Q2 2015 Earnings Call

Company Participants

- Deepak Ahuja
- Elon Reeve Musk
- Jeffrey B. Straubel
- Jeffrey K. Evanson

Other Participants

- Adam Michael Jonas, Morgan Stanley & Co. LLC
- Andrea Susan James, Dougherty & Co. LLC
- Ben J. Kallo, Robert W. Baird & Co., Inc. (Broker)
- Brian Arthur Johnson, Barclays Capital, Inc.
- Colin Michael Langan, UBS Securities LLC
- Emmanuel Rosner, CLSA Americas LLC
- George Galliers, Evercore ISI
- John J. Murphy, Bank of America Merrill Lynch
- Patrick K. Archambault, Goldman Sachs & Co.
- Rod A. Lache, Deutsche Bank Securities, Inc.
- Ryan J. Brinkman, JPMorgan Securities LLC
- Trip S. Chowdhry, Global Equities Research LLC

MANAGEMENT DISCUSSION SECTION

Operator

Ladies and gentlemen, thank you for standing by and welcome to the Tesla Motors, Incorporated Second Quarter 2015 Financial Results Q&A Conference Call. As a reminder, this conference may be recorded.

It's now my pleasure to turn the floor over to Jeff Evanson. Sir, the floor is yours.

Jeffrey K. Evanson {BIO 1535168 <GO>}

Thank you, Huey, and good afternoon, everyone. Welcome to Tesla's second quarter Q&A webcast. I'm joined today by Elon Musk, Tesla Chairman and CEO, JB Straubel, our CTO, and Deepak Ahuja, Tesla's CFO. Our Q2 results are announced in the shareholder letter at the same link as this webcast. As usual, the letter includes GAAP and non-GAAP financial information and a reconciliation between the two.

During our call, we will discuss our business outlook and make forward-looking statements which are based on our predictions and expectations as of today. Actual events or results could differ materially due to a number of risks and uncertainties, including those mentioned in our most recent Form 10-Q filed with the SEC.

And now, Huey, let's go to the first question, please.

Q&A

Operator

Yes, sir. [Operation Instructions]

And our first question will come from the line of John Murphy with Bank of America Merrill Lynch. Please go ahead. Your line is open.

Q - John J. Murphy {BIO 5762430 <GO>}

Good afternoon. Just a first question on the pre-owned program. It seems like there's a fair level of success there with $20 million in revenue. I'm just curious if you could dimension how many vehicles were sold through that program, how many units remain in inventory there, and if we think about how that inventory is restocked, sort of what percentage of new unit Model Ss that are purchased are accompanied by a Model S trade-in?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Hang on one second.

A - Deepak Ahuja {BIO 15935173 <GO>}

Hi, John, Deepak here. Firstly, we just kicked off the program in April, so it's actually been pretty heartening to see how it's done so far. And to keep it at a high level, we're actually selling these cars at a faster rate than we are getting these trade-ins to come in. So as this program picks up, it's going to really be a successful program and it's creating good demand for us on the pre-owned side.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, and I mean, I'd hesitate to make predictions based on such early history, but, I mean, I think there's room for optimism in the future here because these are obviously very low – we don't have to make the cars so we're essentially getting a commission on selling the car and it's very capital efficient. So, I think there's some upside potential there, but nothing we want to sort of really make predictions on it till we have more of a history.

Q - John J. Murphy {BIO 5762430 <GO>}

Okay. Maybe to think about it sort of in terms of – I mean every vehicle that's going into this pre-owned program, I would imagine is accompanied with a new Model S sale? I'm just trying to understand how the acquisition process is working.

A - Deepak Ahuja {BIO 15935173 <GO>}

Absolutely, yep.

Q - John J. Murphy {BIO 5762430 <GO>}

Okay.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah, we accept a trade-in only when that customer is buying a new Model S, if that's what you're trying to suggest.

Q - John J. Murphy {BIO 5762430 <GO>}

Yes. Yeah, that's sort of what I was trying to get at, understand the percentages, but I guess it's too small right now to be too material.

And then just a second question, as we think about the referral program, an interesting marketing angle here, just wondering if you can sort of juxtapose what you think the ultimate cost was. It looks like it was about $2,000 all-in versus your acquisition cost for a customer, and just trying to understand where you're going to save money and how this makes the sort of the customer acquisition process more cost-effective?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Well, it's not necessarily making it more cost-effective, it's intended to be somewhat of a wash so that if we achieve a $2,000 savings we essentially passed that on to the end customer. And we don't know what that's really going to look like until the program is complete which is sort of almost 90 days from now. Early indications are quite positive. But, obviously, for this 90-day period, there's going to be some overlap where we essentially incur a dual expense for – because we're not – we still have all of our stores and we're – have the referral costs. So I don't think it's going to have a big impact on our numbers, but there will be some dual expense because there's no way – have you to kind of run these experiments in parallel, so there's no real way to do it otherwise.

Q - John J. Murphy {BIO 5762430 <GO>}

And how did you build up the $2,000 acquisition costs? Because, as you mentioned, it seems like there's a lot of fixed costs that wouldn't get taken out that quickly in the test phase. I'm just trying to understand how you think about that $2,000 number and how you come up with that.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, it's not taken out in the test phase. It's to inform our long-term decision in terms of how many stores should we open. I mean, a store should be thought of as like a demand generation item, and in order to understand should we do a lot of stores, small number of stores, somewhere between, we kind of need to know how this referral program – how effective the referral program is. I mean, if you can think of some other way to do this that we're not aware of, we'd love to hear about it.

Q - John J. Murphy {BIO 5762430 <GO>}

Sure. We'll brainstorm on that. Then just lastly, as we think about the cash burn in the quarter but also the setup of the credit lines, it seems like you guys are recognizing that, at some point down the line, there might be a need for a capital raise. Would you consider an equity raise in the market, or do you think these credit lines are enough to lean on for now before you ultimately have to make a decision on raising capital in the next 12 months to 18 months?

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah, we only drew down $50 million on our credit line, so we have sufficient lines available and that's expandable, too, to $750 million, which gives us some comfort that we can be close to $1 billion as we go through the year, and, clearly, as X ramps up and gets to a steady state, it enables us to generate free cash flow. So we feel pretty comfortable overall on that front, and we'll just take it as opportunities come in the future.

