

Tesla, Inc. NasdaqGS:TSLA

Shareholder/Analyst Call

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Table of Contents

Call Participants	3
	
Presentation	4
	

Call Participants

EXECUTIVES

Elon R. Musk
Technoking of Tesla, CEO & Director

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Senior Director for Investor Relations

Robyn M. Denholm
Independent Chairwoman

Unknown Executive

SHAREHOLDERS

Elizabeth Levy

Unknown Attendee

Emily Bogen

James McRitchie

Julia Cedarholm

Kristin Blair Hull
Nia Impact Advisors, LLC

Laura Campos

Unknown Shareholder

Winifred Doherty

ATTENDEES

Presentation

Martin Viecha

Senior Director for Investor Relations

Good afternoon, everyone, and welcome to Tesla's 2022 Annual Shareholder Meeting. My name is Martin Viecha. I'm the Vice President of Investor Relations, and I'll be the chair of today's meeting. We're super excited that finally, after 2 years, we get to get a proper attended meeting this year with so many people in the audience.

We have more people in the audience this year than we've ever had before. But first and foremost, I just really wanted to thank all of our investors and particularly our retail shareholders that have been just so supportive and just so engaged over the years, and especially to those who have cast their ballot in the last few weeks. Each vote really matters. So thank you so much for taking time to cast your ballot and do your part in the annual vote. And we're hopeful that from now on every year, you will be casting your ballots.

There will be 2 parts of today's meeting. First, we're going to do the formal part of the meeting, which will cover 13 items that investors are going to be asked to vote on. And after the voting, I will introduce Tesla's Co-Founder and CEO, Elon Musk, who will give a presentation about Tesla and the year-end review.

At this time, I would like to thank members of the Tesla team and the Board who are here with us today. A representative from PricewaterhouseCoopers, Tesla's independent auditor, is present on the phone as well. But before we begin, I would like to introduce you to our Chair, Robyn Denholm, Chair of Tesla's Board, who would like to say a few words.

Robyn M. Denholm

Independent Chairwoman

Okay. This is the short part of the agenda. So thank you, Martin, and good afternoon, everyone. It's my great pleasure to welcome you all to Tesla's 2022 Annual Shareholder Meeting. And I am delighted that we are here in person again this year, and I'm also really thrilled to see so many of you with us today here in Giga Texas in Austin. And so because we know that not everyone can join us in person, we would need a very large stadium to actually have everyone. And because we have a lot of investors as well around the country and around the planet, we actually have also got a lot of shareholders online today, and I'd like to welcome them to this meeting as well. So a big welcome to all of our virtual attendees.

I would also like to thank our amazing investors and acknowledge you because without you, we would not be here today. It is because of your support that we have become the company that we are, and that we have been able to make so much progress against our mission of accelerating the world's transition to sustainable energy. Last year alone, our global fleet of vehicles, energy storage and solar panels enabled our customers to avoid emitting 8.4 million metric tons of greenhouse gas emissions. And to put that in context, that means that we avoided emissions by using Tesla products last year, it was the equivalent of driving gas-powered cars for 20 billion miles, and that is 20 billion.

And as you all know that we are still in the very early phases of this transition, and as I mentioned last year, by 2030, we aim to sell 20 million electric vehicles per annum. And we're making great progress towards achieving this goal. In June of this year, we achieved the highest vehicle production month in our history, despite supply headwinds and despite the shutdowns in Shanghai. And we continue to ramp our factories, both here in Austin as well as in Germany.

And most people know Tesla for our cars. But we are also making a great, big impact with our solar and energy storage business as well. Last year alone, Tesla sold 4 gigawatt hours of energy storage products. That represents enough energy to power 3 million homes. Tesla's energy storage deployments have nearly quadrupled in the last 4 years. And last year represented over 15% of the gigawatt hours globally. Over the past decade, Tesla's solar panels have generated more electricity than it's been consumed by our factories and by all of the Tesla cars, fleet on the road combined. So in theory, today, all U.S. domestic electricity needs as well as the vehicle and transportation needs could be met by solar power alone.

We're also continuously working on reducing the cost of our solar and storage products in order to foster mass adoption. Using renewable energy sources like solar and wind with battery storage, it's fast becoming the cheapest energy option available. And as we continue to bring our cost down, more consumers will be able to not only have a positive impact on the environment, but it will also make economic sense from a -- to use renewable energy.

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As we discussed in our impact report, we're constantly working to improve not only the positive impact of our products, but also to reduce the energy and water consumption that we are using in our manufacturing process. In fact, our goal is to be -- is for all of our factories to be carbon neutral. And to that end, we are continuously innovating for energy efficiency by building increasingly sustainable factories, covering our rooftops with solar panels, leveraging AI to reduce the energy consumption and utilizing renewable energy as much as possible throughout all of our operations. In our newest factories, we already use less water per vehicle than almost any other traditional carmaker. And we are continuously exploring ways to reduce water further throughout our operations, including optimizing and eliminating processes that are water-intensive, harvesting rainwater and also reusing reclaimed and recycled water.

Sustainability is our main driver and motivator. It drives everything that we do. It drives our values and our mission as a company. It drives all of our employees, our shareholders, our customers, and it underscores everything that we do as directors. This month marks my eighth anniversary as a Director at Tesla. And I, along with my fellow Board members, many of whom are here today and online who are here with us today, and we could not be more proud to serve as your Board to help ensure that the framework of governance needed to succeed in our mission.

Our governance model has enabled us to remain focused on making decisions that matter, often bold decisions that unlock growth potential. Decisions like engineering and manufacturing EVs from the ground up rather than being just a supplier of components, by building the world's largest lithium-ion battery factory today, and so that we can scale our operations efficiently. Making investments in an international network of stores, service centers and supercharging stations to expand customer convenience and access. And we remain dedicated to advancing your interest, your shareholder interest and firmly believe that good governance is a hallmark of sustainability. Driving long-term value, protecting shareholder interest and ensuring our actions are aligned with our values. Thank you.

And as directors, we listen to and value your voice and input. And whether it be by submitting comments and questions during our earnings calls or communicating with us through our Board portal or attending and interacting with us at events like this, and this shareholder meeting today. I'm excited also to announce that we have recently launched a new shareholder platform to facilitate your interaction with management, participating in company events and receiving information directly relevant to you as a shareholder. You'll be hearing more updates on this platform in the near future. Once -- thank you. Once again, I want to thank you for your support and for continuing to be our partner along this incredible and important journey.

I would also like to take this opportunity to thank all of Tesla's amazing employees around the world. You are the lifeblood of all of our achievements as a company. You're phenomenal. And lastly, I would also like to thank Larry Ellison, who has diligently served as a Director over the last 3 years. Your contributions have helped us as a Board and also as a company greatly.

And with that, I'm going to hand it over to Martin again. Thank you.

Martin Viecha

Senior Director for Investor Relations

Thank you very much, Robyn. I will now call the meeting to order. The time is now 4:42 Central Time p.m., 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 the votes have been counted -- were already submitted before this meeting. However, if you wish to vote your shares or if you wish to change your vote, you may do so through the virtual meeting site. For those here in person, ballots and ballot boxes were made available for you prior to the meeting.

Tesla's Board of Directors has appointed Computershare Trust Company to serve as an inspector of election for this meeting. Computershare has taken and signed an oath as Inspector of Election, and has certified that starting on June 23, 2022, the proxy materials or the notice of Internet availability of the proxy materials were mailed or provided to all Tesla stockholders as of record date of June 6, 2022.

We have majority of outstanding shares represented at the meeting, so I declare that there's a quorum present and that we may proceed with the meeting.

The items on the agenda are as follows: Number one, the election of 2 Class 3 directors, Ira Ehrenpreis and Kathleen Wilson-Thompson, to serve for a term of 3 years or until their respective successors are duly elected and qualified. If proposal 2 of the agenda is approved, then Mr. Ehrenpreis and Ms. Wilson-Thompson would serve for a term of 2 years or until their respective successors are duly elected and qualified.

Number two, to adopt amendments to our certificate of incorporation to reduce director terms to 2 years; number three, to adopt amendments to certificate of incorporation and bylaws to eliminate applicable supermajority voting requirements; number four, to adopt amendments of certificate of incorporation to increase the number of authorized shares of common stock by 4 billion common shares; number five, to ratify the appointment of PricewaterhouseCoopers LLP, Tesla's independent registered public accounting firm, for the fiscal year 2022.

