



Nikola Corporation
Q2 2020 Financial Results
August 4, 2020

Presenters

Britton Worthen - Chief Legal Officer
Mark Russell – Chief Executive Officer
Kim Brady – Chief Financial Officer

Q&A Participants

Jeff Osborne - Cowen and Company
Paul Coster - JP Morgan
Emmanuel Rosner - Deutsche Bank
Joseph Spak - RBC Capital Markets
Hilary Cauley - JMP Securities

Operator

Greetings, and welcome to Nikola Corporation's second quarter 2020 earnings conference 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 will turn it 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 Second Quarter 2020 Earnings Call. With me to today is Mark Russell, Chief Executive Officer of Nikola and Kim Brady, our Chief Financial Officer.

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 of 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 Russell.

Mark Russell

Thanks, Britton. This is really exciting, Nikola's first conference call as a public company. Going public through a business combination with VectoIQ was a critical step for us. It's laid the groundwork for us to accomplish our objective of becoming the global leader in zero-emissions transportation.

I'll start with an overview of the business, cover the milestones we were able to hit in the quarter, and then finally overview our strategy for executing going forward. Kim will then go over the numbers.

Nikola is a vertically integrated zero-emissions transportation systems provider. We design and manufacture battery, electric, and hydrogen fuel cell electric vehicles along with the battery charging systems and hydrogen fueling stations to power them. Our core global offering centers on heavy commercial trucks. Our long haul commercial transport solution is especially unique, with a revolutionary bundled lease or freight as a service model.

We provide customers with a fuel cell electric truck, the hydrogen fuel it needs, and all scheduled maintenance for a fixed total cost. All the customer needs to provide is a driver. This approach has proven very attractive and many customers are finding that they will be able to transition to zero-emissions without an increase in total cost compared to their current fossil fuel solution.

Our fuel cell electric truck reservation book exceeded 14,000 units or approximately \$10 billion in potential revenue some time ago. Since then, we focused our efforts on direct partnerships with customers who have dedicated routes. Rolling out our hydrogen station network along corporate customers dedicated routes, or milk runs, allows us to guarantee a high degree of hydrogen station utilization and avoid speculative investments in fueling infrastructure. Stations are being developed based on known customer demand, along established dedicated routes.

During the quarter we signed an order for 85 megawatts of alkaline electrolyzer capacity from Nel ASA, which is enough to build five of our base eight-ton hydrogen production and

dispensing stations. At full capacity these stations can produce 40,000 kilos of hydrogen every day, which is enough to fuel up to 1,100 trucks. This milestone marks the beginning of the construction of our hydrogen station network.

During the quarter we also hired Pablo Koziner as President of Nikola's energy company. Pablo is a 19 year veteran of Caterpillar who most recently served as President of Cat's solar turbines subsidiary. Pablo brings extensive experience in global energy generation and distribution to our team, and he'll be leading the implementation of our energy strategy across the globe, starting with the initial tranche of stations I just referenced.

Nikola and IVECO started modifications to our dedicated facility in Ulm, Germany during the quarter, to meet our target of commencing serial production of the Nikola Tre there in 2021. The first trucks produced from this facility will be exported to customers in the United States, but it will eventually be dedicated solely to supplying customers in Europe. The facility will have a capacity of up to 10,000 trucks per year when complete.

Nikola also recently broke ground on its greenfield manufacturing facility in Coolidge, Arizona. We expect phase one of this facility to be complete about a year from now with limited manufacturing starting there before the end of 2021. Once phase two and three are completed in 2022 and 2023, respectively, the facility will have a capacity of 35,000 units a year on two shifts.

We estimate we'll have spent a total of \$600 million by the time all three phases are complete. We've partnered with Walbridge, a leading facility construction expert to ensure that we complete the facility on time and on budget.

All of our manufacturing activity is now being overseen by Mark Duchesne, he's our newly hired Head of Global Manufacturing. Mark is a 22-year veteran of Toyota and a five-year veteran of Tesla. As Director of Operations at Tesla, he oversaw the installation of the innovative Model S and Model X production lines at Tesla Fremont, and he was subsequently responsible for assembly, manufacturing, and engineering there.

