

SPAC Insider Podcast Transcript – 6/27/2023

Nicholas Clayton:

Hello and welcome to another SPAC Insider podcast. We bring an independent eye in interviewing the targets of SPAC transactions and their SPAC partners. Car enthusiasts have been bolting carbon fiber wheels onto high performance vehicles for years, but hitherto luxury add-on brings real benefits to vehicle weight and energy economy, both of which have a new importance in the age of EVs. I'm Nick Clayton, and this week my colleague Marlina Haddad and I speak with Jake Dingle, CEO of Carbon Revolution. Carbon Revolution is working to scale up its carbon fiber wheel production to provide the wheels as a mass produced staple in the industry. They announced a 270 million dollar combination with Twin Ridge Capital in November to accelerate these plans.

He describes the major business advantages in bumping up from the ASX to a US exchange, and how the transaction has opened up some financing doors even while it is still pending close. Take a listen.

So just to get started, Jake, some of our listeners may not consider the wheels to be the part of the vehicle that is going through a lot of technological advancement right now, but Carbon Revolution has racked up 58 patents so far with 31 more pending, all focused on the wheels. So what are some of the innovations that you've been able to generate there?

Jake Dingle:

Well, firstly, wheels have not really progressed very much since the introduction of aluminum wheels back in the '70s. So this really is a big step forward. Our wheels are made from carbon fiber, which is a very sophisticated, complex material to work with, but it's extremely light and extremely strong, and it enables us to take up to 50% of the weight out of a wheel versus a conventional aluminum wheel. Even more if you compare it with a steel wheel. But it's a really challenging material to work with, so in order to do what we've done, you need to have advanced engineering capabilities and advanced manufacturing capabilities to do that. But yes, it really is the next step change in wheel technology, having really seen no major step forward since the advent of aluminum wheels some 40 to 50 years ago.

Nicholas Clayton:

And it seems like carbon fiber wheels, they've been around for a little bit, but they've long been considered a nice aftermarket add on for car enthusiasts, but it wasn't something that was coming stock on vehicles off the line very often. But that seems like that's changing now. What are you seeing there?

Jake Dingle:

Well, we set this business up to be a disruptor. So our focus right from the outset was on the OEMs, so the car manufacturers rather than aftermarket. So even though, like a lot of new technologies that are introduced and taken up and ultimately become mainstream, this has started at the premium performance luxury end of the market, and that's still an enormous part of the market. Automotive wheel market is around about \$38 billion a year, so it's an enormous market. We've come in at the top end, but we'll trickle down as aluminum wheels did.

So by setting the business up to be a disruptor and to be a high volume supplier to the automotive OEMs, we've enabled ourselves to set up to scale and to take cost out and to facilitate that expansion and growth. That's really the difference in terms of how we've approached this versus anybody else that's tried to do carbon fiber wheels, and that's why we are really the only company in the world that has these multiple programs and a scale manufacturing facility to be able to do the sort of volumes that we're already doing and then into the future to be able to be a real disruptor.

Marlena Haddad:

And just going off of that, many of your competitors are still aftermarket focused. So with that in mind, can you dive a bit deeper into what your strategy has been for getting integrated with the major OEMs?

Jake Dingle:

Yeah, sure. So they're very, very different markets. If you are to be an OEM supplier, you're dealing with very large sophisticated engineering organizations that have an extremely high risk aversion or sense of risk around any safety critical technology like this. So the validation requirements for the product itself, to ensure that it's safe to be integrated onto a vehicle, and then the expectations and demands around quality, so the ability to keep producing at a level of quality that meets their expectations, and then to be able to grow volume to something very much larger than anything you ever see in the aftermarket, that creates an enormous barrier to entry. So the customer relationships and the ability to take a customer in this market, these very large, sophisticated global car makers, introduce a brand new technology in a safety critical part of the vehicle, get them comfortable enough to introduce it on a relatively small niche vehicle, as we've done in the initial stages of adoption, where it is high profile, but not particularly high volume. And then to be able to work through to offer it in higher volumes to larger vehicle platforms.

That creates a relationship, it creates a level of trust and understanding of the safety capability and the quality capability of the technology in the company. And that represents a very high entry barrier. Aftermarket does not have those sorts of entry barriers. It's far easier to introduce products into the aftermarket, and the market is much smaller and more fragmented. So really that's why going back over a decade, we set out to be an OEM supplier. So the way we've structured the business, the way we've targeted our technology, our technology strategy and the evolution of both the product and the processes that make the product, they've all been directed towards high volumes, high levels of quality, meeting the OEM's requirements in those regards and ensuring that we have strong customer relationships.

