Tesla, Inc. NasdaqGS:TSLA FQ1 2019 Earnings Call Transcripts

Wednesday, April 24, 2019 9:30 PM GMT

S&P Global Market Intelligence Estimates

	-FQ1 2019-			-FQ2 2019-	-FY 2019-	-FY 2020-
	CONSENSUS	ACTUAL	SURPRISE	CONSENSUS	CONSENSUS	CONSENSUS
EPS Normalized	(0.94)	(1.77)	NM	0.34	3.62	8.32
Revenue (mm)	5176.99	4541.46	V (12.28 %)	6337.71	26030.07	31434.66

Currency: USD

Consensus as of Apr-23-2019 3:00 PM GMT

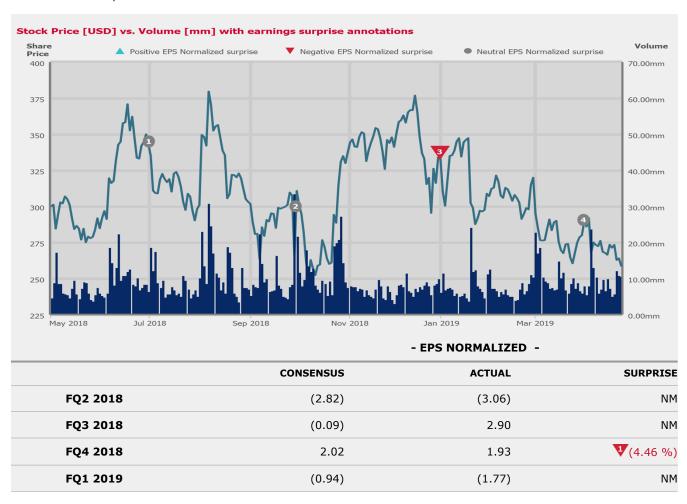


Table of Contents

Call Participants	3
Presentation	 4
Ouestion and Answer	8

Call Participants

EXECUTIVES

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Jeffrey B. Straubel

Chief Technology Officer

Jerome Guillen

President of Automotive Division

Jonathan A. Chang

Vice President of Legal & General Counsel

Martin Viecha

Senior Director for Investor Relations

Unknown Executive

Zachary Kirkhorn

Chief Financial Officer

ANALYSTS

A.M. Sacconaghi

Sanford C. Bernstein & Co., LLC., Research Division

Adam Michael Jonas

Alexander Eugene Potter

Piper Jaffray Companies, Research Division

Colin Langan

UBS Investment Bank, Research Division

Colin William Rusch

Oppenheimer & Co. Inc., Research Division

Daniel V. Galves

Wolfe Research, LLC

David J. Tamberrino

Goldman Sachs Group Inc., Research Division

Joseph Robert Spak

RBC Capital Markets, LLC, Research Division

Maynard Joseph Um

Macquarie Research

Philippe Jean Houchois

Jefferies LLC, Research Division

Pierre C. Ferragu

New Street Research LLP

Ryan J. Brinkman

Morgan Stanley, Research Division JP Morgan Chase & Co, Research

Presentation

Operator

Good day, ladies and gentlemen, and welcome to the Tesla Q1 2019 Financial Results and Q&A Webcast. My name is Cherie, and I will be your coordinator for today. [Operator Instructions] As a reminder, this conference is being recorded. I would now like to turn the call over to your host, Mr. Martin Viecha, Senior Director of Investor Relations. Mr. Viecha, you may now proceed.

Martin Viecha

Senior Director for Investor Relations

Thank you, Cherie, and good afternoon, everyone. Welcome to Tesla's First Quarter 2019 Q&A Webcast. I'm joined today by Elon Musk, J.B. Straubel, Zachary Kirkhorn and a number of other executives. Our Q1 results were announced at about 2 p.m. Pacific time in the update letter we published at the same link as this webcast.

During this call, we will discuss our business outlook and make forward-looking statements. These comments 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 filings with the SEC. [Operator Instructions]

But before we jump into Q&A, Elon has some opening remarks. Elon?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Thanks, Martin. On Monday, we hosted our first-ever Autonomy Investor Day, showcasing our new inhouse designed full self-driving computer and our AI-based software trained by more than 400,000 Tesla vehicles. All Tesla cars being built today have all the hardware necessary for full self-driving, and over the year updates will enable our customers to use the Tesla ride-hailing network fleet and generate income which, as we said on Autonomy Day a few days ago, we think is somewhere between \$10,000 and \$30,000 a year, in some cases, perhaps more. We're the only company in the world producing our own vehicles and batteries as well as our own in-house chip for full self-driving. We're in a position unlike anyone else in the industry. And in 2020, we expect to have 1 million robotaxis on the road with the hardware necessary for full self-driving. We believe we'll have the most profitable autonomous taxi on the market and perhaps the -- yes. Last quarter, we experienced a massive increase in delivery volume in Europe, similar to what North America experienced last year as well as a massive increase in delivery volume to China.

As far as challenges go, this was a good one to have because we booked vehicles and consumers bought them, but this rapid increase in overseas volume strained our logistics operation and resulted in over half of our global deliveries occurring in the final 10 days of Q1.

This was the most difficult logistics problem I've ever seen, and I've seen some tough ones. So I'll say it again, equipment fleet delivered the half of all vehicles produced -- delivered all half -- all deliveries occurred literally in the final 10 days of Q1.

As a result, a large number of vehicles -- the vehicle deliveries shifted into Q2 which, of course, Q1 net income to be negatively impacted. As we said, we could not get the vehicles to customers specifically in time. In response to this, we are in the process of regionally balancing our vehicle booked throughout the quarter. This will make the -- this will put much less strain on Tesla, results in a much better delivery experience for customers and have a very positive effect on our working capital in the middle of the quarter.