At Toyota, Mark developed a \$900 million greenfield facility from beginning to end, and was subsequently responsible for process efficiency, product quality, and capacity improvements there.

With that, I'll turn it over to Kim to review the numbers.

Kim Brady

Thanks Mark. I would like to provide a review of our public market activity and second quarter financial results. On June third we completed our business combination with VectoIQ and subsequently listed on the NASDAQ under the ticker symbol NKLA. The transaction provided an

additional \$616.7 million of cash on the balance sheet and put us in a strong liquidity position to execute our business plan.

As a result of the transaction, we incurred one-time cost of \$51.5 million, including advisory, legal, accounting, and other fees. Following the close of the transaction on June third, 2020 our ownership structure consisted of 77.2% ownership by legacy Nikola shareholders, 8.2% ownership by public VectoIQ shareholders and SPAC sponsors, and 14.6% by pipe investors. Total outstanding shares before warrants were \$360.9 million.

In June and July 2020, as required by the terms of the business combination agreement, we filed two separate resale S-1s to register 52.5 million pipe investor shares, 23.9 million public and private warrants, and 249.8 million shares of common stock comprised mainly of legacy Nikola shares. Both S-1s have since been declared effective by the SEC.

On July 22, we announced the redemption of public warrants, assuming all public warrants are exercised into common shares, this will provide Nikola up to additional \$265 million of cash on the balance sheet. As of July 30, 2020, approximately 18,070,302 warrants representing 78% of all outstanding public warrants have been exercised, providing Nikola with an additional \$207.8 million of cash on the balance sheet.

As of July 27, all 360.9 million outstanding shares post-business combination have been fully registered, as well as additional 23 million shares from warrant redemption had become part of the float.

Focusing on the results in the second quarter, net loss was 86.6 million, and on a non-gapGAAP basis adjusted EBITDA totaled negative 47 million. Adjusted EBITDA excludes 38.2 million in stock-based compensation and 1.5 million in depreciation and amortization.

Research and development expenses were 42.5 million, which includes 2.9 million of stock-based compensation expense. R&D expenses consist mainly of costs incurred in the development of Nikola Tre BEV and Nikola Two fuel cell electric vehicle trucks, as well as power sports products. This cost include the following:

- Personnel costs for our in-house engineering and research functions;
- Expenses related to materials, supplies, and third party services;
- Fees paid to third parties such 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 road map. During the second quarter of 2020, we incurred approximately 44.1 million of SG&A expenses of which 35.3 million is stock-based compensation expense.

SG&A expenses consist principally of the following costs:

- Personnel related to expenses for corporate departments;
- Professional fees related to legal, accounting, and financial advisory fees;
- Public company costs such as insurance, SEC fees, and compliance costs.

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 370 FTEs and is growing at a major but steady pace as we continue to build our team. The net loss per share basic and diluted in the second quarter was negative \$0.33 per share on a GAAP basis, and \$0.16 per share on a non-GAAP basis. The weighted average shares outstanding were 303.8 million. As we are in a net loss position, the fully diluted share account is not utilized for our EPS calculation.

Turning to the balance sheet, we ended the second quarter with approximately \$698 million of cash and cash equivalents on our balance sheet, excluding \$8.9 million of restricted cash. We currently have no debt outstanding aside from 4.1 million equipment loan fully secured by restricted cash on our balance sheet.

Our capital expenditures total 6.9 million year to date, which comprised mostly of investments in R&D equipment. With the groundbreaking of phase one of our greenfield manufacturing city in Coolidge, Arizona, we anticipate CapEx to increase significantly over the next 12 months.

Now to the full year 2020 outlook. As a pre-revenue company, the best way to monitor our progress and execution, would be to hold us accountable for achieving certain milestones rather than earnings. However, the following provides our general expectations for the year in regards to our operating expenses. Estimated R&D for 2020 is in the range of 190 to 200 million, which includes approximately 10 million of stock compensation expense.

