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<<Rod Lache, Analysts, Wolfe Research, LLC>>

So welcome, everybody, to the 2023 Wolfe Auto and Auto Consumer Conference. We'd like to thank everybody for coming to us live again after doing this for two years virtually. Do I look any different than on Zoom? I don't know if taller? Yes, well, maybe skinnier, younger? I don't know. And I want to especially thank our conference team, Tatjana Petrovic, who worked so hard to pull this together. It takes a lot of work to pull these conferences together and hopefully, you guys will appreciate this. Everything will go smoothly and you'll get a lot out of it.

We've got, I think, a great agenda here with management teams and thought leaders who are changing mobility. And it's our view that it's as clear as ever that mobility is going to change the world. Today's agenda is going to cover a lot of the mega themes that we've been talking about, including EVs and AVs. And we're also going to hear about a huge opportunity to transform the industry and meet some of the companies that are actually working through that transformation. We're going to be talking to Ford here in about a minute.

And then in our second fireside chat, we're going to be talking about industry cost benchmarks and how transformational they could be and whether they're achievable. And you're going to actually see physical examples of that. Right outside of this room, we've got two huge battery packs, for example, and I'm not sure exactly how that was checked into the overhead bin, but it somehow got here. And I think it tells you just -- it tells you a lot more than you can possibly see in a PowerPoint. And I think it underscores a lot of the things that our next management team is going to be talking about.

And then tomorrow, we have a little bit of a different flavor to the conference. We'll be focusing a lot on macro issues, and our top-ranked consumer analyst, Greg Badishkanian, is going to be closing out the day with a candid discussion with some large dealers, auto repair shops and auto distributors. And we think that we're all going to get a lot out of this.

So let's dive right in. We're thrilled to be kicking off the conference with Ford's Jim Farley and John Lawler. Jim, as many of you know, has been with Ford for 16 years. I actually don't know how long John has been with Ford.

<<John Lawler, Chief Financial Officer>>

33.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

33 years. But, boy, like the past couple of years, the past three years have been really very different for this company. And we've seen this company take a lot of actions to address some deep-seated problems to make Ford much more successful in the future. Some of these things are just radical for the auto industry, exits from major markets and product lines that don't produce appropriate returns.

Most recently, Ford announced a radical reorganization that will result in separate entities, including one focused exclusively on EV products. So I'd like to thank the management of Ford for joining us. And why don't we sit down and we can start our fireside. Great. Well, thanks again for being here.

<<Jim Farley, President and Chief Executive Officer>>

Great to be with all of you. Actually, I think the conference comes at a great time for our industry because it's all in execution now.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Like I said this morning, when we kicked off the conference, the plane has taken off now. It's about landing it.

<<Jim Farley, President and Chief Executive Officer>>

Yes.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

So I'd like to start maybe by talking about something that you mentioned two weeks ago on the Q4 earnings call. And that was, you alluded to some deep-rooted problems at the company, and you characterized it as dysfunction. And it sounded like those things contributed to Ford leaving something like \$2 billion of earnings on the table from lower-than-expected volume in 2022. And they may have also contributed to disproportionate variable costs. And John, you talked about having something like a \$9 billion increase in variable costs or purchase material costs last year.

<<John Lawler, Chief Financial Officer>>

Right.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Half of that wasn't even commodities.

<<John Lawler, Chief Financial Officer>>

Right.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

So I would like for you to maybe start by elaborating on what you mean by dysfunction, how can organizational changes address that. And within that question, at least my impression is that variable cost problems are really, really hard because they typically require engineering to fix them and product cycles to fix them. So that takes a long, long time. So maybe you can start off by talking a little bit about the issue, the org changes and then how long it's going to take to fix.

<<Jim Farley, President and Chief Executive Officer>>

Okay. Well, first of all, the \$2 billion is really around lost production in the fourth quarter, which goes back to our supply chain readiness and fitness. I was on Alan's team. I've watched several leadership teams at Ford. And so my perspective is we can cut the cost. We can cut people. We can do that really quickly. We'll do whatever we need to. The reality is if you don't change the efficiency of engineering, supply chain and manufacturing, the basic work statement, the way people work, the efficiency of that, it will grow back because it did. It all grew back.

