Carbon Revolution Limited (ACN 128 274 653)



# PROSPECTUS

Initial Public Offering of Ordinary Shares



### **Important notices**

#### Offer

This Prospectus is issued by Carbon Revolution Limited (ACN 128 274 653) (Carbon Revolution or the Company) and Carbon Revolution SaleCo Limited (ACN 636 286 078) (SaleCo) for the purposes of Chapter 6D of the *Corporations Act 2001* (Cth) (Corporations Act). The offer contained in this Prospectus is an initial public offering to acquire fully paid ordinary shares (Shares) in the Company (Offer).

#### **Lodgement and Listing**

This replacement prospectus is dated 8 November 2019 (**Prospectus Date**) and was lodged with the Australian Securities and Investments Commission (**ASIC**) on that date. It is a replacement prospectus that replaces the prospectus dated 1 November and lodged with ASIC on that date (**Original Prospectus**). For the purposes of this document, this replacement prospectus will be referred to as the Prospectus. The key changes that have been made to the Original Prospectus are:

- including cross references to section 9.5.3 in sections 1.2, 3.3.1 and 5.1.2;
- amending the number of Shares acquired in the Offer by Mark Bernhard and Peter Lewinsky (see section 1.7);
- including additional disclosure on the source of weight saving statistics in Exhibit 15 (see section 3.2);
- amending the disclosure on when the Company expects to realise fully industrialised production processes (see Exhibit 25 in section 3.4.2);
- including new headings 'Overview' and 'Non-inclusion of long term forecasts' (see sections 4.1.1 and 4.1.2);
- including a new row entitled 'Shares held by successful Applicants on Completion of the Offer' in the mandatory escrow table and voluntary escrow table and amending the last rows in those tables to show the total number of Shares on issue on Completion (see section 9.5.2);
- amending the number in the 'Shares held on Completion of the Offer (#)' column and '% of Shareholder's Shareholding subject to mandatory escrow' column in relation to 'Other Existing Shareholders' in the mandatory escrow table (see section 9.5.2(a));
- removing the total percentage in the '% of Shareholder's Shareholding subject to mandatory

- escrow' column in the mandatory escrow table (see section 9.5.2(a));
- amending the dates in the 'End of escrow period' column in respect of Deakin and 'Other Existing Shareholders' in the mandatory escrow table (see section 9.5.2(a));
- amending each percentage in the '% of total issued Shares in the Company on Completion of the Offer subject to voluntary escrow' column in the voluntary escrow table (see section 9.5.2(b)); and
- including a new row entitled 'State of Victoria' in the voluntary escrow table (see section 9.5.2(b));
- amending the total percentage in the '% of Shareholder's Shareholding subject to voluntary escrow' column in the voluntary escrow table (see section 9.5.2(b)).

The Company applied to ASX Limited (**ASX**) on 1 November 2019 for admission of the Company to the official list and quotation of its Shares on the ASX.

None of ASIC, the Australian Securities Exchange (ASX) or their respective officers take any responsibility for the contents of this Prospectus or the merits of the investment to which this Prospectus relates.

#### **Expiry Date**

This Prospectus expires on the date that is 13 months after the date of the Original Prospectus, being 1 November 2019 (**Expiry Date**) and no Shares will be issued or transferred on the basis of the Prospectus after the Expiry Date.

#### **Note to Applicants**

The information in this Prospectus is not financial product advice and does not take into account your investment objectives, financial situation or particular needs. It is important that you read this Prospectus carefully and in its entirety before deciding whether to invest in the Company.

In particular, you should consider the assumptions underlying the Forecast Financial Information and risk factors that could affect the performance of the Company. You should carefully consider these risks in light of your personal circumstances (including financial and tax issues) and seek professional guidance from your stockbroker, solicitor, accountant or other independent professional adviser before deciding whether to invest in the Company. Some of the key risk factors that should be considered by prospective investors are set out in Section 5. There may be risk factors in addition to

these that should be considered, including in light of your personal circumstances.

Except as required by law, and only to the extent required, no person named in this Prospectus, nor any other person, warrants or guarantees the performance of the Company or the repayment of capital by the Company or any return on investment made pursuant to this Prospectus.

No person is authorised to give any information or to make any representation in connection with the Offer described in this Prospectus that is not contained in this Prospectus. Any information not so contained may not be relied upon as having been authorised by the Company or SaleCo, the Joint Lead Managers or any other person in connection with the Offer. You should rely only on information contained in this Prospectus.

Evans Dixon Corporate Advisory Pty Ltd (Evans Dixon) and Bell Potter Securities Ltd (Bell Potter) have acted as Joint Lead Managers to the Offer. To the maximum extent permitted by law, the Joint Lead Managers and each of their respective affiliates, officers, employees and advisers expressly disclaim all liabilities in respect of, make no representations regarding, and take no responsibility for, any part of this Prospectus other than references to their name and make no representation or warranty as to the currency, accuracy, reliability or completeness of this Prospectus.

As set out in Section 7, it is expected that the Shares will be quoted on the ASX initially on a deferred settlement basis. The Company, SaleCo, the Share Registry, and the Joint Lead Managers disclaim all liability, whether in negligence or otherwise, to persons who trade Shares before receiving their holding statement, even if such person received confirmation of their allocation from the Carbon Revolution Offer Information Line or confirmed their firm allocation through a Broker.

#### **Exposure Period**

The Corporations Act prohibits the Company and SaleCo from processing Applications in the seven day period after the date of lodgement of the Original Prospectus (**Exposure Period**). The Exposure Period expired on 8 November 2019. Applications received during the Exposure Period prior to lodgement of this Prospectus (dated 8 November 2019) have not been processed by the Company and will not receive any preference.

#### **No Cooling-off Rights**

Cooling-off rights do not apply to an investment in Shares issued or transferred under the Prospectus. This means that, in most circumstances, you cannot withdraw your Application once it has been accepted.

#### Obtaining a copy of this Prospectus

During the Offer Period, this Prospectus is available in electronic form at https://events.miraqle.com/carbonrevolution-ipo. The Offer constituted by this Prospectus in electronic form at https://events.miraqle.com/carbonrevolution-ipo is available only to persons within Australia. If you access the electronic version of this Prospectus, you should ensure that you download and read the Prospectus in its entirety.

During the Offer Period, a paper copy of this Prospectus is available free of charge by calling the Carbon Revolution Offer Information Line on 1800 677 648 (within Australia) or +61 1800 677 648 (outside Australia) 8.30am to 5.00pm (Sydney time), Monday to Friday (excluding public holidays).

Applications for Shares may only be made during the Offer Period on an Application Form attached to or accompanying this Prospectus.

The Corporations Act prohibits any person from passing the Application Form on to another person unless it is attached to a paper copy of the Prospectus or the complete and unaltered electronic version of the Prospectus.

Refer to Section 7 for further information.

#### **Financial Information Presentation**

Section 4 sets out the detail of the Financial Information referred to in this Prospectus. The basis of preparation and presentation of the Financial Information in the Prospectus is set out in Section 4.2.

All references to FY17, FY18, FY19 and FY20 appearing in this Prospectus are to the financial years ended or ending 30 June 2017, 30 June 2018, 30 June 2019 and 30 June 2020 respectively, unless otherwise indicated.

The Historical Financial Information is presented on both a statutory and pro forma basis (as described in Section 4.2.2) and has been prepared and presented in accordance with the recognition and measurement principles of the Australian Accounting Standards (including the Australian Accounting Interpretations) issued by the Australian Accounting Standards Board, which are consistent with International Financial Reporting Standards (IFRS) and Interpretations issued by the International Accounting Standards Board (IASB).

The Prospectus also includes Forecast Financial Information based on the best estimate assumptions of the Board. The basis of preparation and presentation of the Forecast Financial Information, to the extent applicable, is consistent with the basis of preparation and presentation for the Historical Financial Information. The Forecast Financial Information presented in this Prospectus is presented on both a statutory and pro forma basis and is unaudited. The Financial Information

has been prepared on a going concern basis, which contemplates the continuity of normal business activities and the realisation of assets and settlement of liabilities in the ordinary course of business.

Investors should note that certain financial data included in the Prospectus is not recognised under the Australian Accounting Standards and is classified as 'non-IFRS financial information' under Regulatory Guide 230 'Disclosing non-IFRS financial information' published by ASIC. The Company believes that this non-IFRS financial information provides useful information to users in measuring the financial performance and condition of Carbon Revolution. The non-IFRS financial measures do not have standardised meanings under the Australian Accounting Standards and therefore may not be comparable to similarly titled measures presented by other entities, nor should they be interpreted as an alternative to other financial measures determined in accordance with the Australian Accounting Standards. Investors are cautioned therefore, not to place undue reliance on any non-IFRS financial information and ratios included in this Prospectus.

The Financial Information is presented in an abbreviated form insofar as it does not include all disclosures, statements and comparative information as required by Australian Accounting Standards and other mandatory professional reporting requirements applicable to general purpose financial reports prepared in accordance with the Corporations Act. The Financial Information should be read in conjunction with, and is qualified by reference to, the information contained in Sections 4 and 5. All financial amounts contained in this Prospectus are expressed in Australian dollars, unless otherwise stated. Any discrepancies between totals and sums of components in tables contained in this Prospectus are due to rounding.

#### Investigating Accountant's Reports on the Historical Financial Information and Forecast Financial Information and financial services guide

The provider of the Investigating Accountant's Reports on the Historical Financial Information and the Forecast Financial Information is required to provide Australian retail clients with a financial services guide in relation to the review under the Corporations Act. The Investigating Accountant's Reports and accompanying financial services guide are provided in Section 8.

#### **Statements of past performance**

This Prospectus includes information regarding the past performance of Carbon Revolution. Investors should be aware that past performance should not be relied upon as being indicative of future performance.

#### Forward-looking statements

The Prospectus contains forward-looking statements, including the Forecast Financial Information in Section 4 of the Prospectus, which may be identified by words such as 'may', 'could', 'believes', 'estimates', 'expects', 'intends' and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, at the date of the Prospectus, are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company and SaleCo.

Carbon Revolution, SaleCo, the Board and Carbon Revolution Management cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in the Prospectus will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements.

Forward-looking statements should be read in conjunction with the risk factors set out in Section 5 of the Prospectus, the assumptions contained in the Financial Information set out in Section 4 and other information in the Prospectus.

#### **Industry and market data**

This Prospectus (and in particular the Industry Overview in Section 2) contains data relating to the industry in which the Company operates (Industry Data).

Such information includes, but is not limited to, statements and data relating to: product segment and market share, estimated historical and forecast market growth, market trends and the Company's estimated addressable market and its industry position. Unless otherwise stated, this information has been prepared by the Company using both publicly available data and its own internally generated data. The Company's internally generated data is based on estimates and assumptions that both the Directors and the Company's Management believe to be reasonable, as at the Prospectus Date.

The Industry Data has not been independently prepared or verified and none of the Company, SaleCo or the Joint Lead Managers can assure you as to its accuracy or the accuracy of the underlying assumptions used to estimate such Industry Data. The Company's estimates involve risks and uncertainties and are subject to change based on various factors, including those described in the risk factors set out in Section 5.

In addition to the Industry Data, this Prospectus uses third party market data, estimates and projections. There is no assurance that any of the third party data, estimates or projections contained in this information will be achieved. Neither the Company nor SaleCo has independently verified this information. Estimates involve risks and uncertainties and are subject to change based on various factors, including those described in the risk factors set out in Section 5.

# No offering where offering would be illegal

The Prospectus does not constitute an offer or invitation in any place in which, or to any person to whom, it would not be lawful to make such an offer or invitation. No action has been taken to register or qualify the Shares or the Offer, or to otherwise permit a public offering of Shares, in any jurisdiction outside Australia.

The distribution of the Prospectus outside Australia (including electronically) may be restricted by law and persons who come into possession of the Prospectus outside Australia should observe any such restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws. For details of selling restrictions that apply to the Shares in certain jurisdictions outside of Australia, please refer to Section 7.

In particular, the Shares have not been, and will not be, registered under the US Securities Act or any US state securities laws and may not be offered or sold in the United States except in transactions exempt from, or not subject to, the registration requirements of the US Securities Act and applicable US state securities laws. This Prospectus may be distributed in the United States only (i) by Bell Potter's US broker-dealer affiliate to a limited number of institutional 'accredited investors' (as defined in Rule 501(a)(1), (2), (3) or (7) under the US Securities Act) and (ii) if it is attached to the US Offering Circular.

#### **Privacy**

By filling out the Application Form to apply for Shares, you are providing personal information to the Company and SaleCo through the Share Registry, which is contracted to manage Applications.

The Company, SaleCo and the Share Registry on their behalf, may collect, hold and use that personal information in order to process your Application, service your needs as a Shareholder, provide facilities and services that you request and carry out appropriate administration. Some of this personal information is collected as required or authorised by certain laws including the *Income Tax Assessment Act 1997* (Cth) and the Corporations Act.

If you do not provide the information requested in the Application Form, the Company, SaleCo and the Share Registry may not be able to process or accept your Application. Your personal information may also be used from time to time to inform you about other products and services offered by the Company, which it considers may be of interest to you.

Your personal information may also be provided to the Company's members, agents and service providers on the basis that they deal with such information in accordance with the Company's privacy policy. The members, agents and service providers of the Company may be located outside Australia where your personal information may not receive the same level of protection as that afforded under Australian law. The types of agents and service providers that may be provided with your personal information and the circumstances in which your personal information may be shared are:

- the Share Registry for ongoing administration of the register of members;
- printers and other companies for the purpose of preparation and distribution of statements and for handling mail;
- market research companies for the purpose of analysing the Shareholder base and for product development and planning; and
- legal and accounting firms, auditors, contractors, consultants and other advisers for the purpose of administering, and advising on, the Shares and for associated actions.

If an Applicant becomes a Shareholder, the Corporations Act requires the Company to include information about the Shareholder (including name, address and details of the Shares held) in its public register of members. If you do not provide all the information requested, your Application may not be able to be processed.

The information contained in the Company's register of members must remain there even if that person ceases to be a Shareholder. Information contained in the Company's register of members is also used to facilitate dividend payments and corporate communications (including the Company's financial results, annual reports and other information that the Company may wish to communicate to its Shareholders) and compliance by the Company with legal and regulatory requirements. An Applicant has a right to gain access to the information that the Company, SaleCo and the Share Registry hold about that person, subject to certain exemptions under law. A fee may be charged for access. Access requests must be made in writing or by telephone call to the Company's registered office or the Share Registry's office, details of which are disclosed in

the Corporate Directory on the inside back cover of this Prospectus.

Applicants can obtain a copy of the Company's privacy policy by visiting the Company's website (http://www.carbonrev.com/).

#### **Photographs and diagrams**

Photographs used in the Prospectus which do not have descriptions are for illustration only and should not be interpreted to mean that any person shown endorses the Prospectus or its contents or that the assets shown in them are owned by Carbon Revolution. Diagrams used in the Prospectus are illustrative only and may not be drawn to scale. Unless otherwise stated, all data contained in charts, graphs and tables is based on information available at the date of this Prospectus.

#### Website

The Company maintains a website at http://www.carbonrev.com/. Any references to documents included on the Company's website are for convenience only, and information contained in or otherwise accessible through this or a related website is not a part of this Prospectus.

#### **Applications**

Applications may be made only during the Offer Period on the Broker Firm Offer Application Form and Priority Offer Application Form (referred to as an Application Form) attached to, or accompanying, this Prospectus in its paper copy form, or in its electronic form, which must be downloaded in its entirety from https://events.miraqle.com/carbonrevolution-ipo.

By making an Application, you represent and warrant that you were given access to the Prospectus, together with an Application Form.

The Corporations Act prohibits any person from passing on to another person an Application Form unless it is attached to, or accompanied by, the complete and unaltered version of this Prospectus.

#### **Glossary**

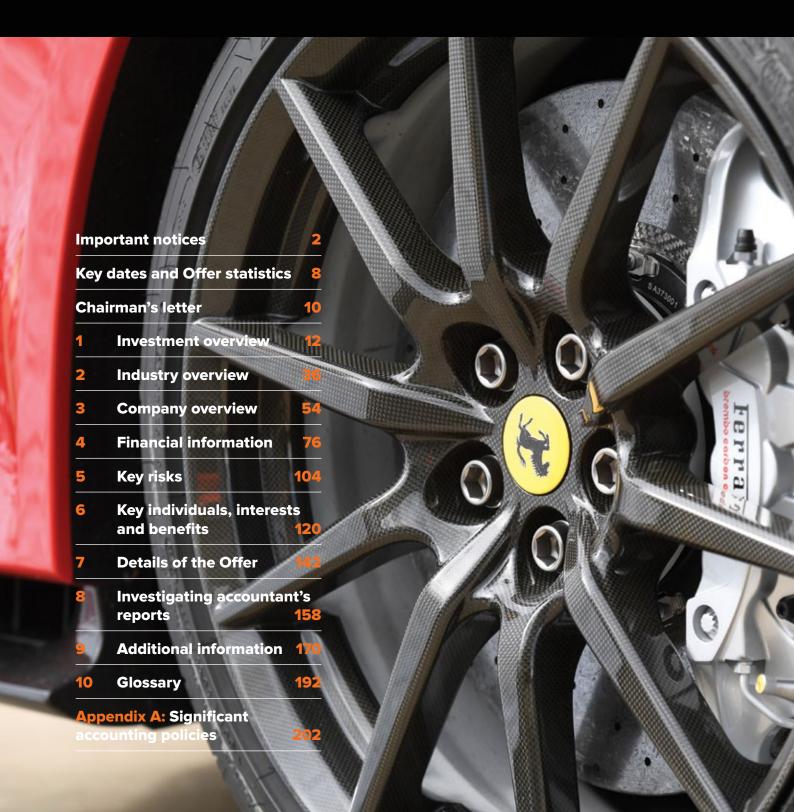
Certain terms and abbreviations used in the Prospectus have defined meanings which are explained in the Glossary at the end of this Prospectus. Unless otherwise stated or implied, references to times in this Prospectus are to Sydney time.