Estimated SG&A for 2020 is in the range of 175 to 185 million, which includes approximately 130 million of stock compensation expense. We expect average shares outstanding of approximately 385 million in the second half of 2020.

The milestones that we should be measured against are as follows:

- Announcement of a significant commercial agreement for Nikola Zero Emission BEV trucks by end of 2020;
- Announcement of an OEM partner for the Nikola Badger by end of 2020;
- Announcement of a hydrogen station collaboration by end of 2020;
- Completion of modification to our JV manufacturing facility in Ulm, Germany by end of 2020;

- Completion of phase one of our greenfield manufacturing facility in Coolidge, Arizona by Q4 2021.

This concludes our prepared remarks and we'll now open the line for questions.

Operator

Thank you. At this time we'll be conducting a question and 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'd like to remove your question from the queue. For participants using speaker equipment it may be necessary to pick up your handsets before pressing the star keys. One moment please while we pull for questions.

Our first question comes from Jeff Osborne with Cowen and Company. Please proceed with your question.

Jeff Osborne

Yeah, good afternoon guys, and thanks for the detail on the call. Just a couple questions on my end. I appreciate the commentary about the expense structure, that's certainly helpful. Kim, how should we think about CapEx for the year?

Kim Brady

Great question. For CapEx, as you know, especially for the second half of the year we have a number of CapEx items in mind in terms of tooling equipment as well as kicking off hydrogen stations as well as other softwares. We also have kickoff of CapEx related to phase one manufacturing. We suspect for the second half of the year that our CapEx will be approximately \$87 million dollars. In addition on top of that we should see around \$25 million dollars.

So essentially you got about \$100 million dollars of CapEx the second half of the year including phase one manufacturing.

Jeff Osborne

Got it. And then I appreciate you setting out the milestones. A couple questions on those, recognizing you're limited. Is there any way you can frame what a significant commercial agreement is? Is that, you know, order of magnitude of what Budweiser was for fuel cells or are these sort of onesie twosies? I didn't know for the BEV product in particular how you think about visibility building for that as people anxiously await the units coming in from Ulm.

Mark Russell

Jeff, this is Mark. So, our target customers for the BEV are very similar to our target customers for the fuel cell truck. So we're targeting large fleets. And so we expect those orders to be significant. So, the, you know, the kind of orders you've seen in the way of Anheuser-Busch, that should be exemplary of what we are gonna do going forward.

Jeff Osborne

Got it. And then is the intent to communicate all of this at Nikola World? It's a bit confusing trying to follow Trevor on his various social media outlets about the timing and cadence of communication of the different variables that you're talking about.

Kim Brady

Jeff, as you're aware we have a number of initiatives that we anticipate that we'll be able to announce in the second half the year. And we'll announce them as we execute them. The goal is not to simply wait until the year end, but we believe that we'll be able to announce several initiatives that we have working on over the next six months.

Jeff Osborne

Perfect. I'll turn it over. Thanks much.

Operator

Our next question comes from Paul Coster with JP Morgan. Please proceed with your question.

Paul Coster

Yeah, thank you for taking my question. Welcome to the public market. It has been fun so far. So, Mark, I just ponder is this all we get? (Laughter) Kind of a joke really but it's so much already. But, you know, I imagine you've had conversations with many customers that are not in these verticals and with partners that are not in these verticals. Is it possible that we'll see this business model expand over the next 12 months beyond trucking and beyond the fuel stations?

Mark Russell

Well what you have to trust us is there's a lot more going on than you see in the announcements. As you know, we're talking to lots of folks. We were talking to lots of folks before but now it seems like just about everybody in the world knows about us. We're gonna have lots of conversations with lots of people. And when we are able to announce those publicly, we're gonna do it just as Kim said. A lot of the people we're talking to would like to keep those conversations confidential for now.