And my job as CEO is to make sure far after I'm gone, that it doesn't grow back. And to do that, we decide as a team to make a more fundamental change than just what we have to do, cut the output costs. But the most important change we're making that we're deep into now, by the way, quality and cost can be solved by the same approach is to go into the company and literally change the behaviors on how we engineer something, how we source it and how we build it.

And that bet is one of the biggest bets. We have a double transformation. It turns out the building of the new company was easier than we thought. And getting the base profitability of the company that funds all that, the first part of the transformation has been a more fundamental change. We have more than half the leadership team is new to Ford. Of all the things you would ask us, you should ask us about the talent. And they all said the same thing when they come. I'm so excited to build this new future.

But my god, we have a lot of work to do to change the base. And that's exciting for us. It's not a bad thing. It's all opportunity. John will go through the specifics, but I want to give an overview that these huge transformations are not linear, perfectly predictable things. Did I think we'd be Number Two in EV sales in the U.S.? No. Did I think that the Lightning would be the best-selling EV pickup in the U.S.? No, because I thought there would be three others on the market.

Did I think that Ford Pro would be getting the traction it has? No. Did I think that I would have people like Alan Clarke and Doug at the company or that we're redoing engineering so fundamentally? No. Did I think that BlueCruise would be beating Tesla and consumer reports on hands-free operation? No. So that has gone really well, and we can get into

that. But this is really about redesigning what we do in the 120-year-old part of the company.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

But in terms of us actually seeing evidence of improvement in fixing the base, just considering that it is variable cost related, is this the kind of thing that we'll see this in three or four years when the next-generation products come out? Or is this something that, even in the short run, we'll see some progress being made there?

<<John Lawler, Chief Financial Officer>>

Right. So if you look at what we believe our cost gap is to traditional OEMs, about \$7 billion to \$8 billion. And so we think it's about \$3 billion to \$4 billion of material cost, which, to your point, is going to be a longer arc to take out. And it's primarily driven by complexity over design. And that runs through every part of the business, Rod, it runs through material cost, it runs through logistics. It runs through manufacturing, it runs through engineering. And that has to be a key thing that we work on. And you've talked about the teardowns and you look at that versus not only traditional domestic competitors, but the new competitors that we have.

Of course, warranty is an issue for us of about \$1 billion. We had talked about \$1 billion to \$2 billion. In 2021, we improved by about \$1 billion. Last year, we were about flat. So we have \$1 billion or so to go. And then you talk about structural cost. We had identified \$3 billion of GAAP last March. We're still about that. And that's going to run through manufacturing. It's going to run through spending related, et cetera. But what's going to be really key to see it, which is an important part of your question is the segmentation because it's not going to happen the same through each of the segments.

If you guys are going to just look at the income statement and say, well, should material costs be coming down, no, because we'll be growing. And as we grow volumes, material cost is going to go up. But you should see the scaling in that and that the cost is going up at a much lower pace than the revenues. And then we'll do the bridges, of course. And then on the structural costs, you'll start to see those structural costs coming down, manufacturing costs, engineering costs, et cetera, that will start coming down in Blue. But we'll be growing in Pro and E. So it's going to be increasing there.

So the segmentation is actually going to be really critical for you guys seeing the traction we're making on these cost reductions and how we're using that to drive growth and profitability in other segments and then getting ourselves where we need to be in the Blue business.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

So it sounds like...

<<Jim Farley, President and Chief Executive Officer>>

And on warranty, we'll see it in initial quality. And then obviously, the warranty cost to be lagging, but you'll see very quick progress on initial quality. That's where it's going to – our fitness there will show up there first.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

That \$7 billion to \$8 billion will show up even in 2025, 2026, two thirds of the company is going to be the ICE businesses. And hopefully, we see something.