#### Questions

If you have any questions about how to apply for Shares, please call the Carbon Revolution Offer Information Line on 1800 677 648 (within Australia) or +61 1800 677 648 (outside Australia) 8.30am to 5.00pm (Sydney time), Monday to Friday (excluding public holidays). Instructions on how to apply for Shares are set out in Section 7 of this Prospectus and on the back of the Application Form.

If you have any questions about whether to invest in Carbon Revolution, you should seek professional advice from your accountant, financial adviser, stockbroker, lawyer or other professional adviser.

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## **Key dates and Offer statistics**

#### **Key Offer statistics**

Offer price	A\$2.60 per Share
Total number of Shares available under the Offer, comprising:	34,671,555
Total number of Shares to be issued by the Company under the Offer	11,538,462
Total number of Shares to be sold by SaleCo under the Offer <sup>1</sup>	23,133,093
Total number of Shares on issue at Completion of the Offer <sup>2</sup>	127,341,942
Total number of Shares held by Existing Shareholders at Completion of the Offer <sup>3</sup>	92,670,387
Total number of Shares held by successful Applicants at Completion of the Offer	34,671,555
Total proceeds under the Offer, comprising:	A\$90.1 million
Total proceeds from the issue of Shares by the Company under the Offer	A\$30.0 million
Total proceeds from the sale of Shares by SaleCo under the Offer	A\$60.1 million
Market capitalisation at the Offer Price <sup>4</sup>	A\$331.1 million
Pro forma net cash (as at 30 June 2019)	A\$45.9 million
Enterprise value at the Offer Price <sup>5</sup>	A\$285.2 million
Number of Options on issue on or shortly after Completion of the Offer <sup>6</sup>	5,093,678

<sup>(1)</sup> For further information in relation to the offer of Shares by SaleCo, refer to Section 9.3.

<sup>(2)</sup> This includes approximately 48,243,689 Shares issued to Convertible Note Holders on Conversion of the Convertible Notes (see section 9.5.6 for more detail), 16,356,588 Shares issued to Existing Shareholders under the Anti-Dilution Arrangements (see section 9.5.6 for more detail), 38,269 Shares issued under a tax exempt employee share plan Carbon Revolution has in place and 272,336 Shares issued in connection with certain employment arrangements of current and former employees.

<sup>(3)</sup> This excludes any Shares acquired by Existing Shareholders under the Offer and includes 52,345,575 Shares held by Existing Shareholders that will be subject to escrow arrangements for various periods as described further in Section 9.5.2.

<sup>(4)</sup> Calculated as the total number of Shares on issue at Completion of the Offer multiplied by the Offer Price.

<sup>(5)</sup> Enterprise value calculated as the sum of market capitalisation of the Company at the Offer Price and the net debt contained in the Pro Forma Historical Statement of Financial Position (see Section 4.6 for further details).

<sup>(6)</sup> Details regarding the terms of the Options are described in Section 6.5.3.1.2.

#### **Key dates**

Prospectus Date	8 November 2019
Broker Firm Offer and Priority Offer open	18 November 2019
Broker Firm Offer and Priority Offer close (Closing Date)	25 November 2019
Settlement of the Offer	28 November 2019
Issue and transfer of Shares under the Offer (Allotment Date)	29 November 2019
Expected commencement of trading on ASX (on a deferred settlement basis) (Completion of the Offer)	29 November 2019
Expected dispatch of holding statements	2 December 2019
Expected commencement of trading on ASX (on a normal settlement basis)	3 December 2019

Note: This timetable is indicative only and may change. Unless otherwise indicated, all times are stated in Sydney time. The Company and SaleCo, in consultation with the Joint Lead Managers, reserve the right to vary any and all of the above dates and times without notice (subject to the Listing Rules and the Corporations Act) to close the Offer early, to extend the Closing Date, or to accept late Applications or bids, either generally or in particular cases, or to cancel or withdraw the Offer before the allotment of shares, in each case without notifying any recipient of this Prospectus. If the Offer is cancelled or withdrawn before the allotment of Shares, then all Application Monies will be refunded in full (without interest) as soon as possible in accordance with the requirements of the Corporations Act. Investors are encouraged to submit their Applications as soon as possible after the Offer opens. No cooling-off rights apply to the Offer. The admission of the Company to the Official List and the commencement of quotation of the Shares are subject to confirmation from ASX.

#### How to invest

Applications for Shares can only be made by completing and lodging an Application Form included in or accompanying this Prospectus.

Instructions on how to apply for Shares are set out in Sections 1.8 and 7 of this Prospectus and on the back of the Application Form.

#### Questions

Please call the Carbon Revolution Offer Information Line on 1800 677 648 (within Australia) or +61 1800 677 648 (outside Australia) 8.30am to 5.00pm (Sydney time), Monday to Friday (excluding public holidays). If you are unclear in relation to any matter relating to the Offer or are uncertain as to whether Shares in Carbon Revolution are a suitable investment for you, you should seek professional guidance from your solicitor, stockbroker, accountant or other independent and qualified professional adviser before deciding whether to invest.

This Prospectus is important and should be read in its entirety prior to deciding whether to invest in Shares. In particular, Section 4 sets out in detail the financial information referred to in this Prospectus, the basis of preparation of that information, the Statutory Financial Information and Pro Forma Financial Information, certain financial ratios and metrics and details of Carbon Revolution's net cash and dividend policy. Section 4 contains certain non-IFRS measures and should be read in conjunction with the risk factors set out in Section 5 and other information contained in this Prospectus.



### Chairman's letter

Dear Investor,

On behalf of the Board of Directors of the Company, it is my pleasure to offer you an opportunity to invest in Carbon Revolution, an Australian-based advanced manufacturing company, which was established in Geelong in 2007 to develop and commercialise single piece carbon fibre wheel technology developed by the Company's founders. The technology has potential application across a broad range of transportation industries, and has been initially commercialised for the global automotive new vehicle wheel market<sup>1</sup>.

Carbon fibre has the key advantage of being lighter than traditional automotive wheel materials, primarily steel and aluminium, for a given level of stiffness and durability. This weight saving delivers significant performance and efficiency benefits, which are highly valued by our core customers, global Automotive Original Equipment Manufacturers<sup>2</sup> (**OEMs**).

We are the only company globally to have successfully developed and manufactured single piece carbon fibre automotive wheels to OEM quality standards with commercial adoption across several major OEM models.

Our wheels are currently available in the market on certain vehicles manufactured by Ford Motor Company (Ford), Ferrari S.p.A (Ferrari) and Groupe Renault (Renault). These customers have rigorously tested our product quality and have approved our manufacturing capacity and capability for production for their vehicle programs. We have also secured supply contracts<sup>3</sup> with other global OEMs and continue to actively engage with a range of other global OEMs.

Our products are underpinned and supported by an extensive intellectual property portfolio, including numerous granted and pending patents.

We have invested over A\$150 million to date in order to develop and commercialise our technology and build our manufacturing facility in Geelong, Australia. Since commencing production for our first OEM program for Ford in early 2015, we have progressively increased our production capacity in response to increasing demand from customers. We are currently undertaking a significant industrialisation program, which is designed to further increase our manufacturing capacity as demand continues to grow, and lower unit costs of producing our carbon fibre wheels. We expect that we will become EBITDA positive during Q4 FY20 based on the forecasts in section 4 of this Prospectus. In the short to medium term, we believe our products are most suited to the high-performance and luxury segments of the automotive new vehicle market<sup>4</sup> which we estimate accounted for approximately 36 million to 56 million wheels per annum<sup>5</sup> in 2017.

The Offer will raise A\$90.1 million through the issue and transfer of 34,671,555 Shares at an Offer Price of A\$2.60 per Share. The funds raised will provide Existing Shareholders with the opportunity to realise part of their investment and allow Carbon Revolution to invest in new manufacturing equipment to reduce unit costs of production and increase production capacity at the Geelong facility as well as fund continued research and development (R&D) activities and pre-pay \$5 million of the Ronal Loan. On Completion of the Offer, new investors in the Offer are expected to hold 27.2% of the Shares on issue, the Directors and Management Shareholders will hold a combined 8.9% of the Shares on issue and the remainder will be held by other Existing Shareholders, including, 11.2% held by Ronal, 4.3% held by the State of Victoria and 6.6% held by Deakin. 52,345,575 Shares, equal to 41.1% of the Shares on issue at Completion of the Offer, which are held by certain Existing Shareholders, will be subject to escrow arrangements from Completion of the Offer.

This Prospectus contains detailed information about the Offer, the industry in which Carbon Revolution operates, and Carbon Revolution's financial and operating performance. As with other businesses, Carbon Revolution is subject to a range of risks, which if they occur, may have a

negative impact on Carbon Revolution's financial performance and position. These risks include, among others, failure to execute Management plans and forecasts, deterioration of relationships with OEM customers, failure to raise additional funds if required, risks inherent in the development and use of new technology, restriction of Carbon Revolution's operations by third-party intellectual property rights, failure to retain or attract key staff, and the risk of reputational damage or liability arising from product performance or failures. The risks associated with investing in Carbon Revolution are detailed in Sections 1.5 and 5.

Applications for Shares can only be made by completing and lodging an Application Form included in or accompanying this Prospectus. Instructions on how to apply are set out in Section 7 and on the back of the Application Form.

I encourage you to read the Prospectus carefully and in its entirety before making your investment decision. You should seek professional advice if required.

An investment in Carbon Revolution presents an opportunity to participate in the expected growth of an innovative Australian advanced manufacturing company.

On behalf of my fellow Directors, I look forward to welcoming you as a Shareholder.

Yours sincerely,

**James Douglas** 

Chairman of Carbon Revolution

Defined as wheels fitted to newly assembled passenger cars and light vehicles. This most commonly includes two and four door passenger cars, hatchbacks, station wagons, minivans, sports cars and sport utility vehicles (SUVs). This market is described further in Section 2.3.

 $<sup>\ 2\</sup>quad \hbox{An industry term used to describe car manufacturers}.$ 

<sup>3</sup> A supply contract relates to an individual vehicle program, which is standard practice in the automotive industry.

<sup>4</sup> These segments consist primarily of vehicles with a manufacturer's suggested retail price (MSRP) greater than US\$50,000 and engine power output greater than 200kW.

<sup>5</sup> The key assumptions underpinning Carbon Revolution's addressable market are provided in Section 2.3.4.

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# INVESTMENT OVERVIEW





### 1 Investment overview

#### 1.1 Introduction

#### **Topic**

Who is Carbon Revolution?

#### **Summary**

- Established in 2007, Carbon Revolution is an Australian-based advanced manufacturing company that designs, manufactures and markets single piece carbon fibre wheels.
- These wheels have potential application across a broad range of transportation industries including automotive, aerospace and industrial uses.
- Carbon Revolution has prioritised the global automotive new vehicle wheel market for initial commercialisation of the technology.
- Since Carbon Revolution's first OEM deliveries for commercial sale for the Ford Mustang GT350R in 2015, the Company has sold over 17,300 wheels to date, for the equivalent of over 4,300 vehicles.
- The Company's principal operations, which include its corporate
  office and manufacturing facilities, are located in Geelong, which
  is situated approximately 75 kilometres from the Melbourne city
  centre, Australia. Carbon Revolution has a number of permanent and
  contract personnel in North America and Europe, to service current
  and prospective OEM customers. Currently, there are over 380 full
  time equivalent personnel in the business.

#### For more information, see Section 2.1 and 3.1

What are Carbon Revolution's products?

- Carbon Revolution's technology has been applied to its product range of single piece carbon fibre wheels for the automotive new vehicle wheel market.
- Carbon Revolution's wheels generate substantial weight savings
  relative to wheels constructed from conventional materials (such
  as steel and aluminium) as well as provide significant and valuable
  efficiency and performance benefits to its customers, global OEMs.
- Carbon Revolution is the only company globally to have successfully developed and manufactured single piece carbon fibre automotive wheels to OEM quality standards with commercial adoption across several major OEM models.

What is Carbon Revolution's Business Model?

#### **Summary**

- Carbon Revolution primarily generates revenue through the sale of carbon fibre wheels to global OEMs that are based in regions including North America and Europe.
- Carbon Revolution's business model is based on concurrently developing materials, products and processes with the aim of lower cost and higher volume industrialised production.
- The Company's first awarded OEM supply contract was for the
  Ford Mustang GT350R in 2014, with first deliveries for commercial
  sale achieved in 2015. The Company has now secured nine supply
  contracts for its carbon fibre wheels with a number of leading global
  OEMs including Ford, Ferrari and Renault, and is currently party to
  an engineering contract or in discussions with a number of global
  OEMs (including the above-mentioned OEMs) regarding future
  opportunities for its carbon fibre wheels.
- Since commencing production for its first OEM program for Ford in 2015, the Company has progressively increased production capacity in response to increasing demand, and is investing in additional capacity for FY20 to meet growing demand from customers.
- August 2019 production equated to an annualised production rate of approximately 12,000 wheels per year with this monthly annualised production rate forecast to rise to almost 32,000 by June 2020.
- The company completed a manufacturing facility expansion in October 2018, with the size of the building footprint increased from 3,000m<sup>2</sup> to 10,000m<sup>2</sup> which will allow the Company to materially increase production capacity.

#### For more information, see Section 3.1

What industry and market segment does Carbon Revolution operate in?

- The Company has prioritised the automotive new vehicle wheel market, where its lightweight wheels deliver substantial performance and efficiency benefits.
- Specifically, in the short term to medium term, Carbon Revolution has targeted and is operating in the high-performance and luxury segments of the automotive new vehicle wheel market, which Carbon Revolution estimates accounted for approximately 36 million to 56 million wheels globally in 2017<sup>6</sup>.
- As Carbon Revolution continues to industrialise its operations it
  expects unit costs of production to fall further. This is expected
  to result in Carbon Revolution's wheels being adopted across a
  broader range of vehicles outside the high performance and luxury
  segments. The automotive new vehicle wheel market is estimated by
  QUBE to have been approximately 429 million wheels in 2018<sup>7</sup>.
- Carbon Revolution also aims to leverage its technology into adjacent industries (such as the aerospace and industrial sectors).
   In 2019 the Company was awarded a \$2.4m grant to design the world's first light-weight carbon fibre wheels for the Boeing CH-47F Chinook helicopter.

For more information, see Section 2.1, 2.3, 2.5, 3.7

- 6 The key assumptions underpinning Carbon Revolution's addressable market are provided in Section 2.3.4.
- 7 QUBE 2019 Q3 Automotive OE Tyres and Wheels Technology Trends and Forecasts to 2034.

#### What is the Offer?

#### **Summary**

- The Offer contained in this Prospectus comprises the:
  - issue by the Company of 11,538,462 Shares at \$2.60 per Share to raise gross proceeds of \$30.0 million (before costs and expenses) for the Company; and
  - sale by SaleCo of 23,133,093 Shares at \$2.60 per Share to raise gross proceeds of \$60.1 million (before costs and expenses) for certain Existing Shareholders who are realising part of their investment in Carbon Revolution.
- The Offer will raise gross proceeds of approximately A\$90.1 million.
- All Shares issued or transferred under this Prospectus will, from the time they are issued, rank equally with all other Shares.
- The total number of Shares on issue at the Completion of the Offer will be 127.3 million.

#### For more information, see Section 7.1

## Why is the Offer being conducted?

The purpose of the Offer is to:

- · raise additional capital for investment in:
  - new manufacturing equipment to reduce unit costs of production and increase production capacity at the Geelong facility;
  - continued R&D activities;
  - general corporate purposes;
- pre-pay \$5 million of the Ronal Loan;
- provide Carbon Revolution with additional financial flexibility through improved access to capital markets;
- provide a liquid market for Shares and an opportunity for new investors to invest in the Company;
- provide certain Existing Shareholders the ability to realise part of their investment; and
- provide Carbon Revolution with the benefits of an increased profile that arises from being a listed entity.

#### 1.2 Key features of Carbon Revolution's business model

#### **Topic**

How does Carbon Revolution generate revenue?

#### Summary

- Carbon Revolution primarily generates revenue through the sale of single piece carbon fibre wheels to global OEMs. Carbon Revolution also generates revenue via the provision of associated engineering services and customer-owned tooling related to those wheel sales to global OEMs.
- The sale of Carbon Revolution's wheels takes place under supply contracts with global OEMs (for further information in relation to Carbon Revolution's customer contracts, see section 9.5.3).
- Carbon Revolution is expected to generate total revenue from wheel sales and associated engineering services and customer-owned tooling of A\$62.2 million in FY20.
- Carbon Revolution also receives other income that includes R&D tax incentives and government grants.

#### For more information, see Sections 3.1 and 4

What are Carbon Revolution's key costs?

- Key operating costs for Carbon Revolution include materials, direct labour and direct manufacturing costs involved in the production of wheels. In addition, indirect costs such as R&D costs, salaries and other overheads are incurred to support the business.
- Capital expenditure for manufacturing equipment and systems, and investment in net working capital are also required as Carbon Revolution increases the scale and efficiency of its Geelong facility.

#### For more information, see Section 4

Who are Carbon Revolution's customers?

- With Carbon Revolution's short to medium term strategy of focusing on the high-performance and luxury segments of the automotive new vehicle wheel market, the Company's current customers are global OEMs that are based in regions including North America and Europe.
- Carbon Revolution has secured nine supply contracts with leading global OEMs, including Ford, Ferrari and Renault, and is currently party to an engineering contract or in discussions with a number of global OEMs (including the above-mentioned OEMs) regarding future opportunities for its carbon fibre wheels.

#### For more information, see Section 3.1

What is Carbon Revolution's industrialised manufacturing process?

- From its inception, Carbon Revolution has had the objective of becoming a supplier to the global OEM industry. Accordingly, its approach to developing materials, products and processes has focussed on industrialisation as its ultimate aim.
- Having successfully commercialised its products, Carbon Revolution has already started industrialising its manufacturing operations.
   Industrialisation is expected to drive increased capacity at Carbon Revolution's manufacturing facility and lower the cost of producing each wheel by:
  - increasing capital efficiency;
  - increasing labour efficiency; and
  - increasing material efficiency.

What is Carbon Revolution's Research and Development process and approach to Intellectual Property?

