

Jack Allen:

Hello. I'm Jack Allen. I'm the CEO of Proterra. I came to Proterra in 2017 as a board member and I became the CEO earlier this year. My career has entirely been in the commercial vehicle market with Navistar, where I held a number of leadership positions; I retired in 2015 as Chief Operating Officer.

I was attracted to Proterra because I was convinced that they had the people and technology to completely disrupt the diesel commercial vehicle market that I had spent 33 years developing. This is a special company. It is dedicated to advancing EV technology. And myself, and Amy, and Dustin, we're excited to tell you our story today.

Our story starts with innovation – innovation is in our DNA – and we have developed exciting, differentiated products that are already proven with real-world miles. We know that transitioning the massive commercial vehicle market won't be easy, but Proterra has the building blocks in place to grow.

Today, we are pleased to be announcing our business combination with ArcLight Clean Transition Corp. We believe the strategic fit and alignment in sustainability and energy makes us ideal partners.

I'd like to introduce Jake Erhard from ArcLight.

Jake Erhard:

Thank you Jack. It's really great to be here with you. We are genuinely excited about this opportunity to partner with you. As Jack mentioned, I am the CEO of ArcLight Clean Transition. I'm also a partner at ArcLight Capital which is a Boston based energy infrastructure asset manager where I've been for the last 20 years. I'm going to take a moment here to provide a brief transaction overview for you.

Over the course of the last couple of months, we negotiated a business combination agreement with Proterra that values the company at an initial enterprise value of \$1.6 billion. From our perspective we see this as a very compelling entry point in today's market for a clear and established leader in the commercial electric vehicle space. As part of that transaction, we've successfully raised a \$415 million PIPE, all of which will be going onto Proterra's balance sheet. So 100% of Proterra's existing shareholders will roll in this transaction.

Together with the cash that we have in trust of approximately \$278 million, and the cash on Proterra's balance sheet today, the company would have over \$800 million of cash on hand, which fully funds a number of identified investments in R&D and plant that you're going to

hear about today. And importantly from our perspective, this capital raised positions Proterra to extend the distinct first mover advantage that it presently has on the rest of the commercial EV space. We also think it's a very logical transaction for Proterra to be pursuing at this time given what's going on in the rest of the EV market.

A word on ArcLight: we completed our IPO in 2020; we're sponsored by ArcLight Capital, which as I mentioned, is an energy infrastructure manager that has raised and invested over \$23 billion dollars of capital. We're active investors in the transportation logistics, power, renewable, utility, and grid infrastructure businesses; and as Jack mentioned, one of the key reasons we're here is that we see a tremendous overlap between this energy domain expertise and what Proterra is doing particularly on the charging and energy solutions side of its business. We've looked hard for investment opportunities within this space, and really no one that we found has a track record and actionable solutions like Proterra has today. So, we're very excited to be part of this and, hopefully, we can help the company in tangible ways as we move forward together.

As a sponsor of this transaction, we've conducted substantial due diligence on Proterra; notwithstanding COVID, we've managed to spend a fair bit of time together in person and in their facilities, we've undertaken a detailed third-party technical review of their battery technology, and we've otherwise taken a deep dive on their contracts, their IP, and their financials.

So, again, thrilled to be part of this; I appreciate the opportunity to be here. With that, I'm going to turn it back over to Jack.

Jack Allen:

Thank you, Jake. And [Slide 8] is a powerful slide that shows our track record in commercial vehicle electrification and demonstrates what the integrated ecosystem of Proterra Powered, Proterra Transit, and Proterra Energy has been able to accomplish in just a few short years. We've sold a thousand electric transit buses with 550 on the road today; our battery system technology is proven and validated with 16 million miles; and we've deployed an industry-leading 54 MW of charging systems. We are well-positioned to participate in this massive market that's growing rapidly toward electrification, as battery costs continue to decline. We have strategic partnerships with blue-chip companies like Daimler and Van Hool; and we already have significant revenue and plans to grow at a 68% CAGR, supported by orders and a backlog of over \$750 million. Throughout our journey at Proterra, we've been supported by a world-class group of financial and strategic partners. So, we believe what you're going to hear today is that we have a proven business model that is already penetrating this market.