And so that's one of the reasons we don't announce everything that we have going on. But when we have something that we can publicly announce, you're gonna hear about it. I will make one addition to Kim's point before. There's gonna be a lot of cool things at Nikola World. You want to be there. We won't wait. You know, if we have something that's material, of course we're gonna announce it. We're required to do that.

But there's gonna be a lot of cool stuff that happens at Nikola World. It's gonna be a place to be.

Paul Coster

Right. But there's gonna be trade offs , right? In terms of how much capital you've got to throw at initiatives and, you know, the possibility you're pulled in many directions and timelines suffer. What is it you're not prepared to sacrifice in evaluating those adjacencies?

Mark Russell

Well actually, being focused makes it as important to say no as to say yes. The things that we say no to, we are very objective and careful to make sure we stay focused on delivering the things that we have to deliver. That's why we've laid out the milestones we think you should hold us accountable for, and we're gonna make sure we deliver those things.

Kim Brady

Paul, we have always communicated that capital efficiency and allocation is very important. And we understand from investors perspective that we are being wise about our spending. We recognize that while we have different product lines, what you will find is that as we announce initiatives you will find that we are de-risking the process and you will get a better appreciation in terms of how we allocate capital. And we understand from your perspective that this is very important.

Paul Coster

Okay. Just a couple of other quick ones. At the conclusion of phase one of the Coolidge build out, what will you be producing at that plant?

Mark Russell

We will be producing the Nikola Tre BEV, the battery electric version of a Nikola Tre there.

Paul Coster

Right. Mark, can you just elaborate what then subsequently happens and when the fuel cell gets produced and will it be from the same facility but the second phase thereof?

Mark Russell

The fuel cell truck will not be built until phase three. So, 2023 is the projected start of the fuel cell build. Now, remember we're building this facility to be flexible between the different models. So we should be able to build a One, a Two, or a Tre on this, on the same line in this facility. We're following the Toyota discipline of being able to build any one of those three related models on the same line any day.

Paul Coster

Gotcha. My last question is, and I know there's some concern that you need to put up a lot of miles of field testing of the fuel cell truck in real world conditions, hundreds of thousands potentially millions of miles. At the moment as far as we can tell there's just one prototype

running around. Can you just talk us through how you get the prototypes out there in real world conditions as quickly as possible and when that might be?

Mark Russell

Yeah, well first of all we have a couple of prototypes that have been accumulating track miles since we built them. And we will get prototypes in the hands of our launch customers very first. So they will get the prototypes the very first. For example, Anheuser-Busch long ago earned the right to get prototypes from us first. So, Anheuser-Busch will be testing trucks from us. We've already pulled a load of beer from the St. Louis brewery to the distribution center there in Missouri.

You can see some pictures of that on our website. And when we have the working first production versions for testing, you're gonna see them pulling red trailers. So we're gonna utilize our best customers and our pilot and launch customers the ones who have shared some risk with us, we're gonna utilize them to do the testing as well.

Paul Coster

And that's imminent or already underway?

Mark Russell

As I said, we've already we've already hauled a load with one of our prototypes for A-B.

Paul Coster

Okay, got it. Thank you very much.

Operator

Our next question comes from Emmanuel Rosner with Deutsche Bank. Please proceed with your question.

Emmanuel Rosner

Hi, good afternoon everybody. So, appreciate the list of milestones that you're committed to before the end of the year. I was hoping you'd be willing to share with us some elements of progress and how these various milestones are going, how some of these discussions are. It feels like some information about it was already parsed out, I guess throughout the last few weeks or a month.

I think there were some, you know, discussion around some specific number of OEM potential partners, you know, on the Badger. I think that at some point there was discussion of some of the commercial partner for the hydrogen stations. There's some interest in there from oil, big oil, oil companies. Just anything you can give us in terms of how these various initiatives are going so far.

Mark Russell

Well, we can't go further than what we put out there at this point. But, I will remind everybody that we did have a public groundbreaking ceremony. So you're gonna see the activity at the site. We're on track to get phase one up on time and on budget. And we have talked about the fact that we're gonna announce a partner for the Badger. And then the other milestones that Kim mentioned.

