Hyzon

Q2 2024 Earnings Conference Call

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CORPORATE PARTICIPANTS

Parker Meeks - Chief Executive Officer

Stephen Weiland - Chief Financial Officer

Tom Cook – Managing Director of Investor Relations at ICR

ANALYSTS

Craig Irwin - Roth Capital Markets

Steven Fox - Fox Advisors LLC

Operator

Thank you for standing by. My name is Christa and I will be your conference operator today. At this time, I would like to welcome everyone to the Hyzon First Quarter 2024 Earnings Conference Call. All lines have been placed on mute to prevent any background noise. After the speakers' remarks, there will be a question-and-answer session.

I will now turn the conference over to Tom Cook, Managing Director with ICR. Tom, you may begin your conference.

Tom Cook, Managing Director of Investor Relations at ICR

Thank you, Operator, and good morning, everyone. Welcome to Hyzon's second quarter 2024 Earnings Call. With me on the call today are Parker Meeks, Chief Executive Officer and Steve Weiland, Chief Financial Officer.

As a reminder, you can find a press release detailing our financial results and the presentation accompanying today's call in the Investor Relations section of our website.

Today's discussions include forward-looking statements regarding future plans and expectations. Actual results might differ materially from those stated, and factors that could cause actual results to differ are explained in the forward-looking statements at the end of the press release and page two of our earnings presentation. Forward-looking statements speak only as of the date on which they are made. You are cautioned not to put undue reliance on forward-looking statements.

With that, I will turn the call over to our CEO Parker Meeks. Parker?

Parker Meeks, Chief Executive Officer

Good morning, and thank you for joining our 2024 second quarter earnings call. I look forward to sharing the commercial, technology and organizational progress we have made, which we believe strengthen our first mover position in decarbonizing heavy mobility. On the technology side, these include continued advancements toward Start of Production of our leading 200kW fuel cell technology. On the commercial side, we are pleased to have launched our 200kW Class 8 fuel cell truck trial program with multiple large fleets in July, with positive initial customer feedback, which I will expand upon later. Steve Weiland will then review our financials in more detail.

First, let me address the announcement we made last month to focus on our core North American Class 8 and refuse vehicle markets.

After reviewing our strategic options, we decided to focus our operations on the market and applications with the highest immediate commercial potential – the Class 8 tractor and refuse truck markets in North America. After considering our options and completing a full assessment of challenging international market conditions and waning government support outside of North America, we decided to halt our operations in the Netherlands and Australia.

In collaboration with our Board of Directors, this was deemed the best path to support the active commercial development of the North American business and our 200kW Start of Production (SOP). This decision allows us to concentrate our financial resources and investments on our first-to-market, single stack 200kW fuel cell technology in our North American Class 8 and refuse truck platforms, which we have launched in large fleet trial programs in the U.S., supported by continued customer interest and advancing government subsidy programs.

Steve will provide more color in a moment on the financial impact of this decision. This quarter, we are proud to have met our guidance and delivered a monthly average cash burn at the low end of guidance. After halting operations in the international markets, based on how we are operating now, we estimate our average recurring monthly cash burn to be further reduced to approximately $6.5 million by year-end. Additionally, given our strategic transition to a single region, we are no longer providing deployment guidance for the balance of 2024 as we narrow our focus to the opportunities in the North American Class 8 and refuse markets. We plan to provide updated guidance on the North American market in the future as our customer trial programs advance.

Alongside focusing our resources, we have continued our capital raise efforts, working with our financial advisor PJT Partners to evaluate potential strategic capital investment and strategic alternatives to support commercialization of our 200kW fuel cell technology.

In late July, upon becoming shelf eligible, we raised $4.5 million in gross proceeds via a registered direct offering in a difficult market environment to increase our runway and improve the liquidity in our stock. This represents the first capital the company has raised since going public in July 2021. Since this raise, Hyzon's average daily trading volume has increased approximately 22 times to 13 million shares per day, when comparing the 30 days prior to the transaction to the 16 trading days post-transaction ending on August 9th. We believe that this capital raise and improved liquidity, combined with continued commercialization of our proprietary fuel cell technology, positions us to pursue additional financings later this year. We believe that successful trials of our leading fuel cell truck platforms converting to large fleet customer contracts, combined with the expected near-term SOP of our 200kW fuel cell system, will serve as important commercial, equity market and strategic investment catalysts.

We recognize the capital markets for early-stage growth companies, particularly those operating in the hydrogen fuel cell and clean transportation sectors, have been in a prolonged period of upheaval. Once this challenging environment subsides, we expect to have broader

access to less expensive capital, while strategic capital remains our primary focus in the near-term. We continue to work with our strategic partners and customers to find ways to advance the commercialization of our technology which includes recent proposals regarding fuel cell and fuel cell truck orders and potential investment into our company, proposals we hope will convert to definitive agreements in the near future.

Now, let me turn to our commercial and technology progress, where we continue to make important strides driving both near-term and long-term value.