We are electrifying the commercial vehicle industry by going to market with three complementary businesses: Proterra Power designs and manufactures best-in-class battery systems, drivetrains, and controls for commercial vehicle OEMs. Proterra Transit is North America's number one electric transit OEM; we're purpose-built for electrification and our performance is driven as a result of our battery system technology from Proterra Powered. Proterra Energy is a complete end-to-end provider of EV charging systems and infrastructure solutions; we win by providing customer solutions with a holistic turnkey approach. Now, these three businesses are interconnected in a self-reinforcing manner that results in a winning differentiated business strategy.

We participate in a massive commercial vehicle market that's rapidly transitioning to electrification; electrification is ideal for many commercial vehicle applications. It's different than the passenger car market where there are defined characteristics like high mileage, poor fuel economy, and urban routes that prioritize this move to electrification. Certainly, governments and communities, they want clean air and noise mitigation, and they're using mandates and incentives to get there. But companies also want clean air. But what ultimately wins them over is the increasing compelling total cost of ownership as battery costs continue to decline, complementing what is already a significant advantage in maintenance costs.

The transition to electrification is not going to be easy; there are challenges and obstacles to overcome. But this is where Proterra is advantaged; we've been doing this for years and we have proven solutions for the biggest obstacles. So, let me go through just a few of these. Fleets want equal total cost of ownership and Proterra is moving that direction with low cost due to our scale, our partnership with LG, and the automated assembly in place. Dustin will touch on safety: it's a must.

Quality. Fleets need long life for their batteries and significant uptime. We have a proven lifespan of 4,000 cycles for our battery systems; that's charging and discharging every day for 12 years; and our maintenance cost is known with the 16 million miles that we have driven. Fleets also want to know that you can meet their needs, that you have the scale. We have a decade-long track record of manufacturing; we've produced 300 MWh hours of batteries, and we have 350,000 square foot of assembly capacity already under roof.

Our experience transcends into our organization and our facilities. We have a world-class battery team of engineers located in a laboratory in Silicon Valley; we have transit bus manufacturing in place for almost 700 buses in Greenville and Los Angeles. Our new modular battery

assembly facility in Los Angeles has capacity for 675 MWh, and is a template that can be replicated at customer sites for 12 months or \$20 million. The result is since 2017, we have lowered our battery cost by 86 percent and our labor and overhead by 55 percent. So, while others are just getting started with building prototypes and factories, we have been at this for years; so, what we get to do is focus on the next generation of technology as we continue to gain more experience by putting more vehicles on the road.

Being the first mover with over 16 million real-world miles is a huge differentiation for Proterra; we are far along what we know is a very steep learning curve, and that's a big advantage. Battery electric vehicles are hard; what I know for my Navistar days is it's not like designing a new diesel engine where you have a playbook and a hundred years of experience; optimizing battery electric vehicle performance and quality requires multiple design iterations and real-world testing. Our telematics system pulls real-time data from over 500 vehicles in operation every day, providing our engineers an incredible insight into vehicle performance in all kinds of environments, allowing them to continually improve performance. This results in Proterra being able to build customer relationships, improve our brand and drive sales of our EV systems.

Let me go through the products and services that Proterra Powered and Proterra Energy bring to market to develop this integrated ecosystem to provide advantages to our customers. Now, I've talked about the design and manufacturing of battery packs, but beyond that, we have our own drivetrain that's optimized for battery electric vehicles; we also provide vehicle integration services for our customers. We provide end-to-end infrastructure and charging systems. And our in-house telematics system, APEX, serves as a fleet management platform and also integrates our vehicle to grid services that monitor and controls our systems on the grid.

It's these products and services, combined with our first-mover market experience, that allows us to be uniquely positioned to capitalize on the commercial vehicle market – and the infrastructure and charging market that is going to be required to serve the commercial vehicle market. And with the partnerships that we have in place today, we are already moving up this arc.

So, let me talk about how we go to market. Proterra Power goes to market with a tailored approach for each of our partners. For example, for Proterra Transit and for Daimler's Thomas-Built Bus, we provide an end-to-end powertrain partnership all the way from the drivetrain back to the battery system; for Bus Tech and for Daimler's Stepvan, we take a

different approach based on the customer needs; we provide the energy system, the battery, and the high voltage systems and controls. And for Optimal and Valhaul, we're their battery partner. The point here is we have adapted our system to be fully integrated with the needs of our customers.