So, you know, you're gonna see evidence of progress on that as we go. As soon as we can announce something we're gonna tell you.

Emmanuel Rosner

Okay. Any sense on the, what you can give us, on the deposits for the Badger? I know at some point you discussed, you know, if it's initially getting 1,500 or so a day. Is that a number you're prepared to update yet?

Mark Russell

Yeah obviously, yes. Obviously we were intending to continue to give you updates. But I'll tell you this Badger story. It's just incredible. Because I mean we a year ago we didn't believe we'd be building a pickup truck. We had some concepts. We have a great design team and Trevor's extremely creative with this stuff. And we have built several off-road vehicle type prototypes.

And they had a concept for a pickup truck that they had. Just in concept. Just as a conceptual exercise. And we didn't intend to do anything with it until we saw the Cybertruck. And a lot of people didn't like the look of the Cybertruck. Including me. I think it looks like a doorstop. But, they got lots of reservations for it. And so there's, you know, more power to them. We're trying to get the whole world to zero and it's gonna take more than us. So we give it, we cheer them on.

But a lot of people didn't like the look of that thing. So Trevor just released the concept that we had for the pickup truck, and people just went nuts over it. So much so, that we said hey let's put a thing on the website that allows people to go in there and fill out a form and sign up for and say that we're interested.

We ended up with over 89,000 of those people signed up. So that's when we got serious about it and said I think the world wants us to build this darn thing. But it wasn't in the plan before. So we said hey if we're gonna do it we're gonna need a partner. That's our model. If we're facing a big challenge with lots of risk we're looking for partners in help, and so we said we'll look for a partner.

And we got lots of people who were interested in partnering with us. That has gone so far and so fast that we are now in a quiet period. We can't talk about it until it's done. So you're just gonna have to wait on that one.

Emmanuel Rosner

Alright, that's exciting, so that's 89,000 deposits anywhere between \$250 and \$5,000 a piece?

Mark Russell

No, no, no, no. The 89,000 was the registration on the website. That's just them raising their hand and filling out a form saying I'm interested. We haven't announced a pay reservation since we announced, since we said for the first few days. But as I said, now we're in a quiet period at this point. We can't go further until that's done, and as soon as it's done, we'll announce it.

Emmanuel Rosner

Okay. Thank you. And then just there finally, in our initial discussion with investors I think that if there's one area maybe of questions or in the way of skepticism is around some of the assumptions around the cost of electricity in the future when, you know, supplying hydrogen. Can you maybe give us some elements around, you know, have you had discussions with electricity companies yet, any sort of like strong indication that, sort of like this kind of input cost is actually realistic or that you would have partners who are, like, willing to work with you on this?

Mark Russell

Absolutely. It's a great question. So, we can make hydrogen for about a decimal move or better on the cost of electricity. So if we can get, say, electricity to three and a half cents then we should be able to make hydrogen at three fifty a kilo or better given our current technology and the current design of our stations. So the key for us to have our target hydrogen cost is for us to get the electricity at the right cost.

So what you want to look at is you want to look at the price of renewable electricity. That's what we're targeting. We're trying to use the wind and the solar and the other renewable source of electricity. We want it to be all green. That's our target is 100% green. We're gonna get as close to it as we can everywhere we go. And look at the price of the renewable, the big renewable projects that are out there. This is one of the reasons we got a big investment from a solar provider out there. We had a big investment in our private rounds from Hanwha which is a big solar panel provider and solar array manufacturer.

Because they can profitably build solar arrays and sell the electricity on a long term basis, you know, for the projected life of our stations even on a fixed cost basis for our target price. They can do that. Wind, big wind projects. You're gonna see the same. The other thing you want to pay attention to is the wholesale price of electricity at the major trading points in places where it's free to trade. You're gonna see that that price when it's being driven by the renewables, that price falls way down there. It even goes to zero once in a while and occasionally goes negative when one grid has too much of it.

