



Nikola Corporation
Q3 2020 Financial Results
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Presenters

Britton Worthen, Chief Legal Officer
Mark Russell, Chief Executive Officer
Umran Ashraf, Global Head of Vehicle Engineering
Kim Brady, Chief Financial Officer

Q&A Participants

Jeff Osborne -- Cowen and Company
Paul Coster -- JP Morgan
Edison Yu -- Deutsche Bank
Joseph Spak -- RBC Capital Markets
Daniel Ives -- Wedbush Securities
Hilary Cauley -- JMP Securities
Pavel Molchanov -- Raymond James

Operator

Good afternoon and welcome to Nikola Corporation's third quarter 2020 earnings call. At this time all participants are in a listen only mode. A brief question and answer session will follow the formal presentation. If anyone should require operator assistance during the conference, please press star zero on your telephone keypad. As a reminder, this conference is being recorded.

At this time I would now like to turn the conference over to Nikola's Chief Legal Officer Britton Worthen. Thank you, Britton. You may begin.

Britton Worthen

Thank you and good afternoon everyone. Welcome to Nikola Corporation's third quarter 2020 earnings call. With me today is Mark Russell, Chief Executive Office of Nikola; Kim Brady, Chief Financial Officer; and Umran Ashraf, Global Head of Vehicle Engineering. During today's call we will make certain forward-looking statements within the meaning of the Federal Securities laws.

Forward-looking statements are predictions, projections, and other statements about future events that are based on current expectations and assumptions and as a result are subject to risks and uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this communication.

For more information about factors that may cause actual results to materially differ from forward looking statements, please refer to the earnings press release we issued today as well as the risk factors section in our current report on Form 8-K as amended that we filed with the Securities and Exchange Commission June 8 and June 9, 2020, in addition to the company's subsequent filings with the Securities and Exchange Commission. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements.

With that, I will now hand the call over to Mark.

Mark Russell

Thanks, Britton. We're pleased to welcome you to Nikola's third quarter 2020 earnings call. Thanks to the continued work of all of our dedicated people, Nikola made significant progress this quarter on our previously announced milestones. On today's call we'll give you an overview of what we achieved during the quarter, including updates on our manufacturing facilities in Ulm, Germany and Coolidge, Arizona, and also give you some context for our other announcements.

We also want to do something different this quarter: some technical insights into our Nikola Tre prototypes which are being assembled in Ulm, Germany at the IVECO industrial complex there. We've asked Umran Ashraf, our Global Head of Vehicle Engineering for battery-electric vehicles to give you a short primer on the systems in the groundbreaking Nikola Tre. After that, Kim will discuss our financial results, and then of course we'll open up the line for Q&A.

Let me start with a brief comment about General Motors. There's been a lot of speculation about our ongoing discussions with GM. The contemplated agreement, which would give GM an equity stake in Nikola in exchange for various in-kind services, is not yet closed. But discussions do continue and we'll give you further updates when appropriate or required.

Next, let me update you on our joint venture manufacturing facility within IVECO's industrial complex in Ulm, Germany, and also on progress with our greenfield manufacturing facility in Coolidge, Arizona. Along with our partner IVECO, we've made substantial progress on the refurbishment of the joint venture manufacturing facility that will be dedicated to the Nikola Tre production in Ulm.

The utility, civil work, and building infrastructure have been completed, including the manufacturing floor. Construction of the work cells is currently in process. Upon completion of

the work cells, we'll install an automatic guided vehicle line and the heavy-duty assembly tools we'll need there, including impact drivers and tilting systems. Barring further COVID-related delays all of this work is on track to be completed and ready for the start of production by the end of 2021.

Nikola broke ground on the construction of our greenfield manufacturing facility in Coolidge, Arizona in July. The facility's master site plan is complete, and has been submitted to and approved by the city of Coolidge. In August, preliminary earthwork began, preparing for grading work and utilities. Site grading began in October. Our manufacturing partner, Walbridge, also awarded the initial building subcontracts in October.

Building pad preparation and utility work continues this month in foundations, floor slabs, and steel erection will follow through December and January. We continue to submit secondary permits as required and we'd like to specially thank the city of Coolidge's building department, which has provided excellent and responsive support in helping us stay on schedule.

Manufacturing process engineering for Coolidge is underway, including work on key initial equipment such as frame turning, the heavy-duty dyno, and roll and brake test. Based on our current rate of construction we think we'll be ready for production trials starting in mid-2021 followed by a ramp up to the start of limited serial production by the end of 2021.

To focus and prioritize all of our work we've recently aligned our organizational structure to match our key milestones. Dedicated leaders and teams are now concentrated on executing well defined and critical objectives that will drive us to the start of production for the Tre battery-electric vehicle and the continued engineering of our platform for hydrogen fuel-cell powered trucks.