Let me talk for a minute about Daimler. Daimler is the world's largest commercial vehicle manufacturer and we are fortunate to have a special and unique relationship with them. They're an investor, a customer, and their top European finance person serves as a board of director. We have two active programs with them today: Thomas Built Bus went into production in 2019; there are 480,000 school buses on the road and Thomas Built Bus is a market leader. Freightliner Custom Chassis is the market leader in the 300,000 Class 4 to 6 final-mile delivery van chassis market. We built them prototypes in 2020, and they will go into full production in 2021.

The flagship market for our battery system technology was the transit market, because we believe that this market would be the first to go all-electric; and I also can't think of a more demanding market to validate and improve our technology. These vehicles go hundreds of miles every day in stop-and-go traffic in difficult urban streets. Our transit bus has been through eight Altoona tests, we provide great range, fuel efficiency, the ability to climb hills, excellent operating costs. The result here is that we have sold over a thousand; we have a 50-plus percent market share, 16 million miles driven; and this year, we introduced our fifth generation of transit bus with the ZX5.

The transit EV market is growing rapidly with 50 percent penetration expected by 2025. Today, if you take the entire bid universe of diesel CNG and electric vehicles, 26 of them are zero-emission buses. So, we're well on our way to that 50 percent target. Proterra is proud to have our buses in 120 communities across the US and Canada – we're in large cities, small cities; we operate in hot climates and cold, in the mountains and in the valleys; you'll see Proterra buses everywhere across North America.

The third area of our business is Proterra Energy, and I believe this is the biggest obstacle to the broad adoption of battery electric vehicles: it's in the infrastructure and charging. This is incredibly difficult and complex. Fleets ask us every day, "What kind of charging do I need? Where do I put it? How do I interact with utility? Who lays out and manages construction? Are these systems reliable? What's it going to cost?"

So, we needed to develop a product line to enable our customers to accelerate the adoption of EVs. No one was doing fleet charging, and

there is a huge, largely-untapped market on the right side of this chart, and fleet depots in destinations, and on-route top-outs being required like in warehouses. This requires a multi-disciplined approach, and that's what we have done at Proterra. We provide a complete turnkey suite of services from fleet modeling, to energy as a service, finance, and leasing. We've partnered with Power Electronics, a global leader in inverter technology, to provide our charging hardware; and then we use our in-house telematics system, APEX, to monitor our fleet and as a vehicle-to-grid interface.

We have a plan for the second life of our batteries and, ultimately, to recycle the materials with Redwood. The result is that just in the last two years, we've installed 54 MW of charging.

So, here are two real-life examples of our integrated platform. On the left you see Edmonton, they have 40 electric transit buses, and we've installed 4.3 MW of charging hardware. What's really important to them is the software: they've built a special garage just for their electric vehicles and what we help them do is have a fully-integrated charging solution that optimizes and schedules their charging while lowering the demand charges.

On the right side of this page, you see Dominion Energy. Dominion is a Virginia-based energy company, and they're a leader in commercial vehicle electrification. So, they have 50 Thomas Built school buses with our power; and what they're interested in is charging infrastructure and vehicle-to-grid services. They're seeking state approval to buy another thousand electric school buses which then they will turn around and lease to the school districts; they want to use batteries as a grid resource, especially in the summertime when the vehicles aren't moving as much. They want to use this to provide backup power, stabilization, and load-shifting with the grid.

My last slide is around our team, and I believe we are a public-ready company from the leadership team and the board of directors. In addition to my experience at Navistar, I also served on the board of Valspar for seven years in the Audit Committee. You're going to hear from Amy Ard; she started her career at PwC and spent significant time in the industry including at Precision Castparts. You'll hear from Dustin Grace, our CTO. Dustin was a battery engineer at Tesla before coming to Proterra. In addition, a couple others I would mention on this page. Josh Ensign is our Chief Operating Officer; he ran manufacturing at Tesla, and he also worked at Honeywell for many years running more than 12 plants across three continents. The latest member of our team is Gareth Joyce. Gareth is the President of Proterra Powered and Energy. He spent a dozen years in the Daimler Organization, much of it at Mercedes-Benz.

In his last position, he was the Chief Sustainability Officer for Delta Airlines.

So, we have a team that's public-company-ready from both our leadership team and our board. So, with that, I'll turn it over to Dustin Grace.