Turning first to our commercial activity, in the second quarter we delivered one additional 110kW fuel cell truck to our customer Performance Food Group (PFG), for a total of five vehicles deployed with PFG in California. We continue to gather critical on-road experience through these trucks' commercial operations. We plan to continue working with PFG on an agreement for up to 15 200kW fuel cell trucks following a successful 200kW truck trial, and a possible option to purchase an additional 30 fuel cell electric trucks – an example of the multi-year commercial order pattern we prioritize with large fleets.

Additionally, our 200kW Class 8 fuel cell truck large fleet customer trial program launched with multiple customers in July, and the initial operational performance and telematics data is both encouraging and exceeding our expectations. The truck has proven its ability to complete double shifts, ending the day with fuel to spare, accomplishing full-day combustion engine operations many other major OEM's battery electric trucks could not complete. One trial customer's experience underscores the out-performance we are seeing in a key metric: fuel efficiency. On a heavy-haul, steep route double shift day, where the customer's standard diesel truck averages four miles per gallon, Hyzon's FCEV has averaged over six miles per gallon equivalent, roughly 50 percent better than diesel. This fuel efficiency is critical, because fuel comprises 50 percent of the total cost of ownership for a heavy-duty truck. Based on our calculations, with this level of fuel efficiency total cost of ownership parity with diesel is achieved today, even with fuel that is 40 percent more expensive than diesel. We look forward to sharing more information from these trials as they progress.

On the refuse collection vehicle front, customers, partners and stakeholders across the industry are demonstrating commercial interest for our refuse collection truck. As a reminder, in May we unveiled the first fuel cell electric refuse truck for the U.S. market with New Way Trucks, the largest private refuse equipment manufacturer in North America. Together, we are embarking on customer trials in the U.S. and Canada to prove the viability of the technology and showcase its performance. We expect to launch the first trial with San Francisco-based waste and recycling management company, Recology, this month.

Across the two vehicle platforms, we remain over-subscribed for our trial program, with 25 large fleets in the schedule across the 200kW Class 8 and refuse trucks through January 2025. These fleets represent many of the largest fleets in the North American Class 8 and refuse truck markets, averaging more than 4,200 trucks per fleet, including 10 fleets with at least 5,000

trucks each. As discussed in previous quarters, we prioritize large fleets as they have strong motivation to purchase zero emission vehicles because of government incentives, their customers' requirements and in many cases, their own sustainability commitments.

Subject to the success of these trials, we expect to enter into initial definitive commercial agreements in the second half of 2024, with commercial deliveries beginning in 2025. We are excited by the potential for our trial and commercial agreement program to provide a strong order pipeline and foundation for commercial growth for Hyzon. Any material success in converting those 25 large fleet trials to our targeted 50 to 100 truck multi-year commercial agreements per fleet would yield sizeable year-end order backlog for the company.

Beyond our vehicle platforms, we are also seeing increased commercial interest in our fuel cell technology from the stationary power market, including in such applications as backup and primary power for data centers. The combination of rapid data center storage demand growth driven by AI and cloud computing, alongside data center owners and customers' significant ESG goals, is in turn driving demand for clean hydrogen fuel cell power in data center expansion projects. We are now in advanced customer discussions for near-term deployments. With these trends in mind, the stationary fuel cell power market, estimated at $3.5 billion in the U.S. by 2030, poses an attractive future application for Hyzon's heavy-duty fuel cell technology.

Moving to our fuel cell technology, we're continuing to make progress with our C-sample development in our Bolingbrook, Illinois facility, and remain on-track for SOP in the second half of 2024. As a reminder, Hyzon's fuel cell system generates a net 200kW from a single fuel cell stack, which offers a 30% lighter, 30% smaller, more cost-effective and more fuel-efficient option when compared to the conventional approach of combining two systems or stacks to reach equivalent power.

In the second quarter, we built 16 C-Samples, for a total of 21 C-Samples built in the first half of 2024. We also progressed our rigorous durability testing, supported by commissioning our eighth fuel cell test stand in Q2, which expands our capability for in-house, end-to-end fuel cell testing today and ongoing quality control once we begin production.

Our remaining Capex spend to achieve SOP is substantially complete, at which point we expect annual capacity to be 700 200kW fuel cell systems on three shifts. We expect this to sustain our planned production rates for the next two years. In initial capacity testing, our team confirmed this production rate, along with our capital efficient future capacity expansion plans in line with anticipated demand and customer scale-up programs.

Finally, let me touch on the market environment. While government support has waned in international markets, we are seeing continued and growing strong support here in the U.S. This includes the $2.6 billion Environmental Protection Agency's Clean Ports Program, CARB's HVIP program in California, the Internal Revenue Code's Section 45W $40,000 commercial clean vehicle tax credit and the administration's Hydrogen Hub program – which recently

funded its first three regional hubs, including a $12.6 billion agreement for California's hydrogen hub application, ARCHES. We expect additional hydrogen hubs to be funded before the end of the year, and potential first awards under the Clean Ports Program to be granted by year end as well. Hyzon has supported several Clean Ports applications, the largest of which could yield an order of up to 100 fuel cell trucks, if selected.

