Annual General Meeting

Company Participants

- Elon Musk, Co-Founder, Chairman and Chief Executive Officer
- James McRitchie, Shareholder
- Jing Zhao, Shareholder
- Robyn Denholm, Head of Worldwide Sales
- Steve Diamond, Shareholder
- Todd Maron, General Counsel and Corporate Secretary
- Unidentified Speaker

Other Participants

- Unidentified Participant

Presentation

Todd Maron {BIO 18879554 <GO>}

Hey, everyone. Welcome to Tesla's 2018 Annual Meeting of Stockholders. We're glad you could join us today. My name is Todd Maron, and I'm Tesla's General Counsel and Corporate Secretary. Following the formal part of the meeting, I'll be introducing Tesla's Co-Founder, CEO and Chairman, Elon Musk, to the stage. In addition, I'd also like to introduce several other people we have here from Tesla today. In the front row, we have our Board of Directors. We have our CEO (sic - CFO), Deepak Ahuja; and Martin Viecha from our Investor Relations team. We also have several other members of our management team. We have Larry Westall and David Humphries from PwC, Tesla's Independent Auditor.

There are going to be two parts to today's meeting. First, the formal part of the meeting, also known as the very boring part, that will cover the four items that stockholders have been asked to vote on today. After the voting, Elon will answer questions about Tesla both from those that were submitted on Twitter before this meeting and from those in attendance today.

Okay. Let's get started by calling the Annual Meeting of Stockholders to order. Please refer to the agenda and rules of the meeting that were provided to you today. The time is now 2:36 PM, and I declare that the polls are now open. We have already received, over the past few weeks, voting proxies from our stockholders, meaning that almost all of the votes that will be counted were already submitted before this meeting. However, as I mentioned earlier, if you wish to submit a ballot to vote your shares or change your prior vote, you can do so today by picking up a ballot at the

table in the corner and handing it to Lisa Brenton from Computershare. Lisa, if you could just raise your hand one more time, there she is.

Tesla's Board of Directors has appointed Lisa of Computershare to serve as the Inspector of Election for this meeting. Lisa has taken and signed an oath as Inspector of Election. Computershare has certified that starting on April 26, 2018, the proxy materials are a notice of Internet, availability of the proxy materials were mailed or provided to all Tesla stockholders of record as of April 12, 2018. We have a majority of the outstanding shares represented today. So I declare that there is a quorum present and then we may proceed with the meeting. The items on the agenda are as follows.

Number one, the election of three Class II directors Antonio Gracias, James Murdoch and Kimbal Musk to serve for a term of three years or until their respective successors are duly elected and qualified. Number two, to ratify the appointment of PricewaterhouseCoopers as Tesla's independent registered public accounting firm for the fiscal year ending December 31, 2018. Tesla's Board has recommended that our stockholders vote for each of the director nominees and for the ratification of the appointment of our accounting firm. I know we have one stockholder today, who would like to make a brief comment on the director proposal and now would be the time to do so.

Steve Diamond {BIO 5905726 <GO>}

Thank you, Phil. Thank you, Todd. My name is Steve Diamond, I represent the CtW Investment Group shareholders in Tesla, who work with union-sponsored pension funds, which are also shareholders in Tesla. For several years, we have engaged with Tesla about our corporate governance concerns. We want to see Tesla succeed in providing energy efficient transportation and generating sustainable high skill, high wage industrial employment, but the current Board is an obstacle, not an aid to these goals. We urge shareholders to vote no to the re-election of Mr. Gracias; Mr. Musk; and Mr. Murdoch. We do not think these individuals are credible, independent voice for shareholders. Their lack of significant auto industry experience and human capital management experience are only their most obvious deficits. We are also concerned about whether these highly paid directors can help the CEO focus on solving the serious financial, production and labor relations problems now facing Tesla.

Before we vote today, we believe it is important that each of these candidates personally explain to us how they can contribute to finding solutions to these problems. Thank you.

Todd Maron {BIO 18879554 <GO>}

Thanks. Obviously, we've put forward a different presentation in our proxy and the Board recommends that the shareholders vote for the election of each of the directors. We also received two stockholder proposals as described in our proxy statement. The first proposal is to require that the Chair of the Board of Directors be an independent director. Our Board has recommended that our stockholders vote

against this stockholder proposal. That proposal was proposed by Mr. Jing Zhao, who is here to present this proposal today. Mr. Zhao.

Jing Zhao {BIO 15003234 <GO>}

Is that Okay. Hi -- hi good afternoon. There is no need to repeat the content of the proposal. I think that you can read it. I don't want to spend too much time, and I just want to point it out. First, the opposition statement, number is a little misleading. In fact, only 49% S&P 500 combined, CEO and the Chairman (inaudible). And the second, as just actually as the gentleman pointed out, our Board is not fully independent. For example, our lead director is not fully independent and some Board Members are not independent. So combined these factors and the other factors are listed in my proposal, it's the time for all to change course to have an independent Chairman. Thank you very much.

Todd Maron {BIO 18879554 <GO>}

Okay. Thanks. Finally, we received one last stockholder proposal regarding proxy access, which is also described in our proxy statement and our Board has recommended that our stockholders vote against that proposal as well. This proposal is being presented by Mr. James McRitchie. Go ahead, Mr. McRitchie.

James McRitchie {BIO 5114010 <GO>}

Tesla shooting for the moon and beyond, and we love it, but shouldn't we have a little insurance. A cost benefit analysis by CFA Institute found proxy access would benefit both the markets and corporate boardrooms with little cost or disruption raising US market capitalization by a 140 billion, in other words, a vote in favor of this proposal is likely to raise the value of our stock. Two of our directors hold no stock in our company. Why do they have such a little confidence? Proxy advisor, Institutional Shareholder Services considers three of our directors to be not to be independent.