Dustin Grace:

Thanks Jack. Hi folks, this is Dustin Grace. I am Proterra's Chief Technology Officer. I have had the pleasure of dedicating the last five years of my career to this great company. Prior to joining Proterra, I spent about eight and a half years focused on battery systems at Tesla. Before that, I began my career at Honda R&D, spending time at both their Ohio and Los Angeles development centers.

In our mission to develop and manufacture technology for this space, what we do at Proterra is extremely difficult. The duty cycles are rigorous. Our customers are demanding. Safety could not be a higher priority for our team. Our charter is simple, and it is focused. We aim to advance the state of the art by developing the most efficient, energy dense, and cost-effective powertrain systems for pure-play battery electric vehicles. Our technology has been intentionally architected to adapt it to a wide array of vehicle types and markets. Thanks to the devotion of this team, many years of iteration and testing, and real-world customer validation, Proterra could not be in a better position to lead this market towards a zero emissions future.

Before we jump into the technology, I will take a moment to highlight what I am most proud of. That is our phenomenal engineering team. Our engineering organization is a powerful group of innovators and represents over 46% of our indirect work force branching across vehicle, battery, drivetrain, software, and manufacturing engineering functions.

We opened our Silicon Valley technology center in 2015 to build a world-class team to go deeper on the internal development of our own electric powertrain technology. There are six battery engineering managers in my org, and every one of them joined Proterra from nearby Tesla in recent years. These managers average over ten years in battery-specific engineering experience, so we are experts in this space.

Our products are backed by 81 patents, and no shortage of proprietary processes to manufacturer, monitor, and operate these products in a fleet environment. As we walk through these slides, my hope is that you will key onto our obsession with efficiency – not only in a traditional sense of its benefit to vehicle range or reduction of energy consumption – but also in our approach to intelligent product design and the use of space.

With that in mind, let us start with our battery system. This is where we are most vertically integrated in our development and manufacturing capability, so let us walk through our approach. Every battery starts with the world's best cells. Today, our battery packs are based on small format cylindrical cells. Cell selection, whether looking at the performance of the cell or the manufacturer of the cell is a non-trivial and ongoing process. Gaining access to these cells requires proven technical capability to safely integrate them into roadworthy battery packs. This is not to mention a collaborative and technical relationship with our supplier base.

We are actively benchmarking the latest cell technology from most tier one lithium-ion cell manufacturers. Our deepest partnerships are with LG Chem and Panasonic, who we have collaborated with since 2016. Proterra does have its own in-house capability to characterize, test, model, and extract performance from these candidate cells with our own software limits and algorithms. Looking deeper into the modules and packs, and what makes them so unique is how highly integrated Proterra's architecture is.

Why does this matter? In battery engineering complex is easy, but simple is hard. Our cooling distribution, our module structure, and our pack structure are all literally the same thing. They serve the same function. They occupy the same space. They share the same costs. We have architected an extremely efficient design readily apparent from the moment you lay eyes on it. It is a key differentiator for Proterra and why our customers prefer Proterra battery packs versus our competitors and even their own designs. Our packs are smaller in size. They provide more energy. We can offer them at compelling price points because of this architectural efficiency. This energy density does not come at the expense of safety thanks to our ISO 26262 certified BMS and our patented thermal event mitigation scheme. More on those in a bit.

Finally, the vast majority of our customers require massive and complex energy systems in their vehicles. Typically, these are on the order of several hundred-kilowatt hours. Our job is really not done after the packaging exercise is complete. To enable the seamless integration of these systems into our partners' vehicles, Proterra also develops and sells our own embedded software systems, which ultimately make us more attractive to our partners but also sticky as well. We offer a universal charge controller to enable DC fast charging. We offer a vehicle control unit, or VCU, to interface our multi-string battery systems, drivetrains, and other HV systems. We offer a telemetry gateway, which has over-the-air software flash capability for Proterra controllers.

A better way to describe our battery pack is not as a pack, but rather as a platform. Packing enough energy on board a vehicle is, even today, perhaps one of the most difficult challenges when engaging a customer for a new project. An energy system can easily make up over 30% of the mass of a vehicle. Figuring out where and how to package a battery on board while maximizing safety is one of the best ways to differentiate ourselves from our competition. Flexibility is a key element to our architecture, and it is fully based into both the hardware and the software that govern these systems. Our latest platform is now offered in two widths and in two heights to maximize the use of space packaged within, below, or on the sides of those standard truck chassis rails you are going to see in a Class 4 or Class 8 heavy-duty truck.