We now have a dedicated commercial and technical lead for each of our two primary vehicle programs for Class 8 battery-electric vehicles and Class 8 fuel-cell electric vehicles. And the result has been a heightened focus with a robust set of accountabilities. Shared services such as business development, marketing, vehicle design, vehicle safety, software, manufacturing, are working closely with both teams to create solutions that meet the respective programs' demands, and dedicated functions such as vehicle engineering have cleared mandates for milestone achievement.

Let's turn now to our recent Board and leadership changes. On September 20, Trevor Milton approached the Board and volunteered to step aside as Executive Chairman and from the Board. The Board accepted his resignation and Steve Girsky, the former Vice Chairman of General Motors and a member of the Board was appointed as Chairman.

Last month we announced the appointment of two new independent Board members, Steve Shindler, who was also elected to take Steve Girsky place as Chair of the audit committee, and Bruce Smith, who is our newest independent director. Both Steve and Bruce are seasoned

leaders and we welcome their experience and perspective as we continue to execute on our priorities.

And finally, before I turn it over to Umran let me give you just a brief legal and regulatory update. Nikola proactively contacted and briefed the SEC during the quarter regarding our concerns pertaining to a report published by a short-seller. Our counsel has been in close contact with the SEC and the Department of Justice, and we are fully cooperating with both in their requests for information and documents.

We remain focused on achieving our stated milestones and in continuing to drive our business forward and create value for our shareholders. With that I'll turn you over to Umran. He'll give you some insight into the exciting technology employed in our new battery-electric Tre prototypes. Umran.

Umran Ashraf

Thank you, Mark. Nikola has accelerated the development of the Tre BEV 6x2 prototypes for the U.S. market by working with IVECO in Ulm, Germany until our Coolidge, Arizona manufacturing facility is fully operational. The Nikola Tre BEV is part of our portfolio for zero-emissions Class 8 trucks that meet the distribution and delivery applications classified as short-to medium-haul.

The Nikola Tre BEV's heavy-duty truck elements are leveraged from the production S-WAY platform in partnership with IVECO. This includes the chassis elements such as a high strength steel ladder frame with multi-link rear suspension on the solid axle with electronically controlled air springs and 17-inch air disk brakes. All integrated with a state-of-the art BOSCH electro-hydraulic steering system.

Nikola's technology focuses on developing electric vehicle propulsion architecture including the high voltage battery system, electric drive axle, vehicle thermal management, vehicle controls, and human machine interface including infotainment. Nikola has engineered a bespoke 800 volts propulsion architecture for the Class 8 battery-electric truck consisting of 720-kilowatt hour multipack battery system integrated with a 480 kilowatt continuous and 1,020 kilowatt peak single speed PMSM dual motor drive electric axle.

The system is capable of handling 82,000 pounds gross combined vehicle weight with a projected range of 250 to 300 miles, up to a maximum speed of 75 miles per hour with hill start up to 17% grate with 1,800 Newton meters of peak torque at the motors. The 800 volt system, inclusive of an active liquid cooled 720 kilowatt hour multipack battery, is a unique architectural approach in managing large amounts of on-board battery energy for an all-electric Class 8 truck.

It is a modular approach for the parallel design of nine packs. Each of the multipacks is at system voltage and managed in parallel for our redundancy and safety with a sophisticated vehicle controls architecture integrated into the battery management system. These packs are

engineered for durable, heavy-duty truck missions such that they are IP67 and IP69K for environmental tightness and thermal conditioning to handle both extreme hot and cold climates.

They are also structurally integrated in the truck chassis, where the battery mass contributes to dynamic stiffness characteristics while still enabling configuration flexibility for on-board battery energy for potential truck variance. Nikola engineered and integrated the thermal architecture, smart vehicle controls, and HMI for the Class 8 truck associated with performance management, range optimization, and features and functions including stability control features like ABS, electronic stability control, and electronic controlled air suspension load management.

Key features of the human machine interface include:

- Keyless entry by cloud assignment that is integrated into a user smart phone
- Telematics connected to the cloud
- Commercial truck navigation
- Over the air update and big data management
- Asymmetric encryption scheme for vehicle communication

The assembly progress continues for the first five prototypes being built in Ulm, Germany. The first truck has been assembled and is undergoing systems commissioning, including torque command calibration on a test track and debugging. Since most of Nikola Tre systems are heavily integrated using Nikola proprietary controls software, the commissioning of the second Nikola Tre will progress at a much faster pace than the first truck, as the software will have gone through debugging on the first completed vehicle and can be slashed on the second completed truck.

Our target completion of the assembly for the remaining four prototype trucks is by Q4 2020. We anticipate the commissioning phase to be completed prior to full track validation kickoff by the end of Q1 2021 or the start of Q2 of 2021. Validation will consist of durability testing, propulsion endurance, break testing, hot and cold weather testing, range testing, high mileage accumulation with payload, and regulatory compliance.