In Q1, Model 3 was yet again the best-selling premium car in the U.S., outselling the runner-up by almost 60%. It's worth to dwell on that for a moment, just how absurd this is compared to predictions that were made several years ago. There were literally, to the best of my knowledge, 0 predictions that this would

happen, if you go back just even 5 or 6 years ago, that an electric car would be the best-selling premium car in the U.S. And we believe, over time, we'll be the best-selling premium car throughout the world.

And in fact, in Norway, in March, we set a record for the highest sales of any car period ever. And that'd be something similar in Switzerland as well. So these were really incredible achievements by the Tesla team.

Since the introduction of Standard Range and Standard Range Plus, nearly 70% of trade-ins from Model 3 have actually been nonpremium vehicles, where people actually pay more for a car than they have ever paid for a car. They never anticipated paying this much for a car, but because they want the Model 3 more than they ever wanted a vehicle, they're willing to pay more to get a Model 3.

And keep in mind, global expansion for the Model 3 has just begun, and this segment is vastly larger internationally than it is in the U.S. We're continuing to make significant improvements to our vehicle lineup, including updating the Model S and X production line to accommodate the next generation of powertrains. So we announced this yesterday and we are now in production with the significantly more balanced powertrains for the Model S and X as well as an upgrade to the suspension system to have active adaptive damping in the suspension system and to enable charging at 200 kilowatts, which is -- and there are a number of other small changes. If anyone is thinking about upgrading their Model S or X, this is a great time to do it. And we also introduced the loyalty program where if somebody has -- is an existing Tesla owner and they buy a performance Model S or X, they get the Ludicrous upgrade for free. So this is -- yes, as a thank you and an appreciation to existing Tesla customers.

So they have a longer range. The Model S now has a range of 370 miles. This is actually EPA range of 370 miles, and Motor Trend test drove the car a few days ago and drove nonstop all the way from San Francisco to Los Angeles at normal highway speeds. And they said they could have even gone faster. And there weren't any headwind as well. So this is pretty remarkable that an electric car could go nonstop between the 2 biggest cities in California. I mean, I remember back when I was driving gasoline cars, I always had to stop at a gas station. This is literally better than a gasoline car with the rare exception. And there's also an increase in power. It accelerates faster. Just better, better in every way. And we're able to this without increasing the size of the battery pack, which is a testament to the powertrain team for it to be able to improve the efficiency of the powertrain by such a significant margin.

So with the recently announced product improvements on Model S and X as well as continued expansion of Model 3 globally, we expect our order rate to increase significantly throughout the year and commensurate with our production levels. And in terms of other products, I'm very excited about the future for other products, especially for full self-driving, which will fundamentally transform transport as we know it; the Tesla Semi truck; Model Y; improvements to Powerwall; Powerpack; the Solar Roof version 3 on the energy side. And no question in my mind that Tesla has the most exciting product road map of any consumer product company in the world.

And finally, I want to thank our employees for their incredible work and our customers for their continued support.

Martin Viecha

Senior Director for Investor Relations

Thank you very much, Elon. And I think Zach -- Zachary would like to have some remarks as well.

Zachary Kirkhorn

Chief Financial Officer

Yes, thank you, Martin, and thanks, Elon, as well. Overall, as we reflect on the progress of Q1, this was one of the most complicated quarters that I can think of in the history of the company. And it was ambitious even by Tesla's own standard. The global expansion of Model 3 was a huge theme within the quarter. We launched the Standard Range lineup for Model 3, product retooling for Model S and Model X, which Elon just talked about with the range enhancements and suspension upgrades, and then we implemented various pricing adjustments and worked to do the corresponding impact that had on our order mix in deliverable cars. So there's 2 key themes that I'd like to discuss briefly, and then we'll open it up to Q&A, around cash and profitability for the quarter.

First, on the cash front, we exited Q1 with \$2.2 billion in cash and cash equivalents on hand. This was a \$1.5 billion reduction from our 2018 ending cash balance, but this reduction is attributed to 2 factors. The first is that we paid off \$920 million convertible note on March 1. Note for those of you looking to the cash flow statement, \$188 million of this is flowing through our operating cash flows. The balance to the \$1.5 billion reduction is more than explained by the working capital impact of expanding Model 3 operations overseas. And the 2 components to this which we have discussed, is that an international operation naturally commands additional working capital because of transit times, but then also the stress on our delivery operations meant that not all of our cars will be delivered. Both of these factors which occurred in Q1 we do not expect to repeat in Q2. And we expect our quarter ending cash balance to continue to increase going forward. I'll also note that we're tracking in April to the largest amount of deliveries for a month 1 in the history of the company.

On the working capital point, as Elon noted, 50% of our deliveries in Q1 occurred in the final 10 days of the quarter. This is because we prioritized international builds for the first half of the quarter and then U.S. local builds in the second half. This led to a binary inflow of Model 3 cars to EMEA and China and significantly stressed the delivery operations. Note, we also faced import issues in Shanghai and Beijing and worked through those, but that also skewed deliveries towards the final couple of days and weeks in the quarter. So we're addressing this by regionally on balance -- by building regionally balanced, and we've already executed on this for Model 3, and S and X will be implemented in the next week or 2.

The secondary benefit of this is that it enables us to run stable operations throughout the quarter. So we don't have to staff many of our delivery areas and logistic operations to the peak. We expect significant cost savings to come from this.