We can scale the length of our packs to be as short as three feet or up to as long as nine feet. Our packs can be racked or stacked together to increase either voltage or energy capability in these vehicles. In the modules inside of these packs, we produce up to seven different energy and voltage combinations. It can be strung in series up to 1200 volts, gaining us access to markets outside of commercial vehicles such as marine, rail, and even the stationary space all equally exciting and massive markets that we believe will explode this decade.

This flexibility carries all the way through to our manufacturing and automation strategy. The new Los Angeles battery line that Jack and Governor Newsom announced just a few weeks ago is operational and capable of producing every one of the variants you see on the bottom of your screen. With this flexible automated manufacturing scheme, we can build out a gigawatt hour of manufacturing capacity in less than 50,000 square feet. This can be stood up in less than 12-months' time as we just did through a difficult 2020.

Why am I telling you this? Shown at the bottom, you can see how this flexibility enables us to integrate our systems as small as 113-kilowatt hours for example in a paratransit van to over a megawatt hour in size for long haul Class 8 trucks. The practical lower limit, really, for our platform can be as small as 35-kilowatt hours for a small delivery van and as large as 6-megawatt hours which we have seen interest in for rail applications.

I have already spent some time describing the benefits of our superior architecture and the results of class-leading energy density. Let us dig in a bit deeper to some of the key features related to our approach to safety. On the active safety front, this begins with our second-generation 1200-volt capable BMS. It was developed in collaboration with a close partner of ours. Together, we spent the entirety of 2020 working with an accredited third party on both the hardware and the software architecture

of the entire system. In December of last year we were awarded our certificate of compliance to ISO 26262, the current technical state of the art for functional safety and road vehicles.

Proterra is one of a select few battery manufacturers in the States who can claim compliance to the standard from an accredited third party. We are ahead of the curve with this certification, but it is in demand from our customers today especially in European markets. Because most of our energy systems use a multitude of battery packs in parallel, if there is ever a critical problem with one of them it can be isolated from the system without interrupting vehicle operation. Consider it propulsion redundancy in the same way commercial jets have multiple engines.

Moving forward to passive safety, we often get the question from our investors. Why do you use cylindrical cells? Would it not be easier to use large prismatic or pouch cells instead? Well, that is precisely the point; it is the core of our differentiation. It is not in our nature to take the easy path to get to 80% of the safety or performance goal. We are going to go all the way to the top. It is true; we manufacture some of the largest battery systems in the world using some of the smallest cells out there, and this is not by accident. Small format cells enable Proterra to design battery packs to be more resilient to cell defects and critical failures. If one of our cells experience a latent failure at some point during the life of the vehicle, it will actually be opaque to the customer and will result in about a 1% capacity loss. That is well within the bounds of our warranty laws. If the cell defect were to result in an internal thermal event, our passive propagation resistant design will yield a detectable and more importantly an inert response.

Why does that matter? Competitors who use large format cells will be more vulnerable to warranty activation on account of single cell degradation. Worse, they are more susceptible to mass recalls or thermal events due to cell defect escapes through their factories. We are hearing about this more and more in the news as this option increases. There are some battery packs out there based on large format cells. They develop a latent internal short at a high state of charge. The end result can be a vehicle fire even while the vehicle is not in operation. OEMs who do not embrace passive propagation resistance as a requirement will continue to grapple with this challenge as they scale.

As we look forward to a decade of increases in energy density, passive and active safety systems will become even more critical. Really this is an opportunity to continue to differentiate and extend our lead from our competition.

Looking to the future, our approach to battery engineering is guided by a confidence that the batteries of 2030 will look nothing like the batteries of 2020, just as today's batteries look nothing like what we were developing back at Tesla in 2007. They will be smaller. They are going to be lighter and more powerful. They are going to last longer. As a technology thesis, we are focused on energy density and cost advancements that will come from nickel-based chemistries. We are less enamored by recent LFP developments which are in sort of a "good enough" category today, but will be left behind as the state-of-the-art advances.

The battery industry is a rapidly evolving space. It is important to highlight how Proterra has evolved with it over the last few years before we give you a preview of where we are focusing our R&D efforts to further develop this market. Let us start from the bottom of [Slide 30], and I will move up. In 2017 after about 18 months of development and collaboration between Proterra and LG Chem on a new 18650 cell, we entered the market with our third-generation battery pack manufactured at our Silicon Valley facility. By vertically integrating from the cell up, we fell off a COGS cliff reducing our battery systems' cost by 75%. It was a transformational moment for Proterra. In the following years, we have averaged about a 10% learning rate on our cost structure developing a second-generation BMS capable of multi-pack architectures. With that, we found our way into five partner vehicles.