That's the reason we have faith that we're gonna be able to hit this number, especially on the average. Some places will be a little lower, some places a little bit higher. But we're gonna be

on our average, some places a little lower some places a little bit higher, but we're very confident.

Kim Brady

And Emmanuel, we are having some conversations in the Phoenix area and we're getting some indications that it can be below three point five cents per kilowatt hour. And we are also having some number discussions in various areas of collaboration and various projects where we can achieve that.

Mark Russell

And that's why that's one of our milestones. I think you're gonna see us announce some collaboration on the electric energy front, and the energy front generally.

Emmanuel Rosner

Yeah, thanks for all the color.

Operator

Our next question comes from Joseph Spak with RBC Capital Markets. Please proceed with your question.

Joseph Spak

Thank you very much and thanks for the color so far. Maybe can you just follow on that last point. Can you comment on I guess the overlap of renewable electricity or I guess broadly cheap electricity and the map for, you know, dedicated high volume routes that I think you're going after for the initial fuel cells is, you know, I guess you sort of need both. Like, or, you know, or maybe you could just help us understand. Like, which is leading which?

Like, it seems like when you first presented the opportunity it was going after some of these dedicated routes that you could quickly, you know, sell. And how does the overlap with cheap electricity fall into that plan?

Mark Russell

That's a great question. That is the challenge and the opportunity in front of us is to cover those dedicated routes that are our target customers. Our target customers' dedicated routes between the city pairs that are too far apart to service with a battery electric truck and to get the trucks to that route and to get the fuel to that route at the same time. That's our challenge, to provide the chicken and the egg. That's always been the challenge for hydrogen is to get vehicles and fuel in the same place at the same time. Especially in the kind of volumes that we need for heavy duty trucking.

So that's been our focus. I'll give you a test case. One of the city pairs we know we're going to tie together is Phoenix and Los Angeles. Los Angeles is the location of one of the largest breweries of our launch customer for the fuel cell vehicle, Anheuser-Busch. They have a very

large brewery in Van Nuys. Pretty much all the beer that is drunk here in Arizona comes from that Van Nuys brewery cause there's no brewery in Arizona. So they have to truck it all.

It comes down Interstate 10 to a distribution center in Chandler. And then in from Chandler it goes to the points of sale here in the Phoenix metro area and around Arizona. So that's about, that's over a 400 mile route and in order to cover that without losing case, you know, pallets of beer off your load because you're too heavy because of too much batteries, you gotta have a fuel cell truck. Anheuser-Busch recognized that early on. That's why they placed the 800 unit order with us early on.

So we have to tie Phoenix and Los Angeles together which means we need a station somewhere on Interstate 10 and accessible to Interstate 10 in the Phoenix metro area, preferably on the west side for that city pair. And then another station somewhere in the Los Angeles basin or nearby on Interstate 10. Those two stations will service those trucks. And we can size those stations anywhere from about 210 trucks capacity to 1,000 trucks capacity plus.

So we can fuel up to from 400 up to 2,000 trucks with just two stations for that city pair. And then we build it from there. You know, Los Angeles we then tie to San Francisco. There's an Anheuser-Busch facility in Fairfield, California in the Bay Area. It's also about 400 miles away from Van Nuys. So that'll be another city pair that we tie together early on.

And getting the electricity for these stations, again, is the great challenge and opportunity for us. And we are well on our way to having the electricity arrangements in place for those facilities.

Kim Brady
(INAUDIBLE).

Joseph Spak
(INAUDIBLE). Sorry, go ahead.

Kim Brady
Just for a bit more nuance in terms of the way we think about in terms of when we lock in demand and utilization. We've always talked about we will want to lock in demand first so that we're not risking or speculating. So if you think about it we'll do our best in terms of locking in demand. But as you know hydrogen station lead time is around 18 months. So while ideally we'd like to have about 90% plus utilization, it doesn't mean that we will always have lock in demand two years in advance.

We'll have demand locked in and then over next 18 months during the lead time we will continue to develop and gain customers so that ultimately by the time this station is ready for our customers we will have over 90% utilization.