We anticipate testing on proving ground tracks during the first half of 2021, eventually transitioning to testing on defined routes on select roadways. That is expected in the second half of 2021. I'll now hand it over to Kim to discuss Nikola's third quarter financial results.

Kim Brady

Thank you, Umran. I would now like to provide a review of our public market activity and third quarter financial results. On July 22nd we announced the redemption of public warrants. We completed the warrant redemption process on a cash basis on August 21st. As a result of the

warrant redemption 22,877,806 warrants were exercised into common shares resulting in an additional \$263 million of cash to the balance sheet.

Focusing on the results in the third quarter, net loss was \$117.5 million and on a non-GAAP basis, adjusted EBITDA totaled negative \$58.8 million. Adjusted EBITDA excludes \$52.2 million in stock-based compensation, \$1.5 million in depreciation and amortization, and \$5.2 million in regulatory and legal matters, which represents legal, advisory, and other professional service fees incurred in the connection with the short-seller analyst report from September 2020.

Research and development expenses were \$51.5 million, including \$4.6 million of stock-based compensation expense. R&D expenses consist primarily of cost incurred in the development of Nikola BEV and fuel-cell electric vehicle trucks. This cost includes the following: personnel costs for in-house engineering and research functions, expenses related to materials applied, and third-party services, fees paid to third parties for outside development, IVECO in-kind services for vehicle integration, product validation, and engineering support, and depreciation for our R&D facilities and prototyping equipment.

We expect our research and development cost to increase for the foreseeable future to achieve our technology and product roadmap. During the third quarter of 2020 we incurred approximately \$65.8 million of SG&A expenses, of which \$47.6 million is stock-based compensation. SG&A expenses consist mainly of the following costs: personnel related expenses for corporate departments, professional fees related to legal, accounting, and financial advisory, public company costs such as insurance, SEC fees, and compliance.

We expect our SG&A expenses to increase for the foreseeable future as we scale headcount with the growth of our business and as a result of operating as a public company. Our total headcount now exceeds 429 and it's growing at a measured but steady pace as we continue to build our team. By the end of 2020 we anticipate our headcount will be more than 530.

Turning to the balance sheet, we ended third quarter with approximately \$908 million of cash and cash equivalents, excluding \$15 million of restricted cash. Restricted cash is inclusive of customer deposits associated with the Nikola badger, cash collateralization of our equipment term loan, and the required deposits to Pinal Land Holdings for the construction of the Coolidge, Arizona manufacturing facility. We currently have no debt outstanding aside from \$4.1 million equipment loan, fully secured by the restricted cash on our balance sheet.

Our capital expenditures totaled \$15.2 million year-to-date and \$8.9 million during the third quarter. Capital expenditures are comprised mostly of investments in R&D equipment. Weighted average shares outstanding for the third quarter was 377,660,477. GAAP net loss per share for the third quarter was \$0.31 and non-GAAP net loss per share was \$0.16. Non-GAAP net loss per share excludes stock-based compensation and regulatory and legal matters previously mentioned.

As a pre-revenue company we believe the best way to evaluate Nikola's results is to track our progress toward achieving announced milestones. We remain committed to our goal of announcing collaboration partners for electricity procurement and hydrogen fueling stations. In addition, during the fourth quarter of 2020 we expect to make continued progress toward the assembly of remaining Tre BEVs, and construction of the Coolidge, Arizona facility. Management is laser focused on prioritizing programs and aligning resources to achieve these milestones and lay the groundwork toward becoming a leader in the zero-emission transportation industry.

This concludes our prepared remarks. We will now open the line for questions. Operator.

Operator

Thank you. At this time, we'll be conducting a question answer session. If you'd like to ask a question, please press star one on your telephone keypad. A confirmation tone will indicate your line is in the question queue. You may press star two if you would like to remove your question from the queue. For participants using speaker equipment it may be necessary to pick up your handset before pressing the star keys.

Our first question today is from Jeff Osborne of Cowen. Please proceed with your question.

Jeff Osborne

Hey, good afternoon guys. Thanks for all the detail. Just a couple questions on my end. Mark, I was wondering if you could go through, you know, prior to GM coming into the fray as a battery and fuel-cell supplier what the original plan was and what the fallback plan would be in the event that that supply agreement doesn't go forward? And I'm talking more for the Class 8 program as opposed to the Badger.

Mark Russell

Sure Jeff. The base plan that we are going into production with for the Nikola Tre BEV battery-electric vehicle is a battery pack that we have designed and engineered and which contains a battery module designed and engineered by Romeo which contains cells from a Korean supplier. And that's what we will be going into production with next year.

The agreement with GM was going to give us options for the next generation of our vehicle, which would be based on a non-cylindrical cell. GM is developing an Ultium battery system that's based on pouch or large format cells. That would have given us another option for generation two of our vehicles. But our primary path is the path that we've already developed in which we are going into production with now.