Hyzon has also recently submitted an application under the Bipartisan Infrastructure Law's Advanced Energy Manufacturing and Recycling Grant Program. If selected, the grant could provide up to $19.9 million in a 50 percent match structure to help fund future expansions of our Bolingbrook fuel cell manufacturing facility to annual production of 2,800 fuel cell systems, well beyond our anticipated cash flow breakeven production rate.

Despite the potential for political changes in November, we remain bullish on the long-term prospects for our industry and our company thanks to the support we see from states, such as California, which are committed to decarbonization, and the Federal programs I mentioned before, which have shown continued momentum over the past several months.

Before handing the call over to Steve, I would like to reiterate the two primary goals and anticipated milestones for 2024, which we discussed last quarter.

First, SOP of our 200kW FCS and Class 8 fuel cell truck platform. We expect to reach SOP for our single-stack 200kW fuel cell system and our 200kW Class 8 fuel cell truck platform in the second half of 2024. These will be major technology and commercial achievements, clearing the path for commercial scale-up of our leading fuel cell technology to large fleet customers.

Second, large fleet commercial agreements. Subject to successful trials, we anticipate signing new large fleet multi-year commercial agreements in 2024, on the back of the 25 large fleet trials planned through January 2025. These trials launched on the 200kW Class 8 truck platform in July with positive results thus far, and are expected to launch on the refuse truck platform with Recology this month. Additionally, we anticipate advancing fleets under existing commercial agreements to the second tranche of their multi-stage commercial agreement. As I stated previously, any material success in converting trials to new large fleet contracts would show significant progress in setting Hyzon's commercial pipeline foundation alongside evidence of large fleet scale-up progression.

Finally, we are focused on strengthening our balance sheet and securing additional capital to fund our business.

With that, I'll hand it over to Steve to discuss our financial results in more detail. Steve?

Stephen Weiland, Chief Financial Officer:

Thank you, Parker. Just to recap our prior disclosures and what Parker discussed on our strategic repositioning – after a comprehensive review, we are focusing on the North American Class 8 and refuse markets. We believe that there is a tremendous opportunity in these markets with a supportive regulatory environment, and that the difficult decisions we took to preserve our balance sheet and narrow our focus will ultimately put us in a position to succeed.

In connection with the exit activities in Europe and Australia, we now estimate we will incur charges of approximately $21 million, of which approximately $4 million is cash. While the total estimated amount has increased since our initial disclosure, the estimated cash impact has come down. We incurred substantially all of these costs in the second quarter and anticipate making the related cash payments in the third and fourth quarters of 2024.

However, we do believe that once our announced actions are complete, based on how we are operating now, our average monthly recurring net cash burn will drop to approximately $6.5 million by the end of the year, while still supporting our core initiatives. These were difficult but necessary actions, and we are deeply appreciative of our employees' accomplishments in these regions and continued support as we wind down impacted operations.

Turning to our results for the second quarter of 2024.

Our second quarter 2024 revenue was $0.3 million, compared to zero revenue in Q2 2023. Our revenue this quarter primarily reflected continued recognition of the trucks delivered to PFG that are treated as an operating lease for accounting purposes and spare parts sales to a customer.

Cost of revenue came to $18.4 million in the second quarter of 2024 versus $2.4 million in the prior year period. Cost of revenue for this quarter was primarily related to inventory write downs associated with the restructuring actions in Australia and Europe as well as in the U.S. for 110kW inventory given the transition to our 200kW platform. Cost of revenue for the comparable prior year period primarily related to cost provisions accrued for customer contract activities and inventory write downs in Europe.

We are pleased to report that R&D, SG&A, and net cash burn all came in at or below the low-end of our guidance ranges, reflecting our concerted efforts to manage spend.

R&D expenses came to $9.8 million in the second quarter of 2024 versus $12.6 million in the prior year period reflecting lower R&D material costs partially offset by higher R&D personnel costs. Second quarter R&D came in below our quarterly guidance range of $11 million to $13 million primarily due to continued efforts on reducing spend, certain development costs coming in less than anticipated, and the timing of certain development activities in support of our fuel cell SOP.

SG&A came in at $25.5 million in the second quarter of 2024 versus $49.1 million in the prior year period. The year over year decrease in SG&A was primarily driven by the $22 million SEC settlement recorded in the second quarter last year, an overall reduction in legal and professional fees, and spend reduction efforts partially offset by higher stock-based compensation and a write-down of certain supplier deposits. Second quarter SG&A came in just below the bottom end of our $26 million to $30 million guidance range. We also recognized restructuring charges of $2.7 million in the second quarter of 2024 compared to no charges in the prior year period. Restructuring charges this quarter include asset impairment and employee-related charges related to our wind down activities in Australia and Europe.