Q - John J. Murphy {BIO 5762430 <GO>}

So, Deepak, do you think as you go through the launch of the Model X and ultimately the Model 3, that you'll turn cash flow positive at the right point where you might not need to do a capital raise going forward, is that kind of how you're thinking about this with the credit lines on top?

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah, we are comfortable with the cash levels. I'll put it that way.

A - Elon Reeve Musk {BIO 1954518 <GO>}

I don't think that there's not a need to raise equity capital. There may be some value in doing so as a risk reduction measure, but to be clear, we – what Deepak is saying is that even in the absence of any additional capital generation activity, we would have on the order of $1 billion through – basically that would be, our minimum cash position.

Q - John J. Murphy {BIO 5762430 <GO>}

Yeah, no, I think the risk reduction function you mentioned is probably the most – is the most valuable, and that's kind of why we're asking about that when you look at the cash burn and how the capital market sometimes shift very quickly, it just seems like an opportune time to take advantage of what you might need in the future, so that's why we're asking.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, so I think we're in the same sort of mind frame as you are. Yeah.

Q - John J. Murphy {BIO 5762430 <GO>}

Great. Thank you very much.

A - Elon Reeve Musk {BIO 1954518 <GO>}

All right. Thank you.

Operator

Thank you, sir. Our next phone question will come from the line of Rod Lache with Deutsche Bank. Please go ahead. Your line is open.

Q - Rod A. Lache {BIO 1528384 <GO>}

Hi, everybody. A couple of questions. First, maybe you can just elaborate a little bit on the drop in the forecast from 55,000 units, to 50,000 units to 55,000 units. Is there some aspect of the Model X launch that isn't what you've projected? It doesn't really sound like this is related at all to the backlog of orders from Model S.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Correct. I mean, we do think that it's going to be quite a challenging production ramp on the X, and if we are faced with a choice of deliver great – we only want to deliver great cars, so we don't want to drive to a number that's greater than our ability to deliver high quality vehicles, so – and the nature of the production ramp which is basically an exponential ramp that then becomes an S-curve, is basically for every week longer that it takes us to climb up that exponential is about an 800 vehicle reduction of the X. But that's why we sort of do want to emphasize the longer term, long term, really just meaning like Q1 next year type of thing, not super long-term. I think one gets a better picture of the business just sort of thinking about that, and that's where we feel really highly confident of the 1,600 vehicles per week to 1,800 vehicles per week combined production of S and X, and both production and demand.

Q - Rod A. Lache {BIO 1528384 <GO>}

Okay. The – was there an adjustment from something like 2,000 units a week to that 1,600 units to 1,800 units, and are we thinking about like a 48-week production year or are you thinking about this in terms of the full calendar year?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, so that's a good question. It's like there – yeah, that's averaged over the year. So that means, like, in a given week, we might go as high as 2,000 units to make up for holidays, factory retooling and that kind of thing.

Q - Rod A. Lache {BIO 1528384 <GO>}

Okay. Your run-rate of gross margin, obviously it's being affected by a number of things; by launches, by mix, the deferral of Autopilot revenue. Can you just talk a little bit about what are some of the issues there, what is the issue with Autopilot, would we – would it be reasonable to expect the margins to rise again to the 25%-plus level once X is out and Gigafactory begins to ramp?

A - Deepak Ahuja {BIO 15935173 <GO>}

Hi, Rod, yeah, definitely. The most of the Autopilot deferral, we should be able to recover that later this year. There may be a small portion going into 2016, but difficult to say at this point. And the two big issues that have been affecting us, I'd say, is the dollar, the strong dollar, and then the mix, especially as we have started to build 70D and the 70 cars recently. The dollar has had a huge impact just from Q1 to Q2. It took 100 basis points out for us roughly. So even after we consider all of that and we look at 2016 to say that we'll be at 25% and better with S and X combined, yes, we should be there.

Q - Rod A. Lache {BIO 1528384 <GO>}

Okay. And just lastly, you've had a few more weeks here since the announcement of the stationary storage business, do you have any additional thoughts on how that's expected to ramp?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah. I do want to preface this with some degree of uncertainty, because this is quite new, and again, we've got that challenge of exponential ramp and then depending upon how you move the – on how the dates fit over an exponential ramp, the actual numbers in a given quarter could be quite different, but the demand has been really crazy, so it's well in excess of – I mean if you just take the reservations that have been made thus far, it's well over $1 billion worth of Powerpacks and Powerwalls. So – and that's with no marketing, no advertising, no sales force to speak of, really, we're not trying to sell it, it's basically a presentation and a webcast and 30 minutes of press Q&A.

So there's probably room to improve. So this is – I mean, really, we're basically sold out of what we could make in 2016 at this point. And assuming these orders are real, which they seem to be. So were looking at maybe, again, just to preface with meaningful uncertainty, $40 million to $45 million in stationary storage in Q4 and maybe as much as 10 times that number in for next year. So it's $40 million to $50 million that this year and 10x of that next year. And I mean that growth rate is probably going to just, keep going at quite a nutty level. It's probably at least a few billion dollars in 2017, somewhat speculative at this point, but I think that's likely. So it's sort of growing by half order of magnitude to an order of magnitude per year.

Q - Rod A. Lache {BIO 1528384 <GO>}

Great. Thank you.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah.

Operator

Thank you, sir. And our next question will come from Trip Chowdhry with Global Equities Research. Please go ahead. Your line is now open.

Q - Trip S. Chowdhry {BIO 5306842 <GO>}

Thank you. A couple of questions regarding the validation units. I was wondering regarding Model X, do we have a general ballpark number in terms of how many validation units we may have to produce before the robots become smart enough?

A - Elon Reeve Musk {BIO 1954518 <GO>}

I'm not sure I totally understand your question.

Q - Trip S. Chowdhry {BIO 5306842 <GO>}

Like when we had the Model S retooling, we created a few Model S validation units, I think probably around 40 units or 50 units which were used to train the robots, so...

A - Elon Reeve Musk {BIO 1954518 <GO>}

Sure.

Q - Trip S. Chowdhry {BIO 5306842 <GO>}

...before the product really goes into production, I do believe there are some validation units of the car that are produced so as to train the robots. I could be wrong, but that's my understanding.