<<John Lawler, Chief Financial Officer>>

Yes, you'll see that. And you'll see it on the year-to-year as we show the bridges.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

The \$2.5 billion cost opportunity that you mentioned for this year, can you elaborate on what that is? And are you confident that you can actually bring this down? Because mean Tier 1 suppliers aren't exactly knocking the cover off the ball in terms of their earnings. I mean there's a seating company that will be speaking later. It has like a 2% margin last year. And just curious about how you are managing that and them coming back to you as they did last year with incremental asks.

<<John Lawler, Chief Financial Officer>>

Well, you had raised it earlier as the increase in the material roughly \$9 billion. About less than half of that was commodities. We do expect to see commodities come off this year. So just looking at the forwards in the curves, maybe \$1 billion to \$1.5 billion there. The other thing is, is we have a lot of our suppliers on what we call an index program. So their commodity costs, we mark with the indexes. So you'll have – when commodity costs are rising, they'll go up a little bit quicker. As they're coming down, they should come down quicker for us, I think, relative to others.

And then we have about \$1 billion this year that we're going to take out back to what Jim was talking about relative to dysfunction. We had very, very poor schedule stability last year. And then our complexity on top of that, schedule stability drives significant cost and expedites premium freight, production disruptions in our competition, labor sitting around, down weeks that were planned that we had to pay for. So, we need to fix that piece of it. Normalize our production schedules, let that flow through. We believe there's at least \$1 billion of opportunity there just by fixing some of the aero space.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Yes. I want to switch gears and ask you about the consumer in the U.S. and affordability. The average transaction price in the car has gone up by about 28% from December 2019

to December 2022, which is a lot. And you did mention that you thought average transaction prices might come down by about 5% by the end of the year. Is that enough to support a recovery? Or do you think that affordability is just the reality we're going to – it's going to constrain the market for a while?

<<John Lawler, Chief Financial Officer>>

Do you want me to go?

<<Jim Farley, President and Chief Executive Officer>>

Yes.

<<John Lawler, Chief Financial Officer>>

So on that, we're still seeing strong demand. Our order bank was up about 14% in the fourth quarter. And so the industry is still constrained. We're seeing next year, this year at about \$15 million. Probably a normal run rate would be about \$17 million. We do see prices coming in. There's room to move with the dealer margins, and we see that – the back half of the year, we're probably going to see incentives increasing. So demand stays – remains relatively strong. And remember, we've been at this constrained industry for about three years. One of the interesting things for us is as we look at it now that we look at it in the segments, we see that demand in the commercial vehicle business is going to remain strong.

Vehicles are aging. They need fleets that need to be replaced. There has been significant demand beyond supply for the last few years, and the order bank is extremely robust. Battery electric vehicles, I mean that's ramping. That's new. We're selling every one we can. Lightning order bank is sold out. And then when it comes to the ICE vehicles, as I said earlier, we're still seeing strong demand. That's where we're going to see probably the issue come to fruition first if it does and see that in the back half, and that's where incentives will be coming back. And as that plays out over time, I think we need to see what the run rate is coming out of this year, where demand is, what's happening with the economy, and then we can take a look at 2024. But I think what we've called for this year is a pretty solid foundation.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

A lot of pent-up demand is potentially the answer there.

<<John Lawler, Chief Financial Officer>>

Yes, a lot.

<<Jim Farley, President and Chief Executive Officer>>

At the consumer level, we can't ignore the used car price change. So payments are going up a lot for customers. Thank goodness, we have such a fresh lineup, as John said. And where we're seeing that is retained gross for dealers. Their retained gross margin is almost perfectly correlated to the increase or decrease of inventory. So stock's going up. Retained margin's going down. The OEM is after that. And you have dealers here. You can ask them about that. But I think the pressure we'll see at the consumer side is their used car value is not what – it's not nearly worth what it was a year ago, and that's forcing payments up. But we have a new Super Duty. We have a new Ranger. We're sold out of Maverick. We're sold out of Bronco. It's a long list. So we're very fortunate.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

About a third of that 28% inflation is actually dealer margin that's gone up. And as you said, I mean it's already coming down a bit in the past couple of months, and there's a lot of room to go, but you're talking about also changing distribution more fundamentally. I was hoping you might talk about where that needs to go and why you think this \$2,000 per vehicle of cost is actually achievable. What's the incentive on the other side to work with you on that?

