer of 2011) focus on the following:

Can Tesla take advantage of new government funding for advance vehicle R&D?

| Figure 1 | 4: New | Funding | for Ac | lvance \ | Vehicle | R&D |
|----------|--------|---------|--------|----------|---------|-----|
|----------|--------|---------|--------|----------|---------|-----|

| rigure 14. New Furturing for Advance Verticle NaD | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|
| Advanced fuels and lubricants | Improve today's vehicle fuels and lubricants to enable optimal performance of advanced combustion engines. Accelerate commercial availability of lighter weight vehicles | | | | | | | | | |
| Light weighting materials | using advanced materials like magnesium and carbon fiber to dramatically reduce vehicle weight. | | | | | | | | | |
| Multi-material light weight material prototype | Design, build, and test a light-weight vehicle that is 50% lighter than a baseline light-duty vehicle. | | | | | | | | | |
| Advanced cells & design technology for electric drive batteries | Develop high energy or high power electric vehicles that significantly exceed existing state-of-the-art technologies in terms of performance and/or cost. | | | | | | | | | |
| Advanced power electronics and electric motor technology | Develop the next generation of power inverters and electric motors to meet demanding performance targets while achieving significant reductions in cost. Improve the efficiency of thermoelectric devices to convert | | | | | | | | | |
| Thermoelectric and enabling engine technology | engine waste heat to electricity. Develop early-stage enabling engine technologies to improve fuel efficiency and reduce emissions. | | | | | | | | | |
| Fleet efficiency | Develop and demonstrate fuel efficient tire and driver feedback technologies that will positively affect efficiency of the fleet of passenger cars and commercial vehicles. | | | | | | | | | |
| Advanced vehicle testing and evaluation | Conduct laboratory and field evaluations of advanced technology vehicles and related infrastructure, while developing new or modified test procedures. | | | | | | | | | |

Source: DoE

All these programs should help spur EV adoption. If Tesla is able to successfully wind awards from these and/or other government funded programs, our sell thesis could be negatively impacted. However, they also point out the lack of profitability of EVs and the inability of companies involved in EV development to stand alone.

Solid management team assembled

We believe Tesla has a strong management team with engineering and design strength and acknowledge that such talent is an important part of developing a profitable company. Tesla's culture is focused on engineering and product development. The assembled team does have a diverse set of skills from aerospace design to retail sales to more traditional automotive engineering and manufacturing. We have one concern that CEO Elon Musk appears to be a serial entrepreneur and there is a risk that he moves onto a new venture once the Model S is launched. He also currently fills the dual roles as CEO of both Tesla and SpaceX.

Diverse management talent at Tesla

| Figure 15: Executive Management Biographies – Diverse Talent | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Executive | Former Position(s) | | | | | | | | | | | |
| Elon Musk - CEO | Co-founder of PayPal and chairman of spaceship developer Space Exploration Co; chairman Solar City | | | | | | | | | | | |
| Deepak Ahuja – CFO | Ford Motor, Small Car Product Development; CFO Ford South Africa | | | | | | | | | | | |
| Jeffrey Straubel – CTO, Co-Founder | CTO, Volacom (aerospace); Rosen Motors | | | | | | | | | | | |
| Franz von Holzhausen | Director of Design Mazda NA; positions at GM and VW | | | | | | | | | | | |
| John Walker - VP N. American Sales & | Audi – GM, NA Sales | | | | | | | | | | | |
| Mktg | | | | | | | | | | | | |
| VP Manufacturing – Gilbert Passin | Toyota – Production Engineering | | | | | | | | | | | |
| George Blakenship – SVP, Sales | Gap, Apple | | | | | | | | | | | |
| Source: Company reports | | | | | | | | | | | | |

A glance at Tesla - focus on EVs and battery packs

Tesla's two operating segments are electric vehicles and powertrain components, mainly battery packs and some engineering services.

(1) Electric Vehicles – 75% of 3Q10 revenue

Tesla focus on designing, manufacturing and selling electric-only vehicles geared for the high performance luxury market. The company introduced the hand-built carbon fiber Roadster in 2008 and also offers an upgraded and slightly redesigned model called the Roadster Sport. As with the original Roadster, there is quick acceleration to a top speed of 125 mph. However, the Roadster Sport reaches 0-to-60 mph in an extremely quick 3.7 seconds (versus 3.9 seconds) with the same liquid-cooled 53 kWh lithium-ion battery pack. This 288 hp two-seater fully charges in 3.5 hours via a 240 volt /70 amp charger using any 120 volt outlet. Both the original Roadster and the Roadster Sport use Lotus Elise bodies built in the UK.

Figure 16: Tesla Realizes the Limited Roadster TAM; Trying to Launch More Affordable Models

| 2008-2012 Roadster & Roadster Sport | | 2012 Model S | | Longer-Term Model - Unnamed |
|--|---|--|---|---|
| High performance all EV sports car Lotus body with Tesla powertrain \$109K base price, ~\$140 realized price 245 mile range ~1,500 units sold since 2008 | - | Full size all EV sedan All in-house design and manufacture \$57,400 base price before ZEV credit; ~ \$80K avg. realized price 160-300 mile range 2012 expected launch date | - | Lower cost sedan (<\$40K) 2015 launch date at the earliest |

Tesla began taking model reservations in 1Q09 and which we believe reached over 3,000 in 3Q10. In 1Q10 Tesla introduced a leasing program for the Roadster to make it more affordable.

Figure 17: Tesla's Cars Are Aimed at Niche Luxury Market

Tesla is a bet on

two EV models







Source: Company reports

(2) EV Powertrain components & engineering services – 25% of 3Q10 revenue

Tesla's powertrain business consists of Tesla's efforts to monetize its EV battery technology, chargers and engineering services.

Figure 18: Example of Tesla Charger and Roadster Battery Pack



Source: Company reports

Advantages of Tesla's battery pack:

- Cheaper pack since they use generic cells / form factors Currently most major battery manufacturers such as Panasonic/Sanyo, Sony and LG make the 18650 form factor. This helps Tesla keep costs down and they can seek out multiple bids to keep suppliers honest.
- 2. Improved range the cost advantage enables longer range vehicles
- 3. Sleeker design the flat, modular design of the pack may add to vehicle stability

Disadvantages of Tesla's battery pack:

- 1. Complexity increases Tesla's choice in using smaller cells adds some complexity to the battery pack. The cell's state of charge must be optimized suing software while an active cooling system keeps it from overheating.
- 2. There is also a greater potential for failed cells (although this minimizes battery underperformance vs. large form factors, especially as the Model S pack has a higher energy density.

As we discussed earlier a major reason for Tesla to gain profitability is to achieve strong gross margins on its Model S production. The key drivers in the (projected) ~ 30% battery pack cost reductions (to \$300 kW/hr. from today's ~\$475kW/hr) are as follows:

- 1. Pack and cell level improvements 35-40% higher pack densities and 10-15% higher energy density (cell chemistry changes from lithium cobalt to nickel cobalt aluminum lowers cobalt use and it is very expensive vs. nickel and aluminum).
- 2. <u>Economies of scale</u> 20x greater production volumes = improved fixed cost absorption

EV Basics

Electricity can be used as a transportation fuel to power battery electric vehicles (EVs). EVs store electricity in an energy storage device, such as a battery. The electricity powers the vehicle's wheels via an electric motor. EVs have limited energy storage capacity, which must be replenished by plugging into an electrical source.

In an EV, a battery or other energy storage device (e.g. fuel cell) is used to store the electricity that powers the motor. Some EVs have onboard chargers; others plug into a charger located outside the vehicle. Both types use electricity that comes from the power grid. Although electricity production may contribute to air pollution, EVs are considered zero-emission vehicles because their motors produce no exhaust or emissions.

In contrast, hybrid electric vehicles (HEV) combine the benefits of high fuel economy and low emissions with the power, range, and convenience of conventional diesel and gasoline fuels. HEV technologies also have potential to be combined with alternative fuels and fuel cells to provide additional benefits. Typically HEVs combine the internal combustion engine of a conventional vehicle with the battery and electric motor of an EV. The combination offers low emissions and convenience as HEVs never need to be plugged in.

How does a hybrid electric vehicle work? Hybrid electric vehicles are powered by two energy sources (1) an energy conversion unit (such as an ICE or fuel cell) and an energy storage device (such as batteries or ultracapacitors). The energy conversion unit can be powered by gasoline, diesel, compressed natural gas, hydrogen or other fuels.