Joseph Spak

Okay. Maybe, you know, I think I saw in one of your filings that there was a requirement to deliver some of the test fuel cell vehicles to Anheuser-Busch by 2021. Maybe you could just, you know, confirm that, and let us know if you're sort of up to date on that timing or timeline. If that's a milestone.

And also I understand that you can't talk about certain things without customer permission. But you did mention sort of your newfound publicity. Can you just maybe qualitatively talk about the funnel of your opportunity now versus maybe, you know, six or 12 months ago?

Mark Russell

Yeah, so that, well, let's take that and I mean both parts there. So the first question is Anheuser-Busch will be our launch customer for the fuel cell vehicle. How soon will they get prototypes? We do believe that we'll be able to give them test prototypes before the end of 2021. Serial production or mass production of the fuel cell truck will not begin until 2023.

But they're gonna test with us. They've been a risk sharing partner from the beginning. They've helped us with development from the beginning. So they're gonna take test trucks and accumulate miles for us and get data for us.

Joseph Spak

Okay. And the funnel of opportunity.

Mark Russell

Yeah, so one of the great things about all the publicity that's come from our public listing and this process as it continues is there's not very many people that haven't heard of Nikola now. So people that weren't engaged in discussions with us, they are now. We had lots of discussions going on before, but it's just, it's increased greatly since this public listing process. So, the good news is everybody wants to do business with us. And we're in a position of being able to pick and purposefully choose who our partners will be going forward.

Joseph Spak

Can I squeeze in one more on Europe? You know, IVECO talked about the JV you set up with them. Is everything you're going to do in Europe through this JV? I think it's for both battery and fuel cells. And also they talked about this sort of complete turnkey offering for customers. Is that similar to your fuel cell lease solution in the United States?

Mark Russell

Now remember the joint venture with IVECO is to produce trucks in Europe. So we have a facility that's being modified for mass production of our trucks in Europe. It will start with the Tre battery electric vehicle first and then it'll eventually add the fuel cell version over there. And it'll build those two versions of our vehicles out of the Ulm, Germany facility that we're just about to finish.

We actually have the first five prototypes coming off the end of the facility at this point. And they'll go on the test track here in the next couple of months. And we'll go from there. So that's the plan for Europe. That joint venture is just to build those trucks. Each partner has right to 50% of the output of the facility and the production lines there.

So everything else is, you know, the energy side of the business and everything else in Europe will be Nikola alone. And not to downplay the joint venture. It's an outstanding joint venture. IVECO's been an outstanding partner for us in getting our vehicles ready for production here. The commercial offering in Europe will vary slightly but that will be in common. We are gonna offer a bundled lease in Europe just like we do in the United States for the fuel cell vehicle.

Battery electric vehicles we think around the world so far, most customers want to purchase those outright. So we don't think we will be leasing battery electric vehicles. We think we'll sell those outright and customers will put in charging infrastructure which we're gonna help them with, but they're gonna do it themselves in their terminal or their depot. They want to charge those trucks overnight. Which is an ideal solution for battery electric vehicles. And in their depot, in their terminal.

The fuel cell electric vehicle, that's different. We need to provide the fuel in addition. And that's why the bundle lease makes sense in Europe as it does in North America. We'll be offering the fuel, the truck, the maintenance, all in a bundled package ready to service in Europe just like we do here.

Joseph Spak

Okay. Thank you very much.

Operator

Our next question comes for Joe Osha with JMP Securities. Please proceed with your question.

Hilary

Hi, this is actually Hilary (PH) on for Joe. Thank you for taking my question. I just kind of wanted to touch on kind of the grid and how hydrogen can potentially kind of play a role in helping to balance that energy demand. And secondly kinda if you would potentially think about building some of that extra storage kind of in the earlier phase of building out some of these stations or if that's something we would expect to come at a later time.

