Q1 2015 Earnings Call

Company Participants

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

Other Participants

- Adam Michael Jonas, Morgan Stanley & Co. LLC
- Andrea Susan James, Dougherty & Co. LLC
- Ben J. Kallo, Robert W. Baird & Co., Inc. (Broker)
- Brad Erickson, Pacific Crest Securities
- Brian Arthur Johnson, Barclays Capital, Inc.
- Colin Michael Langan, UBS Securities LLC
- Colin W. Rusch, Northland Capital Markets
- Daniel V. Galves, Credit Suisse Securities (USA) LLC (Broker)
- John D. Lovallo, Bank of America Merrill Lynch
- Patrick K. Archambault, Goldman Sachs & Co.
- Rod A. Lache, Deutsche Bank Securities, Inc.
- Ryan J. Brinkman, JPMorgan Securities LLC
- Trip S. Chowdhry, Global Equities Research LLC

MANAGEMENT DISCUSSION SECTION

Operator

Good day, ladies and gentlemen, and thank you for standing by. Welcome to the Tesla Motors First Quarter 2015 Financial Results Q&A Conference Call. After opening remarks, we'll open the floor to your question. And as a reminder, today's conference may be recorded.

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

Jeffrey K. Evanson {BIO 1535168 <GO>}

Thank you, Huey, and good afternoon, everyone. Welcome to Tesla's first quarter Q&A webcast. I'm joined today by Elon Musk, Tesla Chairman and CEO; JB Straubel, our CTO; and Deepak Ahuja, Tesla's CFO. We announced our financial and operational results today in a shareholder letter that is available at the same link as

this webcast, and a replay of the webcast will be available later today at the same link.

The shareholder letter includes GAAP and non-GAAP financial results, as well as reconciliations between the two. Our non-GAAP measures add-back deferred revenue and related expenses for cars delivered where cash has been or will very soon be collected. And these non-GAAP results also exclude stock-based comp and non-cash interest expense. Revenues and costs associated with cars leased directly through Tesla are treated the same in our GAAP and non-GAAP financial information.

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

And now, Huey, if we could please have the first question.

Q&A

Operator

Sure thing. Our first phone question will come from the line of Dan Galves with Credit Suisse. Please go ahead. Your line is now open.

Q - Daniel V. Galves {BIO 16540648 <GO>}

Good afternoon. Thanks. So, if we assume Model S volume of 50,000 in 2015 deliveries need to average over 14,000 per quarter in Q3 and Q4, what's the biggest challenge to get there? And do you have order rates today that support that level of volume in the back half?

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

Sure. So, yeah, I mean, that's about right. I mean, actually with Model X production ramping up quite heavily in Q4 depending upon how that ramp goes and obviously it's difficult to predict that with perfect clarity, but our volume essentially doubles in Q4. So depending upon how the ramp goes. So, I do want to emphasize that, like sometimes people don't totally appreciate is that, there are several thousand unique parts in a car and if even one of those parts is not available for any reason, then you cannot ship, you cannot scale production.

So essentially, the production ramp goes according to the unluckiest and worst performing supplier or project of Tesla. But that said we do expect to see a significant ramp in Q4 for the X and have something that may be as much 2X other quarters and in Q4. And as far as demand for that, we do not see that being a

problem. Obviously, there are huge advance orders for the X, and we see a steady climb in demand for the S. So...

Q - Daniel V. Galves {BIO 16540648 <GO>}

Okay. Got it. And then just to follow-up, you've improved the Model S a whole lot in the last couple of years. Does that make it easier to launch Model X at a high-quality level? And does it allow you to move engineering and design resources towards Model 3 faster than you moved resources to Model X?

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

Yeah. In the case of the X, the X ended up being a lot more different than the S than we originally anticipated. So the development took a lot longer and we were distracted solving all sorts of issues with the S during that time which made it difficult for us to allocate engineering resources to the X, when there were issues to be solved with the S.

So I think we'll do a lot better with the X and we're paying close attention to some of the things that are different about the X to make sure that they're not an issue, particularly the falcon wing door and the second row seats. And yes, I'm feeling pretty good about things.

But because that production ramp just scales exponentially, depending upon where that exponential curve falls across a quarterly boundary, can actually make quite a significant effect on the production and deliveries in that quarter. That's why it's like a lot easier to predict if it's continuous than if it's discrete with arbitrary quarterly cut-offs.

But I really think the X is really going to be a great car. And I just drove the latest prototype today and it's like wow. But this is by far the best SUV.

Q - Daniel V. Galves {BIO 16540648 <GO>}

Sounds good. Thank you.

Operator

Thank you.

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

Go ahead, Huey. Next question, please.

Operator

Yes, sir. Next question comes from the line of John Lovallo with Bank of America Merrill Lynch. Please go ahead your line is now open.

Q - John D. Lovallo {BIO 16511598 <GO>}

Hey, guys. Thanks very much for taking my call as well. First question is, do you guys earn 4 ZEV credits or 9 ZEV credits per vehicle and how many vehicles are participating in your battery swap beta program?

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

The amount of ZEV credits we earn depends on the size of the pack, different for what we're doing for the 60 versus 85, and now the new ones at 70. That has been varying over time, the amount of ZEV credits we earn. So, I'll need to confirm that before I give the official number here.

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

I mean, the ZEV credits thing is not like – I mean, it sort of moves things about like 2%. It's like not super material. So I'm not sure what the point of your question is.

Q - John D. Lovallo {BIO 16511598 <GO>}

Well, yeah, here's the point of the question is that assuming that you guys sell 10,000 vehicles in ZEV states this year, that would mean that you would need 400 vehicles involved in this battery swap program, if you assume that each of them swap 25 times each, so a minimum of 400 vehicles. So, I'm just curious if there are 400 vehicles involved in the battery swap program?

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

Well, I mean, you do realize that ZEV credits don't sell for 100 ZEVs per $1. They sell for like $0.50 or sometimes less. And there are not always customers for the ZEV credits. So...

Q - John D. Lovallo {BIO 16511598 <GO>}

Yeah. I'm just asking about in terms of what you guys are actually earning per vehicle. Okay. And I guess the next...

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

It's not a big deal. Yeah. And as more of our production goes overseas, obviously, there are no ZEV states overseas and as our sales increase outside of California, also that – or Canada there, but those are not ZEV states, so this is like, the ZEV stuff is like an increasingly small part of the picture over time.