2020, as fun of a year as it has been, had us focused on completion of our fourth-generation battery platform as well as the commissioning of our automated battery production line, which builds this platform, at our new factory in Los Angeles. We have evolved to a 2170 form factor cell with improved energy density, while reducing cell cost by 25%. This new cell is capable of over 4,000-plus full discharge cycles. Proterra battery packs can now outlast the vehicles they are installed in without necessitating mid-life replacements. This is an absolute game-changer from a total cost of ownership perspective.

We are accelerating into 2021 with our new fully operational battery production facility, eager to enjoy the fruits of 2020's labor. Cost of goods sold continues its trajectory downward as Proterra Powered volumes increase and factory efficiencies are realized.

For my team, the most exciting aspect of 2021 is really our move from being a single-module company to a multi-module company. We captured five customers with that one module configuration. The seven of them in our portfolio will significantly broaden our application reach. So 2022 will see further vertical integration and deeper cuts in our cost structure, as we approach a gigawatt hour throughput. We are currently

validating a new cell chemistry, NCMA with a higher silicon content, that will drop directly into today's design.

At the top of the page, and most importantly from a use of proceeds standpoint, in 2021 we are beginning the ramp of our new development for a next-generation battery pack. This will incorporate the latest in cylindrical cell technology, including a plan to invest to produce those cells domestically with a partner. The overarching goal is new architecture to launch in 2024 with aggressive cost targets and pack energy densities in excess of 200-watt-hours per kilogram. We believe this architecture will be Proterra's statement that even in the zero emissions long haul truck market, battery electric propulsion will be a dominant force.

Moving away from batteries, let us have a look at Proterra's multi-speed drivetrain offerings. Again, there exists an easier path to electrifying commercial vehicles with big, heavy, and expensive direct drive systems. These systems are a minimal viable product. They may get the job done, but have you really developed an electric vehicle worth its weight if you have not focused first on efficiency or mass optimization? Proterra has been developing and deploying best-in-class electric drive products with multi-speed transmissions since 2011. Moving from the bottom up, our first offering features a two-speed gear box we borrowed from a diesel electric dump truck application. We married this permanent magnet motor and inverter from Danfoss and developed the software controls and shifting logic ourselves to work for a transit application. A major benefit we get from this system as compared to our direct-direct competitors is a 5% to 10% efficiency improvement due to operating the motor at its optimal efficiency points whether they are on the highway or in stop-and-go city traffic. Just as critically, we are able to better climb hills in cities like Seattle and San Francisco due to having this low gear.

Currently in development is a new system architecture which leverages a new four-speed gear box that Proterra has integrated into a transverse axle governed by our own software and controls. In this system, our customers will see 17% more power density, 28% more real torque, and another 5% efficiency above our base system. In moving to our most premium product, about three years ago we kicked off the development of DuoPower, which was deployed in November 2019. Proterra was first to market in heavy-duty with a production E-axle. It was a great reception by our customers, especially those who would prefer to upgrade their drivetrain for more performance and range rather than adding more batteries to the vehicle.

DuoPower is a brute force product with 550-horsepower capability, but it is really developed to be efficient first and powerful second. The

regeneration capability of DuoPower allows drivers of our 20-ton vehicles to exercise true one-foot driving, making it natural to bring the vehicle to a complete stop without the use of friction brakes. This is really important because our customers are going to get an additional 5% to 15% more range out of their vehicle from a performance and efficiency standpoint.

Moving forward to Proterra Energy, I will take a moment to share with you the next-generation charging hardware that was developed with our exclusive partner Power Electronics. As Proterra evolves from a pilot-scale order size at five vehicles per customer to 20-plus vehicles per customer, it is important to look forward to what technology can meet that moment. For this, we have turned to highly efficient utility scale power conversion equipment which has been customized from behind the fence fleet charging. These systems have been in development with our partner for the last year or so. We made our splash with this new lineup about two months ago. So far, we have seen a great market response.

