Q3 2021 Earnings Call

Company Participants

- Andrew Baglino, Senior Vice President of Powertrain and Energy Engineering
- Elon Musk, Chief Executive Officer
- Lars Moravy, Vice President of Vehicle Engineering
- Martin Viecha, Senior Director of Investor Relations
- Unidentified Speaker
- Zachary Kirkhorn, Chief Financial Officer

Other Participants

- Brian Johnson, Analyst, Barclays
- Colin Langan, Analyst, Wells Fargo
- Colin Rusch, Analyst, Oppenheimer
- Jed Dorsheimer, Analyst, Canaccord
- Joseph Spak, Analyst, RBC
- Pierre Ferragu, Analyst, New Street Research
- Unidentified Participant

Presentation

Martin Viecha {BIO 17153377 <GO>}

Good afternoon everyone and welcome to Tesla's Third Quarter 2021 Q&A webcast. My name is Martin Viecha, Senior Director of Investor Relations and I'm joined today by our CFO, Zachary Kirkhorn; and our Senior VP Andrew Baglino as well as other executives. Our Q3 results were announced at about 3:00 PM Central Time in the update deck 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.

During the question-and-answer portion of today's call, please limit yourself to one question and one follow-up. Please use the raise hand button to join the question queue. But before we jump into the Q&A, Zach has some opening remarks. Zach?

Zachary Kirkhorn {BIO 20940148 <GO>}

Yeah, thanks Martin. We are continuing to make great progress as a company, setting new records on each of the most important financial metrics for Q3. Overall, we delivered just over 240,000 cars, 20% higher than last quarter and 70% higher than the same quarter last year. We were also able to achieve an annualized production run rate of over 1 million cars towards the end of the quarter.

The increase in production rate has primarily been driven by further ramping of the Model Y at our Shanghai factory. Additionally, we have made great progress increasing production volumes of Model S and have recently started the ramp and deliveries of Model X. It will take a bit more time to get this program back to higher volumes, but based on demand we are targeting to exceed historical production levels.

We have also completed the transition of our Shanghai factory as our main export hub. This has enabled us to supply more vehicles to the North America market and to introduce Model Y to Europe. Due to part shortages and logistics variability we have not been able to run our factories at full capacity. It's important to note that while we have roughly doubled deliveries year to date, this has been exceptionally difficult to achieve.

I want to thank our supply chain team for their incredible work and our production teams for showing impressive flexibility as we make adjustments real time. This team's expertise in the chip industry across all Tiers has made a huge difference in managing through these challenges. Additionally, we never reduced our production forecast with our suppliers, as we're adding capacity as quickly as possible. I also want to thank our suppliers for their dedication and partnership to Tesla. Despite these increases in production and generally higher prices our backlogs are continuing to grow and average customer wait times are extending. The only practical way to address this in the immediate term is to do everything we can to build more cars on our existing production lines which is where we are focused.

Similar dynamics are also playing out in our storage business as we are working to expand Powerwall and Megapack production as quickly as parts and sells allow us to do so. Additionally, we have made good progress on the in-house battery manufacturing program and we're excited to have expanded to Full Self Driving beta program to more customers. Financially our Auto gross margins reached 30.5% on a GAAP basis and just under 29% excluding regulatory credits, which is our strongest yet. This benefit primarily comes from higher volumes, particularly out of the Shanghai factory increased mix of the Model Y as we -- and we have made good progress, increasing Model S volumes.

The Model S has now returned to positive gross margin and we expect this to increase with higher production and the ramp of Model X. As was the case in Q2, there were some net benefits from pricing actions. However, this remains small in the context of other contributors. Please keep in mind that given backlog it will take time for the impact of recent changes to flow through our financials. Note that we are also not yet recognizing additional revenue from the FSD beta program. Supply chain challenges, including (inaudible) continued to provide cost headwinds as was also the case with FX this quarter.

While we are seeing an impact from the rising commodity and labor costs we have also been adjusting pricing, which should help to compensate. Overall, as I mentioned in our last call, our P&L continues to benefit from the marginal of profitability of each incremental unit with higher fixed cost absorption. As a result of the great progress on margins, volume, and appropriate management of overhead costs we were able to achieve an operating margin of just under 15%, exceeding the long-term guidance we've laid out previously.

On cash, we generated record operating cash flows of $3.1 billion and continued to invest heavily in the build out of manufacturing supercharging and service capacity. We also continued to retire high-interest rate debt including the early settlement of our 2025 Senior Notes of 1.8 billion during the quarter. As we look forward, we are clearly quite a bit ahead of the pacing required to achieve our target annual growth rate of 50% this year. Q4 production will depend heavily on availability of parts. But we are driving for continued growth.

We are also nearing assembly of our first production cars in Austin and Berlin. It's important to stress, while the first production car is an important milestone the hardest work lies ahead in the ramp. Please keep in mind that we are pushing the boundaries on new product and manufacturing technologies at these factories, which makes it difficult to predict the exact pace of the ramp.

These factories will also partially weigh on our margins as we work towards volume production. Overall, I'm very proud of what the team has accomplished and I'm excited for our next phase of growth into Q4 and into 2022. The team has done a tremendous job improving our financial health in a short period of time, while also continuing to preserve improve our precision and pace of execution. Thank you.

