



**CARBON REVOLUTION LIMITED**  
**(ASX: CBR)**  
**ASX & MEDIA RELEASE**  
**23 April 2021**

## **\$95M EQUITY RAISING TO FUND PHASE 1 OF THE FIRST MEGA-LINE**

### **Summary**

- Carbon Revolution Limited (ASX:CBR) has decided to commence construction of Phase 1 of the first Mega-line (“Phase 1 of Mega-line”)
- Carbon Revolution has secured formal agreements to initiate detailed design and engineering relating to four new Original Equipment Manufacturer (“OEM”) programs, a significant proportion of which are for electric vehicles.<sup>1</sup> Following extensive collaboration with these customers, Carbon Revolution believes it will require additional capacity of circa 75,000 wheels per annum in order to deliver these programs
- Once completed, Phase 1 of Mega-line is expected to provide additional manufacturing capacity of circa 75,000 wheels per year, approximately doubling Carbon Revolution’s total capacity to circa 155,000 wheels per year, and to reduce labour per wheel to less than 10 hours
- Phase 1 of Mega-line is expected have a pay back period of approximately 2 years when fully utilised<sup>2</sup> and provide a strong return on invested capital
- The Company is pleased to announce the appointment of Ron Collins, a long serving senior executive and previous head of chassis engineering at Ford, to Carbon Revolution’s US business development team as Vice President, North America
- Carbon Revolution is undertaking a fully underwritten \$95 million equity raising comprising a 1 for 4.38 pro-rata Accelerated Non-Renounceable Entitlement Offer (“Entitlement Offer”) to raise circa \$53.5 million and an Institutional Placement (“Placement”) to raise circa \$41.6 million (together the “Equity Raising”)
- The Equity Raising together with additional working capital financing arrangements is expected to provide sufficient funding for Carbon Revolution to reach cash flow breakeven<sup>3</sup>
- Carbon Revolution is also announcing its Q3 FY21 results today. The Company saw strong growth with revenue and volumes rebounding from Q2 FY21 and progressed with reducing labour hours per wheel to 31 hours, heading towards its near-term target of 17 hours per wheel

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<sup>1</sup> Refer to slide 28 of the investor presentation released after this announcement for further information on the wheel program lifecycle, and the stage of these agreements.

<sup>2</sup> Key assumptions and inclusions: (1) Average gross margin (excluding depreciation and allocated overheads) is assumed to be in the range of \$600 to \$800 per wheel. This is dependent on limited price reductions, achievement of labour cost reduction targets from 17 labour hours<sup>5</sup> to <10 labour hours per wheel and other economies of scale arising from higher production volumes (including raw material costs); (2) Capital costs include equipment, tooling and incremental capitalised program development; (3) Incremental overheads and working capital in line with normal business requirements.

<sup>3</sup> This excludes funding any capital expenditure for Phase 2 of Mega-line (and associated program-specific tooling and development capex)

Carbon Revolution today announces that it is proceeding with construction of Phase 1 of its first Mega-line, to be funded via part of the proceeds of the fully underwritten Equity Raising. This investment is a significant milestone for the Company and the next step towards full industrialisation.

The decision to proceed with Phase 1 of the Mega-line follows Carbon Revolution securing formal agreements to initiate detailed design and engineering relating to four new Original Equipment Manufacturer ("OEM") programs, a significant proportion of which are for electric vehicles. Following extensive collaboration with these customers, Carbon Revolution believes it will require additional capacity of circa 75,000 wheels per annum in order to deliver these programs. These programs are expected to enter production in CY2023 and CY2024.

To date, Carbon Revolution has sold circa 40,000 wheels with 6 awarded programs announced by OEMs and in the market. The 4 new agreements underpinning Phase 1 of Mega-line will increase the total number of unannounced programs<sup>4</sup> under detailed design and engineering agreements to 10 programs.

Chair, James Douglas, said "Carbon Revolution is excited to begin this next chapter in our development as a company. I believe that commencing construction of Phase 1 of Mega-line represents the most significant operational decision for Carbon Revolution in its history. The Mega-line is expected to deliver a step change in production scale and economics that enable the company to deliver large volume programs to a broader cross-section of the market. We are committed to investing in, improving and growing our operations to position Carbon Revolution to continue to play a leading role in the design and development of carbon fibre wheel technology into the future, and maximising value and sustainable returns for its shareholders."