The power modules in these units are sized with the capability to charge medium- and heavy-duty vehicles overnight, typically within a two- to six-hour window. They can be configured with either a remote CCS charge plug or an automatic overhead pantograph. It will be compatible with a new standard for MCS – the megawatt charging system – when that is released for long haul truck in the coming years.

Let us focus on the middle of [Slide 32] on the fleet charger. That is perhaps the most transformational fleet charger product we are going to see for some time. It is a product that we have exclusivity over for three years in transit and school bus markets. It is a 1.5-megawatt all-in-one-system which connects directly to medium-voltage powerlines up to 35-kilovolts completely bypassing the expense and inefficiency of transformers and switch gear. It is about the size of a 20-foot shipping container and can charge up to 20 vehicles in parallel or up to 40 vehicles serially.

To the right of that we have a special project of mine, the Fleet Battery. Proterra is a battery manufacturer with sufficient scale, so why not develop a product which our customers can use to augment their ever-scaling charging infrastructure? The fleet battery is being architected in both a first-life system and as a second life battery receptacle. Our customers can use this system to deploy the batteries they pull from their fleet vehicles when they are ready to upgrade to newer and more capable batteries at the midlife of their vehicle. The power capability of this unit will also be 1.5-megawatts, directly matched to the fleet charger.

Finally, I will close with a preview of Apex, our software management platform for managing commercial fleets. This is the thread that ties it all together for Proterra's business units and technology platforms. On the left, we have our monitoring and analysis features – the core functionality needed by any modern fleet operator. This is how you monitor, analyze, or diagnose your fleet performance real time. Customers can track their CO₂ emissions per unit passenger mile traveled, as this becomes increasingly relevant.

In the right column, the more powerful arm of this tool is the control element of this platform. This is where we give users the capability to configure their charging profiles and rollout times, participate in energy arbitrage through V2G, and we can even enable OTA software updates for onboard vehicle controllers as we improve performance, fix bugs, and want to enable new features for our products. Proterra's telemetry hardware is installed on all of our transit busses, as well as Proterra Powered vehicles at our partner's request. This transmits about a gigabyte per day per vehicle via wi-fi or 4G to our Apex cloud platform.

It is important to highlight the customer of Apex actually varies. This is both an internal and an external tool. Internally, our service and engineering departments use this tool in different capacities; I use it every day. Externally, fleet operators and utilities will use this tool in their respective capacity. Everyone really gets their own unique pane of glass. By far, the most exciting part of this platform is its capability to transform Proterra Powered vehicles into mobile energy storage units, which I will talk about on my final slide.

Vehicle-to-grid to this point has been a really neat concept without a lot of legitimate proof points. The truck of yesterday is an idle asset when not in use, but the battery electric truck of today has the potential to become a useful asset when not on the road. Energy optimization is where the smartest fleet operators will win on TCO over just the good ones. Proterra is hard at work developing a turnkey platform that enables our suite of Proterra Powered vehicles, our lineup of Proterra Energy fleet charging systems, and APEX to communicate and intelligently share power with an energy provider. The school bus segment is perhaps the most well-suited for this capability due to the duty cycle. Generally, school buses are parked during summer months, precisely when peak demand on the grid could be benefited by this clean, reliable, inexpensive power, but even year-round their operations are largely restricted to peakier routes, meaning they're driving in the morning then are connected to the grid throughout midday, and then they operate again in the evening. A lot of noise is being made in this space lately. A typical approach you're going to hear about our competitors' announcements are going to be like Software Company A partnered with Bus Company B,

and they're partnered with Powertrain Company C and all of them will partner Charger Company D to develop the vehicle-to-grid-capable product.

Proterra has an inherent advantage here because we're working within our own partner systems: we use Proterra batteries, we use Proterra controllers, and our own exclusive family of fleet chargers. Our APEX software development team based out of our Silicon Valley office where I work is focused on the delivery of our first two deployments in Q2 2021 at Dominion Energy in Virginia and one in Beverly, Massachusetts. This is an ambitious effort, but Proterra already has the foundation well-built.

So, coming off this capital raise, we're excited to further invest in this capability because we believe that we will absolutely win with the best overall product.

On that note, I'll pass it to Amy Ard, our CFO, who will she'll bring us home.