<<Jim Farley, President and Chief Executive Officer>>

Okay. First of all, Ford is like a very different company than our competitors. We have Pro. We're 50% of that market, 5-0. Our second-place competitor isn't even half our size. So the dealership distribution model for Pro is our advantage, because we only get 10% of customers doing parts and service business with us post warranty and Pro. With the software that we're seeing consume now and the cycle of people turning to us for more parts and service, actually 24/7 service, physical service as well as now we have thousands of mobile trucks doing service for Pro, the retail network we have is actually our biggest advantage as well as body upfitters and our lineup of product and the software we're shipping to the customers and the product.

On the retail Blue side, our distribution model through franchise dealers is a premium model. And so we have to give more to the customer, like remote pickup and delivery for all transactions, like a lot of initiatives. And for us, we're going – 50% of our sales now in Blue are from orders. So, we're trying to lean the inventory out. And that's a really different model than I think our competitors. We were 6% sales from delivery just year and a half ago. So the real change we see in the efficiency of distribution will be retail EVs. We can debate how big that market is. But the direct model that's emerged is going to change, too. If I could take this whole room and everyone online and go to Norway, you would see a very different Tesla in Norway. Physical outlets, a lot higher cost because their UIO was so large in Norway, they can't get by with just online and remote service.

There's a point where your units in operation gets so big that you need to handle used cars and trade-ins, complicated financing and especially physical repair service. So the

direct models will get more expensive. But we think we have to really change fundamentally the cost of our distribution for retail EVs. Go online, okay? We need to cut the number of people it takes to sell a vehicle, and that needs to be a really simple couple of clicks to buy online e-commerce. We have to get the inventory out of the system. Inventory is – the cause of inventory is very expensive and it's spread across many different people. So it's not obvious. But when you actually do the calculation, it's an enormous cost of that \$2,000, it's like a third. So we have to get the inventory out, and we're going to go to that model.

The next thing is we have to make sure that we do things remotely. So people don't have to go into a physical dealership and so all transactions, pickup and delivery. And probably the most fundamental change for us is non-negotiated price at the brand level. So when you buy a Ford EV in January next year, customers will negotiate. And that takes people and money and time for all that to happen. Non-negotiated price really facilitates e-commerce, and it's good for the customer, too.

I think there's a next layer of efficiency we have to find beyond that, because you can sell a lot of EVs. But if you want to make 8%, it is a game changer in terms of every cost in our system. And I hope we get into that. From engineering in the vehicle, the labor content in the vehicle, our supply chain and vertical integration, so much has to change. And distribution has to change, too. And I think even the direct model may not be fully competitive to get to 8% in a fully competitive overserved market. Maybe two years ago, it was fine. But in a market where there's lots of choice, lots of competition and high pricing pressure, can you get away with no advertising? Can you get away with the distribution model that a direct model has? I'm not sure.

So I think – the industry needs to start focusing on making money on EVs. And when you do that, it's a total game changer including distribution. And I think there's another layer we have to get to of efficiency.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

I'm going to ask you about what you're alluding to in terms of EV cost competitiveness in a second. First, just maybe higher level on growth. Ford in 2019, pre-COVID, did \$144 billion in automotive revenue, excluding Ford Credit. Three years later, in 2022, you did \$149 billion in a smaller market. In North America, you went from \$98 billion to \$109 billion. So obviously, prices are up. But now you're spending – you're increasing your spending in a number of areas. If you are successful, how big is Ford in three years?

<<Jim Farley, President and Chief Executive Officer>>

A lot bigger than we are. I mean just look at the plants and the battery plants. And what's different about Ford is our Blue business, we have reconstructed the segments we compete in very carefully, and they are the segments that probably won't go electric immediately. The brands that are in the two-row crossover business and the passive car

business, the EV transition will be much faster for their customers. A Super Duty, an F-150, a Bronco customer, they're different. So – and we've seen that already. In the very first inning of a nine-inning game, our EVs are like 70% incremental to the company. And I mean, we have so much upside on Pro. We're 50% of the market. when we get the cycle going, like we're seeing now. I mean, we haven't had a new product in Europe for several years in commercial, and our share keeps going up. Why is that because we're focusing on Pro, the services side of Pro. I don't know if, John, if you want to be any more specific than that?