Questions And Answers

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much and we will now take questions from institutional and retail shareholders that we posted on our website.

The first question is, when should we expect the first vehicles to be delivered with 4680 cells.

Q - Unidentified Participant

Yeah, thanks. Martin. Early next year from a non-cell perspective structural battery crash range and reliability testing are on track to be complete this quarter testing to date has gone well and the Fremont manufacturing line is on track to support. However, similar to what Zach said before, this is a new architecture and unknowns may exist still. Our top priority is ensuring quality in what we deliver. And from a cell perspective, we are comfortable with the design maturity and manufacturing readiness matching the pack timeline I just mentioned.

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much. The second question from institutional investor comes, do you still expect to start production of the $25,000 model in 2023. What are the biggest hurdles from now until then.

A - Unidentified Speaker

Thanks, Martin. Yeah. We're working on a strategy to increase our production rates as quickly as possible. I think Zach (inaudible) that well and we're doing this well to try and add the least amount of incremental complexity to the business. We don't want to add any new vehicles to our lineup when we're generally in a cell-constrained world while there is still more runway to grow these existing products. We are focused on Model Y expansion in Austin, Berlin, ramping S and X further in three months to restore to past levels while also growing 3 and Y production in Fremont and Shanghai. As we mentioned before after Model Y in Austin our next product launch will be Cybertruck and that timing course depends on increasing cell capacity both from our suppliers and through our inherent so as well as many other headwinds we faced in supply chain and completing our currently full plate of products on the table.

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much. The third question is with FSD beta training data set to explode exponentially as software has released a wider and wider audience. Are there any early takeaways with regards to how quickly versions can iterate and be pushed out from biweekly to weekly or even daily.

A - Unidentified Speaker

At this point, it's not so much about how much data can we collect but how quickly can we process the data we've collected. This is where Dojo comes in as we mentioned on AI Day with substantially faster computer and Dojo will be able to iterate more often than we do and[ph] say the training and that takes one day instead of one week makes a huge difference in our ability to push out more updates. But realistically, there's a whole lot more that comes into play when iterating software updates. The whole infrastructure from top to bottom, including testing and validation needs to be set up for faster iteration to daily updates are not really realistic for now.

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much. The next question is, can you provide an update on future model development and how much diversity in your fleet will be necessary to achieve 20 million in annual volumes. The best selling cars in the world today only sell slightly over 1 million units. So is it possible to achieve 20 million units with just S, X, 3, Y, truck and the $25,000 car?

A - Unidentified Speaker

Thanks, Martin. Yeah as we've mentioned before, we've seen record growth in both Model 3 and Model Y segments where Model 3 is currently the best-selling luxury sedan worldwide. And as we mentioned at our shareholders' meeting Model Y is poised to be the best selling vehicle in the world. Tesla continues to break modes in these Vehicle segments and we hope to do so with each new product as we've said publicly will eventually expand the vehicle item to get to larger volumes and we believe that we will need to be in all major segments across small, mid-size, large sedans, SUVs and trucks to do so along with the course a massive space of robotaxis[ph].

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much. The next question from retail shareholder is what is Tesla's goal for vehicle production capacity for the four current factories Fremont, Shanghai, Austin and Berlin by 2024.

A - Unidentified Speaker

Yeah. Thanks, Martin. Our goal as a company here is to grow on an average basis[ph] 50% per year and so you can extrapolate that out. There may be some periods of time in which we're well ahead of that. There could be some periods of time despite best efforts we are slightly lower than that, but that remains the long-term goal of the company. In Fremont we're continuing to push the boundaries of what's possible there. Over the last 12 months, we've done about 430,000 cars of production and based upon everything that we know in the factory where the bottlenecks are what the potential is we're targeting to increase that another 50%.

I think that will be a difficult goal, but that's the goal that the internal team has and they're going to continue to push on that. As we look towards Shanghai we're continuing to push the boundaries there and we continue to ramp production there as well. So most recently the ramp up to Model Y, which was our biggest contributor of volume in Q3 will continue to ramp that factory and in our plans there with time are to keep growing the capacity in that factory.

Austin and Berlin are interesting factors because our first iterations of capacity there are on Model Y but we've intentionally set these factories and locations in which they have a quite significant amount of land and ability to expand and so we'll take Model Y at these factories. We're trying to get to 5,000 cars a week as soon as we can. And then, we'll continue to push beyond that, potentially even getting to 10,000 cars per week at those factories and then we'll add Cybertruck here in Austin and continue to grow from there.

So our goal is to get to millions of cars per year over the next couple of years and then ultimately in the long-term be able to achieve 20 million cars per year. We're going to grow as quickly as feasibly possible with an eye towards a 50% annual growth rate.

A - Martin Viecha {BIO 17153377 <GO>}

Great, thank you very much. The next question is, what is your view on the tightening regulatory environment for FSD, the investigation and broad data request by NHTSA some of the recent nominees (inaudible) have been publicly critical of FSD including engaging with short[ph] sellers online. How will you manage this environment?