A - Elon Reeve Musk {BIO 1954518 <GO>}

No, that's true. There are actually – it's a little more complicated than that because there are parts of the factory that are much more automated than other parts, so there's – in terms of the programming the robots, it varies quite a bit in terms of how much program there is, how difficult that programming is. But we actually have now produced several Model Xs off the Tesla production line, but this is a complex machine with several thousand unique components. So there are still a lot of low volume parts for suppliers on the Model X. And – but with each week, we keep building more and more Xs off the line with greater and greater part maturity. And then (17:18), we expect to do our first delivery of production of Model Xs at the end of next month.

Q - Trip S. Chowdhry {BIO 5306842 <GO>}

Excellent. I had a question also on the Autopilot. I was wondering are you aware of this research paper from Alex, I think they also call it AlexNet. In few conferences we

went, they talk a lot about image classification, especially with NVIDIA. And if you haven't heard about it, that's fine. But if you have heard about it, I was wondering, are we working with some similar technologies with Autopilot or we are doing everything in-house in terms of image recognition and auto steering?

A - Elon Reeve Musk {BIO 1954518 <GO>}

The overall system is designed by Tesla, but then there's components from a number of other suppliers. The Autopilot or the auto steer, highway Autopilot essentially is using a combination of the Ford camera, Ford radar, the sight ultrasonics, and then the GPS navigation system. So it integrates those four systems in order to do auto steer on the highway. And yeah, so that's what we're sort of working out the final details on. We're targeting release to our early access customers, on August 15, and then depending upon how that is received and what issues we encounter in different parts of the world, we expect to go to wide release on Autopilot, highway Autopilot and auto park in one to two months after that.

Q - Trip S. Chowdhry {BIO 5306842 <GO>}

And last question I have regarding the calendar year 2016 production. I was wondering in 2015, this current year, we are having a few retooling and getting the assembly lines, or I should say the production lines of Model X and Model S a little up and coming. Do we see any similar disruption happening in 2016 or we're pretty much straight? And when we put the Model 3 line in place, it will be completely isolated from Model X and Model S?

A - Elon Reeve Musk {BIO 1954518 <GO>}

There are periodic down periods in order to do equipment maintenance where that can't be accomplished and, let's say, on a Saturday and Sunday. But we're not anticipating any significant downtime for S and X as a sort of, like, maybe it's one or two weeks out of the year, something like that. And those are – because we do productivity improvements to reduce the production cost and, like I said, just general equipment maintenance. For the Model 3, we really are doing our best to make sure that it does not affect S and X production. We don't currently anticipate it affecting S and X production in 2016, but there may be some effect in 2017.

Q - Trip S. Chowdhry {BIO 5306842 <GO>}

If I may squeeze in one more, you did mention that Model X production is challenging, like there's a difference between saying doable and undoable and everything is challenging in the world, like – I was wondering, like, we have a control over this challenge because every problem is, if it's not a – (21:07) enjoy something and not challenging. You're saying it's – from a challenging, like it is out of control, or challenging because you're enjoying doing it?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Well, I think there's – some things are definitely a lot more challenging than others. And the Model X is I think a particularly challenging car to build. Maybe the hardest car to build in the world. I'm not sure what would be harder.

Q - Trip S. Chowdhry {BIO 5306842 <GO>}

Excellent.

A - Elon Reeve Musk {BIO 1954518 <GO>}

But it is an amazing vehicle and I think it's going to blow people away.

Q - Trip S. Chowdhry {BIO 5306842 <GO>}

Looking forward to it. Thank you.

A - Elon Reeve Musk {BIO 1954518 <GO>}

All right. Thank you.

Operator

Thank you, sir. Our next question in queue comes from Adam Jonas with Morgan Stanley. Your questions, please.

Q - Adam Michael Jonas {BIO 3339456 <GO>}

Hey, Elon, Deepak. First question, Steve Jurvetson was recently quoted saying that Uber CEO, Travis Kalanick, told him that if, by 2020, Tesla's cars are autonomous, that he'd want to buy all of them. Is this a real – I mean, forget like the 2020 for a moment, but is this a real business opportunity for Tesla, supplying cars to ridesharing firms, or does Tesla just cut out the middleman and sell on-demand electric mobility services directly from the company on its own platform?

A - Elon Reeve Musk {BIO 1954518 <GO>}

That's an insightful question.

Q - Adam Michael Jonas {BIO 3339456 <GO>}

You don't have to answer it.

A - Elon Reeve Musk {BIO 1954518 <GO>}

I think – I don't think I should answer it.

Q - Adam Michael Jonas {BIO 3339456 <GO>}

Okay. Let's move on. Second question is, there's been – sometimes you can tell more from the non-answer than from the answer – there's been a lot of excitement about mapping technology for autonomous and semi-autonomous applications with a German consortium bidding firm for HERE, Nokia's business. I would love to hear your views, Elon, on how you view Tesla's mapping capabilities. Is this something you need to license, continue licensing from outside vendors or can you use your own unique connected machine learning fleet to build your own mapping capabilities and be self-sufficient? Or you rather not answer that one?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Well, the fact of the matter is, there's not publicly available data that is sufficiently accurate for Autopilot as far as navigation data, street data, it's too coarse. So it looks like we don't really have much choice, but to create our own data set for driving in order to – in the long-term, in order to provide a high quality Autopilot experience. Yeah, I mean, it's – yeah, that's just the only way we can think of to do it.

Q - Adam Michael Jonas {BIO 3339456 <GO>}

Great. Thanks.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Okay.

Operator

Thank you, sir. And it looks like our next question in queue will come from Ryan Brinkman with JPMorgan. Please go ahead. Your line is open.

Q - Ryan J. Brinkman {BIO 16417954 <GO>}

Hi. Thanks for taking my question. First question is I'm just curious what the new guidance for range of deliveries, 50,000 units to 55,000 units versus 55,000 units prior, what does that mean, if anything, for the earlier target of free cash flow break-even in 4Q, is that something we should think about maybe more in 1Q 2016 then?

A - Deepak Ahuja {BIO 15935173 <GO>}

Certainly in 1Q we will be free cash flow positive. Q4, it's hard to predict, given that range, certainly towards the end as Model X deliveries are ramping up we would be, but then if you look at the full quarter, it's somewhat close to call.