Whatever you think of our current Board, it's not good to have just a little insurance in the time of crisis and I don't just mean our ongoing production crisis. We could place two nominees on the proxy without going through an expensive proxy contest based on the -- my proposal, any group putting forth nominees would have to have held 1.5 billion in Tesla stock continuously for three years between 2015 and 2017, and I have a total of 206 proxy access proposals were voted, average support exceeded 53%, more than 60% of S&P 500 companies have adopted proxy access. In its statement of opposition, the Board points to a lack of safeguards, such as the ability of investors to use proxy access, even if they have lent out shares, hold a short position or intend a change of control. However, this proposal simply offers advice to the Board subject to a 500 word limit. The Board is free to adopt proxy access by law that includes restrictions on the use of proxy access, just as every other adopting company has done.

Furthermore, the ability to include a Director nominee and the company's proxy does not guarantee election, even if "special interest" shareholder were to be placed on the ballot that nominee would still need to win broad support to be elected. Keep

in mind that current officers and directors, who presumably would vote against any such nominee own nearly 25% of outstanding shares. No shareholder nominee would win without the support of our largest investors, such as Fidelity, T. Rowe Price, Baillie Gifford, Tencent, Vanguard and BlackRock. Vote for proxy access, item number four, vote for insurance. Thank you.

Todd Maron {BIO 18879554 <GO>}

Okay. Thank you, Mr. McRitchie. Before we conclude, are there any proxies remaining in the audience that have not been submitted. This would be the time. I see one here. Keep them up high and we'll have people come by and grab them from you. Anyone else? One up here. Last call. Okay. All right. I declare that the polls are now closed. Based on the proxies that we've received before the meeting, I can announce that our shareholders approve the recommendations of the Tesla Board of Directors on all four agenda items and they did so by a wide margin. Each of the items passed in line with the recommendations by more than a super majority vote. We will formally announce the results of the voting by filing a Form 8-K within four business days of today's meeting.

That concludes the official business of today's meeting, also known as the boring part, which is now adjourned. I welcome you to now stay for the Q&A session and Elon's presentation. In addition to taking questions from the audience, Elon will answer questions that you have and that you submitted on Twitter before the meeting.

During the course of the Q&A session, we may discuss our business outlook and make other forward-looking statements, such statements are predictions based on our current expectations. Actual events or results could differ materially due to a number of risks and uncertainties, including those disclosed in our most recent Form 10-Q filed with the SEC. Such forward-looking statements represent our views as of today, should not be relied on thereafter and we disclaim any obligation to update them after today.

With that, please welcome Elon Musk.

Elon Musk {BIO 1954518 <GO>}

Welcome. Welcome. I love you guys too. All right. I think we've got quite a lot of good news to talk about and look forward to sharing that with you and then taking questions from the audience. And yeah, I'm just really proud of the Tesla team for accomplishing so much against incredible headwinds, and I just like to express a note of appreciation for all of our customers, who bought our cars. Thank you for buying our product. We're doing everything we can to make it as good as possible, as fast as possible. I think, I like -- this is going to sound maybe little cheesy, but at Tesla we build our cars with love, like we really care.

I think -- at a lot of other companies, they are built by like the marketing department and the finance department and it's -- there is no soul. So like we're not perfect, but

we pour our heart and soul into the product we really care. So and the dedication of the Tesla team has been incredible and people have -- they've really been working incredibly hard to make the cars. It's very difficult to become a mass manufacturing car company, no one has succeeded in doing this in a very long time in the United States, and even the ones that have -- only Ford is -- Ford is the only one that hasn't gone bankrupt. So it's super difficult.

So in fact, yeah, in the history of the American Auto Industry, it's always worth bearing in mind that only two have not gone bankrupt and that's Ford and Tesla. So it's insanely hard just staying alive. So just want to be clear, it's really difficult. And we've had people at Tesla, who've sort of worked like 60 days straight. It's like we basically forced them to go home, like you got to go home and you are going to keel over and then snuck [ph] back in work, like, dammit, we said go home. So but the net result is despite a lot of difficulties, all lines -- all parts of the monthly production system have demonstrated a 500-car per day capability or a 3,500-car per week capability. So -- and -- and then we -- we just did a big set of upgrades and we're spooling up the production lines again, and I think it's more -- it's quite likely that we will achieve a 5,000-car a week by the end of this month.

It's like, this is like, I will tell you, the most excruciating hellish several months I have maybe ever had and lot of other people at Tesla, but I think we're getting there. The -- we're doing well in market share. The blue line is the Tesla Model 3. We just became in May the best selling mid-sized premium sedan in the United States of any kind. So that's of any kind, so not just, so it's beating all internal combustion engine cars, not just battery or hybrid or anything like that. And that's despite the fact that we still offer only one version of the car and we don't -- all wheel drive is coming out next month and -- and then we'll have the lower cost -- the shorter range battery and lower cost car at around the end of this year, is the one we are expecting to do it.

So we've also made huge progress in the reliability of the car. So in the beginning it was a bit bumpy and now as deliveries have risen, the quality and reliability of the car has improved dramatically. So it's improved by a factor of maybe four or five since started production, and we're working on making that even better. Employee safety is a big deal for us. It's -- it's always tougher to achieve safety when you are building a new manufacturing line. So if you've got a manufacturing line that's in steady state, then you've got an opportunity to iron out the processes and make it a lot easier to build the car. As you're figuring things out, it takes a while to get there.

So thus far, in 2018, our average industries -- our injuries per person are 6% below the industry average, which is great because last year, we are a little bit above and now we are little bit below, and then -- and that trend is continuing downward. So I think we've got a shot at being maybe half the injuries per person of the auto industry and that's the goal we're striving for us to be half the injuries per person. When you're building cars and you've got a huge number of peoples, it's impossible to be zero. We wish it could be zero, but we think being twice as good as the average in the auto industry is a very achievable number and that's what we're working hard to achieve. It's worth noting that when the injuries, the vast majority of injuries are repetitive stress injuries. So like back strain or restrain by far the most

common thing. So then the way to address that is with better tooling and fixtures and rotating people through different roles, so they're not always doing the same action and it's also boring to do the same action over and over again.