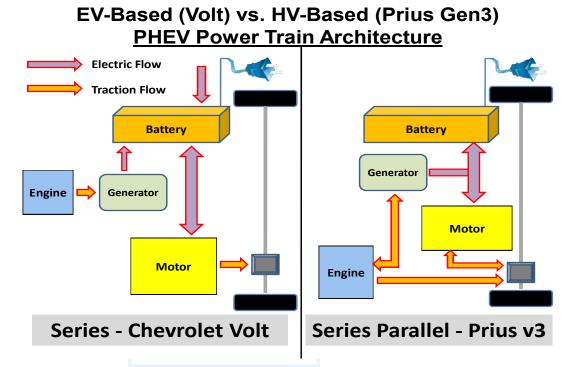
How does a plug-in hybrid electric vehicle (PHEV) work? A plug-in hybrid electric vehicle (PHEV) has two defining characteristics (1) it can be plugged in to an electrical outlet to be charged; (2) has some range that can be traveled on the energy it stored while plugged in. PHEVs can be charged with electricity like pure electric vehicles and run under engine power like hybrid electric vehicles. This combination offers increased driving range with potentially large fuel savings and emissions reductions.

| Benefits | HEVs | PHEVs | EVs |
|----------------------|--|--|--|
| | Better than similar conventional vehicles | Better than similar HEVs and conventional cars | No liquid fuels |
| | HEVs achieve 20-40% more mpg than conventional vehicles (e.g. the 2010 Honda Civic Hybrid gets 40 / 45 mpg city/highway versus conventional Civic at 25/36 mpg. | PHEVs get about 40% better fuel economy than HEVs and permit driving at slow and high speeds using only electricity. Fuel economy above that of HEVs varies based on how often the vehicle is driven on only electricity. | Fuel economy of a electric vehicles usually expressed a cost per mile. |
| | Lower emissions than conventional vehicles | Lower emissions than HEVs and conventional | Zero emissions |
| Low Emissions | HEV emissions vary by vehicle and type of hybrid power system. HEVs are often used to offset fleet emissions to meet local air-quality improvement strategies and federal requirements. | PHEV emissions are lower than HEV emissions because they are driven on electricity some of the time. Most categories of emissions are lower for electricity generated from power plants than from engines running on gasoline or diesel. | EV emissions do not come from the tailpipe so EVs are considered zero-emission vehicle: However, emissions a produced from the electric power plant. Most categories of emissions are lower for electricity generated from power plants that from engines running on gasoline or diesel. |
| | Less expensive to operate than a conventional vehicle | Less expensive to operate than an HEV or conventional vehicle | Less expensive to operate than gasolin and diesel vehicles |
| Fuel Cost Savings | Because of their improved fuel economy, HEVs usually cost \$0.05- \$0.07 per mile to operate compared to conventional vehicles, which cost \$0.10-\$0.15 per mile to operate. | When operating on electricity, a PHEV can be expected to cost \$0.03-\$0.04 per mile (based on average U.S. electricity price). When operating on gasoline, the same vehicle will cost \$0.05-\$0.07 per mile compared to conventional vehicles, | Because EVs operate using only electricity, a typical electric vehicle costs \$0.03-\$0.04 per mile for fuel (based or average U.S. electricit price). |
| | HEVs use loss patroloum | which cost \$0.10- \$0.15 per mile to operate. | EVa uso algetricity |
| Energy Security | HEVs use less petroleum because they have better fuel economy than conventional vehicles. Some HEVs use renewable and domestically produced alternative fuels instead of gasoline or diesel. | PHEVs use electricity produced from coal, nuclear, natural gas, and renewable sources. Some PHEVs use renewable and domestically produced alternative fuels instead of gasoline or diesel. | EVs use electricity produced domestically from coal, nuclear, natural gas, and renewable sources. |
| Fuel Flexibility | Same as conventional | Can get fuel at gas stations or charge at home or public charging stations | Can charge at home of public charging station |
| Vehicle Examples | Toyota Prius v1; Honda Insight v1; Ford Fusion; Mercedes Benz S400, Honda Civic Hybrid | Ford Escape, Fisker Karma, Chevy Volt? | Roadster, Nissan Lea |

Differences in powertrain architecture

The two things that differentiate a PHEV from an HEV are the inclusion of a charge-depleting operating mode and a recharging plug. Therefore, a PHEV can be implemented using any of the typical HEV architectures – parallel, series or power-split. For example we compare and contrast the Chevrolet Volt with the Toyota Prius third generation to show the differences between series HEV and series parallel designs.

Figure 20: PHEV Power Train Differences for Brand Name Auto OEMs

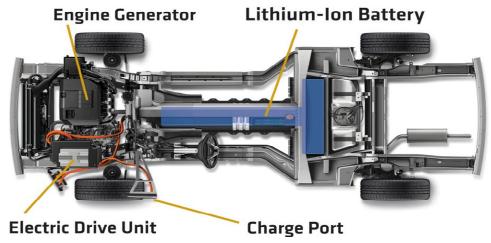


Source: Company reports and CapStone Investments estimates

There are advantages and disadvantages to each approach. Considering that ~80% of daily driving distances are less than 40 miles, the simplicity efficiency and zero emission (in city traffic) of a series design or topology is very attractive. Another variation is powers-split hybrids, which are parallel hybrids. They incorporate power-split devices allowing for power paths from the engine to the wheels that can be either mechanical or electrical. The main principle behind this system is the decoupling of the power supplied by the engine (or other primary source) from the power demanded by the driver.

Some controversy has recently surrounded the Volt. We believe the Volt is architected bit differently than originally thought but a little but of mystery still surrounds the powertrain architecture.

Figure 21: Is the Volt a Hybrid or and EV? Depends on who you ask.



Source: General Motors

GM calls it an "electric-plus-gas" system. The mystery is whether the engine serves only to feed the batteries (unconnected to the wheels) and will start up only when they need recharging. Or is the gas engine really hooked up to the electric drive train? If so, is it directly or indirectly connected? The Volt's 150-horsepower electric motor is backed up by a 1.4-liter four cylinder engine. However, the gas engine has no connection to the drive train. When the Volt reaches its battery range of 40 miles, the gas engine generates electricity to drive the electric motor. This "extended-range mode" gives the Chevy volt a range of 344 miles. In any case whether the Volt is an HEV or an EV the fact remains the Volt is now on the market and is eligible for the full \$7,400 tax credit.

| rigure 22: Advar | stages & Disadvantages of Series vs. Para | allei Powertrain Phev Architectures |
|------------------|--|---------------------------------------|
| | Series (e.g. Chevy Volt) | Series-Parallel (Toyota Prius) |
| | Internal combustion engine (ICE) is | Includes the capability for the ICE |
| Design / | connected in a series to the generator- | simultaneously power the drive shaft |
| Topology | battery-electric motor and is not directly | and recharge the battery |
| | connected to the driveshaft | |
| | Battery tends to be larger (e.g. Volt = 16 | Battery is smaller (e.g. Prius Gen3 = |
| Battery | kw/Hr., 40-mile range, 90% <> 40% state | 4kw/Hr., 9-mile range, 90% <> 30% |
| | of charge (SoC) | state of charge (SoC) |
| Electric Motor | Motor tends to be larger (e.g. Volt = peak | Motor tends to be smaller (e.g. Prius |
| | power of 140kW, 180HP | Gen3 peak power of 50kW, 67HP) |
| Combustion | ICE tends to be smaller (e.g. Volt 1.4L, | ICE tends to be larger (e.g. Prius |
| Engine | 53kW, 71HP) | Gen3 1.8L, 70kW, 94HP) |
| | None (no gears involved) b/c the torque | Essentially none. Single gear than |
| Transmission | characteristics and wide RPM range of | never shifts |
| | electric motors | |
| Performance | Full performance (incl. improved | Combination of ICE and electric |
| | acceleration) in EV alone | motor needed for full performance |
| Emissions | In city traffic Series design likely to | In highway traffic series parallel is |
| | pollute less | likely to pollute less |
| | After series hybrid has exceeded its EV | In contrast a parallel series hybrid |
| | range (using ICE to turn generator to | the loss of efficiency (after |
| Other notes | create elec. to then create mechanical | exceeding the EV range) is only |
| | energy by the motor to turn the drive | ~5% since the ICE directly turns the |
| | shaft) there is ~15% efficiency loss | driveshaft via the transmission. |

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Source: Company reports, Plug-in Vehicle, Libralato Holdings

As batteries become cheaper, longer-life commodity item, PHEVs with the most power and range will likely dominate this auto segment.

Cost premiums for EV and PHEVs partially offset by fuel cost savings and government subsidies

EVs are typically more expensive than similar conventional vehicles before tax credits or other incentives. The average incremental price—the additional price of an HEV over a comparative non-hybrid—was \$5,500 for cars and \$6,700 for lightduty trucks in 2009. This price is expected to drop to \$1,500 for cars by 2015, according to a study by Argonne National Laboratory. Light-duty PHEVs and EVs that are nearing market availability are expected to be more expensive than similar conventional vehicles. However, the cost premiums for PHEVs and EVs can be offset by fuel cost savings, a federal tax credit, and state incentives.