Q - John D. Lovallo {BIO 16511598 <GO>}

Okay. That's fair. Go ahead.

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

We do have hundreds of vehicles in the battery swap pilot program...

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

Yeah.

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

...it's not like 10 or something like that, it's hundreds of vehicles.

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

Yeah, we've steadily increased the invitation list. We just found like there just is not a lot of interest in people doing pack swap. So, we make the invitations and we get a very small percentage of that actually take us up on the invitation.

Q - John D. Lovallo {BIO 16511598 <GO>}

Right. The only point is there's a difference of five ZEV credits per vehicle, that was the only point. Second question, would be and final question. There is some news report saying that SolarCity has said that they're not going to use the 7-kilowatt hour battery, in fact, I think there was a quote from a spokesman, whether it's true or not, we don't know, saying that it doesn't make economic sense. I mean, could you guys just comment on that please?

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

Yeah, I mean, let me just talk more broadly about the response to the Powerwall and Powerpack because I don't think that's really the question you should be asking. The response has been overwhelming, okay, like crazy. In the course of like less than a week, we've had 38,000 reservations for the Powerwall, 2,500 reservations for Powerpack. The Powerpack, it should be noted, typically this is bought by utilities or large industrial companies for heavy industrial work. So, typically Powerpack, it's like at least 10 Powerpacks per installation. So if there's 2,500 reservations, actually 25,000 Powerpacks.

Powerwall also we suspect is probably an average of number of Powerpacks, it's probably 1.5 to 2 per installation. So, 38,000 reservations is more, like 50,000 or 60,000 actual Powerwalls.

So, I mean, there's, like, no way that we could possibly satisfy this demand this year and we're basically like sold out through the middle of next year in the first week. It was just crazy. We had 2,500 requests from companies that want to distribute and install the Powerwall and Powerpack. We can't even respond to them. We have to, like, triage our response to those who want to be a distributor.

So, it's like crazy off the hook. Yeah. And it seems to have gone super viral. For the specific case of SolarCity, what they are referring to is that there's two versions of the Powerwall. There is the daily cycling version and there is the Power backup version. One is energy optimized and one is daily-cycling-optimized.

For the daily-cycling-optimized one, the economics, it is true in the U.S. with rare exception are more expensive than utility. So if somebody wants to do a daily cycling, basically go off grid. It's going to be more expensive than being on grid. This doesn't mean that people won't buy it because there are people who want to go off grid on principle, or they just want to be independent. And that's what the SolarCity comment is about.

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

Yeah. It might also be worth noting that SolarCity doesn't yet operate in Europe and the main target application for the daily cycling battery pack was actually were several markets not in the Continental U.S. and particularly Germany and Australia are very strong markets where it does make economic sense today based on the feed in tariff and the electricity rate structures in those countries. So, SolarCity's comments I think need to be sort of put in the regional context.

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

Yeah. SolarCity is only operating in the U.S. And I mean, the Powerwall, it will be available from SolarCity and from other installers in both configurations. But if someone is doing a daily cycling application, they're doing it out of – because they specifically want grid independence and there are some number of people who will want to do that and that's good.

And it's also important to appreciate even for say the power backup systems that you always have power in the event of power outage, if like let's say that appeal to like 2% of households in the U.S. or 1%, that's 1 million households, like it is 1 person in a 100 care about having battery backup in the event of a utility outage, probably. We couldn't even support a small fraction of that right now. So, it's kind of a moot point.

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

Okay. John, I hope that answers your questions. Huey, I guess, we're ready for the next question then.

Operator

Sure thing. Our next question comes from Andrea James with Dougherty & Company. Please go ahead with your questions please.

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

Hi. Thanks for taking my questions. Just to build on the Tesla energy conversation. What are your revenue and gross margin targets on that business and how do we look at the 2015 ramp?

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

Well, I mean, the gross margin and revenue obviously is going to change with time. So when it's low volume, made in Fremont, it will be relatively low margin. Once we

get Gigafactory up and running, and high volume and get the economies of scale working, this is just a guess, right now, but I mean, like, maybe it's somewhere around 20% because this is not like – it's like we just don't have enough information to say exactly what that would be. But probably 20% is a reasonable guess.

And then, in terms of volume, I mean, we're going to try to scale it as fast as we can – as the slowest manufacturing constraint. So, I mean, it's easier to say what's the long term without saying like exactly which quarter is it going to be in. I don't know. But I think, we'll see demand for stationary storage as measured in sort of megawatt hours or gigawatt hours to be approximately double that of the car. But that's our best guess for long-term demand. Yeah.

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

How do we think about your capacity or even your cost of per kilowatt hour because it's different than a car, right? The duty load is way different for a stationary storage application. So could you just educate us a little bit on how we look at analyzing that business and the difference between that and the energy needs of the car business per pack?

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

Yeah, there is two applications which are quite different, one is backup power or peak up (15:59), sort of the equivalent, the only utility scale is like peaker plant, which is a high-energy application and then there's the daily cycler application. There are different chemistries depending upon which one you have. So the backup power chemistry is quite similar to the car, which is like nickel-cobalt-aluminum-cathode, the daily cycling control constituent is nickel-manganese-cobalt, so there's quite a lot of manganese in there and one is meant for call it, maybe, 60 or 70 cycles per year, and the other one is meant for daily deep cycling, so it's 365 cycles a year.

And the daily cycler one, I mean, we expect it to be able to daily cycle for something on the order of 15 years. Actually the warranty period would be a little bit less than that. But we expect it to be something that's in the kind of 5,000 cycle range capability, whereas the high-energy pack is more like around the maybe depending upon on how it's used anywhere from 1,000 cycles to 1,500 cycles. And they have comparable calendar lives, and for the high energy one, it's important to appreciate that this actually has a lot of interest from utilities because utilities have to maintain these things for peaker plants, and like when there's like a sharp increase in usage.

You can imagine the highest energy day in California on a hot summer day where there's a heat wave, the energy consumption there is very high compared to a pleasant spring night where nobody is air-conditioning or heating is on or for very little and, like commerce is not happening and people are asleep and lights are off. That can be a huge delta. Depending upon the situation, it can be anywhere from, like, a 5x to 10x difference.

So then having a battery pack that can take out those like very sort of weird sharp peaks. like the heat wave day, you could either have a battery pack which requires basically no maintenance and doesn't require any fuel and it's going to peak shave

those really troublesome days or you could have, like, a power plant that requires fuel and maintenance and it's got to be – it's always going to be maintained and it takes time, you can't just start it up in 3 seconds, like you've got to have a little bit of notice. But the high energy pack is actually very economically competitive in those sort of situations.