<<John Lawler, Chief Financial Officer>>

Yeah. We'll break out in May, Rod. We're not going to talk about today what the actual numbers are. What we'll do in May is as we get into the strategy on the segments we'll start talking a little bit more about revenue pools, volume pools and profit pools to kind of frame that up for folks because it's really important to think about the segments differently.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Let me ask it a little bit differently then and maybe you could address this. You're targeting 2 million electric vehicles capacity by 2026. We assumed about three quarters of that will be North America. It's kind of proportionate to the size of the company. Maybe that's right or wrong. But we have applied some assumptions to the ramp and thought, okay, maybe by then, there's 1.3 million EVs sold here in North America, and maybe a third of those are incremental to Ford's market share.

<<Jim Farley, President and Chief Executive Officer>>

A third?

<<Rod Lache, Analysts, Wolfe Research, LLC>>

I don't know, I mean, do you think it's still 70% in that time frame? Well, I guess the point is even if it's a third...

<<Jim Farley, President and Chief Executive Officer>>

The design of the vehicles is in our hands, right?

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Yeah.

<<Jim Farley, President and Chief Executive Officer>>

So we are very intentional about that. Like the most important question people should be asking Ford about EV profitability is, what segments are you going to be competing?

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Yeah. Well, let me ask you.

<<Jim Farley, President and Chief Executive Officer>>

So I would say we'll give you the details, as John said, but I'm not putting in that kind of capacity for a third incrementality.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Well, even if it was only a third you'd be gaining 200 basis points of market share in North America, which is a lot, just given the history of the company. I know this is a very different area and there's a lot of opportunities but where do you see that coming from?

<<Jim Farley, President and Chief Executive Officer>>

We see it on the commercial side coming from our traditional competitors who have not moved in the same way we do. We'll be on our second cycle of EVs while they're coming out with their first. Some won't even have their first. And then on the passenger car side, we see it from the import brands. Like we're already seeing it. We're already seeing it from them. It's interesting lightning customers are mostly new to pickups. Think about that. Pickup is 13% of the industry. Almost all of our lightning sales are not traditional pickup to our customers.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Yeah.

<<Jim Farley, President and Chief Executive Officer>>

The people who have hesitated to buy a pickup but like the imagery and the capability but now they have lockable storage, they have a mobile generator, it's a different kind of product than a traditional pickup, and we're seeing new people. So – but I think a lot of those, the trucks and the commercial will be from our traditional competitors who aren't moving in fast or investing or executing as well. But we'll have a lot of conquest like we're seeing a Maverick. Most of Maverick sales are Toyota and Honda Civic, Corolla, especially RAV4.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

It sounds like the competitive landscape is going to change over the next couple of years.

<<Jim Farley, President and Chief Executive Officer>>

Yeah, a lot.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Let me ask you about competitiveness on costs. And I asked you this question on the earnings call about whether you would be able to make a \$40,000 crossover and get a 20% margin on something like that and your answer was interesting. You said, look, we don't really want to make that because that's not really that rewarding to shareholders. We want to focus on our strengths and I think that, that's – I think that's great. Like that's the biggest determinant of profitability is always price, not cost. But I still want to understand competitiveness on costs.

About a year ago, you talked about the cost of a Mach-E being \$25,000 to \$27,000 more than the Edge, including \$18,000 for the battery and electric motor versus the internal combustion engine, which seemed like that was a jaw-dropping number. I'd like to know, just including IRA, do you think that you can get cost down to a similar level in this 2026-time frame, which is another way of asking, do I want to own a company that's 40% EV?

<<John Lawler, Chief Financial Officer>>

Yeah. I'll start.

<<Jim Farley, President and Chief Executive Officer>>

Yeah.