So GM was just going to give us an additional option for the next generation of vehicles. Especially in the event that that technology is able to hit its targets in terms of performance and cost, which are very aggressive, which we hope they hit and that's one of the reasons we were interested in doing the deal.

Jeff Osborne

That makes sense. And can you just touch on as it relates to the fuel-cell development program, you know, what their JV with Honda is in the event that you don't use them at all what the plan was there?

Mark Russell

Yeah Jeff it's almost the same story. So our base plan is to go into production with a fuel-cell that we have developed in collaboration with Bosch over a number of years. That's been specially engineered and designed to be used in a heavy-duty truck / heavy-duty vehicle. The Hydrotec system from General Motors is also an impressive fuel-cell system, but right now it's engineered for passenger cars, like most fuel-cell systems are.

So the deal with GM would give us, again, a backup plan that we could use for future iterations of our vehicles using that technology, which tests very, you know, impressively by the way; we're impressed with the Hydrotech system in our testing. And so we'd love to have that as an option for our vehicles in addition to the system we developed with Bosch. But the base plan is to use the system we've already developed and we are engineering into our production vehicles for the fuel-cell system.

Jeff Osborne

Got it. And then just two other quick ones. It was unclear with the Tre that you have the picture of—is that operational today? You alluded to test track work for torque. Is it actually moving?

Mark Russell

Yes, it has been on the test track. It's been on the dyno. It's in commissioning.

Jeff Osborne

That's great to hear. And my last question for either of you is just as it relates to the stations. Can you remind us with the order that you placed right after going public, you know, what the timing is of the build out of the stations? I recognize that you alluded to, you know, reiterating that you'll have partners announced by year end if I heard Kim correctly. And then electricity agreements which will be certainly helpful to understand the economics of it.

But can you just talk about what the timing is of that equipment showing up and when you would have your first station under construction?

Mark Russell

We placed those orders so that they would have enough lead time now to deliver them in time to be installed in the first station next year, and then stations come online after that. We ordered enough electrolyzer equipment, which is the single most expensive part of the station. We ordered enough of that equipment to build up to five stations of eight tons capacity each. Eight tons of daily production of each.

We did that to make sure that we were ahead of the curve on the lead time to make sure we could get underway in time to hit our milestone that we have in the timeline that we previously published which is us breaking ground for the first station next year.

Jeff Osborne

Excellent, thank you. That's all I had.

Operator

The next question is from Paul Coster of JP Morgan. Please proceed with your question.

Paul Coster

Yeah, thanks for taking my questions. They're not all related to GM I promise, Mark. But I'll start off with are you still committed to closing the deal by early December? And can you contextualize a little bit your comments that were reported I think in the *Financial Times* around the Badger initiative? What message do you want to convey to shareholders regarding the desirability of proceeding with that initiative?

Mark Russell

Well Paul, unfortunately I can't give any more color than we've already given you. I think it goes without saying that we're interested in doing the deal with GM if we can get it done. And we'll give you updates when and as needed. And then with regard to the Badger, we've been very consistent, when we announced the Badger we said we would do that with a partner. GM is, you know, the GM deal anticipates being that partner. And that's all we can report at this point.

Paul Coster

Okay. The Badger initiative entailed some \$700 million, up to \$700 million of investment in a facility at GM. You know, I mean, some of us are looking at it and saying well, you know, maybe it's better not to proceed with that. Can you just kind of give us some sense of the nature of the spend with the GM deal plus the Badger versus a non-GM scenario? What kind of timeline and, you know, how long does the cash last before--how far do you get down your roadmap essentially in either scenario and how quickly?

Kim Brady

Paul, great question. As you know and we have talked about this previously with respect to GM transaction, it's something that we are still in the works and we feel confident that we will get greater clarity here in the next couple of weeks. But until then that is going to be difficult in terms of sharing with you any additional info. But you're right to the extent that we move forward with the Badger, there is corresponding capital commitments.

As we kind of think about that, you know, ultimately there are a number of perhaps considerations potentially that we could discuss with GM and potentially perhaps delay some of those commitments. But to the extent that we have to move forward, then of course then we

have to think about our capital expenditures closely. To give you some context as we think about into 2022, 2021 and consider all of our priorities with respect to Nikola Tre BEV, as well as Nikola Tre fuel-cell for Europe, as well as U.S., it is important that we prioritize our capital expenditures as well as operating expenditures.

And right now looking at our cash position we feel pretty confident that we'll be able to meet all of our operating commitments as well as CapEx with respect to our ongoing programs. Now, in our estimation of the cash balance we're not including anything related to the Badger. However, we believe that based on existing cash that we have, that we should have adequate cash flow and still could end next year with \$300 million or more cash on the balance sheet.

Understanding that, you know, as we talked about last quarter that at some point we will consider going out to market and raising potential additional equity. And we always have suggested that we will do that likely a year in advance of when we actually need that cash. And so if we exclude cash need for CapEx related to the Badger, we think we will move out to market some time, you know, potentially middle of next year.