Our average monthly net cash burn for the second quarter of 2024 was $9.2 million, for a total $27.5 million for the quarter, coming in at the low end of our quarterly guidance range of $27 to $30 million. Although down from the $9.9 million first quarter average monthly net burn, this was up slightly from the first quarter $8.0 million average monthly net cash burn excluding the first SEC settlement payment and proceeds from the sale of the Rochester facility, which reflects the slight uptick we spoke about last quarter due to timing of working capital and payroll. Based on how we are operating at the moment, we estimate that our increased focus and restructuring actions will further reduce our average monthly recurring net cash burn to an estimated $6.5 million by year end.

Our cash, cash equivalents and short term investments stood at $55.1 million as of June 30, 2024.

I'd like to provide some additional color on our first capital raise since our company was listed in July 2021. We have been actively laying out this path with actions such as our shelf filing and authorized share increase. It's also worth noting that we had been unable to raise registered capital, which is critical in this market, until we became shelf eligible in June. Once that occurred, we executed against it promptly.

While capital raising in the current market is very challenging, we believe that this offering helps provide the groundwork for better trading liquidity, a key ingredient for an improved ability to raise capital. We have seen this play out, as our average daily trading volume increased approximately 22x to 13 million shares a day from the 30 days prior to the offering to the 16 trading days following it. We believe that this groundwork combined with continued successful 200kW trials will help provide a path to more meaningful capital raises and potential strategic investment interest.

Lastly, given the dynamic conditions, our ongoing cost actions, and capital raise efforts, we are not providing further financial guidance at this time.

With that, I'll hand it back to Parker for closing remarks.

Parker Meeks, Chief Executive Officer:

Thank you, Steve.

We are encouraged by the data and feedback from the first vehicles deployed with PFG and from our first trials with the 200kW Class 8 fuel cell truck. Our trial customers tell us that Hyzon trucks are outperforming battery electric and completing daily operations as well as – and in some cases better than – diesel trucks, with fuel efficiency that is up to 50 percent better than diesel in some major customer use cases. We are excited to begin trials of the U.S. refuse truck this summer, and to progress the 25 large fleets currently in our full trial schedule targeting conversion of multi-year commercial agreements on the back of those trials. If successful, this would serve as a strong pipeline and commercial growth foundation for Hyzon heading into 2025 and beyond.

We remain on track for SOP of our single stack 200kW fuel cell system in the second half of this year while improving our manufacturing efficiencies and expanding our facility capabilities in Bolingbrook, Illinois.

I would like to thank the whole Hyzon team for their continued dedication. Finally, I would like to thank our customers and stakeholders for their continued partnership and for sharing our goal of reducing emissions across the heavy-duty industry through hydrogen fuel cell technology.

With that, operator, we are now ready for questions.

Operator:

Thank you. The floor is now open for questions. [Operator Instructions] Your first question comes from the line of Craig Irwin of ROTH MKM. Your line is open.

Craig Irwin, ROTH MKM Partners:

Good morning, and thanks for taking my questions. That was a really busy quarter in there. So, I'm not completely sure where to start. I guess we could probably start with the discussion of refuse trucks. Parker, when we were at ACT Expo, we heard people say that the practicalities of actually doing battery electric refuse truck are actually quite limiting. They don't have the ranges or the performance necessary and it's actually hard to mount enough batteries on the vehicles. So the superior economics versus diesel you discussed in your prepared remarks, really, it's just the tip of the iceberg. Can you maybe unpack for people the practicalities of hydrogen fuel cell implementation on a refuse truck and why your customers are showing such strong interest?

Parker Meeks, Chief Executive Officer:

Hey, Craig, good morning. Thanks so much for the question and great to hear from you. So this is a topic that we love to really dive into because, frankly, it's changed so much in terms of our, the market, and our customers' understanding of what are the credible options for zero emission refuse collection going forward. You know a year ago, we thought this platform will be a great platform, one they could outperform in the fuel cell category, but we thought the space would have a significant amount of room for battery electric solutions given the theory was that low-speed start, stop regen braking-driven use case, batteries would be able to perform it. But I think you've hit the nail on the head as to what we and our customers have realized as many of our customers, particularly the large fleets in North America, have been trying battery trucks for some time.

When you're talking about a garbage collection vehicle, those vehicles need to do several things, really perform the same job that the combustion engine trucks do today, right? They need to be able to carry a certain amount of payload, is really one of the most important things. Of course, they need to operate safely. They need to be able to handle in some cases, hilly steep climbs and neighborhoods one the way to and from landfills.

They've got to be able to also handle the power requirements for these advanced garbage truck bodies, right? When you look at the garbage truck of today, it's incredible innovation that the garbage truck body manufacturers have put into these garbage truck bodies, the ability to pack the trash while the truck is moving, for instance, all the efficiencies that they can build in, but all of that creates power too.

If you add all that demand up, needed to carry payload, where some garbage truck applications need to carry up to 10 tons of trash payload to stay on track in terms of the number of trips they're having to make to a landfill to complete their route. They need to be able to carry up and down hill. They need to be able to power a body, which has a steadily increasing power demand based on what it can do.