<<John Lawler, Chief Financial Officer>>

So we set the target of 8% on our BEV business, 10% as a company, 2026-time frame. We believe that, yes, we can bridge that to 8% from where we're at today on our battery electric vehicles. And there's four key – five key areas that we need to unpack there. And I think – and Jim will talk about it because he's got a lot of passion over this. So I'll set it up. And really, and I'll be a little bit more technical about it.

Look at it and say, okay, there's battery chemistries. You've got to have the different battery chemistries and there is evolving and they're lowering cost. We just announced our LFP this week, and we see that having a significantly lower cost, and that's going to be – could service up to 20% of our BEV. We have NCM. You have LFP. You've got manganese-rich coming. Eventually you'll have a solid state or a form of solid state. And so having the right battery chemistry is important, so you can ride that.

But eventually, we believe the batteries will be commoditized, and they'll be about the same. There's not going to be that much of a difference there. But you have to obsess

over efficiency. The most expensive part, as you just said, of the EV is the battery. So what are you doing to get the lowest size, smallest size battery you can in the vehicle, and that comes to the design. And what helps you do that is a complete clean sheet, ground-up design process for those BEVs.

We're in the second generation. We've already started our third generation. We have the folks at our company now, to Jim's point, about talent that are radically changing the way we approach this, and they're obsessing over the efficiency of the battery and getting the smallest battery we can in the vehicles with the right chemistry to get the maximum amount of range that we think is needed for those customers, and its customer-specific. So that's what you have to do.

So it's chemistries. It's efficiency obsession. It's clean sheet design to simplify the design. It's being in the right segments. It's the differentiation that you're going to have through your fully networked vehicle and architecture and the software that you can put to that. It's the distribution cost, as Jim said, and then it's the service and how we can be competitive there. Those are the buckets we're driving that will bridge us to the 8%. And what we'll do at Capital Markets Day is we'll build that out in detail to show you what that is and put some meat behind that.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

One, maybe Jim, you can answer this question on Model E and how this is different. So we host this weekly webinar on Thursday, is called Car Talk and we asked our listeners, investors, people that are here, do you think that legacy automakers generically could become cost competitive with Tesla? 100 people decided to answer the poll question, 92% said no.

<<Jim Farley, President and Chief Executive Officer>>

Yes, I'm with them.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

It's okay. So you're not surprised.

<<Jim Farley, President and Chief Executive Officer>>

I'm in the 92% camp. That's why we split the business.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Okay, so maybe talk about that.

<<Jim Farley, President and Chief Executive Officer>>

Prejudice is so high for how we've done things. I'll just give you some examples. Now we're already engineering second cycle. We're working on third now. Some are just delivering that first. So why do we split the company? Well, because I heard my Head of Engineering say, there's no design cost difference between a Model Y and Mach-E. Mach-E is super popular with customers. So let's just talk the part that customers don't see, the cost. I was like. So the reality is our Wiring Harness is 1.6 kilometers longer, it's 70 pounds heavier and battery costs it's \$500 of weight just to carry the Wiring Harness around.

The battery is so expensive in these vehicles that the math totally changes around aero, around simplicity of engineering. Even the cooling system that we use, which is an ice cooling system metric had to withhold like 4 times the pressure of the cooling system that we actually had to use in the Mach-E. We had – even the piping of the cooling system was triple what it needed to be in terms of spec. We have 50% more fasteners.

So we've redone all of our platforms, completely changed the engineering, large castings, a completely different math. And what you'll see is a vehicle like half the labor content, half the fasteners half not just lower parts, but radical simplicity. That's what John was talking about. And every watt of energy is measured. It's like Apollo – the Apollo program. Every watt has to be measured. If you need to spend more on the wiring system, not just for weight because it's much more efficient and save \$900 in a battery, spend the money. Aero, a fully optimized full-size truck on aero, 75 miles more range.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

How do you institutionalize that? So it sounds like you're going to have...

<<Jim Farley, President and Chief Executive Officer>>

We created a different company.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Well, I understand but how does the people that you're bringing in there, there's a different mindset in the company...