Amy Ard:

Thanks, Dustin. Hi. My name is Amy Ard, and I'm the CFO of Proterra. I have been with Proterra for four years, and I'm happy to tell you about the progress we've made and the exciting path we are on. I'm going to cover four main topics. First, I will talk about revenue, both our historical revenue and how we expect to expand our revenue opportunity. I will also speak to how our current backlog and orders give us visibility to near-term financial performance. I will cover profitability, both gross margin performance and expectations, as well as how we will gain operating leverage. Finally, I will cover use of proceeds.

Slide 37 shows revenue projections, but I think it is first important to talk about our historical revenue. We had over \$100 million in revenue in 2018, and tens of millions of dollars in the years before that. In 2020, we're nearing \$200 million dollars of revenue, with year-over-year growth despite a difficult COVID-impacted year.

We have great visibility for our expected revenue in 2021, as over 90 percent of that, \$246 million, is covered by backlog and orders. As we move out to 2023, you can see the benefits of the modular battery design and cost down effort that Dustin spoke about as we will move into new commercial vehicle categories. By 2025, you see the further benefits of getting closer to powertrain parity as our commercial vehicle categories continue to expand and our volumes grow. We are showing a 68 percent CAGR from 2020 to 2025 – significant, but certainly very achievable.

We are gross margin positive today. It is difficult to get to gross margin positive as a startup hardware manufacturer, but we have achieved that milestone by growing our gross margin by 26 percent since Q1 2018. That experience gives us confidence in our ability to grow from 4 percent to 25 percent by 2025. How will we do that? The same way we've done it in the past. We will use manufacturing efficiency. That is driving volume through our capacity, getting higher fixed cost absorption, and using continuous improvement throughout our process, and a design-for-manufacturability mindset.

We will also use bill of materials reduction, and that's more detailed. We have a part-by-part, subsystem-by-subsystem review process across our products. We use redesign as one way to reduce costs. We have done this in the past, as Dustin described, with both battery packs and drivetrains. We have also done it in other parts of our products driving thousands of dollars of cost out of each of our vehicles. We will use resourcing and renegotiation. Naturally, with volumes, we will get cost reductions. However, we have an experienced supply chain team that is constantly ensuring that we are finding the best suppliers and best prices at current volume.

The final point I want to make is on margin evolution. We are acknowledging that in order to drive the commercial vehicle market to electrification, we will be required to reduce prices. However, we will not do that without the roadmap on efficiencies and cost downs to still maintain 25 percent gross margin.

Our financial model was built based on experience. We know what our order book is, what the current cost of products are, and what our roadmap shows for efficiencies and costs in the future. Our experience is also evident in operating expenses; we have already invested in our technology, as Dustin explained, and we already have an SG&A organization in place. We've built up our commercial team; sure, it will grow with our volume, but the core team is in place. We've already built up our ERP system, our finance, legal, and HR organizations; we are not starting from scratch. We know how to build teams efficiently and that will allow us to gain operating leverage achieving EBITDA-positive by 2023, and over 20 percent EBITDA margins by 2025.

Our experience also gives us an advantage as we think about CapEx investments; our volume projections imply that we will need to invest in growth capital and vertical integration, but we will not make those investments without an eye on ROI for our investors. Our EBITDA and disciplined capital approach will allow us to get to free cash flow positive by 2024 and to generate significant free cash flow by 2025.

Finally, I want to cover the use of proceeds. This transaction will allow us to maintain our competitive advantage, building our competitive moat deeper and wider as we get closer to powertrain parity. We will invest in R&D, our vehicle and powertrain engineers will drive performance and cost in our products as they have done in the past. We will also invest in software, strengthening our current APEX product and increasing our energy as a service offering to become a one-stop-shop for fleet operators.

We will also invest in growth capital. Growth capital will be required to meet the volumes we are projecting; however, our flexible manufacturing systems will allow us to make the best decisions about where those plant locations will be, whether they are co-located with customers or centralized in the country to focus on freight optimization, and our cell partners' new location.

Finally, one of our strategic advantages has been our partnerships with cell manufacturers. We hope to strengthen our relationships with our partner by co-investing in domestic cell manufacturing. That will give us access to next-generation technology and allocation of supply that we believe will be required as vehicle electrification grows and best-in-class pricing.

I will now pass it back to Jack to close us out.

Jack Allen:

Thanks, Amy, and thanks, Dustin. And thanks to all of you for listening. We're thrilled to have the opportunity to tell you the Proterra story. We are committed to a really simple vision: to provide clean, quiet transportation for all. And we look forward to you being with us on our journey.

Thank you.