Tesla's Board has recommended that our stockholders vote for each of the director nominees and for each of those proposals. We have also received 8 stockholder proposals as described in our proxy statement. I would like to remind our stockholders that Tesla's Board has prepared a statement in opposition to each of those proposals, which appear in our proxy statement.

The first stockholder proposal is an advisory vote regarding proxy access. Our Board has recommended that our stockholders vote against this stockholder proposal. This stockholder proposal is proposed by James McRitchie, who is on the line to present the proposal. Mr. McRitchie, I would like to invite you to speak. You have 3 minutes.

James McRitchie

Thank you. Tesla's opposition statement says the Board recognizes proxy access is a topic of growing interest in the investor community. Unlike 79% of the S&P 500, our Board have failed to adopt any provision to provide shareholders with a real voice in directly nominating Board members or representatives on Tesla's corporate governance. Instead, the Board promises to continue to monitor the topic. Tesla further argues our proposal provides no safeguard against corporate raiders to effect a change of control. Nonsense.

Our proposal is limited by law to 500 words. It simply asks the Board to allow long-term shareholders who've owned at least 3% of Tesla continuously for 3 years or more be able to nominate directors. Nothing in the proposal is binding as it is up to the Board to add necessary safeguard, as Boards have done at hundreds of other companies. Getting more than 50% of the shareholder vote may mean little at Tesla. Our proposal to eliminate supermajority requirements that Tesla won 56% of the vote at our 2020 meeting, yet we are still voting on it this year.

Are insiders at Tesla voting to block adoption? Our proposal to declassify the Board on won 55% at the 2021 meeting, yet the Board now want a halfway measure. Instead of voting on directors every year, the Board wants it to be every other year. How large of a majority is required to move our Board to action? Because of the Board's inaction, proxy advisers, ISS and Glass Lewis recommended against the directors up for election at this meeting and against the halfway measure towards declassifying the Board.

As stated in the proxy access proposal, 2 of our largest shareholders BlackRock and Vanguard, voted in favor of 87% and 91% of shareholder proposals to establish proxy access during the last 3.5 years. Additionally, proxy advisers, ISS, Glass Lewis and Egan-Jones all recommend a vote for Proposal #6 at this meeting. Let's cut the bull, give shareholders a direct voice in nominating directors, vote for proposal #6. Proxy access at Tesla is long overdue. Thank you.

Martin Viecha

Senior Director for Investor Relations

Thank you, Mr. Ritchie. The second stockholder proposal is an advisory vote regarding annual reporting on anti-harassment and discrimination efforts. Our Board has recommended that our stockholders vote against this stockholder proposal. This stockholder proposal is proposed by the New York State Common Retirement Fund, whose representative, Emily Bogen, is on the line to present the proposal. Ms. Bogen, I would like to invite you to speak. You will have 3 minutes.

Emily Bogen

Good afternoon. On behalf New York State Comptroller, Thomas DiNapoli, Trustee of the New York State Common Retirement Fund, owner of over 1 million shares of Tesla valued at approximately \$1.2 billion, I'm presenting proposal 7 on the proxy.

The proposal request a report describing and quantifying the effectiveness and outcomes of company efforts to prevent harassment and discrimination against protected classes of employees, including, but not limited to, sexual harassment and racial discrimination. Tesla's 2020 diversity, equity and impact report says, "We insist on equitable practices not just because it's the right thing to do, but because fair processes allow our team members to bring their whole selves to work. We value and include underrepresented community at all levels of our company."

Meanwhile, there have been multiple news reports, allegations and lawsuits in recent years concerning gender and race discrimination at Tesla. These include: A federal district court recently concluding that there was ample disturbing evidence that support the outcome of a California discrimination trial in October of 2021, at which [indiscernible] that the Tesla factory in Fremont was [indiscernible] with racism, and that supervisors at Tesla's product management failed to help. The judge added, "and supervisors even joined in on the abuse."

Additionally, the U.S. Equal Opportunity Commission has initiated an open investigation into Tesla for alleged workplace discrimination at its facilities.

Finally, after receiving hundreds of Tesla's workers' complaints, the California Department of Fair Employment and Housing is suing the company over allegations of discrimination and harassment of black employees at a San Francisco Bay Area factory.

Shareholders need the information requested for the following reasons: First, it has been reported that most Tesla workers are subject to mandatory arbitration agreements. Consequently, transparency at the extent of workforce mismanagement is limited; secondly, civil rights violations within the workplace can result in substantial cost to the company, including fines and penalties, legal costs, costs related to absenteeism and reduced productivity; thirdly, a company's failure to properly manage its workforce can damage corporate goodwill, making it more difficult to retain and recruit employees and jeopardize its relationship with its customers and partners.

Lastly, a Deloitte global executive survey on strategic risk found that the #1 risk concerns that business executive, surveys from around the world, is reputation damage. All these reasons, shareholders want increased transparency and the request for data, policy and practices so we can better evaluate whether the Board is effectively exercising its [indiscernible] obligations, its efforts to translate into improved performance in managing its workforce and reputation and whether there's alignment between Tesla's stated policies and actions.

Thank you for your consideration.

Martin Viecha

Senior Director for Investor Relations

Thank you, Ms. Bogen. The third stockholder proposal is an advisory vote regarding annual report on Board diversity. Our Board has recommended that our stockholders vote against the stockholder proposal. The stockholder proposal is proposed by Alex Lamb, who's representative, Julia Cedarholm from Arjuna Capital, is on the line to present the proposal. Ms. Cedarholm, I would like to invite you to speak. You will have 3 minutes.

Julia Cedarholm

Good afternoon. My name is Julia Cedarholm from investment management firm, Arjuna Capital, and I move knew Proposal 8, asking the company to report on policies and practices to improve Board diversity, that is to obtain racial and gender representation better aligned with the demographics of its employees and customers.

Board diversity efforts are in the best interest of Tesla and its investors. Numerous studies show greater diversity leads to better company performance and increased shareholder value. Regulation has increased as the value of Board diversity becomes more evident. At least 12 states have enacted or are considering Board diversity requirements, and the NASDAQ requires companies obtain at least 2 diverse directors. But more is needed.

In a country comprised of 51% women and 42% minorities, current Board diversity aspirations fall short. A Board of Directors whose diversity is reflective of its employee and customer base is better positioned to outperform. When a Board includes diverse members, they can better recognize the unique needs and interest of its stakeholders. That is why 61% of investors believe Boards should aim to reflect the company's customer base and broader societies in which they operate, according to a survey by Institutional Shareholder Services.

Unfortunately, Tesla's Board diversity is disproportionate with its employee base in U.S. demographics. The Board remains majority white and majority male, despite a majority minority employee base. The Board is made up of 25% racially or ethnically diverse directors, far below its employee base, which is 60% minorities. The Board is also made up of only 25% women. Additionally, Tesla currently faces litigation with California State for failing to deal with allegations of systemic racism and sexism at the automaker. It's crucial Tesla addresses these issues head on at the highest level of governance, its Board of Directors.

While the company has said it's committed to Board diversity, there are no quantitative Board diversity goals. Such goals and transparent reporting are needed to create progress over time and hold the company accountable to its investors, employees and customers. I urge you to support proposal 8, requesting Tesla further diversify its Board to reflect its employee and customer base. Such action can better position our company to respond to stakeholders' needs and concerns and ultimately improve performance. Thank you for your support on Proposal 8.

Martin Viecha

Senior Director for Investor Relations

Thank you, Mr. Cedarholm. The fourth stockholder proposal is an advisory vote regarding reporting on employee arbitration. Our Board has recommended to vote against this stockholder proposal. The stockholder proposal is proposed by Impact Capital, whose representative, Kristin Hull, is here to present the proposal. Dr. Hull, I would like to invite you to speak. You will have 3 minutes.

Kristin Blair Hull

Nia Impact Advisors, LLC

Hello. I'm Dr. Kristin Hull, Founder and CEO at Nia Impact Capital. On behalf of Nia and our co-filers, I formally move Proposal #9.

As an investor, I'm here today like many of you, because we believe in the strength of this company to lead in the transition to the next sustainable economy. This resolution requests that Tesla's Board of Directors oversee the preparation of a report on the use of mandatory arbitration for dissolving disputes between workers and the company. Your yes vote today will impact Tesla for the better, and here's why.