And that's really a huge blocker, it's a very, very strong entry barrier, because whilst our customers love the idea of this technology and wanted to see it introduced and continue to want to see it proliferate, particularly as they shift to EVs, they are very, very risk averse, so they invested heavily to make sure that the supply of it was going to meet all of those requirements, and they partnered with us very strongly. It's unlikely that they would invest that much again to bring somebody up to this stage. They would expect anybody else coming to them with an alternative version of this to be effectively comparable, and that makes it very difficult for anyone to follow.

Marlena Haddad:

And you've sold over 60,000 wheels to date, so I'm interested to hear what have been your best-selling product so far, and then looking ahead, how do you expect that to change?

Jake Dingle:

Well, each of our programs has exceeded expectations in terms of volumes. So anywhere from a little more than was expected in the original contract to around double. So we've got a very good track record of over delivering or the demand being in excess of what our customers originally estimated it to be. That's both in terms of actual volumes demanded and also the length of the program. So we've produced more wheels in every case than we had been originally contracted to do, which is great. And anecdotally, we have customers regularly saying to us, "How much more of this can you make with the available tooling and the available capacity, because we'll take everything that you can possibly make." Into the future, as we transition into higher volume, larger platforms, and particularly the SUV and pickup space that we are now getting into, and particularly as the OEMs electrify and the demands for weight saving technologies like this really, really accelerate, we're seeing a big step up in terms of demand.

So moving through that adoption curve from the early niche programs that you'll see in the public domain now, you will have seen last week the Range Rover Sport has just been launched with our wheels. Fantastic vehicle, terrific program, and a great partnership with JLR. That's the first publicly announced SUV program. And you can see how the technology fits with large vehicle platforms like that, that need very strong but very light wheels.

So in terms of what what's coming in the future, we're seeing demand accelerating, more programs being awarded. Even just in a number of months we've seen a doubling in what we see as our forward book of business, and it's increasingly moving towards electrified vehicles, which you would imagine, because of the way the industry's going, but increasingly being seen as an enabling technology for some of these larger vehicle platforms as well that are really struggling with weight as they move into this next generation. And we can offer a huge step change in weight. As wheels are getting bigger, they're getting heavier, we're able to offer a very meaningful weight saving, 60 to 70 kilograms in some cases, which is 150 pounds, in the part of the vehicle that it matters the most, the rotating unsprung mass on corners of the vehicle.

Nicholas Clayton:

Yeah and I wanted to get into that a little bit more too, and I think it's obviously intuitive that the lighter is better, and EVs, we know that those cars and those builds are getting heavier and heavier. But can you walk through just how that translates into value, both in terms of the EV's performance and then also in terms of value for the OEM and onto the end customer?

Jake Dingle:

Yeah, sure. So there are a number of different ways that this adds significant value. The first, most obvious is in range. So as a significant weight saving technology, it directly contributes to range, and that can be anywhere between 5% and 10% extension. 5% if you're just purely adding the wheels and being able to replace that weight save with additional battery. You can see it more than 5% directly in terms of additional range. But if it's fully integrated into the vehicle and you take advantage of other elements, like the ability to create more efficient aerodynamic shapes, the NVH or the noise transmission benefit, given that this is quite a damped material means that additional weight can be taken out. Other knock-on benefits means that up to 10% is actually possible. And from a range point of view, that's a really, really big number. Anywhere between five and 10% with bolt-on technology that doesn't require investment in the plant that's manufacturing in the way that anything on the body of the vehicle would or in the chassis would. That's really meaningful. And there is obviously a significant competitive environment around range, trying to deal with consumers' range anxiety, given that these vehicles go a lot less far on a charge than they used to on a tank of fuel.

There's a couple of other important aspects though. One is around regulatory drivers. So the car makers are still dealing with CAFE credits and the ability to meet the requirements of the regulator in terms of corporate average fuel economy. The ability to offer significant weight savings means that we can very meaningfully help them to keep these larger vehicles, particularly within weight class limits. That means that they count towards their CAFE credits, and that's worth an enormous amount. It means that the EV continues to contribute to the corporate average fuel economy, and it means that they can continue to sell the ICE or internal combustion engine vehicles alongside the EVs and continue with that business model. The point at which they're too heavy to do that means that there are penalties and things that could otherwise be avoided if you can take weight out. So being able to offer this much weight, up to 150 pounds of weight saving is a very meaningful way to hit those targets.