On the P&L side, we incurred \$188 million of one-time adjustments that flowed through to net income. \$120 million of this was related to S and X pricing adjustments that we announced on February 28. This included a reserve for a potential increased return rate for our Residual Value Guarantee and Buyback Guarantee of vehicles and also an adjustment for the inventory value of our used Tesla inventory and service deliveries. There's an additional \$67 million related to Q1 restructuring and other charges that flowed through.

Within the automotive business, one thing that I want to note here is that automotive revenue was negatively impacted by \$501 million attributed to the reserve increase for S and X that I just noted. If you adjust for this, the decline from Q4 to Q1 in revenue is roughly in line with the decline in deliveries.

Within automotive gross margin, Model 3 gross margin declined slightly to approximately 28 -- to 20%. This is due to 2 factors. One is the pricing adjustments that we made on February 28 as well as a mix shift towards the Standard Range lineup which we launched. We also successfully executed on a number of cost reductions which offset this impact. Labor content, warehousing and scrap, as examples, all had double-digit improvements from Q4 to Q1.

In spite of launching the Standard Range variance, we want to note that North American ASPs are close to \$50,000, with the majority of our orders being for long-range variants of Model 3.

In S and X, the impact on margin was more significant. Two major pieces here: the volume reduction led to a reduction in fixed cost absorption, so that impacted our margin as well as the pricing actions that we took on February 28. Even though S and X had been in production for a while, we still continue to make operational improvements there, the labor content as an example, which improved quarter-over-quarter.

As we look to the future here, I agree with Elon's sentiments about the excitement of our product lineup. But from a financial standpoint, what we've effectively done here is build an incredible base of knowledge and assets that we can quickly scale and replicate into different products around the world.

So Gigafactory Shanghai is a terrific example of this. As we noted in the letter, CapEx bringing up capacity 50% for Giga Shanghai as compared to the Model 3 in the U.S., and that 50%, our internal forecast that we're executing against, is actually better than that.

And Model Y, as we've noted, is built on the Model 3 platform, so we're able to leverage the knowledge there for capital-efficient expansion.

In energy as well, as we've noted previously, 2019 is a big year for storage, so a lot of exciting improvements coming there. And the expansion will help improve margin as we can better utilize some of the assets that we've made investments in that.

So just to conclude the opening remarks here, I've personally never felt more excited about the future of the company, and I'm looking forward to the discussion.

Martin Viecha

Senior Director for Investor Relations

Thank you very much, Zachary. Let's take some first questions from retail shareholders who have been submitting their questions on say.com.So the first question is, will Tesla be able to complete their purchase of Maxwell Technologies? What is holding that back?

Question and Answer

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Jonathan, do you want to?

Jonathan A. Chang

Vice President of Legal & General Counsel

Yes, it's Jonathan Chang, Legal Counsel here. Right now, we're just going through approvals with the SEC. There's not a whole lot of things holding it back. We're on schedule. We're on track. Right now, we're looking to close in mid-May.

Martin Viecha

Senior Director for Investor Relations

Thank you. The second question is, is Tesla considering and creating an insurance program in order to further simplify the ownership experience and to more accurately take into account safety of driving an Autopilot? The insurance market is very unreliable for Tesla owners right now.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

The answer is, yes, we are creating a Tesla insurance product, and we hope to launch that in about a month. It will be much more compelling than anything else out there.

Martin Viecha

Senior Director for Investor Relations

Great. Thank you very much. The next question is, Elon, most people when they think of Tesla only see it as an automotive company. Can you speak to the energy side of the company, specifically the road map for when you see the energy side of things really taking off and generating major revenue for the company?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Sure. The challenge really is battery cell scarcity. As far as the stationary storage is concerned, we basically need an upsell to support the vehicle production as well as to both Powerwall and Powerpack. Last year, in order to have enough cells for Model 3, we actually had to convert all of the lines of the Gigafactory to produce cells just for the Model 3 as opposed to Powerwall, Powerpack. And so we're essentially scrounging cells from all around the world to, at least, continue some level of production on the Powerwall and Powerpack. This year, we think that we'll be able to allocate at least maybe 5% to 10% of cell outputs. [I incur] J.B., like what do you guys think?

Jeffrey B. Straubel

Chief Technology Officer

Yes.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes, something like that.

Jeffrev B. Straubel

Chief Technology Officer

Between 5% and 10%, exactly that.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes. So there are far fewer cells in a Powerwall than in a car, so that translates to quite a decent number of Powerwalls. And then we will continue to use cells from various suppliers around the world. The Powerwall and Powerpack, because they don't have to go through vehicle homologation, are much more adaptable to using a variety of cells from other cell providers. So are we expecting that Powerwall and Powerpack to see a very significant percentage growth this year, maybe on the order of 300% or some quite high number. Sorry? Yes, 300%. I guess he was just confirming it, 300%. So this is a very big percentage growth rate. It's much faster than an automotive. So over time, we would expect that to -- that sort of growth rate we hope will be able to continue and then battery storage will become a bigger and bigger percentage of Tesla's business over time. We also have -- we're also planning a significant increase in retrofit solar this year because we've finally refined the product offering to be something that's extremely compelling and much more cost efficient to deliver and install. So a radically streamlined process from what has been done before, and we'll have more to say on that possibly next week. And then the Solar Roof tile, we're on version 3 of the design. That necessarily takes a while to scale up because we have to be confident that the Solar Roof is going to last for on the order of 30 years and because the warranty is sort of 20, 25 years. And so the rate at which you can iterate on Solar Roof is necessarily slowed down by the -- according to the rate which you can do accelerated aging on the roof. And we want the installation process to be simple and easy. So I was just actually at the Buffalo -- Tesla Buffalo factory a few weeks ago and I was pretty impressed with the team, and we're looking forward to scaling that up significantly through the balance of this year and next.