#### **Summary**

- As an advanced manufacturing business, research and development are at the core of Carbon Revolution's business model.
- Carbon Revolution has spent over 12 years, and over \$39.2m developing proprietary technology across its advanced products, raw materials and manufacturing processes.
- Carbon Revolution's research and development team focuses on the ongoing development of Carbon Revolution's products, materials and process technologies, in order to ensure that Carbon Revolution retains or extends its leadership position in terms of product and manufacturing technologies.
- Carbon Revolution has been granted 41 patents across 7 patent families with a further 8 pending across those families, and 4 pending patents across 4 new patent families. Typically, these granted patents are filed in multiple jurisdictions globally.
- Carbon Revolution has an intellectual property management system in place in order to protect its intellectual property.

#### For more information, see Sections 3.5

What is Carbon Revolution's growth strategy?

- Carbon Revolution is currently increasing its manufacturing output significantly in response to demand from existing customers.
- Beyond this, the key growth driver of the business in the near term will be the further expansion of its carbon fibre automotive wheel manufacturing capacity at its Geelong facility where it can significantly expand its production capacity within its current premises. The large size and growth trend of its addressable market are expected to satisfy near-term growth objectives, particularly as the technology's adoption in more mainstream vehicle segments increases.

For more information, see Section 3.7

#### 1.3 Key strengths of the Carbon Revolution business

#### **Topic**

Highly capable, experienced and aligned Management and technical team

#### **Summary**

 Carbon Revolution has a highly experienced Management and technical team with significant automotive, advanced manufacturing and composite material sector expertise.

For more information, see Sections 3.6 and 6.2

Industry benefits of carbon fibre wheels

#### **Summary**

- Lightweight carbon fibre wheels are an efficiency technology which deliver material performance and / or economy benefits.
- The benefits of Carbon Revolution's carbon fibre wheel technology over wheels constructed from traditional materials include:
  - Increased vehicle efficiency: Carbon Revolution modelling suggests that the weight reductions achieved by its carbon fibre wheels can materially improve vehicle efficiency and therefore reduce fuel consumption by 2-6%8 (compared to cast aluminium wheels). This efficiency translates directly into reduced carbon dioxide emissions by the vehicle.
  - Enhanced vehicle performance: The lower rotating unsprung weight<sup>9</sup> achievable with carbon fibre wheels provides significant improvements in acceleration and road handling. These performance enhancements are being demanded by OEM customers.
  - Increased range for electric vehicles: Lightweight and efficient technologies such as carbon fibre wheels are beneficial for autonomous and electric vehicles by offering greater vehicle range.
  - Improved noise, vibration and harshness (NVH) performance:
     Carbon fibre wheels possess superior dampening characteristics over wheels constructed from traditional materials and therefore reduce the transmission of road noise.
  - Aesthetic improvement: Carbon fibre wheels offer aesthetics that are not achievable with conventional wheel materials due to the woven pattern created by the carbon fibre weave 'finish'.

#### For more information, see Section 2.3.3

Leadership in carbon fibre wheel technology

- Carbon Revolution builds wheels which are lighter and deliver superior performance, for a given level of stiffness and durability, compared to other wheels on the market.
- It is the only company globally to have successfully developed and manufactured single piece carbon fibre automotive wheels to OEM quality standards with commercial adoption across several major OEM models.
- It has commercialised its patented technology, with supply contracts for nine vehicle programs with a number of leading global OEMs, including Ford, Ferrari and Renault.

<sup>8</sup> The 2010 Ford Focus was used by Carbon Revolution as a benchmark to develop a computer simulation model for quantifying fuel economy improvements. The computer model was then used to estimate the efficiency improvements.

<sup>9</sup> Unsprung weight refers to the total weight of parts that are not supported by a vehicle's suspension. Rotating unsprung weight refers to parts that are not supported by a vehicle's suspension that are accelerated or decelerated when the speed of a vehicle changes (principally the wheels and tyres of the car). Additional information regarding unsprung weight (including the benefits of reducing unsprung weight) is provided in Section 2.3.3.

#### Large market opportunity

#### **Summary**

- As Carbon Revolution continues to industrialise its operations it
  expects unit costs of production to fall further. This is expected
  to result in Carbon Revolution's wheels being adopted across
  a broader range of vehicles outside the high performance and
  luxury segments.
- The automotive new vehicle wheel market is estimated by QUBE to have been approximately 429 million wheels in 2018<sup>10</sup>.
- While this market, historically, has been dominated by wheels
  constructed from traditional metals such as steel and cast aluminium,
  carbon fibre automotive wheels are an emerging substitute for these
  traditional metal wheels given industry trends and the advantages
  described above.

#### For more information, see Section 2.3, 3.1.2, 3.7

# Scalable industrialised manufacturing process

- Carbon Revolution has commenced its industrialisation program by automating a number of core processes, the benefits of which will be realised during FY20 as it delivers a substantial scale-up in production of current and new customer programs.
- Beyond FY20 it plans to implement further significant automation across its entire manufacturing process, enabling further increases in manufacturing capacity and reductions in unit costs per wheel.

#### 1.4 Financial information

#### **Topic**

What is the key financial information of Carbon Revolution?

#### **Summary**

- A select summary of Carbon Revolution's Historical Financial Information and Forecast Financial Information is set out below.
   You should read this information in conjunction with the more detailed discussion of the Financial Information set out in Section 4, including the assumptions, management discussion and analysis and sensitivity analysis, as well as the key risks set out in Section 5.
- A reconciliation of the Statutory Historical Income Statements and Statutory Forecast Income Statement to the Pro Forma Historical Income Statements and Pro Forma Forecast Income Statement is provided in Section 4.5.
- A reconciliation of the Statutory Historical Cash Flow Statements and Statutory Forecast Cash Flow Statement to the Pro Forma Historical Cash Flow Statements and Pro Forma Forecast Cash Flow Statement is provided in section 4.8.

	Pro forma historical			Pro forma forecast	
A\$ million	FY17	FY18	FY19	FY20	
Revenue	8.0	8.1	15.1	62.2	
EBITDA	(13.6)	(17.7)	(16.1)	(8.3)	
EBIT	(15.4)	(20.0)	(19.9)	(16.1)	
NPAT	(16.2)	(20.8)	(22.4)	(18.4)	
Net cash outflows before financing activities	(19.5)	(23.4)	(41.3)	(39.7)	

	Statutory historical			Statutory forecast
A\$ million	FY17	FY18	FY19	FY20
Revenue	7.8	8.0	15.1	62.2
EBITDA	(11.9)	(17.4)	(21.9)	(95.9)
EBIT	(13.5)	(19.5)	(25.2)	(103.7)
NPAT	(14.2)	(20.2)	(27.2)	(106.0)
Net cash outflows before financing activities	(36.4)	(4.7)	(41.4)	(39.5)

#### For more information, see Section 4

What are Carbon Revolution's key debt financing arrangements?

Carbon Revolution's key debt financing arrangements are as follows:

- \$18 million Ronal Loan, of which \$5 million will be pre-paid using some of the proceeds raised under the Offer, due to mature on 30 June 2021 (unless repaid earlier);
- a \$5.5 million loan from the State of Victoria (being the amount of advanced grant payments outstanding under the Grant Agreement) due to mature on 30 June 2021; and
- Convertible Notes which will automatically convert into Shares immediately prior to Completion of the Offer.

Will Carbon Revolution have sufficient funds for its activities?

How will Carbon Revolution fund any future growth?

What is Carbon Revolution's current dividend policy?

• The Board is satisfied that, upon completion of the Offer, Carbon Revolution will have enough working capital to carry out its stated objectives.

#### For more information, see Section 4

Summary

 Future working capital requirements due to underlying growth will be funded through the usual industry financing sources.

#### For more information, see Section 4

- The Company does not expect to pay dividends in the foreseeable future as its focus will primarily be on using available funds to expand its manufacturing capacity and reduce unit costs of production.
- · Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend upon matters such as the availability of distributable earnings, the operating results and financial condition of the Company, future capital requirements, general business and other factors considered relevant by the Directors. For more information on the Company's ability to pay franked dividends, see Section 5.1.24.

For more information, see Section 4

#### **Key risks** 1.5

#### **Topic**

Carbon Revolution may not be able to execute its plans and forecasts

#### Summary

- There is a risk that Carbon Revolution's industrialisation plans and growth strategy may not be successful, or may take longer or cost more than anticipated, which would adversely affect Carbon Revolution's financial position and performance.
- Significant technological, engineering and logistical challenges must be overcome in order for Carbon Revolution's industrialisation plans to be achieved. There is a risk that this process may take longer or cost more than anticipated, not achieve the cost reductions or scale anticipated, or that unforeseen issues may arise during the engineering or commissioning process for new equipment. There is also a risk that the capital cost of expanding operations may be higher than anticipated resulting in a lower return on investment than expected. If Carbon Revolution cannot automate and scale its manufacturing process, it will have a material adverse impact on Carbon Revolution's performance and prospects.
- There are a range of factors which may result in demand for Carbon Revolution's wheels being lower than anticipated, and many of these factors are outside Carbon Revolution's control. If demand for Carbon Revolution's wheels is lower than anticipated, this will adversely impact Carbon Revolution's ability to generate revenue which will in turn impact on Carbon Revolution's financial performance and prospects.

Carbon Revolution has only a limited number of OEM customers and relationships with them may be lost or deteriorate

Carbon Revolution is not yet

profitable or cash flow positive

#### Summary

- Carbon Revolution has only nine customer programs (with less than nine OEMs), and losing any one of these may significantly adversely affect its financial performance and prospects.
- Failing to enter into additional supply contracts and attract additional OEM customers will negatively impact on Carbon Revolution's prospects and likely future financial performance.
- A range of factors may lead to an OEM terminating its existing supply contract with Carbon Revolution, or not seeking additional supply contracts with Carbon Revolution, or may lead OEMs to discontinue their relationships or discussions with Carbon Revolution (including where an engineering contract is in place). These factors include but are not limited to many of the risks outlined in Section 5.

#### For more information, see Section 5.1.2

 Carbon Revolution is not yet profitable and does not generate enough funds from its operations to continue those operations. It is anticipated that Carbon Revolution will not become cash flow positive in the forecast period.

- Carbon Revolution is party to the Ronal Loan, under which Carbon Revolution must pay Ronal the principal amount outstanding, which will be \$13 million after a pre-payment of \$5 million using some of the proceeds of the Offer, plus accrued interest, by 30 June 2021, and may be required to make additional pre-payments before this time (see Section 9.5.7 for further details). Carbon Revolution is also party to the Grant Agreement with the State of Victoria, under which Carbon Revolution was provided with an Early Advance, \$5.5 million of which is outstanding and expected to be repayable on 30 June 2021 (to the extent not set-off against grant moneys which become payable as the Company satisfies the relevant grant deliverables and conditions).
- Carbon Revolution's ability to raise funds if required, to meet its
  operational requirements and repay Ronal or the State of Victoria,
  through debt or the issue of securities will be subject to factors
  beyond the control of Carbon Revolution and its Directors, including
  cyclical factors affecting the economy and capital markets. There is
  no guarantee that such funding, whether debt, equity or otherwise,
  will be obtained or available on favourable terms, or at all. Any
  inability to raise funds when required may adversely impact on
  Carbon Revolution's financial performance and prospects.
- Finally, Carbon Revolution has a limited operating history and has not yet become profitable and, as such, its operating history does not provide a meaningful basis for investors to evaluate the business or its financial performance and future prospects.

Carbon Revolution is subject to inherent risks in the development and use of new technology

#### **Summary**

- The implementation of new technology and manufacturing processes may be challenging and involves risks inherent in the development and use of new technology and in particular, the manufacturing of composite materials which is known to be complex.
- Failure to properly implement new technology may result in Carbon Revolution's product failing during trials, failing to gain customer approval or being difficult to profitably commercialise. The cost and time required to develop new wheel technology and to obtain customer validation for new wheels can be uncertain. If Carbon Revolution is unable to successfully continue to develop its existing or new technology, it may not be able to achieve its growth plans, which would adversely affect its operations, financial position and performance.
- The above risks may also result in higher scrap rates and quality issues than anticipated after customer validation and commencement of production. Higher scrap rates or quality issues may result in higher costs, and/or delays in deliveries to customers, which could result in Carbon Revolution being required to pay costs or damages to its customers, or result in negative customer perception about Carbon Revolution's ability to meet its supply obligations under its supply contracts. This in turn could adversely impact Carbon Revolution's ability to secure new programs, which would have an adverse impact on its ability to generate revenues.

Carbon Revolution's operations may be restricted by third-party intellectual property rights

#### **Summary**

- Carbon Revolution relies on its own technology to develop, manufacture and sell its carbon fibre wheels. A number of Carbon Revolution's competitors are also developing carbon fibre wheel technology. There is a risk that these competitors may create, or have already created, intellectual property rights (including patents) that restrict Carbon Revolution's ability to exploit its own technology.
- In particular, Carbon Revolution is aware of certain granted patents and patent applications relating to certain key technologies used in carbon fibre wheels which have been filed by competitors and industry participants in countries which are key markets into which Carbon Revolution supplies its carbon fibre wheels (including the US, Australia, Europe, Japan, and China). To the extent it might be claimed that Carbon Revolution infringes any such patent or patent application (if granted), Carbon Revolution believes that it has reasonable grounds to defend any such claim either on the basis that it does not infringe or that it could successfully challenge the validity of these patents or patent applications (if granted). Furthermore, Carbon Revolution believes that technological developments that it has recently made, which could be applied to both future and existing wheel programs, are likely to reduce such risk of infringement. However, if these patents or patent applications (if granted) are found to be valid and Carbon Revolution is found to infringe them (where it cannot take alternative steps such as modifying its technology or entering into licensing or royalty arrangements), that may materially restrict Carbon Revolution from selling its wheels to its OEM customers (see section 5.1.5 for more detail).
- It is also possible that third parties may challenge Carbon Revolution's intellectual property rights or assert intellectual property infringement, breach of confidentiality or make similar claims against Carbon Revolution (or its customers) under patent, trade secret or other intellectual property laws. Such claims, if made, may harm Carbon Revolution's business. If Carbon Revolution is forced to defend claims of intellectual property infringement or breach of confidentiality, whether they are with or without merit or are determined in Carbon Revolution's favour, the costs of such litigation will potentially be significant and will divert Management's attention from normal commercial operations.

Carbon Revolution's performance and execution of its growth plans are linked to its ability to retain key staff, attract sufficiently skilled staff, and effectively manage its workforce

Carbon Revolution may suffer reputational damage or incur liability due to product performance or failures or other issues with its wheels

Carbon Revolution's estimates of carbon fibre wheel acceptance and addressable wheel market may be incorrect, and adjacent markets may not be available to it

#### **Summary**

- Carbon Revolution's ability to effectively execute its business strategy depends upon the performance and expertise of its key Management personnel. The loss of key Management personnel, or any delay in their replacement, may therefore adversely affect Carbon Revolution's operations and future performance.
- The achievement of Carbon Revolution's growth plans requires
  the services of additional technical, manufacturing and sales staff.
  Carbon Revolution may not be able to attract and retain the services
  of such people, and this may limit Carbon Revolution's growth and
  consequently adversely affect Carbon Revolution's prospects and
  future financial performance.
- The most recent Enterprise Agreement covering Carbon Revolution's production workforce has passed its nominal expiry date. The negotiation of new Enterprise Agreements or changes to awards from time to time may increase the overall costs of running Carbon Revolution's business and such increased costs may not be able to be passed through to customers in full or at all.

#### For more information, see Section 5.1.6

- There is a risk that events, including many of the risks described in Section 5, may damage Carbon Revolution's reputation and brand, including through negative publicity, disputes and negative customer experiences.
- Damage to Carbon Revolution's reputation may reduce the demand for Carbon Revolution's wheels, adversely impact relationships with key customers, suppliers, employees or government grant providers and diminish the prospects of securing new programs with existing and new OEM customers.
- Product liability claims brought against Carbon Revolution may result in Carbon Revolution paying damages, an increase in insurance premiums, reputational harm and could have materially adverse effects on Carbon Revolution's activities, business, operating results, financial position and reputation.

#### For more information, see Section 5.1.7

- The growth of Carbon Revolution is dependent on its ability to increase the volume of wheels that it sells. As set out in Section 2.3 Carbon Revolution currently assesses the total addressable market segment for carbon fibre wheels to be approximately 10-15% of the overall total automotive new vehicle wheel market (equivalent to approximately 36 million to 56 million wheels).
- However, this is a judgment question, and the addressable wheel market may be smaller than anticipated. Furthermore, market acceptance of Carbon Revolution's wheels may not be as wide as anticipated.
- If the acceptance of Carbon Revolution's wheels is lower or if the size of the market in which it operates is smaller than anticipated, this may restrict Carbon Revolution's ability to sell wheels and generate revenue which, in turn, may adversely affect the profitability of Carbon Revolution.

Carbon Revolution's competitive position may deteriorate

Carbon Revolution may not be able to enforce its intellectual property rights and may be involved in disputes regarding intellectual property or contractual obligations

Other risks

#### **Summary**

- Carbon Revolution operates in a competitive industry, and its competitors could include existing wheel manufacturers, new entrants and OEMs. Carbon Revolution's competitive position may deteriorate, as a result of the action of any of these participants.
- For example, there are various market participants who are also developing lightweight wheel technologies and/or carbon fibre wheels, which could ultimately be superior or gain greater market approval than Carbon Revolution's wheels.
- Any such actions of new or existing competitors may reduce the volume of wheels sold by Carbon Revolution or the price at which it can sell wheels. This, in turn, may adversely affect Carbon Revolution's operating and financial performance.

#### For more information, see Section 5.1.9

- Carbon Revolution has a portfolio of intellectual property rights that supports the commercialisation of its wheels. The commercial value of the intellectual property is dependent on legal protections provided by a combination of patent rights, registered trademarks, copyright, confidentiality obligations, trade secrecy laws and other intellectual property rights. These legal mechanisms, however, do not guarantee that Carbon Revolution will be able to enforce its intellectual property rights and stop relevant infringement or breaches of its intellectual property, or that Carbon Revolution's competitive position will be maintained.
- Litigation may be necessary, where commercially feasible, from time to time to enforce Carbon Revolution's rights in its technology and intellectual property. Such litigation can be costly and could have adverse effects on Carbon Revolution's activities, business, operating results and financial position. Likewise, a failure to succeed in protecting any such rights may equally have a materially adverse effect on Carbon Revolution's activities, business, operating results and financial position.