So we're making good progress on that. And it's also worth noting even our current injury rate is half that of what it was when Toyota and GM were operating the plant. So that's often lost in a lot of the media articles. So if we achieve our goal, we will be a quarter of the injuries of when it wasn't any. So this is very -- what I really want to emphasize it's a super important thing to me because we, obviously owe a great debt to the people, who are building the car, I really care about this issue. So --

And Supercharger expansion is going, going really well. We're almost over 10,000 Superchargers worldwide. And our goal is to -- to be able to go almost anywhere on earth using the Tesla Supercharger system. We're very excited about the next generation Supercharger that is -- it's mostly finished in design and will go into production, hopefully around end of this year. So Supercharger Generation III will be a -- quite a dramatic improvement. But we want to save that announcement for when it took place, which is hopefully later this year. And then once we have that system in place, then we're going to accelerate the Supercharger expansion even more.

So we've managed to do now a gigawatt hour of energy storage deployment worldwide. This is all the way through from the Reign of Ramses II of Egypt through today. So it's very impressive period of time. And in -- in less than a year from now, we will do another gigawatt. So that's -- it's pretty massive. Yeah. So the rate of stationary storage deployment is going to grow exponentially. I mean, it's really -- I think for many years to come, the -- each incremental year will be about as much as all of the preceding years, which is a crazy, crazy growth rate, and it's also sort of production limited thing. We would actually be able to do more if we could produce more and we are producing a lot of batteries. So in fact, next quarter at the Gigafactory, we expect to make more battery capacity than all other EVs combined worldwide, including China.

So I mean is this is a really crazy amount of batteries. It's -- it was one factory is making -- will make more than all the other batteries on earth, I think really deserving that Gigafactory sort of title. It's really, really nutty. We are going to try have like maybe, when things got calm down a bit, like have more tours available for Giga because it's like epic. Yeah, it's like a two -- at least two hours to walk -- just to walk through all of the parts of Giga at this point, just to walk through everything, it takes two hours, like if you don't pause a lot. It's like good exercise. So that's -- yeah, pretty well.

We have our first really -- we've actually have a bunch of non-Tesla employee solar roof customers and the response has been very positive that that whole roof is solar, and it just looks normal, in fact, it looks better than the roof that was there. So I have and I have it on a house that I -- the little house across the road that used to be owned by Gene Wilder, it's sort of like Willy Wonka House. And I was like trying to figure out how to -- how to go solo with that, kind of running the Gene Wilder

Aesthetic, which is I really like. So but I was able to put these on Gene Wilder's old house and it still looks it look like, it still has the same character, which is great.

And it's -- we're spending a lot of time just validating the solar roof because they need to last at least 30 years ideally longer and there's only so much accelerate -- accelerated life testing that you can do on a roof. So before we can deploy it to a large number of houses, we need to make sure that -- that all elements of the roof are going to last for at least three decades and ideally sort of half a century or more, but this is going to be a very big product. So -- and also it's going to grow exponentially. Yeah. And I think you kind of want to have a thing where if you look around the neighborhood, having solar actually made the -- improved the aesthetics and feel of the neighborhood. I think that's a really big deal.

We are not far from Q3 and I'm -- actually my CFO and General Counsel like, you have to watch what words you use in these situations. But I think we -- it's really looking like we're going to have positive GAAP net income next quarter, and as well as positive cash flow in Q3 and Q4. And we -- as I've said before, do not expect to need to raise any incremental debt or equity.

Here we've got some exciting products in the works. The Model Y is really going to be something super special. We're aiming to unveil Model Y approximately March next year and then go into production about -- maybe around two years from now, maybe a little less than two years, but basically first half of 2020 for production Model Y. Something similar for Semi and Roadster.. So these products are shaping up. I think there are -- Semi and Roadster are actually going to be even better than what was unveiled. We figured out ways to improve the range and overall functionality of the Semi, in particular.

The Roadster, we -- what I unveiled with the Roadster was the base model performance that's -- it's going to have a SpaceX option package. It's crazy. And I think it's important for us to show with the Roadster that an electric vehicle can outperform a gasoline car in every way, so that -- because gasoline car still have sort of a halo effect. And I think if we can show an electric car can outperform gasoline car in every way, then we sort of get rid of that halo effect of gasoline cars and I think that's quite a powerful thing conceptually for the general public.

So these are just some questions that we got on Twitter. I guess some -- it's a really insightful questions on Twitter, as well as some strange ones. But -- yeah so one of the first questions is in -- from Model 3 production line. As I said before, we're really going to focus on manufacturing technology for Tesla, and we've made a lot of mistakes with Model 3 production that -- but we've recognized those mistakes and we're confident we know how to address them, in fact, we are addressing them. And long term, I think the biggest competitive strength of Tesla is going to be manufacturing. This is -- this is sort of counter-intuitive, but it is -- it's going to be quite dramatic, I think.

The approach to automation that we are taking, I think at some cases has worked and some cases has not, but it's clear that there are some elements of production, which are really well suited to people doing it and some parts production that are really well suited to robotics. And one of the biggest mistakes we've made was trying to automate things that are super easy for person to do, but super hard for robot to do. And when you see it, it looks super dumb, you are like well, why do we do that?

So -- and then, as you -- it sort of makes sense to have start off with initial production line, which is -- has a relative bias towards people and then you automate the parts of the production system that are the most painful and difficult for people to do. So particularly ones that result in repetitive stress injuries or mechanically difficult, that's really a much better approach and that's -- that's what we're going to do for (inaudible) factories I and II, it's a much more sensible way to do things.

See, well, let me actually have Tesla, some [ph] Tesla executive team come up, Guys, you want to come up and hangout. So Jamie [ph], do you want to talk about the battery car stuff?

