S&P Capital IQ

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Tesla, Inc. NasdaqGS:TSLA

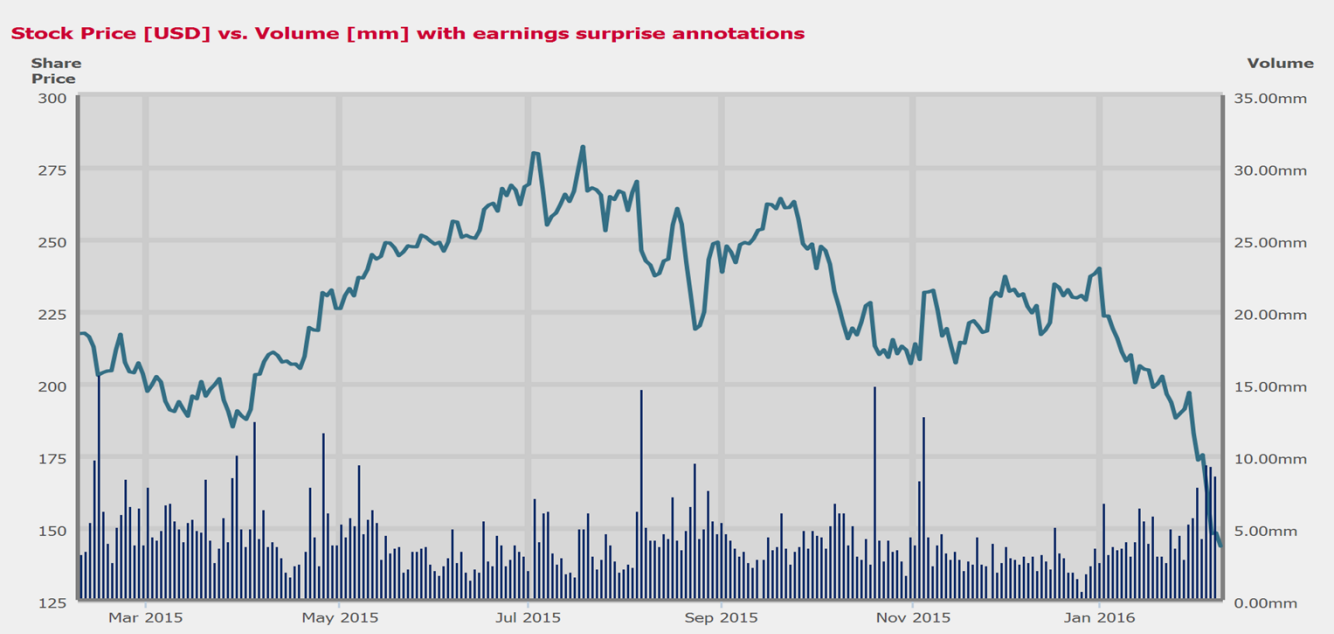
FQ1 2016 Earnings Call Transcripts

Wednesday, May 04, 2016 9:30 PM GMT

S&P Capital IQ Estimates

	-FQ1 2016-			-FQ2 2016-	-FY 2016-	-FY 2017-
	CONSENSUS	ACTUAL	SURPRISE	CONSENSUS	CONSENSUS	CONSENSUS
EPS Normalized	(0.67)	(0.57)	NM	(0.04)	1.20	3.75
Revenue (mm)	1598.59	1601.73	0.20	2002.36	8640.41	11128.23

Currency: USD
Consensus as of May-04-2016 4:52 AM GMT



- EPS NORMALIZED -

	CONSENSUS	ACTUAL	SURPRISE
FQ1 2015	(0.49)	(0.36)	NM
FQ2 2015	(0.62)	(0.48)	NM
FQ3 2015	(0.59)	(0.58)	NM
FQ4 2015	0.11	(0.87)	NM

Call Participants

EXECUTIVES

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Jason S. Wheeler
Former Chief Financial Officer

Jeff Evanson
Vice President of Investor Relations

Jeffrey B. Straubel
Chief Technology Officer

Jonathan McNeill
President of Global Sales and Service

Unknown Executive

ANALYSTS

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Morgan Stanley, Research Division

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Robert W. Baird & Co. Incorporated, Research Division

Brian Arthur Johnson
Barclays PLC, Research Division

Charles Lowell Anderson
Dougherty & Company LLC, Research Division

Colin Langan
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Emmanuel Rosner
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Stifel, Nicolaus & Company, Incorporated, Research Division

John Joseph Murphy
BofA Merrill Lynch, Research Division

Joseph Robert Spak
RBC Capital Markets, LLC, Research Division

Patrick Kenehan Archambault
Goldman Sachs Group Inc., Research Division

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Deutsche Bank AG, Research Division

Ryan J. Brinkman
JP Morgan Chase & Co, Research Division

ATTENDEES

Alexandria Sage

Dana Hull

Phil Lebeau

Presentation

Operator

Good day, ladies and gentlemen, and welcome to the Tesla Motors First Quarter 2016 Financial Results Q&A Conference Call. [Operator Instructions] As a reminder, this conference is being recorded.

I would now like to turn the conference over to your host, Mr. Jeff Evanson. Mr. Evanson, you may begin.

Jeff Evanson
Vice President of Investor Relations

Thank you, Cherie, and good afternoon, everyone. Welcome to Tesla's First Quarter 2016 Q&A Webcast. I'm joined today by Elon Musk, Tesla Chairman and CEO; J.B. Straubel, our CTO; CFO Jason Wheeler; and Jon McNeill, President of Global Sales, Service and Delivery.

Our Q1 results are announced in the update letter at the same link as this webcast. As usual, this letter includes GAAP and non-GAAP financial information and reconciliations between the 2.

During our call, we will discuss our business outlook and make forward-looking statements. These 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 recently filed Form 10-K at the SEC website.

We're going to start today's call with some comments by Elon, followed by the question-and-answer period. [Operator Instructions]

Elon, I'll turn it over to you.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

All right. Thank you. The -- I think the most important point here that we want to make is that we're advancing the Q3 -- I'm sorry, the Model 3 build plan substantially. So -- and just overall -- the overall volume plan, with Tesla aiming get to the 0.5 million unit per year run rate in 2018 instead of 2020. And this is based off of the tremendous demand we see for the Model 3, which I think is actually a fraction of the ultimate demand when people fully understand what the car's capable of and are able to do a test drive. So this is probably the biggest change strategically.