For more information, see Section 5.1.10

A number of other risks are included in Section 5.

For more information, see Sections 5.1.11 to 5.2.8

#### 1.6 Directors and key management

#### **Topic**

Who are the Directors of Carbon Revolution?

#### Summary

- The Board is comprised of seven Directors, including six Independent Directors.
- · The Directors are as follows:
  - James Douglas Independent, Non-Executive Chairman
  - Jake Dingle Chief Executive Officer, Managing Director
  - Bruce Griffiths Independent, Non-Executive Director
  - Lucia Cade Independent, Non-Executive Director
  - Dale McKee Independent, Non-Executive Director
  - Mark Bernhard Independent, Non-Executive Director
  - Peter Lewinsky Independent, Non-Executive Director

#### For more information, see Section 6.1

Who are the key members of Carbon Revolution's Management team?

- · Carbon Revolution's key Management team consists of:
  - Jake Dingle Chief Executive Officer, Managing Director
  - Gerard Buckle Chief Financial Officer
  - Brett Gass Chief Technology Officer
  - Dr Ashley Denmead Engineering and Design Director
  - Luke Maunsell Manufacturing Director
  - Luke Preston Industrialisation Director
  - David Nock General Counsel and Company Secretary
  - Adrian Smith Sales and Business Development Director

#### 1.7 Significant interests of key people and related party transactions

#### **Topic**

Who are the Existing Shareholders and what is their interest in the Company upon Completion of the Offer?

#### Summary

Shareholde		Shares held prior to the Offer¹ (#)	Shares issued on Conversion of the Convertible Notes and under the Anti-Dilution Arrangements (#)	Shares transferred to SaleCo in connect- ion with the Offer (#)	Shares acquired in the Offer (#)	Shares held at Compl- etion of the Offer (#)	Shares held at Compl- etion of the Offer (%)
Directors Managen (and associate	nent ed						
entities)	11	,283,731	396,373	(500,000)	199,997	11,380,101	8.94%
Ronal	16	,553,000	5,367,248	(7,692,307)	_	14,227,941	11.17%
Deakin	5,0	085,000	3,292,592	_	_	8,377,592	6.58%
State of Victoria		_	12,833,226	(7,411,484)	_	5,421,742	4.26%
Other Existing Share- holders	18	,281,472	42,710,838	(7,529,302)	_	53,463,008	41.98%
New Shar	re-				34,471,558	34,471,558	27.07%
Total	51,	203,203	64,600,277	(23,133,093)	34,671,555	127,341,942	100%

- This includes 38,269 Shares to be issued prior to Completion of the Offer to employees
  of the Company under a tax exempt employee share plan the Company has in place and
  272,336 Shares in connection with certain employment arrangements of current and
  former employees.
- 2. This table assumes Existing Shareholders do not acquire any Shares under the Broker Firm Offer.
- 3. At Completion of the Offer, 41.1% of the Shares will be subject to mandatory and voluntary escrow arrangements. See Section 9.5.2 for further information.
- 4. There will also be 5,093,678 options on issue on or shortly after Completion of the Offer, held by certain members of Management (see further section 6.5.3.1.2).

What are the Directors' holdings in the Company?

#### **Summary**

• The Directors' direct and indirect interests in Shares is as follows:

		Shares issued on				
		Convers-				
		ion of the Convert-	Shares trans-			
		ible Notes	ferred to		Shares	Shares
	Shares	and under	SaleCo in		held at	held at
	held	the Anti-	connect-	Shares	Compl-	Compl-
	prior to	Dilution	ion with	acquired	etion of	etion of
	the Offer	Arrange-	the Offer	in the	the Offer	the Offer
Shareholders	(#)	ments (#)	(#)	Offer (#)	(#)	(%)
James						
Douglas	1,448,000	129,952	_	76,923	1,654,875	1.30%
Jake Dingle	3,972,000	64,975	_	_	4,036,975	3.17%
Bruce Griffith	s 105,000	99,799	_	_	204,799	0.16%
Lucia Cade	_	32,877	_	_	32,877	0.03%
Dale McKee	_	49,316	_	17,307	66,623	0.05%
Peter Lewinsky	_	_	_	9,615	9,615	0.01%
Mark						
Bernhard			_	38,461	38,461	0.03%
Total	5,525,000	376,919	_	142,306	6,044,225	4.75%

#### For more information, see Section 6.4.5

Will any Shares be subject to escrow restrictions on disposal following Completion? Certain Shares held by Ronal, the Directors and entities and persons associated with them will be subject to ASX imposed escrow for a period of 24 months from Completion of the Offer. These Shares amount to 8.0% of the Shares on issue immediately following Completion of the Offer.

Certain Shares held by other Existing Shareholders will be subject to ASX imposed escrow for 12 months from the date the relevant Shares were issued, or treated as issued, under the Listing Rules. These Shares amount to 15.7% of the Shares on issue immediately following Completion of the Offer.

Further, certain Existing Shareholders have entered into voluntary escrow arrangements with the Company in relation to the remainder of their Shares held at Completion of the Offer which are not subject to ASX imposed escrow, under which these Shares will be escrowed until 1 December 2020<sup>11</sup>. These Shares amount to 17.4% of the Shares on issue immediately following Completion of the Offer.

In aggregate, 52,345,575 of the Shares on issue immediately following Completion of the Offer will be the subject of these ASX imposed and voluntary escrow arrangements, representing approximately 41.1% of the total Shares on issue immediately following Completion of the Offer.

<sup>11</sup> The only exception to this is that the voluntary escrow arrangements that have been entered into by Brett Gass only apply to 66.66% of his Shares which are held on Completion of the Offer which are not subject to mandatory escrow.

What significant benefits are payable to Directors and other persons connected with the Company or the Offer and what significant interests do they hold?

#### Summary

- On Completion, the Directors and entities and persons associated with them, Ronal, the State of Victoria, Deakin and other Existing Shareholders will hold Shares as set out in the table in section 1.7 above.
- \$60.1 million of funds received under the Offer will be paid to the Existing Shareholders as consideration for the Shares transferred to successful Applicants by SaleCo.
- Directors and senior Management are entitled to remuneration, fees and payments as set out in Sections 6.4 and 6.5.
- Certain agreements have been entered into between Carbon Revolution and Deakin, including the lease for the Company's facility in Geelong and agreements relating to research collaboration, as set out in Section 6.6.1 and Section 9.5.
- Certain agreements have been entered into between Carbon Revolution and Ronal, including the Ronal Loan and associated financing arrangements, as set out in Section 6.6.1 and Section 9.5. Further, \$5 million of the proceeds raised under the Offer will be used to partly pre-pay the Ronal Loan.
- Certain agreements have been entered into between Carbon Revolution and the State of Victoria, including the Grant Agreement involving an Early Advance, arrangements relating to the Convertible Notes held by the State of Victoria, and associated financing arrangements, as set out in Section 6.6.3, Section 6.6.4 and Section 9.5.
- Professional advisers to the Offer are entitled to fees as set out in Section 6.7.

For more information, see Section 6 and Section 9

#### 1.8 Overview of the Offer

#### Topic

What is the Offer?

#### Summary

- The Offer contained in this Prospectus is an initial public offering which comprises:
  - the issue by the Company of 11,538,462 Shares at \$2.60 per
     Share to raise gross proceeds of \$30.0 million (before costs and expenses) for the Company; and
  - the sale by SaleCo of 23,133,093 Shares at \$2.60 per Share to raise gross proceeds of \$60.1 million (before costs and expenses) for certain Existing Shareholders who are realising part of their investment in Carbon Revolution.
- The Offer will raise gross proceeds of approximately A\$90.1 million.
- All Shares issued under this Prospectus will, from the time they are issued, rank equally with all other Shares.
- The total number of Shares on issue at the Completion of the Offer will be 127.3 million.

Who is the issuer of this Prospectus?

How will the proceeds from the Offer be used?

#### Summary

 Carbon Revolution Limited (ACN 128 274 653) and Carbon Revolution SaleCo Limited (ACN 636 286 078)

#### For more information, see Section 7

Sources	A\$ million	Uses	A\$ million
Cash proceeds	\$30.0	Capital expenditure	\$9.6
to Carbon Revolution under the Offer		Research and Development	\$6.2
		Working capital	\$4.7
		Pre-payment of the Ronal Loan	\$5.0
		Offer costs	\$4.4
Cash proceeds received for the transfer of Shares by SaleCo under the Offer	\$60.1	Payment by SaleCo of cash proceeds to Existing Shareholders as consideration for the acquisition of the Shares being transferred under the Offer	\$57.7
		Offer costs <sup>1</sup>	\$2.4
Total sources	\$90.1	Total uses	\$90.1

- 1 The majority of the Joint Lead Managers' management and underwriting fees referable to the sale of Shares by SaleCo into the Offer will be deducted by SaleCo from the proceeds due to Existing Shareholders who have sold Shares to SaleCo in connection with the Offer.
- The proceeds from the Offer received by Carbon Revolution are anticipated to be used principally for the purchase of new manufacturing equipment required to reduce unit costs of production and increase production capacity at the Geelong facility, continued R&D activities and general corporate purposes over the next phase of the Company's development.

#### For more information, see Section 7.1.3

What is the Offer Price?

• The Offer Price is A\$2.60 per Share.

For more information, see Section 7.1

Is the Offer underwritten?

• The Offer will be fully underwritten by the Joint Lead Managers.

For more information, see Section 7.7 and 9.5.1

What is SaleCo and what role does it play in the Offer?

#### **Summary**

- SaleCo is a special purpose vehicle that was established to enable certain Existing Shareholders to sell a proportion of their Existing Shares. Each of these Existing Shareholders has entered into irrevocable sale arrangements in favour of SaleCo under which they irrevocably offer to sell certain Shares to SaleCo free from encumbrances and third-party rights and conditional upon Completion of the Offer.
- The Shares which SaleCo acquires from the relevant Existing Shareholders will be transferred to successful Applicants at the Offer Price.

#### For more information, see Section 9.3

Who are the Joint Lead Managers of the Offer?

- Evans Dixon Corporate Advisory Pty Limited.
- · Bell Potter Securities Limited.

#### For more information, see Sections 7.2 and 9.5.1

How is the Offer structured?

- · The Offer comprises:
  - the Broker Firm Offer, which is open only to Australian clients of participating Brokers who have received an invitation from their Broker to acquire Shares under this Prospectus;
  - the Institutional Offer, which consists of an invitation to bid for Shares made to Institutional Investors in Australia and a number of other eligible jurisdictions; and
  - the Priority Offer, which is open to selected investors in Australia who receive an invitation under the Priority Offer.
- No general public offer of Shares will be made under the Offer.

#### For more information, see Section 7.1.1

What is the minimum and maximum Application size under the Offer?

- The minimum Application size under the Offer is A\$2,000 worth of Shares. There is no maximum value of Shares that may be applied for under the Offer.
- The Company, SaleCo and the Joint Lead Managers reserve the right to reject any Application or to allocate a lesser number of Shares than that applied for. In addition, the Company, SaleCo and the Joint Lead Managers reserve the right to aggregate any Applications which they believe may be multiple Applications from the same person or reject or scale back any Applications (or aggregation of Applications) in the Offer which are for more than A\$250,000 worth of Shares.

Will the Shares be quoted on ASX?

#### Summary

- Yes. The Company has applied to ASX for admission to the Official List of, and quotation of Shares by, ASX (which is expected to be under the code 'CBR'). It is anticipated that quotation will initially be on a deferred settlement basis.
- Settlement of the Offer is conditional on ASX approving this application. If approval is not given within three months after such application is made (or any longer period permitted by law), the Offer will be withdrawn and all Application Monies received will be refunded without interest as soon as practicable in accordance with the requirements of the Corporations Act.

#### For more information, see Section 7.9.1

What are the tax implications of investing in the Offer securities?

- The taxation consequences of an investment in Shares will depend on an investor's particular circumstances. Applicants should make their own enquiries concerning the taxation consequences of an investment in the Company prior to deciding whether to invest.
- Summaries of certain Australian tax consequences of participating in the Offer and investing in Shares are set out in Section 9.10.

#### For more information, see Section 9.10

What is the allocation policy?

- The allocation of Shares between the Broker Firm Offer, Institutional Offer and Priority Offer will be determined by agreement between the Company and the Joint Lead Managers having regard to the allocation policies outlined in Section 7.
- With respect to the Broker Firm Offer, each Broker will decide how it allocates Shares among its clients, and it (and not the Company nor the Joint Lead Managers) will be responsible for ensuring that clients who have received an allocation from it receive the relevant Shares.
- The allocation of Shares under the Institutional Offer was determined by agreement between the Company and the Joint Lead Managers.
- With respect to the Priority Offer, the Company will decide how it allocates Shares amongst the investors nominated by the Company who receive a Priority Offer Letter.

#### For more information, see Section 7.3.5, 7.4.2 and 7.5.5

Who bears the costs of the Offer?

• The costs of the Offer (including advisory, legal, accounting, tax and duty, listing and administrative fees, the Joint Lead Managers' management and underwriting fees, Prospectus design and printing, advertising, marketing, Share Registry and other expenses, which amount to approximately A\$6.8 million), have been, or will be borne by the Company from the proceeds from the Offer, except in relation to the majority of the Joint Lead Managers' management and underwriting fees referable to the sale of Shares by SaleCo into the Offer, which will be deducted by SaleCo from the proceeds due to Existing Shareholders who have sold Shares to SaleCo in connection with the Offer.

#### For more information, see Section 9.13

Is there any brokerage, commission or stamp duty payable by applicants?  No brokerage, commission or stamp duty is payable by applicants on acquisition of Shares under the Offer.

How can I apply?

#### **Summary**

- Broker firm Offer Applicants: Broker Firm Offer Applicants may apply for Shares by completing a valid Broker Firm Application Form attached to or accompanying this Prospectus and lodging it with the Broker who invited them to participate in the Offer.
- Institutional Offer Applicants: The Joint Lead Managers separately advised Institutional Investors of the Application procedure under the Institutional Offer.
- Priority Offer Applicants: Applicants under the Priority Offer must apply in accordance with the instructions provided in their Priority Offer Letter and Section 7.5.2.

#### For more information, see Section 7.2

When will I receive confirmation that my application has been successful?

- Confirmation of successful Applications in the form of initial holding statements are expected to be dispatched by standard post on or about 2 December 2019.
- For more information, see the key dates referenced on page 9.

#### For more information, see Section 7.2

Can the Offer be withdrawn?

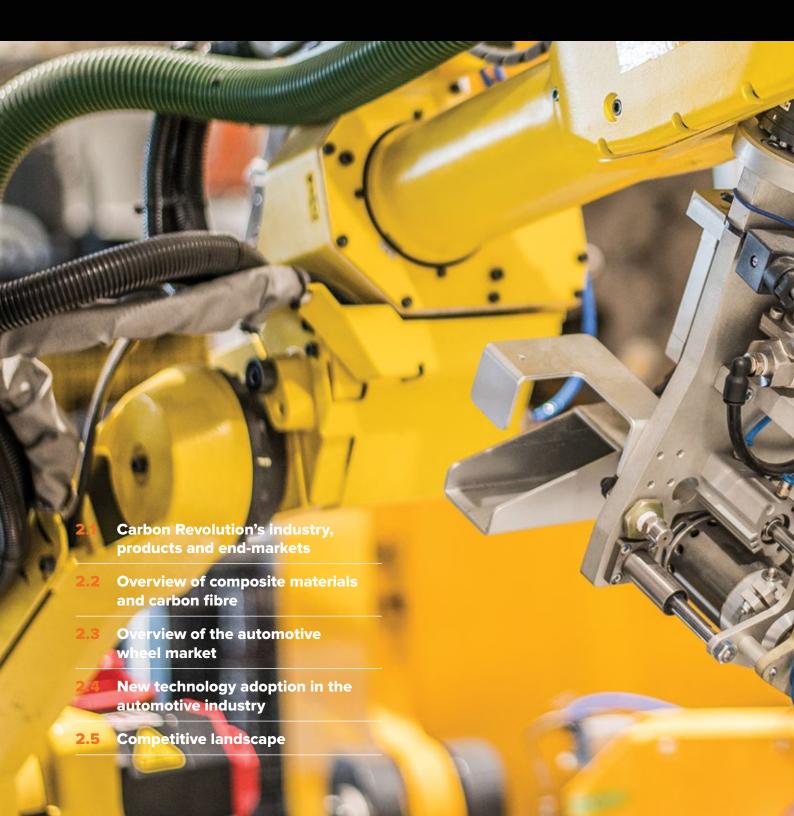
- The Company and SaleCo reserve the right not to proceed with the Offer at any time before the issue and transfer of Shares to successful Applicants.
- If the Offer does not proceed, all Application Monies will be refunded.
- No interest will be paid on any Application Monies refunded as a result of the withdrawal of the Offer.

#### For more information, see Section 7.2

Where can I find more information about this Prospectus or the Offer?

- Call the Carbon Revolution Offer Information Line on 1800 677 648 (within Australia) or +61 1800 677 648 (outside Australia) 8.30am to 5.00pm (Sydney time), Monday to Friday (excluding public holidays).
- If you are unclear in relation to any matter or are uncertain as to whether Carbon Revolution is a suitable investment for you, you should seek professional guidance from your accountant, financial adviser, stockbroker, lawyer or other professional adviser before deciding whether to invest.

# INDUSTRY OVERVIEW





## 2 Industry overview

# 2.1 Carbon Revolution's industry, products and end-markets

Carbon Revolution is an Australian-based advanced manufacturing company that designs, manufactures and markets carbon fibre wheels. Carbon Revolution's products have potential application across a broad range of transportation industries including automotive, aerospace and industrial uses. The Company has, however, prioritised the automotive new vehicle wheel market as its primary industry to operate in.

# 2.2 Overview of composite materials and carbon fibre

### 2.2.1 What are composite materials?

Composite materials are generally formed by combining two or more materials, such as fibres and resins, to create a material which has attractive properties relative to the properties of the standalone materials. The two materials being combined generally serve different purposes (for example, the fibre provides stiffness and strength while the resin provides form or shape). Examples of common fibres used in composites include fibreglass and carbon fibre. Various resins, including polyesters, vinylesters and epoxies, are typically combined with the fibres and cured at elevated temperatures to produce the final composite material.