Type of energy storage systems/battery is crucial to cost reductions

Energy storage systems, usually batteries, are essential for electric drive vehicles, whether they are HEVs, PHEV or EVs. Batteries must have a high energy-storage capacity per unit weight and per unit cost. Because the battery is the most expensive component in most electric drive systems, reducing the cost of the battery is crucial to producing affordable electric drive vehicles. The following energy storage systems are used in HEVs, PHEVs and EVs.

Lithium-ion batteries are currently the leading technology for **EVs**

| Figure 23: Lithium-Ion Batteries are Currently the Leading Technology for EVs | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|
| Battery Type | Characteristics: | | | | | | | | | |
| Lithium-lon | Lithium-ion batteries are currently used in most portable consumer electronics such as cell phones and laptops because of their high energy per unit mass. They also have a high power-to-weight ratio, high energy efficiency, good high-temperature performance, and low self-discharge. Some components of lithium-ion batteries can be recycled. Most near-term plug-in hybrid electric vehicles and all-electric vehicles will use lithium-ion batteries. Development is | | | | | | | | | |
| Nickel-Metal Hydride Lead-Acid | ongoing to reduce cost and improve calendar and life cycle. Nickel-metal hydride batteries, used routinely in computer and medical equipment, offer reasonable specific energy and specific power capabilities. Nickel-metal hydride batteries have a much longer life cycle than lead-acid batteries and are safe and abuse tolerant. These batteries have been used successfully in all-electric vehicles and are widely used in hybrid electric vehicles. The main challenges with nickel-metal hydride batteries are their high cost, high self-discharge and heat generation at high temperatures, and the need to control hydrogen loss. Lead-acid batteries can be designed to be high power and are inexpensive, safe, and reliable. However, low specific energy, poor cold-temperature performance, and short calendar and life cycle impede their use. Advanced high-power lead-acid batteries are being developed, but these batteries are not currently used in most EVs other than for ancillary loads in some cases. | | | | | | | | | |
| Lithium- Polymer | Lithium-polymer batteries with high specific energy, initially developed for electric vehicle applications, also can provide high specific power for hybrid electric vehicle applications. Like lithium-ion batteries, they could become commercially viable if the cost was lowered and life cycle improved. | | | | | | | | | |
| Ultracapacitors | Ultracapacitors store energy in a polarized liquid between an electrode and an electrolyte. Energy storage capacity increases as the liquid's surface area increases. Ultracapacitors provide vehicles additional power during acceleration and hill climbing and help recover braking energy. They are also useful as secondary energy-storage devices in electric drive vehicles because they help electrochemical batteries level load power. Additional electronics are required to maintain a constant voltage due to low energy density. | | | | | | | | | |

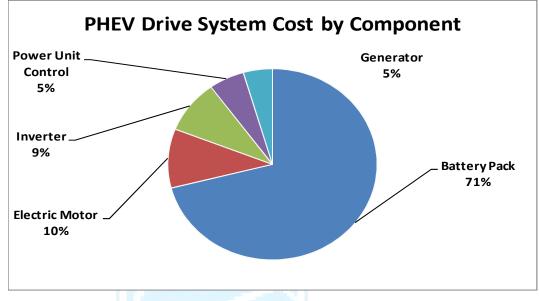
CapStone Investments Trading Desk: 1-858-875-4550

Source: Company reports and CapStone Investments estimates

Driving component costs lower to reduce bill-of-materials (BOM). The battery is the most expensive component in an electric vehicle. For example, ~ 80% of a PHEV-40's drive system is due to the battery pack. Other major components include the electric motor, inverter, power control unit and generator.

Battery cost dominates PHEV drive system cost



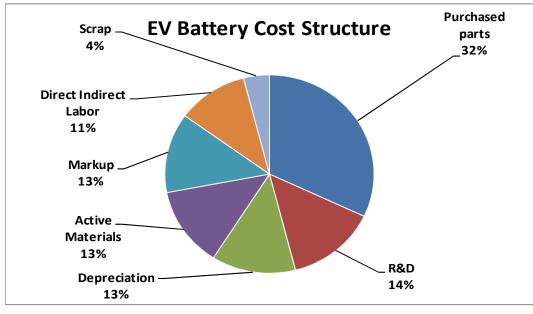


Source: MIT Energy

Where our sell thesis is perhaps weakest is that the strength of EVs derives from the drive train and battery technology. We believe Tesla's OEM investees (Daimler, Toyota and Panasonic) saw Tesla as an inexpensive way to partake of one leading battery pack form factor and cost rather than an investment in EVs. Tesla receives access to supplier lines at rates lower than they could have without these investees.

EV material costs often outweighed by manufacturing cost, which are heavily dependent on unit volume

Figure 25: Material Costs Often Outweighed by Manufacturing Cost, Dependent on Volume



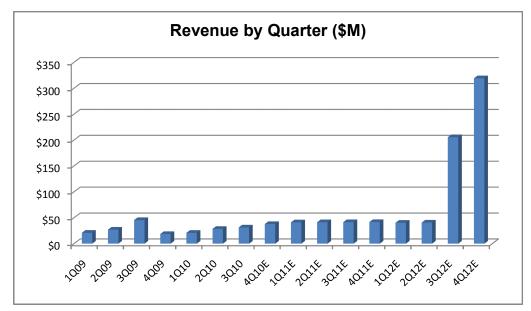
Source: MIT Energy

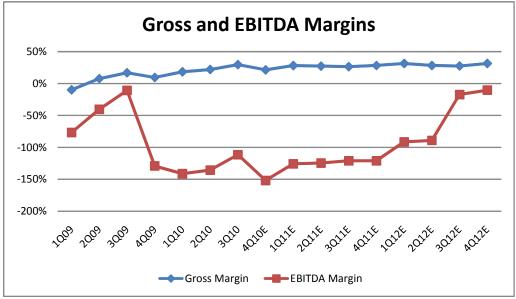
Financials – Tesla is well capitalized but significant losses through 2012

Tesla's future may be bright but it is still almost two years away from any meaningful revenue growth and probably three years away from realistic profitability. Tesla is heavily dependent on a successful introduction of the Model S vehicle for revenue growth and profitability. So many things have to go right for Tesla to justify its current valuation. Look how Tesla is still over 1.5 away from meaningful revenue growth and operating profitability is over 2 years away.

Tesla's revenue growth is far out; profitability is even farther out

Figure 26: Tesla's Revenue Growth is Far Out; Profitability is Even Farther Out





Source: Company reports and CapStone Investments estimates

We forecast sales below consensus. Or thesis that Tesla is attacking a niche market for luxury vehicles (at least the first Model S model) is the primary reason we see vehicle sales at lower levels than our competitors do. It is not because we are **CapStone Investments Trading Desk: 1-858-875-4550**

discounting Tesla's suggested sales prices for its Model S to any degree. For battery pack sales we forecast an ASP of \$25K (minimum 1K units) and expect packs sales to ramp from 1.125K in 2010 to 3.4K annually in 2015 with minimal ASP erosion.

We forecast margins below consensus. We forecast lower gross margin assumptions than the Street consensus. Our peak gross margins, which do not occur until 2014-2015 are 200-300 bp lower than current covering analysts' forecasts primarily due to our belief than Tesla's EV sales will be below forecasts and capital investment higher than expected. We also believe that Tesla's decision to open and operate its own retail store network adds unnecessary costs and would be better served with a distributor approach. Currently the company has 15 stores open and hopes to have stores globally over the next few years.

Zero emission vehicle (ZEV) credits. The ZEV program grants credits to auto OEMs that manufacture zero tailpipe emission vehicles. Originally designed by the California Air Resources Board and adopted in various degrees by at least 11 other states, ZEV credits are margin-enhancements for companies such as Tesla that make ZE vehicles. Since many states require that each auto OEM that sells vehicles in their state must sell a certain percentage of E vehicles, if an OEM cannot do so they could buy their credits from Tesla (partial credits are given for hybrid vehicles). Many similar type programs are proliferating in Europe where they have actively traded Co₂ markets. Currently the ZEV credit is \$7.5K but we expect the figure to decline over the net several years.

The balance sheet is cleaner and stronger after the IPO. The convertible preferred stock is gone after the IPO. The cash position with the DoE loan (see below) along with the IPO (\$184Min net proceeds) and equity investments from various OEMs equals a well-funded company. Tesla does have significant capital commitments now that they have purchased NUMMI's old factory and we expect capex to grow substantially.

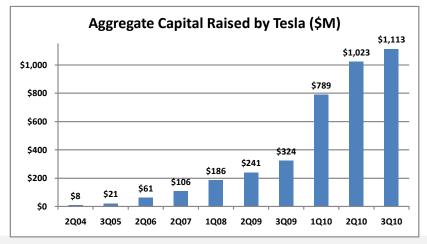
DoE loan repayment will not help cash flow. The DoE loaned Tesla \$465M in January 2010 under section 136 of the 2007 Energy Independence and Security Act (also called the Advanced Technology Vehicle Manufacturing Program). The loan, technically a conditional loan commitment, was designed to aid Tesla in funding its Model S development and power train business. The loans are fixed to the treasury rates (3%) and Tesla must repay the loans by December 2018. The majority of the loans, \$365M, will finance the production facility (purchasing and modifying NUMMI's old plant), with the remaining \$100M aiding the manufacturing for battery packs and power train development.