A - Lars Moravy

Thanks, Martin. Yeah. As we have been for years. We always engage with and it's another worldwide regulatory bodies to share our knowledge and to work with them on our approaches on both active and passive safety. There are ongoing regulatory inquiries taking place all the time and especially on the subjects like FSD they are at the cutting edge of technology development. During these investigations my team, myself are always cooperative as much as possible. We expect and embrace the scrutiny of these products and know that the truth about their performance in the innovations, our products have will ultimately be all that matters. In the end and as I've said on previous calls, we take safety as a top priority in all our designs.

This is because our primary motivation is from -- coming from a team of incredible engineers designing software and hardware that saves lives and prevent injuries and doing so we will continue to be transparent to the public on how our technology is both developing from an auto pilot safety data, the latest of which we just shared in the Shareholder Update and you can also see in review a wide variety of customer post FSD videos and social media.

A - Unidentified Speaker

Right, just to add to that, I mean as Lars said safety is extremely important for Tesla. It's the right thing to do. And if you look at various independent testing and regulatory testing of our products. You can see the work of incredibly talented engineers and the results of those tests and our goal in developing safety-oriented software around the car is to continue to go beyond what the hardware is able to provide, if you can prevent a crash from happening that's the safest way to manage this and I think at a macro level here, what we're seeing and this is entirely understandable and expected is that the automotive industry is going through a transition from the traditional car as we know it to more of a computer software oriented sensor suites around them that can manage things beyond just what the driver manages.

And the regulatory bodies are understandably so are interested in understanding how to regulate in this environment and this is no exception to that. So as Lars mentioned here, I think this is a great thing. We're excited to partner and we will work collaboratively with all regulatory bodies who want to go on the journey to the transition to a software-oriented vehicle.

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much. The next question is service remains an issue with appointments available weeks or even months out. Likewise supercharge (inaudible) become untenable at some locations. What concrete steps is Tesla taking to improve the customer experience in these two key areas?

A - Unidentified Speaker

Yeah, I'll take the service part of this question, Andrew. You can take the supercharging part. We have seen an increase in service wait times throughout the summer and a couple of things that have contributed to that based upon the information that we had. The first is that and I think this is kind of this is not unique to us is that the return to some sense of normalcy in a post-pandemic world has happened I think more quickly than most people expected and what we're seeing here is that the number of miles that people are driving has increased. There may have been some demand for service during 2020 or in the early parts of 2021 that customers put off and so there is a bit of a catch up that's occurring that has increased demand for service.

At the same time in the macro environment here logistics, moving parts, sourcing parts, has become increasingly more difficult, which is well known issue in the world right now as well as challenges in the labor market and so that's kind of the simultaneous increase in demand for service when the ability to supply that service has been impacted for the reasons I mentioned. And so we saw an uptick, primarily in Europe and North America and service wait times over the course of the summer, and we've been working extremely hard since then to address this and we've seen our wait times come down. So this is not the case in every location. But if you think about it from regional average perspective, we are seeing improvements there.

We remain super-focused on adding locations and so over the last year we've grown our physical footprint of service centers by 35%. We have grown our footprint of mobile repair by over 40%. We're also adding staffing as quickly as we can in the areas that are most impacted by the imbalance of supply and demand for service, but I think the most important part about all of this is and we said this on calls before the best service is no service and so we have been incredibly focused as a company both on the initial quality of our vehicles and reliability of our vehicles. And we've seen pretty substantial improvements in both of those metrics over the long term and over the last couple of quarters.

So it is something that remains on our minds We monitor this very closely, but hopefully that's a helpful explanation into the context in what we're doing.

A - Andrew Baglino {BIO 21161872 <GO>}

Yeah. And on the supercharger side, the supercharging team monitors congestion and plans expansion to ensure customer experience with minimal wait times alongside the growth in our vehicle fleet. While we certainly have work to do in expanding capacity in some congested areas, average congestion on the network has decreased over the past 18 months, nonetheless we're not standing still. We are executing accelerating expansion plans globally, the network has doubled in the last 18 months and we are planning to triple it over the next two years and even so on an individual site basis to combat existing congestion more quickly where it is isolated and problematic, we expedite local relief sites, deploy mobile superchargers, and we try to introduce pricing strategies that encourage more off peak usage to avoid the waiting.

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much.

A - Unidentified Speaker

And just one thing to add on supercharging. If you haven't experienced our latest iteration [ph] of battery packs that can handle fast charge rates in combination with our 250-kilowatt charging stations is pretty incredible. And this is a really important component to supercharging capacity because the faster you can charge the more charge sessions that you can have on an individual post, the better the customer experiences as you're going on a long-term journey because you're supercharging times are lower. So this is a really important part of the strategy supercharging team has done a great job rolling these out but it requires a combination of both the 250-kilowatt charging and our latest iteration of battery packs.

And we've also maintained an ongoing roadmap on software improvements dynamic routing to avoid busy superchargers that's actually really helpful. We take the real-time business of the stations into account when choosing where to navigate people on their road trip. I mean beyond that, we're also continuing to improve the trip planner itself and how it estimates how much energy people use. So it's not too conservative and (inaudible) charge more than they need to which is another thing that can delay total trip.