And the final one is just around structure. You've probably noticed in the last 30 years, wheels have continued to get bigger and bigger. That's really been driven by the studios and the designers and requirements of the aesthetics of vehicles. And that won't change. The designers within the car makers tend to have a very significant impact on what the engineers then have to go and engineer into vehicles. And so as wheels get up to 23 and 24 inches, and the one that we've just launched with JLR is a 23-inch wheel, in aluminum, they're incredibly heavy. And as you add more weight for the strength required to take the even heavier EV versions of these vehicles, you're starting to see structural problems. So having that much weight on the corners of the vehicle or the ends of the axles creates really significant structural issues. And so rather than having to redesign, retool the connecting structures, the suspension, those sorts of things, which is high investment cost, you can replace those very heavy aluminum wheels with much lighter carbon fiber wheels that are half the weight. So they're the weight of a much, much smaller aluminum wheel, and you avoid a lot of other engineering challenges that may add weight.

And so those three areas. Really, range is the obvious one. Regulatory drivers are of significant importance, particularly at the moment through this transition period. And then just structural performance, which is avoiding that knock-on additional weight issue by having to engineer stronger and heavier structures. So we're helping in all of those ways. And in the future, aerodynamics for more range, NVH for less sound deadening material, they're the sort of next level or the next tier of benefit that we're starting to get to. Because frankly, what we are designing and what you've seen on the road are not really... They're not aerodynamically or geometrically really optimized for the material. They're really rendering much more traditional wheel designs in carbon fiber. So there's still a long way to go in terms of getting the full benefit of this technology.

Nicholas Clayton:

Yeah. And getting more into that on your end, seems like Carbon Revolution is doing a lot to really expand its own production capacity right now with a few different plans in the works. Can you walk through how that's going right now, and what does the full plan look like for expanding your production end?

Jake Dingle:

So we have our manufacturing facility in Australia at the moment. Obviously that's where the company has grown. The majority of the volume and the capacity that we expect to produce from Australia is already awarded. So we have very strong revenue visibility for the coming years, and to take us to what we expect to be the full capacity of the plant in Australia, which is significantly higher than what we produced last year, it's multiples of that, for example. But the Australian facility is a really important development area for both our product technology and our process technology. We're implementing what we call our first Mega-line, which is a unit of capacity that really automates and industrializes all of our processes so that we have as efficient a manufacturing process as we can achieve, and we really optimize the flow of materials and the way that they're moved and automated in between the processes in order to set up a stable and highly automated manufacturing environment. And that will take us to roughly 80 to 90,000 wheels a year we think. Which is still a very small number of wheels by global standards.

What that sets us up to be able to do is to then expand further in more strategically located geographies. So getting closer to our customers, reducing some of the supply chain issues that we have by bringing expensive raw materials from the Northern Hemisphere, bringing them to the Southern Hemisphere, manufacturing wheels, and then sending them back to the Northern Hemisphere where our customers are. So we would look to expand our manufacturing capacity into North America, a very important region for us, the actual location yet to be finalized, but expanding significantly. And this is driven by our customers' demand, what we understand as to be their requirement and desire to take a lot more of this technology. So having perfected what we do in Australia, which we're in the midst of doing at the moment, we'll then be able to multiply quite significantly the number of Mega-lines that we have, and put them in a much more strategically located place to be able to service our customers. And particularly in North America we see that would be the first priority for us.

Marlena Haddad:

And beyond your initial capital plan, what else would this deal's proceeds be used for? I know you briefly touched on international expansion, but are you looking at M&A at all?

Jake Dingle:

No, the merger and the relisting and access to capital markets is really to underpin the expansion we see that's coming in terms of demand from our customers. So we have a very good visibility of what we think the demand will be and a well-developed plan in terms of what the required expansion would be in terms of our manufacturing capacity. So the proceeds will go towards that expansion, completing what we're doing in Australia, which as I said, we largely have the awarded business to fill the plant here in Australia. So very good revenue visibility to fill the Australian plant, but then to start to expand offshore to continue to service really the same customers and some additional customers with much higher volumes. So it will all go into productive capacity and expanding in order to become much more efficient, reduce the working capital penalties as well of being so far away, and being able to reliably deliver much more of the technology as it becomes more and more disruptive.

Marlena Haddad:

Got it. And how have the supply chain issues that we've been seeing impact you, if at all? Did it cause more problems in terms of getting supplies to you, or for getting your finished products out of Australia?