Significant concerns have been raised about the persistence of racism and racist actions at Tesla. There have been many recent discrimination claims, including California's Department of Fair Employment, which alleges that hundreds of black Tesla employees have been discriminated against in job assignments, with disciplinary actions, with regard to pay and being passed up for promotions. Allegations also include the use of racial slurs and racial graffiti. Also troubling may be a culture of retaliation where employees who have raised these issues with management and HR have claimed being retaliated against.

Given the grave allegations, it's time that investors get a look under the hood, or the trunk, as it would be with Tesla. When disputes are handled via arbitration, the underlying facts and outcomes of the cases often remain secret, preventing other employees from learning about and taking action on shared concerns. Arbitration precludes employees from suing in court and it blocks class actions, allowing pervasive discrimination to continue. Stated simply, arbitration of employee claims may allow bad corporate behavior to continue, hidden from other employees and from investors. Bias, discrimination and harassment in the workplace create uncompensated risks, both for investors and, as it seems to be, invite legal, brand and financial risks for our company, Tesla.

In this day and age, we know strong human capital management is essential, recruiting, hiring and training an employee and then treating them in a way that inhibits their top performance, even preventing them from doing their job well. It doesn't make moral or financial sense. Tesla is known, as we all know, for its innovation and its leadership in technology. And now, Tesla needs to rev up to solve this grave human capital issue. Tesla will need a smart, well-run, loyal and devoted workforce and, of course, loyal customer base to stay ahead. And frankly, racism has no place in a business seeking to lead our future. We at Nia ask again that the Board evaluate the effects and the impact of arbitration on Tesla's brand, on its employees and on its workplace culture. Thank you.

Martin Viecha

Senior Director for Investor Relations

Thank you, Dr. Hull. The 5th stockholder proposal is an advisory vote regarding reporting on lobbying. Our Board has recommended that our stockholders vote against this stockholder proposal. This stockholder proposal is proposed by the Nathan Foundation, whose representative, Laura Campos, is on the line to present the proposal. Ms. Campos, I would like to invite you to speak. You will have 3 minutes.

Laura Campos

Good evening. I'm Laura Campos, I am the Director of the Corporate and Political Accountability Program at the Nathan Cummings Foundation. I'm participating in Tesla's annual meeting, move Proposal #10 on behalf of the Foundation and

its co-filer, Green Century. Proposal 10 requests that Tesla's Board of Directors evaluate and report on Tesla's direct and indirect lobbying and policy influence activities and how those activities align with the goal of limiting global warming to 1.5 degrees Celsius.

The proposal also seeks information on plans to mitigate risks presented by any misalignment that might be found. Here are just a few of the reasons we categorically disagree with the Board's assertion that Tesla does not need to evaluate and report on its lobbying and policy influence activities. Unlike most other companies of its size and influence, Tesla does not appear to have strong governance mechanisms in place to ensure its political activities, including lobbying expenditures, support its business model and its mission to accelerate the world's transition to sustainable energy.

In fact, the company earned an abysmal 0 point out of a possible 70 on the most recent CPA-Zicklin Index of corporate political disclosure and accountability. Tesla contends that a simple online search provides the information sought in this proposal. That is incorrect. To our knowledge, the only information Tesla discloses is found in its quarterly lobbying activity report, which all active registrants are required to file. These reports do not enable investors or the public to determine whether a company is taking a stance for or against a particular bill. Furthermore, this reporting does not reveal whether Tesla's advocacy is aligned with the Paris Agreement, and it fails to shed any light at all on indirect lobbying.

Tesla's message to investors when it comes to its political activities appears to be, just trust us, we're the good guys. But that's simply not sufficient for a public company. Peers like GM and Ford have substantially more disclosure in this area.

What's more, public statements by Tesla's CEO raise real questions about Tesla's actual stance on legislation intended to support the world's transition to sustainable energy. For instance, in a 2021 Wall Street Journal interview, Tesla's CEO expressed a lack of support for the Build Back Better Act, a centerpiece of the Biden administration's efforts to address climate change. In a statement indicative of the need for stronger governance mechanisms when it comes to political activities and lobbying, Tesla's CEO noted that, "No one at Tesla has actually brought up whether they care about this bill or not. We don't think about it at all, really."

Completing the requested evaluation would ensure that someone at Tesla is thinking about the company's stand on critical pieces of major legislation that impacts not just the transition to sustainable...

Martin Viecha

Senior Director for Investor Relations

Ms. Campos, 3 minutes have passed.

Laura Campos

Thank you.

Martin Viecha

Senior Director for Investor Relations

Thank you very much. The sixth stockholder proposal is an advisory vote regarding the adoption of freedom of association and collective bargaining policy. Our Board has recommended that our stockholders vote against this stockholder proposal. The stockholder proposal is proposed by Christian Polly, who has prepared a prerecorded message.

Unknown Shareholder

Fellow shareholders, members of the board, my name is [Christine Polly]. With support of the Shareholder Association to Research and Education and co-filers at Domini Impact Investments and SOC Investment Group, I wish to advance #11 on Tesla's proxy statement, urging adoption of a policy to respect rights to freedom of association and collective bargaining in the company's operations.

These rights can enhance shareholder value through improving health and safety, encouraging training and skills development, increasing productivity, promoting diversity, equity and inclusion and strengthening human rights due diligence. Yet in the face of public allegations of Tesla interfering in unionization efforts, a National Labor Relations Board ruling concluding the Tesla intimidated, threatened and retaliated against employees to prevent their organizing, and the CEO's history of public comments on this topic. To aid informed investment decisions, investors require clarity on Tesla's approach to these fundamental labor rights and management of related risks.

The Board's response is cause for shareholder concerns. Although the Board states its commitment to human rights, Tesla's human rights policy omits mention of freedom of association or collective bargaining. The Board points to Tesla's supplier code of conduct, which does include respecting the rights of workers to form and join trade unions. But in fact, this policy does not apply to operations, creating a double standard. The NLRB findings already mentioned, challenge the Board's claim that the company complies with all applicable laws, and often local laws, fail to adequately protect these rights.

Tesla's peers, including Ford, General Motors and Goodyear, explicitly referenced Freedom Association in their human rights policies, which do apply to operations. Even nonunionized peers, including Toyota, Volkswagen and BMW, have statement that respect the right to freedom of association or collective bargaining that apparently applied to operations.

But Tesla's governance gap on freedom of association and collective bargaining represents material, reputational, regulatory, legal and operational risk and create workforce uncertainty. In the post-pandemic context of workforce organizing efforts at other major companies and growing interest in unionization and explicit commitment to freedom of association and collective bargaining is essential. We urge the Board to clarify the company's policies and practices to respect rights to freedom of association and collective bargaining in its operations.

Fellow shareholders, I urge you to vote for this proposal. Thank you.

Martin Viecha

Senior Director for Investor Relations

Thank you, [Ms. Polly]. The seventh stockholder proposal is an advisory vote regarding additional reporting on child labor. Our Board has recommended that our stockholders vote against the stockholder proposal. The stockholder proposal is proposed by the Sisters of the Good Shepherd, whose representative, Sister Winifred Doherty, is on the line to present the proposal. Sister Doherty, I would like to invite you to speak. You will have 3 minutes.

Winifred Doherty

The quest for clean energy, while admirable, ultimately perpetuates violations of children's human rights, especially with regard to child labor. Good evening, and thank you for this opportunity.

My name is Winifred Doherty, and I am representing the Sisters of the Good Shepherd New York Province, which is a Tesla shareholder and the lead filer of this proposal requesting Tesla issue a public report on how it will with eradicate child labor in its factory supply chain by 2025. I hereby move Proposal 12 and encourage your support for this proposal. I ask -- this ask is supported by the New York State Common Retirement Fund and International Rights Advocates.

The Sisters of the Good Shepherd support the education and sustainable development of children and their families in cobalt mining communities in the Democratic Republic of Congo. Good Shepherd's mission partners have witnessed firsthand the harm on the health, development and education of children who are exploited by child labor and cheap labor and often enticed to work by a few coins. The harsh working conditions, lack of safety standards and reports of abuse place every child at risk. Property, injury and in some cases, even death is a daily reality.

Article 32 of the rights of the child says that the child has the right to be protected from economic exploitation, and from performing any work that is likely to be hazardous to or interfere with the child education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development.