Martin Viecha

Senior Director for Investor Relations

Thank you very much. The next question comes from [Jeffrey]. When and where will the Tesla Semi production begin?

Jerome Guillen

President of Automotive Division

This is Jerome. Next year, we'll start production. We're very happy. We're driving the trucks extensively with, I think, so far quite amazing success, yes.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

The prototypes are working amazingly well.

Jerome Guillen

President of Automotive Division

Yes, very well. We just use them all the time. We load them to the maximum weight and continue to make improvements. So...

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

We even used them to deliver some Model 3s.

Jerome Guillen

President of Automotive Division

Yes, that was fun. So yes, we'll start production next year. The location is not yet set, but it's pretty clear that we make all the batteries and [driving units] in Reno.

Martin Viecha

Senior Director for Investor Relations

Great. Thank you very much.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

That was Sparks, technically.

Jerome Guillen

President of Automotive Division

Yes, Sparks. Yes. Northern Nevada.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes, Northern Nevada.

Martin Viecha

Senior Director for Investor Relations

And perhaps the last question from retail. How soon should current owners that purchased FSD get the new FSD computer?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

I think the -- from features and functionality standpoint, I think there's no point getting the FSD upgrade if you don't really have it in the car for probably about 2 or 3 months. That's when we'll start releasing features that are materially different from the feature set available on the version 2 hardware. So just no need to rush to the -- get your computer replaced. It's like 2 to 3 months before it becomes relevant. And then it will obviously increase rapidly from then. One other comment I'll make in case, since nobody asked this explicitly. For Model Y production, we are right now trying to decide whether Model Y vehicle production should be in California or Nevada, and we expect to make a final decision on that very soon. But in the meantime, we have ordered all of the tooling and equipment required for Model Y. So we don't expect this to, in any way, delay production of Model Y, but it's currently a very close call between Nevada and California as to whether we do the Model Y at Giga or at Fremont. But those are the 2 options, and hopefully, we'll be able to make a decision in the next few weeks.

Martin Viecha

Senior Director for Investor Relations

Thank you very much. Cherie, we can go to analyst questions in the question queue.

Operator

Our first guestion comes from Ryan Brinkman with JPMorgan.

Ryan J. Brinkman

JP Morgan Chase & Co, Research Division

Your guidance for 90,000 to 100,000 2Q deliveries when combined with the full year outlook, it suggests somewhere between 35% and 45% sequential growth from the first half to the second. Can you talk about what is giving you the confidence to project that growth? And in particular what the order book or reservation list may be telling you?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes. The -- we do see strong demand for vehicles, the -- both S, X and 3. The Standard Range Plus Model 3 with Autopilot included at \$39,500 is just an incredibly compelling vehicle and affordable to probably something on the order of like the top 40% income earners in the U.S. and Europe. So it's -- I think we'll see a lot of interest and demand in that. We are. And then with the upgraded S and X, I think a lot of people were kind of anticipating that there would be an S, X upgrade, and this really is kind of a game changer of an upgrade. So I think we are seeing an uptick in demand, and we expect to see that to be

quite significant. So -- and we're also out of the seasonality of Q1 with a few people just generally don't like buying cars in winter, and we're getting past the overhang of that tax credit cliff which, for us, ended in the U.S. on December 31. So these were all very positive factors. We also have just a lot of markets where there's -- where we haven't yet tapped into demand, especially for Model 3. So we'll be releasing the right-hand drive Model 3 and expect to see significant demand in right-hand drive countries. Overall, I feel really good about where things are headed.

Ryan J. Brinkman

JP Morgan Chase & Co, Research Division

Okay. And then my follow up -- I'm sorry...

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

[indiscernible]...

Ryan J. Brinkman

JP Morgan Chase & Co, Research Division

I was just going to say, on a previous call, you indicated that the Y would not be built in Fremont because it was, I think you said, packed to the gills. I heard today that it is now a close call between California and Nevada. Is anticipated demand for Fremont-built vehicles less than was previously thought? Or have you managed to maybe find more capacity in Fremont, for example, with the tent or some other production method?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Well, first of all, obviously, on kind of tents, like I mean, real like hardcore tents, so not like Cub Scout tents, which are fine. But this is actually -- credit goes to a number of Tesla team because they actually look at how could we do this in Fremont if we had to, and we feel that we can actually append building space to the -- basically to the west side of the building and use a lot of internal space that's currently used for warehousing in the Fremont factory. And so we believe it actually can be done with minimal disruption to add Model Y to Fremont.

Operator

Our next question comes from Pierre Ferragu with New Street Research.

Pierre C. Ferragu

New Street Research LLP

My first question is really on the Model S and Model X and, Elon, you say you're comfortable with them. You see -- based on what you saw in April, do you think that the 25,000 units per quarter is the level of demand that is where you see the market coming back already? Or are we not there yet? And more specifically, in the U.S., the pull forward in Q4 could hurt a lot of demand for S and X? Is that something that you still see in the numbers today in recent weeks? Or is that behind us? And I'll have a follow-up on Q2.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes. I mean, I think something like the -- returning to the 100,000 a year annualized demand for S and X is what we anticipate. That's to the best of my knowledge. We don't have a crystal ball, but that's probably our best guess. And sorry, what was the other part?