In trials, our customers tell us that most of the battery garbage trucks on the road today really can only complete about a half to maybe two-thirds of a day's work, right, because of all that power need, because of the way the battery is. And the biggest part of that is the payload penalty. We're seeing payload penalty on battery, refuse collection vehicles of up to 40%, which – obviously, that means they can carry less refuse and need to make more trips and/or just have more trucks to complete with the same amount of refuse collection, to hit the same number of houses.

To give you some numbers from our initial refuse truck trial in Australia, that route tree required about 125 kilometers plus 1,200 garbage can lifts per day. Think about it as 1,200 households, right, that truck had to pick up. And that's what combustion could do in a route that had up to 18% grades, which are just massive hills in the suburbs of Sydney. That truck was in operation for 4 months, completed that 125 kilometers plus 1,200 bin lifts per day with the steep hills without needing to refuel during the day, right? With battery trucks today, battery truck

technology simply cannot do. So that's the use case. And that's why we say, given that we're the only fuel cell refuse collection vehicle that's close to coming to market and the only one that we see announced at least, for at least the next two, probably three years. And the fact that we don't see a single dielectric truck that even comes close today based on publicly announced results to being able to meet the use case and meet the needs.

When your large refuse fleets are facing both – in many cases, board-level sustainability goals of their drive to low emissions, to zero, which we're very thankful to partner with many of the large refuse companies in our upcoming trials. These companies have been leaders in the drive towards lower emissions through the work they've done with CNG, for instance. But – then you combine that with customer demand and willingness to pay. So particularly in the state of California, where you have customers at the city and county level, right, these are the customers with large refuse management companies and fleets. They're putting in their RFPs and their bid packages a goal and a scoring mechanism around how many zero emission trucks that refuse collection provider has in their fleet on their routes by a certain year, 2026, 2027, 2028. And these are tens of trucks per major part of that route. And this is now a scoring requirement that the refuse collection fleet see. If they don't want to compete, if they don't want to either retain the contracts that they already have in their portfolio or they want to expand their market share into big city, big county contracts that have these requirements. They need to have an ability to raise zero emission trucks in their fleet. And if they choose battery based on today's technology, they have to buy again 25% to 40% more trucks to be able to deliver that service.

So it's a performance gap that we think is substantial between fuel cell and battery. It's an economic gap, and we think it's substantial. And the most exciting thing that we see, frankly, is our expectations for fuel efficiency and what that means for the economic equation, particularly on the refuse collection vehicles. So based on our Sydney trial, we saw fuel efficiency of up to 3 times better fuel efficiency on our fuel cell truck than a diesel, right, which is a dramatic difference given half the cost of a truck over its life is fuel. And what that means is if that fuel efficiency holds here in the US, that use case could support up to $15 per kilogram hydrogen pricing, assuming diesel is at $5 a kilogram and be at the same cost of fuel today without subsidy. If that fuel is delivered at $15 a kilogram without subsidy.

So there's – as you can see, use cases, we're quite excited by, and we have very high demand from particularly the large refuse fleet across both the US and Canada because of, again, the performance equivalency with combustion, the performance advantage that's not even close versus battery and the economic advantages of fuel cell when it comes to the fuel efficiencies that we're seeing, that we expect to confirm and trial very, very soon.

Craig Irwin, ROTH MKM Partners:

Thank you for that. So the investment community is paying a lot of attention to infrastructure as far as the ability to either fuel or charge the new drivetrain vehicles that are becoming available

out there. A lot of the EV truck companies have had challenges because they can't cite sufficient charging for the school bus fleets or for the anticipated truck fleets that people want. Can you talk about how you're charging – sorry, how you're handling refueling for your trials, not just on the refuse trucks, but on other markets? And the time lines and permitting necessary to put in hydrogen refueling structure and whether or not there's pre-existing infrastructure may be available to some our customers that facilitates early adoption?

Parker Meeks, Chief Executive Officer:

Thanks, Craig. And that's a critical area that we're actually working on. As you know, my personal background actually is more on the energy and infrastructure side. So something Hyzon has been in deep collaboration with partners around really since Hyzon's inception, right, bringing the molecule and the infrastructure required to our fuel cell technology and to our trucks in this case is vital. And again, going back to what I just said, given its half the cost of the truck over its life and because both technologies have infrastructure challenges to overcome. But we do see the path for hydrogen fuel cell technology and infrastructure to be an easier one than by electric and a less expensive one. And so let me explain the line and update in line with your question as to what we're doing and what we are seeing.