A - Martin Viecha {BIO 17153377 <GO>}

Great. Thank you very much. The next question is this considering any other ideas, other than FSD with the real world AI that can bring additional software[ph] revenue to Tesla. If not can Tesla consider building interesting games around FSD beta?

A - Unidentified Speaker

Sure. On AI day we did talk about potential future where Dojo could be used as a neural net training platform for other companies. It's not a focus of ours today as we are fully subscribed on Dojo with our internal uses. We do expect to continue to improve the in car experience in the context of FSD.

A - Martin Viecha {BIO 17153377 <GO>}

Great, thank you. And maybe last question from shareholders is how does FSD take rate -- how has FSD take rate changed since introduction of monthly subscription. Are there any plans to increase the FSD pricing as wider release becomes imminent?

A - Unidentified Speaker

I'll take the second part of the question first and we won't be providing any forward-looking commentary on our pricing strategy or what may happen here over the near term. With respect to the first part of the question it has been an interesting theme for us to impact within the company. I mean what I'll say just as a general statement before I make a couple of specific comments is that the things that we learn on FSD subscription today are not necessarily all that relevant. This is really more of a platform for when FSD beta goes into wide release and the features and functionality become more accessible to more customers.

The second thing that I will note is that if you look at the pricing, the monthly pricing of FSD subscription and then you compare that to the cost of either rolling FSD option into your lease or your loan on a monthly basis the most economical way for customer to enjoy the features of full self driving is through purchasing it upfront and enrolling into their financing and as a result of that what we've seen in the data is it is not -- we're unable to detect a change in the upfront take rate of FSD when people purchased cars. We have seen quite a bit of activity of folks curious to experience what the software has to offer and subscribing to it and enjoying it to that route, but again as I said at the beginning I think what we've seen so far on FSD subscription is not terribly relevant. We'll see how that plays out in the future as we continue to release more features.

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much and now let's go to analyst questions. I just wanted to remind everyone to click on the raise hand button. If you want to ask a question. The next question comes from Pierre Ferragu from New Street Research. Pierre, feel free to unmute your mic and go ahead. Pierre, I think your mic is muted. Okay. While Pierre works on that let's go to the next analyst. The next question comes from Joseph Spak from RBC. Joseph, we cannot hear you. Can you click unmute?

Okay, well the -- the team is working on that, let's just go back to set[ph] of questions. So the next set of[ph] question is can Tesla allow for FSD to be transfered to another vehicle at a fee something less than 10-K early adopters, are paying the price if they want to upgrade their vehicle, you lose the value on the trade, the trade-in and now you have to buy in at the higher cost.

A - Unidentified Speaker

I don't think that this is widely known, but (inaudible) doing the sentiment of what this question is asking if you trade in your Tesla to Tesla there is a difference in price that we pay for a trade in that has FSD compared to one that doesn't. And so there is that premium that we pay to repurchase the FSD that money can then be applied towards the purchase of a new car. So I just -- we hear this feedback quite a bit. We see it on social media. We see it in the forums et cetera and so this already does exist. Not directly in the form here and we don't call it out explicitly in the trade-in[ph] potentially that we have increased the price of your trade and as a result and hopefully this clears this up because we do actually do that.

A - Martin Viecha {BIO 17153377 <GO>}

Okay. And the next question is Elon said that we get an update on cybertruck in November a year ago but it hasn't happened and we know there are a lot of updates. Will you show off the new and improved cybertruck?

A - Elon Musk {BIO 1954518 <GO>}

Yeah. Thanks, Martin. We get a lot of questions on cybertruck. We've been busy detailing the cybertruck to achieve the prototype version we shared with customers a while back. As you may have seen recently on social media we've built a number of alphas and are currently testing those to further mature the design and while those point out a few key additions like (inaudible) also a number of smaller or less visible improvements, though the product is largely true to the initial vision. We'll continue to work through the product and the beta stages that we're in now and look to launch that later next year.

A - Martin Viecha {BIO 17153377 <GO>}

Okay, thank you very much. We just promoted Pierre (multiple speakers).

Q - Pierre Ferragu {BIO 15753665 <GO>}

Can you -- can you hear me, guys.

Q - Unidentified Participant

Yes, we can hear you.

Q - Pierre Ferragu {BIO 15753665 <GO>}

Amazing. I'm very impressed that you managed to figure those.

A - Unidentified Speaker

Thank you, Pierre.

Q - Pierre Ferragu {BIO 15753665 <GO>}

I would (technical difficulty) anyway let me ask you my question, actually I'm very intrigued by what you guys are doing on the insurance front and so you have now in the market in Texas and insurance products, for which the premium varies as a function of the safety score of the driver and so I'd love to hear you about that you must have some initial data points so that market reaction, you know, what is the update and from there, can you tell us about how do you think you're going to distribute[ph] that, is that going to go through your installed base very easily or is it going to be like a heavy marketing push and then maybe tell us about your expansion plans, what are the next geographies what's the timing, how fast is that business line likely to grow in the next few years.