Despite Tesla's claims that no child labor has been detected in its EV battery supply chains, the company faces a class action lawsuit for allegedly aiding and abetting in the deaths and serious injury of children who claim they were working in cobalt mines in their supply chains. As stated in the resolution, child labor in the cobalt supply chain exposes Tesla and you, its investors, to financial, legal and reputational risks. We demand a supplier criteria that are binding, enforceable and regularly monitored by independent auditors for compliance with international laws prohibiting child labor and with the company's own written policies...

Martin Viecha

Senior Director for Investor Relations

Sister Doherty, I would like to remind you that 3 minutes have passed.

Winifred Doherty

Thank you.

Martin Viecha

Senior Director for Investor Relations

Thank you, Sister Doherty. And the final and the 8th stockholder proposal is an advisory vote regarding reporting on water risk. Our Board has recommended to vote against this stockholder proposal. This stockholder proposal is proposed by [JCD Investments], whose representative, Elizabeth Levy from As You Sow, is on the line to present the proposal. Ms. Levi, I would like to invite you to speak. You will have 3 minutes.

Elizabeth Levy

Good afternoon, Chairman, members of the Board. My name is Elizabeth Levy. Thank you for the opportunity to present proposal #13.

Climate change is causing more intense drought globally, and those droughts are predicted to worsen. This climate change-related water scarcity poses material risks to our company. Large water-reliant manufacturing plants, including our companies, are facing increasing competition from high-value uses, such as drinking water and agriculture, among others. This competition for water resources will only become stronger.

Tesla's automotive manufacturing needs a significant amounts of water. Many of Tesla's plants operate in water-stressed areas where our company's water use has generated public and ongoing controversy. Tesla's supply chains are also increasingly subject to water risk.

While Tesla has provided information from global water efficiency and is exploring ways to reduce water consumption, shareholders have no meaningful way to put these actions into context. Generalized company-wide water use data does not address the issue of location-based risk. Each location in which Tesla operates is unique in its water risk. Every region has different levels of water stream and scarcity, use and competition.

Without site-specific use information, investors cannot accurately assess material risk. Such risks include the potential for operations disruptions due to climate-related water depletion, overconsumption or competition. The company also fails to address how it can reduce the contentiousness of its interactions with communities in water-constrained areas, which increasingly poses reputational risk to the company.

Disclosing water use information will increase public goodwill and will provide investors with the data necessary to assess water-related risks. This is not a choice between making good vehicles and providing the requested data.

As one of the top 10 valued companies globally, Tesla has the resources and the know-how to do both. Thank you.

Martin Viecha

Senior Director for Investor Relations

Thank you, Ms. Levy. Please note that now is the final opportunity to submit any proxies in order for them to be counted.

I declare that the polls are now closed.

Based on the proxies that we have previously received, I'd like to announce on a preliminary basis, that our stockholders approve -- have approved the recommendation of Tesla Board on all agenda items, except item #2 regarding the reduction of Director terms to 2 years; item 3, regarding elimination of applicable supermajority voting requirements; and item 6 for an advisory vote regarding proxy access.

While over 98% and 97%, respectively, of the shares present and entitled to vote on items 2 and 3 did so as recommended by the Board, unfortunately, less than 2/3 of total outstanding shares, which were required to approve these items, submitted votes for these items.

After the final tabulation is completed, we will formally announce the results of the voting by forming a Form 8-K within 4 business days of today's meeting. That concludes the official business of today's shareholder meeting, which is now adjourned.

We will now move into the company update presentation by Elon. If you're currently joining through the virtual meeting site, please go to tesla.com/2022shareholdermeeting to continue to watch the presentation.

During the course of the following 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 filing 10-Q 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.

And with that, please welcome Elon Musk.

Elon R. Musk

Technoking of Tesla, CEO & Director

Welcome. Well, I feel welcomed. So -- well, it's great to see everyone here. So...

Unknown Attendee

Take off your shirt.

Elon R. Musk

Technoking of Tesla, CEO & Director

So yes, welcome to Giga Texas. All right. So let's see, I'll go over kind of recount the year. It's been an amazing year. The Tesla team has done amazing work. And I have to say, like one of the things that feels like what do you enjoy most in life? Really, being able to work with a super talented group of people and to create great products and manufacture those products and deliver them to people and make people happy from those products is -- that's one of the best things in life.

So yes, I'd just like to say what an honor it is to work with such a talented team at Tesla, and that's the reason we've been able to do all these things.

So yes, we are aiming to achieve a 2 million vehicle run rate by the end of the year. This is the best crowd. I mean -- I love you guys, too.

So anyway, thanks to the hard work of the Tesla team, we've already been able to achieve 1.5 million unit annualized run rate. And depending on how the rest of this year goes, I think we might get close to -- or we'll get approximately at the 1.5 million mark and be exiting the year at a 2 million unit run rate.

And then also worth noting, just recently, in the last few weeks, we made our 3 millionth car. The -- it's pretty wild to think like 10 years ago, where things were. 10 years, August 2012, we'd made 2,500 Roadsters and, I think, maybe a couple hundred Model S, ish. But less than 3,000 cars. So 10 years ago, we had made less than 3,000 cars. And here we stand, 10 years later, having made over 3 million.

And actually, this is one of the cleanest exponentials I've -- it looks like one of those sort of business plan presentation things that doesn't actually come true, but you see it in the venture capital business plan situation, but it's actually true. That's the amazing part. And yes, yes, we're doing okay on demand. So...

Unknown Attendee

Welcome to Texas.

Elon R. Musk

Technoking of Tesla, CEO & Director

Thank you. So yes, it's great here. I love California, too, to be frank. I'm going to be clear. Oh, come on. We've got great teams in California and we've got a great team in China, in Shanghai, and a great team in Berlin in Germany and Europe, it's so -- yes.

And I thought it's interesting to look at the cumulative profitability since inception. And this approximately tracks to sort of mental pain actually. This is psychic damage with that green curve is approximately correct. But it's -- I'm just very proud of the fact that we've actually been able to produce more cash than we have spent and have positive retained earnings and be worth our salt, essentially. And that's a really big deal. And it's very hard. So I mean, this is a big deal. And I think it's going to go up from here.

So you can see, we obviously had some challenges there in 2017. And then -- but since then, our free cash flow generation has been very good and trending upwards. And this is really before autonomy really kicks in. We have autonomy to some degree, but solving autonomy is -- will really be an amplification of free cash flow to a degree that is -- you run the numbers, and it's like, wow, can it really be that crazy? But it could be that crazy. And this year, I swear, we got anyone here in the FSD beta program?

Unknown Attendee

I love it, baby. 10.13.

Elon R. Musk

Technoking of Tesla, CEO & Director

Sweet. Yes. No, totally, totally, totally. Okay. Well, I thought -- all right. I thought you might ask that. So because it's 10.13 we've been working on for a while. And actually, what sort of happened is we've made some pretty significant architectural improvements. So it's really going to be more than a 10.12 to 10.13 release. It might, I don't know, speak to you soon. It might qualify for 10.69. So it's got to earn that, obviously. Can't just throw that out. But it's -- there's a lot of improvements and -- especially in complex left turns. And yes, we're going to solve trucks soon. Yes. Yes. 100%. Absolutely.

We have a lot of respect for valid criticism. So -- and yes, so -- I think we're at roughly 90% success rate with U-turn. So we're almost at 100%. So it's looking good. And yes, so I mean I'm hopeful it might be next week. So yes, 2 weeks. Yes. It's working well for me. So yes, so anyway, the team's like working literally 7 days a week and making major improvements. And it's really interesting because we're effectively solving an important aspect of artificial intelligence, real-world AI for self-driving, which when you think about it, kind of is what's needed to solve the -- to solve self-driving.

Because how is the road system designed? It's designed for a biological neural net and eyes. And so naturally, the thing that would therefore work the silicon analog is cameras and silicon neural nets. And so sort of by accident, we're actually solving an important and, I think, very useful element of artificial intelligence. And I definitely want people out there, talented people who are working on AI to consider working at Tesla because I think we're solving just a very important part of AI and one that can ultimately save millions of lives and prevent tens of millions of serious injuries by driving just an order of magnitude safer than people.

There used to be a time back in the day where we'd have -- yes, this is super important. There used to be a time when we'd have elevator operators. [indiscernible] have elevator operators and have like a big relay and stuff. But we can -- every now and again, you make a mistake and shear somebody in half. So I'll be like, okay, then we went to automated elevators and you press a button and you go to your floor and it just works. And that's kind of how it's going to be in the future with cars. And yes, so -- and then we'll have lots of interesting things to say on AI Day at the end of next month. I'll leave that to the next month. Yes.