Chief Executive Officer Jake Dingle said "The award of these new OEM formal agreements validates Carbon Revolution's strategy and our world-class products and technology. This is a proud day for Australian advanced manufacturing, and I am excited about, and committed to, the execution of our ambitious growth plans. We thank our shareholders and partners, particularly the Victorian government and Deakin University, as well as the entire Carbon Revolution team who have worked hard to achieve this milestone."

"Our OEM relationships have recently been enhanced through the appointment of Ron Collins to Carbon Revolution's US business development team as Vice President, North America. Ron was a senior executive with Ford Motor Company and brings over 30 years of experience within the car industry including as global head of chassis engineering at Ford. Ron is a great addition to our business development team and will help fast track growth in North America."

"The last twelve months have seen a significant shift by major OEMs towards an EV future. Coupled with increasing government support around the world, the adoption of EVs looks set to accelerate in the coming years. We believe carbon fibre wheel technology will play an important role in enhancing vehicle range through weight savings and improved aerodynamics. Carbon Revolution is excited to be involved in one of the most significant shifts in the automotive industry since the implementation of mass production in the early 1900s."

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<sup>4</sup> The company has formal agreements for 16 programs, including 11 awarded programs (of which 6 have been announced by OEMs, 5 have been awarded but are not yet announced and 3 have completed serial production (run out) during FY21). In addition, there are now 5 programs under formal design and engineering agreements (the latest agreements fall in this category) and that have also not yet been announced by the OEMs. Refer to slide 28 of the investor presentation released after this announcement for further information on the wheel program lifecycle, and the stage of the new agreements.

## Phase 1 of the Mega-line investment

The Mega-line represents the next phase of industrialisation of Carbon Revolution's production process to full industrialisation; with the Mega-line to consist of industrialised and fully automated advanced manufacturing cells which are expected to deliver high volumes with dramatically reduced labour inputs. Developed by the company and its partners in Australia, the Mega-line will deploy state of the art technologies and will supply to the global automotive market.

Initial commercial supply to date has focused on achieving required product performance and manufacturing quality. Over the course of FY20, there was particular focus on the automation of core manufacturing processes, including automated preforming, face and rim layup and high pressure moulding. With the construction of the Mega-line, Carbon Revolution will achieve fully industrialised production by using proven industrialisation part-flow automation to link each of the automated core manufacturing processes resulting in a significant further reduction in direct labour inputs and costs as well as a step change in production capacity.

As announced in its H1 FY21 results on 24 February 2021, Carbon Revolution has completed the initial design of the Mega-line. Carbon Revolution's Mega-line technology has been developed using in-house expertise, equipment partners, and advanced 3D and simulation tools to reduce risk during design, construction, and commissioning. The Mega-line will connect key modules already used in Carbon Revolution's facilities, such as high-pressure moulding and fascia technology, using proven industrial part-flow automation. Additionally, a number of new generation automated modules will be introduced, reducing the number of manual labour touchpoints in the production process.

Phase 1 of the Mega-line is anticipated to provide a step-change improvement in Carbon Revolution's production process. Once complete, Carbon Revolution expects it to provide additional capacity of circa 75,000 wheels per annum, and at full production, the labour hours per wheel is expected to reduce from circa 17 hours<sup>5</sup> to below 10 hours. Notwithstanding the improved labour productivity of the Mega-line, the growth in production ahead will see an increase in the workforce at our Geelong facility. Importantly, the increased levels of automation will drive a shift to higher skills reflecting truly modern and advanced manufacturing. This first Mega-line is the first of four Mega-lines that are expected to be developed at Carbon Revolution's Geelong facility.

Construction of Phase 1 of Mega-line is expected to take approximately 18 months and can be efficiently completed in stages given the Mega-line's modular components. Phase 1 of Mega-line capacity is expected to be commissioned progressively from early CY2023, in time for the anticipated program start of production dates.

The capital requirement to build Phase 1 of the Mega-line is circa \$47 million. There are additional costs, including development and tooling of circa \$16 million and \$8 million respectively, associated with the new OEM programs, which have also been taken into account when sizing the Equity Raising. Should Carbon Revolution seek to invest in Phase 2 and complete the first Mega-line, the incremental cost to complete Phase 2 construction is expected to be significantly lower at circa \$23 million (excluding program-specific tooling and development capex), as core infrastructure for the entire line will be completed in Phase 1. Phase 2 of the Mega-line is expected to provide further capacity of circa 75,000 wheels per annum.

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<sup>5</sup> Near-term target run rate for production wheels produced on the high pressure moulding line with fascia.