Starting with battery electric because that is part of the comparable. Again, both on the Class 8 fleet platform and with the refuse collection vehicle, all of us in zero emission are going to scale, whether it's battery trucks or fuel cell trucks in back to base use cases, right? We're not going to scale these solutions, new markets and over the road point-to-point long-haul type of a setup. That means we have typically anywhere from 50 to 500 trucks behind the warehouse fences, behind intermodal yard fences, behind refuse collection landfill fences that are all being fueled differently on site today, right? They're being fueled with diesel, they're being fueled with CNG. And that actually helps us from a hydrogen perspective because these fleets are used to handling fuel that's either being produced on site in the case of CNG, collected and/or distributed and if it's diesel, they are receiving typically diesel deliveries, at least weekly, if not daily, right? So that is normal for almost every fleet from a large fleet perspective that we are working with. That's how they run their operation today, on-site fueling, regular deliveries or collection of fuel. In some cases, and particularly in the refuse industry, they're already producing their own fuel for many of these fleets from the CNG perspective.

When you look at battery electric, right, the transition for our fleet to try a new battery charging for any concentration of trucks is dramatic, right? If you're talking about any meaningful number of trucks, 40, 100, 150 battery trucks, you probably get into megawatts of power that's required behind these fences. When we look at where these trucks are, where there's trucks, there's people, typically. And where there's people in this activation environment, there's a grid typically that is challenged, be it either in generation or in more likely transmission distribution and substation infrastructure capacity. And all that is real cost.

So when you see some estimates that people put out on battery electric charging, they're only counting the cost of power and using cost of power, assuming that all the equipment is there, which is almost never the case. And we're talking about this level of installed charging if you're getting into the 10s and 20s and potentially hundreds of trucks behind a single fence. So the fleets are seeing that, and some of the more advanced fleets are quantifying it. And the cost of battery electric and the time it will take – in some cases, we've had customers who told us they've gone in for applications with the power authority for a couple of hundred trucks worth of charging and they've been told it's going to take anywhere from two to six years to get the infrastructure online that they would need to get to 200 trucks or the electrical infrastructure capacity at a single point.

But again, when you think about places like LA, San Francisco, you can imagine the challenges, whereas from a hydrogen standpoint, the transition can be grid independent, right? When you talk about on-site fueling for mobile fuelers to start, which is what we're doing today. So, we disclosed publicly, for instance, the launch of the first trucks delivered to Performance Food Group that the pilot is providing the mobile fuelers for that facility. These typically are mobile fuelers that carry anywhere from 200 kilograms to up to 1 to 4 tons of fuel, depending on gases or liquid and have dispensers on site that allow for, in our case, given our gaseous 350 bar tanks, typical fueling for the Class 8 truck of anywhere from 15 to 20, 25 minutes. And for the garbage truck, given the onboard packaging, it's less fuel, doesn't need as much fuel on board, we're fueling the garbage truck typically in 10 to 15 minutes, right, which is important because going back to use case that's also an advantage for us in terms of rates.

In fact, in some of our trials, the range today that we're seeing on our truck in typical use cases is 300 to 350 miles on the Class 8 truck. Even if they want to do a 600-mile a day, it's really only a 15-to-25-minute fill for them to double the range basically, whereas battery doesn't have that option. So, we start with mobile fuelers, that's available today. We have partners that provide that. And then we have a plan with the customer, in line with our multiyear commercial agreement to evaluate, select, permit and install on-site dispensing, right. So again, going back to the mobile fuelers, if you have a 1-ton mobile fueler, in a typical use case on the Class 8 truck, that probably fuels 25 to 30 trucks per day, right?

And we look at our typical multiyear commercial structure, the first year, maybe 5 to 10 trucks. The second year, maybe anywhere from 15 to 30 trucks. You're getting beyond the first year, well into the second year of deliveries on that mobile fueler. And there are options to go to with higher capacity. Again, if you're using a liquid mobile fueler, you can add up to four tons potentially of fuel in that trailer while we're working with the customer and our field partners to site in and permit and have them construct the on-site fueling facility that will fuel the first scale up to 50 to 100 trucks on that site with plans to expand that capacity over time. And all that is really the long lead items in that development are permitting, certainly, just like it is for battery electric and the supply chain of equipment, but it's arguably a fundamentally different profile of the development structure and timing versus battery electric, which again that transforms

typically all the local infrastructure back to the grid with the utility and the expense that has to come with that.

So, we're very fortunate to have many infrastructure, I'd say, collaborators. In some case, they're committed partners who are actively engaging with our customers to lay out this infrastructure path, starting with global fuelers to get us to the first 18 to 24 months with a clear plan to design permit and install permit dispensing. And it's one that as people see this come to life with our fleet over the next 12 to 24 months, I think they'll see that the infrastructure advantage lies with fuel cell.

Craig Irwin, ROTH MKM Partners:

Excellent. Last question, if I may. It's really encouraging to see the C-Samples tracking exactly how you said they would. And it's nice to hear that the 200-kilowatt stack is on track for on-time commercial production later on this year. Can you maybe lay out for us how this might change things in the Class 8 market for you? Do you think that this is something that has some of the customers that are maybe sitting on the bench right now stand up and say, okay, I'm willing to take my first 10 trucks, I'm willing to take my first 20 trucks? Is this something where it's an important proof point to the customer base?