But once again, this really depends on the market condition and when we think will be optimal time and when we can actually minimize any dilution in terms of our shares.

Paul Coster

And just, can you just clarify? The \$300 million year-end cash balance is including the Badger expenditure or excluding the Badger expenditure?

Kim Brady

Excluding the Badger expenditure.

Paul Coster

Excluding. Got you. Okay, thank you.

Kim Brady

It's 2022. This is estimating all of our CapEx needs for Nikola Tre BEV, as well as Nikola Tre fuel-cell, as well as CapEx that we need for hydrogen stations, as well as all the operating expenses that we need to cover.

Paul Coster

So under that scenario you don't need to come back to capture markets in 21 unless circumstances permit or make it worthwhile. Gotcha. And then last question: customer orders. We haven't seen any additional ones since the refuse truck deal. Are you intentionally sort of holding back there? Or has the whole sort of fuss associated with the founder sort of just turned everyone off for a period? And maybe just talk to us a little bit about that dynamic Mark.

Mark Russell

Sure, Paul. The interest in and the need for our vehicles has never been higher. The number of jurisdictions that are going to require zero-emission vehicles in some way, shape, or form goes up and has not gone down the whole time I've been watching it for many years now. Now the number of jurisdictions that have outright bans or fade outs or targets for getting rid of fossil fuel vehicles increases, you know, pretty much every time period.

And that's not--I don't see that going away. And with the results of the election in the United States this week, I think that can only accelerate. So the need for and the demand for these vehicles has never been higher. We've said many times that we welcome everybody into the space because we think it's going to take the effort of many capable and competent players to meet the needs of the commercial transportation market as it transitions from fossil fuels to zero-emissions.

So it's not a demand problem. We're just being very careful and very selective about who we partner with on the customer front. We consider our launch customers to be partners and that's why we've been very careful in selecting them. And as you've seen in the past with Anheuser-Busch, they do become our partners. They help us in many ways with our business plan and model.

Paul Coster

So you're not actively seeking new customers at the moment?

Mark Russell

No, we have lots of customer conversations going on. All I'm saying is that we're very, very careful about who we make a hard contract with.

Paul Coster

Okay.

Mark Russell

You'll see us continue to be very careful and deliberate about that.

Paul Coster

Thank you very much.

Operator

The next question is from Emmanuel Rosner of Deutsche Bank. Please proceed with your question.

Edison Yu

Hey, it's Edison on for Emmanuel. I have a couple questions to follow up on some of the stuff said earlier. Can you just go over what milestones we can expect before year-end? I think in the

past, you know, you've indicated a Tre order, you've indicated a hydrogen partner. Just want to check, should we still expect those things before year-end? What has kind of been pushed out and what kind of latest thinking there?

Mark Russell

We're still targeting those dates. We would like to have an additional customer agreement announced by the end of the year and we would like to have a collaboration on the station infrastructure hydrogen side announced by the end of the year. Those are still good targets for us we think. Things got slowed down here just a little bit recently. We had some travel that got interrupted because of the increasing COVID restrictions in Europe. So we've had just a little bit of a slow down in terms of being able to travel and things like that. But at this point, we're still trying to get those deals done and ready for announcement by the end of the calendar year. If we didn't get them done before New Year's, I would anticipate they would not slip very far into the first of the year.

Edison Yu

Got it. And specifically on the hydrogen partner, can you go over what exactly you're sort of looking for? What, you know, I think there was something rumored in the press, or report in the press, a couple months ago. Is the thinking still, you know, you have about three or four types of partners and that's the way you kind of want to go? Or is this thinking involved?

Mark Russell

That's still how we see it, Edison. The different players we've talked to now for some time, and have had conversations with us for some time, bring different things to the table. You have people that are operating in existing networks of fossil fuel stations for heavy trucks in the U.S. and Europe. They have locations already which are helpful. You have people in the electricity space, utilities, electricity traders, renewable energy partners of which we already have one.

We have a significant investment from Hanwha, which is one of the world's largest solar panel providers and makes solar arrays. That's one of the reasons they're involved with us. And you have people who are already in the hydrogen space, industrial gas players and others who are already producing and distributing hydrogen for existing market uses who would like to be in this space as well. And then you have, you know, the integrated energy majors who usually have their fingers in pretty much all of those things at the same time.

So I believe that before we are done building out our network of hydrogen fueling stations in our supply chain that we will have done some deals with pretty much all of the above. I expect that we will be doing business with people in each one of those segments before we're done. And what we announce first will depend on which one makes the most sense to start with.

Edison Yu

Great. Appreciate the color.

Operator

The next question is from Joseph Spak of RBC Capital Markets. Please proceed with your question.