Jake Dingle:

The biggest issue that we've seen from a supply chain point of view really has been, through COVID, our customers had to close factories and idle production as they were dealing with the early stages of COVID in their own facilities. And then through 2021, we saw the semiconductor chip shortage, and that provided interruptions in the supply chains of our customers again. And that's gone on all the way through into the last year. We think we're through the worst of that now, but it certainly has disrupted our throughput and our forecasts in a challenging way, but we've come through that very well. And a lot of the delays that we've seen, programs that you've seen awarded with our wheels over the last 12 months, including the Corvette with General Motors and the most recent launch, the Range Rover Sport with JLR, there've been delays with those programs that are quite well-publicized, but they've now come to market. So they were delays rather than cancellations.

So it was a challenging period, but we are seeing very good recovery from that now, and our business has come out stronger. These things are challenging, but tend to be stronger when you come out the other end of them. And certainly the supply chain, our supply chain and the way that we have sourced our materials, we've been able to maintain supply and not had any major disruptions at all in that regard.

Nicholas Clayton:

Great. And I wanted to get down a little more into the granular detail, perhaps not too granular, but nonetheless, on some of those contracts. We have seen some SPAC targets face some scrutiny, specifically in the EV space for citing contract figures early on that weren't quite as firm as initially appeared. So it sounds like you've been delivering on these contracts for a long time for a while, but just what more detail can you give in terms of how certain it is that the dollars in those awarded contracts are going to be translated into concrete revenue moving forward?

Jake Dingle:

Yeah. So to start with, so this year, 100% of what we're forecasting in our revenue is actually contracted. And next year it's around about 96%. So there's, for the next two years, very, very good visibility from awarded programs. The only thing that really impacts that in terms of volume is whether our customers have changes in their own ordering patterns. And as I've said in the past, we've seen in all cases the demand has been higher than what was originally contracted. Now, we can't be 100% sure which way that's going to go, and obviously we've seen disruptions, but these are contracted programs that we are supplying, having to provide a certain capacity. The automotive industry doesn't work on a take-or-pay basis. Nobody in the tier one space has a take-or-pay arrangement as far as we're aware, and we've been in the industry for quite a long time now. But what we have as an advantage is that the vehicle programs that we are on are very high profile. They tend to be well and truly sold out into the future. So our customers, as I mentioned before, more often than not, we are pushed for producing more than we've originally been asked to produce because of the demand being very strong. So there's really never been a concern for us in terms of whether the demand's there for the product from the end consumer, the only challenges that you can foresee is in terms of supply chains and our customers' manufacturing strategy that really, I think we've seen a lot of that play out over the last couple of years. As I said, we're on high-profile programs, very good forward visibility for our customers in terms of their orders, not really subject to some of the bigger economic or macroeconomic fluctuations or volatilities that you see with much more mainstream programs.

Nicholas Clayton:

Yeah. And beginning to look at the SPAC transaction a little bit here, Carbon Revolution you were public about, you were looking for some source of a capital infusion before the deal was announced, and you just recently announced that you've secured a \$60 million debt facility to help your rollout right now. And so how did the pending SPAC deal help get that debt raise done, and what does that do for you?

Jake Dingle:

So the merger with Twin Ridge, we saw and have seen as a fantastic way of accessing the capital that we need to grow. So over a year ago, we set out to find the right approach to accessing capital. We didn't go into it saying we have to do this kind of transaction or that kind of transaction. We just knew that our customers had really started to push us in terms of how we would demonstrate the disruptive capability of the technology, how would we demonstrate that we had the capacity and the resources to do that as they provided us with access to more and more important and larger or higher volume segments of their portfolio or platforms.

So we went into this knowing that a lot of our demand was going to be coming from North America, as it has, the move to electric vehicles was going to really accelerate the demand, and that we needed to demonstrate not just that we had an operational strategy or manufacturing strategy that could deliver disruption, but also a balance sheet could demonstrate that we were able to access the capital to build factories and put in capacity fast enough to go with the demand.

So that led us through a very detailed process, led us ultimately to Twin Ridge as a potential partner. Then I think as we got to know each other, we realized that this was a fantastic fit. They're very, very credible, understand the industry very well, very good contacts in the capital markets and ability to help us with that. It's a great strategy. It takes longer to do a SPAC deal. It gives you more time to inform and to bring the market up to speed with what you're doing. And what we are doing, it's not a simple, straightforward, obvious thing as we've been talking about, but it's a very, very attractive space that we are in. For us to just try to list the company in North America without that sort of partnership, we think would've been much more challenging. But the partnership with Twin Ridge is a very, very valuable one. And I think we see the world the same way. They bring some really, really important capabilities, accesses and networks to help make sure this is an enormous success.