Parker Meeks, Chief Executive Officer:

It certainly is Craig. And I think as – when you look at the large Class 8 fleets that are in our trial schedules, which again, we are quite proud to have across the Class 8 platform and the refuse truck platform, 25 large fleets in our trial schedule, which we're very excited to have that trial scheduled launched last month with our first two large fleets actively in that trial. These fleets are focused on quality. They're focused on durability, they're focused on longevity. They've been driving a business that's successful, that in the end is a low-margin business. Trucking typically is a low-margin business so they focus on the longevity of the products they put in to their operation and the overall sort of profit structure of those trucks. So that is a very high bar of me, which is why Hyzon from the start, we followed a very typical OEM automotive SOP process, making sure that we're communicating in a way that these fleets are used to, one that they understand when we're able to bring them into our facility and show them how we're progressing, not just in our SOP, but in our quality control, in our durability testing and very transparently in what we're seeing, what we're finding.

It's not just about – the fuel cell works great, don't worry. It's about the process gone through where we showed learnings, right? Whether it's in the fuel cell development testing and design or on trial, right? There are learnings, and our fleets want to see learnings. If we're not showing learnings, they know they're not seeing the full picture because many of them have been through this before, right? They are part of the CNG transition. They are part of the LNG transition. They are part of battery, the electric truck market. And so, it's about transparency,

it's about a process that they see as standard for the industry and one that they can touch and feel and they trust.

And whenever we tell them that we've implemented over 40 design changes in the 200kW fuel cell since the start of SOP, that gives them actual confidence, right, that the process is working, that it's showing results that you would expect to have. When we show them the camera-based quality control that we put in, the efficiencies that we've been able to realize in the production process, the additional testing that we brought online to further expand our end-to-end in-house testing capabilities from single cell all the way to full stack and full system, and why we have confidence that assuming that we declare the SOP later this year, we'll pass all those milestones and will have a product that truly is commercially viable because it speaks to their language, because it's something that's been done in a way that they can see and touch and feel and we're very open and transparent about it.

I think it absolutely is a critical validation for our fleet customers who want to see a product that they can rely on. And if they understand what state is that, they fully understand this is not diesel, right? Diesel has been going through decades of innovation and maturity. And they are okay with that, right? As long as they understand that we are ahead, which we think our customers see that, they understand that our performance is going to get the job done, that the path to achieve the longevity, the durability and the quality that they desire is on track and that we are on path to have a product which has economics that need subsidy today, but don't need subsidy in the future. It can scale along with the ambition that they have for zero emission trucks. And that's what we think we put on the table for that.

Craig Irwin, ROTH MKM Partners:

Great. Well, congratulations for all the progress in the quarter. I'll go ahead and hop back in the queue. Thanks.

Parker Meeks, Chief Executive Officer:

Thanks so much, Craig.

Operator

Your next question comes from line of Steven Fox of Fox Advisors. Your line is open.

Steven Fox, Fox Advisors:

Hey. Good morning, everybody. I guess, first of all, can you – Parker, can you clarify a couple of things you said relative to PFG. So from a standpoint of potentially ramping to maybe 30 vehicle orders and PFG operating, say, 20 to 30 vehicles at a time. How do you and your partner

envision that working? And can you just sort of specifically talk about how the fueling infrastructure would work with what would be your first large fleet customers at scale? And then I had a couple of follow-ups.

Parker Meeks, Chief Executive Officer:

Good morning and thanks for the question. So, specifically, with regard to Performance Food Group we're – again, we're quite thankful to have PFG as a core anchor fleet customer here in the US market. Those that aren't aware, PFG is the fifth largest private fleet in the US with 7,000 trucks. And we think that they are a real leader in the industry in terms of decarbonization goals and driving innovation into their fleet. They've shown that through a variety of public announcements they've made on the battery electric side. And now we're the first fuel cell truck supplier. So now we have now five. We're very proud to have five 110 kilowatt trucks deployed to PFG over the past few quarters. And those 5 are the first 5 of the potential total 50 truck commercial agreement that we signed with the PFG last year. The next tranche is 15 trucks – up to 15 trucks on the back of the 200 kilowatt trial that we hope is successful. Assuming that trial succeeds, PFG will have the options to purchase up to 15 trucks in the next launch. And then there's a further 30 truck option for PFG beyond that.

So, we're currently delivering those trucks in their Fontana facility, which we had a celebration event in January at that facility when the first four trucks were put into ops there. And I can't speak deeply on PFG's plans. But what I will say is we work very closely with PFG, as an example of a large, big customer who does fuel their truck, their diesel fleet on site today. So it fits right in the model that I just walked through as to how we see the infrastructure evolving over time. Today, those trucks, as we announced publicly, are being fueled by a few different fueling sources. Initially was fueled by a trailer provided by Pilot. And we are in the middle, as I've mentioned before, in line with how we typically approach things with our fleets, working with PFG on their midterm and long-term fueling solutions for Fontana and then for the potential in other locations where they're considering expanding fuel cell trucks as we get into – deeper into that total 50 truck potential order pattern over time.