Advanced composite materials generally have a number of attractive properties relative to traditional materials. They include high tensile strength<sup>12</sup>, high stiffness, low density as well as resistance to corrosion and fatigue. Manufacturers are also able to incorporate customised resin systems that can be optimised for specific parameters (e.g. product related factors such as durability and temperature performance as well as processing parameters such as cure times and viscosity). The light weight characteristics of composite materials, combined with their high performance, have seen an increase in their adoption over time.

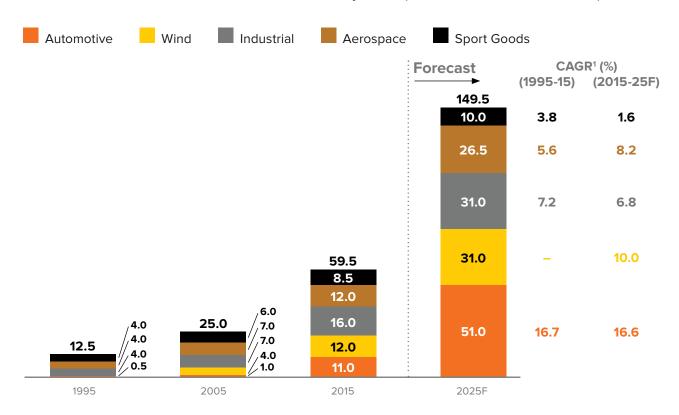
#### 2.2.2 What is carbon fibre?

Carbon fibres are approximately 10 microns<sup>13</sup> in diameter and are composed mostly of carbon atoms that are bonded together in thin crystals aligned parallel to the fibre direction. This alignment gives the fibre a high strength-to-volume ratio. The material has several advantageous properties, including high stiffness, high tensile strength, low weight and high temperature tolerance. Successfully designing and manufacturing complex structural components can be challenging. As such, advanced capability for design and manufacturing is required to create complex structures.

#### 2.2.3 Carbon fibre end market size and growth

Carbon fibre has been adopted in a variety of products and end markets. As shown in Exhibit 1 below, the automotive sector exhibited the highest growth rate of carbon fibre use between 1995 and 2015 (compared to the wind, industrial, aerospace and sports goods sectors). Carb Consult forecasts that the automotive sector will become the largest contributor of global carbon fibre demand by 2025, with total automotive demand estimated to grow from approximately 11 thousand tonnes (approximately 20% of the carbon fibre market) to approximately 51 thousand tonnes (approximately 35% of the carbon fibre market) between 2015 and 2025.

Exhibit 1 – Historic and forecast carbon fibre demand by sector (1995-25F; thousands of tonnes)



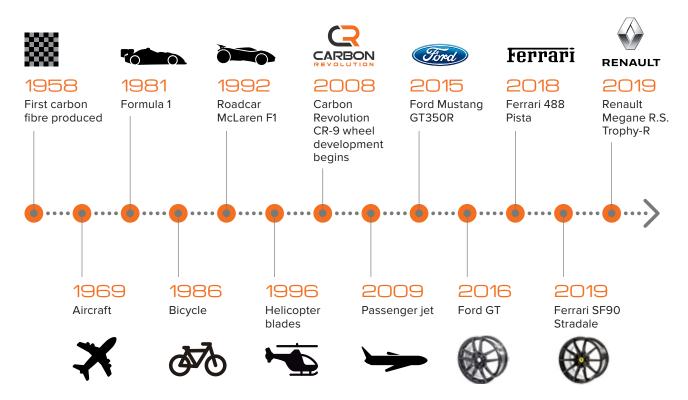
Source: Carb Consult (Carbon Fibre Industry Update, March 2017). Note:

### 2.2.4 Increasing adoption of carbon fibre in the transportation industry

Carbon fibre was originally developed for the aerospace industry where weight reduction and high performance are considered important, however the material is increasingly being adopted across the broader transportation industry due to its lightweight characteristics and attractive properties relative to traditional materials.

<sup>1</sup> CAGR stands for Compound Annual Growth Rate

Exhibit 2 – Select carbon fibre adoption in the transportation industry



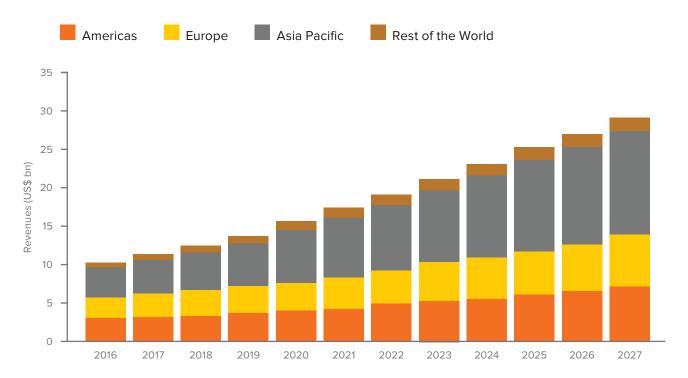
Weight reduction is a key trend in the global transportation industry, with vehicle manufacturers focused on adopting new weight reducing technologies which have the potential to improve both vehicle efficiency and performance. As a result of global competition, environmental regulations and political pressures, vehicle manufacturers are continuing to focus on weight reduction solutions for the vehicles they manufacture. Reducing the weight of a vehicle has a number of potential advantages, including:

- increased fuel efficiency;
- reduced emissions;
- · enhanced vehicle performance; and
- the potential to carry a larger payload<sup>14</sup>.

The focus on weight reduction solutions by vehicle manufacturers has led to the increased adoption of composite materials (including carbon fibre) in vehicles.

As shown in exhibit 3 below, the global automotive composite market is estimated to experience an increase in annual global revenues from just over 10 billion USD in 2016 to just under 30 billion USD by 2027.

Exhibit 3 - Regional automotive composite market forecast 2016 - 2027

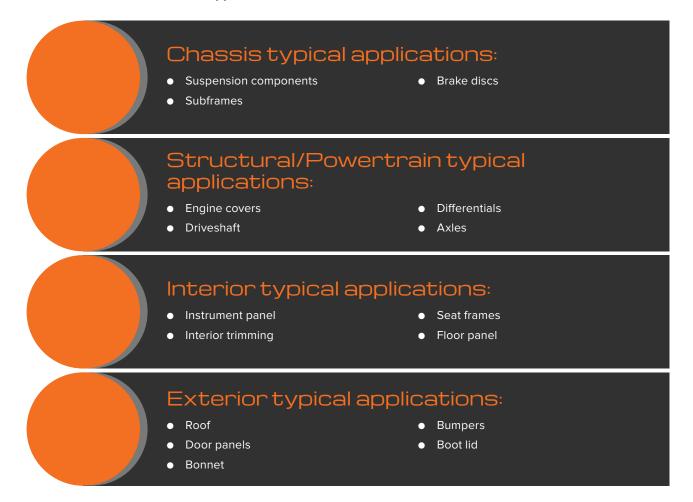


Source: JEC Automotive and composite materials: current state and forecast (2018)

### 2.2.5 Carbon fibre use in the automotive industry

Carbon fibre has a number of applications in automotive vehicles, in particular for exterior components, interior components, structural / powertrain<sup>15</sup> and chassis components. Automotive wheels are not currently considered a typical application of carbon fibre. This is due to the advanced capability required to design and manufacture carbon fibre wheels, which is reflected in the limited number of companies currently able to produce carbon fibre automotive wheels. The Company expects automotive wheels to become a typical application of carbon fibre over time as production costs and prices decrease.

### Exhibit 4 - Select automotive applications of carbon fibre



Source: L.E.K. market study

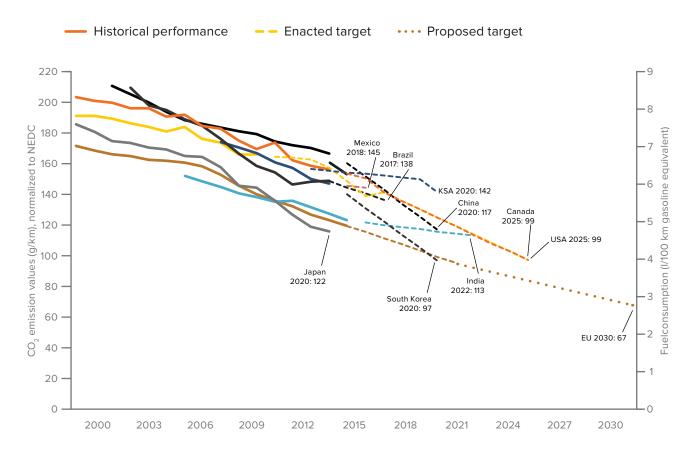
According to the Centre for Automotive Research, composite and carbon fibre materials will account for approximately 15% of total US automotive vehicle weight by 2040, up from approximately 1% in 2010 and approximately 2.5% in 2015<sup>16</sup>. The major driver for this shift is OEMs targeting vehicle weight reduction throughout their product portfolios. Weight reduction allows OEMs to improve fuel economy against regulator fleet emission targets which are represented in Exhibit 5 below.



Composites ... are a critical lever for weight reduction."

(AUTOMOTIVE REPRESENTATIVE, JEC AUTOMOTIVE AND COMPOSITE MATERIALS: CURRENT STATE AND FORECAST (2018))

Exhibit 5 – Historical fleet CO<sup>2</sup> emission performance and current standards



Source: International Council of Clean Transportation (July 2018)

Weight reduction also improves overall vehicle performance and thereby can provide a positive point of differentiation to customers. The increasing adoption of lighter weight materials, such as composites and aluminium, has been made at the expense of steel, which continues to decline in terms of share of vehicle weight, as demonstrated in Exhibit 6.

Composite / CFRP<sup>1</sup> Magnesium Aluminium Steel change in % Forecast (2010-2040F) 100% -90% -80% --41 70% -60% -50% -40% -22 30% -20% -5 10% -14 0% 2010 2015 2020F 2025F 2030F 2035F 2040F

Exhibit 6 – US automotive vehicle composition by material (2010-40F)

Source: Centre for Automotive Research (Technology Roadmaps: Intelligent Mobility Technology, Materials and Manufacturing Processes, and Light Duty Vehicle Propulsion – June 2017);

Note: Percentages based on overall vehicle weight;

1 Carbon fibre reinforced plastic.

### 2.3 Overview of the automotive wheel market

### 2.3.1 Materials used in automotive wheel manufacturing

Automotive wheels are predominantly manufactured using five existing materials, namely steel, cast aluminium, forged aluminium, magnesium and carbon fibre. A summary of these materials as well as their typical applications and relative benefits are shown in the table below.

### Exhibit 7 - Overview of materials used in automotive wheel manufacturing



### Steel:

Vehicle application

Commercial and low-end

#### Relative benefits

• Cheap to source for low-cost cars



### Cast aluminium:

Vehicle application

Low to high-end

#### Relative benefits

• Lighter and have a better aesthetic than steel wheels



### Forged aluminium:

Vehicle application

High performance

#### Relative benefits

• Lighter than cast aluminium, increasing performance



### Magnesium<sup>1</sup>:

Vehicle application

High-end performance

#### Relative benefits

• Lighter than forged aluminium<sup>2</sup>



### Carbon fibre:

Vehicle application

High-end performance and low weight applications

#### Relative benefits

• Stronger and lighter than magnesium further increasing performance

### Note:

- 1 Includes cast and forged magnesium wheels.
- ${\bf 2} \quad \hbox{Limited current usage in the market due to cost and performance factors}.$

In the early 1900's, steel was seen as the preferred choice for producing automotive wheels given the material is well suited for high volume, low cost production. Cast aluminium wheels entered the market in the 1920's, but it has been since the early 1970's that they have achieved meaningful penetration of the automotive new vehicle wheel market. The increased adoption of cast aluminium wheels was driven by a growing emphasis on performance along with fuel economy and the need to reduce vehicle weight, with the high-performance and luxury segments of the market the first to adopt the technology. As the cost of cast aluminium wheels reduced, this adoption filtered through to the mass market.

The adoption of cast aluminium wheels illustrates how the automotive wheel industry can shift with the introduction of a new technology, in this case following improvements in manufacturing techniques that

enabled the production of lighter and better performing alternatives. Carbon fibre automotive wheels are a logical fit for the automotive wheel industry given their advantages over traditional wheel technologies (discussed further in Section 2.3.3).

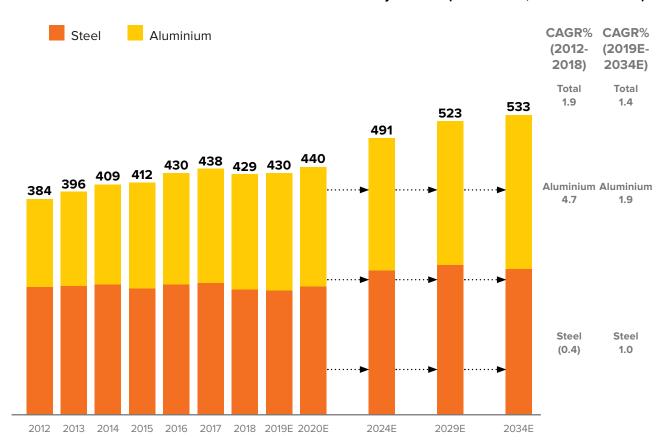
#### 2.3.2 Size and growth of the automotive new vehicle wheel market

In 2018, the automotive new vehicle wheel market comprised of approximately 429 million wheels<sup>17</sup>. QUBE estimates the market expanded at a compound annual growth rate (**CAGR**) of 1.9% over the period from 2012 to 2018, with the aluminium portion having grown by a CAGR of 4.7% over the same period (which included taking market share from steel wheels).

While the automotive new vehicle wheel market has historically comprised of wheels made of traditional materials such as steel and cast aluminium, Carbon Revolution expects that continued reductions in price coupled with increased awareness of the benefits of carbon fibre wheels are likely to result in carbon fibre automotive wheels becoming an emerging substitute for these traditional metal wheels. Carbon fibre wheels represent a significant opportunity for their manufacturers given the size of the automotive new vehicle wheel market and industry trends towards lighter and better performing materials (discussed further in 2.3.3).

A summary of the estimated automotive new vehicle wheel market is provided below.

Exhibit 8 - Estimated automotive new vehicle wheel market by material (2012-2034E; millions of wheels)



Sources: QUBE 2019 Q3 Automotive OE Tyres and Wheels Technology Trends and Forecasts to 2034; QUBE 2016 Q2 Global light vehicle OE wheels market – forecasts to 2030.

#### 2.3.3 Expected drivers of carbon fibre wheel adoption

Due to their lighter weight, carbon fibre wheels are an efficiency technology which can be used to deliver performance and / or economy benefits. The significant benefits of carbon fibre wheel technology over wheels constructed from traditional materials are expected to drive increasing adoption of carbon fibre wheels in the automotive new vehicle wheel market. These advantages include:

- Increased vehicle efficiency;
- Enhanced vehicle performance;

- Increased range for electric vehicles;
- Improved noise, vibration and harshness performance; and
- · Aesthetic improvement.

An overview of each of these advantages is provided below.



Lighter wheels means lightening the extremities, thus reducing forces of inertia and rotating mass for the drivetrain to deal with. That means they can accelerate harder, turn-in sharper, corner at higher speeds and brake more effectively. Greater all-round performance means greater driver enjoyment."

### THE OFFICIAL FERRARI MAGAZINE, SEPTEMBER 2018

### 2.3.3.1 Increased vehicle efficiency

OEMs are actively seeking efficiency technologies that can contribute to reducing fleet emissions to meet regulatory requirements in markets around the world. Carbon Revolution modelling suggests that the weight reductions achieved by its carbon fibre wheels can materially improve vehicle efficiency and therefore reduce fuel consumption by 2-6%18 (compared to cast aluminium wheels). This efficiency translates directly into the carbon dioxide emission reductions of the vehicle.



It's really about taking out weight to improve fuel efficiency, reducing CO2 emissions. Basically making a good product even better."

MATTHEW ZALUZEC (SENIOR TECHNICAL LEADER, FORD RESEARCH & INNOVATION CENTRE (2014), HTTPS://WWW.MOTORAUTHORITY.COM/NEWS/1092484\_FORD-FUSION-LIGHTWEIGHT-CONCEPT-CAR-GOES-ALL-OUT-WITH-HIGH-TECH-WEIGHT-SAVINGS-VIDEO)

The same OEM trends towards reducing fleet emissions have driven the introduction of other new technologies, for example, 'start-stop' technology to lower fuel consumption during city driving. Studies have indicated this technology can achieve a reduction in fuel consumption in the order of 4% to 10%19. This technology has been widely adopted by a number of global OEMs, despite the fact the technology needs to be implemented in conjunction with a number of modifications to the vehicle's engine and electrical systems. These types of vehicle modifications are not required for the adoption of carbon fibre wheel technology.

### 2.3.3.2 Enhanced vehicle performance

OEMs are actively seeking performance enhancements to meet the demands of their customers. Wheels are a relatively heavy structural component that bear the full weight of a vehicle and all of the dynamic forces that are created during the vehicle's use. The lower rotating unsprung weight achievable with carbon fibre wheels provides significant improvements in acceleration and road handling. Carbon Revolution has already achieved weight savings of more than 40% for its wheels versus equivalent cast aluminium wheels (see section 3.2 for more details).

<sup>18</sup> The 2010 Ford Focus was used by Carbon Revolution as a benchmark to develop a computer simulation model for quantifying fuel economy improvements. The computer model was then used to estimate the efficiency improvements.

<sup>19</sup> Natural Resources of Canada (Government of Canada), "Idle stop-start technology (2018)".

"

.....Ford Motor Company's performance vehicles unit has a mission to drive innovation for the whole company. The Shelby Mustang GT350R is Ford's flagship sportscar, designed to match the Porsche GT3, the benchmark for performance vehicles. It wears Carbon Revolution's carbon fibre wheels because they cut the unsprung weight - the weight below the suspension - by 30 kilograms, reducing inertia by 40 per cent. That to an engineer is a mind-blowing number.