Competitor Nissan (Nissan North America) is getting \$1.6Bn to retool its Smyrna, Tennessee factory to build electric cars and batteries, so Tesla's competitor got a big boost as well. Should the Model S production ramp be delayed or sales fall short of estimates then Tesla must begin to repay the DoE loan starting in 4Q12. The \$465M loan calls for \$13M quarterly payments beginning in 4Q12.

Figure 27: Significant Capital Raised (> \$1Bn)

Aggregate Capital Raised by Tesla

| Investors | 2Q04 | 3Q05 | 2Q06 | 2Q07 | 1Q08 | 2Q09 | 3Q09 | 1Q10 | 2Q10 | 3Q10 |
|--|------|------|-------------|-------|-------|-------|-------|-------|---------|---------|
| CEO Musk & Compass Technology | \$8 | | | | | | | | | |
| CEO Musk & Valor Equity | | \$13 | | | | | | | | |
| CEO Musk, GOOG Founders, JPM, Ebay 1st | | | \$40 | | | | | | | |
| employee (Skoll), DFJ (VC) | | | \$40 | | | | | | | |
| Convert Preferred Stock - Series D | | | | \$45 | | | | | | |
| CEO Musk et al | | | | | \$80 | | | | | |
| Convert Preferred Stock - Series E | | | | | | \$55 | | | | |
| Convert Preferred Stock - Series F | | | | | | | \$83 | | | |
| DoE Loans | | | | | | | | \$465 | | |
| IPO | | | | | | | | | \$184 | |
| Toyota Investment | | | | | | | | | \$50 | |
| Panasonic Investment | | | | | | | | | | \$30 |
| Toyota Investment - Develop RAV4 | | | | | | | | | | \$60 |
| Total Capital Raised (aggregate) | \$8 | \$21 | \$61 | \$106 | \$186 | \$241 | \$324 | \$789 | \$1,023 | \$1,113 |



Source: Company reports and CapStone Investments estimates

Valuation – losses through 2013 make comparables difficult

We use three different metrics to value Tesla. Admittedly comparability is difficult since we forecast Tesla will continue to deliver net losses for several years. We use enterprise value (EV)-to-sales and EV-to-EBITDA and a 5-year discounted cash flow (DCF) to value Tesla. The average of the enterprise value multiples and our discounted cash flow analysis yields our \$22 target price.

1. EV-to-Sales and EV-to-EBITDA multiples

We believe Tesla deserves a premium multiple to its peer group but we believe the stock more than reflects such a premium. Given the company's leading battery technology and first-to-market advantage we believe the shares should trade at a premium to its peer group. We define Tesla's peer group as automotive OEMs, battery companies, and applied technology companies. With Tesla potentially at the forefront of its growth trajectory we assign a 50% premium multiple to its peer group for both metrics. Even with this premium the shares appear starkly overvalued.

We project out to 2014 and 2015 for sales and EBITDA, apply the premium multiples, subtract forecast debt, discount both values by 20% (3 and 4 years for

sales and 2 and 3 years for EBITDA), divide by projected shares outstanding to arrive at our per share equity values, respectively.

Using these assumptions Tesla trades at \$13.38-\$20.01 per share on a multiple of EBITDA and \$16.74-\$21.54 on a multiple of sales, ~50% higher than the current share price if we take the mean of each of the two figures. If we average the two higher figures per metric we arrive at a per share value of \$20.77.

Applying 50% multiple to peer group still highlights valuation gap

Figure 28: Applying 50% Multiple to Peer Group Still Highlights Valuation Gap

| (1) EV-to-EBITDA | | | | | |
|--|-----------|---------|-------|------------------------|------------------------|
| \$M, except per share figures | 2011E | 2012E | 2013E | 2014E | 2015E |
| EBITDA | (\$162) | (\$76) | \$35 | \$182 | \$321 |
| Multiple (50% premium to comps on 2012E) | 12.9x | 12.9x | 12.9x | 12.9x | 12.9x |
| EV | (\$2,085) | (\$979) | \$445 | \$2,350 | \$4,139 |
| Debt (end of period) | \$357 | \$441 | \$389 | \$337 | \$285 |
| Equity Value (undiscounted) | | | | \$2,013 | \$3,855 |
| Discount rate - 20% Factor | | | | 2- year factor 1.44 | 3-year factor 1.728 |
| Equity Value Discounted by Factor | | | | \$1,398 | \$2,231 |
| Shares Outstanding | | | | 104.5 | 111.5 |
| Per Share Value | | | | \$13.38 | \$20.01 |

| (2) EV-to-Sales | | | | | | | | | | |
|--|-------|---------|---------|----------------|---------------|--|--|--|--|--|
| \$M, except per share figures | | | | | | | | | | |
| | 2011E | 2012E | 2013E | 2014E | 2015E | | | | | |
| Sales | \$166 | \$605 | \$1,428 | \$1,715 | \$2,620 | | | | | |
| Multiple (50% premium to comps on 2011E) | 2.0x | 2.0x | 2.0x | 2.0x | 2.0x | | | | | |
| EV | \$324 | \$1,186 | \$2,798 | \$3,359 | \$5,132 | | | | | |
| Debt (end of period) | \$357 | \$441 | \$389 | \$337 | \$285 | | | | | |
| Equity Value (undiscounted) | | | | \$3,022.9 | \$4,847.4 | | | | | |
| Discount rate - 20% | | | | 3- year factor | 4-year factor | | | | | |
| Factor | | | | 1.728 | 2.074 | | | | | |
| Equity Value Discounted by Factor | | | | \$1,749 | \$2,337 | | | | | |
| Shares Outstanding | | | | 104.5 | 108.5 | | | | | |
| Per Share Value | | | | \$16.74 | \$21.54 | | | | | |
| Average of 2015E metrics> | | | | | | | | | | |

Source: Company reports and CapStone Investments estimates

As mentioned above, we compare Tesla to companies that produce battery technologies for EVs & PHEVs, along with automotive OEMs. While Tesla is an early stage company it does not compare favorably using price-to-book value, enterprise value-to-sales. Since Tesla does not earn positive earnings we cannot compare it to its peers using a more traditional P/E ratio.

Tesla is expensive using any relative multiple - P/B, EV/Sales & EV/EBITDA

Figure 29: Tesla is Expensive Using Any Relative Multiple - P/B, EV/Sales & EV/EBITDA

Comparable Valuations - Electric Vehicles, Applied Technologies, Battery Makers, Auto OEMs (All Figures in \$M except per share data and volume and where otherwise indicat (per share) Dil She Ticker FYE Price Cap. Cash Debt Out. (Ms) P/B Value Applied Technologies / EVs / Battery Makers Ener1 Dec \$4.12 \$481 \$52 \$33 \$462 117 0.2x \$17 Bvd Co. Ltd. BYDDY \$91,114 \$2.311 \$92,456 5.8x \$7 Dec \$42.50 \$3.654 2.144 Advanced Battery Tech ABAT Dec \$3.89 \$234 \$74 2.0x \$2 UQM Technologies HOM Mar \$2.39 \$64 \$26 \$0 \$38 27 2.2x \$1 Johnson Controls JCI Dec \$39.06 \$23,252 \$601 \$3.966 \$26,617 595 2.8x \$14 Auto OEMs \$144,981 \$56,271 \$44,377 \$133,087 NM (\$2) Ford \$16.99 3,312 Toyota TM 1,815 Honda HMC Dec \$39.45 \$71,584 \$15,170 \$47,416 \$103,831 1.7x \$23 Liquidity Price Earnings Estimates FY11E 30-day Ticker Inter. (Ms) Vol. (Ks) High Company Applied Technologies / EVs / Battery Makers A123 AONE 14.9 1.567 \$23.46 \$6.32 (\$1.25)(\$1.39)(\$1.28)(\$121)(\$98)(\$17)6.5 447 \$7.06 \$2.75 (\$0.55)(\$0.50)(\$0.27)(\$47) (\$28)Ener1 HEV \$22 Byd Co. Ltd. RYDDY 3.812 \$84.00 \$41.25 \$1.54 \$2.00 \$6.268 \$8.189 \$10.008 \$2 26 Advanced Battery Tech ABAT 7.7 1,794 \$4.80 \$3.02 \$0.59 \$0.60 \$0.60 \$46 \$49 \$53 **UQM Technologies** UQM 257 \$7.45 \$1.89 (\$0.11)(\$0.06) (\$0.01)(\$3) \$3 \$12 3.5 JCI 3.5 4,455 \$40.15 \$25.56 \$2.00 \$2.52 \$2.98 \$3,002 \$3,506 \$3,974 Auto OEMs. Ford 269.0 63,461 \$17.42 \$9.71 \$2.05 \$2.08 \$2.14 \$11.278 \$12,736 \$13.708 TM Toyota NA 475 \$91.97 \$67.56 \$3.35 \$2.34 \$4.14 \$16.861 \$22.513 \$24.658 HMC NA 426 \$28.33 \$1.59 \$3.53 \$3.24 \$10,863 \$13,137 \$15,745 Honda \$39.39 (\$2.76)(\$2.09 (\$76) \$14.98 (\$2.65) EV / EBITDA (FY) P/E (FY) EV / Sales (FY) 2009A 2009A 2012F Company Ticker
Applied Technologies / EVs / Battery Makers P/E P/E P/S P/S EV/EBITDA EV/EBITDA EV/EBITDA P/E AONE NM A123 6.1x 5.6x NM NM NM NM Ener1 NM 13.3x 6.8 2.2x 21.0x Bvd Co. Ltd. RYDDY 18 8x 27 7x 21.3x 2 3x 2 0x 1 6x 14 8x 11.3x 9 2x Advanced Battery Tech 3.6x 3.3x ABAT 6.6x 6.5x 6.5x 2.6x 1.6x 1.2x 3.1x 12.6x NM Johnson Controls JCI 19.5x 15.5x 13.1x 0.8x 0.7x 0.7x 8.9x 7.6x 6.7x Auto OEMs. Ford 8.3x 8.2x 7.9x 1.2x 1.2x 1.2x 12.9x 11.4x 10.6x Toyota TM 23.3x 33.3x 18.8x 1.0x 0.9x 0.8x 12.2x 9.1x 8.3x Honda HMC 24 8x 11.2x 12.2x 1.1x 0 9x 0.9x 7 9x 6.6x 9.6x NM