So when we started out here, obviously, we were told electric cars were impossible. And even if, really, if you could make an electric car with a couple hundred miles range, then nobody would buy it anyway because people just love gasoline cars. So when we started out, it was d*** to start a car company and then d*** squared to do an electric car company. And we're told you're never going to make money, et cetera, and we didn't for a while.

But now, we have the highest operating margin in the whole industry. Exactly. Exactly. Tesla is not just a car company, Tesla is many companies in 1. And we're as much as a software company as we are a hardware company. So -- and that's just really going to be obviously essential for the future. And software, both in the car and, obviously, with neural net training, but also software in the factory as well. So you can think of a factory as a giant cybernetic collective. So factories are just an enormous cybernetic collective of humans and machines and software. And the better the software is, the better that cybernetic collective works. I don't think other OEMs think like that. But that's what it is.

So there's a lot of talk of competition among electric vehicles. But really, the EVs or electric vehicles are taking market share from gasoline cars. So yes. So the -- and from Tesla's standpoint, we obviously welcome this, and we're very excited to see that other -- the big car companies are embracing electric vehicles.

If you were to rewind the press releases to 5 years ago, that was not the case. They were not saying nice things about electric vehicles 5 years ago. But now I believe almost every major car company in the world has embraced electrification and agrees that it is the right path. And this is really what we set out to do with Tesla. It was not to like get maximum market share or anything. It was really trying to get the -- to show the auto industry that it was possible to go electric and

that if you made compelling electric cars, people would buy them. And that's what's happened. And I think that's really profound.

Also, when our competitors advertise for electric vehicles, every time they do that, our sales go up. So it's pretty funny. So yes, but we do -- we have open source of our patents, so they can use our patents for free. And so we're pumping out and I think it's sort of a mutual prosperity thing, and it's good.

So yes, so Model Y, you don't -- definitely don't want to count chickens until they're hatched. But I think we're tracking to have Model Y be the highest selling vehicle by revenue this year and the highest by unit volume next year. Still a lot of work to do. Like these factories don't just magically work. So still a lot of work to do, Berlin and here in Austin to spool up these 2 Gigafactories. And we've got different supply chains, and so it's always -- there's a host of problems. None of the problems are individually like difficult, but there's like 10,000 of them. So it's the rate of production is like how fast can you solve the 10,000 problems essentially. And we're solving pretty fast, but a lot of work to do.

And we might be able to announce another factory location later this year. Wait, where should we -- okay, where should we build it? Okay. We've got a lot of Canadas. I'm half Canadian, so maybe I should. Yes. Well, I think ultimately, we'll end up building, I don't know, probably at least 10 or 12 -- 10 or 12 Gigafactories. And they will be really Gigafactories like outputs -- aiming for output -- average output of like 1.5 million to 2 million units for a factory, which is enormous. So -- and our Fremont factory in California is already the highest output factory in North America. Sorry?

Unknown Attendee

How long will Giga Texas take Fremont?

Elon R. Musk

Technoking of Tesla, CEO & Director

Well, I think we'll have a friendly competition between Texas and California. Well, Shanghai is hard to beat, I'd have to say. Shanghai is pretty -- our Shanghai team is just awesome. So they're -- yes, great, great team there.

So with respect to -- sometimes you get the sort of these bogus attacks of like EVs are somehow worse than gasoline cars, which is not true. The average life cycle emissions of an EV are dramatically lower than that of a gasoline car. And I'm kind of telling you things you already know. But every now and again, you think, surely, this nonsense has been put to bed. But it pops up again, but it's -- obviously, electric cars is dramatically lower CO2 lifetime than a gasoline car. So anyway, that's kind of obvious.

Now this is the thing that I think is super cool. If you add up all the energy produced over the last 10 years by Tesla solar panels, it is more energy than was used to manufacture all of our cars and charge all of our cars at Superchargers and at home. This is like -- and I mean, the mission of Tesla is to accelerate sustainability. And the -- I think this is really amazing. More energy produced than was used in making the car or -- and charging them over billions of miles. So -- and we're going to keep obviously increasing our solar activity and vehicles, and try to keep these on par.

Because the 3 elements of a sustainable energy future are sustainable energy production, primarily with solar and wind, and then stationary battery packs to store the sustainable energy because of wind and solar are intermittent, and then electric transport. And if you have those 3 pillars, you have a fully sustainable future. And yes, so that's -- yes. And obviously, battery packs are very recyclable. They are -- you can think of it like high-grade ore. Do you want to crunch up a bunch of rocks or crunch up a battery pack, which is like super high-grade ore. So there's a no-brainer to recycle battery packs.

And we are already recycling. I should point this out, so people won't wonder what's happening. We're already recycling at over 50 a week in Nevada. So Tesla battery recycling is already underway -- has been underway and is scaling up. Now cars are lasting quite a long time, so there's not that many batteries to actually recycle because you kind of have to typically wait like 12 years or something, like quite a long time before the battery actually is no longer useful. Sometimes 15 years. So recycling starts off small, but then it becomes very significant long term. So we got some factory footage, obviously.

Unknown Attendee

What is 50 packs a week?

Elon R. Musk*Technoking of Tesla, CEO & Director*

Just 50 packs a week, yes. So that's what I'm saying, like this actually just not that many packs to recycle because there's not -- the vast majority of them are still in use.

Unknown Attendee

[indiscernible]

Elon R. Musk*Technoking of Tesla, CEO & Director*

Sorry? Yes, exactly. [indiscernible] Where is that thing? So [indiscernible] is going to be fundamentally about scaling. Just looking at the overall problem from a global macroeconomic standpoint and seeing what are all the things that are needed to achieve a fully sustainable economy? Because I think a lot of people don't know. And really, like what tonnage of lithium, of cathode, anode, separator, electrolytes, electronics, what are all the things that are needed -- what are the things that's need to be done in order to transition to a fully sustainable global economy, which I think the sooner we do that, the better for the planet.

And I think just articulating that and just making it clear that this is absolutely doable. And it is being done, and we just want it to be done as fast as possible. Because I think a lot of times -- I mean, I meet a lot of people out there who have lost hope. They think it's too late. And they think there's no chance and the earth is doomed. It's like it's not doomed. Okay. Yes. It can and will be saved. Yes.

So in addition to battery advancements and electronics advancements in AI, we've also done a lot to simplify the structure of cars to make it easier to manufacture. And one of the things we've done is create the largest castings that have ever been done. And they're very complex castings. And so we're able to take 171 pieces of metal and go from 171 pieces to 2. And in the process, make it lighter, stiffer with better ride handling, better noise, vibration and harshness, better sealing against water. So it's really better in every way. And, yes. So -- and we're going to keep enhancing the casting. So this is a testament to our materials team and to -- a lot of casting technology. So really rethinking the whole way in which a car is made, and it's a gigantic improvement.

We have, at this point, from going from, say, Model S or even Model 3, we're at about 30% of the robots used for Model 3 from our current Model Y. So, yes. We've also improved the layout of the factory. So the factory is sort of a single -- or close to a single monolithic factory with a very straightforward flow. Fremont, we do a lot in Fremont. But the flow is complex, and it's not an easy flow. So we're really rethinking the factory. And I think the -- like the really long-term sustainable advantage of Tesla will be manufacturing. I mentioned this before. But obviously, everyone will have electric cars, all manufacturers will have electric cars. And eventually probably take longer than they think, but eventually, all cars will be self-driving. And the thing that will be hardest to replicate is Tesla's manufacturing technology. So this is actually very important from a long-term standpoint.

When thinking about the competitiveness of companies, especially if the companies are technology companies, I recommend looking at where the smartest engineers want to work. This is -- wherever the smartest engineers want to work, that's going to be -- that technology company is going to be the one that is likely to succeed. Just like if it's a pro sports team, where are the ace players going? Okay, probably that team will win. So we've put a lot of effort into ensuring that the best engineers in the world want to work at Tesla.

And frankly, sometimes Tesla's #1, sometimes SpaceX is #1, but this is just like last year. But -- and we do actually -- for those curious and maybe want to work at either SpaceX or Tesla, we do allow people to move from one company to the other if they would like. So if you want to spend a better time working on electric vehicles, but at times spending working on rockets, you can -- that's cool. We support that. So -- yes.