Q - Ryan J. Brinkman {BIO 16417954 <GO>}

Okay. Okay, thanks. That's helpful. And then just last question, it seems like we've seen a number of announcements into quarter now by utilities and other companies about using your Powerpack, companies like Amazon, et cetera. I'm curious how much of the Tesla Energy business do you now expect to generate from corporate or institutional demand versus more retail customers? I'd be interested to if – this mix and expectation, if it's changed over time at all since you first debut the product.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Sure. This is JB. We're getting a little bit better sense of it, but it's still early days and I think initially we thought that the majority of the business would be the Powerpack in the commercial or institutional business and we've actually been a bit surprised at how strong the Powerwall, the retail demand is and the interest is. So I – again, it's hard to guess at numbers, but I would say that we're perhaps in the – maybe not quite close to 50/50, but I think 70% perhaps Powerpack.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah.

Q - Ryan J. Brinkman {BIO 16417954 <GO>}

Okay.

A - Elon Reeve Musk {BIO 1954518 <GO>}

It's really early days because – a big dependency here is when someone orders the Powerpack, how many Powerpacks do they order, and – so Powerpack is sort of 100 kilowatt hours, and – but industrial and utility customers may order as many as 100 or 200. I'm not sure what's our biggest one so far, is it like 200?

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

(26:38) in that order of magnitude, 100s.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, so I think our biggest one is around 250 or so. So, yeah, it could be quite a large, in terms of kilowatt hours, quite a large amount going in the direction of Powerpack. In terms of unit volume, the Powerwall would be the greatest. But the likely thing for Powerwall is somebody is going to order maybe one to three, maybe it's average of 1.5 or something like that, whereas Powerpack could be an average of five to 10.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah, and I think as the market grows and as we go further into the future, we're going to see more and more total energy demand coming from Powerpack. That's still our expectation.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, exactly. So, I mean, a real important thing to understand, I mean, maybe with drilling it a little bit that for stationary storage, the fundamental economics of cost are always true, meaning that there's always a cost advantage to someone – to a system-wide implementation of stationary storage, because of the high peak to trough electricity usage. So, if you have buffering, which is what stationary storage allows for, then you only need your power plants to operate at the average energy usage, which means that you can basically, in principle, shutdown half of the world's power plants if you had stationary storage. This is independent of renewable energy. It does not matter whether you have solar panels (28:33), this is just being able to shut down half of your power plants if you have buffering, because you can then have your power plant output at the average of what is needed by the consumers.

Q - Ryan J. Brinkman {BIO 16417954 <GO>}

I see. That's very interesting.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah. It seems like sometimes people link this too much to renewable energy. Of course we're huge believers in renewal energy, but that is not the gating function of demand for stationary storage. Stationary storage is really as compared to existing power plants.

Q - Ryan J. Brinkman {BIO 16417954 <GO>}

Great. Thank you.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah. And then, like, depending on the country, that may be represented as a price to the user of the electricity. So, for example, in Germany and Australia, there is time-based cost of electricity. It's like, it costs more sometimes today than others. Whereas in most of the U.S. you just have a meter that's ticking over. So it doesn't differentiate between, say, day use of energy or night use of energy. So in places where the price represents the cost, the Powerwall makes economic sense, but the Powerpack makes sense everywhere.

Q - Ryan J. Brinkman {BIO 16417954 <GO>}

Great.

Operator

Thank you, sir. Our next phone question will come from Patrick Archambault with Goldman Sachs. Please go ahead. Your questions, please.

Q - Patrick K. Archambault {BIO 4638109 <GO>}

Oh, yeah. Good afternoon. Thanks for taking my questions. I just wanted to follow up on the Autopilot, and I'm sorry if you guys have said this, but can we talk a little bit more about the capability that that's going to bring? Is that kind of a hands-off, feet-off kind of product that would be somewhere close to NHTSA Level 3, or we're just talking about kind of more Lane Keep Assist and Forward Collision Warning, that sort of stuff, that that would still be kind of one to two? Let me just start off with that question.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, I'm not too familiar with what the various (31:01) levels mean, but I can tell you just what it will translate to in the initial Autopilot. The – we don't want to set the expectation that it's – that you can just basically pay no attention to what the car is doing, we do want to set the expectation that it's much like the Autopilot in a plane where you turn the Autopilot on in a plane but there's still some expectation that the pilot will pay attention to what the plane is doing and weren't sort of go to sleep or disappear from the cockpit. So we do want to set that expectation with consumers.

That said, in terms of what the capability of the system is, I think it's capability in steering and control of acceleration and braking is excellent. When it has a tracking vehicle in front and you can basically have high confidence in steering, braking, and acceleration when basically when you're in some kind of traffic situation where there's a car on the road in front of you. I think it's pretty good in the absence of that, so if it's just lanes, it's pretty good, and it will get better over time as we refine the software. So I would certainly not take the initial version of Autopilot as the final version. It will just get better and better over time.

Q - Patrick K. Archambault {BIO 4638109 <GO>}

Got it. That's helpful.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Just with software updates. Just with software updates, to be clear.

Q - Patrick K. Archambault {BIO 4638109 <GO>}

And then I take it there's some kind of human machine interface thing that keeps you focused and beeps if you try and use your BlackBerry or something?

A - Elon Reeve Musk {BIO 1954518 <GO>}

That's still something that we're debating and I think we want to see how the early access program goes. That's basically our public beta. And based on that, we'll set the warning levels. Yeah.

Q - Patrick K. Archambault {BIO 4638109 <GO>}

Got it. More of a guidance question, it was touched on earlier that the 1,600 vehicles per week to 1,800 vehicles per week is down from I think what was being floated around as 2,000 vehicles per week for next year's production level. I get that the production overall might be lower based on a slower ramp, but is there something structural that's keeping you from hitting that 2,000 vehicles per week on a run-rates basis, understanding that you can kind of surge to that at certain points? Is there something that kind of in preparing for the launch you've realized that you're just not going to have the capacity that you thought you would have?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Frankly, the main thing is we don't want to set high expectations and then the only way for us to feel good about the future is that if we exceed really high expectations. So it's sort of like winning needs to feel like winning, if that makes any sense. So that's really why we're sort of setting those numbers. Could we do 2,000 vehicles per week? Aspirationally, yes. Do we want to commit to that? Ideally not. Yeah.

Q - Patrick K. Archambault {BIO 4638109 <GO>}

Got it. Understood. Just setting the bar at achievable levels is something that makes sense. And just last one for me, like an accounting issue, I think there was, like, a

$0.10 gain or a $0.13 gain on, like, FX revaluation. Like, I don't know, Deepak, I didn't know what that was exactly.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah, that's driven by our balance sheet, currency, and receivables revaluations that happen at the quarter end exchange rates. It's not really – it's not representative of what happens during the quarter, in the middle of the months, and based on where the exchange rates were, we had good news this time from that revaluation, clearly as you're aware, Q1 we had significant bad news, and if you really net the two out on a full year basis, it's a small number.