The debt facility that you just mentioned is a really good example of that. That's actually IP backed. So the assets that back that loan include all of the intellectual property that we've developed in more than a decade of doing this. In our home market in Australia, that sort of facility is just not available. So that's a really great example of what this opens up for us. Much more innovative, broader opportunities for sourcing the right kind of capital to be able to deliver to our customers what they're demanding. And our customers are some of the largest and most sophisticated companies in the world, obviously. So in order to be able to do that, we need to have an appropriate approach that matches that in terms of accessing the capital to grow. And really North America is such an important market for us. Redomiciling our listing to North America just makes sense in the world. And the partnership with Twin Ridge is obviously, as we got to know each other, we realized that was a very logical partnership to establish.

Marlena Haddad:

Right. And so you briefly touched upon this earlier, but I'd be interested to hear more about what you see as being the main benefits and bumping up from the ASX?

Jake Dingle:

Well really, access to capital. In a market that obviously understands we're a physical technology company into an automotive industry, which North America is clearly a very significant player in the global automotive industry, but also very, very sophisticated capital markets, very good understanding of what this kind of technology represents in terms of an opportunity to disrupt the automotive industry as it's going through this massive transition from conventional internal combustion engine vehicles to electric vehicles. And who knows what other sorts of alternative propulsion systems come through over the next decade or two? So the understanding of what this technology offers into a massive global market, where North America is a very, very significant part of that global market, that translates back into the capital market's understanding of these sorts of opportunities. And it's a more sophisticated view and a much deeper market for the kind of capital that we need to grow to service those customers.

As I said, the debt facility that we've just put in place is a great example of that, and so it just makes sense. And perhaps years ago we could have looked to list the company on the US Exchange before we decided to list on the ASX, but I think, and we can have all sorts of hindsight discussions about that. So it's just matching the sources of capital with really the markets that we are servicing and making sure that we have a credible strategy, both for how we grow our capacity and our technology, but also how we fund that. That's where the logic for doing this really sits.

Marlena Haddad:

Yeah, definitely. And so as of now, there doesn't seem to be a listed company with exactly your focus and specialization. So what kinds of companies would you say are the best comparisons for Carbon Revolution?

Jake Dingle:

Well, I mean, we've looked at comparables in terms of trying to understand what the value of this business would be, and I think any businesses that are in the EV space focused on extending range, whether they're battery technologies or technologies related to batteries, related to other parts of the vehicle that are looking to facilitate this big transition across to the EV space, in addition to that, this is a technology that fits with conventional vehicles as well as it does with EVs. So there's a lot of companies that are very successfully supplying as tier ones into the automotive space today that are great comparables with what we do right now. You've got the likes of Brembo in Italy, who supply the high end of the brake market. That's a good comparison or a good comparable for what we are today.

But as we move further into the EV space, it will be much more around the comparable new technologies that are being seen as enablers for that transition to make dramatic improvements in range, sustainability and facilitating this transition on a global scale to EVs, which is going to play out through the next decade or two, as I think we're already seeing very significant moves in that direction. So, I think any physical technology or even some of the digital technologies that are underpinning that transition are good comparables for what we do.

Nicholas Clayton:

Yeah. And that's an interesting group in terms of some of the EV companies in terms of the direct battery makers that still have some bits of their technology that's not been fully deployed, or at least in some cases are still underdevelopment. Whereas your products are out in the market already. I'm sure you're working on improving margins as your capacity grows as well. So just in general, looking at all of those, what do you think are some of the important metrics for investors to keep an eye on in terms of comparing you to the rest of the space and tracking Carbon Revolution's progress?

Jake Dingle:

Yeah, I think the revenue visibility that we have, I think, is very important. As you say, this is relatively quite mature compared to some of the other new technologies. We've had the benefit of introducing it to a highly visible but still relatively small segment of the market to prove it out, not just to investors, but to our customers frankly. That's what's underpinning this rapid growth that we can see ahead of us. So I think actual locked in programs, strength of customer relationships across... Our customers are Ford, General Motors, Jaguar Land Rover, Ferrari. We are dealing with the global tier one auto manufacturers and that will continue to add to that.

So I think the track record strength of customer relationships and the nature of those customers and the adoption of the technology that's already been demonstrated. And we are on a classic adoption S-curve where we've really serviced the niche part of the market. We're now moving into beyond just servicing that high performance, luxury niche part of the early stage of the market now into really the premium next segment. And then mainstream comes beyond that.

And because of our automation strategy and because of the way supply chain opportunities are now opening up, as we grow in scale, we become more and more attractive as a customer for our raw materials. And within the supply chain, that will then dramatically drop the input costs of our raw materials. So you can see there's a pathway that's already playing out. We're already reducing our costs quite dramatically. But as we grow and relocate manufacturing or located in offshore locations, that will drive all of our direct input costs down.