A - Unidentified Speaker

Yeah. Thank you, Pierre. I'm extremely passionate about our insurance product. We have a terrific team here at Tesla of folks who have been spending a lot of time developing this and probably listening to the call. So we're pretty excited so far Pierre. So I mean at the highest level here. We entered the insurance market kind of unintentionally I would say. Our customers are coming to us complaining that the price of traditional insurance was too high and it was reducing the affordability of the

Tesla and part of our journey here at Tesla is we want as many people as possible to be able to afford our products. That's extremely important to achieving the mission of the company.

And if you look at the price of insurance as a percentage of what somebody's monthly payment is it's quite high and we spend extreme amounts of effort in manufacturing to take $5 of BOM[ph] cost out here or $10 out somewhere else. If we can get $5, $10, $20, $30 dollars out on a monthly payment you can calculate what that means in terms of reduction of the price of the car. If you finance it and the leverage of improving insurance cost is huge in terms of affordability and so that's kind of the context by which we stepped into this.

As we started to do more research essentially the tools by which the insurance is traditionally calculated are optimized based upon the existing data, but the existing data is limited. So therefore there is a focus on things like marital status or age or other attributes like that, accident history is a good one et cetera. What essentially happens here is customers who are low risk and don't actually file many claims and are overpaying on their insurance relative to their cost that overpayment then goes to riskier customers who are essentially being subsidized. And as we looked at this and we looked at the data, we thought this just doesn't seem like it's fair. At Tesla because our cars are connected, because they are essentially computers on wheels there is enormous amounts of data that we have available to us to be able to assess the attributes of a driver who is operating that car and whether those attributes correlate with safety.

Because we do get a signal when a car has been in an accident. So we've been spending our time looking at hundreds of different variables and also looking at billions of miles of driving history and we've been able to find[ph] a model that is able to predict with decent accuracy the probability of collision over a period of time. And the model is not perfect, the model is a function of the data that we have available. That data set continues to grow. We continue to experiment with new variables, but we do have a model that works pretty well so far. And from that model being able to predict frequency of collision we can then align that against the price curves.

And we can have individualized pricing integrated into the car, integrated into the app, integrated into that customers' experience where the feedback go[ph] back to the customer on how they're driving after every drive. The attributes that they were successful on or unsuccessful on and the tips of things that they can do to improve their safety. So that's what we have developed. We then included safety score as part of the FSD beta enrollment program where we have almost 150,000 cars currently using the safety score and I believe the latest data is over 100 million miles of driving. So we've been able to go back and analyze that data and we've learned two things coming from that.

The first is that the probability of collision for a customer using safety score versus not is 30% lower, it's a pretty big difference. It means that the product is working and customers are responding to it. The second thing that we've looked at, is what is the probability of collision based upon actual data as a function of a driver safety score and that is aligning with our models, most notably here in the top tier of safety compared to lower tiers there is multiple X[ph] difference and probability of collision based upon actual data. So this is a very new and very exciting frontier for us. I know that was long-winded but we spent a lot of time on this and we have put a lot of thought into it.

Specifically with respect to the rollout, the insurance industry in the US is intensely regulated and it's regulated on a state by state level. That means that we have acquired regulatory approvals from each individual department of insurance at each individual state. Texas is the first state that we launched in, I do want to thank the Texas insurance regulators here, you've been great to work with. We have a roadmap of additional states we will launch the product in their states, as we receive regulatory approvals and our goal is to be in every major market in which we have cars[ph]. The -- we did a soft launch in Texas last week. Yeah, and what we're seeing an initial take rate[ph] data is that, if you compare that to what we're seeing in California, we're off to a good start here. So we're very excited about it. We're excited about individual risk-based pricing. We're excited about the ability for folks to become safer and as a result, save money and it feeds into our priority of the company of building the safest products in the world.

If I can add that, it's really exciting for the engineering team to the finance team taking on safety (inaudible). Thanks for that guys.

Q - Pierre Ferragu {BIO 15753665 <GO>}

Thank you, guys.

A - Zachary Kirkhorn {BIO 20940148 <GO>}

Thank you, Pierre do you have a follow-up question.

Q - Pierre Ferragu {BIO 15753665 <GO>}

No, I think I'm fine Zach. Thanks for taking the time. It's fascinating and very interesting (technical difficulty).

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much. The next question comes from Joseph Spak from RBC.

Q - Joseph Spak {BIO 17457170 <GO>}

Thanks. Can you hear me.

A - Martin Viecha {BIO 17153377 <GO>}

Yeah, we can hear you.

Q - Joseph Spak {BIO 17457170 <GO>}

Perfect. So, Zach as you noted, you hit low teens operating margins. That was your medium-term target. You're there now despite the number of challenges and not full utilization, sort of the plan. So how are you thinking about that target now and does it allow you to drive price down further and[ph] lot more demand invest in other initiatives or does that target need to change and then longer term, do you have an aspirational gross margin target as the mix of software and hardware changes?

A - Zachary Kirkhorn {BIO 20940148 <GO>}

Yeah, we have achieved. We've actually exceeded our long-term guidance on our operating margin target. So we're very pleased to see that And as we look out over the next quarter and the next year there's a number of puts and takes financially for the company. The launch of Austin and Berlin, will have ramp inefficiencies there for some period of time until we get those factories up and running and so that's likely to put some downward pressure on our margins as those factories ramp. Our goals are to ramp those as quickly as possible. But, as Drew mentioned earlier, there are number of unknown unknowns that we'll need to work through.