Joseph Spak

Thank you very much. Good afternoon. Mark, just want to follow up on sort of the comments with the infrastructure partner and maybe some of these other partners. So this is all due to travel and, you know, some other logistical issues? Has there been any as far as you said there hasn't been any change in either caution from partners or perceived change in negotiating positioning given some of the noise around the company?

Mark Russell

Well obviously everybody reads the news and, you know, people could read the short-seller report like anybody else. But the people that we're talking to strategically, I don't think were distracted by that generally. You know, I'm sure there are exceptions to that. But generally people are focused on the long-term opportunity here and the structural change in the global energy markets that this possibly represents and probably represents.

And so that the only thing slowing us down I think at this point is the logistics that we're talking about here. I don't mean to imply that that's massively slowed us down. I'm just saying that we thought things would continue to loosen up in terms of travel and logistics, and that's not happening at the moment as you know.

Joseph Spak

Yep.

Mark Russell

So again, that's also a distraction. And we believe that the strategic reason for us to be able to do these things is again, stronger than ever. So that's why we're confident you're going to see us announce something on this front. And that will not--as I just mentioned--that will not be the last one either. That will just be the first.

Kim Brady

And Joe, as Mark talked about, to give you some additional insight: it's not simply a matter of entering into a contract. This is all about: is it the right location? Is it the right price? When we think about electricity procurement from a single location perspective to potentially even much greater in terms of potential collaboration. And so, you know, we suggested that all the discussions that we've had prior to the Hindenburg report is continuing after. And it's just a matter of when we can strike the right deal that makes sense for both parties.

And so all those discussions are ongoing. Of course it's going slower than we anticipated partially due to COVID, as well as we are nearing year-end and sometimes that tend to slow

down especially when you have, you know, holidays. But we are very much focused on accomplishing what we have committed by year end if not into Q1.

Joseph Spak

Okay. Thanks for all that color. The battery-electric vehicle architecture systems split on slide two you showed, is that how we should also expect the, I guess that's called division of labor once the Tre is made in Coolidge maybe with the possible exception of a different battery relationship? And how would that chart look like on a hydrogen version of the truck? Recognizing that you obviously would need to introduce it.

Mark Russell

So I'll just say in general, Joe, that our long term goal is to have a supply chain for North American trucks that is as much North American as we can practically make it. And then the supply chain for European trucks would be as much European as we can practically make it.

Obviously we're not going to start out that way. We've got a disproportionate amount of the bill of materials that comes from Europe to start with since we started with a bill of materials that IVECO had put together before we did the deal. But for the part that we're engineering and providing, you know, the key parts of the electric vehicle and the software, those parts will be, you know, more straightforward in terms of establishing supply chains that matched the geography in which the truck is intended to be sold.

The fuel-cell truck will look somewhat similar with the addition of the fuel-cell system. So, they will look very similar actually. But you'll have a fuel-cell system and maybe a couple of other minor differences where Nikola will be the primarily responsible party for that.

Joseph Spak

Thank you for that. Last one for me is, so it sounds like you'll have five Tre's by the end of the year or some more in the first quarter 21. But, you know, it also sounds like these are still, and correct me if I'm wrong, but it sounds like they're still sort of more of your internal testing and validation before they're sent to customers.

So can you just update us again on when you expect customers to start to get some test vehicles and how long do you anticipate them needing to, you know, incorporate into their fleet doing their own testing to see, you know, how much it costs to operate before, you know, they go ahead with the larger orders to be fulfilled?

Mark Russell

You are correct. These are five production prototypes. They will not be sold and won't be on the road for customer use. We'll be using them for testing and validation only. Next year we will be building further prototypes, some of which will go on the road for road testing and will be used in customer fleets. And then next fall we will be producing for regular customer sale.

So it'll be end of 2021 that we will be shipping units from serial production into regular customer fleets. And again, one of our reasons for focus on specific launch customers is to try to limit the number of customers that we're doing this work with. You know, we don't want to get involved in a huge number of customers with a small number of trucks with each. We'd like to concentrate as much as we practically can with launch customers who are collaborating with us on the vehicle design and the testing and the validation.

Joseph Spak

So there will be data sharing back and forth?

Mark Russell

Correct. Yeah. Absolutely.

Joseph Spak

Okay. And I guess just, again, how, like, you know, as we all know the commercial truck purchase is one of economics and cost of ownership. So, you know, how long do these initial customer trials do you think need to last before they get some good data?

Mark Russell

Well, some of the data it'll take some time to be accumulated in terms of, you know, end of life health for the battery and things like that. We simulate that of course and we'll do accelerated testing. But as everybody knows, for example, with Tesla batteries it wasn't til they were out there for seven years that you knew how good they were at the end of seven years.

And of course they turned out to be really good as everybody knows. And since we're basing our batteries on the same base cell, we hope that we get the same result. But only actual experience will prove that out. But we share test data with our target customers. We share a lot of the information that we have and they frankly have shared data back. We get a lot of great data from our partners and our customers. And then we think we're sharing data with them because we're working on this as a team.