JAMAL HAMEEDI, FORMER GLOBAL HEAD OF FORD PERFORMANCE ("UNLOCKING OUR INNER INNOVATOR", AUSTRALIAN FINANCIAL REVIEW, 9 OCTOBER 2015)

Unsprung weight relates to the total weight of parts that are not supported by the car's suspension (e.g. wheels, tyres, brake assemblies, some differentials, solid drive axles, hub motors and anything connected to the wheels). Rotating unsprung weight relates to parts that are not supported by the car's suspension that are accelerated or decelerated when the speed of the vehicle changes. Wheel weight is a key component in rotating unsprung weight and poses a different set of engineering challenges to sprung weight, due to the fact the wheel and tyre are the vehicle's contact point with the road.

While overall vehicle weight is a concern for OEMs, reductions in wheel (rotating unsprung) weight are more beneficial to overall vehicle performance and efficiency than reductions in body (sprung) weight. When investing in weight reduction, a greater benefit to the vehicle is gained per kilogram if weight is removed from wheels as they are both rotating and unsprung components compared to reductions in weight of primary chassis components that are sprung and static. Reducing sprung weight only provides energy savings relative to the movement of the entire vehicle (translational motion). Reducing rotating unsprung weight has equivalent benefits but with added benefits in performance due to two additional factors:

- 1. Reduced rotating unsprung weight means reduced rotational inertia (less energy required to accelerate the rotation of the wheel) this can be equivalent to the energy saved in translational motion depending on the size of the wheel; and
- 2. The reduction in inertia of the rotating unsprung components realised through the dynamic movements of the suspension and wheel system as a result of variations in the road surface. As the weight of the rotating unsprung components reduces from weight saving initiatives, the resulting forces imparted on the spring and damper system also reduce. This allows the spring and damper to keep a more consistent contact pressure between the tyre and the road surface. This directly increases the mechanical grip of the tyre to the road and results in improved handling and performance.

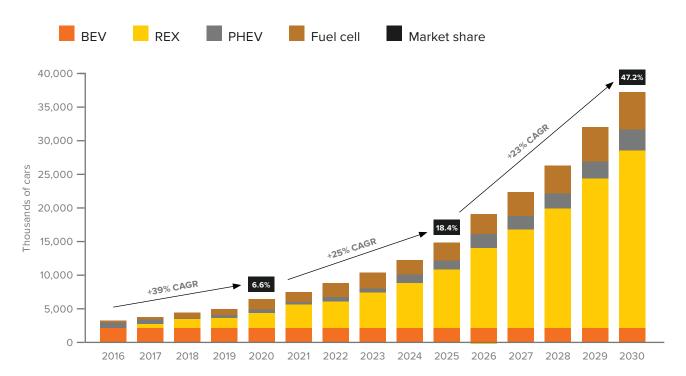
#### 2.3.3.3 Increased range for electric vehicles

The electric vehicle market is expected to experience significant growth over the coming decade, as shown in Exhibit 9. Electric vehicle manufacturers are also seeking efficiency technologies that can provide material improvements in vehicle range. A current barrier to electric vehicle uptake is 'range anxiety', which relates to the fear experienced by drivers of electric vehicles that their battery could run out of charge and strand them far away from a charging station. Realising potential benefits from lower weight wheels in electric vehicles, such as range extension from reduced energy usage or reduced weight being reallocated to a larger battery, could assist OEMs in addressing this issue. Carbon Revolution is involved in discussions with a major electric vehicle manufacturer that is looking at adopting carbon fibre wheels.



Moving to electric vehicles will redefine the design of cars, including their weight, and with it the materials used for their construction."

Exhibit 9 - Annual sales forecast of electric, hybrid and fuel-cell vehicles (2016 - 2030)



Source: QUBE 2019 Q3 Automotive OE Tyres and Wheels Technology Trends and Forecasts to 2034. The Acronyms used in the legend are as follows: Battery Electric Vehicles (BEV) are vehicles 100% powered by an electric motor and a long range plug-in battery; Range Extended Electric Vehicle (REX) are vehicles powered by an electric motor and a plug-in battery, with a small auxiliary combustion engine used to recharge the battery; Plugin Hybrid Electric Vehicle (PHEV) are hybrid vehicles that feature a larger battery, rechargeable via connection to the grid or via their internal combustion engine, enabling longer distance using the electric-motor; and Fuel Cell vehicles are powered by electric motors which use the energy generated by a fuel cell that is composed of a tank containing compressed hydrogen which reacts with ambient oxygen to generate electricity.

#### 2.3.3.4 Improved noise, vibration and harshness performance

Carbon fibre wheels possess superior dampening characteristics over traditional wheel materials and therefore reduce the transmission of road noise into the interior of the car. OEMs focus heavily on reducing the noise experienced by vehicle occupants. Technologies that can assist with achieving this are therefore considered to be of value. This is also considered to be highly relevant for manufacturers of electric vehicles, which lack the engine noise that is typical of internal combustion engine vehicles, so significant focus is placed on reducing other sources of cabin noise, including road noise transmitted through wheels.

### 2.3.3.5 Aesthetic improvement

Aesthetics and fashion in the automotive industry are also evolving. Carbon fibre wheels offer aesthetics that are not achievable with conventional wheel materials due to the woven pattern created by the carbon fibre weave 'finish'.

#### 2.3.4 Addressable market for carbon fibre wheels

In the short to medium term, Carbon Revolution believes its products are most suited to the high-performance and luxury segments of the automotive new vehicle wheel market, which it estimates to be 10% to 15% of the wheel market. This segment consists primarily of vehicles with a manufacturer's suggested retail price greater than US\$50,000 and engine power output greater than 200kW. This is typical of new automotive technologies, which are usually adopted first by the high-performance and luxury car market segments.

The Company determined the short to medium term addressable market size by segmenting the total automotive new vehicle market of 92 million vehicles per annum in FY17<sup>20</sup>, according to both the vehicle price and power rating as indicators for both luxury and performance level – factors that the Company believes are key drivers for the near-term uptake of this technology. An example of a segment is cars with 300-399kW

and a price between US\$50,000 and US\$200,000. The Company then determined the addressable segments by considering:

- · segments for which it has currently awarded vehicle programs;
- · segments for which it is undertaking engineering activities for future vehicle programs;
- segments for which other car programs have announced carbon fibre wheel offerings where Carbon Revolution is not the supplier;
- · segments in which the Company has quoted to supply carbon fibre wheels; and
- certain segments which are adjacent to the above segments, and/or which show uptake of carbon fibre components on vehicles within that segment.

The Company accordingly estimates that its addressable market is 9 million to 14 million vehicles per annum (based on an overall FY17 market size). This in turn accounts for 36 million to 56 million wheels.

The Company considers that the addressable market is reasonable because in the majority of addressable segments noted above:

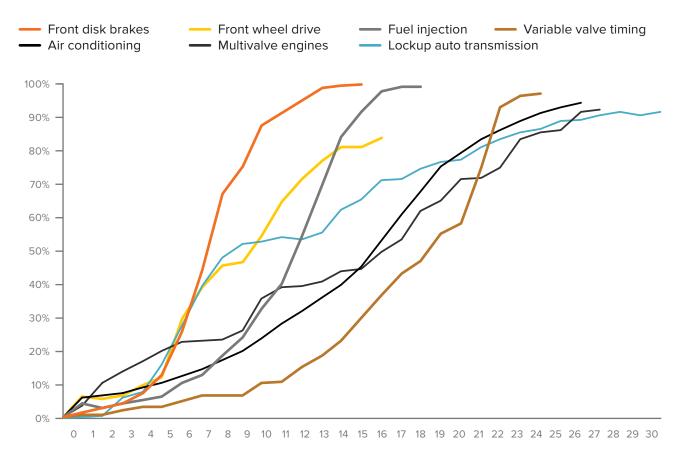
- it already has a supply contract, an engineering contract or quotations for a vehicle in the segment, or
- other car programs have announced carbon fibre wheel offerings where Carbon Revolution is not the supplier.

### 2.4 New technology adoption in the automotive industry

A number of new technologies have been introduced into the automotive industry since the 1950's. Generally, as the technologies have become more well-known and cheaper to manufacture, the market penetration has increased until a point of close to full adoption within the relevant market is reached. These new technologies have typically transitioned from the high-performance and luxury end of the market to the mass market. Given the significant performance and efficiency benefits of carbon fibre wheels, the Company believes that there is potential for carbon fibre wheels to significantly penetrate the automotive new vehicle wheel market over time.

The exhibit below shows the historical adoption curves for a number of established automotive technologies, including front disk brakes, front wheel drive, fuel injection, variable valve timing, air conditioning, multivalve engines and lockup automatic transmissions.

Exhibit 10 – Penetration of emerging automotive technologies (% of total potential market)



Years since introduction

Technology	First year	Years to maturity
— Front disk brakes	1960s	14
— Front wheel drive	Late 1970s	15
— Fuel injection	1980s	15
— Variable valve timing	1980s	24
— Air conditioning	1960s	26
— Multivalve engines	1970s	27
<ul> <li>Lockup auto transmission</li> </ul>	1970s	30

Source: L.E.K. market study

Note: The size of the total potential market is measured at the point where the technology appears to reach steady state and volumes grow in line with the market.

### 2.5 Competitive landscape

Carbon Revolution believes that it is well positioned in the market and it is the only company globally to have successfully developed and manufactured single piece carbon fibre automotive wheels to OEM quality standards with commercial adoption across several major OEM models.

Beyond Carbon Revolution, there are only a limited number of competitors currently able to manufacture a carbon fibre automotive wheel. The Company believes this is because carbon fibre wheel technology is difficult to engineer and manufacture to OEM performance and quality specifications in a repeatable way. None of the competitors who are currently associated with or aiming to supply major OEMs are claiming to achieve wheel weight savings that are equivalent to those achieved by Carbon Revolution. Carbon Revolution has already achieved weight savings of more than 40% for certain wheels versus their cast aluminium equivalents. This is discussed further in Section 3.2.

Current competitors with publicly disclosed programs include:

- Porsche AG (Porsche) / Thyssenkrupp AG (Thyssenkrupp): Thyssenkrupp has developed carbon fibre
  wheels for Porsche using a braided rim technology. These wheels are reportedly 20% lighter than
  Porsche's regular aluminium wheels for the vehicle;
- Bayerische Motoren Werke AG (BMW) / Mubea Carbo Tech (Carbo Tech): Carbo Tech has developed
  carbon fibre wheels for BMW using a carbon-fibre/aluminium hybrid wheel, with an aluminium hub and
  spokes and a carbon-fibre rim. The hybrid wheel option for this vehicle appears to be approximately
  equivalent in weight to the forged aluminium wheel option that is also offered for that car; and
- Koenigsegg Automotive AB (**Koenigsegg**) has developed a carbon fibre wheel which is believed to only be offered on its own limited volume hypercar range.

Source: Company websites

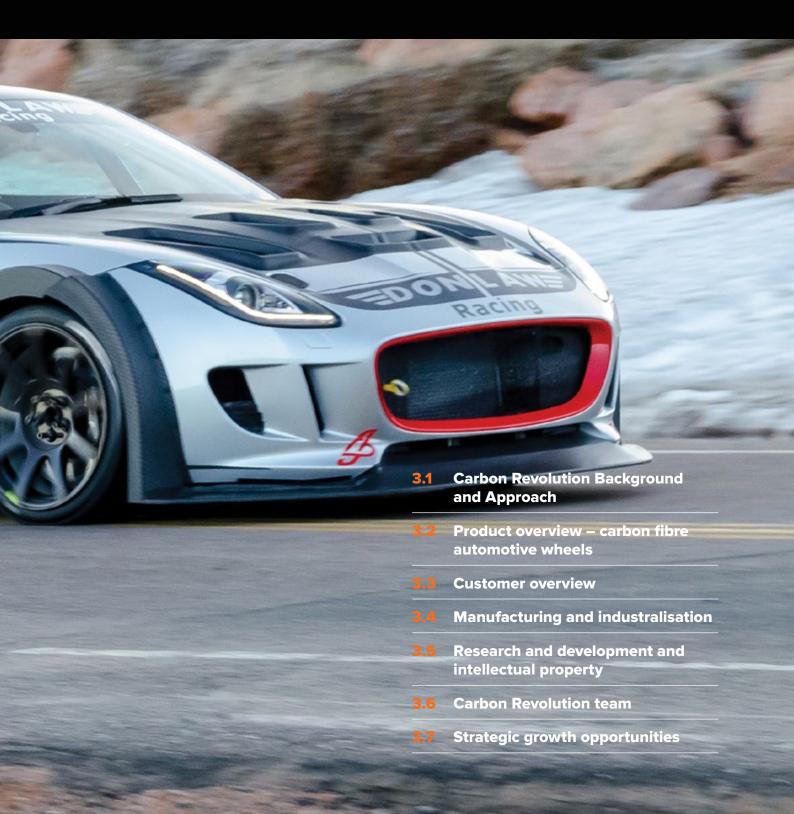
Carbon Revolution is also aware of other attempts to manufacture carbon fibre wheels by various groups, however these appear to be at an early stage of development or focused more on the aftermarket<sup>22</sup> or for low volume programs.

As Carbon Revolution continues to industrialise its operations it expects unit costs of production to fall further. This is expected to result in Carbon Revolution's wheels being adopted across a broader range of vehicles outside the high performance and luxury segments. This is likely to be driven by the value proposition and trade-offs of Carbon Revolution's wheels becoming increasingly attractive to OEM customers and end consumers.



# COMPANY OVERVIEW





# 3 Company overview

### 3.1 Carbon Revolution Background and Approach

Carbon Revolution was established over ten years ago to develop and commercialise single piece carbon fibre wheel technology developed by its founders. As an advanced manufacturing company, Carbon Revolution has simultaneously developed its materials, products and processes. The Company's wheels deliver substantial weight savings relative to wheels constructed from conventional materials (such as steel and aluminium) and in doing so provide significant and valuable efficiency and performance benefits to Carbon Revolution's customers, global OEMs. Carbon Revolution has sold over 17,300 wheels to date, for the equivalent of over 4,300 vehicles.

While the technology has potential applications across a broad range of transportation industries, Carbon Revolution has prioritised the automotive new vehicle wheel market to commercialise its technology. Carbon Revolution is the only company globally to have successfully developed and manufactured single piece carbon fibre automotive wheels to OEM quality standards with commercial adoption across several major OEM models. The Company has successfully secured nine carbon fibre wheel supply contracts with a number of leading global OEMs, including Ford, Ferrari and Renault, and is currently party to an engineering contract or in discussions with a number of global OEMs (including the above-mentioned OEMs) regarding future opportunities for its carbon fibre wheels.

Carbon Revolution's principal operations, which include its corporate office and manufacturing facilities, are located in Geelong, which is situated approximately 75 kilometres from Melbourne, Australia. Carbon Revolution has a number of permanent and contract personnel in North America and Europe, to service current and prospective OEM customers. The Geelong facility is a purpose-built facility which was completed in 2014 with an initial size of 3,000m². Since commencing production for its first OEM program for Ford in 2015, the Company has progressively increased production capacity in response to increasing demand from customers.

Carbon Revolution completed a manufacturing facility expansion in October 2018, with the size of the building footprint increased from 3,000m² to 10,000m² which will allow the Company to materially increase production capacity over the coming years. Carbon Revolution is investing in additional capacity for FY20 to meet growing demand from existing programs.

August 2019 production equated to an annualised production rate of approximately 12,000 wheels per year with this monthly annualised production rate forecast to rise to almost 32,000 by June 2020.

The Geelong facility is quality accredited with the international automotive supply standard IATF16949.

Exhibit 11 - Company headquarters (Geelong, Australia)



### 3.1.1 Company history

Carbon Revolution emerged from a university Formula SAE<sup>23</sup> team comprised of student academics and industry supporters. The carbon fibre wheels were developed by the founders of Carbon Revolution and first appeared in 2004 on vehicles in this competition. Carbon Revolution was established in 2007 to develop and commercialise the technology that was initially conceived as part of the competition. Since that time, Carbon Revolution has been progressively developing its carbon fibre wheel technology and expanding the capacity within the Geelong manufacturing facility.

Carbon Revolution filed its first carbon fibre wheel patent application in 2008 and in total has been granted 41 patents across 7 patent families with a further 8 pending across those families, and 4 pending patents across 4 new patent families. Typically, these patents are filed in multiple jurisdictions globally.

The Company's first awarded OEM supply contract was for the Ford Mustang GT350R in 2014, with first deliveries for commercial sale achieved in 2015. Since then, global OEMs have awarded Carbon Revolution a further eight supply contracts.

<sup>23</sup> SAE International, initially established as the Society of Automotive Engineers, is a U.S.-based, globally active professional association and standards developing organisation for engineering professionals.

A summary of Carbon Revolution's history is provided below.

**Exhibit 12 – Select Carbon Revolution history** 

PRODUCT RELEASES	COMPANY EVOLUTION
	2007 —— CARBON REVOLUTION WAS FOUNDED
PROTOTYPES RELEASED Carbon Revolution presents prototypes to European and North ——American car makers	2010
CR-9 WHEEL LAUNCHED World's first one-piece carbon fibre wheel launched at SEMA show in Las Vegas, available for	2012
aftermarket fitment for the Porsche 911 GT3, Lamborghini Gallardo and Audi R8	QUALITY CERTIFICATION Achieved
	2013 — standard for quality systems (ISO9001:2008)  MANUFACTURING PLANT OPENS New manufacturing facility, located alongside
	Deakin University, CSIRO and Carbon Nexus in Waurn Ponds, Geelong
representation of the first vehicle to include Carbon Revolution wheels as standard fitment	QUALITY CERTIFICATION Achieved global OEM standards for component supply (ISO/TS 16949)
FORD GT SUPERCAR Carbon Revolution wheels available as an option	QUALITY CERTIFICATION Achieved global standards for effective environmental management systems (ISO14001)
HIGH VOLUME SUPPLY CONTRACT signed with global OEM	2017
FERRARI 488 PISTA Carbon Revolution announced as one of 21 key strategic partners for the 488 Pista program	2018
FORD GT500 Launched at the Detroit Motor Show in January 2019	MEMORANDUM OF UNDERSTANDING for a Strategic Partnership with Mitsui & Co
FERRARI SF90 STRADALE Launched in May 2019 at Maranello	COMMONWEALTH GOVERNMENT  AEROSPACE GRANT of \$2.4m to design a  carbon fibre wheel for the Boeing CH-47F
RENAULT MEGANE R.S. TROPHY-R Launched in July 2019	Chinook Helicopter

#### 3.1.2 Business model

Carbon Revolution primarily generates revenue through the sale of carbon fibre wheels to global OEMs. The Company also generates revenue via the provision of associated engineering services and customer-owned tooling related to those wheel sales to global OEMs. The sale of Carbon Revolution's wheels takes place under supply contracts with OEMs.