I think also, Tesla is going to be hell-bent on becoming the best manufacturer on earth. So the -- thus far, I think we've done a good job on design and technology of our products. The Model S and X, I think, are generally regarded by very critical judges as technologically the most advanced cars in the world. And so the -- I think, we've done well in that respect.

The key thing we need to achieve in the future is to also be the leader in manufacturing. So we take manufacturing very seriously at Tesla. It's the thing that we need to obviously solve if we are going to scale and scale rapidly and make the cars more affordable. So that's -- I really want to sort of send the message out there to those -- to the best manufacturing people in the world, we want you to come join our company. And that is going to be the primary focus of Tesla is how do we get super good at making large, complex objects.

So that's the -- I think, the most salient point. It's easy to get wrapped up in like a bunch of sort of short-term issues, but I think in terms of what matters in the future, I think that's the most significant thing.

Overall, on the short-term stuff, our quarter-over-quarter stuff, I think, has improved quite significantly. Obviously, Model X production increased by a factor of 5 from Q4 to Q1, and we continue to make huge strides in volume and quality of the vehicle. And I'm personally spending an enormous amount of time on the production line. My desk is at the end of the production line. I have a sleeping bag in a conference room adjacent to the production line, which I use quite frequently. The whole team is super focused on

achieving rate and quality and at the target cost. So that's -- I feel very confident in us achieving that goal.

And with the increase in ramp, we do feel comfortable affirming the 80,000 to 90,000 deliveries this year. So that's -- yes, I think what -- it's just the rate of improvement with each passing day is very significant.

And let's see, finally, I'd like to sort of thank Greg Reichow, who was our head of production, for tremendous contribution over the last 5 years. Greg is still -- contrary to some media reports, Greg is still at Tesla. He's still with the company, and he's helping with the transition to sort of -- to some new leadership. And we have some, I think, exciting announcements coming in the next -- possibly in the next few weeks about additions to the Tesla management team on the productions side.

So that -- I'm feeling really, really excited about where things are heading in that direction.
With that, let's go to questions.

Question and Answer

Operator

[Operator Instructions] Our first question comes from James Albertine of Stifel.

James Joseph Albertine
Stifel, Nicolaus & Company, Incorporated, Research Division

There's no doubt you have an incredible undertaking in front of you. Can you help us understand some of the key obstacles and how we should consider those obstacles between now and your anticipated launch of the Model 3 in late 2017, whether it's sort of P&L adjustments that we need to make along the way? But can you just help us sort of choreograph how that's going to take place?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Sure. So with the Model 3, as I mentioned on the last earnings call, we're really try to take a lot of lessons learned from Model X, where -- Model X, we put a lot of bells and whistles on Model X and a lot of advanced technologies that weren't necessarily for version 1 of the vehicle. With Model 3, we're being incredibly rigorous about ensuring that we don't have anything that isn't really necessary to make a very compelling version 1 of the car. We also have a much tighter feedback loop between design engineering, manufacturing engineering and production. And so no element of Model 3 can be approved unless manufacturing has said that this is easy to manufacture and that the risks associated with manufacturing it is low. There are many ways to skin a cat, and it's remarkable how you can achieve the same objective with a hugely varying degree of difficulty. You can sort of take the analogy and say, if you want to kill a fly, you can kill a fly with a thermal nuclear weapon, with a MOAB, with a cruise missile, with a machine gun or a flyswatter. So the end result is the same, but the difficulty is considerably more significant from one to the other, and the collateral damage is considerably more significant. So having that -- having production be really fundamental to the design of the Model 3, I think, is very important. And making sure we're not adding extraneous features to the 3 that aren't necessary to achieve the production volume is also extremely important. I'm not going to -- at the risk of this being misinterpreted, and probably there will be some number of articles that do, I think it's worth explaining sort of how manufacturing a complex object with several thousand unique components actually works and what dates are relevant. And it's -- what -- in order to achieve volume production of a car -- a new car with several thousand unique items, you actually have to set a target date internally and with suppliers that is quite aggressive. And that is a date that is taken -- that has to be taken seriously. So like, the date -- because I'm sure this will leak. It's hard to keep a secret, really. The date we are setting with suppliers to get to a volume production capability with the Model 3 is July 1 next year. Now will we actually be able to achieve volume production on July 1 next year? Of course not. The reason is that even if 99% of the internally produced items and supplier items are available on July 1, we still cannot produce the car, because you cannot produce a car that is missing 1% of its components. Nonetheless, we need to work internally and with suppliers to take that date seriously, and they need to see some penalties for anyone, internally or externally, who does not meet that time frame. The -- that -- this is just -- this has to be the case because there's just no way that you have several thousand components, all of whom make it on a particular date. So the reality is that the volume production will then be some number of months later as we solve the supply chain and internal production issues. But it is a bit of a confusing thing, and it is -- it does create some churn, because people are like, "Well, what's the real date?" It's like you have to take the July 1 date seriously in order for some date a few months later or some number of months later to actually be the real date. So yes, that's actually how it has to work. So in order for us to be confident of achieving volume production of Model 3 by late 2017, we actually have to set a date of mid-2017 and really hold people's feet to the fire internally and externally to achieve an actual volume production date of late 2017. So as a rough guess, I would say we would aim to produce 100,000 to 200,000 Model 3s in second half of next year. That's my expectation right now. Yes, so that's the thing. And now, what I would say to anyone that is thinking about ordering a Model 3, now is a good time to actually place your reservation or place your order because you don't have to worry about if you're placing your order and receiving it 5 years from now. If you place your order now,

there's a high probability you will actually receive your car in 2018. So it's -- I'd really recommend that anyone who wants to receive their car in 2018 place their order very soon.