Unidentified Speaker

Sure. So it's difficult for us to talk about specific cost numbers that's always a difficult topic, but we are still very confident that we have the best price and performance of anything out there in the world. If there's something better, I don't know about it, and we've looked as hard as we possibly can. We try and talk to every single battery start-up, every lab, every large manufacturer, we get quotes from them, we test cells from them. So if there's something better, we're all the years, we'd love to find it, but we haven't found it yet. So generally yeah, we're still pretty confident about that same direction.

Elon Musk {BIO 1954518 <GO>}

Yeah, I mean, we think at the cell level probably we can do better than $100 per kilowatt-hour maybe later this year depending upon what on commodity prices. If commodity prices are roughly, where they are today, then we'll probably do better than $100 kilowatt hour at the cell level. And then, with further improvements to the cell chemistry and the production process and more vertical aggression on the cell side, for example, integrating the production of cathode and anode materials at the Gigafactory, and then, an approved design of the module and pack, we think long-term we can get below $100 kilowatt hour at the pack level, which is really the key figure of merit for a car. But long-term meaning, definitely less than two years, that's Tesla long-term.

Anything, I mean -- yeah, we think -- we think we've come up with some pretty cool breakthroughs on this front on energy density and cost of the battery pack, and yeah, I think it's going to be pretty great, as far as I can see. Yeah. Cool.

When will the Gigafactory be completely built? I think we'll keep building on the Gigafactory for at least four years or five years. It will be by far the biggest building in the world. It's not that far from being the biggest building in the world already and based on the plants that we know, it might be as -- it might be twice as big as the next building in the world. Hence the interesting tour. So it's yeah -- yeah it's about a third done right now. And yeah, so it's really, really, really enormous, and I think it's going quite well. There will be more Gigafactories in the future. I think we're close to announcing a combined vehicle and battery factories.

So future Gigafactories will include vehicle and battery pack and powertrain as a single integrated unit. And we're close to announcing something in China that I don't know Robyn, do you want to talk about that. Well, I mean, we don't want to make an announcement exactly, but maybe just talk about like the preamble or something on it. So Robyn is the Head of Worldwide Sales for Tesla.

Robyn Denholm {BIO 5964382 <GO>}

Thanks, Elon. I didn't expect to talk about this. So we're incredibly excited to build first Tesla Gigafactory outside of the US. In China is specifically, it's going to be in Shanghai and we have been holding discussions with the government, various governments in China, really great discussions, great partners. We really look forward to working with them in the years to come. This is going to be the next generation of Tesla factory we are super excited. The stuff that we are going to be put in there and the cars that we are going to be building in that factory is going to be incredible. So we are going to announce something really -- all the details really, really soon. So I won't tell more, but this is enough.

Elon Musk {BIO 1954518 <GO>}

Thank you. And particularly as we try to make cars more and more affordable, it's very [ph] important to localize production to at least the continent level and so having Gigafactory and vehicle factory in North America, one in China, and then one in Europe will be -- that sort of the -- those are the obvious three places for vehicle and battery Gigafactories. So probably if things go according to our plan, we will probably be announcing the details of the China Gigafactory as soon as next month, and then Europe Gigafactory maybe end of this year, kind of depending on how the -- we need to figure out where to put it exactly. So but probably towards the end of this year for the Europe Gigafactory and ultimately we expect probably there is 10 or 12 worldwide.

So I had some questions on Tesla Semi. We are going to do another revision of the Tesla Semi design because there is -- we've learned a lot and we think we can actually make it even better than what was unveiled and really have a range that is way beyond what people think, what most people in the industry think is possible. And we want to -- it's definitely going to be a Semi that works in Europe and in North America and China and the rest of world. I hope you guys were convinced with that, yeah one major factory in the works and then another one in the works later this year. Yeah, do you want to talk about cells?

Unidentified Speaker

Yeah. We've talked about this a few times, but Tesla will absolutely recycle and we do recycle all of our spent cells, modules and battery packs. So the discussion about this waste, is sort of ending up in landfills is not correct. We would not do that. These are valuable materials. In addition to, it's just the right thing to do. So we have current partner companies on every major continent, where we have our cars operating that we work with to do this today. And in addition, we are developing internally more processes. We're doing R&D on how we can improve this recycling process to get more of the active materials back and ultimately what we want is a closed loop right at the Gigafactories that reuses the same recycled materials, this isn't possible. We see a pathway to do it, but that's where we're headed with this. And today, we're on the way to do that. It's definitely something that will be a huge benefit in the long term to cost, as we're able to reprocess more materials instead of actually having to mine new materials.

Elon Musk {BIO 1954518 <GO>}

In terms of repairability of Model 3 including insurance costs. We're working with the -- with insurance companies and on some internal activities. We're really confident of getting the cost of insurance for Model 3 to be at least 20% to 30% lower than say a BMW 3-Series or equivalent mid-sized sedans. So the safety is definitely better, and then we're working on the repair costs, we made a lot of progress in that front. But bottom line is that the insurance cost -- total cost of -- ownership of Model 3 should be significantly better than any other mid-priced premium sedan.

So, yes, there will be -- we will definitely offer a $35,000 version of the Model 3. And I think probably at the end of this year is where we should be able to make the smaller battery pack and then get into kind of volume production of 35,000 version in Q1 next year. So that's definitely -- we will definitely honor that obligation, and we will do so right now if it was physically possible.

See yeah, we're going to -- in -- probably next month offer a free trial for people to try out Autopilot and see how it works. We're also making rapid progress on Autopilot technology. So the -- there's a new version of Autopilot that's rolling out, I think this week, which I think is quite a significant improvement. And I think what you'll see is that the reliability and capability of Autopilot will increase exponentially over the next 6 months to 12 months. It's really -- the improvements are very, very rapid.