And then we have a business model that's very leveraged to fixed costs because of the nature of our relationships with our customers, we will see very good improvement in our contribution margins and our overall profit margins because our fixed costs don't have to move particularly significantly as we grow volume very significantly. And we'll see those direct costs coming down. Obviously the labor input costs and the raw material input costs coming down quite dramatically as we grow.

So those factors are all really important to understand what this business can deliver as we grow beyond the early adoption that you've seen in the market through to the next big chunk. And bear in mind, this is the premium segment of the market. If it's 10%, it's still around 40 million wheels or 10 million vehicles. So that is an enormous part of the market, even though the total market is around a hundred million vehicles. And as I said, \$38 billion of market for wheels into the automotive space each year is enormous. So the adoption curve that we are on, probably you would say it will be supply constrained.

We're the only ones that are doing this at the moment at this scale, but it's a highly attractive offering. OEMs are wanting it in higher volumes, obviously, as I've said. So the opportunity to continue to lead and to put capacity in and to grow into that space off the basis that we've started with is a really strong opportunity. We expect there will be competition at some point, but the aim is to have a better product, a better manufacturing process, and to be the lowest cost producer as well due to this strategy.

Nicholas Clayton:

And so looking forward, and as you're developing your IP portfolio there, have you thought about getting into other carbon fiber components as a part of the car, as I imagine there's other parts that can be made lighter?

Jake Dingle:

There're certainly ways that the intellectual property and the techniques that we've developed can be used for the other parts that are on the vehicle. But in fact, given that our IP and our advantage is really around wheels, which are a complex thing to develop and particularly complex to be made from carbon fiber, our other opportunities really are in wheels for other applications. So under a federally funded program, we've already developed the first stages of aircraft wheels. So you can imagine in an aircraft, the value of weight savings is even higher than it is in road vehicles. And so wheels for aircraft and ultimately wheels for industrial applications on long haul trucks and transit vehicles, commercial applications is an obvious adjacency to what we do today. Probably more so than getting into other parts of the car itself. We'd never say never for any of these things, but really, we've embarked on probably the most complicated individual component on a vehicle to render in carbon fiber.

And in so doing, we've developed intellectual property in the way we design the product, use the material and the way we manufacture it, that's equally applicable for wheels that go on aircraft and wheels that go on commercial vehicles. And so in order to best exploit what we've developed over the years in terms of an advantage and intellectual property, they're probably additional massive markets that we could go into where we would probably get a better benefit from what we've done than to use it on much simpler products on the vehicle. But as I said, there are techniques that we've developed that would be very applicable for some of those other products.

Marlena Haddad:

Got it. And so just going off of that, with those costs coming down and weight becoming even more important with EVs, just how much of the overall wheel market could be disrupted in the coming years?

Jake Dingle:

Well, if you look at what aluminum did that came in the '70s really and looked probably at that stage very much like what we look like today, the aluminum wheel segment of the total market is now over 50% and still taking share off steel. So steel is the other material. If you look at that from an overall market adoption point of view, there is no reason why you wouldn't see a similar kind of adoption curve for carbon fiber. In fact, the weight saving benefits and the other knock on benefits are potentially more significant than what drove aluminum into the market. So as long as the supply chain can respond and the capacity can be put in place, we would see no real impediment to adoption as our costs are coming down.

So we will be working hard obviously on perfecting our manufacturing processes so that we can expand manufacturing. We're already working hard on supply chain partnerships and making sure we secure raw materials at the right volume and the right cost so that we can offer this disruption. And aluminum wheels are still sold at a very significant premium to steel. We are at a significant premium to aluminum at the moment, but that can continue to come down. But we will always offer value relative to conventional wheel technologies because of all the benefits that we provide. And so I expect to see a similar thing play out. And that's obviously a very good and very obvious case study to use for what we can do with this technology.

Information about Proposed Business Combination

As previously announced, Carbon Revolution Limited (“CBR”, “Carbon Revolution” or the “Company”) (ASX: CBR) and Twin Ridge Capital Acquisition Corp. (“Twin Ridge” or “TRCA”) (NYSE: TRCA) have entered into a definitive business combination agreement and accompanying scheme implementation deed (“SID”) that is expected to result in Carbon Revolution becoming publicly listed in the U.S. via a series of transactions, including a scheme of arrangement. Upon closing of the transactions, the ordinary shares and warrants of the merged company, Carbon Revolution Public Limited Company (formerly known as Poppetell Limited), a public limited company incorporated in Ireland with registered number 607450 (“MergeCo”), that will become the parent company of the Company and Twin Ridge, are expected to trade on Nasdaq in the United States, and Carbon Revolution’s shares shall be delisted from the ASX.