<<Jim Farley, President and Chief Executive Officer>>

Totally.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

...than there is in auto companies. So is it all ex-Tesla people and Apple people?

<<Jim Farley, President and Chief Executive Officer>>

No, it's a mix of people but the prejudice has to be different. And we found whether it was distribution, vertical integration and supply chain. But especially in the engineering side, we needed a completely different prejudice. It's not like we were – we just didn't know and when I saw that, and when I saw – Team Edison remember, the successful products we – now we're not Number 2. That was not created by Ford. It's created by a skunk works called Team Edison, okay? I saw how the Team Edison team was treated in the company. I watched it really carefully. And it became crystal clear for us, the leadership team, especially when we got the new talent in the company.

No, we cannot use our prejudice. Our prejudice will never get us to 8% profit. We have to design the vehicle totally differently. We have to manufacture it. We have to source it, and we have to sell it totally differently. And that's been a big transition. But I think equally exciting about that change is what's happened with Pro, which people I don't think really understand. If you're an investor in Ford, you need to be understanding what's happening in Pro because that's really the future state of the company will emerge first there.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

All the things that you're talking about here, by the way, you also checked this out. We've got examples of what these big cast things look like versus all the 300 parts that typically go together or you mentioned the 5-pound pressure cooling system instead of 21 pounds. You can see that here. I think it really brings a lot of what you're saying to light.

<<Jim Farley, President and Chief Executive Officer>>

We have a brackets group. We have hundreds of engineers who make brackets. If you want to make 8% margin on EV.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

No brackets.

<<Jim Farley, President and Chief Executive Officer>>

There's no bracket group. You can't allow people. Fasteners have to have at least three jobs. In the ICE world, fasteners can do one job, fasten a carpet to the floor. But in the world we're going to, fasteners have to have three roles at a minimum. They have to do – they have to locate, they have to fasten something. They have to make sure that it's put correctly together. It's a different world. You'll see it.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

On the competitiveness side, you announced this \$3.5 billion battery plant. And just going through the math on that, it looked like it was about \$100 million per gigawatt hour, which still looks a little high versus what we see from Tesla and maybe a couple of

others. Could you address the competitiveness of investment in batteries and whether you – what are the benchmarks that you're looking for to assure that on battery cost per kilowatt hour you're competitive?

<<John Lawler, Chief Financial Officer>>

Yes. So when you look at that, not all plants and not all processes are created equal. We've done extensive benchmarking. So there's four phases, right? There's the electrode. You've got to assemble that electrode, then you do the formulation around it and then you put the array together. Many of those announcements don't have all four steps in the plant. Each of those steps is about 25% of the investment. So you got to get apples-to-apples comparisons, right? And then the other thing is the building costs are a significant amount. There's a greenfield site, there's a brownfield site. What's happening to that? What are you building your capacity for? Is your initial announcement on capacity, where you're going to get to? Or can you expand for a much lower cost? So there's examples out there where, when you do that basic math, we're competitive with that. And then there's others out there saying they're more competitive. But as we've unpacked that, they might not have the electrode piece in the plant. They might not have the assembly piece in the plant.

And so we've normalized that across all of those elements. And of course, we're being very thoughtful about it, and we're driving towards that competitiveness to make sure we are competitive. But at the end of the day, as I said earlier, we think batteries are going to be more like commodities, and we will get to a normalized level. There's not that much difference between all of them. That's not where the game changer is.

<<Jim Farley, President and Chief Executive Officer>>

Yes. I would just say that – and actually, capacity turns out in this growth business, capacity winds up being a strategic thing, a strategic advantage. So how people – how each player announces the actual capacity is a competitive thing. So what do you want to give to competition? That's a choice.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

So if I said that competition is targeting cell costs \$70 to \$90 per kilowatt hour cell, not pack by the middle of the decade, those are the kinds of numbers that you guys are looking at.

<<Jim Farley, President and Chief Executive Officer>>

Yes, in LFP even more attractive, even more attractive.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Let's see if we have any questions in the audience. We've got a couple of minutes. Raise your hand if you do.