The length of time to wait for Model 3, if you're ordering one now will vary quite a bit depending upon what part of the world you're in -- you're in and what configuration. So if -- for the existing configuration, if you would order now in the US, you probably would be waiting, I'm guessing about three months or four months. If you on the other hand, if you want the right-hand-drive version, you are probably waiting for over a year because we need to build the right-hand-drive version and ship it to other countries and homologate the car for other countries. So the wait is anywhere

from 3 months to 15 months approximately. But for current configuration order it now, it's maybe about three months or four months.

This is actually quite a complicated answer. There are many lines to the Model 3 and some places it's -- there are several lines, in some places, there are -- there's just one line and it kind of depends what the capacity of that line is. So for general assembly, which is like putting the parts together at the end, we currently have two lines and are constructing a third. The third line is, I think dramatically better than lines one and two. We started construction on that third line about two weeks ago, and we already putting the first car through that line. So it's really crazy fast and that's part of what gives me confidence about the 5,000 per week for Model 3. But currently, the biggest constraint on output is general assembly and I think we'll probably get to 5,000 a week with the current two general assembly lines, but with the third one, I'm highly confident that we can exceed 5,000 units per week.

In Model 3 test drives, we should able to offer Model 3 test drives starting at the end of this month, and I think we should have them in almost all stores in North America by the end of next month. We are rapidly expanding service centers. I think by kind of year-over-year probably see a doubling of service center capacity for Tesla, and we are making major progress on the body shop front. We are also -- it was quite a big deal. We're creating Tesla body shop repair locations, and we should have by the end of this month the -- at least the top 10 metro areas in the US being able to be serviced by Tesla body shop. This will be a dramatic improvement in the cost and time of body repair. In fact, we think we might be able to do for a lot of them like same day body repair, which is, you know, it's definitely possible, so I think we want to aim for at least some number of body repairs to be the same day, whereas if we go to third-party, best case, it's about a week and some cases, it's several weeks. So this is pretty exciting actually. We are basically just taking our biggest service centers, adding in an annex for body repair and then pre-stocking the parts, so you don't have to wait for parts to come from the factory. Not yet, but, yeah, March next year, I think we'll have something very exciting to show.

All right. So let's take some questions from the audience. I think it's basically is lined up with the mics and go for it.

Questions And Answers

Q - Unidentified Participant

I wanted to ask, is there going to be a time perhaps in the next eight years and Tesla is going to produce compact and/or sub-compact vehicles; such a huge segment and it seems like that would be necessary to fulfill the Master Plan, Part Deux mandate?

A - Elon Musk {BIO 1954518 <GO>}

Yeah. I think we'll do a compact car in less than five years. Yeah, all right.

Q - Unidentified Participant

Great progress. You mentioned Autopilot progress as well. So when do you expect like fully enhanced Autopilot functionality like, following navigation, switching freeways within the six month time frame?

A - Elon Musk {BIO 1954518 <GO>}

I was just testing that last night at about 1:00 AM. I think we might be able to release something in a couple of months, that can do that. We've been pursuing two paths; one really complicated path, but I think isn't working that great, and then a simple path that I think will work pretty well. I mean, I was able to drive last night, go from highway on-ramp to highway off-ramp using the simplified version of the control system, and I think with some further effort, we can get that out in the next couple of months. Yeah.

Q - Unidentified Participant

Is this on [ph], there we go. So as far as Tesla Inc is concerned with the Model 3 and to what degree of certainty will there be a consumer or a fleet lease option within the next three years on the Model 3, is that something that you guys already have in the plans and the works or is there room for ancillary business?

A - Elon Musk {BIO 1954518 <GO>}

We do -- we will offer leasing on Model 3, but probably end of this year or early next, because it does have a slight impact on the capital usage of Tesla. We -- in terms of fleet stuff, I think we've -- I think people can certainly buy a lot of Model 3s and then operate them as a fleet like people do for Model Ss and Xs for taxies. Yeah, I think we're -- certainly be happy to support that, yeah.

Q - Unidentified Participant

(Technical Difficulty) Kind of a simple follow-up to that, just kind of the understood thing. If I purchase the whole fleet and then Tesla comes in and says, all right we're going to start leasing direct to the consumer or having a commercial option that might not work out so well for me, but that's why I'm asking is it anything commercial happening that you have in the works in the next two years even?

A - Elon Musk {BIO 1954518 <GO>}

Well, we don't really think -- right now we're just super focused on ramping up manufacturing of Model 3 and make sure people can get their cars because they have been waiting for a couple of years. And we're not really thinking much about incremental demand generation because as it is even getting to a 5,000 cars per week, we would -- it would take us almost two years to produce enough cars to satisfy those that have put down a $1,000 deposit. So yeah, we need to kind of ramp to 5,000 and then next year ramp to 10,000 a week, and get the right-hand-drive version done and homologate the car for Europe and Asia. And then we will think about other things once we've done all those things. Thank you.

Q - Unidentified Participant

Thank you.

Gwynne Shotwell of SpaceX mentioned that Tesla automobiles might use in some way the Starlink satellite network, I was wondering, if you might elaborate on that opportunity and when that might take place?

A - Elon Musk {BIO 1954518 <GO>}

It's possible. I think it probably will be -- the Starlink thing is more meant for like fixed terrestrial, homes and businesses and that kind of thing. For mobile, it might be possible to use the Starlink system effectively if you had a repeater, a ground-based repeater system. But the Starlink uses a terminal as about the size of a sort of small to medium size pizza. So I'm not sure, if you want to put that on the roof of the -- of Tesla. Maybe, but I think probably just using -- most likely we'll continue to use just Wi-Fi and the cellular network, yeah most likely. Yeah.

Q - Unidentified Participant

Hello. My name is Steven Singleton [ph]. And my question is, how is Tesla engaging regarding virtual power stations with governments and territories in countries that may have weak power infrastructures to provide clean energy to more of the world citizens?