James Joseph Albertine
Stifel, Nicolaus & Company, Incorporated, Research Division

Elon, if I may, as a follow-up, can you give us some reference as to -- again, most generously, you would think if you said end of fourth quarter or -- you said fourth quarter of 2017, so that's 6 months at its most generous calculation. How does that compare with the volume production-agreed date for the Model X, just as an example? And then how does this flow with your cash needs? As you've articulated, it seems you've walked back a little bit from the prior quarter's discussion around cash flow positive and no need for capital markets raise. It seems like there may be a need here. If you could just articulate how the 2 fit together, that'd be helpful.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

It's always tempting for people to reason by analogy instead of first principles, and that's what -- that would be the mistake of assuming that anything to do with the X production has bearing on Model 3. They're very different programs with fully different approaches. So I would not try to extrapolate from that any more than it would have made sense to extrapolate from the Roadster when we were making 600 cars a year to 20,000 cars a year with the Model S. So in the Roadster case, we went from making 600 cars a year in 2010, where Lotus made the body and chassis, we made the powertrain and we did final assembly. It was a far simpler car than the Model S. I would tell people we were going to do 20,000 -- get to a run rate of 20,000 cars a year with the Model S, despite it being a vastly more complicated car and a car where we made the whole car, not just the powertrain. If you would extrapolate from the Roadster experience, you would be completely wrong about the Model S outcome, and many people were. That's why it's -- I would say, X is not relevant. As far as the increased capital raise, well, obviously, if you double your planned volume, you can't expect the capital to stay the same. I think our capital efficiency will actually improve on a per-car basis, but obviously, it can't stay the same.

Operator

Our next question comes from Colin Langan of UBS.

Colin Langan
UBS Investment Bank, Research Division

Just to kind of follow up, you've had issues with the X, there's management changes. What gives you the confidence of the 500,000? That's a pretty amazing jump into next year. What kind of gives that conviction that is going to be possible by 20?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

You mean by 2018?

Colin Langan
UBS Investment Bank, Research Division

Yes, 2018, yes.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes. Well, first of all, I think we've got an excellent team at Tesla in production. And there's -- we're adding world-class aces in production with each passing week. It is a huge advantage to have the most -- I mean, what -- I think it's better to say it's probably the most compelling product program in the world with the Model 3. I'm not sure what would be more compelling -- at least, I think that there's a good argument that Model 3 is the most compelling program on earth, so -- from a manufacturing standpoint.

So I believe to recruit top manufacturing talents to the most compelling product on earth is very strong. We find the response to be extremely good when we call people up. So based on the rate at which we're adding world-class manufacturing expertise and some of the things that I know we're going to announce in the future, I feel highly confident that Model 3 is going to be well executed as a program. And yes, that's -- you wanted to add something, J.B.?

Jeffrey B. Straubel
Chief Technology Officer

Yes. If I might just add, I mean, you've mentioned this briefly before, but the design of the vehicle lends itself to high-volume production very efficiently. And I think that's really...

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes, designed for manufacturing.

Jeffrey B. Straubel
Chief Technology Officer

Absolutely. And that's something we're doing even today. Those designs are firming up. So this is something happening far, far ahead of time. And the second point would be the quality and the motivation of the suppliers involved in the program is best ever.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes, it's massively increased, yes. I mean, every supplier wants to be in this program.

Colin Langan
UBS Investment Bank, Research Division

Got it. And if I could just ask a follow-up, I mean, obviously, cost is going to be an important factor when the 3 launches. I think you've indicated that your battery cost with PACCAR now, under $190 per kilowatt-hour. How do think that compares to the industry? Where do you think it'll be by the time the Model 3 is launching, since the launch, it seems, is a little slower?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes, we're trying to comment on an individual component costs, and that's stuff's fairly proprietary. It's kind of giving away our playbook. So -- but I think it's pretty obvious that we will exceed anyone else in the world in scale economies with the Gigafactory, and we're very confident in Panasonic's ability to execute on that front. So I just don't know anyone who, in terms of intrinsic costs, is going to be close to what the Gigafactory could produce on a cost-per-kilowatt-hour basis.

Colin Langan
UBS Investment Bank, Research Division

And any color, when you think the $190, how much like a CAGR of decline until the Gigafactory's [indiscernible] the 30% [indiscernible] once that's online?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

I -- yes. Next question.

Operator

Our next question comes from Colin Rusch of Oppenheimer.

Colin William Rusch

Oppenheimer & Co. Inc., Research Division

As you look at this accelerated plan for production, what can we expect on OpEx spending to support all of those cars coming out a lot faster than you had previously expected?

Jason S. Wheeler
Former Chief Financial Officer

Yes, this is Jason. I think we updated our guidance on OpEx for the year a little bit in the letter. We had talked about 20% last year and moving that range to 20% to 25% for 2016. So there's obviously going to need to be more OpEx at this. However, at the same time, you see how we improved quarter-over-quarter in terms of OpEx. We were down $12 million from Q4, down 3%. So there's a renewed focus in the halls here at Tesla on making sure we are managing costs extremely effectively. And all of our employees get that and are contributing to that.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes. I mean, I think it's -- our sort of operating leverage, I mean, just sort of fixed costs relative to our variable costs has been improved dramatically as you get volume up.

Jason S. Wheeler
Former Chief Financial Officer

Yes, absolutely. We talked a little bit about this on the call last quarter. The potential for operating leverage is massive with production scaling.

Colin William Rusch
Oppenheimer & Co. Inc., Research Division

Great. And then Elon, what do you need to see to move your desk out of the factory? It's a kind of a dramatic thing to talk about. I mean, your factory and your sleeping bag there. So obviously, there were some things you are concerned about. But what are you going to want to see to go back to a different location?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes. I mean, my desk has frequently been in the factory, so this is not some new thing. On the Model S ramp, my desk was also in the middle of the factory at the start of the body line for a year. So I move my desk around to wherever the most important place is for the company. And then I'll sort of maintain a desk there over time to sort of come and check in on things. But I mean, I suspect probably by the end of this quarter, most of my time will not be spent on the factory floor.

Operator

Our next question comes from Pat Archambault from Goldman Sachs.

Patrick Kenehan Archambault
Goldman Sachs Group Inc., Research Division

Just -- so getting back to the capital requirement for the expanded Model 3 production, appreciate the guidance that you've provided for this year from a CapEx perspective, that's helpful. But I don't know, maybe this is a question for Jason. I mean, have you guys -- can you share with us maybe what a total capital cost estimate might look like for the Model 3 program now that you've got a handle on what your volume's going to be, or what you want to produce to?

Jason S. Wheeler
Former Chief Financial Officer

Yes, a couple of things there. So one, we've provided some breadcrumbs, like we updated our CapEx guidance to -- we had guided at $1.5 billion last quarter. And we think it'll probably be 50% higher than that for 2016 -- into 2017.

Unknown Executive

$1.5 billion.

Jason S. Wheeler
Former Chief Financial Officer

What?

Unknown Executive

$1.5 billion.