And then the high cycling pack is really great for – if you've got some sort of wind or solar situation, that's where the high-cycling one is really great on the utility scale. And I should say like the most of our stationary storage sales to be at the utility or heavy industrial scale, it's probably – and just a guess because early days – 5 to 10 times more megawatt hours will be deployed at the utility in heavy industrial scale than at the consumer scale.

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

Okay.

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

So the Powerpack would be the one that's like the heavy duty, like the big production sales one, not so much the Powerwall. Powerwall is great, but like I said, it's probably only 10% to 20% that the size of the Powerpack demand.

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

Yeah. Maybe one point on the cost structure. There's definitely a lot of commonality in the supply chain and even in the manufacturing base on how we do the modules and sales for the Tesla Energy products along with the vehicle products. So as we ramp up production on the Tesla Energy products, there definitely are benefits to the vehicle costs of energy storage from scale and from just generally moving more material and kilowatt hours through that whole chain. So both businesses benefit each other.

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

Yeah. I mean, clearly, given the very high demand that we're seeing for Tesla Energy products, we're actually trying to figure out if we can go from like our current production target of like 35-gigawatt hours at the cell level and 50 at the pack level in our Nevada plant to maybe 50% more than that or even higher because just the sheer volume of demand here is just staggering. We could easily have the entire Gigafactory just do stationary storage.

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

Right. So, you have some capacity. I think you've said maybe 15% of your capacity might be reserved for stationary storage. Maybe I've read that in an article somewhere, I'm not sure.

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

A 15-gigawatt hours or a third of the 50-gigawatt hours that targeted at the pack level.

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

Okay.

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

So the 15% is the 15-gigawatt hours or roughly 30%.

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

Okay. And you might add now – maybe you're looking at doing another 50% and growing the capacity 50%. You have the space, I guess, there in Nevada to do that.

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

We do. I don't want to make that a prediction, but that seems like the thing we should do. So, we're investigating that. It seems like the logical thing to do. So we're going to probably try to do that. Yeah, because, like, we're fairly confident at this point like so that the entire Gigafactory output could just do stationary storage. I mean it's like, wow, okay. Well, we need to make cars too, so we're just trying to make the factory bigger. That's like the total logic. It's lot more complicated than that.

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

But given the choice between making – sorry, then I'll get off. Thank you so much for your time. But given the choice between making a pack for a car and making a pack for a stationary storage application, how do you pick which one gets the priority?

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

Well, I guess, we'd pick cars because we got this whole other plant here in Fremont making cars. So, cars will get the priority. Yeah. That would be a logical priority. And yeah, but I mean, it really feels like, man, the stationary storage demand is just nutty. Like worldwide, it's just crazy.

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

Great. Thank you.

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

Huey, we actually have a question emailed in from one of the analysts that is out of the country. So I'll read those next. And we'll start with the energy storage questions. So, guys, do our years in R&D work in vehicle batteries contribute benefits into this Tesla Energy business? Where have we drawn some learnings from the vehicle business for Tesla Energy?

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

I've learnt a lot about battery packs, I mean, obviously, how to make them and have them last for a long time and working in high-temperature ranges and that kind of thing. I think there are a few points of clarification that should be made regarding the Powerwall, because a lot of people are confused about the whole inverter issue. So, the Powerwall does include a DC to DC inverter, and that can interface directly with a solar panel installation.

And if somebody has a solar panel installation, they already will have a DC to AC inverter for the solar panel system, and so no incremental DC to AC inverter is needed. Like in some of the analysis we've seen online by people who think are experts, they don't seem to realize that there is a DC/DC inverter, and we haven't been, I guess, quite clear about that, which we need to be.

But like if you already have a solar installation or you're going to get one, the DC/AC inverter is already there. That's an important point in considering the cost of the system. And then, the operating temperature – it's actually capable of operating at a much wider band of temperature. So we got to fix that specification that's stated on the website.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}
Yeah. In general, most of the learning is from the car R&D and engineering carry over.

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

A - Jeffrey B. Straubel {BIO 16619298 <GO>}
I mean, part of why we can do this so quickly, and...

A - Elon Reeve Musk {BIO 1954518 <GO>}
Anywhere the car works, the pack will work...

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

A - Elon Reeve Musk {BIO 1954518 <GO>}
...and the car works pretty much everywhere.

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

A - Elon Reeve Musk {BIO 1954518 <GO>}
So in fact, it does work everywhere. So, the pack will work everywhere obviously.

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

If anything, it's quite over-engineered for a battery pack that doesn't have to move, it gets mounted on your wall.

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

Yeah.

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

So I think that's going to be a great benefit for reliability and just longevity of the pack.

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

Okay. And then, one for Deepak. Would you be willing to provide any breakdown of the CapEx spending in Q1?

A - Deepak Ahuja {BIO 15935173 <GO>}

The CapEx spending was primarily driven by the capacity expansion that we're doing from Model X including the tooling spend. And then, of course, we are putting in the new paint shop, which is a very significant investment. That'll ready in Q3. And then, we've also had investments in the Gigafactory and our sales and service network. That's probably the order in which we've been spending.

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

Great. Thank you. Okay, Huey, let's go back to the queue please.

Operator

Yes, sir. Next question comes from Colin Langan with UBS. Please go ahead. Your line is open.

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

Great, thanks for taking my question. I guess, first question staying on the stationary storage topic, I mean, how do you view the – you mentioned there's two different chemistries. How does that work with the Gigafactory? Does that require all separate lines? Is there any more complexities? They are all within the same facility? And how do you view your chemistries versus other competitive options out there, there are other people who are bullish on things like (27:37) more basic chemistry?

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

Well, they could still both be built in the Gigafactory. We have multiple lines operating in the Gigafactory so if one line is building nickel-cobalt-aluminum chemistry and another is building nickel-manganese-cobalt, that still works just fine.

A lot of the cell assembly and then the processes that happen after that are almost identical.

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

Yeah. I mean, they look the same at the module and pack level. You can't really tell just by looking at them.

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

Yeah.

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

It's just kind of the internal chemical constituents. I mean, if you think like the – I mean, sort of right down the palm, like the cell is a chemical engineering problem. It's like a little can of chemicals and then the module and pack problem is a mechanical engineering, electrical engineering and software engineering problem.