A - Elon Musk {BIO 1954518 <GO>}

Yeah, I think the -- we'll have a lot more to say about that when we announce the Generation III of the Superchargers because that we have been doing much more of an integrated solar battery system with the Superchargers. So to-date only a few of the Supercharger systems have solar and battery systems, but long-term, we want to have almost all of them have that. And the nice thing is that if you've got like a solar powered -- kind of like a solar-powered carport area and Tesla batteries, than even if -- you don't even need to be connected to the grid. So it's sort of like even proof against like a zombie apocalypse of digital work, as long as the zombie is not too near of the Supercharger, I suppose. But yeah there, it will be able to work anywhere even if there's not good power infrastructure.

A - Unidentified Speaker

I think he's also asking about like networking powerwalls together?

And for like a virtual power plant, if that's kind of what you also were alluding to. We do have a really cool project in Australia, where we're actually networking together up to 50,000 individual homes with powerwalls, so each one of those homes has its own battery. They can still serve as like a backup power source if the utility totally goes out, if there's a storm, but when things are working normally, all those houses can talk together and then we can talk to the utility and treat them as sort of one big distributed power plant. So that's a really cool project that has benefits across the whole grid, for the homeowners, for a lot of people. And we're building that out

right now and we'll probably be expanding that same model. We have a small demo in the US and we'll be expanding it worldwide.

And we're also doing again, quite a lot in Puerto Rico. I think we have -- I think Tesla has more battery projects and solar projects in Puerto Rico than everyone else combined. So it's -- we're making a big difference there, doing our best to and I think there is potential for kind of a virtual grid in Puerto Rico, as well rather than rebuilding a legacy sort of oil and gas based energy generation system.

Q - Unidentified Participant

Hey, Elon, I also think boring, boneheaded questions are not cool, so hopefully this is little more interesting. I've had a Model S since 2012 best purchase ever, you guys nailed design, nailed performance. The one thing, I always get from friends and family because I do the drive down to LA a lot is the Supercharging time. I know you mentioned you guys are working on Supercharger III, I assume it's going to be a bit faster. Just curious, do you guys see room for kind of orders of magnitude improvement in charging time or are we kind of reaching a plateau with current battery chemistry and technology?

A - Elon Musk {BIO 1954518 <GO>}

I wouldn't say that there is an order of magnitude improvement, but I think a factor of three or four is possible, now it won't be applicable to all battery chemistry's. So 2012 chemistry can take the charge rate of current chemistry, but and we wish it could be -- wish it could, but we just have to make much improvements to increase charge rates. The key, I think, figure of merit is that the ratio of drive time to charge time should be at least on the order of like 6:1, if not 8:1 or 10:1. The point at which you're driving say 10 times as much as you're charging, then the natural sort of human need to take a break unless you have an enormous bladder is (inaudible) paramount. I mean, if you start a road trip at say 9:00 AM typically by around noon, you want to stop, hit the restroom, grab a bite to eat, grab a coffee, and then you want to get back to your car and have it be ready to go.

So that's where -- I'd like to say that, that's like maybe half an hour, that's kind of the minimum threshold for the car to be ready to go when you come back from a break. And then once you get to the point, where I would say 10:1, where maybe it's only 15 minutes, 20 minutes, yeah, sitting on the road 15 minutes, then the car is ready to go way before you're ready to go. And for some of the long distance like, if you get to say a Model S 100D, you can drive non-stop from LA to San Francisco, if you drive carefully. That's a long drive, so and we think there is potential -- there is certainly opportunity for range improvements down the road, where we're able to offer cars with ranges in excess of 400 miles. Thanks.

Q - Unidentified Participant

Hi. My name's Dr. Catherine (inaudible) and I'm with People for the Ethical Treatment of Animals. I have a question regarding your use of leather in your gear shifter and steering wheel?

A - Elon Musk {BIO 1954518 <GO>}

Gear shifter. Our Gear shifter, I don't think, has anything. Steering wheel maybe does or -- steering wheel (inaudible). But, Franz [ph], if you want to?

Q - Unidentified Participant

Are you still using leather in some of your components?

A - Unidentified Speaker

So we do in Model S, X and 3 currently, we have the only leathers on the steering wheel rim and people have asked and kind of off menu, we do replace that for people that are -- need a fully vegan car.

Q - Unidentified Participant

Sure. So our concern is that we're obviously facing environmental crisis and animal agriculture, as we all know is one of the main contributors particularly leather production and we're really pleased to see that you have introduced non-leather seating options and that's a really fantastic step towards your goal of sustainability. We would really like you to take the next step and eliminate all leather components?

A - Unidentified Speaker

Yes. I think S, X and 3, they are -- we may be the first vehicles in production to kind of go non-leather and at least in all of our seating and our trim. And we're actively working on replacing the steering wheel as well, we just want to make sure that the experience is as good, if not better.

Q - Unidentified Participant

Sure. Yes, just to add to that. So there are some existing premium vegan leather suppliers, Ultrasuede and Alcantara, if I'm pronouncing it correctly they are used by other luxury cars like Ferrari. So yeah, we would really like to see Tesla step-up as well?

A - Elon Musk {BIO 1954518 <GO>}

Yeah. Well, definitely we are offering sort of -- as far as technically, we do not say it on the website, but you can actually have a Tesla that has zero leather whatsoever, including on the steering wheel. It's a little difficult because we do it in small quantities at the design studio. So it's challenging to do it in scale. But Model Y, for example, will not have any leather in it, that including in the steering wheel even if it does have steering wheel. Thank you.

Q - Unidentified Participant

When do you expect significant battery advances to allow Tesla to pack twice as much energy into each of the batteries without increasing the size or weight?

A - Elon Musk {BIO 1954518 <GO>}

Twice as much as tricky, but we can certainly see a path to about a -- about a 30% improvement maybe a 40% improvement in energy in the same size battery pack, but like the best technology, we our confident does work and it just -- it needs to be scaled up and made very reliable, but 30% to 40% is definitely doable long-term probably double -- long-term by other people standards. From a Tesla standpoint, we think probably two years to three years to get to about a 30% improvement in volumetric energy density and, yeah, maybe six years or something, six years to eight years to get to a doubling, it's highly dependent on making lithium for that really big jump, lithium anode is the key, just plating after [ph] lithium on the anode.