Carbon Revolution's business model is based on concurrently developing materials, products and processes with the aim of lower-cost and higher volume industrialised production. During the initial phases of development, Carbon Revolution focused on working with its primary customers, the global OEMs, to develop its product and achieve required standards for safety, quality and reliability for its wheels, which are an important structural component of a vehicle. Having successfully developed its capabilities at lower production volumes, Carbon Revolution is now seeing significant progress with its industrialisation program to lower unit costs of production and expand capacity in order to meet customer demand.

The parallel and coordinated development of Carbon Revolution's complex product and process technologies, and the successful launch of these into the automotive new vehicle wheel market with major OEMs has resulted in a number of sources of competitive advantage and has created barriers to entry for competitors. Carbon Revolution believes that this makes it difficult for new entrants and competitors to replicate Carbon Revolution's market leading technology position.

The key pillars underpinning Carbon Revolution's business strategy and competitive advantages are described below.

### Exhibit 13 - Carbon Revolution's strategy and competitive advantage



### Leadership in carbon fibre wheel technology

- Carbon Revolution builds wheels which are lighter and deliver superior performance, for a given level of stiffness and durability, compared to other wheels on the market
- It is the only company globally to have successfully developed and manufactured single piece carbon fibre automotive wheels
- to OEM quality standards with commercial adoption across several major OEM models
- It has commercialised its patented technology, with supply contracts for nine vehicle programs with a number of leading global OEMs, including Ford, Ferrari and Renault



# Proprietary technology and manufacturing best practice enabling industrialisation

- Whilst developing its technology,
   Carbon Revolution's objective was to transition to low-cost, high-volume industrialised production.
- To enable this, Carbon Revolution has built an experienced team of industrialisation
- engineers to deliver its plans, by combining Carbon Revolution's technology and global best practice manufacturing
- This has already lead to increased scale and reduced production costs, with significant further cost reductions expected



### Large market opportunity

- In the short to medium term, Carbon Revolution's products are most suited to the high-performance and luxury segments of the market, which corresponds to 36 million to 56 million wheels per annum (for further detail see section 2.3.4)
- As per wheel production costs decrease further, the Company expects to increase its market share within this segment and target adjacent segments, as the value proposition of Carbon Revolution's wheels become increasingly attractive



### Customer focused technology development

- OEMs have stringent validation and quality requirements for new products and technologies. As a pioneer of new technology, Carbon Revolution works closely with OEMs to achieve required levels of product performance
- In doing so, Carbon Revolution has established deep, technical relationships with these OEMs, creating barriers to entry for potential competitors



### Application to adjacent industries

- Carbon Revolution's intellectual property portfolio means it is ideally placed to open up high-value adjacent market opportunities
- For example, the Commonwealth
   Government has awarded Carbon Revolution
   a \$2.4 million contract to design the world's
   first light-weight carbon fibre wheels for the
   Boeing CH-47F Chinook helicopter
- Carbon Revolution may also target the industrial transportation market once it has developed appropriate scale and manufacturing automation, opening up opportunities in public transport, freight and logistics vehicles

#### 3.2 Product overview – carbon fibre automotive wheels

Carbon Revolution's technology has been applied to develop its product range of single piece carbon fibre wheels for the automotive new vehicle wheel market. Carbon fibre wheels have a range of benefits over wheels constructed from traditional materials, including improved vehicle efficiency, enhanced vehicle performance, increased range for electric vehicles, improved noise, vibration and harshness performance, and aesthetic improvements (for further information see section 2.3.3). Exhibit 14 details some of the key components of Carbon Revolution's carbon fibre wheels.

#### Exhibit 14 - Carbon fibre wheel



The PATENTED BOLTED JOINT **DESIGN** for composite wheels ensures a robust connection with the vehicle that is serviceable and appropriate for the unique application of wheel attachment. Each joint carries a compressive load of more than 4,000kg.

**HUB CORE 'PUCK'** is a

proprietary lightweight high strength internal core material developed by CR using recycled materials that can be reclaimed from other manufacturing process steps.





The RIM/BARRELL portion of the wheel is a highly efficient structure with fibre orientations selected for high performance and manufacturability. The Rim/Barrel transmits high loads from tyre through to the spokes but also has to act as a pressure vessel to maintain tyre inflation.



THERMAL BARRIER COATING provides a reduction in wheel temperatures of over 100°C through the use of a proprietary

plasma applied coating.



The **HUB REGION** is made up of a complex highly engineered fibre architecture capable of withstanding the equivalent of 2,800kg pushing sideways on the end of a spoke while the wheel rotates.







The SPOKE TO RIM . **CONNECTION** is a proprietary fibre architecture that allows load transfer from the rim to the spoke with a continuous fibre connection.

The **SPOKES** are a multi-material architecture with low density core structure to minimize wheel mass and optimize wheel stiffness for improved vehicle dynamics.



Carbon Revolution's first deliveries of wheels for commercial sale, for the Ford Mustang GT350R, occurred in 2015 and the business has now secured supply contracts for nine vehicle programs with a number of leading global OEMs, including Ford, Ferrari and Renault. Six of these programs are currently in production (with three of these programs having commenced full commercial production in FY20). The remaining programs are expected to commence production between FY21 and FY23 (subject to any changes required by the relevant OEMs).

Examples of Carbon Revolution's products are shown in the exhibit below. The weight savings achieved for the Renault Megane Trophy RS were curtailed due to Renault's decision to use a first-generation Carbon Revolution wheel designed in 2012 in order to shorten the lead time and reduce design activities.

### Exhibit 15 - Announced programs (in the public domain)



### Ford Mustang GT350R (2015)

**6.9kg WEIGHT REDUCTION** per wheel
Sports Car of the Year<sup>1</sup>

**45%**<sup>2</sup> **WEIGHT SAVING** over aluminium equivalent





### Ford GT (2016)

Carbon Revolution's FIRST EXPOSED WEAVE OEM product

**22%**<sup>3,4</sup> **WEIGHT SAVING** over aluminium equivalent





### Ferrari 488 Pista (2018)

Next generation
PREFORM
TECHNOLOGY AND
RESIN SYSTEM

40%² WEIGHT SAVING over aluminium equivalent





### Ford Mustang GT500 (2019)

First industrialised wheel
MOULDED UNDER
HIGH PRESSURE

**41%**<sup>4</sup> WEIGHT SAVING over aluminium equivalent





### Renault Megane Trophy RS (2019)

**FIRST FRONT WHEEL DRIVE** hot hatch
application

23%<sup>3,4</sup> WEIGHT SAVING over aluminium equivalent





### Ferrari SF90 Stradale (2019)

FIRST PLUG-IN HYBRID ELECTRIC vehicle application

**32%**<sup>4</sup> WEIGHT SAVING over aluminium equivalent



#### Note:

- 1 Popular Mechanics Sports Car of the Year for 2015.
- 2 As publicly stated by OEM.
- 3 Constrained by styling requirements and compared to lightweight forged aluminium wheel.
- Based on calculations by the Company which compared the weight of the benchmark aluminium wheel to the relevant Carbon Revolution wheel

Carbon Revolution competes against existing technologies in the global automotive new vehicle wheel market (principally aluminium wheels). Carbon Revolution's wheels are lighter and deliver superior performance (across a number of metrics), for a given level of stiffness and durability, compared to aluminium wheels.

With a target weight reduction of 40% to 50% per wheel, carbon fibre wheel technology provides a very significant reduction in rotating unsprung weight<sup>24</sup>. This delivers a significant benefit to OEMs, particularly in the areas of vehicle performance and efficiency. As unit costs of production and the sale price of carbon fibre wheels decrease, the Company expects to increase market share as the value proposition of carbon fibre wheels becomes increasingly attractive across a broader range of vehicles outside the high-performance and luxury segment of the market.

#### 3.3 Customer overview

#### 3.3.1 Customer base

Carbon Revolution has a clear strategy and focus on targeting the automotive new vehicle wheel market. This represents the greatest opportunity for high volume supply contracts, which underpin the Company's expansion and industrialisation plan. Carbon Revolution targets leading global OEMs that are based in regions including North America and Europe. The Company has 9 existing contracts with 5 global OEMs (for further information in relation to Carbon Revolution's customer contracts, see section 9.5.3).

### 3.3.2 Customer partnerships

Automotive wheels are an important structural and safety critical component of any vehicle. Testing requirements for structural components, particularly for new technologies, involve a number of key stages and generally a heightened focus on validation and risk management. These testing requirements and standards increase the lead time for product development and validation. This in turn creates potential barriers to entry for new suppliers. In order to introduce technology that impacts major structural components of the vehicle and achieves the required levels of product performance and quality control, OEMs typically make significant investments and have to partner closely with technology providers like Carbon Revolution. The Company believes that it has developed a highly collaborative relationship with OEMs.

Carbon Revolution's business development and sales process involves extensive partnering and collaboration on engineering and design with OEMs. Carbon Revolution is generally involved earlier in the design process than a conventional wheel manufacturer. For example, an aluminium wheel supplier would typically be engaged by an OEM in the engineering and design phase. In contrast, Carbon Revolution is typically deeply engaged during this stage and may also participate in the earlier advanced technology, R&D stage. This means that further design efficiencies can potentially be achieved by the OEM as the wheel design can be integrated with the rest of the vehicle. This also helps embed the Company further into the relevant customer's supply chain. Carbon Revolution's engagement across a typical OEM program's lifecycle is shown in Exhibit 16.

This type of relationship creates barriers to entry for potential competitors given the significant investments made by OEMs to work with Carbon Revolution to achieve the required level of product standards and quality control.

<sup>24</sup> Unsprung weight refers to the total weight of parts that are not supported by the car's suspension. Rotating unsprung weight refers to parts that are not supported by the car's suspension that are accelerated or decelerated when the speed of the vehicle changes (principally the wheels and tyres of the car). Additional information regarding unsprung weight (including the benefits of reducing unsprung weight) is provided in Section 2.3.3.

### Exhibit 16 - Typical OEM program lifecycle



### Design and Engineering Analysis

#### Typically 6 - 12 months

 Iteration with the customer's design teams to trade off styling/marketing requirements to meet all performance specifications



### Testing and validation

#### **Approximately 6 months**

- Manufacturing of preproduction parts and samples
- Confirmatory testing to ensure performance requirements are met – both structural and environmental



### Wheel production

### Typically 5 – 7 years

- Mass production to support vehicle assembly schedule
- Ongoing monitoring of production costs to achieve business case

### Recurrent for all Carbon Revolution OEM programs

### Typical OEM wheel supplier activities

#### 3.3.3 Customer case studies

#### 3.3.3.1 Ford

Carbon Revolution's relationship with Ford was established in 2012, with a product testing, validation and familiarisation process conducted between 2012 and 2014, where Carbon Revolution supplied wheels for a number of concept demonstrator vehicles that were intended to show-case Ford's light-weighting technologies in a U.S. Department of Energy program.

This led to the award of the Mustang GT350R program, which was formally launched by Ford at the 2015 Detroit Motorshow. Carbon Revolution's wheels are offered as a standard fitment on this vehicle.



...Lightweight carbon fiber wheels are standard on Shelby GT350R, making Ford the first major automaker to introduce this innovative wheel technologyas standard equipment... This combination of incredibly stiff and light wheels with bespoke tires offers customers exceptional steering feel and levels of performance.

# (SHELBY GT350R MUSTANG: MOST TRACK-CAPABLE PRODUCTION MUSTANG EVER BUILT, FORD PRESS RELEASE, 12 JANUARY 2015)

Carbon Revolution was subsequently awarded the Ford GT program, and commenced shipping production wheels for this program in late 2016. Carbon Revolution's wheels are offered as an option on this vehicle.

The successor vehicle to the Ford Mustang GT350 is the Ford Mustang GT500. The latter was formally unveiled to the public at the January 2019 Detroit Motor Show. Carbon Revolution's carbon fibre wheels are a base fitment on the 'Carbon Fibre Track Package' variant of the vehicle.

The Mustang GT350R, GT and Mustang GT500 programs are all in production from Carbon Revolution's Geelong facility.

We'll go to the ends of the earth looking for cutting edge technology, things that give our racing cars an advantage over their competition - and that's what carbon fibre wheels do."

JAMAL HAMEEDI, FORMER GLOBAL HEAD OF FORD PERFORMANCE ("UNLOCKING OUR INNER INNOVATOR", AUSTRALIAN FINANCIAL REVIEW, 9 OCTOBER 2015)

These wheels are really revolutionary. They are a game changer for a performance car in terms of acceleration, unsprung weight and handling...they cut the unsprung weight - the weight below the suspension - by 30 kilograms, reducing inertia by 40 per cent. That to an engineer is a mind-blowing number."

JAMAL HAMEEDI, FORMER GLOBAL HEAD OF FORD PERFORMANCE ("UNLOCKING OUR INNER INNOVATOR", AUSTRALIAN FINANCIAL REVIEW, 9 OCTOBER 2015)





#### Exhibit 18 - Ford GT



Exhibit 19 - Ford Mustang GT500



### 3.3.3.2 Ferrari

Carbon Revolution's relationship with Ferrari was established several years before the award of its first program when initial prototyping and validation work was conducted. The Ferrari 488 Pista program was formally launched by Ferrari at the Geneva International Motorshow in March 2018. At the launch in Switzerland, Carbon Revolution was named one of a select group of suppliers, including Apple, Brembo, Michelin, Shell and Robert Bosch, described by Ferrari as strategic partners for the 488 Pista program.

The 488 Pista program has been in production from Carbon Revolution's Geelong facility since April 2018.

A significant new innovation of Carbon Revolution's wheel architecture was introduced in the production of the Ferrari 488 Pista wheel.



This innovation reduced wheel weight by a further one kilogram per wheelincredible when you think that carbon fibre wheels are already around 40 percent lighter than the standard wheels mounted on the Ferrari 488 GTB."

#### THE OFFICIAL FERRARI MAGAZINE, SEPTEMBER 2018.

On 30 May 2019, Ferrari debuted the SF90 Stradale, its fastest ever production car. The vehicle boasts 1,000 metric horsepower, a hybrid 4WD powertrain and Carbon Revolution's carbon fibre wheels as an optional fitment. Production of the wheel has already begun in the Company's Geelong facility. Carbon Revolution targets the adoption by Ferrari of Carbon Revolution's wheels on all Ferrari programs.

Exhibit 20 - Ferrari 488 Pista



Exhibit 21 - Ferrari SF90 Stradale



#### 3.3.3.3 Renault

In July 2019, Renault announced details of its high-performance Renault Megane R.S. Trophy-R, which recently broke the front-wheel drive lap record at the Nürburgring circuit in Germany and the Spa-Francorchamps circuit front-wheel drive production car record, both while using Carbon Revolution's CR9 wheels. The vehicle features Carbon Revolution's carbon fibre wheels as an optional fitment. Production of the wheel has already begun in the Company's Geelong facility. This is Carbon Revolution's first awarded program in the large global performance hatch market segment.

The "Carbon Wheel pack vehicle adds four Carbon Revolution 19-inch wheels... these wheels have been designed to unlock even greater on track potential."

### **RENAULT UK PRESS OFFICE, JULY 2019.**

Exhibit 22 - Renault Megane R.S. Trophy-R



### 3.4 Manufacturing and industrialisation

### 3.4.1 Current production and manufacturing facility

Carbon Revolution's purpose-built manufacturing facility is situated on Deakin University's Geelong campus, approximately 75 kilometres from the Melbourne city centre.

The building was constructed by Deakin University and progressively fitted out by Carbon Revolution with its carbon fibre wheel manufacturing equipment and infrastructure. An expansion to the manufacturing facility was completed in October 2018, with the size of the building footprint increased from 3,000m² to 10,000m² allowing the Company to materially increase production capacity as industrialised manufacturing equipment is progressively installed.

Carbon Revolution has achieved three global key quality accreditations for the facility:

- 1. IATF16949 one of the automotive industry's most widely used international standards for quality management.
- 2. ISO9001 an international standard for quality management systems.
- 3. ISO14001 an international standard for environmental management.

Carbon Revolution is currently increasing its manufacturing output significantly in response to existing customer program demands. The Annualised rate of production of finished wheels increased by over

110% between the January to March 2019 quarter and August 2019 as described in Exhibit 23 below. The facility had a demonstrated annualised production rate of approximately 12,000 wheels per annum as of August 2019 with a forecast monthly annualised production rate of almost 32,000 wheels per annum by June 2020.

Exhibit 23 – Annualised rate of finished wheels production

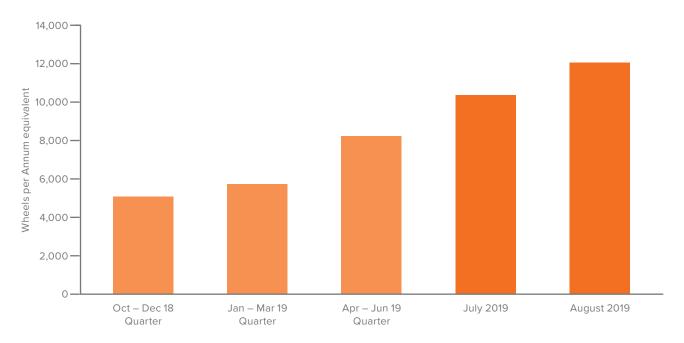


Exhibit 24 - Manufacturing facility



### 3.4.2 Approach to Industrialisation

From its inception, Carbon Revolution has held the clear objective of becoming a supplier to the global OEM industry. Accordingly, its approach to developing materials, products and processes has focussed on industrialisation as its ultimate aim.