Pierre C. Ferragu

New Street Research LLP

My question was about the run rate of demand you see at the moment. Do you still feel like weak demand in the U.S. because of the pull forward in Q4? Or do you think demand returned to normal already?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

I think we expect demand to -- we are seeing demand returning to normal in Q2. And it might be a little better than normal. It's -- I don't have a crystal ball, so it's hard for me to say, but my impression right now is that demand is quite solid, quite strong, yes.

Pierre C. Ferragu

New Street Research LLP

And then my second question was briefly on the...

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Sorry, Zachary would probably like to...

Zachary Kirkhorn

Chief Financial Officer

Yes. But just one thing I wanted to add to that, just on the production side of S and X. We did reduce production in Q1, as was noted. That was part of the retooling that we put in place to get the longer-range vehicle out with the improved suspension. And we're in the process of increasing production back up over the course of Q2. So just for the purpose of expectations, I mean, we will exit Q2 at a higher production rate than we did in Q1 on S and X and then return back to a more normal volume in Q3. I think it's already increasing.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes. Yes.

Martin Viecha

Senior Director for Investor Relations

Okay. What was your second question?

Pierre C. Ferragu

New Street Research LLP

And my third...

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Part of the S, X. Yes -- S, X, yes. Or by an S, X. Yes.

Pierre C. Ferragu

New Street Research LLP

And my follow-up was really on Q2 like with 90,000 to 100,000 units, you're getting back to fairly nice volumes, and I'm surprised you don't -- you still expect a loss. So maybe if you could take us through where we will see in Q2 pain points compared to Q4 and Q3, where you had a profit for similar volumes. How much of the loss in Q2 would be the one-off costs? How much is the price points coming down in the mix? And how much is related to pricing and other things?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Sure. So quite a bit -- but we think if we didn't unwind or pulled the wave where we, yes, made cars in the first half of the quarter almost exclusively for Asia and Europe and the second half almost exclusively for North America, and then actually even that is subdivided depending upon whether it's West Coast or East Coast, then we could deliver more cars. But we think it is important to unwind this wave because it ends up being sort of optimizing for 1 quarter, but really adding a lot of cost and difficulty and not just -- not being a good experience for customers and putting great stress on the Tesla team. So if we were to fully optimize for profitability in Q2, I think we could do it, but then we would be unable to unwind this crazy wave of deliveries. And it also helps on working capital within the quarter to not have the wave. And then, Zach, do you want to talk about some of the other items?

Zachary Kirkhorn

Chief Financial Officer

Yes. No, I think you summarized it well, Elon. Two other things that I would add. One is that we did make pricing adjustments to our products in Q1, which puts pressure on margins. And so that's part of what we will see in Q2. The teams are working extremely hard and making terrific progress on improving the cost efficiency of the business without sacrificing growth. And that, in combination with the efficiencies from unwinding the wave, is where we feel we'll be comfortable returning to a place of profitability in Q3 once all of those pieces are in place.

Operator

Our next question is from Adam Jonas with Morgan Stanley.

Adam Michael Jonas

Morgan Stanley, Research Division

First question, Elon. A couple of days ago, I asked you how safe is the Autopilot technology and you said something like twice as safe as normal driving. But you seem to be in a really unique position to really collect exabytes of data and that you can't potentially be externally validated much more rigorously provided to a regulatory body or insurance institute to just show how much safer Autopilot is. When can we -- could we expect to see Tesla do that, that type of validation that investors could also get a sense of. It seems really, really important for adoption. And I have a follow-up.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

I think we're just going to continue to report the absolute numbers. So I think reporting in detail just gives those who are opposed to Tesla, they can sort of like data mine the situation and then try to turn a positive into a negative. So we're just going to keep reporting what we report. We do give some more detailed information to insurance companies and to help with rates. And obviously, as we launch our own insurance product next month, we will certainly incorporate that information into the insurance rates. So we can -- because we essentially have a substantial price sort of arbitrage -- or information arbitrage opportunity where we have direct knowledge of the risk profile of customers and basically the car. And then if they want to buy Tesla insurance, they'd have to agree to not drive the car in a crazy way. Or they can, but then their insurance rates are higher. So we're just going to keep reporting the numbers at a broad brush-stroke level, which I think is really what matters. Autopilot...

Adam Michael Jonas

Morgan Stanley, Research Division

Okay. I understand it.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

That's for safety.

Adam Michael Jonas

Morgan Stanley, Research Division

Okay. And just a follow-up, Elon, and you kind of alluded to it a little bit. There's just so much drama around Tesla's share price and quarterly results. From the outside, at least, it just looks like a huge distraction. And at the same time, there's so much alternative capital and large amounts of strategic capital that is incrementally deployed in domains where Tesla has real leadership. So how important is it for Tesla to be a publicly traded company, Elon?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Well, this may -- I don't want to surprise you, but I would prefer we were private. But unfortunately, I think that ship has sailed. So...

Adam Michael Jonas

Morgan Stanley, Research Division

But is it important? I mean, do you think the company's value is maximized being public? Or is there just only so much you can do and you just got to play the hand that you're dealt?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Well, being public does feel like the sort of price of the stock is being set in kind of a manic depressive way. And I think Warren Buffett's analogy is just like perhaps being a publicly traded company is like having someone stand at the edge of your home and just randomly yell different prices for your house every day. It's still the same house. So it's a little bit of a distraction at times, but I'm not sure what to do about it.

Operator

Our next question comes from Maynard Um with Macquarie.

Maynard Joseph Um

Macquarie Research

In the update letter, you talked about supplier limitations impacting production. Can you just talk about what that was and how long you think that might continue to impact you? And then I have a follow-up.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

In Q2, we don't -- we think we're through supplier interruptions. At least there aren't any significant ones that we're aware of.