Q - Patrick K. Archambault {BIO 4638109 <GO>}

Okay, got it. So it's just the impact of transactional stuff sequentially?

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah.

Q - Patrick K. Archambault {BIO 4638109 <GO>}

Okay, got it. All right, thanks a lot, guys.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Okay.

Operator

Thank you, sir. Next question comes -

A - Deepak Ahuja {BIO 15935173 <GO>}

Just to clarify, it's translational and transactional in the sense that we have foreign currencies on hand, which we are translating $2 at quarter end. And that impact has to flow through income.

Q - Patrick K. Archambault {BIO 4638109 <GO>}

Got it.

A - Elon Reeve Musk {BIO 1954518 <GO>}

But we haven't actually done the exchange, right?

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah. Yeah, it's unrealized.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Right.

A - Deepak Ahuja {BIO 15935173 <GO>}

There is some realized portion that happened during the quarter. Most of it is unrealized.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah.

Q - Patrick K. Archambault {BIO 4638109 <GO>}

All right. Understood. Thank you.

Operator

Thank you. Next question comes from the line of Emmanuel Rosner with CLSA. Please go ahead. Your line is open.

Q - Emmanuel Rosner {BIO 16323493 <GO>}

Hi, good afternoon, everybody. I wanted to start just with a quick math question. So your comments suggested that the – if there's any sort of delay towards the end of Q4, this would have an impact of about 800 Model X units per week. And then you're also guiding to about 1,600 to 1,800 combined volumes of production per week next year. Does that just simplistically mean that you're targeting the mix to be roughly 50/50 between X and S right from the get-go in 2016?

A - Elon Reeve Musk {BIO 1954518 <GO>}

It does, although I wouldn't put too much precision on that because what we're going to try to do is to push the production slightly more in the direction of X because people have been waiting for a long time for their cars. And then, in any given month it could be 60/40 one way or the other. If you look at worldwide demand for SUVs and sedans, it's almost dead-even, at 50/50. And in some regions, sedans are favored. In some regions, SUVs are favored. But generally it's, on a worldwide basis, 50/50. But it is difficult for us to say exactly what the S/X demand ratio will be until the car is out there and people are experiencing it and we see what the relative order volume is. But we have so many advanced orders on the X that this will be not going to be an issue in the early days, and we are going to try to get people their car as fast as we can.

Q - Emmanuel Rosner {BIO 16323493 <GO>}

Okay. So I understand the demand aspect, but I guess from a production capacity point of view you're saying that as of early 2016 you could theoretically have as many Xs as Model Ss being produced?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah. I mean, to sort of put our cards on the table here, I mean, we're setting factory capacity to be 1,000 Ss and 1,000 Xs per week. But actual production and capacity are not exactly the same thing, so there's always some percentage lower than the capacity that is – or, like, occasionally it may hit capacity, but it's hard to maintain capacity. But our goal is – what our internal plan is, I can tell you, is that we want the factory to be able to make up to 1,000 Xs, up to 1,000 Ss per week next year and in terms of capacity. And then actual production is affected by real world issues, so there will be maybe some weeks where there is 2,000 produced and some weeks where there's very few produced because we've got factory tooling situations, hence the 1,600 to 1,800 average over the year that we're predicting.

Q - Emmanuel Rosner {BIO 16323493 <GO>}

Okay, thanks.

A - Jeffrey K. Evanson {BIO 1535168 <GO>}

It would be fair to say the goal of the factory is to not just produce cars but it's to produce cars with the right cost and the right quality.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, yeah, particularly, I mean, once we hit steady state, we can certainly do that, but it's just difficult during the ramp phase. Yeah.

Q - Emmanuel Rosner {BIO 16323493 <GO>}

Okay. That's very clear. And then one question on China. So they're happy to see that your revised strategy is getting some traction. So what exactly are you doing differently there, I guess besides offering a home charger for the buyers of Model S? Are there any other things you're doing differently in China and any lessons that you can learn from there in terms of applying that to other regions?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Well, China is – does have a unique set of challenges. The – for example, there's the whole license plate question, to get a license plate to drive a car in a lot of the major Chinese cities is quite difficult, so whether you have the electric vehicle exemption in a given city or not makes a big difference because if you don't, then people can buy the car but they can't drive it. So we've been – it has taken awhile but we've been successfully in getting EV plate exemption everywhere except Beijing, and we're optimistic about Beijing. We're seeing Beijing exemption in the future, hopefully in the near future. So that's important for China, but not something that one can extend to other parts of the world.

I think the – yeah, I mean, it's – I think it's really just that in China and in most countries that there is a bit of a slow build of awareness and confidence in Tesla. And depending upon when we went to market in a particular country, that feeling is going to be at a low or a high stage of maturity. In the U.S., say, particularly California, it's a high stage of maturity. The awareness and comfort with Tesla in California is very high and that's sort of at a moderate stage of maturity in, say, the

northeast of the United States and still at the low stage in most of Asia. And the same has been true in Europe.

Basically, it seems like with every country you've got to build confidence in the brand over time and it just takes time. You can't just have it be immediate. And just because people love it in California does not mean they automatically love it in other places. You've got to build the confidence over time.

A - Deepak Ahuja {BIO 15935173 <GO>}

We've been in China now slightly over a year.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah just a year.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah.

Q - Emmanuel Rosner {BIO 16323493 <GO>}

Understood. And a final one just on the Gigafactory. Can you just give us an update on how things are going there in terms of the preparation and then there was also, I think, you've been mentioning a bunch of hands (43:35) throughout the months on potentially wanting to add some space there, adding some capacity? Can you talk, I guess, more precisely in terms of where would you see capacity go beyond sort of like the initial stages?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, I'll say a few words and maybe JB can weigh in. I mean, whatever engaging and speculative comments like this, I think it is important just to remember they are speculative and not a prediction that we would have to say with very high confidence. But what we have found is, with the Gigafactory, that as we spent more and more time on it, we found we've been able to improve the space efficiency of the production and the overall efficiency by more than our initial expectations. So the net result is that we think in the same volume we can do potentially significantly more output. JB, do you want to elaborate on that?