We are kind of also in this uncertain environment with respect to cost structure, so we are seeing cost increase on the commodity side. We're getting feedback from our suppliers as we are seeing ourselves, the impact of labor shortage and then logistics and expedite cost just continue to be a part of our story here and it's uncertain how that will unfold. It's our hope that these things stabilize exactly when that happens is difficult to predict and we have been adjusting pricing in line with those changes in cost and so we'll see how that unfolds over the course of the next year. So it's difficult on gross margin to say where that will go for those reasons.

With respect to operating margin we've been very focused as a company on managing our overhead expenses and operating expenses and operating expenses as a percentage of revenue has been declining and I expect that trend to continue to happen, and I think the net of all of this is hopefully that we continue to make progress on operating margin over the next four or five quarters. As we think can afford[ph] the business up until this point, it's largely been a hardware automotive business with a little bit of software on top of that. As full self driving matures as take rates increase if we are to raise pricing on that there is considerable upside both on gross margins and operating margin as that comes delayed.

As the business starts to become more of a mix of hardware-based company and a software-based company. So we feel optimistic about the journey very optimistic about the journey. As we look over into the long-term. Just a little bit difficult over the next four to five quarters, we'll continue to update on earnings calls as we learn more information. There's just a lot of uncertainty in the world right now.

A - Martin Viecha {BIO 17153377 <GO>}

Thank you, Joe. Do you have a follow-up question.

Q - Joseph Spak {BIO 17457170 <GO>}

Yeah. The second question is just you mentioned LFP[ph] globally for standard range models my understanding is that all comes from China is that the continued go forward plan or do you want (technical difficulty) LFP abilities and other factors[ph] around the world.

A - Unidentified Speaker

Yeah, certainly our goal is to localize all key parts of the vehicles on the continent, at least the continent, if not closer to where the vehicles are produced. So that is our goal and we're working with internally and with our suppliers to accomplish that goal and not just at the end assembly level but as far (inaudible) as possible.

Operator

Thank you very much. And the next question comes from Colin Langan from Wells Fargo. Colin are you able to unmute? Okay. While we're waiting for that let's go.

Q - Colin Langan {BIO 15908877 <GO>}

Oh, sorry. Do you hear me now.

A - Martin Viecha {BIO 17153377 <GO>}

Sorry, yes, we can hear you now. Perfect

Q - Colin Langan {BIO 15908877 <GO>}

Okay. Yeah, I was just actually kind of following up on the question before. You mentioned commodities are rising and when I look at a lot of the key raw materials in the battery cobalt, nickel, lithium all up 40% and I know you guys have done a good job of getting long-term contracts and sort of mitigate that impact, I mean have you seen so far any impact from that spike and if not I mean, any sense of when that raw material headwind might actually show up or has shown up.

A - Unidentified Speaker

Yeah, we have seen an impact. Our primary exposure right now is around nickel and aluminum. Nickel in the cell, aluminum in non-cell and we have a mixture of contracts with various suppliers and some materials we contract directly and we have full exposure to price fluctuations. We do have a number of long-term commitments and long-term contracts in place. We also have contracts where there is some amount of cost sharing based upon the movement of the indexes and as these have been moving some of those costs have been flown through to us. It's not a substantial amount of cost, but it's not small. As we look towards the next year I certainly hope it doesn't play out as way but it's possible that we continue to see more of cost headwind as a result of these movements. It's difficult to say precisely but the volatility and the increases are so substantial and there are certain suppliers that maybe up to a certain point have been absorbing some of the increase and as contracts expire there where we have to renew and extend them we'll have to return to negotiations.

And so what we have to do as a company and what we are intensely focused on is we need to be continuing to drive down the cost of our products which we have been doing and we have to overcome cost increases that are outside of our control. So whether that's resourcing components or redesigning components or finding ways to be more efficient in manufacturing we have no choice but to continue on that path and be even more aggressive in the light of the macroeconomics here.

Q - Colin Langan {BIO 15908877 <GO>}

And diversification, right. It doesn't need to be nickel or cobalt or I mean there's always another option.

Operator

Thank you. Colin, do you have a follow-up question. Okay. Let's go to the next one. The next question comes from Colin Rusch from Oppenheimer.

Q - Colin Rusch {BIO 15823117 <GO>}

Hey guys, can you hear me okay?

A - Martin Viecha {BIO 17153377 <GO>}

Yeah, we can hear you

Q - Colin Rusch {BIO 15823117 <GO>}

Perfect. Can you talk a little bit about your strategy around anode materials and your ability to leverage that into reduction on the cathode side performance from (technical difficulty).