Mark Russell

Hilary that's an outstanding question. One of the great benefits of what Nikola's bringing to the world is the ability to balance the renewable energy that's coming into the grids. As you know the huge challenge as the world transitions from fossil fuels to renewable sources of electricity is that these renewable sources do not produce on demand. They only produce when the wind blows and the sun shines typically.

And that's not what the grids are designed for. And that's not what people expect that when they flip switches things turn on. They expect to have electricity on demand. But the generating sources that are renewable don't produce on demand. They're interruptible. And they're variable. So, one of the great things that Nikola offers to the world is when we put these hydrogen stations in and we start to get a lot of them in there, it represents a tremendous amount of demand for electricity that can match up to the supply.

So we can make hydrogen when the electricity is available, and then we don't have to add significant demand to the peak. So typically most grids around the world have peak of demand somewhere in the late afternoon or early evening hours. And the peak of renewable production typically around the world is about solar noon in each location. That's when the solar peaks. And so you got this mismatch between the peak of renewable production.

If the wind happens to be blowing optimally around noon and the sun always shines optimally at noon, then you've got way too much power at that point. And then, but, you know, sometime around between four and seven o'clock you don't have enough. Well guess what? When Nikola's there in bulk which we're gonna be in volume, we can take a lot of that extra power at the peak and turn it into hydrogen and then we don't have to be pulling power when the rest of the grid needs it so badly at the peak of demand.

And then on the rest of the off hours we can be taking some of that power that's otherwise wasted right now. When the wind's blowing nicely at night a lot of that today is just wasted. We'll use that to make hydrogen which we'll then put in vehicles and that will be useful to mankind. So, we're an answer to prayer to grid operators worldwide because we're gonna help balance these renewable energy sources into their grids.

And we represent a great grid buffer. Remember how much power we're talking about here. You know when you're talking about 1,000 trucks represents 100 megawatts. 10,000 trucks is basically a gigawatt. Every 10,000 trucks is a gigawatt of power to keep those trucks on the road if you're using zero emissions. So once you talk about replacing the entire North American fleet of millions of vehicles then you're talking about hundreds of gigawatts of power.

And that's one of the problems with looking at the battery side of this. Our battery trucks represent a problem for the grid too because guess what? People want to charge their batteries. If they're on, you know, if they're on the open highway they want to charge their batteries at the same time as they stop for diesel fuel today. Which is breakfast, lunch, and dinner time.

So that five o'clock stop for fuel is a enormous problem for the grid if they want to charge their batteries quickly at that point. The power's not there. And that's a challenge for battery electric vehicles. That's why we like battery electric vehicles for local deliveries and short haul and metro areas where they can return to base and charge overnight where they don't burden the

grid and we like fuel cells that not only have the long range but can fuel up with hydrogen that we make when the electricity's available. It's really an elegant solution.

Kim Brady

Regarding your second question about storage tank, that can be somewhat nuanced. As you know the supply chain is still very early and immature and storage tanks can cost a significant amount. But at the same time as you know we anticipate on all of our locations we will have at least 30 hours of storage. And when you think about depending on the locations and cost of electricity, we understand that in certain locations we may need to have greater flexibility. And certainly as we think about over time we know that storage tank cost is going to come down as we have new entrants from supplier perspective.

So we will size appropriately depending on the geography as well as the cost of electricity. We want to make sure that we have plenty of flexibility.

Hilary

Okay, great. That is the only question I had for you. Thanks so much.

Operator

There are no further questions at this time. At this point I'd like to turn the call back over to management for closing comments.

Mark Russell

So we are grateful for your interest and thanks for dialing in. Thanks for covering us. We're grateful for you guys doing a great service to explain what we're trying to do to the investing public. We're grateful to have such great result. We spent I think 11 million less than you guys were projecting in the quarter. So, you know, we're showing good discipline on the spending front. And since we're in pre-revenue position every one of those dollars has to come from our investors. So we know that that's critical and we take that trust very seriously. And we're committed to continuing that discipline going forward.

So appreciate your questions and we'll look forward to talking to you again in 90 days. Thanks.