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah, I think our plans are still on track and unchanged for the first phases of production to support Model 3 and to support the Tesla Energy business, but the ultimate production capability of the site is what we believe can go much higher than we maybe initially thought it could. And we do remain on track for construction at the site. We'll have first equipment being installed at the end of this year and planning to start production on Tesla Energy products in Q1 2016.

A - Elon Reeve Musk {BIO 1954518 <GO>}

In Gigafactory, we're already in production...

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah.

A - Jeffrey K. Evanson {BIO 1535168 <GO>}

Fremont and Clarence (45:35).

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, we're already in production with Tesla Energy products in Fremont but that production will transfer to the Gigafactory next year.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

And expand and ramp significantly.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah.

Q - Emmanuel Rosner {BIO 16323493 <GO>}

Perfect. Great to hear. Thank you very much.

Operator

Thank you, sir. Our next phone question will come from the line of Brian Johnson with Barclays. Please go ahead. Your line is now open. Your questions, please.

Q - Brian Arthur Johnson {BIO 21263539 <GO>}

Good. I've got two questions, one on Powerwall – excuse me – Powerpack opportunity and another relating back to Model S, Model X. On the Powerpack, I want to get sort of a deeper understanding of where you see your competitive advantage? If I think about simplistically four levels of a stack in terms of the utility, Powerpack solution with the upper level being sort of the grids, software interface with the grid kind of tie in when it's needed, when it's not needed. Second layer, the battery management software and then at the hardware, the inverter and other power electronics, followed by the battery itself. Where do you see your advantage to each of those levels? How is it important to play at all of those levels and how do you interface with some of the existing middle people you might call them or consultants in the industry or other software providers who might be providing elements of the stack already?

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Well, so it's a pretty detailed question. I think one of the maybe at a high level, one of the biggest benefits that we offer and where we have a competitive strength is having a system that solves pretty much all of those problems together. I think a lot of other people aspiring to be in this market sell one piece among that entire stack

as you're calling it, and then you'd have to go to different companies to find the other pieces. At Tesla, we're integrating all of those pieces together for a very turnkey solution, that utility or commercial customer can just install.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Basically plug and play matters even if you're at the megawatt scale.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah, exactly. And I think, of course, the pricing fundamentals, starting with the battery itself, are really the foundation of that, but we have a lot of expertise and a lot of knowhow in power electronics and software as well that we've built on the car side of the business for many years.

Q - Brian Arthur Johnson {BIO 21263539 <GO>}

And how about the software, the interface with the grid and determine when to charge when, when to discharge?

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah, that's something we're working on now, and we're also working in partnership with many different utilities on this. There's not a, perhaps, a universal point of view on exactly where that control and sort of dispatch should live, a lot of utilities want to be very involved in that themselves. So, we're basically setting up the tools and the infrastructure so that they can control in a way that's familiar and the most convenient for them.

A - Elon Reeve Musk {BIO 1954518 <GO>}

It's effectively like an API...

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah.

A - Elon Reeve Musk {BIO 1954518 <GO>}

...so that the utilities systems can essentially call – can put or call power to the pack, and then they can query the pack for information about its status. But, as JB was saying, like, it does have to interface with quite a heterogeneous set of systems around the world, so that's why you have to have basically an API interface to the pack saying – so that the utility system can request power or put power to the pack.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah, and maybe just one more comment. At the commercial level, that is something that Tesla is engaged in much more directly for things like demand management and those type of applications, but it's a bit of a different answer depending on which market we're in here.

Q - Brian Arthur Johnson {BIO 21263539 <GO>}

And sort of how are you getting the utilities comfort with the cycle, number of cycles, and the lifetime of this? Are they sort of taking your word for it or is that something they're seeking to explore through pilots and/or their own high intensity testing of your battery packs?

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Well, we have a lot of data, actually. It's not – they don't just have to take our word for it. A lot of these tests have been running for a long time and we can show them fairly hard cycle data and some lifetime data, so that's been very helpful. And also, of course, there's all the sort of field experience from the automotive fleet. That is much bigger than what we're deploying in the stationary fleet and will remain so for a number of years. So having the confidence there and how those batteries have aged and done quite well is extremely helpful in building confidence.

Q - Brian Arthur Johnson {BIO 21263539 <GO>}

Got it. And just final quick question, Model S, you noted some risks to 4Q depending on what happens with the X ramp-up. Earlier in the year, you talked about a 30% gross margin for the Model S part of 4Q, of course that was not for 4Q overall, where do you stand on that 30% internal goal now?

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah, that 30% goal was before the dollar began to really strengthen at this level. So clearly that has had a fairly large impact on it. And also the mix has had some impact. Our focus also in the last few quarters has been much more so on Model X. There are various other cost reduction opportunities that we have that we are hoping to get in Q4 but they could potentially get delayed into Q1. We want to make sure they happen right and we are, at the same time, focusing on X. So I would say broadly, if we put aside exchange, we see a trend of improving gross margin, despite mix over time.

Q - Brian Arthur Johnson {BIO 21263539 <GO>}

Okay. But no longer a hard 30% in 4Q?

A - Elon Reeve Musk {BIO 1954518 <GO>}

No, not in – not next quarter, basically. But next year, contingent on macroeconomic conditions not going whacky, that seems like potentially an attainable number.

Q - Brian Arthur Johnson {BIO 21263539 <GO>}

Okay. Thanks.

Operator

Thank you, sir. Next question comes from the line of Colin Langan with UBS. Please go ahead. Your question, please.

Q - Colin Michael Langan {BIO 15908877 <GO>}

Great. Thanks for taking my question. Can I just follow up on some of the numbers you threw out on stationary storage – the $1 billion, is that orders or reservations? I just want to get a sense of how firm that was? And did you imply that because it sounds like $400 million to $500 million for next year? And then is it a few billion dollars for 2017 is the storage market, is that what you said?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah. These are reservations, so you can – reservation may be in order or maybe not, but that's certainly what people have said that they want. Yeah, so there's over 100,000 reservations that have been placed for Powerwall and Powerpack. And of that, you can sort of speculate as to how many Powerwalls, how many Powerpacks per reservation. It's likely to be more than one, particularly in the Powerpack case. So, yeah, that's what leads us to think $40 million to $50 million, Q4, maybe 10x that number next year. And then 5x to 10x that number in 2017. But as I said earlier, as we get further away in time, the numbers are more speculative. Yeah.