And we believe that they'll get enough data and information for them to commit to volumes of trucks, you know, up front just like the announced deals that we have are for volume. I think you'll see more deals like that going forward. We will give trucks to customers for test purposes but our priority is going to be on our launch customers.

Joseph Spak

Great. Thank you very much for the information.

Operator

The next question is from Daniel Ives of Wedbush Securities. Please proceed with your question.

Daniel Ives

Yeah, and thanks for the all the insights in the questions. So my question first, I mean, from our when we go back the last few months what's been the biggest challenge for you and the team? And obviously it seems that you've overcome a lot of it but I'm just--I'll start there.

Mark Russell

Well our biggest challenge is ridding the world of fossil fuels. But when it comes down to actual logistics, you know, people who have never done something like this don't understand what it entails. We're disrupting a vehicle industry that has been iterated and perfected over a century. And, you know, the Ulm facility where we are building these trucks was building heavy trucks over 100 years ago.

I mean, they've been building heavy trucks at that location powered by fossil fuels for a century. And they've got really, really good at it. And now we're asking them to build heavy trucks with a completely different design. You know, their motor force is a completely different system. And this is a lot of work. It requires tremendous amounts of engineering, tremendous amounts of testing and validation, tremendous amounts of verification and simulation. And we are just so grateful that we have such strong partners who have worked with us to get us to this point. And we're grateful to our team who do an incredible job.

We have an incredible team of people that have come to us from all over the world and from all the other established players who've come here with one single purpose. And that's to rid the world of fossil fuels. You know, that's the passion that motivates the Nikola people is we have a mission. And if we're successful in--you know, if we succeed we're going to help the world solve one of the most difficult challenges for emissions. And that's how do you get heavy stuff long distances.

You know, commercial transportation is one of the toughest things to solve for zero-emissions. And that's what Nikola's all about. Battery-electric trucks for short range, fuel-cell electric trucks for long range. And we think we can cover that whole ground. We're one of the few people that have a plan for both.

Daniel Ives

Great. Great.

Kim Brady

You know, I don't want to understate in terms of the amount of effort that we put in to realign the organization as Mark talked about in the last four to six weeks. Of course we've had some disruption and want to recognize that. But at the same time I think because of that we have been able to strengthen our Board as well as we have been able to focus and realign and reestablish priority with respect to Nikola Tre BEV as well as timelines for Nikola Tre fuel-cell for Europe as well as the U.S.

And so we want to, you know, fully recognize the efforts that the team has gone through to really focus and prioritize and that's real important. Because of that, I think we'll be able to accelerate in terms of our execution.

Daniel Ives

Yeah thanks for the answer. Are you from a partner perspective, are you hearing from partners that maybe you weren't expecting to hear from in terms of looking to partner with Nikola? Is that a trend? And obviously you're going to be selective. But, you know, in all different sort of areas in terms of the push versus pull are you starting to hear from more and more partners, you know, wanting to be a part of this vision on the hydrogen fuel-cells out of next year? Thanks.

Mark Russell

Well I think we have heard from a few people that we haven't heard from before. And at this point I'd be surprised if that circle expands dramatically because at this point one of the side effects of the last few interesting months is that everybody we ever run into has heard of Nikola now. Like, everybody knows who we are and that has brought some things I think--some people got aware of us that weren't aware of us. And that has led to a few conversations that we weren't having before. But we were, you know, we were very focused on talking to everybody in the space, you know, who was willing to talk to us from the beginning. And so we feel like we have pretty good conversations with everybody that could reasonably be a partner with us. And we're grateful for the conversations and we're, you know, interested in partnering with people where it makes sense for both of us.

Daniel Ives

Thanks again.

Operator

The next question is from Hilary Cauley of JMP Securities. Please proceed with your question.

Hilary Cauley

Hello, thanks for taking my questions. I wanted to first kind of follow up on one of the earlier comments about the supply chain and just any additional context you can give for timing on when you expect to be able to source some more of those materials domestically versus kind of continuing to import these. And are these conversations that are kind of already ongoing or is the focus to kind of focus on getting this up and running and then focusing there?

Mark Russell

So Hilary the--that's a good question. The bill of materials for the Tre is, on a line basis, is more than 80%, more than 90%--

Kim Brady

--Probably about 90 to 95--

Mark Russell

Yeah over 90% of the bill of materials by line item for the Tre is stock from the parts bin at IVECO and CNH. Because we're not, you know we're not innovating tire and wheels and frames and, you know, cab frame, body and the like. We're not innovating the parts of the truck other than we're trying to make everything as good as we can make it. And that's one of the blessings of partnering with IVECO, by the way. The IVECO S-WAY was only introduced in July of 19. That's one of the newest diesel vehicles in the world, so we had a very new recently validated platform to pick from.