Additional Information about the Proposed Business Combination and Where to Find It

This communication relates to the proposed business combination involving CBR, TRCA, MergeCo, and Poppetell Merger Sub, a Cayman Islands exempted company and wholly-owned subsidiary of MergeCo (“Merger Sub”). In connection with the proposed business combination, MergeCo has filed with the U.S. Securities and Exchange Commission (the “SEC”) a Registration Statement on Form F-4 (the “Registration Statement”), Amendment No. 1 and Amendment No. 2 thereto, including a preliminary proxy statement of TRCA and a preliminary prospectus of MergeCo relating to the MergeCo Shares to be issued in connection with the proposed business combination. The Registration Statement, as amended, is subject to SEC review and further revision and is not yet effective. This communication is not a substitute for the Registration Statement, the definitive proxy statement/final prospectus, when available, or any other document that MergeCo or TRCA has filed or will file with the SEC or send to its shareholders in connection with the proposed business combination. This communication does not contain all the information that should be considered concerning the proposed business combination and other matters and is not intended to form the basis for any investment decision or any other decision in respect of such matters.

BEFORE MAKING ANY VOTING OR INVESTMENT DECISION, TRCA’S SHAREHOLDERS AND OTHER INTERESTED PARTIES ARE URGED TO READ THE PRELIMINARY PROXY STATEMENT/PROSPECTUS AND THE DEFINITIVE PROXY STATEMENT/ PROSPECTUS, WHEN IT BECOMES AVAILABLE, AND ANY AMENDMENTS THERETO AND ANY OTHER DOCUMENTS FILED BY TRCA OR MERGECO WITH THE SEC IN CONNECTION WITH THE PROPOSED BUSINESS COMBINATION OR INCORPORATED BY REFERENCE THEREIN IN THEIR ENTIRETY BEFORE MAKING ANY VOTING OR INVESTMENT DECISION WITH RESPECT TO THE PROPOSED BUSINESS COMBINATION BECAUSE THEY CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED BUSINESS COMBINATION AND THE PARTIES TO THE PROPOSED BUSINESS COMBINATION.

After the Registration Statement, as amended, is declared effective, the definitive proxy statement will be mailed to shareholders of TRCA as of a record date to be established for voting on the proposed business combination. Additionally, TRCA and MergeCo will file other relevant materials with the SEC in connection with the proposed business combination. Copies of the Registration Statement, as amended, the definitive proxy statement/ prospectus and all other relevant materials for the proposed business combination filed or that will be filed with the SEC may be obtained, when available, free of charge at the SEC's website at www.sec.gov. In addition, the documents filed by TRCA or MergeCo may be obtained, when available, free of charge from TRCA at www.twinridgecapitalac.com. TRCA's shareholders may also obtain copies of the definitive proxy statement/prospectus, when available, without charge, by directing a request to Twin Ridge Capital Acquisition Corp., 999 Vanderbilt Beach Road, Suite 200, Naples, Florida 60654.

No Offer or Solicitation

This communication is for information purposes only and is not intended to and does not constitute, or form part of, an offer, invitation or the solicitation of an offer or invitation to purchase, otherwise acquire, subscribe for, sell or otherwise dispose of any securities, or the solicitation of any vote or approval in any jurisdiction, pursuant to the proposed business combination or otherwise, nor shall there be any sale, issuance or transfer of securities in any jurisdiction in contravention of applicable law. The proposed business combination will be implemented solely pursuant to the Business Combination Agreement and Scheme Implementation Deed, in each case, filed as exhibits to the Current Report on Form 8-K filed by TRCA with the SEC on November 30, 2022, which contains the full terms and conditions of the proposed business combination. No offer of securities shall be made except by means of a prospectus meeting the requirements of the Securities Act.

Participants in the Solicitation of Proxies

This communication may be deemed solicitation material in respect of the proposed business combination. TRCA, CBR, MergeCo, Merger Sub and their respective directors and executive officers, under SEC rules, may be deemed to be participants in the solicitation of proxies from TRCA's shareholders in connection with the proposed business combination. Investors and security holders may obtain more detailed information regarding the names and interests in the proposed business combination of TRCA's directors and officers in the Registration Statement, TRCA's filings with the SEC, including TRCA's initial public offering prospectus, which was filed with the SEC on March 5, 2021, TRCA's subsequent annual reports on Form 10-K and quarterly reports on Form 10-Q. To the extent that holdings of TRCA's securities by insiders have changed from the amounts reported therein, any such changes have been or will be reflected on Statements of Change in Ownership on Form 4 filed with the SEC. Information regarding the persons who may, under SEC rules, be deemed participants in the solicitation of proxies to TRCA's shareholders in connection with the business combination will be included in the definitive proxy statement/prospectus relating to the proposed business combination, when it becomes available. You may obtain free copies of these documents, when available, as described in the preceding paragraphs.