Q - Unidentified Participant

I started a company called Tesla Attractions, Tesla Attractions is basically gamification version of visiting Superchargers. And I know that you've tweeted about this a while ago saying that it was a good idea. And if you ever decide to go through with it, obviously, I do not want to be in a position of competition with you. So how could someone like me help the mission?

A - Elon Musk {BIO 1954518 <GO>}

Maybe you should interview at Tesla. I said folks right now is getting through the critical stuff like -- especially the Model 3 production ramp, and then smoothing out the production process to make the car affordable, getting the lower cost battery pack or small batter pack into production. So those are kind of critical fundamental things to really the survival of the company. And then we do kind of like the fun, frivolous things, like they add joy to the experience, maybe later this year. I think it was like doing sort of fun, silly things in the car, like the Easter eggs, that -- there's like a lot of Easter eggs in the Model S and X and 3 that are quite fun if -- in fact, once they're discovered, they're put in the Easter egg box, which you just tap the Tesla logo on the screen and then wait for about 30 seconds and it opens the Easter egg box, yeah. All right.

Q - Unidentified Participant

My name is Ben Gerber [ph]. I'm hooked into Tesla in multiple ways, obviously I'm a stockholder. I have a SolarCity panel on my roof and also have a Model 3 reservation from March 31st of 2016 ready for configuring, but I would really, really, really like to have an all-wheel drive. Can you give an order of magnitude guess as to how long, I'd have to wait for that?

A - Elon Musk {BIO 1954518 <GO>}

You should receive a configuration e-mail within next week or so. We start production of all-wheel drive -- actually, we're starting production on all-wheel drive this month and we expect to scale it up in July and August and be in high volume production of all-wheel drive by September, for sure.

Q - Unidentified Participant

So I have a tour planned for September, a one month tour. Any chance, I can make it?

A - Elon Musk {BIO 1954518 <GO>}

All right. We'll make sure you get your car. Thank you.

Q - Unidentified Participant

Hi, I got my first Model S in 2013 and have an X and the 3 now, I love the product. I feel like I'll always be one of the first to try -- to try one of your new products. And I was just wondering, is there any chance in the future that we will be able to text commands to our car, like keep my car at this temperature, come pick-me-up that type of stuff?

A - Elon Musk {BIO 1954518 <GO>}

We're going to keep enhancing the Tesla app on the phone and to be able to, long-term, just tap the summon button and your car will come find you wherever you are and really wanted to learn -- you can change the temperature right now from the app, but we want the car learn what you are most likely would do like you basically, if there was a great chauffeur in charge of the, what would that person do anticipating your needs and knowing what you'd want. So it's sort of like an intuitive trustee's deed that just always knows what you want, ideally, and then you can easily adjust that as needed. So you want as -- be as close like a mind meld with the car as possible.

Q - Unidentified Participant

Hi. My name is Kevin. I have the model S since '13, and my question is about Autopilot and the use of LIDAR. As we all know that Tesla probably still, the company alone that not using LIDAR, where all other vendors using it. So as autonomous driving is close to reality, I think, inevitably, there will be a showdown on which approach will be more superior. So what do you think, when that time will be?

A - Elon Musk {BIO 1954518 <GO>}

Well, I think LIDAR will be seen as -- what LIDAR tends to drive companies to do is to go to a local maximum in terms of Autopilot capability or autonomous driving capability and LIDAR ends up being like somewhat of a crutch, it's helpful to get almost there. But if you rely on it, you will never get actually get there is my opinion. So you have to make vision work extremely well in order to achieve true self-driving. Once you've made vision work extremely well, LIDAR is really unnecessary, its not really adding anything.

We do have sophisticated sonar like ultrasonic sensors around the vehicle for near field, and we do have a forward radar system, which is useful for detecting objects even in fog, sort of snow or rain like low visibility conditions, where you can't see what's going on, and that's also the case where LIDAR is ineffective, because LIDAR is an active proton generator in the visible spectrum. This doesn't make sense to me, because you have a massive amount of incoming photons in the visible spectrum

normally. So if you are going to do active photon generation the 400 to 700 nanometers is the wrong wavelength -- or on that order is wrong wavelength. You only want to be aiming for something that's around 4 millimeter wavelength because that is occlusion penetrating.

Q - Unidentified Participant

We're two time Tesla Model S owners and also stockholders. Question about JB every SEC filing has always included JB as a key man, and he was suddenly dropped off in the Q1 filings, so little concerned about JB --

A - Elon Musk {BIO 1954518 <GO>}

Oh, really. I don't know that. Now, that's very accidental, sorry. I don't even know that was the case.

Q - Unidentified Participant

And is there a path --

A - Elon Musk {BIO 1954518 <GO>}

(inaudible)

A - Unidentified Speaker

We just made it more generic.

Yeah. The intent was to make it more generic, the risk factor. There was no intended or unintended implication behind that. JB we love you, we want you.

Q - Unidentified Participant

Sorry. And one last one, which is the Tesla's energy storage business is still running double-digit gross margins negative. It looks like even though you've managed to deliver a lot more megawatt hours. Can you talk about the pathway to getting a profit out of that business, please?

A - Elon Musk {BIO 1954518 <GO>}

Yeah, well do you want to talk about that?

A - Unidentified Speaker

Sure. Yeah definitely, we expect our storage business to turn significantly positive, and our goal is to have the same level of gross margin as the automotive business. And as our volumes scale, and as we have more powerwalls out there and our manufacturing efficiencies come in, we definitely expect that you will see a big change and a positive trend in that every quarter into 2019.