And if you have a just like a small number of cells, then as an overall engineering problem, it's like mostly about the cell. But once you have a lot of cells, then the intellectual property challenge, or you know, the intellectual challenge becomes more at the mechanical, electrical and software level, which is where Tesla does quite well. That's why you don't really see like nobody else is like has a pack like ours. But the cells are relatively generic but the module and pack is not.

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

Yeah. And we've looked at pretty much every chemistry couple. They could possibly be relevant for this and are confident what we're using is going to be the best. But if there's something better we can also adjust and change over time. So there's a lot of flexibility.

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

Yeah. I mean, I'm not sure like what the right analogy would be, but like if you've got like a laptop, and it's like you could say, well, a laptop is really just like Intel CPU and some Micro and DRAM chips, like big deal. What's any computer company actually doing? They're doing a lot.

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

So what do you view as your competitive edge? And so it sounds like you think it's the software and electronic integration, the competitive advantage. In your presentation, you actually mentioned you've encouraged other companies to enter the market as well.

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

Yeah. And I think in terms of the electrical engineering, the mechanical, the software, and the overall aesthetics and just having something that really just works and is easy for consumers and utilities and large industrial applications to just order, and it just

works and it's just there as a fully integrated system, that's what is the value that Tesla is adding.

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

I think, there's also substantial benefit to the track record of the automotive fleets. That's something that a lot of the sort of newer startup companies or different technologies in this space really struggle with, especially in the utility application where you need to be sure that it's going to work for 15-plus years. And we have a sense of scale and a great track record on the vehicle fleet that you can really pull from data and pull data from and understand how it's going to work.

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

Yeah. It's not like we're like wedded to a particular chemistry or anything like that, we just want to use the best chemistry. Like whatever little can that contains that cathode and anode and separator and electrolyte, whatever the best constituents of that can, that's what we will want to use. So we'd love it if somebody could come up with a better internal chemistry for the cell. But it's worth noting that nobody has sent us anything, a sample cell that's better than the cell we're producing, or that something that we will produce in the Gigafactory. So, we'd love it if somebody would do that, they just haven't.

So, there's like always things, which are big on promise and short on delivery when it comes to battery chemistry, and it's just a real hard problem. And then hardly a week goes by that there's not some alleged breakthrough in batteries, but what they'll do is they'll cite the power, but not the energy or they'll forget to mention that it only lasts for 50 cycles or uses incredibly exotic raw materials.

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

Or one component under the battery pulled separately.

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

Yeah, exactly. It's just not – it's not like a – it's not the full picture. So it's not like we don't want a better chemistry to exist than what we're using. We'd love it if there was such a thing and I'm sure there will be improvements over time and we'll implement them as soon as they are remotely production-ready.

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

Thanks for the color. Just one last final question, any color on a financial question, other expenses is up quite a bit. It was $22.3 million. What was really just driving that in the quarter?

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

Yeah. That was essentially revaluation of primarily our foreign currencies that we had at the end of the quarter. The dollar was particularly strong against foreign currencies there and it's also in most cases unrealized losses. So as the currency

moves in Q2 in different directions that could have an impact as well. A positive effect is what I mean.

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

Okay. (33:32) most of those one-time in nature because of that balance sheet effect?

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah. They're not related directly to our operations. It's simply the devaluation of our currencies into company's items.

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

Okay. All right. Thank you very much.

Operator

Thank you, sir. Next question comes from the line of Rod Lache with Deutsche Bank. Please go ahead. Your line is open.

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

Hi, everybody. Couple of questions on stationary storage first. One is it seems like utilities moved quite a bit slower than other markets. So I was wondering when you are thinking about the expectations for the trajectory of growth. If you have the capacity today, how long do you think it would take for you to get to that 15-gigawatt hours?

Also, related to this business, it seems like you're using third parties for most of the distribution installation. So, if you achieved maybe a 20% gross margin, can you pass along any thoughts on how we should be thinking in terms of SG&A is allocated?

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

I think, it's pretty early days to – I mean, we're being super speculative at this point. So, it's...

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

Yeah. Maybe one point on the distributors is we're only focusing on that approach for Powerwall in most cases. So, with utilities, we're building those relationships directly. It's not something that is really effective to go through a distribution channel and it's something we've also been doing for a number of years. It didn't just start last Thursday.

And we've built these relationships partially through vehicle infrastructure and charging questions and back and forth, supercharging as well. So, there's actually quite a lot of trust built between Tesla and many of the utility companies, which is very helpful to grow that business faster.

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

Okay. And just a clarification on the comment about the fact that the DC/AC inverter is already there for solar, does the fact that it needs to be bidirectional change the nature of the cost or not really?

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

No. Not in most cases. Because if you already have solar, typically the energy to charge the battery can come from the solar panel. So I think maybe one way to think of it is that the battery pack, the Powerwall, with its internal DC to DC converter can act much like a solar panel. It can match voltage with a solar panel array...

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

I see.

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

...and it can feed power back into that. So the existing inverter doesn't particularly see a big change.

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

Okay. Got it. And on the auto business, do you have any preliminary expectations on the mix of the 70D versus 85? Any thoughts on how that affects margins. And lastly, a question for Deepak, in the past we were able to look at your supplemental information on leasing where you disclosed the value of the leases delivered and the value that you're booking this at on the balance sheet which is presumably your cost. And it sort of approximated your gross margins, but this quarter when you do the math, the implied margins were something like 44%, not like 29%, 30%. Is there something unusual there?

A - Deepak Ahuja {BIO 15935173 <GO>}

I'll answer the second one. No, there is nothing unusual in those numbers as the overall – what you are seeing in the supplemental information is the new cars we've delivered. What's coming through ultimately is the cumulative impact of all the leasings that we have done. But to my knowledge, there is nothing else unusual.

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

Okay. It seems like a pretty high margin though when you look at it that way.

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

We ...

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

Anything on the mix, 70D versus 85?

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

I mean, it's still pretty early to be predicting mix because you have to distinguish between what's sort of initial demand versus sustained demand. So, I mean, it looks like there may be going to be comparable number of 70s versus 85s. But this is difficult to – I mean this is extrapolating on very little information. And yeah, I think a key point I should make before this call ends is we're really optimizing at this point going forward. We're going to be optimizing for the operational efficiency of the company as opposed to specific quarters.