Jason S. Wheeler
Former Chief Financial Officer

$1.5 billion. And into 2017. We're not going to talk about that right now. But the other thing to pay attention to is our CapEx for this quarter was $216 million, which was a 47% decrease over Q4. A little bit of that is what we talked about last quarter, where a lot of the big investments from Model X had already been made. But also, we're just really focusing, as Elon has said, on capital efficiency and making sure that we are investing in the highest and best uses of cash. And I think those principles are what's going to guide the Model 3 program.

Patrick Kenehan Archambault
Goldman Sachs Group Inc., Research Division

Yes, I mean, look, that's a good starting point to work with for us. I mean, we appreciate the update for this year. Maybe the way to take the question is just kind of understand when the peak spending periods are going to be. And if you're launching through middle of next year, is it kind of a good idea to maybe extend the amount of capital you see spending kind of in the balance of the 3 [ph] quarters through the second half of next year? And then clearly, with the launch, that tapers off. Is that a right way to think about it? And then second to that, I would probably ask the same question just on the R&D front. When do those costs spike in the timeframe of that program?

Jason S. Wheeler
Former Chief Financial Officer

Sure, I think you're thinking about it the right way, the way you've laid it out. And you can kind of use Model X and Model S and the ramp of capital for those programs as a way to think about Model 3. On the R&D piece of it, that is a big driver behind our updating of our range to 20% to 25% OpEx in 2016. So we'll start to see a little bit of that in the second half of this year. And then certainly, some more into the first half of 2017.

Patrick Kenehan Archambault
Goldman Sachs Group Inc., Research Division

Got it. If I can squeeze in one last one, just on the sourcing. Is this changing your strategy of working with suppliers? I mean, you've done a lot in-house for all your products so far, but obviously, this is a very different kind of volume number you're talking about. So are you thinking about changing the level of vertical integration? And how does that work into sort of the ongoing capital requirements for this program?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

No. I think we're actually going to increase the amount of vertical integration that we have. I think it's very important for us to have the ability to produce almost any part on the car at will, because it alleviates

risk with suppliers, where -- going back to like, where if 2% of supply is not ready, we can't make the car. Having the ability internally to adapt and make those -- that 2% of parts internally is a -- really massively reduces risks associated with the production ramp. That, I think, is a very important thing. Now once -- like, if we get to a steady state and we talk to a supplier and they can do a very efficient job of making that part, we have no problem transitioning it from in-sourced to outsourced. I've always -- not to in-source for the sake of in-sourcing, but rather to in-source if we think that it has meaningful improvement on schedule or cost or quality. And I mean, one of the challenges we face is that for a lot of the supply chain, they are impedance matched to the timeframe for the big OEMs. And Tesla just moves a lot faster than the big OEMs. And so if they're impedance matched to a typical sort of 10 -- sorry, sort of -- call it like a 6-year development cycle and we're on a 2- or 3-year development cycle, it just doesn't -- couldn't connect properly. Some suppliers can handle that, and some can't.

Operator

Our next question comes from Brian Johnson with Barclays.

Brian Arthur Johnson
Barclays PLC, Research Division

I just want to talk a little bit about maybe some of the milestones that you see in terms of this accelerated development and launch of the -- or scale-up of the Model 3. First, it looked like in the proxy that the Alpha prototype was completed as of -- when it was filed a few weeks ago. So a few questions. One, when do you kind of expect the Beta prototype to be achieved? When do you think you'll have firm specs for both your internal parts operations and for your external suppliers? And then in terms of the capital, do you see -- 2 other questions. Kind of when would you see raising capital, if at all, to meet this? And then finally, given the volume of trade-off decisions you're talking about making between manufacturing, design, engineering, do you see any role for a COO-type similar to what you have at SpaceX to accomplish this timeline?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Okay, that's like 17 questions in one.

Brian Arthur Johnson
Barclays PLC, Research Division

You could send us the project plan.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Well, from an engineering standpoint, we're already almost complete with the design of Model 3. And in fact, the prototype that was driving at the Model 3 event the end of March was actually using the production drivetrain. So I think we feel pretty good about engineering completion of the last items probably within 6 to 8 weeks, thereabouts. The -- so the -- and -- so with -- sort of completing the final release for tooling no later than the end of June. That sort of leaves roughly 9 months for the tools to be manufactured, which, I think, is an achievable timeframe. It's gets [ph] some suppliers, but it's an achievable timeframe. I mean, you can have a -- you can create a human baby in 9 months. I think you can pretty much make a tool in 9 months. So that's our expectations. So then, we want to have parts off production tooling starting in April next year. So we've got 3 months of validation for a normal start of volume production in July. Again, it's a nominal start, and it's a date that we internally take seriously, and that suppliers need to take seriously. But it is one where inevitably, there will be some small number of items that cause slippage that -- such that the actual date of reaching volume production is some number of months after that. This is simply in the nature of things. It's unavoidable. And so that's -- and if you tell me what those parts would be, we'd be able to take action now. It's easier to see what these things are in hindsight, but not in advance. And sometimes, they're the things you don't expect to be a problem. So there's -- Tesla is a large, complex business. It's -- I think -- I don't want to comment on -- too specifically on senior exec hires.

Brian Arthur Johnson
Barclays PLC, Research Division

Okay. And I guess does this imply a similar accelerated schedule for the Gigafactory, which always seemed tied to the 2020 0.5 million unit goal?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

It does, yes. J.B., do you have anything you want to add?

Jeffrey B. Straubel
Chief Technology Officer

Yes, we've -- I mean, as we've discussed previously, this is a small part of why the Gigafactory was -- we accelerated some of our plans there. And we're still on track to have first cell production starting at the end of this year, so that we'll able to ramp up to match the Model 3 schedule as well.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes. Again, I sort of want to emphasize some comments that I made earlier in the earnings call, which is, Tesla is really hell-bent on being the world's best at manufacturing. Like, this is a big deal. And I think it's the right thing to do because what we're trying to do is get as many electric cars on the road as possible. And what's the limiting factor? Well, it's production, like how can we scale and scale efficiently? And so we need to go -- we need to figure out how to be the world's best in manufacturing. That's what we're going to be hell-bent on doing.

Operator

Our next question comes from Adam Jonas of Morgan Stanley.