## Equity Raising

The fully underwritten \$95 million Equity Raising is comprised of the 1 for 4.38 pro-rata Accelerated Non-Renounceable Entitlement Offer to raise approximately \$53.5 million and the Institutional Placement to raise approximately \$41.6 million.

The proceeds of the Equity Raising will be used as follows:

- approximately \$47 million: Phase 1 of Mega-line total expansion capital expenditure;
- approximately \$8 million: Program tooling capex for the relevant programs;
- approximately \$16 million: Program development capex predominantly related to Phase 1 of Mega-line related programs;
- approximately \$13 million: Global business development and general costs; and
- approximately \$10 million: Grant advance repayments and transaction costs.

The Equity Raising together with additional working capital financing arrangements is expected to provide sufficient funding for Carbon Revolution to reach cash flow breakeven<sup>3</sup>, based on Phase 1 of Mega-line and awarded OEM programs.

Under the Entitlement Offer, eligible shareholders will be entitled to subscribe for 1 new Carbon Revolution fully paid ordinary share (each a “New Share”) for every 4.38 existing shares (“Entitlement”) held as at 7:00pm (Melbourne time) on Tuesday, 27 April 2021. All New Shares offered under the Equity Raising will be issued at a price of \$1.60 per New Share (“Offer price”), which represents a:

- 25.0% discount to the theoretical ex-rights price (“TERP”)<sup>6</sup> of \$2.13; and
- 31.9% discount to the last closing price of Carbon Revolution shares of \$2.35 on Thursday, 22 April 2021.

Approximately 59.4 million New Shares will be issued under the Equity Raising (comprising approximately 40.6% of Carbon Revolution’s existing issued capital). New Shares issued under the Equity Raising will rank equally with existing ordinary shares. Entitlements cannot be traded on the ASX or transferred. Eligible shareholders who do not take up their Entitlement under the Entitlement Offer in full or in part, will not receive any value in respect of those Entitlements not taken up.

## Placement

Up to approximately 26.0 million New Shares are expected to be issued to eligible new and existing institutional investors under the Placement at the Offer price. The Placement will be conducted concurrently with the Institutional Entitlement Offer (as described below).

New Shares issued under the Placement will not be eligible to participate in the Entitlement Offer.

## Institutional Entitlement Offer

Eligible institutional shareholders will be invited to participate in the institutional component of the Entitlement Offer (“Institutional Entitlement Offer”), which is being conducted today, 23 April 2021.

Eligible institutional shareholders can choose to take up all, part or none of their Entitlement. Institutional Entitlements cannot be traded on the ASX or transferred.

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<sup>6</sup> TERP is the theoretical price that Carbon Revolution shares should trade at immediately after the ex rights date for the Entitlement Offer. It is a theoretical calculation only and the actual price at which Carbon Revolution shares trade immediately after the Entitlement Offer will depend on many factors and may not be equal to TERP. TERP is calculated by reference to Carbon Revolution’s closing share price of \$2.35 on Thursday, 22 April 2021 and includes New Shares issued under the Entitlement Offer and Placement.

Institutional Entitlements that eligible institutional shareholders do not take up by the close of the Institutional Entitlement Offer, and institutional Entitlements that would otherwise have been offered to ineligible institutional shareholders, will be offered to eligible new and existing institutional shareholders concurrently with the Institutional Entitlement Offer.

Carbon Revolution's shares will remain in a trading halt pending completion of the Institutional Entitlement Offer and Placement.

### **Retail Entitlement Offer**

Eligible retail shareholders in Australia and New Zealand will be invited to participate in the retail component of the Entitlement Offer ("Retail Entitlement Offer") at the same Offer price and offer ratio as the Institutional Entitlement Offer. The Retail Entitlement Offer will open on Friday, 30 April 2021 and close at 5.00pm (Melbourne time) on Friday, 14 May 2021.

Under the Retail Entitlement Offer, eligible retail shareholders may apply for additional New Shares in excess of their entitlement up to a maximum of 50% of their entitlement under an oversubscription facility ("Oversubscription Facility"). Additional New Shares will only be available under the Oversubscription Facility to the extent that there are entitlements under the Retail Entitlement Offer that are not taken up by eligible retail shareholders. The scaleback of applications for additional New Shares under the Oversubscription Facility will be subject to the terms set out in the retail offer booklet.

Further details about the Retail Entitlement Offer will also be set out in the retail offer booklet, which Carbon Revolution expects to lodge with the ASX and dispatch to eligible retail shareholders on Friday, 30 April 2021. The retail offer booklet will also enclose personalised entitlement and acceptance forms.