But more than 80% of the value of the vehicle comes in the less than 10% of the bill of materials that Nikola is engineering and taking the lead on. You know, the battery, the e-axes, the motors, the inverters, the control systems, the software, the thermal systems, the parts of the vehicle that make it an electric vehicle--that's the part that Nikola is specializing in and takes the lead on in our partnership with IVECO.

So the existing bill of materials is very European focused because IVECO has no North American manufacturing presence. The rest of the products are a mix because we've been willing to partner with anybody in the world who we think is world class and is interested and sees the future the same way that we do. And that's what led to our collaborations with Bosch, with MAHLE on thermal, with Meritor, and WABCO and people like that.

So that's a mixed bag. And what we're trying to do as we said is domesticate both supply chains. So the parts that are currently sourced in the United States, for example our batteries are sourced from the United States right now, we would like to get a European supply chain established as soon as practical. And for the parts that are coming from Europe, which is a lot of the existing bill of materials for example, we would like to get a domesticated supply chain established as soon as practical.

We anticipate for some of those things that can happen fairly quickly. And for some of those things they think it will take, you know, up to several years frankly for some of the parts. So it'll be a varying answer depending on the part. Some quickly, some will take months. I mean a few might even take a few years to get completely domestic.

Kim Brady

In terms of process we have sourcing counsel on a weekly basis between IVECO and Nikola to review those parts that have been internally sourced. And the goal would be by sometime towards the end of 2021 and early 2022 the majority of the parts could be localized. But as Mark indicated, some components may take longer. And this is all about looking at volume and potential impact on BOM. And to the extent that some parts will take longer is simply because based on volume and type of part it may make sense to continue to import from Europe a little longer than simply trying to localize it over next year and a half.

But ultimately we recognize that we want to get to a position where we have localization of all components.

Hilary Cauley

Okay great. And then I was just kind of wondering obviously a lot of interest in the fuel-cell truck and quite an impressive backlog there. I was just wondering if you can share any thoughts in timing and when we might start to see some of those preorders converting to binding orders. And that's all I had for you. Thank you.

Mark Russell

Another good question Hilary, thank you. The focus has been on getting orders fixed and firm when they are in the one year window. So when we're 12 months from production we're looking to have firm commitments in place. That's kind of a rolling target we have. Now that's going to vary either way of course from time to time. But as we reach one year from production we would like to have launch customers in place.

And so one year from production for the fuel-cell truck will be in 2022. Fuel-cell truck goes into production in 23. And so in 2020 I hope we can do this faster than this but we would be targeting to have a hard contract in place with a launch customer a year out from production.

Operator

The next question is from Pavel Molchanov of Raymond James. Please proceed with your question.

Pavel Molchanov

Thanks for taking this question. Let me take a step back. You referenced the election a few minutes ago and, you know, obviously given your comments about decarbonization let me just ask what would you like to see from the Biden Administration assuming, you know, not a whole lot perhaps can get through the Senate. You know, any executive actions that you would be encouraged by?

Mark Russell

We expect the Biden Administration to be more aggressive than the Trump Administration on these matters. And in the event that the, you know, the Senate falls to Democratic control then you've got the possibility of something like the Green New Deal, which of course makes the whole country look more like California. All of those things will be positive for the demand profile for our products and for our business model.

Kim Brady

And Pavel, you know, I think we talked about this with the Biden Administration we are expecting the restoration of the Paris Accord. And we would expect much greater participation by the federal government with respect to green energy. I think they look at that as a

centerpiece in terms of creating new jobs and we think that's important. To the extent that the perspective is that you can wean off fossil fuel and create high paying jobs with green energy this is going to be an important transition especially in the U.S.

There has been less focus and less emphasis by the Trump Administration, but we think that will definitely change. And so it's going to be good for Nikola.

Pavel Molchanov

One more policy question. This one about Europe. As part of the European climate law, which is due to be approved next month, there are some really aggressive electrolyzer targets. I think 40,000 megawatts by the end of this decade. You know, in that context would you consider expanding your targets for fuel station construction in Europe which historically have been pretty small?

Mark Russell

Yeah, again one of the reasons that we are planning to construct fewer stations in Europe is because we believe in Europe they will be of average larger size. You have the volume on the truck routes in Europe is higher comparatively than the U.S. We also see the increase of government-led action in Europe or the comparative greater governmental action in Europe compared to the United States.

There are some very impressive large-scale green electricity electrolyzer hydrogen production projects underway in Europe, some of them very impressive and which we are following along and in talks with. We would like to be involved in those things and we encourage them and we want to do our part to accelerate the rollout of some of these infrastructure projects. We think it will help facilitate the building of the network that we're undertaking there and that all parties and people who want to get involved in this would be welcome from our perspective.

Helps to save the planet.

Pavel Molchanov

Thanks very much.

Operator

There are no additional questions at this time. This will conclude today's conference. You may disconnect your lines. Thank you for your participation.

Mark Russell

Thank you.