Maynard Joseph Um

Macquarie Research

Okay. And I guess there was some concern out there that Model 3 was cannibalizing S and X despite them being all different vehicle classes, and it doesn't sound like you're seeing that at all, but I was just wondering if you had any evidence that proves or disproves this? Any thoughts there would be helpful.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

No, there really do seem to be different market segments. Yes.

Martin Viecha

Senior Director for Investor Relations

And also, about only 3.5% of our trade-ins for Model 3 are coming from Model S. So it's from all the Model 3 trade-ins, Model S accounts for a super, super tiny portion.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes, for sure. We feel we have one Model S just want to trade it in for another Model S or maybe an X.

Operator

Our next question comes from Dan Galves with Wolfe Research.

Daniel V. Galves

Wolfe Research, LLC

I got a couple of questions. One, you mentioned a \$50,000 ASP for North America Model 3s. Can you give us a little bit more detail on kind of -- is that a number like since the February 28 price adjustments? Is that what you're kind of seeing as order flow? I'm sorry, is ASP is in kind of the current order flow since those price adjustments?

Zachary Kirkhorn

Chief Financial Officer

Yes, this is Zach. I mean, what we saw on February 28 when we launched the Standard Range, the Standard Range Plus variance is that there's pent-up demand for those products that released very quickly after it was announced. And then as more time has passed and order rates have stabilized, it's starting -- the average ASP has actually been increasing each week ever since as the order rate stabilizes. And just under \$50,000 ASP represents the most recent data, and we think it's starting to stabilize there. And we'll see where things trend in EMEA and China as well, but what we're seeing in North America is that over 50% of our orders are of the long-range variants and the ASPs are profitable enough.

Daniel V. Galves

Wolfe Research, LLC

That's really helpful. And the follow-up is, I know order questions have been asked before, but let me put it this way. So the -- I imagine that S and X orders need to have a couple of days to pick up after the upgrades. But on Model 3, whatever your assumption is within the 90,000 to 100,000 Q2 deliveries, whatever that assumption is for Model 3, does your current order flow support that? Or do you need something kind of positive to happen over the course of the quarter to get there?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

I think we'll -- I think it'll be fine. Yes, I don't think that there's any major thing required.

Operator

Our next guestion comes from Toni Sacconaghi with Bernstein.

A.M. Sacconaghi

Sanford C. Bernstein & Co., LLC., Research Division

Elon, I was wondering if you could talk about this whole notion of raising capital. For about the last year, you sort of eschewed it as almost an evil thing, and I think a lot of investors believe that the company might be better served in its growth aspirations if it did raise capital or had a stronger cash base. And given that you used up about \$2 billion worth of cash in the quarter, aren't you potentially trying to go through a very thin space while trying to grow quickly and be self-funding, which, quite frankly, may be unrealistic? So why not raise capital? And why do you view that as something that Tesla shouldn't do or wouldn't do? And I have a follow-up, please.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes. I don't think raising capital should be a substitute for making the company operate more effectively. So that in that sense, I think it's just -- it's important to have a strong financial discipline of the company and just -- to make sure we don't have extraneous expenses and that we're just being frugal with capital.

If we just keep raising capital every time, then it just takes -- we don't have the forcing function for improving the fundamental operation of the business. So I think it is healthy to be on a Spartan diet for a while. At this point, I do think there are -- is some merit to raising capital. That's a -- but this is sort of probably about the right timing, but yes.

A.M. Sacconaghi

Sanford C. Bernstein & Co., LLC., Research Division

So does that mean that investors should expect the capital raise in the near to medium term? And I hear you on the force and constraint, but I mean, growth does eat cash, especially in a capital-intensive business. And if you really do believe you have a first-mover advantage, why wouldn't you want to push it as quickly as possible even if it meant raising capital in the short term.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes. First of all, I'll just say I don't think that capital has been a constraint on our growth thus far. And if I thought there was a fundamental constraint on growth we would have [faced] capital before now. But I think it is very important as company scales to make sure we are on a solid foundation and that we're -- we have the appropriate financial discipline throughout the company and are spending money very efficiently. At this point, I think we are doing that, but there's more work to do. And Tesla today is a far more efficiently operating organization than it was a year ago. We've made dramatic improvements across the board. And so I think there's merit to the idea of raising capital at this point.

Zachary Kirkhorn

Chief Financial Officer

Just to add to that, the journey we've been on for the last 12 to 18 months on being more efficient in how we spend money has really changed the culture inside the company. It enabled us to accelerate a number of cost reductions on the COGS side of our products and then make improvements in operating expenses as well. And then as we look forward to capital investments for Giga Shanghai and Model Y and ultimately a European facility, our CapEx per unit of capacity has come down significantly through the work from the team here. So I think it has been a very productive journey for us.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

And technically, we did raise some debt capital in China for the Shanghai Giga on the order of \$500 million. So that -- we want to make sure that we don't have to draw upon global capital to fund the Shanghai factory.

Operator

Our next question comes from Alex Potter with Piper Jaffray.