Note: Mean First Call estimates used for all companies except Tesla

Source: Company reports and CapStone Investments estimates

16 9x

17 1x

13.4x

2. DCF Analysis

Mean (excludes Tesla)

Median (excludes Tesla

As a reality check and to provide some sensitivity analysis we conduct a 5-year discounted cash flow analysis. We calculate the DCF using the following assumptions and calculations:

13 3x

12.6x

3 6x

2.5x

1.3x

10.3x

10.9x

9 0x

8 6x

7.5x

- Our WACC calculation yields 14%.
- Terminal EBITDA multiple of 15x with a range of 13x-18x for sensitivity analysis. We use an EBITDA multiple as a proxy for FCF in perpetuity.
- Operational and maintenance capex is $\sim 50\%$ of total capex.

We believe these terminal multiples are appropriate given the rapid revenue growth, leading battery technology, early mover advantage and OEM support. **These metrics yield a value per share of \$21.73**, with a range of \$16.83-\$27.41 per share.

Tesla Motors, Inc. - DCF Valuation Assumptions Discount rate 14% Terminal multiple 13 14 15 16 17 2011E 2012E 2013E 2014E 2015E Net Income (204)100 206 D&A Cap Ex, net PP&E (68)(47)(40)(86) (93)Non-cash expense/changes in WC 7 (42)(19)(13)(39)Free Cash Flow (223)(175)73 150 EBITDA 172 282 0 Terminal value at: 13 x 0 0 0 3.667 14 x 0 0 0 0 3,949 15 x 0 0 4,231 16 x 0 0 0 0 4,513 17 x 0 4,795 multiple 13 NPV FCF (232)(232)(232)(232)(232)1,904 2,197 NPV Terminal Value 2.051 2,344 2.490 Firm Value 1,672 1,819 1,965 2,112 2,258 Cash 97 97 97 97 97 1,712 1,859 2,005 2,152 2,298 Equity Value Shares Out 92 92 92 92 92 Per Share Value \$18.56 \$20.14 \$21.73 \$23.32 \$24.91 **DCF Matrix at Varying Multiple and Discount Rates** Discount **Terminal Multiple** Rate 13x 14x 15x 16x 17x 12% \$20.47 \$22.21 \$23.94 \$25.68 \$27.41 \$22.81 13% \$19.49 \$21.15 \$24.47 \$26.13 14% \$18.56 \$20.14 \$21.73 \$23.32 \$24.91 15% \$17.67 \$19.19 \$20.71 \$22.23 \$23.75 16% \$16.83 \$18.29 \$19.75 \$21.20 \$22.66

Figure 30: Range of \$16.83 to \$27.41 per share value for Tesla

INVESTMENT RISK

Tesla faces intense competition from established auto OEMs, execution risk for Model S, lack of widespread EV adoption, potential reduction in government support and continued operating losses.

VALUATION METHODOLOGY

We value TSLA using 3 metrics - EV/S, EV/EBITDA and a 5-year DCF. Our \$22 target price is the average relative multiples and our DCF - using 15x terminal EBITDA multiple and 14% WACC.

Figure 31: Model S Revenue Model (ASP, Units, Gross Margins)

| ASP (\$K): | 2012E | 2013E | 2014E | 2015E | 20 ⁻ |
|--|--------------------|-----------------|-----------------|-----------------|-----------------|
| Base Price - 160 mile range | \$57.4 | \$57.4 | \$56.3 | \$54.5 | \$5 |
| 230 mile range 300 mile range | 68.9 | 68.9 | 67.5 | 65.4 | 6 |
| ŭ | 77.5 | 77.5 | 75.9 | 73.6 | 7 |
| Sales (%) - 160 mile range | 30% | 30% | 30% | 30% | 5 |
| 230 mile range 300 mile range | 35% 35% | 35% 35% | 40% 30% | 45% 25% | 2 |
| Average ASP across all 3 models | \$68.4 | \$68.4 | \$66.7 | \$64.2 | \$6 |
| Vehicle Options | 7.5 | 7.5 | 7.0 | 7.0 | |
| Dest. & Delivery Charge | 1.0 | 1.0 | 1.0 | 1.0 | |
| Zero Emission Vehcile (ZEV) Credit | 5 | 5 | 3 | 3 | |
| Blended ASP (\$K) | \$82 | \$82 | \$78 | \$75 | |
| Unit Volume | 3,000 | 10,000 | 12,950 | 18,000 | 30, |
| Revenue (\$M) | \$246 | \$819 | \$1,006 | \$1,354 | \$2 , |
| urope & ROW Model S Markets | | | | | |
| ASP (\$€): | 2010E | 2011E | 2012E | 2013E | 20 |
| Base Price - 160 mile range | € 77 | € 77 | € 76 | € 74 | • |
| 230 mile range 300 mile range | € 93 € 105 | € 93 € 105 | € 91 € 103 | € 88 € 99 | (|
| · · | | | | | |
| Sales (%) - 160 mile range 230 mile range | 30% 35% | 30% 35% | 30% 40% | 30% 45% | 3 |
| 300 mile range | 35% | 35% | 30% | 25% | 2 |
| Average ASP across all 3 models (€) | € 92.4 | € 92.4 | € 90.0 | € 86.7 | € 8 |
| Vehicle Options | 10.1 | 10.1 | 9.5 | 9.5 | |
| Dest. & Delivery Charge | 1.4 | 1.4 | 1.4 | 1.4 | |
| Blended ASP (€) | € 104 | € 104 | € 101 | € 97 | • |
| € / \$ FOREX Rate (assume constant) | 1.32 | 1.32 | 1.32 | 1.32 | • |
| Blended ASP (\$K) | \$79 | \$79 | \$76 | \$74 | |
| Unit Volume | 2,500 | 5,500 | 7,000 | 11,000 | 14, |
| Revenue (\$M) | \$197 | \$433 | \$534 | \$812 | \$1, |
| otal Model S Markets | | | | | |
| ASP (\$K) | \$80 | \$81 | \$77 | \$75 | |
| Gross Unit Cost (\$K) Gross Profit per Unit/Vehicle (\$K) | <u>76</u> \$4.3 | 69 \$12.2 | 65 \$12.6 | 61 \$13.2 | |
| Gross Mgn per Unit (%) | \$4.3 5.3% | \$12.2 15.1% | \$12.6 16.3% | \$13.2 17.7% | 13 |
| Total Volume / Units | 5,500 | 15,500 | 19,950 | 29,000 | 44, |
| y/y growth (%) | 5,500 | 182% | 29% | 29,000 45% | 44, |
| Total Model S (\$M)> | \$443 | \$1,252 | \$1,540 | \$2,166 | \$3, |
| Total COGS (\$M) | \$419 | \$1,063 | \$1,289 | \$1,783 | \$2, |
| Total Gross Profit (\$M) | \$24 | \$189 | \$251 | \$383 | \$ |
| Gross Margin (%) | 5% | 15% | 16% | 18% | |