I feel like what we've done in the past was really had to scramble at the end of quarters and sometimes have not a great customer experience at the end of quarters. It's not really the right thing for the company. And so we're going to be operating more for sort of steady state efficiency and that means the quarterly fluctuations could be a little higher, but in the long term, it will be better. So that's an important consideration.

Also sort of unlike other car companies, Tesla sales are only recognized when they arrive at the end customer, and we've received payment and all the regulatory docs have been processed and all that. So, our sales are always kind of – they're always true sales. They're not sales to the channel, whereas the other car companies are their sale is to the channels, so it's possible for them to make numbers work where they're selling to their channel as opposed to end customers. In our case, it's always end customers.

And as we're shipping to Asia and Europe and across the U.S., it's fairly easy for there to be a plus, minus 5% difference in deliveries just due to logistics issues. So it's not a huge variation, plus/minus 5%. But that's kind of like the – if a ship is late or early, it can affect the – (40:27) cars that are affected, and then that's 5%, which we've seen in the past.

So that's an important thing to bear in mind. The number that's much more controllable for us is the production number. So that our production predictions, I think, for the vehicles are, at least for the Model S, not so much for new vehicle, but for existing vehicle, our production predictions are a lot more controllable.

And then as I think people at this point realize the demand is different from production, like our cars are almost all ordered in advance. So we really don't see any demand issue, but you can sort of see that by the delivery times of the cars on our website.

So it's like some of you will interpret a quarterly delivery number as somehow being related to demand. This is not the case. This is usually related to like just – that's how many – we produce a certain number and then we're able to deliver a certain number in the quarter and there's a whole bunch of cars on ships or on trains or on trucks, but because Tesla is different from other car companies, applying the other car companies' template can lead to incorrect conclusions about Tesla. Is this making sense, I mean, or should I elaborate further here?

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

Yeah. Makes sense.

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

Okay.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah. And to add to what Elon said, to be more efficient operationally, we are shipping more by train rather than trucks as it's more cost-efficient and creates less damage to the car. It gives a better customer experience. So...

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

Right.

A - Deepak Ahuja {BIO 15935173 <GO>}

...we are taking more traction. (42:32)

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

I guess my question is more geared to trying to assess the effect on ASPs and margins as you're changing the mix a little bit, but I appreciate that.

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

Yeah. To sort of answer your question on margins, I think, there's two things that they're having like the average sales price is going to decline a little bit, but our costs are improving as well. So I mean we see that more or less netting out. So the efficiency improvements offset approximately any average selling prices change.

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

Got it.

A - Deepak Ahuja {BIO 15935173 <GO>}

And this is the process we are growing the market which we truly are by hitting the right sweet spot and we're doing the right thing with the 70D.

And the 70D has a higher gross margin than the 60 for example and 60 was just not hitting the market, just didn't have the right attributes that our customers like, it was a low take rate and we've got a product which is far more compelling and much more competitive with other cars.

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

Great. Thank you.

Operator

Thank you, sir. Our next phone question will come from the line of Colin Rusch with Northland Capital Markets. Please go ahead. Your questions, please.

Q - Colin W. Rusch {BIO 15823117 <GO>}

Thanks so much, guys. As you look at the growth of the organization, the entirety of the culture and the work force, I know that your employees are extremely motivated. But can you talk about, as you grow, how that's growing and changing and what you're doing to maintain that integrity as we go forward?

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

Well, I mean, it is tricky as companies grow to maintain a consistent culture. I think we're doing okay. I think it's measured relative to most companies. But we do need to get you all to think differently and have an expectation of innovation. I mean, I think we're doing okay on that front.

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

Yeah. I think having a general mix of people that have been here for a very long time and have seen multiple programs and seen the company when it was even much smaller than today and more scrappy and had to go through even tighter financial difficult launches, things like that, really helps maintain that culture. And we try and pair different managers up with new groups so that that culture sort of infuses throughout.

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

Yeah. And our growth rate, like this year, personnel-wise, is sort of, I'd say, leveled off. It's still fairly significant, but it's like our net personnel growth this year will probably be 20% to 30%, which is, I think, a manageable number for kind of integrating with people that already have kind of the Tesla culture. And I think it's also – it's a pretty big improvement in productivity because we're looking at – let's call it like at the upper end of that 30% personnel increase, but a 100% increase in vehicle volume. So, I think that's a pretty good indicator for activity improvements, just like how many people do we have and how many cars are we making.

Q - Colin W. Rusch {BIO 15823117 <GO>}

Great. And then the second question is really around some of the choices that you made with the battery product and why choosing 10kW and the size, 220 pounds is actually pretty hefty for a garage wall. And then also the Battery Management System. I think there's a lot of confusion around where it's located and what the real functionality is as you look out at interfacing with utilities and the signals that you get from the market in terms of looking at demand, trying to offset, demand response and some of the other advanced functionalities that are going to be able to be monetizing business models with the product. Can you just clarify where that BMS system is really residing and who owns that technology and why you guys made those choices along with the weight and size choices?

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

Well, some of the different revenue streams you're talking about are kind of mixed between Powerpack and Powerwall. The BMS system lives inside the battery pack in both cases, but with the Powerpack and the more utility-sized installations, there, we often will have sort of a site master computer or master controller that controls multiple Powerpacks and that site controller is what then interfaces to the utility or maybe a commercial customer to sort of run the scheduled charge and discharge that would be appropriate for a given application.

On the Powerwall, it's a bit of a different situation. Still the BMS lives inside the battery pack, but in some cases, the inverter may be the system that's deciding how to manage energy in the overall house. And that can depend on which type of inverter we're using and how that works. And in terms of the size, we really – for Powerwall, again, we optimized the size around what was the most common photovoltaic size and also what we felt was kind of the smallest modular increment for backup. And it's pretty key to note here that you can install multiple Powerwalls together.

So, having 10 kilowatt hours doesn't mean that you can't very easily put in 20 kilowatt hours or 30 kilowatt hours or 40 kilowatt hours, and in many cases, I think people will, to have the backup kind of matching that they want to see. But we felt 10 kilowatt hours was the lowest kind of common elements. And if you go smaller than that, you start to run into worst economies of scale and more of the system that's not related to storage.

Q - Colin W. Rusch {BIO 15823117 <GO>}

Okay. Great. I'll have some follow-up offline. Thanks so much, guys.

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

Huey, before we go to the next question, I just want to give everybody a status update here. A lot of important things to talk about on this call. But we're 50 minutes into the call and we still have seven callers in queue. So just let you guys think about how we manage time here. Okay. Huey, let's go to the next question, please.