We also made a lot of improvement with factory safety. So we -- I think we believe we now have the best factory safety in the industry. And so yes, we're excited to have very good safety and getting better. So -- and a bunch of this is driven by just encouraging people within the factory to submit ideas for safety improvement. And we've passed our goal of 3 suggestions per employee this year. And this is really is a game changer for improving safety. So you don't have to clap after every slide, unless you really want to. But -- so we -- there's a lot of interest in working at Tesla with 3 million job applications last year. So...

Unknown Attendee

[indiscernible]

Elon R. Musk

Technoking of Tesla, CEO & Director

Sorry? Yes, it's true. So a lot of interest in working at Tesla. Now some people may occasionally have encountered a Supercharger that didn't work. But in general, the uptime of our Superchargers is extremely good. And we just try to make it super smooth. And because our Superchargers are always connected like the car is always connected, our feedback loop for fixing a Supercharger is very quick.

And obviously, we keep upgrading the Supercharger capability. We're now at Version 3. We'll start rolling out Version 4, I don't know, maybe next year. So they just -- the Superchargers get better and better and -- yes. Actually, I don't want to give away the -- let's just say that there's some cool stuff happening on the supercharging front. So -- all right. We're basically doubling our Supercharger account every year. So if there isn't a Supercharger in some place that you think is important, it probably will be there soon.

So we've also made a lot of progress on safety. So our cars are already the safest in the industry. So we have the lowest probability of injury of any cars ever tested by the U.S. government. And we update this in real time. So we -- because our cars are connected, this is a big difference. All the other cars with rare exception are not connected. So the manufacturers don't really know what happened in a crash. But in the case of Tesla, we are able to look at crashes and see how can we improve the safety. Look at the crashes and improve the crash structure. Also we improve how the seat belt's tension and how the airbags deploy.

So in these updates, if we figure out, oh, there's a slightly better way to deploy the airbags to improve the safety in a crash, we'll actually do an over-the-air update to improve the way that the airbags deploy or the way that the seat belt pretensions. And we're now starting to include our Tesla autopilot AI to be able to see if a crash is about to occur. And if it sees that a crash is about to occur with 99-plus percent probability, then it will activate the seatbelt pre-tensioners and deploy the airbags as opposed to what the vast majority of cars do is they are only -- the vast majority of cars are only able to deploy airbags when the crash is happening. And so that makes the airbag deployment a lot more violent. But if you can anticipate the crash, the airbag deployment can be much better than just impact.

We'll see FSD Beta grow very rapidly. And this is definitely going to go very exponential in miles driven. So we're now at over 40 million miles. And I suspect by the end of this year, we'll be -- I don't know, well over 100 million miles. So -- and we're still tracking very much to have widespread deployment of FSD Beta this year in North America. So I should say basically, FSD will be available to anyone who requests it by the end of this year.

So AI Day Part 2, I think people were blown away, but that's at the end of next month. So I believe that if you accept it -- there's going to be a lot of cool stuff, so I'm sort of surprised that people or at least like analysts out there are not really understanding the importance of the Optimus robot. My guess is Optimus will be more valuable than the car than long term. And in fact, it will, I think, turn the whole notion of what's an economy on its head, at the point at which you have no shortage of labor -- economy is GDP per capita. If you do not have a capital constraint, then the economy just can be arbitrarily huge. So yes, it's sort of crazy.

Anyway, thank you for voting. So your vote matters and it's great to have direct contact with individual shareholders. And thank you for voting to support our proposals.

So the next decade, I wonder how many cars we'll have in 10 years. Yes, 10 years ago, we had less than 3,000 cars. Now we've made 3 million.

Unknown Attendee

300 million.

Elon R. Musk

Technoking of Tesla, CEO & Director

300 million.

Unknown Attendee

[indiscernible]

Elon R. Musk

Technoking of Tesla, CEO & Director

I'd say 100 million is pretty doable. So I'd be surprised if it's not over 100 million in 10 years. And then many other products, some of which you've heard about, some of which you have not. [indiscernible]

All right. So we've got some questions from the Internet that were voted to the top. So I'll answer these questions, and then we'll take just questions from the audience. And so one of the questions is, how does Tesla intend to utilize cash in the coming years? Will we increase CapEx, I guess you can read the question, share buybacks, dividends or acquisitions?

Well, it's interesting, like Tesla has actually done very few acquisitions. Apart from the SolarCity acquisition, it was the only really big acquisition we did. And the next largest would be Tesla Grohmann, but it's -- Tesla actually used a remarkably small amount to equity to do acquisitions compared to other companies. The vast majority of our growth, basically 90% of our growth has been organic, which I think is actually a really good thing. But if we do see interesting companies, we will acquire them. But it's quite rare for us to acquire a company. But we are interested in companies that are very good at manufacturing automation, software, AI, manufacturing technology in general, that kind of thing. We certainly will increase CapEx.

We are actually spending sort of -- we're spending CapEx money and R&D money as fast as we can do so without wasting it. So this is not a constraint. If we try to spend it any faster, we'd just be wasting money. So we're cranking hard on CapEx and R&D. Depending on what our future cash flow looks like, I think a sort of share buyback is possible. I wouldn't want to commit to that, but -- well, let's just make sure that there's not some force majeure event somewhere. We think we want to make sure we have plenty of capital. And that future cash flow is looking very solid and the world is relatively stable. And then I think share buyback is on the table.

Yes. So how many factories are necessary to achieve 20 million vehicles? I think probably roughly a dozen. So we're aiming for 1.5 million to 2 million units per factory. Now our factory in California, we're just running out of room. So it's hard to get more than maybe 700,000, 800,000 vehicles a year out of there. But most places, we'll be aiming for 1.5 million to 2 million.

Unknown Attendee

A dozen sites of building.

Elon R. Musk

Technoking of Tesla, CEO & Director

A dozen sites, although we are aiming for giant monolithic buildings.

With Cybertruck pricing, it was unveiled in 2019, and the reservation was \$99. So things have -- a lot has changed since then. So the specs and the pricing will be different. I hate to sort of give a little bit of bad news, but I think there's no way to sort of -- haven't anticipated quite the inflation that we've seen and the various issues. But what I can say is that the Cybertruck will be one hell of a product. It's going to be like a damn fine machine.

And we are tracking to be in production middle of next year from this factory. So they -- we're installing -- we're going to be installing the production equipment, tooling and all starting in the next couple of months, we'll begin the installation. So aiming to be in volume production middle of next year.

Now what could possibly go wrong in answering this question? All right. So I should just pass. Well, let me just say that I hope for peace and respect.

Unknown Attendee

[indiscernible]

Elon R. Musk

Technoking of Tesla, CEO & Director

Fair enough. Yes, good advice. So we're -- try to -- we're deploying Superchargers wherever we see the greatest need. And sometimes, the greatest need is in some place that is extremely difficult to get permits. Like the -- getting a permit in Malibu was nuts, like the next level, that took years. And so some places are hard to get permits, and some places are easier. But we are aiming to, just generally, we analyze the Supercharger usage every day, and we prioritize our Supercharger locations according to where we see the greatest need. With -- what?

Unknown Attendee

[indiscernible]

Elon R. Musk

Technoking of Tesla, CEO & Director

Sorry, what? Well, maybe we should do an online poll for where is it -- where should we put Superchargers, yes. That's good. Okay. We'll do that.

So I mean, with respect to amenities with Superchargers, I think we'll do a couple of just fun things. Like we're going to do a really fun Supercharger location in L.A. And the general vision is to have something that's like a futuristic kind of like diner sort of like, I don't know, Blade Runner meets Grease meets Jetsons. Something cool, different and -- but with some style and where you can get -- so some great food. And the one in L.A., we're planning to have like these big screens at the Supercharger location and the screens will be aiming to show like the 100 greatest movie clips of all time. And so you can like have a cheeseburger and charge your car and watch some cool stuff on the screen.

And it will be open to others who are not -- you can come to the restaurant, even if you don't own a Tesla, but it will be like a little gem, I think, there in L.A. And then depending on how that goes, we'll roll that out to a few other places. We will try to do interesting, fun things that are not necessarily economically assessable, but they're cool.