A - Unidentified Speaker

Sure. I don't know that I'm going to get into too many specific's but I guess first one thing I would say is unlike the commodities discussion we just had like the anode materials are not really in the same situation just in terms of what the considering components are so there is less of focus on like rapidly changing them one way or the other because they're generally stable commodities. There isn't exactly like a tit for tat or like get a better anode useless cathode like that there is a fundamental ratio that you need to maintain for the cell to function. So I guess zooming out the primary focus on the anode side that we have is just ensuring that it doesn't in any way that we were able to continue to reduce the cost of the anode without impeding on the long-term cycle -- cyclability of the product. It can also help with energy density as you like sort of improve the energy density of the anode and improve the energy density of the cell not directly one to one, because you have to pack more cathode in as the anode gets better and that gets a focus as well but the trade space is just sort of cycling versus day one cost.

Q - Colin Rusch {BIO 15823117 <GO>}

That's super helpful. And then just around the vehicle pricing strategy obviously there is a lot of flexibility there for some customers or not. Can you just talk a little bit about the process around vehicle pricing and how quickly you expect to change that and adjust as you see some of these commodity prices flow through the cost structure and you look at (technical difficulty) dynamics for vehicles.

A - Unidentified Speaker

Yeah. Pricing has been a really difficult thing for us over the last couple of quarters and part of the -- part of the challenge is the great thing that we're seeing in the space right now is there appears to just be quite a profound awakening of the desirability for electric vehicles and I mean totally frank it's caught us a little bit off guard and that kind of awakening and change in consumer sentiment, I'm sure there's lots of reasons that go into it. But folks want to buy an electric car and folks want one of our Tesla right now, it's very exciting for us.

At the same time we have installed capacity to build more cars, but more constrained by a number of dynamics as we've talked about in great detail and we are putting an extreme effort to build as many cars as we possibly can. It's hard to overstate how extremely efforts are. It's quite a grind. We're trying as hard as we can to maximize that capacity and to be able to meet the demand that we're receiving but the net-net of all of this is that we're not able to increase production capacity fast enough so that at the same time we are seeing macro economics, cost impacts on our structure as we've discussed previously on the call.

So we're trying to think through, if somebody orders a car now it will -- it could be delivered in some cases and depending upon the car in which factory could be couple of months, could be a couple of quarters and the timing in which we build that car will be just before that car gets delivered and what the world look like at that point and so we're trying to think through how the cost structure is evolving, has pricing you need to change with that, what are the supply dynamics in the space. The other thing that I'll just note on pricing is that company has changed pricing all the time. The difference is that when Tesla changes pricing it's extremely transparent where that's not always the case otherwise and sometimes our pricing will increase sometimes our pricing will reduce sometimes to the public our pricing changes may not seem to make logical sense, but there is a strategy that we work behind the scenes as we're balancing supply and demand as we're also trying to balance various shortages on parts as we're trying to manage wait times. All of that goes into the optimization here.

A - Martin Viecha {BIO 17153377 <GO>}

Okay, thank you very much. The next question is from Brian Johnson from Barclays. Brian please go ahead and you can unmute

Q - Brian Johnson {BIO 7256455 <GO>}

Tesla team.

Q - Unidentified Participant

Yeah, we can hear you.

Q - Brian Johnson {BIO 7256455 <GO>}

Yeah, I know. By the way great to hear. There is a team at Tesla, not just a one person show. I want to drill down a bit more on FSD. In December of 2020 in a business insider interview in Germany your leaders said that he expected level five autonomy by December within a year so that would be now. Yet we look at the progress in FSD and some of the issues you see on YouTube and it looks very much like a Level two, two plus system that requires vigilances in-fact your disclaimer side. So I guess three questions kind of one, what is the timetable to get to level four at least capability we can be able to regulatory stuff later and two, what is the criteria for Zach for you to release revenue -- deferred revenue around FSD and it's having a Level two system that needs monitoring enough to release that deferred revenue and then three, maybe you could talk a little bit more about how you plan to work with the new -- with the folks who appear to be asking some questions they have three request out to you regarding information around the level two around new capabilities (inaudible).

A - Unidentified Speaker

There are lot of things, we will take them in order. It's difficult to be specific on the timelines. The (inaudible) is working extremely hard iterating on every version. We are being extremely transparent through the release of this to public customers who are posting information online. So when you're using for self-driving and you're going through the iterations you can feel the progress and for those who don't have it in their cars social media is excellent getting a sense for how that's progressing and the team is moving quickly with every iteration, with every update and they're working very hard on that.

On your second question about the criteria to release deferred revenue the way that this works is we have made certain commitments as to what this product can offer at the time that a customer has purchased that. And so what we have to assess is we made those commitments and is the software widely available to folks that we've made those commitments to within a certain geography and given that FSD is still currently in the beta phase, it's invitation-only and it's limited. We have not deemed that to be appropriate for recognition of deferred revenue and will continue to evolve this, will continue to monitor it within the finance team to see when we get to the milestones in which we're comfortable releasing.

On the (inaudible) question, Lars do you want to take that.

A - Lars Moravy

Sure, I mean as I said earlier, we always cooperate fully with nets[ph] and other regulatory bodies in any sort of investigation they may have particularly related to ADAS systems when they came out with withstanding general order in July. We were quick to respond to that and one of the first and only company is capable of actually meeting the needs of that report. We continue to send that information through them as required weekly as sales[ph] occur and with the additional investigations as I said with great sincerity and we'll work through them one by one. To make sure that all the facts come out and is well informed about our strategies for both active safety in this case, but also passive safety.