Adam Michael Jonas
Morgan Stanley, Research Division

Elon, so on our math, your combined fleet of Model S and X are driving more than 3 million miles a day. So in just one day, your cars do about 2x the distance that Google's done in the entire history of their self-driving car project. Now while your cars aren't exactly sensor-encrusted Christmas trees with tens of thousands of dollars of equipment, like a retrofitted Google car, it's still a lot of miles. And I was just wondering if you could explain to the investment community what kind of advantage this gives Tesla in the race for sustainable transport and accident-free driving in some commercial, financial terms, if you could, or even engineering terms.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Well, I mean, I think you've pretty much asked the question and then answered it. The -- I mean, data is everything, really, when you're trying to solve the autonomous transport problem and having millions of miles per day of data accumulating. And then as the fleet grows, that grows proportionate to the fleet, it's incredibly helpful. I mean, I think, really -- and particularly, as you go to, say, kind of -- in the long-term, kind of fully autonomous driving which, I think, is going to -- that's going to require quite a lot of regulatory oversight. And I think in order for regulators to be comfortable approving that, they're going to want to see a very large amount of data, like, maybe billions of miles showing that the car is unequivocally safer in autonomous mode compared to manual mode in a wide range of circumstances, in countries all around the world with different rules of the road and ways of behavior. And yes, so you can -- it'll have to be something statistically significant like billions of miles.

Adam Michael Jonas
Morgan Stanley, Research Division

Okay, well, that actually Elon, leads to my follow-up, which is once high volumes of statistical data for your autonomous miles are collected and analyzed, I can't help but get it out of my mind, I have this image of you and some CEOs of other auto companies and CEOs of other software and tech hardware firms testifying in Congress about the urgent need to replace these dangerous, purely human-driven cars on the road with available, affordable and proven, even L2, L3 technology or semiautonomous that's ready for introduction to dramatically improve the epidemic of traffic fatalities. And it's like a national public health and safety priority. Am I crazy, Elon, about kind of -- that type of -- that role for people in your position to play, armed with the data empirically? And if I'm not crazy, then how soon do you think it would take for tech firms like you to have a sufficient quantity and quality of data to be able to make such a scientifically proven case?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Well, I really don't feel like -- I mean, Tesla will argue for autonomous driving, but we're not going to argue against manual driving. People should have the freedom to choose to do what they want to do. And yes, sometimes those things are dangerous, but freedom is important. And if people want to drive even if it's dangerous, they should be allowed to drive, in my view. But then the autonomous safety systems should be in there, so that even if you're in manual mode, the car will still aid you in avoiding an accident.

Operator

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

Joseph Robert Spak
RBC Capital Markets, LLC, Research Division

Also, I wanted to focus on the addressing the Gigafactory plans. I believe originally, you indicated about 15 gigawatt hours per year were earmarked for energy. And with Model 3 demand, clearly, you're robust and -- likely more robust than you originally planned. I'm wondering if that moved some of those Tesla Energy ambitions to the back burner? Does it accelerate the need for a second Gigafactory? Or maybe perhaps you found a way to squeeze more out of the existing one?

Jeffrey B. Straubel
Chief Technology Officer

Well, I think the simplest answer is that we have a lot more capacity at that site than the initial 35 to -- and 15 gigawatt hours that we discussed. That's part of why we've so aggressively made sure that we have extra land and extra space around the site, so that we can continue to expand. And we won't need to rob from Tesla Energy plans in order to meet the Model 3 schedule. We definitely have a way to solve both.

Joseph Robert Spak
RBC Capital Markets, LLC, Research Division

Are you willing to provide an update to those initial targets?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Not yet. Maybe in 1 or 2 earnings calls from now, I think we'll be able to provide more -- shed more light on that. But yes, as J.B. was saying, we're going to make sure that Tesla Energy is not constrained by the vehicle needs. And I think we're -- yes, we're -- that -- the growth rate of Tesla Energy is, on a percentage basis, is still going to be far greater than the growth rate in cars.

Operator

Our next question comes from Ryan Brinkman of JPMorgan.

Ryan J. Brinkman
JP Morgan Chase & Co, Research Division

We can all now see, with the Model 3 preorders, that you are entirely correct that there is tons of demand for the car, just like you've been saying all along. So I think about a month ago, when you started tweeting those preorders, right, the investor and parts supplier confidence in your ability to ramp to 0.5 million units rightfully skyrocketed. With that said, from a supply perspective, you have sometimes had difficulty in achieving delivery targets because of the issues in smoothly increasing capacity in assembly, and you've shown a strong preference for emphasizing quality over quantity. So is there anything that's changed on the supply side of the equation that should also be confidence instilling maybe, I don't know, lessons learned from the launch of X or some other factor that should give confidence in your ability to be at a 200,000 to 400,000 unit annual run rate of Model 3 production approximately 14 months from now?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes. Again, I want to emphasize that the July 1 date is not a date that will actually be met. It is an impossible date. However, it is a date we need to hold ourselves to internally and we need to hold suppliers to. But it is an impossible date because there's 6,000, 7,000 unique components in the Model 3, and it -- and that would assume that all of them arrive on time. Just like if you have a college term paper, there are always late term papers. But you still have to have a deadline and it needs to be real and one with consequences if a deadline is not met. But it absolutely will not -- the probability of it occurring is incredibly low of actually achieving it on July 1. But nonetheless, it is a date we have to take seriously. I explained that with some risk of this being misinterpreted, but hopefully, people will appreciate that I'm trying to explain how it needs to work and it kind of has to work that way. There's no other way to do it. And the things that help us get there are designing Model 3 for manufacturing with engineering, manufacturing engineering and production and supply chain, all in a very close loop, and making sure that we design the car to be easy to make, that we iterate with suppliers, and ask them how -- if we're giving them a design that's easy to make or when it's hard to make, or how do we make it -- how do we reduce risk and make improvements and make it easier to build, this is really fundamentally different from S and X. The S was the first car we really designed ourselves, and it was all about just trying to make the car work in the first place. X was basically built off of the S platform, but then even more complicated. So unfortunately, even harder to make. The Model 3 will -- is the first car Tesla's creating that is designed to be easy to make, but this is really a fundamental difference. And then I mentioned also increasing the scope of our in-house abilities, so that if there's a supplier that isn't able to deliver on time, we can scramble fast and produce that component in-house.

Operator

Our next question comes from John Murphy with Bank of America.