Q - Colin Michael Langan {BIO 15908877 <GO>}

And where would that put you in terms of market share and storage at that point, would it be most of the market for (54:14) stationary storage in 2017?

A - Elon Reeve Musk {BIO 1954518 <GO>}

We don't really know.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Well, I mean, the market is definitely growing very quickly so it's a real hard (54:25).

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, exactly.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

I'd say we're speculating on what the actual entire market is going to do and how that's going to grow. So that's -

A - Elon Reeve Musk {BIO 1954518 <GO>}

I don't think you can draw a lot of conclusions from, like, what is the market.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Exactly.

A - Elon Reeve Musk {BIO 1954518 <GO>}

How much of the stationary storage was sold last year? Just as at the beginning of electric car production for Tesla, people were trying to say, "well, how many electric cars have been sold? Were sold last year? Oh, almost none. Therefore, Tesla will sell almost none."

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah.

A - Elon Reeve Musk {BIO 1954518 <GO>}

That's to summarize what the vast majority of predictions were about for Model S.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah, the prices that stationary storage was selling at last year, for instance, are so much higher than where they would be or will be in 2017, that you can't extrapolate those two.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah, the amount for stationary storage increases at a sort of quite an extreme exponential as the cost of (55:27) decreases. The utilities used to think of, like, things in terms of levelized cost of energy, and depending upon where you are in the world, that number in some places is very high, some places quite low, but as you start to approach the average value, the demand basically scales into the multi terawatt-hour range. So...

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah, I mean, grid parity is kind of the wrong concept here, but it's maybe somewhat of an analogy to think about.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Grid parity, the market is staggeringly gigantic.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Right.

Q - Colin Michael Langan {BIO 15908877 <GO>}

And what is your all-in cost? I know it's $250 million for the Powerpack. I mean, with installation or anything? Do you have any estimate of what it actually costs like a commercial or utility, all-in?

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Well, it depends a lot on the scope and scale and how many other pieces of that installation are bundled together, so we haven't quoted or listed those numbers since they vary so much from one installation to the next. The battery cost is really what matters most in the economics so that's where we've listed those prices.

Q - Colin Michael Langan {BIO 15908877 <GO>}

I mean any sense of the high-end, low-end range for an installation?

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Nothing that we'd be ready to share quite yet.

Q - Colin Michael Langan {BIO 15908877 <GO>}

Okay. And just last question, how should we think about the margin profile over the next few years as this ramps? I believe you said Q4 would be pretty low. Should that meaningfully improve and when do you kind of get parity with your gross margin on the auto side?

A - Elon Reeve Musk {BIO 1954518 <GO>}

We are getting quite speculative about the battery business, but – what's that? I can't read your writing. Oh, 15%? Yeah, I think – yeah, I mean, in the early days, the battery gross margins that are on the order of 15%, over time that could rise to 25% or maybe 30%. But we just don't know that quite yet. And we'd have to look at what the price elasticity of demand is to understand where should we be pricing and what's the right gross margin to hit for.

Q - Colin Michael Langan {BIO 15908877 <GO>}

Okay. All right, thank you very much.

Operator

Thank you, sir. Our next question in queue comes from Ben Kallo with Robert W. Baird. Please go ahead. Your line is now open.

Q - Ben J. Kallo {BIO 16897436 <GO>}

Hi. Thanks for taking my question. As far as the Model X goes, last time, Elon, you talked about configuration in July and I understand with the slippage. But when can we start thinking about configuring cars – we have orders out there? Customer have orders. And then with about a month away from deliveries, when do you expect to show it to people?

A - Elon Reeve Musk {BIO 1954518 <GO>}

We're probably into upper configuration and two or three weeks of the X. So that should go live on the website before the end of August. In terms of the initial deliveries of the X, that's sort of consistent with what we predicted on the last call, which is end of September.

Q - Ben J. Kallo {BIO 16897436 <GO>}

Okay. And then as we look out to the target of 500,000 cars in 2020 and some of the things that you've learned recently, do you still stand behind that number and what gives you confidence in looking ahead to that number and ramping up production?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Sure. I do remain confident about half a million cars in 2020, and maybe being able to exceed that. It's worth noting that, so 2020, that's five years from now. If you go five years in the past for Tesla, we were producing 600 cars per year. Now we can produce 600 cars in three days. So I think going from here to 500,000 cars a year is a much smaller leap than what we did over the past five years.

Q - Ben J. Kallo {BIO 16897436 <GO>}

Got it. And then when we think about your currency exposure, are you guys – where are you guys at on thinking about moving kind of manufacturing outside of the U.S. or any parts of manufacturing or additional manufacturing?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Well, it depends on what timeframe. In the next few years, we expect to be focused on Fremont and the Gigafactory in Nevada. Long-term, again, we're getting very speculative here, but in the three to five-year timeframe, it's going to make sense for us to think about localizing production in different markets, having a factory in Asia, a factory in Europe, other factories in North America. So in order to go beyond the 500,000 units a year, that's what we would need to do. So our Tesla factory in Fremont and in near Reno is, that's sort of the size for the 500,000 level, might be able to do it a lot more than that, but say 500,000 should be very achievable. The NUMMI impact, when it was operating as NUMMI, it did roughly half a million vehicles a year. So for us to do a similar number is just quite reasonable, I think, without adding new factories. So the new factories would be will going past $500,000.

Q - Ben J. Kallo {BIO 16897436 <GO>}

And my final question, headline after this call might be Tesla is going to raise capital, just from your comments I think that some people are going to walk away thinking that and I just want to make sure that you guys can set the record straight if that's in the cards in the near-term or if it's not. Thanks, guys.

A - Elon Reeve Musk {BIO 1954518 <GO>}

We can't comment on that specifically, so. All right, next question.

Operator

Yes, sir. Our next question comes from the line of Andrea James with Dougherty & Co. Please go ahead. Your line is open.

Q - Andrea Susan James {BIO 20758120 <GO>}

Hi. Thanks for taking my questions. What have you learned or discovered between the time when you set that 55,000 unit goal and I guess, now when you're saying it's better to have some more breathing room on the ramp? And also, I guess one more, just along with that, is there any supplier in particular that's concerning you?