Operator

Yes, sir. Our next phone question will come from Adam Jonas with Morgan Stanley. Please go ahead. Your questions, please.

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

Evening, everybody. First question on the Model S and the release candidates, how many release candidates have you produced? What have been some of the issues with the recent production and why the slight – am I seeing a slight further delay biasing late 3Q from what I thought was kind of more of an August time horizon for initial deliveries, anything that kind of might be behind that that you would highlight?

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

I think we'll pass on sort of answering super-detailed questions about the X ramp. But the thing that really matters is not like when do the first deliveries of the X occur, but rather when do significant deliveries of the X occur. And for the S, we had quite a long ramp from – we're like six months from the very first deliveries to a significant volume. We're trying to compress that to maybe like two months or three months at most. I'll cut that in half or more for the X. And we want to make sure we're really delivering a product that has been thoroughly validated in hot and cold weather and through millions of miles of travel and everything.

So it would be easy for us to kind of do some initial deliveries in August. That would be pretty easy. But then, like, we don't have like – we have had door handle issues, like people are aware of that with the S. They don't want to have buckling door issues with the X. We want to iron everything out and make sure it's good and then deliver at high volume.

So effectively, it would create a captive fleet and iron out the issues with that captive fleet. It's – they're quite big, several hundred vehicles basically, and maybe that addresses your release candidate question. And just to make sure that those several hundred vehicles really work well in all circumstances before we start delivering cars en masse because we're going to go from a small number of cars to like 1,000 a week pretty fast.

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

Okay. And just a second quarter in the interest of time and then a final question. Apple has kind of still unofficially perhaps making – they're making inroads into building up its vehicle engineering and transportation capabilities according to a lot of sources and making investments both in physical capital and human capital. Are you starting to feel a greater sense of competition with Silicon Valley parties versus your ability to attract and retain key software and automotive engineering talent? And if Apple were to get into the electric car business, would you see this as a positive for broader consumer acceptance of electric vehicles?

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

I certainly hope Apple gets into the car business. That would be great. But no, we're not really seeing significant attrition of engineers to Apple, for anything, car or otherwise. And actually, anyone can like figure this out by just going on LinkedIn. LinkedIn can produce statistics on what the relative flow of people is from one company to another. And I think it's like – something like – if you look at like the trailing 12 months, Tesla has recruited five times as many people from Apple as Apple's recruited from Tesla. It's like some – it's a fairly high number.

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

Thanks so much.

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

All right.

Operator

Our next phone question will come from Brian Johnson with Barclays. Please go ahead.

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

Yeah. Just really want to ask about the balance between stationary and automotive. It's not unusual for growth companies to change their focus as they evolve. I think at least one of the stories around PayPal that it was going to be a cryptographic PDA-focused company until it refocused perhaps through your help, Elon, on Web-based payments.

I'm hearing you talk about stationary storage as being able to ramp faster, perhaps, although you didn't answer this kind of maybe with a lower CapEx and OpEx ratio than the auto business. Yet at the same time, auto takes a lot of capital, takes a lot of OpEx. And Sergio Marchionne pointed out there's a lot of value-destroying capital spent in the legacy industry. Is it conceivable that instead of, say, being fixed 70/30 auto batteries, that could go the other way?

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

It's possible. I mean, this is – we're like really super in guesswork territory here. All we know right now is like we have demand like well in excess of our production ramp. So, we know like right now, the thing we should work on is trying to increase our production ramp, not trying to increase demand.

So that's kind of like the only thing we know for sure right now. And then if you look really long-term say what's the total energy – how many battery – what's the total terawatt hours of factory installation that's needed to go to a fully renewable global economy, taking into account transportation, current electrical needs, so assume full electrification of transport, electrification of all heating and cooling and then the current industrial uses and commercial uses of electricity. Like, basically, to go fully electric, the transport is about half the size of everything else, but that was sort of our sort of global macro calculations.

So ultimately, we think things will get there. It could take a long time, but that's kind of where we think things will end up and – yeah, but before we get to like the kind of 2 billion Powerpack number, whether that's made by Tesla or other companies or some combination, that's kind of the number you need to get to go fully electric. But where things – how things track between now and then, it's difficult to predict.

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

And in terms of the ROIC, would you be thinking that stationary could be a better ROIC business in auto than say mass market or mass affluent automotive?

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

It might. I mean, it'd be nice to get like maybe a couple of quarters of experience after making the big announcement to really – before we – like our degree of uncertainly will diminish quite substantially with each passing month. Certainly, a year from now, we have (56:45) like a really, I think, a really good idea of it. It's like super speculative at this point. But we just don't – like, man, there's just no way we can meet the demand that we're seeing right now. And so, we got to scale stationary storage as fast as possible.

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

And you mentioned last time that some CapEx was going to product development in the shareholders' letter for Model 3, if Model 3 wasn't in this. Does that mean you might be delaying some Model 3 investments or just the other things kind of swamp it?

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

It's just the other things kind of swamp it, but we need to make sure – like we're doing quite a bit of advance work on Model 3, but this just doesn't amount to a lot of CapEx.

A - Deepak Ahuja {BIO 15935173 <GO>}

And just to clarify, Model 3 spending in initial stages is more engineering spend...

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

It's like basically design the studio.

A - Deepak Ahuja {BIO 15935173 <GO>}

Exactly.

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

It's like very early engineering prototypes.

A - Deepak Ahuja {BIO 15935173 <GO>}

Correct.

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

It's just not very – it's just not very cash-intensive.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yeah. CapEx comes at a later stage when you have all the designs finalized, you're kicking off tooling. And...

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

A - Deepak Ahuja {BIO 15935173 <GO>}
So we are in the early stages, as to be expected at this point in time.

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

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

A - Jeffrey B. Straubel {BIO 16619298 <GO>}
Well, Brian, you might want to ask the follow-up, does this impact our Model 3 timings? So, I'll throw that.

Q - Brian Arthur Johnson {BIO 21263539 <GO>}
Well, go ahead.

A - Elon Reeve Musk {BIO 1954518 <GO>}
I mean, we are hoping to show off the Model 3 in approximately March of next year. Again like, don't hold me to that month, but that's like – that's our aspiration. And that's – and then be in production with Model 3 in the, I'd like to say mid, but probably closer to late 2017 timeframe. Late 2017 is probably more realistic.