So the transition for a fleet like PFG will be on mobile fuelers, and again, based on the capacity that I mentioned before, they can fuel on mobile or temporary fueling solutions, well into basically through this entire second tranche, if you add them together it's five on the ground today and 15 in the second tranche for 20 total. As you progress to a total of 50, should they take their option to bring in the full 15 in the second tranche, and the further 30 if they go through that entire pattern.

50 trucks theoretically can fuel from a liquid fueling trailer solution. But at that point, you start to look at the permanent installed solution for a facility. And the good news is you really only need about 30 to 40 trucks at a single facility to baseload a permanent installed station, right? So even that 50-truck order pattern should it be fulfilled is plenty of trucks to fully economically baseload and on-site fueling installed permanent solution. And then you can imagine, that's

exactly the type of planning that we're going through with PFG, which we've been in for some time as we get ahead of that transition from mobile fueling.

So in short, mobile fueler and additional capacity from the existing stations that are online in the area and that are being brought online are all viable solutions for a customer like PFG well into the 30-plus truck range. And as we get into that third and fourth tranche of an order pattern, we want to make sure we've got that thought solution on site. Of course, there's plenty of capacity and truck volume to make that a viable solution.

Steven Fox, Fox Advisors:

That's really helpful. And then just as a follow-up, you mentioned how you're oversubscribed in terms of future trials of 25 fleets you highlighted. Can you talk about just your confidence level in being able to execute that many trials over a short period of time in the next, I guess, year or two?

Parker Meeks, Chief Executive Officer:

Yeah. No, thanks. Thanks, Steven. It's critical for our business, obviously, as we've said for some time, the trial really is the final stage in the customer development journey. Typically, when a trial launches with a large fleet, we've been through months of joint customer shaping where at both the executive level and the direct sort of fleet OpCo level. We're deep into fuel cell technology economics, where if it's in the use case, where it should outperform battery electric and where it should be on par with the combustion alternative, where the fuels have come from, how it's going to scale over time. All that work is done over months to prove to ourselves and to the customer this is worth doing and then the trial launches as sort of final proof step before finalizing contract negotiations and potential fuel supply for the scale up.

So the 25 large fleets, the majority are at that stage, right? And that's across both platforms. So the Class 8 is already in trial. Our first trial truck is what's already been now in two different large fleets in July into August, and the refuse truck, we're still on track to have that trial launch with Recology, starting in the San Francisco Bay area in this month. And while 25 is a significant number over the remaining 4.5 months of the year, but two truck platforms and additional trial trucks coming online later in the year. We're comfortable and confident, particularly given that the majority of the trials across both platforms are in California or Alberta. So, they're concentrated in geography that helps us in how we support the trials, how we're able to have our both vehicle and fuel cell stack available, both remotely and on the ground as needed, helps us also from a fueling standpoint, right? If we're fueling them on mobile fuelers, those mobile fuelers can just rotate and sort of follow the trucks. So, we don't need – it really minimizes the number of mobile fuelers that we need, it's a very compact industry in trial schedule, where those truck platforms are operating in kind of the same regional areas.

And in terms of performance, we're quite enthused by the performance of the Class 8 truck, which has already been in trial. As we noted in the prepared remarks, to have the challenging use case that one of our customers put that truck through, to have that truck deliver in a use case, have a very heavy haul, very steep grade. You're talking about a 3,000-foot climb as part of this trial route. And to do that work that combustion does and to do work that all the battery trucks they tried was not able to do, I think is a really great immediate result that we're quite proud of. And to do it with fuel efficiency, that was roughly 50% in that Class 8 use case better than diesel, again, that's a tremendous foundation for scalability. And even with fuel that was, let's say, $7, $8 a kilogram today, if that were the price to the fleet, we would already be at TCO parity with that level of fuel efficiency.

So, we're quite confident in the performance of the truck, given the early returns on the Class 8. The refuse truck, we can't wait to get that truck out on route and trial relatively soon. In fact, today, it's going through its final phases in Iowa, New Ways facility, which is going through its final shakedown, is in the great state of Iowa. And it's actually on routes collecting refuse as we speak in Carroll, Iowa. So if you're calling in from Carroll, Iowa, look out on the streets for Hyzon truck, collecting trash. But getting that truck into operation, we think it's going to prove what its sister truck did in Sydney. And we think as we progress through this trial program, it's going to show both our large fleet customers and the market that fuel cell technology is ready to power heavy duty trucks now.

Steven Fox, Fox Advisors:

Great. That's all very helpful. Thank you.

Parker Meeks, Chief Executive Officer:

Thanks, Steve.

Operator

That concludes our Q&A session. I will now turn the conference back over to CEO, Parker Meeks, for closing remarks.

Parker Meeks, Chief Executive Officer:

Thank you, operator, and thank you all for joining us. We look forward to continuing to update you as we drive our commercialization goals to realization this year. Take care.