A - Elon Reeve Musk {BIO 1954518 <GO>}

I don't want to sort of name specific suppliers, but our biggest challenges are with the second row seat, which is, it's an amazing seat, like a sculptural work of art, but a very tricky thing to get right. The falcon-wing door actually seems to probably not be a critical path item. There are some interior components, interior trim that are possibly on a critical path. But it's always hard to say exactly what lies in a critical path because it tends – these things tend to play schedule leapfrog and it's kind of a set of constraints that one day is this constraint, then the next day it's another constraint.

The pace of progress is really dependent on which supplier is the slowest and least lucky. So, if a supplier has unexpected challenges which can range from force majeure to simply having to redo a design because the initial design was wrong. But when you have a complex product like the Model S with thousands of – that's dependent on thousands of suppliers, you can say that the pace of progress is determined by the thousand least lucky and slowest. But if we knew in advance which one of those would be, we would take action. So the – yeah, it's -

Q - Andrea Susan James {BIO 20758120 <GO>}

No, that's helpful. I think everybody understands that an investment in Tesla is a company that's learning as it goes along, so it's always interesting to see what you're discovering as you attempt to build. The other thing, can you walk us through what you accomplished during the factory shutdown in the quarter? It looks like you really did a lot of work in one week. Can you help us understand the significance and then also maybe paint it in terms of what you're doing in the factory this year that's going to actually be repurposed or can even be used toward Model 3 production?

A - Elon Reeve Musk {BIO 1954518 <GO>}

Yeah. So the retooling was both for the X as well as for improved efficiency of S production. And I think we've got a lot accomplished there. For Model 3, the biggest single item is the paint shop. So the paint shop is sized to be able to do 10,000 cars a week. So we've laid the foundations for that rate in the paint shop. And I think that there's also room for significant increases in our foundry in terms of casting. And we've also made a significant investment in stamping and some sort of advanced metal sheet forming technology that isn't stamping.

Anything you want to add to that?

A - Deepak Ahuja {BIO 15935173 <GO>}

I think in plastics paint, especially paint, we made modifications there on the existing paint shop while we're getting the new one ready. I think we essentially added capacity in many different shops in – ahead of Model X. This required some production interruption to do it right, including getting our production control and inventory management processes much better. And we just can't do that when production is running.

Q - Andrea Susan James {BIO 20758120 <GO>}

What about the drive unit, investments in the drive unit manufacturing? Is any of that small drive unit going to be used for Model 3 or -? It seems like you're really scaling up there.

A - Elon Reeve Musk {BIO 1954518 <GO>}

We've certainly learned a great deal going from the original Model S drive unit to the small drive unit – what's called the small drive unit. It's dramatically easier to build, it's much more automated. That said, I think we will do a further revision for the Model 3 and essentially go to the third-generation production technology for the Model 3.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah, maybe one thing to keep in mind is the small drive unit capacity is quite in excess, even of vehicles, because of all-wheel drive. And as that has ticked up, we've increased the capacity of the small drive unit in production that you see as well.

Q - Andrea Susan James {BIO 20758120 <GO>}

Because you need two of them.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}

Yeah.

Q - Andrea Susan James {BIO 20758120 <GO>}

And then finally, I guess, Deepak, I'd love for you to stay as long as possible but I'll just ask this anyway. What's the status of your CFO search?

A - Elon Reeve Musk {BIO 1954518 <GO>}

We're interviewing candidates all of the time. Deepak is part of the interview process. And, yeah, I think we are talking to some interesting candidates. I'm not sure if there's anything more to say about that.

A - Deepak Ahuja {BIO 15935173 <GO>}

No, I mean, no, clearly I'll stay around to ensure there's a smooth transition. And we're continuing to talk to lots of candidates and make sure we find the right person to come in.

Q - Andrea Susan James {BIO 20758120 <GO>}

Okay. Thank you. Actually, do you have any progress on regional heads of sales? And then that's my last one. Thanks.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Oh, well, yeah, we do have a regional head of sales for Asia who came to us from EMC and then there was some press about a head of North American sales who came from Burberry. And then just because we have, like, one person from Burberry, then people think we're copying Apple, which is ridiculous. He's great, but he's just one guy. And then we're continuing to search for our head of Europe sales.

Q - Andrea Susan James {BIO 20758120 <GO>}

Thanks so much.

Operator

Thank you, ma'am. And we do have one additional question in the queue, it looks like our last question in the queue comes from the line of George Galliers with Evercore. Please go ahead. Your line is now open.

Q - George Galliers {BIO 21095133 <GO>}

Good afternoon and thank you for taking my question. I have a strategic question for you. It looks like in the next two years, we'll see (70:30) new and improved electric vehicles from your peers ranging from mainstream models from (70:36) to more premium vehicles from Audi and Porsche. Strategically, how do you think about the future electric vehicles from other ODMs; A, do you view them as a (70:48) EV market; B, do you view them as contributors to the common cause, raising awareness of EVs, overall consumer EV adoption (70:56) the EV market size; or C, given certain compromises of the competitors' efforts to-date, do you actually see them as the opposite, i.e., they form negative prejudice in consumers' minds with respect to electric vehicles, costs, practicalities and performance?

A - Elon Reeve Musk {BIO 1954518 <GO>}

I think this is the first multiple choice I've gotten as a question. But I think if you just look at our comments in the past, what we've said is like we're really excited to see other car companies do electric vehicle programs. What's been done to-date is not much.

They've generally been fairly small programs and often just set to achieve a regulatory minimum. So that hasn't been great thus far, but I'm encouraged by what I see about the future plans, they sound like they're headed in the right direction and I would be super happy to see the whole industry to go electric. And we have open sourced our patent to – so those wouldn't be an impediment. And perhaps it could be helpful. And, yeah, I'd be – it'd be really great if the whole industry would just go electric as soon as possible. In fact – I mean our view is that the whole view will go

electric eventually, they really won't have much choice, but the sooner they go electric the better.

Q - George Galliers {BIO 21095133 <GO>}

Cool. Very clear. Thank you.

A - Elon Reeve Musk {BIO 1954518 <GO>}

All right. Thanks.

A - Jeffrey K. Evanson {BIO 1535168 <GO>}

Okay, I think that was the last question in the queue. Thank you everyone for joining us, and we'll talk to you next quarter. Good-bye.

A - Elon Reeve Musk {BIO 1954518 <GO>}

Thank you.

Operator

Thank you, gentlemen. And thank you, ladies and gentlemen, for joining us today. We hope that you found today's event informative. This will conclude our call. You may now disconnect and have a wonderful day.