Q - Brian Arthur Johnson {BIO 21263539 <GO>}
Okay. And in the meantime, the Gigafactory sounds like it's maybe ramping up faster, but perhaps those batteries could go not just to Fremont cars, but to Fremont stationary storage, or to stationary storage, not necessarily touching Fremont.

A - Elon Reeve Musk {BIO 1954518 <GO>}
Yeah. It would just be built actually just right there – not even go to Fremont, really it would just be built at the Reno factory, (59:12) factory and go from – ship from there to customers.

A - Jeffrey B. Straubel {BIO 16619298 <GO>}
Yeah. Starting Q1 next year, that's our plan for all the stationary or all the Tesla Energy products.

Q - Brian Arthur Johnson {BIO 21263539 <GO>}
Okay. Thank you.

Operator

Okay. Our next question will come from Ryan Brinkman with JPMorgan. Please go ahead. Your line is now open.

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

Hi. Thanks for squeezing me in. I have a two-part question on cash. Firstly, on the last call, you mentioned reaching free cash flow positive in 4Q of this year. I'm just wondering with 1Q behind you, how you think you're tracking relative to that goal? And then, secondly, if you could perhaps comment on your capitalization and liquidity overall and the potential for – or desirability of raising any additional capital? Thanks.

A - Deepak Ahuja {BIO 15935173 <GO>}

We do expect to be free cash flow positive in Q4. That doesn't change. And as we go along, clearly, we are optimizing for efficiency, which results in increase of our finished goods inventory. That makes sense for us to then establish some asset pipelines or credit which is backed by our finished goods inventory or raw materials. So we'll take those actions to make sure we have a solid balance sheet.

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

Yes. Things are looking pretty good for Q4. I think it's hard to predict full quarter exactly because that whole quarterly boundary and where does the exponential ramp of production fall exactly on that side of Q4 boundary. But I think it's extremely likely that cash flow is really good at the end of Q4.

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

Okay. That's great to hear.

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

Yes, sure.

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

Thank you.

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

You're welcome.

Operator

Thank you, sir. Our next phone question will come from the line of Trip Chowdhry with Global Equities Research. Please go ahead. Your line is open.

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

Thank you. A quick question, two quick questions. First is regarding the residences which may not have the solar panels, and say that residence goes and buys two Powerwalls. Does that customer have to buy two inverters or one inverter is sufficient for as many Powerwalls the customer buys?

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

Yes. It's basically whatever the capability of that inverter is. So, typically, a inverter would be capable of handling – one inverter is probably capable of handling, depending on the situation, up to maybe four or five Powerwalls.

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

The second question I had was regarding the Double Black tour you had in 10 cities, and our research indicated that was a very successful event with the reservations and orders really skyrocketing. And I think it was only in Canada and USA. Wondering if you could expand that tour to other continents?

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

Yes, absolutely. We just did a big thing in Europe through Germany, and I think there's, like, quite a big tour happening from Slovenia, I think, through most of Europe. So there's actually quite a lot happening. Actually, our sales in Europe lately have been pretty great. I mean, like, yes, really strong.

A - Deepak Ahuja {BIO 15935173 <GO>}

And we did the tour in Germany too – in Europe, sorry...

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

Yes.

A - Deepak Ahuja {BIO 15935173 <GO>}

...for the Dual Motor. So...

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

Yes. 85D has been a big hit in Europe.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yes.

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

If I can ask one last question, I was at your Lathrop factory the other day and there was some interesting construction happening behind it with huge metallic frames being installed. What kind of production could be happening there? And it seems

like the factory size has increased by almost 40%, and what is happening there? Any thoughts you can share with us? And that's all for me.

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

Yes. We're establishing a big casting foundry and machining facility there and that's intended to support activity in Fremont. So yes, that's what's happening in Lathrop primarily.

Operator

Okay. Our next phone question will come from the line of Patrick Archambault with Goldman Sachs. Please go ahead. Your line is open.

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

Thank you. Thanks for squeezing me in and I'll be quick. Just wanted to build on I think Ryan Brinkman's question on the fourth quarter cash flow guidance. Does that include income from those warehouse facilities to offset leased vehicles or is that exclusive of that?

A - Deepak Ahuja {BIO 15935173 <GO>}

In our projection, as Elon said, towards the end of the quarter as we ramp up production, we should be free cash flow positive on a pure sense.

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

Okay.

A - Deepak Ahuja {BIO 15935173 <GO>}

But frankly, our operations should be looked at without the impact of leasing and that's a purer measure of operations which is a lower threshold, I get it. But that's a unique or a distinct decision we've made to be in that business.

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

Yes, I know, it still helps the model.

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

Deepak, do you want to explain about -hold on a second, Pat. Deepak, do you want to explain about the classification of cash inflows within the statement of cash flows.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yes. So if you look at our Q1 cash flows, for example, we received $155 million from our either the warehouse line or our banking partners related to our leasing business. But that cash flow does not show up as an offset in our cash flow from operations. It shows up in our financing activities. So, our cash flow from operation shows up $131 million negative. But if you offset that against the $155 million that we

received on the leasing business, we were slightly better than breakeven purely on an operations basis. And so, our real cash burn in Q1 was driven by the strong CapEx spend ahead of the Model X launch is the way we tend to look at the business internally.

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

Okay, and I appreciate the clarification. The other quick question I had is just I was a little surprised by the – I think you guys had obviously very good gross margins this quarter relative to some of the headwinds that you were facing and I guess I was surprised to see that ex-ZEV they go from 26% to 25%. With some of the increases in pricing that you're putting through and some of the components that you're buying outside of the U.S. with a stronger dollar now where there was a little bit of a lag I understand, that seemed a bit conservative and I don't know, maybe it ties back into Rod's earlier point about mix. But I guess that was one area that I was a little surprised.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yes. No. So just to clarify, the price increase that we've announced is not going to help us in Q2. Given our book of business, it's going to primarily affect us in Q3.

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

Yes.

A - Deepak Ahuja {BIO 15935173 <GO>}

And also in April, for most of April, the dollar was pretty strong. It's just strengthened in the last week or 10 days or so, and we were continuing to deliver cars. So that strong dollar impact does roll over sequentially into Q2 for us despite the lag effect of good news from a strong dollar. And as we said in the letter, we fully expect the mix impact to be offset by cost reductions that we will achieve. So it's really related to FX that we see the sequential drop.

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

Yes. The FX was really – that was a really tricky thing to deal with, because we had a quite strong European sales and then...