As you guys may know, we released updates to our (inaudible) last week to Model Y using our fleet data. We will work closely on[ph] that and they were fully in the loop before we did it. So I think these kinds of things will continue to happen in the new regulatory space as Zach discussed as we move towards a software-based vehicle and we were happy to be a part of that journey

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much. The next question comes from (inaudible).

Q - Unidentified Participant

Two[ph] very good quarter. I had two quick questions. So first is regarding the two upcoming factories in Berlin and Austin, who are the two factories, different from each other. Maybe in the layout design assembly lines. And the second question is related to Cybertruck, who is the supply looking at, if you look at the exoskeletons steel is the supply for that material sufficient for immediate ramp up, I'll say, in '23, '24 time for Cybertruck. That's all from me.

A - Unidentified Speaker

Yeah, So obviously, as we've noted in the past, we developed our own stainless steel grade for the exteriors cybertruck to meet both the durability corrosion requirements -- required for an automotive world[ph] with this raw material and others as Joe mentioned, we continue to look at multiple sources and we have made some early sourcing decisions in that, but I think we'll keep that one internal and we've already began the first (inaudible) different from any other material, just about how hard the rollers are to get to that hardest level and just like every manufacturing process we put in for every new vehicle will work with our suppliers and vendors to make sure those timelines and supply meet the need and demand of our customers.

And on the differences between Austin and Berlin. There are some. They are largely associated with the different sort of building architectural choices that happened to occur in collaboration with local codes and other sort of governing requirement that drives the differences in the architecture between the locations. In general they are like we're trying to progress the manufacturing system as a system and make sort of logical like path to find improvements from factory to factory and in some cases there was an improvement identified between like decisions for one Austin, Berlin, or vice versa. And so there might be a slightly newer iteration of one part of the factory in one place than the other but it's all part of like a path forward in the factory that builds machine, the machine that builds machine, sorry.

A - Martin Viecha {BIO 17153377 <GO>}

Thank you very much. And the last question comes from Jed Dorsheimer from Canaccord.

Q - Jed Dorsheimer {BIO 6360573 <GO>}

Can you hear me.

A - Zachary Kirkhorn {BIO 20940148 <GO>}

Yes, we can hear you.

Q - Jed Dorsheimer {BIO 6360573 <GO>}

Thanks for taking my question. So, Brandenburg I'm just wondering, Zach if you could estimate the carry costs from a margin perspective. All right. I guess in two parts. So when do you expect do you still expect production coming on in '21. So a couple of months left in December and how do you see that margin impact as a function of the carry cost and I do have a follow-up question.

A - Zachary Kirkhorn {BIO 20940148 <GO>}

Sure. So it remains our target in both Austin and Berlin to be able to build our first production curves before the end of the year. We've talked about this a bit. The unknown unknowns, new factories, new vehicle designs, new technologies, new locations, new teams. So there is quite an execution journey ahead of us. But that remains our target and all of our plans are oriented around that. We should not expect for us to deliver cars by the end of 2021 from these factories, even if we do produce some, so Homologation regulatory reasons. And we'll want to make sure that we build up some number of cars that we're confident in the quality and the customer experience around them.

The second thing that I'll say and I mentioned some opening remarks is because of the newness here it's extremely difficult for us to be precise in what the ramp will look like. And it's possible things -- the stars align and things move quickly as possible that we're spending the bulk of next year, working on ramping these factories and it's just very hard to say. And we'll continue to update you all three of these calls and through other forms. As to how that impacts our margins that is also difficult because that is a function of the ramp which is uncertain. So the benefit here which is different in the ramp of these factories, compared to other factories is if you think about the percentage of our total cost structure in any given quarter that is associated with new ramps.

We have the Fremont factory that's running, generating stable and growing margins there. The same is also true in Shanghai. So I expect we'll see some amount of headwind on margin from these ramps. It's just entirely dependent on how quickly we're able to ramp and what uncertainties come up during the process.

Q - Jed Dorsheimer {BIO 6360573 <GO>}

Sure. So on a margin per car, but I would suspect, though if your carry cost is full rate now on that as you start producing vehicles. It's going to be a margin lift from where you're at right now.

A - Zachary Kirkhorn {BIO 20940148 <GO>}

We are carrying some amount of cost associated with the factories today and so the incremental cost associated turning the factories. It's not 100% of the factory, if that's what you're getting out in your question.

Q - Jed Dorsheimer {BIO 6360573 <GO>}

Yeah, that's what I was getting at.

A - Zachary Kirkhorn {BIO 20940148 <GO>}

Yeah. We also actually saw very similar dynamic to this when we are launching Model S earlier in the year. So when a product starts launching and then cost of goods sold starts to activate depreciation starts to activate, there is a bit of a movement in the P&L as to where that cost resides. So, assuming to some extent Brandenburg and Austin costs are already flowing through our P&L, but we still need to continue staffing and ramping and incurring all the operating costs associated with the factory that we're not spending right now.

A - Martin Viecha {BIO 17153377 <GO>}

Fantastic, thank you very much everyone for all your questions and we'll see you again in the three months. Thank you very much, and goodbye.