Alexander Eugene Potter

Piper Jaffray Companies, Research Division

I was wondering, when you say obviously the logistical challenges were a headwind in the quarter and you talk about trying to regionally balance your deliveries going forward, is that basically saying that people in Europe and China are just going to need to wait longer to take their deliveries and you're going to try to emphasize more North America in order to, I guess, boost your working capital and your profitability in every quarter going forward?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

No, they would actually receive their cars sooner. It just means that instead of building cars in batches, where, say, the first half of the quarter is just dedicated to China, Europe cars, and the second half is dedicated to North American cars, that we blend vehicle production for customers throughout the world,

throughout the quarter. And then this puts much less strain on us. We don't want a situation again like what we had like in Q1 where essentially all the cars were arriving at customers worldwide at the same time. We literally delivered half of the entire quarter's deliveries were in the final 10 days of Q1. That's insane. So I think we need to unwind that. It's also just not a great customer experience because we're shorthanded and then we have to redeploy like people from -- like that are working in sales, HR, legal, engineering, everyone, just to deliver cars. And then we -- then they can't do their regular jobs. So it just makes sense to just blend the production according to demand throughout the quarter.

Alexander Eugene Potter

Piper Jaffray Companies, Research Division

Okay. That makes sense. And second question, I guess on go-to-market, there was some period of time there where the company was focused on closing storefronts, a fair amount of noise made around that. And then it looked like some of the commentary was hedging that strategy. I was just wondering if there's any update there. And if you have one, that would be helpful.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Sure. I think Tesla just sort of -- specifically, I didn't handle messaging of that well. The -- I mean, that's amplified by the statement -- we make a statement, it's sort of taken to an extreme when there's a misunderstanding. We certainly will continue to have stores, and we will continue to add stores provided they are in locations where there is high foot traffic and for people that are in our target market. So we actually will continue to add stores in locations that are no-brainers. We will close stores in locations where they are incredibly hard to find and the foot traffic of potential buyers is very low such that it does not support the cost of the store and the people in it. So I think it's just common sense. And then all sales online just means that even if you go into a store, you -- we would guide you to order the car on your phone. The store is essentially like -- they're like information centers, a place you can get a test drive and buy some Tesla merchandise, that kind of thing. But all sales online doesn't mean all stores are closed. It just means that when you buy a car, you always do it on your phone in the store or at home or anywhere. You also -- all orders online doesn't meant all stores are closing. That's not what is meant.

Operator

Our next question comes from Philippe Houchois with Jefferies.

Philippe Jean Houchois

Jefferies LLC, Research Division

I was just wondering if you could comment on the agreement you seem to have reached with FCA on the possibility of selling your CO2 credits to them in Europe and what that means to your potential cash inflow. When that might start occurring? And if there is any chance any of those things already in the Q1 cash position?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

I think it's a confidential deal with FCA so we -- and we agreed with FCA not to comment on it publicly. So we must abide by that.

Philippe Jean Houchois

Jefferies LLC, Research Division

All right. And can I ask you a question of coming back to what Adam was saying about the drama that surrounds your stock, unfortunately. Why don't you reduce some of it by disclosing on a monthly basis your deliveries and also maybe disclosing early your greenhouse revenue instead of just reserves, so we get right away a better view on some of these details that kind of move the stock?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

I think that would actually be counterproductive because people read too much into what occurred in a month. I mean, even at a quarterly basis, things can be lumpy. And so the more granularity that's provided, let's say, on a monthly level, the people would reach all sorts of conclusions that don't make sense. It's like -- literally like sales to a particular country, say overseas, are affected by when the ship arrives. And so if the ship arrives on the 31st of the month or the first of the next month, this will make it look like something dramatic has happened. But actually the ship was just a day late. So people read -- that would increase the drama, not decrease it.

Zachary Kirkhorn

Chief Financial Officer

And we're filling the ship 100%...

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Filling the ship 100%. So it's like it just ends up being lumpy. So like if you managed -- if you've calculated like GDP of a country to offset the U.S., GDP on Sunday is extremely low, but GDP on a Monday is extremely high. It does not mean -- nothing has really changed.

Operator

Our next guestion comes from David Tamberrino with Goldman Sachs.

David J. Tamberrino

Goldman Sachs Group Inc., Research Division

First one, on customer deposits, it looks like it's essentially flat to maybe slightly down. I understand there's probably some timing with deliveries that could have helped it towards the end of the quarter. But we would have thought it would have increased given the Model Y unveil. So our question is what was the initial order intake for the Model Y? And just coming through some of your comments earlier, what daily order rate are you seeing right now for the rest of your products?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

I think we don't want to comment on the granularity of deposits. Again, people just read too much into this. We're not playing up the Model Y because we're not -- it's not in production. So you can't really read anything into Model Y orders at this point.

David J. Tamberrino

Goldman Sachs Group Inc., Research Division

Okay. Well then, my second question would just be if you anticipate a further price adjustment with the next level of U.S. credit phasing out July 1?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

We don't comment on future price changes unless you see it publicly.

Operator

Our next question comes from Colin Rusch with Oppenheimer.

Colin William Rusch

Oppenheimer & Co. Inc., Research Division

Yes, could you comment on whether you'll be battery constrained at 100,000 vehicles a quarter in 20?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Self-constrained, you mean? We don't [have the feeling of] being self-constrained at 400,000.

Colin William Rusch

Oppenheimer & Co. Inc., Research Division

Okay. And then as you look at the Maxwell Technology and integration, post close, how quickly do you think you'll be able to integrate that technology into the battery production? And could you comment on potential for chemistry and form-factor changes as that gets integrated?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

You're really asking some super secret sauce questions here. Yes, I think we'll have a -- I think we'll probably have an Investor Day like the Autonomy Day maybe later this year or early next just to go over the cell and battery technology and future strategy. I think that will be very informative, but we do recognize the criticality of this.

Operator

Our next question comes from Joseph Spak with RBC Capital Markets.

Joseph Robert Spak

RBC Capital Markets, LLC, Research Division

First question is really just a clarification on -- in the outlook of 25% non-GAAP gross margin that you're targeting. Is that over the mid-term? Or is that something you expect to hit by the end of this year? And if so, what gets S and X back higher given the price cuts?