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

Yes.

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

...the FX impact was quite significant. So, say, you've got a car that is, like, let's say, 25% gross margin, you see a 20% change in currency, it's like, wow, okay. That's not super easy to make up that difference.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yes. And to your point, and maybe this is a broader comment to make that as we look at our Q1 non-GAAP loss that we have of $45 million, a big chunk or most of it could be attributed to the dollar strength that has happened over the last six months. As we've indicated, our Q1 top line came down by about three percentage points and then we had the $22 million unrealized losses from currency. You combine those two and there's an offset in gross margin due to lower cost of parts we buy in foreign currencies. But if you consider this whole mix and you can see the foreign currency change, over the last six months, can explain most of the losses we had in Q1.

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

And, yes, maybe just like that last piece is interesting. I mean, how much are you able to take advantage of that natural hedge you just described, right? Because you are buying components in currencies that have also depreciated, right? Batteries are one obvious thing. I'm sure you're sourcing a lot of stuff in Mexico. Are you close to optimizing that or is that something that can be exercised more?

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

For better or worse and one can look at this as a pro or con depending on the situation, basically about 60% of the car, maybe a little more than 60% is U.S. and Canada. So we certainly have like lots of, say, European companies that supply us, but they will supply us from plants in the U.S. or Canada or sometimes Mexico. So this really is a North American built car, not – for real (1:09:39). So it's like, as Deepak was saying, it's slightly helpful if the dollar strengthens relative to the yen, but then since we have like quite strong European sales, this is – but I can't think, 5% of our products or something come from Europe. It's pretty low.

A - Deepak Ahuja {BIO 15935173 <GO>}

Right.

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

So, if our sales are 30% in Europe, then obviously it's not as much of offset as we'd like. I actually thought it would be higher than that, but it's like – because I'm looking at the names of the suppliers. But what matters is where – not the name of supplier. If their headquarters in Germany, but where is the plant. So...

A - Deepak Ahuja {BIO 15935173 <GO>}

Yes.

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

Got you. Okay. Well, thank you for the helpful color there.

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

All right. I've got to go into another meeting. So is there...

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

We have two more question askers. So if we can quickly go, Huey?

Operator

Our next question will come from the line of Brad Erickson with Pacific Crest Securities. Please go ahead. Your line is now open.

Q - Brad Erickson {BIO 18494007 <GO>}

Yes. Thanks for taking my question. Just a quick follow-up from the last one on the automotive gross margins. I guess ex currency, can you just quickly talk maybe a couple examples where you're looking to remove more cost from the car itself? I think we can all appreciate there's continued scale advantages over time. But maybe if you could talk about other cost-savings opportunities we should be thinking about with both the S and the X and sort of what inning we're in terms of achieving those savings? Thank you.

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

Yes. A big factor is labor hours per vehicle. That has steadily improved. It was sort of quite bad in Q4, particularly with P85D ramp. We've made good progress on that in Q1 and we'll continue to make good progress on that through the rest of the year. So it's labor and direct overhead in the factory.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yes. We're focused across every line item of our cost, so material cost reductions, freight both inbound, we spoke a little bit about outbound freight efficiencies but...

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

Yes. We had a lot of expediting.

A - Deepak Ahuja {BIO 15935173 <GO>}

Yes.

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

You know that big port strike was super unhelpful. That also hurt pretty badly. It was like the I think the worst port strike in the 21st century. And so we're also soldiering through that. So we had to airfreight a ton of stuff...

A - Deepak Ahuja {BIO 15935173 <GO>}

Exactly right.

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

...while everyone else is simultaneously trying to airfreight a bunch of stuff. That's like...

A - Deepak Ahuja {BIO 15935173 <GO>}

It cost us several million dollars because of the port strike.

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

Just to airfreight, yes. So, cutting back on airfreight is really helpful, yeah it's direct (1:12:27) labor hours, just...

A - Deepak Ahuja {BIO 15935173 <GO>}

We continue with several engineering and commercial actions on material costs. So it's a long list, not appropriate to go through, but yes, as a company we are focused on Model X, but S is also certainly improving gross margin. That is part of our priorities.

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

Yes.

Q - Brad Erickson {BIO 18494007 <GO>}

Got it. That's great. Thank you.

Operator

And our final question in the phone queue will come from the line of Tyler Frank with Robert W. Baird. Please go ahead. Your line is open.

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

This is Ben. Hey, guys, just very quickly, you mentioned the Gigafactory and then a lot of talk about stationary storage and increasing sites for Gigafactory. Does that change in any way that you're looking at partnerships, bringing partnerships in and maybe an update on timing there?

And then Elon, you talked about having a fleet of 200 X to get out and test, and you mentioned Model 3 to show in next March. When should we see the Model X and its final version? Thanks, guys.

A - Deepak Ahuja {BIO 15935173 <GO>}

Well, no particular change to the partnership model for the Gigafactory. I think, as Elon said, it's early days on trying to make some of those changes in direction, but largely it's just a bigger scope of opportunity for a lot of the people we're already working with, and it is continuing to go well. We're actually beginning to hire operational people at the Gigafactory and beginning to staff up on that ahead of

starting to train, and then ramp up production of the stationary products early next year.

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

Anything else, Ben?

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

Yes, a quick one. Just on the Model X, when we could see that?

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

Elon, do you want to talk about Model X? We've had a number of questions from investors and Ben's question here about when you'll be able to configure Model X online, when we'll show that to the public, how that will actually deploy?

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

Yes. Probably three months from now, (1:14:44) May, so it's like – this is early July is when we'll ask people to do the configuration. And it would be very similar to the S, like it's not going to be super – there's no big surprises there. It's very similar to the S. And, yes, and we certainly have a lot of customers who've been waiting a long time. So they will probably (1:15:13).

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

Good. We look forward to that.

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

Yes. I think (1:15:19), this is really a great car. I mean it's like – because I have like such a low center of mass, I mean it handles like a sports car even though it's an SUV. The battery pack is in the floor pan. And it's got an incredible acceleration because it's like basically performance version of it like there is for the P85D. The performance is just surreal. It's like nothing else is comparable.

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

Great. Thank you, everyone, for joining us this afternoon. And everybody have a great night. Huey, thanks for your help, and we'll talk to you all next quarter. Bye-bye.

Operator

Pleasure, sir. Ladies and gentlemen, this will conclude today's conference. Thank you for your participation and have a wonderful day.