Q&A

<Q>: [Question Inaudible]

<A – Jim Farley>: If you're an engineer working in the Mach-E, which again is like sold out, right? So the product appeal is real high. You have a standard at Ford for the thickness of the cooling system, you have a standard for what a wiring harness costs. No, it wasn't because we rushed. It's because we have a prejudice and that prejudice was formed after 100 years of doing. For good reason we did those things. But now it's different, it's different. And so I would not say we made those changes. Now some yes, like the Lightning. Could we have done a ground-up EV pickup truck? Yes. But the things I'm talking about, engineering in the second cycle, we're not even talking about the 3rd that we're working on are really things that are embedded in a traditional OEM for good reason that an electric vehicle with a really expensive battery has completely different orientation.

Aero is a good example. An aero in the ICE world, it makes a difference, but it's not a total game changer. But in the EV world, with an expensive battery, aero is a complete game changer especially for larger 3-row type products. A traditional silhouetted 3-row crossover versus an optimized aero for the same interior space or maybe even larger, it's thousands of dollars of battery cost difference. Now that is just a mindset difference. When you design the vehicle, you can't let the designers take a lead. The aero people have to make the decision. So it's – yes, I hope when you go over these findings, you'll see what we saw two years ago.

<A – John Lawler>: And you have to have the best aero people, not only in auto, but the best aero people.

<A – Jim Farley>: Why do you think we're doing Formula One? Because they have the best aero people in the world.

<Q – Rod Lache>: Chris?

<Q>: [Question Inaudible]

<A – John Lawler>: I think when we unpack that, you're right. We've got good content in the vehicles. It's not necessarily content that the consumer sees. We've got complexity. We have tails. A good example, driveshafts in our vehicles. We went from 50 to 100 to 300. Do you know that 86% of those have a take rate less than 1%. So it's that type of content and complexity that's not value-add for the consumer. And so that's the route that we're getting to. We have a formula now we use with the team: highest revenue, lowest margin means highest cost. It's that simple. It's that simple. And when you look at vehicle

line by vehicle line, you just put that equation down and said, this is where we have the opportunity.

<Q – Rod Lache>: Maybe one minute, last question. Stefan?

<Q>: [Question Inaudible]

<A – Jim Farley>: We realized this several years ago. I said that like a couple of times. We're working on our second cycle. It's almost on engineering.

<Q>: [Question Inaudible]

<A – Jim Farley>: I just said we're – we found this out a couple of years ago. We've been engineering a whole second cycle. You haven't seen it but it's like being locked down now. What's even more important is the third cycle because no one's going to stand still. We have to think about the next breakthrough beyond what we've already learned. But the biggest change, which we haven't talked about, is the competitiveness of our embedded electrical architecture because we've never had the chance to send software to the car.

We now know there's three software stacks we can ship to the car that the customers will pay for. Productivity for our Pro business, ADAS, there's a lot more revenue to be had there in Safety and Security. Whoever has the best electric architecture, will have the best software revenue. And so at the same time, we're doing all the lessons learned on the EV side, we're engineering and in-sourcing our embedded electric architecture to take back that. So we have a fully software-enabled vehicle before competitors. And for the traditional OEMs creating in-sourcing 100% of your embedded electric architecture and all the software that runs a car is a huge task. It's a real breakthrough project. And I'm proud to say at Ford, I've already seen the work in prototype. So we made that much progress. The next EVs you see from Ford.

<A – John Lawler>: Starting mid-decade.

<A – Jim Farley>: You will see them in the next couple of years, and we're almost – we're more than halfway through all the engineering.

<<Rod Lache, Analysts, Wolfe Research, LLC>>

Unfortunately, we're out of time. Jim and John, I want to thank you so much for taking the time to talk to us. The transformation sounds pretty awesome. There's a lot of opportunity here and we're going to learn more about that in the next session. If you want to be a better auto analyst, I'd encourage you to pay attention to that one as well. And with that, let's – we can wrap things up.

<<Jim Farley, President and Chief Executive Officer>>

Thank you.

<<John Lawler, Chief Financial Officer>>

Thank you.