Figure 32: Roadster Revenue Model (ASP, Units, Gross Margins)

| 2009 | 2010E | 2011E | 2012E | 2013E | 2014E | 2015E | 2016 |
|---------|---|---|---|---|------------------------------------|--|--|
| \$109 | \$109 | \$109 | \$109 | \$75 | \$71 | \$68 | \$6 |
| 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.9 |
| 26 | 25 | 25 | 24 | 18 | 17 | 16 | 1 |
| 9 | 8 | 7 | 5 | 4 | 2 | 1 | |
| \$146 | \$144 | \$143 | \$140 | \$99 | \$92 | \$87 | \$8 |
| 630 | 300 | 300 | 300 | 500 | 700 | 900 | 90 |
| \$91.9 | \$43.3 | \$42.9 | \$42.1 | \$49.5 | \$64.6 | \$78.2 | \$73. |
| | | | | | | | |
| 2009 | 2010E | 2011E | 2012E | 2013E | 2014E | 2015E | 2016 |
| € 89 | € 89 | € 89 | € 89 | € 60 | € 59 | € 57 | € 5 |
| 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.1 |
| 20 | 19 | 19 | 19 | 14 | 13 | 12 | 1 |
| € 110 | € 109 | € 109 | € 109 | € 75 | € 73 | € 70 | € 6 |
| 1.32 | 1.32 | 1.32 | 1.32 | 1.32 | 1.32 | 1.32 | 1.3 |
| \$145 | \$144 | \$144 | \$143 | \$99 | \$96 | \$93 | \$8 |
| 200 | 250 | 250 | 200 | 300 | 350 | 350 | 35 |
| \$29.0 | \$36.1 | \$36.0 | \$28.7 | \$29.6 | \$33.8 | \$32.5 | \$31. |
| | | | | | | | |
| \$146 | \$144 | \$143 | \$142 | \$99 | \$94 | \$89 | \$8 |
| 116 | 111 | 114 | 111 | 69 | 69 | 67 | 6 |
| \$30.2 | \$33.3 | \$29.3 | \$30.4 | \$29.6 | \$24.3 | \$21.1 | \$16. |
| 20.7% | 23.1% | 20.4% | 21.5% | 29.9% | 26.0% | 23.9% | 19.6 |
| 830 | 550 | 550 | 500 | 800 | 1,050 | 1,250 | 1,25 |
| | -34% | 0% | -9% | 60% | 31% | 19% | 0 |
| \$120.9 | \$79.4 | \$78.9 | \$70.8 | \$79.1 | \$98.4 | \$110.7 | \$104 |
| \$95.9 | \$61.1 | \$62.8 | \$55.6 | \$55.4 | \$72.8 | \$84.3 | \$84 |
| \$25.1 | \$18.3 | \$16.1 | \$15.2 | \$23.7 | \$25.6 | \$26.4 | \$20 |
| 21% | 23% | 20% | 21% | 30% | 26% | 24% | 20 |
| | \$109 1.95 26 9 \$146 630 \$91.9 € 89 1.10 20 € 110 1.32 \$145 200 \$29.0 \$146 116 \$30.2 20.7% 830 \$120.9 \$95.9 \$25.1 | \$109 \$109 1.95 1.95 26 25 9 8 \$146 \$144 630 300 \$91.9 \$43.3 2009 2010E € 89 € 89 1.10 1.10 20 19 € 110 € 109 1.32 1.32 \$145 \$144 200 250 \$29.0 \$36.1 \$146 \$144 116 111 \$30.2 \$33.3 20.7% 23.1% 830 550 -34% \$95.9 \$61.1 \$25.1 \$18.3 | \$109 \$109 \$109 1.95 1.95 1.95 26 25 25 9 8 7 \$146 \$144 \$143 630 300 300 \$91.9 \$43.3 \$42.9 2009 2010E 2011E €89 €89 €89 1.10 1.10 1.10 20 19 19 €110 €109 €109 1.32 1.32 1.32 \$145 \$144 \$144 200 250 250 \$29.0 \$36.1 \$36.0 \$146 \$144 \$143 116 111 114 \$30.2 \$33.3 \$29.3 20.7% 23.1% 20.4% 830 550 550 -34% 0% \$120.9 \$79.4 \$78.9 \$95.9 \$61.1 \$62.8 \$25.1 \$18.3 \$16.1 | \$109 \$109 \$109 \$109 1.95 1.95 1.95 1.95 26 25 25 24 9 8 7 5 \$146 \$144 \$143 \$140 630 300 300 300 \$91.9 \$43.3 \$42.9 \$42.1 2009 2010E 2011E 2012E €89 €89 €89 €89 1.10 1.10 1.10 1.10 20 19 19 19 €110 €109 €109 €109 1.32 1.32 1.32 1.32 \$145 \$144 \$144 \$143 200 250 250 200 \$29.0 \$36.1 \$36.0 \$28.7 \$146 \$144 \$143 \$142 116 111 114 111 \$30.2 \$33.3 \$29.3 \$30.4 20.7% 23.1% 20.4% 21.5% 830 550 550 500 -34% 0% -9% \$120.9 \$79.4 \$78.9 \$70.8 \$95.9 \$61.1 \$62.8 \$55.6 \$25.1 \$18.3 \$16.1 \$15.2 | \$109 \$109 \$109 \$109 \$75 1.95 | \$109 \$109 \$109 \$109 \$75 \$71 \$1.95 \$1.95 \$1.95 \$1.95 \$1.95 \$1.95 \$1.95 \$1.95 \$26 \$25 \$25 \$24 \$18 \$17 \$9 \$8 \$7 \$5 \$4 \$2 \$146 \$144 \$143 \$140 \$99 \$92 \$92 \$630 \$300 \$300 \$300 \$500 \$700 \$91.9 \$43.3 \$42.9 \$42.1 \$49.5 \$64.6 \$144 \$13 \$140 \$100 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.10 \$1.32 \$1.3 | \$109 \$109 \$109 \$109 \$75 \$71 \$68 \$1.95 \$1. |