John Joseph Murphy
BofA Merrill Lynch, Research Division

Just -- my first question on the capital needs. I mean, it looks like there's a little over $400 million left on the ABL. And given the preorders -- or the reservations for the Model 3, it seems like you'll have at least another $400 million flowing in, in the second quarter. So just curious, I mean, as you look at that kind of cash potential or liquidity and potential inflow, do you really think you need to do a capital raise this year? Or could you get by with those sources of cash?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Well, I don't think we want to rely too much on customer reservation money as a source of capital. Maybe as a buffer or something, but it's not -- not as a primary source of capital. So yes, I mean, I think it's going to make sense for us to raise some amount of money, some combination of equity and debt, and make sure the company has a good buffer of cash on hand. It's just -- I think it's important for de-risking the company.

Jason S. Wheeler
Former Chief Financial Officer

This is Jason. The only thing I'd add to that is, we did draw $430 million on the ABL this quarter. A lot of that was we had a large amount of cash in transit at the end of the quarter. Our deliveries were a little bit back-end loaded. And as those cars were delivered in early April, we were able to pay a significant portion of that back.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes, I think most people are familiar with asset-backed liabilities. It's important to say like why is that different from like general debt? The -- unlike other automotive companies, Tesla doesn't ship to dealers. We ship to customers. So we build the cars to order. The car is complete, and it's going to a known customer. So really, the only risk associated with that is if like the ship sinks or something, or the truck that's carrying the cars crashes. But the ABL is -- the asset-backed line is basically finished goods in transit to known customers. It's not like general corporate debt. It's, I think, more appropriately thought of as a slight increase in cost of goods sold.

John Joseph Murphy
BofA Merrill Lynch, Research Division

Okay, that's helpful. And then if I can just ask one follow-up from another question is, I mean, as you look at ramp with suppliers, is there any recourse to suppliers that don't meet sort of that start of production next year or any point of the production schedule? Or is there -- is it really just you cancel the business and move on to another supplier?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes. So the -- we'll be asking for firm commitments from suppliers to meet that time frame. The -- and I'm meeting personally with the team from that supplier who is going to execute on the task, so that I have not just the commitment of the CEO or general manager of that supplier, but the actual team that will execute on the product. And we want to confirm that we feel confident in the actual team. And basically, what we're asking for, the A team from the A supplier and a commitment from that A team that they intend to work harder than they ever have on any other program. And if they're willing to do that, then we work together, otherwise, no.

John Joseph Murphy
BofA Merrill Lynch, Research Division

And recourse, if they miss targets?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes. So along the way, we'll be assessing progress and our confidence level that suppliers will meet the July 1 target. If it looks like they will not, we'll have a conversation with them. If our comfort level drops below a certain level, we will -- they will not be a supplier to Tesla.

Operator

Our next question comes from Rod Lache with Deutsche Bank.

Rod Avraham Lache
Deutsche Bank AG, Research Division

A couple of questions. One, distribution and franchise laws in the U.S. have always seemed like they're an issue, that they're going to need to be dealt with at some point. Does this trajectory force the issue? Or is this something that you can accommodate even with the distribution constraints?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes. First of all, it's worth emphasizing that the whole dealership thing only applies in the U.S. We don't encounter that issue anywhere else in the world. And what's happening is that dealers are using kind of vestigial legislation that was originally put in for a just purpose, which is to protect them from predatory practices from the franchisor, and then using it for an unjust purpose, which is to prevent direct distribution. We believe that in the long term, justice will prevail.

Rod Avraham Lache
Deutsche Bank AG, Research Division

Okay. But is there a view that you can actually achieve this even under the constraints that exist today? Or is that something that you do need to address in order to achieve this plan?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

We believe that, that is not a constraint on our ability to achieve the plan.

Rod Avraham Lache
Deutsche Bank AG, Research Division

Okay. And the second question is, I'm assuming that concurrently with this plan, there is kind of a longer-term plan for growth and that there's going to be a Fremont #2, and I think you alluded to a further expansion of Gigafactory. Can you just give us the sense of what you are aspiring to in terms of the trajectory by the end of the decade, as you've done before? And Jason, I know you didn't want to get into details on project spending, but it would be helpful just to pass along some thoughts on what needs to go into the company in terms of investment in order to get that sort of thing out. Is it reasonable to assume that the new level of spending that we're seeing right now is something that we should assume as being a sustained level going forward?

Jason S. Wheeler
Former Chief Financial Officer

Sure. On that, so yes, I don't want to go into the details of what we think the total capital cost is going to be for the Model 3 program. But certainly, as we continue to ramp, there's going to be more capital requirements of the company. That's just a fact. And ideally, I'd like to fund as much of that as possible with cash flow from operations. So that is really the focus that we have in the short term.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

I mean, there's still like -- probably, like a 2020 target for volume is closer to -- maybe close to 1 million vehicles in 2020 or something like that.

Operator

Our next question comes from Charlie Anderson with Dougherty.

Charles Lowell Anderson
Dougherty & Company LLC, Research Division

I just had 2-parter on the Model 3 reservation holders. I imagine, for many of them, this was their first interaction with Tesla and maybe the first time they went to a store. And I wonder, as you've looked at that base, if there's any potential to up-sell to an S or X in the interim while they wait for their car, if you have any programs planned to address that. And then secondarily, I was curious if you have any color on sort of the geographic split of the reservation holders.

Jonathan McNeill
President of Global Sales and Service

Yes, this is Jon. In terms of the -- your first question on their -- whether or not the reservation holders, this was their first interaction with Tesla. Just about 93% of the reservation holders, this is their first

interaction with Tesla. So it is a super, super majority of a new client base or a customer base for Tesla, and it's exciting. It was exciting when we walked the lines. There were people waiting in line at the stores, and they were excited to become a part of the Tesla community and family. And the demographics of the owners, we're not going to say much about that, but they are a bit different, as you can imagine, than the Model S and Model X owners today. And it presents an exciting new market for Tesla as well. And it should be noted that these folks are not interested just only in Tesla Motors, but also Tesla Energy, because the price point of a Tesla Powerwall is an accessible price point for many of these folks. And so they're expressing interest in both. In terms of their S and X as a bridge to Model 3, we are talking through and thinking through that, because as Elon mentioned earlier, the quickest path to receiving a Model 3 is being a Tesla owner. We've agreed that Tesla owners are receiving priority in terms of production, and so you can run the math I just mentioned. If 93% are new to Tesla, 7% of the reservation holders are Tesla owners. And the fastest way to get a production vehicle, even in 2017, is through Tesla ownership. And so we're finding that there's a good conversion rate of folks that are coming in to test drive and S or an X who are Model 3 reservation holders, and are motivated to be Tesla owners now so that they can receive their Model 3 earlier.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes, actually, an important point worth mentioning is like, we were particularly worried about what would happen with the Model 3 announcement, would it cause like some big drop in, say, Model S sales. It seems to have had the opposite effect. It seems as though S demand has increased. Maybe it has.