So 4680, the -- this is not an easy one to answer. We are making a decent number every week. And I think we'll be in high-volume production by the end of this year. It's always difficult to predict. This is because a lot of new technology what's the slope of the S curve on ramp? And except that I'm confident we will get to the high production rate. But it's probably end of this year before we get confidently to a high production rate. But this does not affect our vehicle output. We actually have enough supply from -- enough battery cell supply from suppliers to make 1.5 million cars this year. So it's not a constraint on output, but it is -- it will be important for next year.

And the new master plan is not yet ready. I don't know, maybe aim to get it done this month. But like I said, it's going to be just -- looking at the big picture, what does it take to make us fully self-sustaining from an energy standpoint. And yes, just map it out and say this is what needs to be done. Tesla will try to be as useful as possible in this regard. And hopefully, lots of other companies can join in and help accelerate the sustainable energy revolution.

With peak inflation behind us, so the inflation question is interesting because we do get a fair bit of insight into where prices of things are going over time. Because when you're making millions of cars, you have to purchase commodities many months in advance of when they're needed. Like so you need to tell -- because it's a very long supply chain with a tremendous amount of inertia. So we sort of have some insight into where prices are headed over time.

And the interesting thing that we're seeing now is that most of our commodities, most of the things that go into a Tesla, not all, but I don't know, more than half, the prices are trending down in 6 months -- 6 months from now. Now this could change, obviously. But the trend is down, which suggests that we are past peak inflation.

Now making macroeconomic prognostications is a recipe for disaster. But my guess is that we are past peak inflation and that we will see -- we will have a recession. I think it will be a relatively mild recession sort of -- I'm just guessing here, this is total speculation. But I would guess it's a mild recession for, I don't know, 18 months or something like that. It would be my best guess right now. We don't have fundamental capital misallocations in the U.S. as we have had in the past, like in leading up to 2008, where we were building primary housing units of twice the rate of household formation, which obviously doesn't make sense.

And there were a lot of companies that were over-levered. The leverage or debt that companies have right now is relatively low. So yes, I would say probably mild, moderate recession, maybe 18 months-ish. And I think we -- I think inflation is going to drop rapidly. That's my guess. I don't what do you guys think? Sound about right? Okay. Great. All right. Cool.

Unknown Attendee

Yes, the Tesla robot essentially changing the economy, like how can we base an economy on automation, AI. With the full self-driving that's being implemented, you're going to have a full fleet of vehicles that can drive themselves. You have these robots that can go and get into your vehicle and place things. Will you be moving to a rental model? Or how will you base a Tesla model on selling cars whenever these cars are fully automated can drive wherever they would like, and hopefully would be applicable to having multiple people use the vehicle instead of just one person.

Elon R. Musk

Technoking of Tesla, CEO & Director

Yes. So it's interesting to think about an autonomous car because when you drive around, look at how many cars are parked. Like they're just parking lots full of cars everywhere because cars need a driver. And so most of the time, they're doing nothing. Typically, a passenger car is going to be like 12 hours a week or something like that of usage. As autonomous, maybe it can get to 50 or 60 hours of usage. And that's sort of 4- or 5-time -- 4- or 5-fold improvement in the utility of a car.

But the interesting thing is that the car still costs the same. So in that scenario, at least for some period of time, the effect of gross margin on our autonomous car is kind of boggles the mind. So in terms of how the cost we operated, I mean, I think it would be just -- you have the option of owning a car, using a car just occasionally when you need it, like an auto Uber or something like that. And there would be -- and then an owner of a car could decide that they want to use their car or they want to add or subtract it to the fleet. So I think it would end up being some kind of combination of like Airbnb and Uber or something like that. So sometimes you can go all the way from owning it to renting it sometimes, to renting it a lot, to completely renting it.

But the utility of the car will just be mind-blowingly great. And then like I said, Optimus will really bring the future to now. So...

Unknown Attendee

Can you rent Optimus hourly?

Elon R. Musk

Technoking of Tesla, CEO & Director

Yes, maybe. Maybe you could rent Optimus hourly. I mean assuming we get all these things -- we do all these things, I think probably Tesla will be the most valuable company in the world.

Unknown Attendee

We all know how the media treats you.

Elon R. Musk

Technoking of Tesla, CEO & Director

So well.

Unknown Attendee

Yes. So I don't have a question for you today. I just want to say, on behalf of my 6-year-old at home, Kyler Scott, that's watching right now who thinks you're awesome as well, thank you for making the world a better place.

Elon R. Musk

Technoking of Tesla, CEO & Director

Thank you. Love you guys. I'm going just like to say thank you for helping make it happen because without the -- without you, without the early adopters of electric vehicles and sort of full self-driving, Tesla would not be where it is today. So thank you for your support.

Unknown Shareholder

What a presentation. Thank you, Tesla team. It's an honor to be a stockholder. Elon, I brought you the final checkpoint for SpaceX and many moon, maybe little next time, play with it. My name is [Naveed Warhalem]. I'm a former brownfield resident. My first suggestion is to add a new steering mode option where the driver can select lazy mode and have the software accommodate between comfort, standard and sport modes depending on the speed the car is going. This will increase handling and safety.

Second, when disengaging auto pilot with the wheel, the accelerator stays on. Please fix it. Last one, weeks ago, talking to Mr. Sam Patel at Starbase, I told him that the team will add a tab in the SpaceX website and disclose what type of skills and preparations are going to be needed from us to accomplish the greatest adventure ever, ever in human history, going to Mars.

Elon R. Musk

Technoking of Tesla, CEO & Director

All right. Well, thanks for the suggestions. Those are good suggestions. Thank you. All right. Sure.

Unknown Attendee

So I do actually have a question, but one thing I want to ask is like people ask you all the questions, what do you think people miss and should be excited way more about? And what do you think people are threatened way too much about and shouldn't be worried at all?

Elon R. Musk

Technoking of Tesla, CEO & Director

Yes, that's actually -- that's a good point. I think actually, the questions and ideas posed by retail investors, like small retail investors, like I think many of you in the audience are actually the most insightful. And it's -- I find it remarkable that -- essentially amateur -- like normal everyday people actually understand Tesla better than the analysts. I mean I wish you must see this as -- and I mean, I think, like to really say like, like what's the point of a company?

The point of a company is to create useful products and services. A company is not -- should not exist in and of itself. It exists. It's a group of people who gather together to make products and services. And if those products and services are great, it's a valuable and useful company. And if they're not, it's not.

And so really, to understand a company, you must use its products. And if you think the products are great, then it's -- well, the company is great. That's it. That's how it is. And so I think, ironically, all of the people that sort of professional analysts don't drive Teslas. So like, well, okay, maybe you should. Yes, cool. I mean we aim to make Tesla the most amount of fun you can have in a car.

So yes. So let's see. So I think that there are a lot of really good and insightful ideas that I see on the Internet, on Twitter and whatnot. And -- oh, yes, Twitter. So yes, so let's see. I think sometimes people fret a bit too much about the short-term things that -- which are clearly just bumps in the road type of thing, where there might be a supplier shortage or some shutdown in some part of the world. But really, those things are clearly just kind of one-off items that don't really matter for the long term.

The sort of -- the trend -- like looking at the sort of cumulative output and cumulative miles driven, and you can see that, that cumulative output is a very clean exponential. And so I guess, I see people fret a little bit too much about this quarter or that quarter. But if you're a shareholder, a company is really like the net present value of future cash flows. And so what is -- 1 quarter is not really a big deal. I think if you see people panicking, then instead of -- you're saying, oh man, my stock has gone down. This is a buying opportunity.

Unknown Attendee

Hi, Elon. Thanks for the meeting. I became a Marine because I want to help protect your future base on Mars. My friends and I are trained and where we support the mission, would you be open to this idea?

Elon R. Musk

Technoking of Tesla, CEO & Director

Yes. Space marines? Absolutely.

Unknown Attendee

Hi, Elon. A lot of Tesla's products today focus on electrical energy for a sustainable future. Do you foresee Tesla perhaps exploring thermal energy sustainable products other than HVAC, for example, in this Gigafactory, taking the residual heat from the Giga presses and applying them to see the drying up into your paint line?

Elon R. Musk

Technoking of Tesla, CEO & Director

Yes. I think getting dual use of like if you use electricity to do something and then generates heat and then you're transporting that heat elsewhere within the factory, it's probably a good idea to do that actually. It is -- and sort of I would say future optimization, but it is probably something we're doing in the factory. And it is something we do in the car.