A - Elon Musk {BIO 1954518 <GO>}

We're aiming for essentially about the same gross margin level as in the cars, which is sort of 20% to 30% gross margin for all of the energy products. It's necessarily we're doing -- as you ramp up production, it ends up being -- it's negative just as it was for Model 3, and Model S and X, but and probably later this year or certainly early next, we should be in the 20% to 30% gross margin level for energy storage.

Q - Unidentified Participant

Hi, thanks (inaudible) on the conference call by the way. And my question was just rounding as a long-term investor, I hate to say this, but I feel like my trust in Tesla's timelines sort of eroded a little bit with the Model 3 ramp, so should I keep discounting things on Elon time or you guys have you learned anything about this?

A - Elon Musk {BIO 1954518 <GO>}

I think, I do have like an issue with time, it's like, it's been true since, so and my brother is here, I was like have a condition, and my brother used to like when we were catching the bus to school, he'd lie to me about the time. And he always says like -- or it's sometimes like earlier than it actually was, and I get there slightly after that and then we'd actually able to catch the bus. So this is something I'm trying to get better at sort of naturally optimistic person, which I have not probably done cars or rockets that was not. But so I'm trying to recalibrate these estimates, yeah, trying to recalibrate as much as possible. Yeah. I mean, I probably put some sandbag on future dates that's probably wise. But I kind of stayed with say -- when I think it can occur, but then I'm typically optimistic about these things. But maybe less -- hopefully less optimistic over time. So it's yeah, like it pretty much always happens, but not exactly on the timeframe.

A - Todd Maron {BIO 18879554 <GO>}

Hey, Elon we have -- we are about 50 minutes over one hour, do you want to take maybe a couple more?

A - Elon Musk {BIO 1954518 <GO>}

Yeah maybe a couple of more questions from each side.

A - Todd Maron {BIO 18879554 <GO>}

Okay.

Q - Unidentified Participant

Hello Mr. Musk. My name is Alex Perez. I really like your jacket today, and so it kind of got me thinking, has Tesla ever thought about going into the motorcycle business?

A - Elon Musk {BIO 1954518 <GO>}

Yeah, I actually used to ride motorcycles, when I was a kid, and I did dirt biking for, I don't know, like eight years or something, and then had a road bike until I was 17 and was almost killed by a truck. So we're not going to do motorcycles.

Q - Unidentified Participant

Hey, Mr. Musk, my name is Sonia and my mom has Model 3 and my dad has a Model S, and I have (inaudible). So I've noticed that whenever my mom is like kind of going a little bit too fast, so like approaching a car to stop sign, the Tesla beeps pretty loudly to kind of warn like, hey you're going to hit that. I was wondering like are you guys thinking about developing mode, where like drivers could choose to turn it on and then if a Tesla detected that it was approaching something quickly or was going to crash, it would like gradually slowdown a little bit so best case scenario if the driver takes control doesn't really matter worst case scenario and the crash it decelerate so it's not as bad?

A - Elon Musk {BIO 1954518 <GO>}

It does actually have -- there is a automatic emergency breaking. And I think what you're saying is like instead of like last-minute kind of dramatic slowdown, maybe slowdown sooner, but less dramatically, and that is something that will occur with the latest versions of Autopilot. So it will -- if as it will decrease speed proportionate to the confidence level we want to do that in a way that's not annoying to people like the car isn't slowing down a lot. But -- so it's really a delicate balance between not annoying people, so they want to turn it off, but also being safe.

For Autopilot, I think the improvement is going to be really quite dramatic in the -- over the next several months. Yeah. This is intended to change speed proportionate to its confidence in going forward. But in order to do so, we have to improve the sophistication of the Autopilot and all that and the heuristics that go with it. So it just didn't annoy the hell out of people. Because at many times, when the car thinks it should slow down, but actually not really and that will just drive people crazy. So I do think what you're getting at is something that you'll see play out with the versions of Autopilot that are deploying later this year including the one that's coming out this week. Thanks.

Q - Unidentified Participant

Hi guys, I just wanted to personally thank Elon, JB, Franz, Deepak, good to have you back; Tim, Emily, Vinny, Andrew the people at Tesla, who I don't know by name the proud owner of an early 2012 Model S very different than Model 3 that my dad recently got his first new car, he's pretty perplexed and amazed by it. I actually drove that from New Jersey to Richmond probably could've skipped supercharging entirely, charged the car for I think it was maybe about 20 minutes and continued the trip, and the car was actually telling me that I was ready to go before I was done eating the sandwich I picked up. I just want to ask a quick question, is there a possibility to get a business card from the guy to your left because I wanted to tell him about a company this man has been working on disruptive technology that you're already indirectly using and wanted an opportunity to speak with you about it further? Thanks.

A - Elon Musk {BIO 1954518 <GO>}

All right. Thanks. Yeah, we'll certainly take a business card and always looking to investigate interesting opportunities to improve the car. If you -- one thing I think we

haven't been good at educating people on is that the Model S and X, but especially the Model S has improved very dramatically from 2012. So we are arguably on Version 3 or 4 of the Model S right now. So it's really a gigantic improvement in Model S today versus Model S of 2012 when we first started production. I really encourage anyone who's got an early Model S to test drive the current version, I think you'll be blown away by how much its improved. All right. I think that might be the last question.

Q - Unidentified Participant

I will soon be driving around in Model 3. I am curious to -- you mentioned earlier that during production, it's people first and the automation later slowly. What kind of considerations prompted to do otherwise when you started Model 3 production. Can you talk about that?

A - Elon Musk {BIO 1954518 <GO>}

I think we're just over confident about the degree of automation that was possible. And we did rely quite a bit on Tier 1 manufacturing automation integrators, and a couple of other things really didn't work out at all, and now we are -- we are really going to internalize all Tier 1 manufacturing systems at Tesla. So we'll have a lot of suppliers, but they will be the Tier 2 and Tier 3 level. All right. Thanks very much for coming.