Jonathan McNeill
President of Global Sales and Service

It has increased.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

It has increased.

Jonathan McNeill
President of Global Sales and Service

Yes. Yes. I think you saw the estimated number in the first quarter is 45% up year-over-year, and that demand continues.

Operator

Our next question comes from Emmanuel Rosner of CLSA.

Emmanuel Rosner
CLSA Limited, Research Division

I wanted to ask you guys about any early thoughts on a need for manufacturing expansion. Obviously, if you're delivering 500,000 units by 2018, I think that's the original capacity of the Fremont plant. So do you need to start thinking about an additional plant? And in that context, any thoughts on global expansion? You were mentioning obviously very strong increase in Model S orders in Asia, for example. Anything you could share with us at this point?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes, I mean, our plans for international expansion, establishment of new plants are sort of speculative. We haven't made any firm decision, but I mean, some of the things are just sort of common sense, that manufacturing cars in California and then shipping them all around the world is not a very efficient thing to do, particularly as you go to more affordable vehicles. So at some point, it's going to make sense to have a plant in Europe and a plant in China and probably plants in other parts of the world. So that's kind

of a natural thing you expect to do. Like, it wouldn't make sense to ship cars from California to Europe, or California to Asia...

Jonathan McNeill
President of Global Sales and Service

In those volumes.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

In those volumes. It's just not an efficient way to go. And then particularly as we saturate on Fremont volume in terms of satisfying demand in North America, I think we'll -- just to satisfy demand in North America for our future product line-up, we're going to need more than one plant in North America, just to satisfy North America demand.

Emmanuel Rosner
CLSA Limited, Research Division

You're right. So when we think about these extra capital needs that you're sort of alluding to, in addition to just the -- obviously, the cost of the Model 3 in development, are you also contemplating, as part of that, to raise the money for an extra factory, to the extent that just beyond 2018, you would already need some extra capacity?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

I don't think we'll be raising money for new factories before we're at volume production of the Model 3. And then as Jason was saying earlier, we're really trying to fund as much of this as possible from operating cash flow.

Operator

Our next question comes from Ben Kallo with Robert Baird.

Benjamin Joseph Kallo
Robert W. Baird & Co. Incorporated, Research Division

I have 18 questions. The first one I have, Model X production, where are we at right there, because I -- we thought all this Consumer Reports issues, that I think it's a little backdated. But can you talk to us about the state production of that? Number two, on the Gigafactory and the battery size for the Model 3, I think everyone's abiding by 80 kilowatt-hours or 75 kilowatt-hours for the number of cars. And how do we think about actually the Model 3 battery size and what the Gigafactory could support? And then the third question is, why is Bob Lutz and Jim Chanos -- they keep on saying such negative things about you guys. What do you have to do to get the dissenters to actually believe in Tesla a little bit?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes. So I mean, I feel confident that we're going to hit like the 2000-vehicle-a-week target by the end of this quarter, of which, on the order of 40% are X. I'm just telling you, that's our internal plan and what we expect to meet. There's no question, the X is a very difficult car to manufacture. I think it's unquestionably actually the most difficult car to manufacture in the world. And Bob Lutz would agree with that. I think he said something to the effect that he thought it wasn't manufacturable or something that. It's certainly manufacturable, it's just a hard thing to fill [ph] for. So I mean, we have some internal milestones that I think are -- that we've achieved thus far that I'm pretty excited about. Friday, at 3, we've achieved our first flawless production of a Model X, where it went through the whole production process and had 0 issues. That was a great milestone, and we were kind of celebrating at 2 or 3 a.m. Friday, it was great. And then -- and now we're starting to get several in a row that are flawless. And so it's really gaining momentum very quickly. We feel pretty good about the trajectory of S and X. As for convincing all the

naysayers, I think that will basically be never. There's always going to be naysayers. And I'd just say like, what I find ironic about a lot of the naysayers is that they -- the very same people will transition from saying it was impossible to saying it was obvious. I'm like, "Wait a second. Was it obvious or impossible? It can't be both." Right?

Benjamin Joseph Kallo
Robert W. Baird & Co. Incorporated, Research Division

Got it. And Model 3 battery, we're all analysts here. We stirred our straw [ph], dividing by 75 kilowatt-hours. Is that the right thing to do with the Model 3? Or should we have a lower number like 40 kilowatts or 45? And then, you've got the guy with the bolt making that car saying that it's going to be ahead of you guys, and then sell for cheaper than you. So how do I think about GM being able to make a car cheaper than you versus making a margin on a Tesla with a lower battery cost, if that makes sense?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes, I mean, we don't want to get into like real specifics on battery pack size, but I think it's fair to say like the average battery pack size for the 3 will be less than 75 kilowatt-hours. That's...

Benjamin Joseph Kallo
Robert W. Baird & Co. Incorporated, Research Division

I'm sorry, what was that?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

The average energy content of a 3 pack is certainly going to be less than 75. It doesn't really need to be anywhere near 75 to achieve the range of 215 miles. So -- but we don't want to go into like -- I think getting into the nitty-gritty is probably unwise. Yes. So...

Jeffrey B. Straubel
Chief Technology Officer

Yes, and I mean, I don't think it's probably -- you probably don't need to fixate on the 35 gigawatt hours. We're planning the Gigafactory to meet the production needs of the energy that we know the cars will need. So there's not a problem in scaling that as we need to. So obviously, internally, when you have -- we know the math, and we know what we need to do, and we're on track to do it.