So in the car, we carefully manage the electrical and the thermal energy. And so like one of the ways that we achieve a long range in cold weather is by both charging the pack and heating the pack. And then the pack acts as both an electrical and a thermal reservoir to achieve long range even in very cold climates. And so we're constantly, within the car, shuttling heat back and forth between motor, driver, motor power electronics, pack and the cabin volume. So that same concept should be applied to a factory, I agree. Yes.

Unknown Attendee

Elon, what's up? My name is Justin. Some know me as [SMD Capital] in Twitter. I had the #1 voted question last earnings about scaling to extreme size. I have another big question I think a lot of people would want to know. In regards to when would Tesla launch their first pilot city for the Tesla network, the robotaxi business?

Elon R. Musk

Technoking of Tesla, CEO & Director

Well, I think it's actually going to be probably much more widespread than that because Tesla is developing a general solution for self-driving. And it's not really specific to one city or location. Now there's different regulatory requirements in various cities and states. So some locations will offer regulatory approval sooner than others, but we are aiming for a general solution. And in fact, if you created a sort of a randomly generated alternate earth, our system would still work. Like literally, like you had some sort of computer-generated earth that's made roughly the same rules as current earth, our system is sufficiently generalized that it would work in a computer-generated alternate earth. So yes.

Unknown Attendee

So I'm Gary Black, Managing Partner of the Future Fund. Tesla is our largest position. Probably the thing we worry about most, it's not PR, but it's succession. So key-man risk is a big thing. How does the Board think about your succession? And especially when you have a judge is going to decide in a couple of months whether or not you have to take over Twitter. How would you split your time?

Elon R. Musk

Technoking of Tesla, CEO & Director

Well, I think Tesla is definitely gathering a lot of momentum, and we have a very exciting product road map that will last a long time. So obviously, execution against that road map is difficult because these are not simple products. They're not copies of what anyone else is doing. They're new things. So -- but I intend to stay with Tesla as long as I can be useful. And not going to be most useful, I think, on the product design and manufacturing.

So basically, factory design, product design and sort of manufacturing optimization. So -- and we do have a very talented team here. So I think Tesla would continue to do very well even if I was kidnapped by aliens or went back to my home planet maybe. But so yes -- no, I think it's a good question. And to be frank, I don't have an easy answer. Open to ideas.

But I'm definitely working as hard as I can and I'm very excited about the future of the company. And I think it's got a very bright future even without me. So I'm not leaving, just to be clear. I obviously have to be a little careful about what I say about Twitter because there is like lawsuit and stuff. So sometimes people get bent out of shape. But I do use Twitter a lot. So it's not like I'm like randomly going around, wanting to acquire companies or something. I'm not like the hedge -- I'm not a hedge fund or private equity firm or something. So in fact, the only 2 publicly traded securities I own are Tesla and Twitter. That's it.

So -- and I think in the case of Twitter, since I use it a lot, shoot myself in the foot a lot, dig my grave, et cetera, but I think it's -- I do understand the product quite well. So I think I've got a good sense of where to point the engineering team with Twitter to make it radically better. And I do sort of have a grander vision for what I thought X.com or X corporation could have been back in the day. It's a pretty, pretty grand vision.

And obviously, that could be started from scratch or -- but I think Twitter would help accelerate that by 3 to 5 years. So it's kind of like something I thought would be quite useful for a long time. I know what to do. I don't have to have Twitter for that, but it would -- it's like I said, it's probably at least a 3-year accelerant. And I think it's something that will be very useful to the world.

Unknown Attendee

How's it going, Elon? My name is Ronnie. And with the projected release of the robotaxi coming in the years ahead, would it be looked at as The Boring Company? Would it be used to get regulation for full self-driving, and would it be a good venue for the robotaxi? Also my little brother, Zane, says, hi. Owns all Tesla Hot Wheels.

Elon R. Musk

Technoking of Tesla, CEO & Director

Okay. Cool. I say hi to him back. So yes, The Boring Company is making good progress, actually. And for the longest time, like I give a talk somewhere and people say, what are opportunities you know about? I was like tunnels. And they'll be like, for 5 years, I said if somebody can just do a tunneling company, we can solve traffic and we can have also very high-speed transport between cities. Because while I am a fan of trains, I like high-speed trains, they do intersect -- go through towns and neighborhoods and chop people's property in half. And they're very loud.

So -- but I want to be clear, I'm pro train, for those who are train people. I take every opportunity to drive -- to go on interesting trains. So -- but if you have a sort of a much simplified version of the Hyperloop, it's really just Tesla is in a tunnel that's depressurized, you can go between cities super fast and without disrupting the stuff above ground. So that's kind of the vision for The Boring Company is to make roads 3D and have sort of an arbitrary number of layers of roads. And I think you can solve essentially any traffic problem in any city, if you go 3D with tunnels. So multiple areas of tunnels going from -- connecting the city.

And you can also turn a lot of the streets into parks because you won't need to have cars on the roads. You won't need parking. So I think Boring Company, I think, is capable of much more transformation than it may seem. And we actually have an operational tunnel in Vegas right now. So yes, if you go to Vegas, go to Resorts World, and you can hop in the tunnel and go to the convention center and like, yes, and you can [indiscernible] Exactly. I do what I can to support those. So -- but yes, I think The Boring Company is going to do some pretty interesting things in the years to come. So let's see.

Unknown Attendee

Good afternoon, Elon. I think many people share my experience. I gave you or at least, Tesla, my complete family's legacy because I believed in it. And thank you for you and your company outperforming. I think you saved a lot of us.

Elon R. Musk

Technoking of Tesla, CEO & Director

Thank you.

Unknown Attendee

So my question is this, commercial aircraft have something called ACAS, where aircraft relay telemetry of their position between one another to prevent a collision.

Elon R. Musk

Technoking of Tesla, CEO & Director

Yes, sometimes too much telemetry.

Unknown Attendee

Yes. Thank you. So taking this to a higher level, do you see Teslas communicating with one another and Dojo turning into some kind of ultimate air traffic control for Tesla supply chains and robotaxi? Thank you.

Elon R. Musk*Technoking of Tesla, CEO & Director*

Actually, that's an interesting idea. I haven't thought about that. I mean right now, our goal with Dojo is just to be really good at video training. So we actually already have, I think, maybe the fourth and maybe approaching the third most powerful computing center in the world for AI training. I think it might be third at this point, which obviously uses just an enormous number of GPUs and stuff. So our first goal with Dojo is to make it competitive and be more effective at neural net training than a whole bunch of GPUs. And it might get there soon-ish.

And then, of course, it can be used for many other neural net training tasks. It's -- fundamentally, it's a computer designed from the ground up to be optimized for neural net training, which really no computer has -- that's never been done before. And yes, so -- and then maybe it will do traffic control. I haven't really thought of that. The Tesla is probably -- there will be some merits to communicating for Teslas to communicate to each other. But that won't be needed for full self-driving at all.

And for a long time, the vast majority of cars on the road will be manually driven. So the value of Tesla-to-Tesla communication is not that high, except for perhaps communicating traffic issues or accidents, pot holes, things that may be helpful to -- road closures and that kind of thing. So it's like you're getting real time, a Tesla ahead of you had seen a road closure and you get that real time updated to your car, so you don't get stuck in the road closure situation. That's the kind of stuff that I think we definitely -- we are working on right now. So All right.

Unknown Executive

All right. We have one last question, and it's yours.

Unknown Attendee

Thank you very much. Hello, Elon. Simply, I would just like to say thank you for everything you've done for Earth and the community and everything you've done. I have one question. And aside from working for Tesla being a shareholder or purchasing a Tesla, how can the masses help push your vision?

Elon R. Musk*Technoking of Tesla, CEO & Director*

All right. Well, I think just generally, encouraging sustainable energy and being supportive of that, I think, is really helpful. So -- but I say you're doing great so far. So like I said, without your support, Tesla wouldn't be where it is. So as people like yourself and everyone in this room and out there, the 3 million people who bought our cars and the millions who have gotten solar. And that all really helps make the world a better place for the future.

And I'd say like definitely, I'd like to sort of convey a message of optimism about the future. And like if we work really hard to accelerate sustainable energy, sustainable transport, the future will be good. And I think just to make sure people know that. Like I'm not suggesting complacency at all. I'm just saying if we work hard towards a sustainable future, we will achieve it. And the future was bright.

So all right. Thanks, guys. Thank you.

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