Zachary Kirkhorn

Chief Financial Officer

Yes, this is Zach here. That guidance that we're targeting for the end of the year. Although internally, we're working towards S and X non-GAAP gross margin achieving that sooner. The biggest lever there is actually 2 components. One is, as we increase volume back on our S and X production line, there's just a natural benefit there from the fixed cost absorption which will help us. But we also have a number of cost reduction projects in place that we're executing on over the course of the year. And then the third piece which applies to S and X, but also Model 3, we're seeing an increased take rate on our full self-driving offering. And there are revenue deferrals associated with that given that the full suite of functionality is not there. And as that option becomes -- approaches sees us continually roll out more, we will be able to have more revenue on that. And so all of these things together within our internal plans gives us confidence.

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes, we should -- I should mention that the upgraded powertrain for S and X was actually results in a significant cost down because we essentially took the high volume rear-drive units of the Model 3, which is extremely efficient but [the same magnet motor and power] electronics already in it and we made a version for that -- of that for the front-drive unit of S and X. And so we're actually able to get a cost reduction while improving range and performance of the car. That's just one example.

Joseph Robert Spak

RBC Capital Markets, LLC, Research Division

Okay. And the second question is just looking at the 10-K, you've continually noticed \$4.9 billion purchase obligation, which I think is primarily related to Panasonic Giga 1. And then Elon, in some of your communication, you've indicated production constraints. So I guess the question is, does that \$4.9 billion correlate to reaching that 35-gigawatt hour rate? And if you can't hit that because of production constraints, does that adjust?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Go ahead...

Unknown Executive

Yes, so this is [indiscernible]. So the purchase obligation in the 10-K is basically for the entire contract which we have for Panasonic. It's not something that we need to hit, I mean, make the purchases tomorrow. So this is going to take a couple of years.

Operator

Our next question comes from Colin Langan with UBS.

Colin Langan

UBS Investment Bank, Research Division

I mean, it sounds like from the tone of the call that you don't see that there's a demand issue for some of the product, but margins seem to be under pressure and typically automakers stop pricing when there is a demand issue. So what is the logic of the price cuts during the quarter?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

I mean, our goal, as we've been very clear about from beginning of the company, is to make our cars as affordable as possible. And we thought it was important to offer the \$35,000 Model 3 and then to create a sort of bundled package for the Model 3 with the increased range because we think actually that difference between 220 and 240 is quite important, the more point people realize in range and having a posher premium interior and then finally, Autopilot. So we thought those -- [like we went and paired like] product that's really just nailed the sweet spot, which I think the \$39,000 -- \$39,500 Model 3 is just really nailed the sweet spot and we're seeing consumer response accordingly. People can still buy the \$35,000 version of the Model 3 that, of course, didn't have Autopilot and has a software range restriction, that kind of thing. It's like slightly more inconvenient to buy. You just have to make a phone call or visit a store. So it's just not like you have to complete the obstacle course or something. But we see very few people actually taking us up on that \$35,000 offer, but it is there and will remain there.

Colin Langan

UBS Investment Bank, Research Division

And as a follow-up, you're still targeting the China facility ramp by the end of the year. Are you still confident in the 3,000 per week? And do you have a battery supplier yet that's getting pretty close to that point?

Elon R. Musk

Co-Founder, CEO, Director & Product Architect

Yes, the Shanghai Gigafactory progress is going incredibly well, a testament to the outstanding execution of our team on the ground there. I get daily e-mails with Tesla pictures from one day to the next from [Tong Zhu], who leads the Gigafactory program. And so we're obviously discussing it or getting updates, so 7 days a week so the -- in that Gigafactory e-mail. So in terms of execution, it's outstanding but, of course, the production goes as fast as the slowest item. That's very important to bear in mind. So we have 99% of things in good shape, but 1% is missing is what can make a car. So with respect to -- that said, it looks like we'll reach volume production at the end of this year with, let's say, more than 1,000 cars a week, maybe 2,000 from Shanghai Giga at the end of this year. That's what it looks like to be a case right now. If it's not at the end, it will be shortly thereafter. And then we expect to have multiple sales suppliers for Shanghai Giga.

Martin Viecha

Senior Director for Investor Relations

Great. Thank you very much, everyone. Unfortunately, this is all the time we have for our Q&A today. Appreciate all of your questions, and we look forward to talking to you in the next quarter.

Operator

Ladies and gentlemen, thank you for participating in today's conference. This concludes the program. You may all disconnect, and have a wonderful day.

Copyright © 2019 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.

These materials have been prepared solely for information purposes based upon information generally available to the public and from sources believed to be reliable. No content (including index data, ratings, credit-related analyses and data, research, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Global Market Intelligence or its affiliates (collectively, S&P Global). The Content shall not be used for any unlawful or unauthorized purposes. S&P Global and any third-party providers, (collectively S&P Global Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content, S&P Global Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON "AS IS" BASIS. S&P GLOBAL PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Global Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages. S&P Global Market Intelligence's opinions, quotes and credit-related and other analyses are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Global Market Intelligence may provide index data. Direct investment in an index is not possible. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Global Market Intelligence assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Global Market Intelligence does not act as a fiduciary or an investment advisor except where registered as such. S&P Global keeps certain activities of its divisions separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions of S&P Global may have information that is not available to other S&P Global divisions. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P Global may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P Global reserves the right to disseminate its opinions and analyses. S&P Global's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

© 2019 S&P Global Market Intelligence.