Figure 33: Tesla Motors, Inc.: HISTORICAL AND PROJECTED INCOME STATEMENT

| \$M | | 200 | | | | | 201 | | | | | 201 | | | | |
|--|------------------|------------------|------------------|------------------|-----------------|------------------|------------------|------------------|------------------|-----------------------|------------------|-------------------------|------------------|------------------|-----------------------|------------------------|
| | 1Q | 2Q | 3Q | 4Q | 2009 | 1QA | 2QA | 3QA | 4QE | 2010E | 1Q | 2Q | 3Q | 4Q | 2011E | 2012E |
| Automotive Revenues | Mar-09 \$20.9 | Jun-09 \$26.9 | Sep-09 \$45.5 | Dec-09 \$18.6 | YEAR \$111.9 | Mar-10 \$20.6 | Jun-10 \$24.0 | Sep-10 \$23.4 | Dec-10 \$18.2 | YEAR \$86.1 | Mar-11 \$20.0 | Jun-11 \$20.0 | Sep-11 \$20.0 | Dec-11 \$20.0 | YEAR \$80.1 | YEAR \$514.8 |
| Battery Packs, Develop. Service Revenue | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 4.4 | 7.9 | 19.6 | 32.2 | 21.0 | 21.2 | 21.5 | 21.7 | 85.4 | 90.7 |
| Total Revenues | \$20.9 | \$26.9 | \$45.5 | \$18.6 | \$111.9 | \$20.8 | \$28.4 | \$31.2 | \$37.9 | \$118.3 | \$41.1 | \$41.3 | \$41.5 | \$41.7 | \$165.5 | \$605.5 |
| YoY Growth | 0% | 0% | 0% | 0% | 659% | 0% | 5% | -31% | 104% | 6% | 97% | 45% | 33% | 10% | 40% | 266% |
| QoQ Growth | NA | 29% | 69% | -59% | | 12% | 36% | 10% | 21% | | 8% | 1% | 1% | 1% | | |
| Cost of Sales - Auto | 22.9 | 24.8 | 37.8 | 16.8 | 102.4 | 17.0 | 22.1 | 21.9 | 29.7 | 90.8 | 29.5 | 30.0 | 30.5 | 29.9 | 119.9 | 526.5 |
| Cost of Sales - Batteries, Develop. Services | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.9 | 2.5 | 7.9 | 12.3 | 9.5 | 9.6 | 9.7 | 8.7 | 37.3 | 31.7 |
| Total COGS | 22.9 | 24.8 | 37.8 | 16.8 | 102.4 | 17.0 | 22.1 | 21.9 | 29.7 | 90.8 | 29.5 | 30.0 | 30.5 | 29.9 | 119.9 | 526.5 |
| Gross Profit | (2.0) | 2.1 | 7.7 | 1.8 | 9.5 | 3.9 | 6.3 | 9.3 | 8.1 | 27.5 | 11.6 | 11.3 | 11.0 | 11.8 | 45.7 | 79.0 |
| R & D | 7.9 | 1.9 | 1.3 | 8.1 | 19.3 | 13.3 | 15.4 | 26.7 | 36.0 | 91.3 | 39.0 | 39.2 | 39.4 | 39.6 | 157.3 | 101.1 |
| S G & A | 6.6 | 8.2 | 10.7 | 16.6 | 42.2 | 16.6 | 22.2 | 20.4 | 30.3 | 89.5 | 24.6 | 23.9 | 21.6 | 21.5 | 91.6 | 109.6 |
| Total Operating Expenses | 14.5 | 10.2 | 12.0 | 24.7 | 61.4 | 29.9 | 37.6 | 47.1 | 66.2 | 180.9 | 63.7 | 63.2 | 61.0 | 61.1 | 248.9 | 210.7 |
| EBIT | (16.6) | (8.1) | (4.3) | (22.9) | (51.9) | (26.0) | (31.4) | (37.8) | (58.1) | (153.3) | (52.1) | (51.9) | (50.0) | (49.3) | (203.2) | (131.7) |
| EBITDA | (15.2) | (6.4) | (2.3) | (21.0) | (45.0) | (23.9) | (28.9) | (34.7) | (55.1) | (142.6) | (42.2) | (42.1) | (39.3) | (38.1) | (161.7) | (75.9) |
| EBITDA Margin | -73% | -24% | -5% | -113% | -40% | -115% | -102% | -111% | -146% | -121% | -103% | -102% | -95% | -91% | -98% | -13% |
| Interest & Other Income, Net | 0.6 | (2.8) | (0.5) | (1.1) | (3.2) | (3.4) | (7.1) | 3.0 | 0.6 | (6.9) | 0.4 | 0.5 | (0.3) | (1.2) | (0.6) | (9.0) |
| Pretax Income | (16.0) | (10.9) | (4.8) | (24.0) | (55.1) | (29.4) | (38.5) | (34.9) | (57.5) | (160.2) | (51.6) | (51.4) | (50.3) | (50.5) | (203.8) | (140.8) |
| Taxes | 0.0 | 0.0 | (0.2) | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.3 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 |
| Tax Rate | 0.0% | -0.1% | 4.5% | -1.0% | 0.0% | -0.4% | 0.0% | -0.2% | -0.2% | -0.2% | 0.0% | -0.2% | -0.2% | -0.2% | -0.1% | -0.1% |
| GAAP Net Income | (16.0) | (10.9) | (4.6) | (24.2) | (55.1) | (29.5) | (38.5) | (34.9) | (57.6) | (160.6) | (51.6) | (51.5) | (50.4) | (50.6) | (204.1) | (140.9) |
| GAAP Net Margin | -77% | -40% | -10% | -130% | -49% | -142% | -136% | -112% | -152% | -136% | -126% | -125% | -121% | -121% | -123% | -23% |
| GAAP EPS | (\$0.77) | (\$0.52) | (\$0.22) | (\$1.15) | (\$2.65) | (\$1.35) | (\$1.68) | (\$0.38) | (\$0.60) | (\$2.76) | (\$0.53) | (\$0.53) | (\$0.51) | (\$0.51) | (\$2.09) | (\$1.40) |
| YoY Growth | NA | NA | NA | NA | 3% | 76% | 223% | 73% | -48% | -4% | -60% | -69% | 35% | -15% | 24% | 33% |
| QoQ Growth | NA | 32% | 58% | -425% | | -17% | -25% | 77% | -59% | | 11% | 1% | 3% | 0% | | |
| Chg in Fair Value Warrants | 0.1 | 0.0 | 0.3 | 0.0 | 0.4 | 2.3 | 6.3 | (3.1) | 0.0 | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Amort. Stock Comp. Expense | 0.1 | 0.2 | 0.2 | 0.0 | 0.4 | 3.4 | 6.1 | 3.8 | 4.0 | 17.3 | 3.5 | 3.5 | 3.5 | 3.5 | 14.0 | 16.0 |
| Pro Forma Net Income | (\$15.9) | (\$10.7) | (\$4.1) | (\$24.2) | (\$54.3) | (\$23.8) | (\$26.1) | (\$34.2) | (\$53.6) | (\$137.7) | (\$48.1) | (\$48.0) | (\$46.9) | (\$47.1) | (\$190.1) | (\$124.9) |
| Pro forma EPS | | | | | | (\$1.09) | (\$1.14) | (\$0.37) | (\$0.56) | (\$2.36) | (\$0.50) | (\$0.49) | (\$0.48) | (\$0.48) | (\$1.94) | (\$1.24) |
| Average Shares Outstanding | 20.9 | 20.9 | 21.0 | 21.1 | 21.1 | 21.9 | 22.9 | 92.3 | 96.0 | 58.3 | 96.8 | 97.5 | 98.3 | 99.0 | 97.9 | 100.9 |
| Percent of Revenue | | | | | | | | | | | | | | | | |
| Cost of Sales | 109.8% | 92.2% | 83.1% | 90.4% | 91.5% | 81.5% | 78.0% | 70.2% | 78.5% | 76.7% | 71.8% | 72.7% | 73.5% | 71.7% | 72.4% | 87.0% |
| Gross Profit | (9.8%) | 7.8% | 16.9% | 9.6% | 8.5% | 18.5% | 22.0% | 29.8% | 21.5% | 23.3% | 28.2% | 27.3% | 26.5% | 28.3% | 27.6% | 13.0% |
| R & D | 38.0% | 7.2% | 2.8% | 43.8% | 17.2% | 63.7% | 54.3% | 85.5% | 95.0% | 77.2% | 95.0% | 95.0% | 95.0% | 95.0% | 95.0% | 16.7% |
| SG&A | 31.6% | 30.6% | 23.6% | 89.1% | 37.7% | 79.7% | 78.2% | 65.4% | 80.0% | 75.7% | 60.0% | 58.0% | 52.0% | 51.5% | 55.4% | 18.1% |
| Total Operating Expenses | 69.7% | 37.8% | 26.3% | 132.9% | 54.9% | 143.4% | 132.5% | 150.9% | 175.0% | 152.9% | 155.0% | 153.0% | 147.0% | 146.5% | 150.4% | 34.8% |

Figure 34: Tesla Motors, Inc.: HISTORICAL AND PROJECTED CASH FLOWS AND BALANCE SHEET