Forward-Looking Statements

All statements other than statements of historical facts contained in this communication are forward-looking statements. Forward-looking statements may generally be identified by the use of words such as “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “expect,” “should,” “would,” “plan,” “project,” “forecast,” “predict,” “potential,” “seem,” “seek,” “future,” “outlook,” “target” or other similar expressions (or the negative versions of such words or expressions) that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding the financial position, business strategy and the plans and objectives of management for future operations including as they relate to the proposed business combination and related transactions, pricing and market opportunity, the satisfaction of closing conditions to the proposed business combination and related transactions, the level of redemptions by TRCA’s public shareholders and the timing of the completion of the proposed business combination, including the anticipated closing date of the proposed business combination and the use of the cash proceeds therefrom. These statements are based on various assumptions, whether or not identified in this communication, and on the current expectations of CBR’s and TRCA’s management and are not predictions of actual performance. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on by any investor as a guarantee, an assurance, a prediction or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and may differ from such assumptions, and such differences may be material. Many actual events and circumstances are beyond the control of CBR and TRCA.

These forward-looking statements are subject to a number of risks and uncertainties, including (i) changes in domestic and foreign business, market, financial, political and legal conditions; (ii) the inability of the parties to successfully or timely consummate the proposed business combination, including the risks that we will not secure sufficient funding to proceed through to completion of the Transaction, any required regulatory approvals are not obtained, are delayed or are subject to unanticipated conditions that could adversely affect the combined company or the expected benefits of the proposed business combination, or that the approval of the shareholders of TRCA or CBR is not obtained; (iii) the ability to maintain the listing of MergeCo’s securities on the stock exchange; (iv) the inability to complete any private placement financing, the amount of any private placement financing or the completion of any private placement financing on favorable terms; (v) the risk that the proposed business combination disrupts current plans and operations CBR or TRCA as a result of the announcement and consummation of the proposed business combination and related transactions; (vi) the risk that any of the conditions to closing of the business combination are not satisfied in the anticipated manner or on the anticipated timeline or are waived by any of the parties thereto; (vii) the failure to realize the anticipated benefits of the proposed business combination and related transactions; (viii) risks relating to the uncertainty of the costs related to the proposed business combination; (ix) risks related to the rollout of CBR’s business strategy and the timing of expected business milestones; (x) the effects of competition on CBR’s future business and the ability of the combined company to grow and manage growth, establish and maintain relationships with customers and healthcare professionals and retain its management and key employees; (xi) risks related to domestic and international political and macroeconomic uncertainty, including the Russia-Ukraine conflict; (xii) the outcome of any legal proceedings that may be instituted against TRCA, CBR or any of their respective directors or officers; (xiii) the amount of redemption requests made by TRCA’s public shareholders; (xiv) the ability of TRCA to issue equity, if any, in connection with the proposed business combination or to otherwise obtain financing in the future; (xv) the impact of the global COVID-19 pandemic and governmental responses on any of the foregoing risks; (xvi) risks related to CBR’s industry; (xvii) changes in laws and regulations; and (xviii) those factors discussed in TRCA’s Annual Report on Form 10-K for the year ended December 31, 2022 under the heading “Risk Factors,” and other documents of TRCA or MergeCo to be filed with the SEC, including the proxy statement / prospectus. If any of these risks materialize or TRCA’s or CBR’s assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements. There may be additional risks that neither TRCA nor CBR presently know or that TRCA and CBR currently believe are immaterial that could also cause actual results to differ from those contained in the forward-looking statements. In addition, forward-looking statements reflect TRCA’s and CBR’s expectations, plans or forecasts of future events and views as of the date of this communication. TRCA and CBR anticipate that subsequent events and developments will cause TRCA’s and CBR’s assessments to change. However, while TRCA and CBR may elect to update these forward-looking statements at some point in the future, each of TRCA, CBR, MergeCo and Merger Sub specifically disclaim any obligation to do so, unless required by applicable law. These forward-looking statements should not be relied upon as representing TRCA’s and CBR’s assessments as of any date subsequent to the date of this communication. Accordingly, undue reliance should not be placed upon the forward-looking statements.