Benjamin Joseph Kallo
Robert W. Baird & Co. Incorporated, Research Division

I guess my 18th question is, so I'm not a car guy, but -- so I have you guys having 40,000 units of the Model 3 at 2017, and from your commentary, it seems like I need to raise my numbers. But how do I think about that ramp-up from 0 to 500,000 over -- let's push it, from 2018 on? Does it go from 0 to 500,000 over 2 years or 1 year? Or how do we think about that?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Well, I mean, obviously, if we're saying that Tesla will have total vehicle production of on the order of 500,000 cars in 2018, it can't be more than sort of 2 years to get there. So now, the -- just sort of another -- maybe better efficient [ph] about -- education about production ramps is, production ramps look like an S curve. It's extremely difficult to predict with precision the early part of the S curve. So -- because in the early part of the S curve, you have -- it sort of starts off very slow and then it increases exponentially, it moves to a linear, and then moves to a logarithmic. So it's really -- it's terribly difficult to predict exactly what the shape of that S curve is. And that's where things get tricky because you end up putting quarterly results, kind of bracketing somewhere on that S curve, and depending from where you are on that S curve, it can actually look like a big difference. But actually, it could be a shift of a few weeks because of the exponential nature of the beginning of the S curve.

Benjamin Joseph Kallo
Robert W. Baird & Co. Incorporated, Research Division

And my 19th question. Can you make 50% gross margin on it or 20% gross margin? Or how do you think about margins, like because people think you can't make it profitably [indiscernible].

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes, we're -- I mean, we're highly confident that can be made profitably. And design for manufacturing and economies of scale are the keys to achieving that outcome. Yes, I think -- like, GM is not aiming for anything near the volumes that we are, and so that they're -- I mean, despite being a big company, their economies of scale are going to be driven by the -- whatever elements are unique in their EV. And we know for a fact that they will not get the economies of scale that we will be at for Model 3.

Operator

Our next question comes from Dana Hull of Bloomberg News.

Dana Hull

What is the mix of -- in 2018 of the 500,000 cars? I mean, it's combined S, X and 3. Should we think of it as like 300,000, 3? Or -- I mean, what's the kind of mix of those 3 vehicles?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Well, I mean, I don't think we've got like an amazing crystal ball to figure out exactly what it's going to be. But I mean, I feel confident about the top line number, but the mix internally is -- it's difficult to figure that out. I mean, yes -- but I mean, maybe it's something like 100,000 to 150,000 S and X, and then 300,000 to 400,000 of 3. But this is -- I don't know, it's really hard to say.

Dana Hull

Hard to say? Okay. And then as you try to attract top manufacturing talent as you begin to ramp, have you given any thought to trying to hire a COO? I mean, I'm just thinking about your personal life between Tesla and SpaceX and sleeping in the sleeping bag and working 90 hours a week between 2 companies. SpaceX has a great COO and has had one since the company -- for years, but Tesla never has.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

I mean, it's sort of -- I mean, it's really -- I mean, the sort of scope of Tesla's [indiscernible] activity is broader than SpaceX. And SpaceX is more of a pure technology company and does not have the sort of sales, service and kind of fleet management, and customer financing, and all that sort of stuff that Tesla has. Obviously, Jon's -- Jon McNeill's taking that -- has that role at Tesla. And then, my focus is primarily on technology, design and then manufacturing. So -- but I mean, you certainly can expect that there will be announcements in the fairly near future about some great executives joining the ranks.

Operator

Our next question comes from Phil LeBeau of CNBC.

Phil Lebeau

Elon, I have a question. It was about 10 minutes ago, you made a reference to 1 million vehicles in 2020. Is that a production target, a production goal, or a hypothetical? I'm just looking for some clarification there.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

I mean, that's my best guess. If we're 0.5 million in 2018, and then sort of roughly 50%-ish growth from there, then, it's probably around 1 million in 2020.

Phil Lebeau

And do you not have an estimate as to how many production plants you will need in order to make that happen?

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Well, we -- I think it is actually feasible. Maybe not advisable, but feasible to do it with just Fremont and the Gigafactory. We actually believe that Fremont and the Gigafactory could scale to 1 million vehicles. Whether that's actually wise is a separate question. And as I said earlier, it's going to make sense to do localized production, at least on a continent basis. Otherwise, your logistics cost end up being quite extreme. Or they start -- your logistics cost start becoming a bigger and bigger percentage of the total vehicle cost. I mean, that's really why manufacturers build their cars for a local market. They build cars for a market in that market because the logistics cost associated with shipping a 1.5- to 2-ton vehicle are massively greater than, say, shipping a little consumer electronics device.

Operator

Our next question comes from Alex Sage of Reuters.

Alexandria Sage

Elon, you say that you're calling out to the best minds of manufacturing to join Tesla, but at the same time, Google and Apple are giving out the same call. I guess, I would wonder what you would say to these people to have them join Tesla over these other companies. At the same -- second question is whether you had any takeaways from the -- your -- in terms of your suppliers, in terms of this HOERBIGER experience and how you can hold these suppliers' feet to the fire on some of these more complicated tasks that they're asked to fulfill.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Yes, I mean, in response to your first question, I mean -- sure you appreciate, like Apple and Google do not manufacture things themselves.

Alexandria Sage

Right. But they are hiring manufacturing people.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

To do what?

Alexandria Sage

That's a good question, but they're hiring manufacturing people, people with manufacturing experience.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

Okay, well, Tesla actually -- Tesla believes strongly in making things. They do not, that's fine. It's a philosophical difference. We believe that manufacturing technology is itself subject to a tremendous amount of innovation. And in fact, we believe that there is more potential for innovation in manufacturing than there is in the design of the car by a long shot. And so now, this is just a philosophical difference. Perhaps, we are wrong. But we -- like, we believe in manufacturing, and we believe that a company that values manufacturing as highly as we do is going to attract the best minds in manufacturing.

Jeff Evanson
Vice President of Investor Relations

Okay, so I think that's all the time we have.

Alexandria Sage

But the supplier question.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

I didn't understand who you were referring to.

Alexandria Sage

HOERBIGER, the original...

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

HOERBIGER? I'm not familiar with that name.

Alexandria Sage

Yes, the original...

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

We're certainly going to try to -- we're certainly going to do our best to ensure that we have high confidence in the suppliers on the Model 3 program. Those that didn't perform very well on, say, prior programs will -- are unlikely to be selected for the Model 3 program. Okay?

Operator

At this time, I would like to turn it back to Mr. Jeff Evanson for any closing remarks.

Jeff Evanson
Vice President of Investor Relations

All right. Thank you everyone for joining us today. We'll talk to you in a quarter. Bye-bye.

Elon R. Musk
Co-Founder, Chairman, Chief Executive Officer and Product Architect

All right, thank you.

Operator
Ladies and gentlemen, this concludes today's conference. You may now all disconnect, and have a wonderful day.