| SM | | | 2009 | | | | | 2010E | | | | | 2011E | | | |
|--|-----------------|-----------------|------------------|----------------------|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|----------------------|----------------------|----------------------|----------------------|-------------------|-------------------|
| | 1Q Mar-09 | 2Q Jun-09 | 3Q Sep-09 | 4Q Dec-09 | 2009 YEAR | 1QA Mar-10 | 2QA Jun-10 | 3QA Sep-10 | 4QE Dec-10 | 2010E YEAR | 1Q Mar-11 | 2Q Jun-11 | 3Q Sep-11 | 4Q Dec-11 | 2011E YEAR | 2012E YEAR |
| Operating Sources: | | | | | | | | | | | | | | | | |
| Net Income Depreciation and Amortization | (\$16.0) 1.4 | (\$10.9) 1.7 | (\$4.6) 1.9 | (\$24.2) 1.9 | (\$55.7) 6.9 | (\$29.5) 2.1 | (\$38.5) 2.5 | (\$34.9) 3.1 | (\$57.6) 3.0 | (\$160.6) 10.7 | (\$51.6) 9.9 | (\$51.5) 9.8 | (\$50.4) 10.6 | (\$50.6) 11.2 | (\$204.1) 41.6 | (\$140.9) 55.8 |
| Total | (14.6) | (9.2) | (2.7) | (22.3) | (48.8) | (27.4) | (36.0) | (31.8) | (54.6) | (149.8) | (41.7) | (41.7) | (39.7) | (39.4) | (162.6) | (85.1) |
| Change in Working Capital Accounts Receivable | 2.8 | (4.0) | 3.2 | (2.1) | (0.2) | (2.4) | (0.5) | (1.6) | (2.3) | (6.9) | (0.9) | (0.1) | (0.1) | (0.1) | (1.1) | (58.5) |
| Inventories | (4.9) | (3.8) | 4.7 | (3.9) | (7.9) | (5.5) | (1.1) | (10.3) | 5.5 | (11.4) | 0.3 | (0.6) | (0.6) | 0.7 | (0.2) | (251.5) |
| Other Current Assets Non-Debt Current Liabilities | (0.2) 0.5 | (2.3) 5.2 | (0.3) (29.3) | 0.4 (3.4) | (2.5) (27.0) | (0.1) 2.2 | (1.3) 8.5 | (8.5) 2.8 | 0.0 (1.5) | (9.9) 12.0 | 0.0 1.8 | 0.0 2.4 | 0.0 2.4 | 0.0 1.5 | 0.0 8.2 | 0.0 267.9 |
| Total | (1.9) | (4.9) | (21.7) | (9.0) | (37.5) | (5.8) | 5.5 | (17.6) | 1.7 | (16.1) | 1.2 | 1.8 | 1.8 | 2.1 | 6.9 | (42.1) |
| Capital Expenditures | 0.9 | 2.5 | 2.3 | 6.2 | 11.9 | 5.5 | 12.2 | 5.4 | 67.0 | 90.1 | 25.5 | 22.2 | 31.0 | 57.0 | 135.7 | 95.0 |
| Operating Cash Flow | (\$17.4) | (\$16.6) | (\$26.7) | (\$37.5) | (\$98.2) | (\$38.7) | (\$42.7) | (\$54.8) | (\$119.9) | (\$256.0) | (\$66.0) | (\$62.2) | (\$68.9) | (\$94.3) | (\$291.3) | (\$222.2) |
| Cash Flow per Share | (\$0.83) | (\$0.79) | (\$1.27) | (\$1.78) | (\$4.66) | (\$1.76) | (\$1.86) | (\$0.59) | (\$1.25) | (\$4.39) | (\$0.66) | (\$0.62) | (\$0.68) | (\$0.92) | (\$2.98) | (\$2.20) |
| Non-Operating Activities: | 8.1 | 16.6 | 133.2 | 0.6 | 158.6 | 30.6 | 28.5 | 104.0 | 110.0 | 273.1 | 68.7 | 68.7 | 93.7 | 93.7 | 324.7 | 162.0 |
| Beginning Cash and Invest. | \$9.3 | \$0.0 | \$0.0 | \$106.5 | \$9.3 | \$69.6 | \$61.5 | \$47.3 | \$96.6 | \$69.6 | \$86.7 | \$89.4 | \$95.9 | \$120.7 | \$86.7 | \$120.1 |
| Net Cash Flow Ending Cash and Invest. | (9.3) \$0.0 | 0.0 \$0.0 | 106.5 \$106.5 | (36.9) \$69.6 | 60.4 \$69.6 | (8.1) \$61.5 | (14.2) \$47.3 | 49.3 \$96.6 | (9.9) \$86.7 | 17.1 \$86.7 | 2.7 \$89.4 | 6.5 \$95.9 | 24.8 \$120.7 | (0.6) \$120.1 | 33.4 \$120.1 | (60.2) \$59.9 |
| Assets | | | | | | | | | | | | | | | | |
| Cash & Equivalents Restricted Cash | | | | \$69.6 0.0 | | \$61.5 0.0 | \$47.3 0.0 | \$96.6 88.1 | \$86.7 88.1 | | \$89.4 88.1 | \$95.9 88.1 | \$120.7 88.1 | \$120.1 88.1 | | |
| Accounts Receivable | | | | 3.5 | | 5.9 | 6.5 | 8.1 | 10.4 | | 11.3 | 11.3 | 11.4 | 11.4 | | |
| Inventories Prepaid & Other CA | | | | 23.2 4.2 | | 28.6 4.5 | 29.5 6.7 | 39.5 8.9 | 34.0 8.9 | | 33.7 8.9 | 34.3 8.9 | 34.8 8.9 | 34.2 8.9 | | |
| Total Current Assets | | | | 100.6 | | 100.6 | 90.0 | 241.1 | 228.0 | | 231.3 | 238.5 | 263.9 | 262.7 | | |
| Operating Lease Vehicles | | | | 0.0 | | 0.0 | 0.0 | 5.7 | 5.7 | | 5.7 | 5.7 | 5.7 | 5.7 | | |
| Net PP&E Goodwill & Intangible Assets | | | | 23.5 3.6 | | 26.9 7.5 | 33.2 5.4 | 37.2 57.5 | 124.1 57.5 | | 139.7 57.5 | 152.1 57.5 | 172.4 57.5 | 212.5 57.5 | | |
| Other Assets | | | | 2.8 | | 10.4 | 19.4 | 20.1 | 20.1 | | 20.1 | 20.1 | 20.1 | 20.1 | | |
| Total Assets | | | | \$130.4 | | \$145.3 | \$148.0 | \$361.6 | \$435.5 | | \$454.3 | \$473.9 | \$519.6 | \$558.5 | | |
| <u>Liabilities</u> Accounts Payable | | | | \$15.1 | | \$18.2 | \$25.6 | \$27.0 | \$24.5 | | \$24.3 | \$24.7 | \$25.1 | \$24.6 | | |
| Accrued Liabilities | | | | 14.5 | | 7.9 | 8.4 | 10.7 | 10.7 | | 10.7 | 10.7 | 10.7 | 10.7 | | |
| Defd Development Compensation Deferred Revenue | | | | 0.2 1.4 | | 0.0 6.7 | 0.0 8.1 | 0.0 3.5 | 0.0 3.5 | | 0.0 3.5 | 0.0 3.5 | 0.0 3.5 | 0.0 3.5 | | |
| Capital Lease Obligations, Current | | | | 14.5 | | 7.9 | 8.4 | 10.7 | 10.7 | | 10.7 | 10.7 | 10.7 | 10.7 | | |
| Reservation Payments Current Liabilities | | | | 1.4 \$57.5 | | 6.7 \$59.1 | 8.1 \$68.6 | 3.5 \$69.3 | 3.5 \$67.8 | | 3.5 \$69.6 | 3.5 \$72.1 | 3.5 \$74.5 | 3.5 \$76.0 | | |
| Common Stock Warrant Liability | | | | 0.0 | | 0.0 | 16.7 | 6.7 | 4.7 | | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Convertible Pfd Stock Warrant Liability | | | | 1.7 | | 10.4 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Capital Lease Obligations, Non-Current Deferred Revenue, less current | | | | 0.8 1.2 | | 0.7 1.4 | 0.6 2.1 | 0.6 2.5 | 0.6 3.0 | | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | | |
| Long-Term Debt - DoE Loan | | | | 0.0 | | 29.9 | 45.4 | 56.6 | 56.6 | | 56.6 | 56.6 | 206.6 | 356.6 | | |
| Other Long Term Liabilities Total Liabilities | | | | 3.5 \$64.7 | | 3.9 \$105.4 | 5.0 \$138.5 | 6.1 \$141.7 | 7.1 \$139.7 | | 7.1 \$0.0 | 7.1 \$0.0 | 7.1 \$0.0 | 7.1 \$0.0 | | |
| Total Convertible Pfd Stock | | | | \$319.2 | | \$319.2 | \$319.2 | \$0.0 | \$0.0 | | \$0.0 | \$0.0 | \$0.0 | \$0.0 | | |
| Series A Convert. Pfd (7.2M shs) | | | | 3.5 | | 3.5 | 3.5 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Series B Convert. Pfd (17.5M shs) Series C Convert. Pfd (35.2M shs) | | | | 12.9 39.8 | | 12.9 39.8 | 12.9 39.8 | 0.0 0.0 | 0.0 0.0 | | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | | |
| Series D Convert. Pfd (18.4M shs) | | | | 44.9 | | 44.9 | 44.9 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Series E Convert. Pfd (102.8M shs) Series F Convert. Pfd (27.8M shs) | | | | 135.7 82.4 | | 135.7 82.4 | 135.7 82.4 | 0.0 | 0.0 | | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | | |
| Total Liabilities & Convert Pfd | | | - | \$383.9 | | \$424.6 | \$457.7 | \$141.7 | \$139.7 | | \$133.3 | \$135.7 | \$288.1 | \$439.6 | | |
| Shareholders' Equity | | | _ | (\$253.5) | | (\$279.3) | (\$309.8) | \$219.9 | \$295.8 | | \$321.1 | \$338.2 | \$231.5 | \$118.9 | | |
| Total Liabilities and Equity | | | - | \$130.4 | | \$145.3 | \$148.0 | \$361.6 | \$435.5 | | \$454.3 | \$473.9 | \$519.6 | \$558.5 | | |
| Key Financial Ratios Days Receivable Outstanding | | | | 17.1 | | 26.0 | 20.8 | 23.5 | 25.0 | | 25.0 | 25.0 | 25.0 | 25.0 | | |
| Inventory Turns | | | | 2.9x | | 2.4x | 3.0x | 2.2x | 3.5x | | 3.5x | 3.5x | 3.5x | 3.5x | | |
| Days Payable Book Value | | | | 74.1 (\$12.03) | | 79.8 (\$12.75) | 82.3 (\$13.51) | 78.8 \$2.38 | 75.0 \$3.08 | | 75.0 \$3.22 | 75.0 \$3.37 | 75.0 \$2.29 | 75.0 \$1.17 | | |
| Cash per Share | | | | \$3.31 | | \$2.81 | \$2.06 | \$1.05 | \$0.90 | | \$0.90 | \$0.95 | \$1.19 | \$1.18 | l | |
| | | | | | | | | | | | | | | | | |

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