## Key Dates for the Equity Raising

Description	Date
Trading halt and announcement of Equity Raising	Friday, 23 April 2021
Institutional Entitlement Offer and Placement opens	Friday, 23 April 2021
Institutional Entitlement Offer and Placement closes	Friday, 23 April 2021
Trading Halt lifted and announcement to ASX of results of Institutional Entitlement Offer and Placement	Monday, 26 April 2021
Record Date for determining Entitlements to subscribe for New Shares under the Entitlement Offer	7:00pm (Melbourne time) Tuesday, 27 April 2021
Retail offer booklet despatched and Retail Entitlement Offer opens	Friday, 30 April 2021
Settlement of Institutional Entitlement Offer and Placement	Tuesday, 4 May 2021
Allotment and normal trading of New Shares issued under the Institutional Entitlement Offer and Placement	Wednesday, 5 May 2021
Retail Entitlement Offer closes	5:00pm (Melbourne time) Friday, 14 May 2021
Results of the Retail Entitlement Offer announced to ASX	Wednesday, 19 May 2021
Settlement of Retail Entitlement Offer	Thursday, 20 May 2021
Allotment of New Shares issued under the Retail Entitlement Offer	Friday, 21 May 2021
Normal trading of New Shares issued under the Retail Entitlement Offer	Monday, 24 May 2021

The above timetable is indicative only and subject to change. The commencement of trading and quotation of New Shares issued under the Entitlement Offer and the Placement is subject to confirmation from ASX. Subject to the requirements of the Corporations Act, the ASX Listing Rules and other applicable rules, Carbon Revolution reserves the right to amend this timetable at any time, either generally or in particular cases, without notice.

## Group Outlook

Carbon Revolution has also today released its Q3 FY21 Quarterly Activities Report & Appendix 4C. Please refer to that report for an update on recent trading activities.

## Further Information

Further details of Phase 1 of the Mega-line and the Equity Raising are set out in the investor presentation released to the ASX today. The investor presentation contains important information that shareholders and investors should consider, including details about key risks and international offer restrictions with respect to the Equity Raising.

UBS AG, Australia Branch is appointed as sole underwriter and Joint Lead Manager, with Bell Potter and E&P Corporate Advisory also acting as Joint Lead Managers.

## **Investor Briefing**

The accompanying investor and analyst briefing will be at 10.30am (AEST) on Friday, 23 April 2021.

To pre-register for this event please use the following link:

[https://carbonrev.zoom.us/webinar/register/WN\\_rZdLuGvwTgO6FBLsf\\_rAlw](https://carbonrev.zoom.us/webinar/register/WN_rZdLuGvwTgO6FBLsf_rAlw)

Registered participants will receive a calendar invite and meeting link (and dial in number if required) which is to be used when connecting.

A recording of the briefing will be made available on the Carbon Revolution Investor Centre website:

<https://investors.carbonrev.com/Investor-Centre/?page=results-and-presentations>

## **Approved for release by the Board of Directors of Carbon Revolution Limited**

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This announcement contains certain "forward-looking statements". The words "expect", "anticipate", "estimate", "intend", "believe", "guidance", "should", "could", "may", "will", "predict", "plan" and other similar expressions are intended to identify forward-looking statements. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. Forward-looking statements, opinions and estimates provided in this announcement are based on assumptions and contingencies that are subject to change without notice and involve known and unknown risks and uncertainties and other factors that are beyond the control of Carbon Revolution, its directors and management. This includes statements about market and industry trends, which are based on interpretations of current market conditions.

Forward-looking statements are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance. Actual results, performance or achievements may differ materially from those expressed or implied in such statements and any projections and assumptions on which these statements are based. These statements may assume the success of Carbon Revolution's business strategies. The success of any of those strategies will be realised in the period for which the forward-looking statement may have been prepared or otherwise. Readers are cautioned not to place undue reliance on forward-looking statements. No representation or warranty, express or implied, is made as to the accuracy, likelihood of achievement or reasonableness of any forecasts, prospects, returns or statements in relation to future matters contained in this announcement. The forward-looking statements are based on information available to Carbon Revolution as at the date of this announcement. Except as required by law or regulation (including the ASX Listing Rules), none of Carbon Revolution, its representatives or advisers undertakes any obligation to provide any additional or updated information whether as a result of a change in expectations or assumptions, new information, future events or results or otherwise.