Having successfully commercialised its products, Carbon Revolution has already started industrialising its manufacturing operations. Industrialisation is expected to drive increased capacity at Carbon Revolution's manufacturing facility and lower the cost of producing each wheel by:

- Increasing capital efficiency this is the efficiency with which Carbon Revolution's machines perform their tasks, having regard to their cost and footprint. Carbon Revolution has already commenced building and commissioning industrial scale equipment, which is capable of performing the same tasks as legacy equipment, but at a much greater rate;
- Increasing labour efficiency this is the efficiency with which Carbon Revolution's production team can
  perform their jobs. This can be achieved by automating and streamlining processes, allowing the same
  number of employees to produce far more wheels in a given time, and thereby reducing the labour cost
  per wheel; and
- Increasing material efficiency this is the efficiency with which Carbon Revolution acquires and uses raw
  materials. By sourcing materials at lower cost and using the materials more efficiently, Carbon Revolution
  can reduce the material cost for each wheel produced. Currently, Carbon Revolution sources its carbon
  fibre and its resin from multiple global suppliers. The Company is currently conducting its own in-house
  R&D programs to develop its own proprietary resin and fibre formats. The aim of these programs is to
  reduce its future reliance on external suppliers.

Carbon Revolution has commenced its industrialisation program by automating a number of core processes, the benefits of which will be realised during FY20 as it delivers a substantial scale-up in production of current and new customer programs. However, beyond FY20 it plans to implement further significant automation across its entire manufacturing process, enabling further increases in manufacturing capacity and reductions in unit costs per wheel.

The key stages of Carbon Revolution's industrialisation strategy are described in Exhibit 25 below.

# Exhibit 25 – Key stages of Carbon Revolution's Industrialisation roadmap to transform the cost of production

Initial Commercial Production and Planning (2014 - 2019)

- Initial commercial supply to OEMs focused on achieving required product performance, manufacturing quality and throughput
- Industrialisation was largely in the planning stage, with a focus on understanding the product and manufacturing processes with a view to future automation, and designing advanced manufacturing equipment
- Some first generation manufacturing equipment was employed

Automation
of Core
Processes
(Realisation in
FY20)

- With its product commercialised, Carbon Revolution focused on automating discrete core manufacturing processes, by constructing and commissioning advanced equipment designed during the previous phase. With this equipment coming on line during FY20, the benefits will be realised as customer programs ramp up
- Planning has already commenced for the next stage

Fully
industrialised
production
(Realisation
expected in CY22)

- Once core processes are automated in stage 2, Carbon Revolution will focus on linking these processes together to form a seamless, autonomous and industrialised process
- Existing processes and equipment will be subject to review with the aim of continuous improvement

Further information in relation to these stages is set out below.

# 3.4.2.1 Initial Commercial Production and Planning (2014 – 2019)

Carbon Revolution has progressively increased its production capacity in response to demand from existing customers, and reduced costs of production since commissioning its manufacturing facility, with a reduction in direct costs of its longest-running product of more than 30% since commissioning in late 2014 to the end of FY19.

Key drivers of this cost reduction occurred in the following areas:

- Labour efficiency improvements resulting from a combination of automating labour-intensive processes, and a focus on reducing waste and increasing machine speed. For example, Carbon Revolution employed a first-generation machine used to set out carbon fibre for the wheel rim, which reduced the time taken on this process from 8 hours to 2 hours.
- Raw material cost reductions resulting from the ability of Carbon Revolution to obtain lower prices for raw materials by purchasing greater volumes allowed by its expanded manufacturing capacity, particularly with respect to improved carbon fibre fabric pricing.
- Insourcing of processes such as wheel machining and painting, delivered through Carbon Revolution developing and/or purchasing its own equipment to perform these tasks.

# 3.4.2.2 Automation of core processes (Realisation in FY20)

Having now successfully demonstrated that it can achieve its customers' product performance, quality and delivery standards, the current phase of Carbon Revolution's industrialisation plans focuses on automating its production processes to obtain further significant increases in production capacity and reductions in the production costs of wheels. In this phase, Carbon Revolution expects a reduction in average direct cost per wheel of approximately 34% from the end of FY19 to the end of FY20.

In order to achieve its industrialisation plans, the Company assembled an experienced team of industrialisation engineers to undertake industrialisation activities. This team has been drawn from a wide range of related industries and companies, including the automotive industry, aircraft manufacturers and manufacturers of industrial composite components.

The outcome of this team's work is being realised in FY20 through increased capacity at Carbon Revolution's manufacturing facility and reduced wheel production costs. These have been driven through automation of certain core processes (increasing capital and labour efficiency), as well

as further raw material cost reductions, through the use of advanced manufacturing equipment. Examples of this include:

- Commissioning first-generation high-volume cutting machines which are used to cut the carbon fibre fabric used in the wheels. By layering the fabric and using a 'cookie cutter' approach, these new machines are able to cut 10 sheets of fabric every 9.7 minutes, compared to the old process which could cut only 2 sheets of fabric every 45 minutes. This reduces the time taken to complete this process to less than 5% of what it formerly was.
- Commissioning second-generation machines that form the rim of the wheel, which reduce the time taken to form the rim by 30%, whilst also automating many of the operator interactions with the machine, further reducing labour costs.
- Moving from low pressure to high pressure 'moulding lines', which inject resin into a mould containing the carbon fibre fabric in order to form the wheel. By injecting the resin at a higher pressure, this allows the equipment to mould a wheel in less than 20% of the time taken by the legacy low-pressure equipment. The new equipment also automates virtually all of the steps required to mould the wheel, further increasing labour efficiency.

# 3.4.2.3 Scale industrialised automation and beyond (development underway)

With the benefit of automation of the core processes being realised in FY20, the focus of the industrialisation team will be on achieving fully industrialised production from Carbon Revolution's manufacturing facility. This is planned through:

- linking discrete processes used to produce a wheel together in one seamless autonomous and industrialised process;
- further automating core manufacturing processes where significant labour input still remains; and
- obtaining raw materials at lower costs, enabled by Carbon Revolution's increasing scale.

# 3.5 Research and development and intellectual property

### 3.5.1 Research and development

As an advanced manufacturing business, research and development are at the core of Carbon Revolution's business model. Carbon Revolution has spent 12 years, and over \$39.2m, developing proprietary technology across its advanced products, raw materials and manufacturing processes. Research and development activities are carried out by more than 30 in-house

technicians, engineers and researchers of which 7 have PhDs. This team is also supported by the federally-funded, Innovative Manufacturing Cooperative Research Centre ("IMCRC") and the ARC Deakin Future Fibre Hub. These programs in combination contribute an additional team of 12 Deakin University researchers, of which 8 have PhDs, who are located on the Company's premises for the duration of the projects. See Section 9.5.9 for further details on these projects.

This team focuses on the ongoing development of Carbon Revolution's products, materials and process technologies, in order to ensure that Carbon Revolution retains or extends its leadership position in terms of product and manufacturing technologies. Examples of Carbon Revolution's approach to research and development are set out below.

# Wheel engineering techniques and design approach

Carbon Revolution has developed a suite of virtual engineering techniques using computational methods to design its wheels. These methods simulate and analyse the structural performance of wheel designs and enable Carbon Revolution to build and test designs in a virtual environment prior to physical prototypes being built.

#### **Development and application of raw materials**

Carbon Revolution selects and develops raw materials with the aim of achieving the best performance and lowest manufacturing cost from its wheels. Wherever possible, highly processed and expensive forms of raw materials are avoided, maximising the amount of value that Carbon Revolution is able to add through its own design and manufacturing activities.

#### Advanced manufacturing processes

Carbon Revolution has developed unique manufacturing processes concurrently with its product designs and selection of raw materials. This approach has been taken to ensure that products are designed to be manufactured in a manner that delivers both optimum performance as well as a pathway to industrialisation.

### 3.5.2 Intellectual property

The research and development activities described above have generated a significant portfolio of proprietary intellectual property, and are expected to continue to do so, as new solutions are found for existing and new challenges.

Carbon Revolution has an intellectual property management system in place in order to protect this intellectual property. Generally, developments in the wheel product are considered for patent protection, however new process developments are ordinarily protected by the Company by keeping them confidential. This strategy is because product developments can be more easily reverse engineered, whereas process developments are generally more difficult to reverse engineer and patent publication would make the proprietary processes public knowledge.

The Company has been granted 41 patents across 7 patent families with a further 8 patents pending across those families, and 4 pending patents across 4 new patent families. Typically, these granted patents are filed in multiple jurisdictions globally.

#### 3.6 Carbon Revolution team

Carbon Revolution has grown from its four founders to over 380 full time equivalent personnel. Their roles span engineering, manufacturing, quality control, planning, maintenance, R&D, finance, administration, sales and marketing functions. The manufacturing facility operates on a 3 shift, 5-day cycle, with weekend overtime used where necessary.

### 3.6.1 Strategy and approach

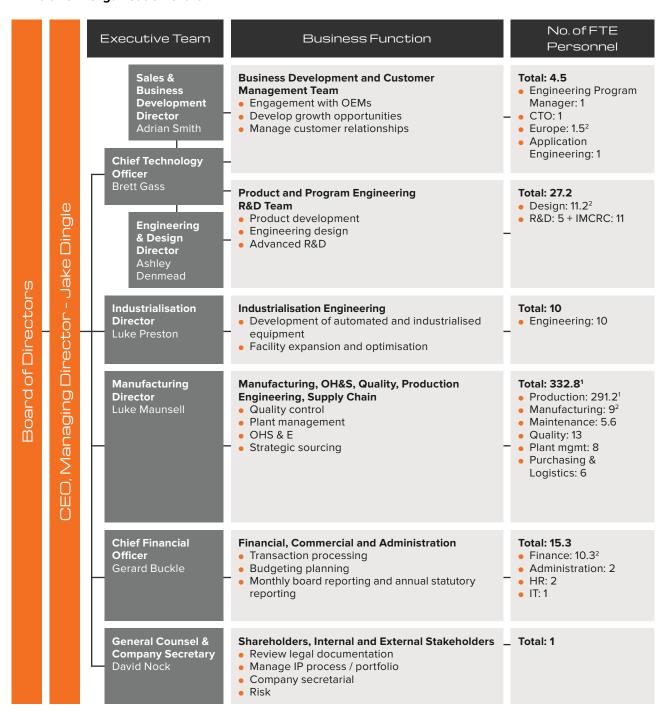
Carbon Revolution's approach to planning and building its business has been to recruit and employ experienced personnel from relevant sectors of the Australian economy. The Company has recruited employees with relevant backgrounds from major industrial companies including Ford, General Motors, Toyota, Tesla, Alcoa, Boeing, Chassis Brakes International (formerly PBR and Bosch), Futuris, Quickstep, OneSteel and Qantas. Personnel with relevant skills and experience have also been recruited from major corporations in a broad range of other sectors, particularly for roles where specific sector experience is not a key requirement. These include commercial, finance and administrative roles.

The approach has aimed at recruiting the most experienced people possible with a view to also ensuring that there is strong cultural alignment with Carbon Revolution's relatively fast paced and entrepreneurial environment.

#### 3.6.2 Current structure of the organisation

A summary of its organisational structure is shown in the exhibit below.

Exhibit 26 - Organisation chart



As at 12 September, 2019;

#### Note:

- 1 Includes production contract staff
- 2 Includes contractors

Exhibit 27 - Carbon Revolution team



#### 3.6.3 Workplace health and safety

Carbon Revolution is focused on providing a safe workplace that supports the wellbeing of its employees. The Company has a formal occupational health and safety policy and the leadership team is committed to driving a proactive safety agenda and has an objective of zero harm to employees.

As the manufacturing process has matured, the Company has assigned additional funding, resources and leadership attention to ensure its strong safety mindset is maintained. This has ensured that whilst the production volumes and workforce have grown significantly, the Company has improved its proactive incident and near miss reporting (lead indicator) and also reduced its actual incident rate (lag indicator). The manufacturing leadership team has extensive experience managing high risk operations including transport, heavy steel and dangerous goods processing. This has ensured that the team is able to closely manage and mitigate the safety risks within the manufacturing process whilst building a team of safety engaged team members.

Safety is the first agenda item on all production meetings. It is also a specific agenda item at formal Management and Board meetings, with a view to promoting a safe working environment.

Carbon Revolution has a strong safety record, which is particularly important given the rate of introduction of new equipment and processes, as well as the rapid increase in the size of the workforce. Carbon Revolution will continue driving a zero-harm culture.

#### 3.7 Strategic growth opportunities

There are a number of strategic growth opportunities available to Carbon Revolution, in addition to the scaling up of its Geelong manufacturing facility to materially increase production capacity. Carbon Revolution also aims to leverage its technology into adjacent industries (such as the aerospace and industrial sectors). A summary of these strategic growth opportunities is provided below.

#### 3.7.1 Core business growth

Carbon Revolution is currently increasing its manufacturing output significantly in response to demand from existing customers.

Beyond this, the key growth driver of the business in the near term will be the further expansion of its carbon fibre automotive wheel manufacturing capacity at the Geelong facility where production capacity can be significantly expanded within the current premises. The large size and growth trend of its addressable market is expected to satisfy near-term growth objectives. In the short to medium term, Carbon Revolution expects this to be driven by demand from the high-performance and luxury segments of the automotive new vehicle wheel market, which Carbon Revolution estimates accounted for approximately 36 million to 56 million

wheels globally in 2017<sup>25</sup>. As Carbon Revolution continues to industrialise its operations it expects unit costs of production to fall further. This is expected to result in Carbon Revolution's wheels being adopted across a broader range of vehicles outside the high performance and luxury segments.

#### 3.7.2 Aerospace

The aerospace industry presents a growth opportunity for Carbon Revolution as the sector continues to seek weight reduction solutions. Carbon Revolution is working in partnership with a tier 1 supplier to a major international aerospace company for the purpose of developing a carbon fibre wheel for aircraft applications with an approximate 30% weight saving over current forged aluminium technology. In addition to this, in 2019 the Commonwealth Government awarded Carbon Revolution a \$2.4 million grant to design the world's first light-weight carbon fibre wheels for the Boeing CH-47F Chinook helicopter.

The aircraft and aerospace wheel market segments that the company believes will ultimately be addressable for this technology include commercial, business and defence. All of these segments are understood to offer opportunities for both retrofit and new aircraft applications.

#### 3.7.3 Adjacent markets

Over the last ten years, Carbon Revolution has developed extensive expertise in the application of carbon fibre to complex structural components. Carbon fibre is considered to be an extremely difficult material to work with when used for such applications. The Company's product design technologies and manufacturing technologies are considered to have potential applications to a variety of adjacent sectors. One of the initial areas the Company has identified for future applications of its technology is the industrial, freight and logistics sector. A wide range of industrial, freight and logistics vehicles could potentially benefit from the weight reduction and efficiency benefits associated with carbon fibre wheels.

The Company recently signed a memorandum of understanding (MOU) with Mitsui & Co., one of the most diversified trading and service enterprises in the world. The MoU reflects Carbon Revolution and Mitsui's intention to develop a strategic partnership. The key elements of the strategic partnership are expected to include opportunities for support with the sourcing of raw material inputs, the recycling of carbon fibre, logistics services, coordination of activities with Asian OEM customers including the major Japanese car makers, trade and equipment finance, and industrial automation expertise.

The MoU contemplates Mitsui and Carbon Revolution exploring opportunities for Mitsui to utilise its global network of businesses and partnerships, including its customer relationships in Japan and across the world to help accelerate Carbon Revolution's growth, both in the automotive industry and in other adjacent markets.

The Company will continue to assess future applications for its technology as it continues to develop and refine its current automotive wheel technology.

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# FINANCIAL INFORMATION





#### 4 Financial information

#### 4.1 Introduction

#### 4.1.1 Overview

The financial information for Carbon Revolution contained in Section 4 includes:

- Statutory historical financial information comprising:
  - statutory historical consolidated statements of profit or loss and other comprehensive income for the financial years ended 30 June 2017 (FY17), 30 June 2018 (FY18) and 30 June 2019 (FY19) (Statutory Historical Income Statements);
  - statutory historical consolidated statements of cash flows for FY17, FY18 and FY19 (Statutory Historical Cash Flow Statements);
  - statutory historical consolidated statement of financial position as at 30 June 2019 (Statutory Historical Statement of Financial Position), (together the Statutory Historical Financial Information);
- Pro forma historical financial information comprising:
  - pro forma historical consolidated statements of profit or loss and other comprehensive income for FY17, FY18 and FY19 (Pro Forma Historical Income Statements);
  - pro forma historical consolidated statements of cash flows for FY17, FY18 and FY19 (Pro Forma Historical Cash Flow Statements);
  - pro forma historical consolidated statement of financial position as at 30 June 2019 (Pro Forma Historical Statement of Financial Position),

(together the **Pro Forma Historical Financial Information**);

- Statutory forecast financial information comprising:
  - statutory forecast consolidated statement of profit or loss and other comprehensive income for the financial year ending 30 June 2020 (FY20) (Statutory Forecast Income Statement); and
  - statutory forecast consolidated statement of cash flows for FY20 (Statutory Forecast Cash Flow Statement),

### (together, the **Statutory Forecast Financial Information**); and

- Pro forma forecast financial information comprising:
  - pro forma forecast consolidated statement of profit or loss and other comprehensive income for FY20 (Pro Forma Forecast Income Statement); and
  - pro forma forecast consolidated statement of cash flows for FY20 (Pro Forma Forecast Cash Flow Statement)

(together, the **Pro Forma Forecast Financial Information**)

The Statutory Historical Financial Information and Pro Forma Historical Financial Information together form the **Historical Financial Information**. The Statutory Forecast Financial Information and Pro Forma Forecast Financial Information together form the **Forecast Financial Information**.

The Historical Financial Information and Forecast Financial Information together form the **Financial Information**.

Also summarised in this Section are:

- the basis of preparation and presentation of the Financial Information (see Section 4.2);
- an explanation of certain non-IFRS financial measures (see Section 4.3);
- a summary of recently adopted and forthcoming changes to Australian Accounting Standards (AAS) (see Section 4.4);
- Carbon Revolution's key financial and operating metrics (see Section 4.5.2);
- a summary of Carbon Revolution's liquidity and capital resources (see Section 4.6.2);
- a summary of Carbon Revolution's indebtedness before and after the Offer (see Section 4.6.3);
- a summary of Carbon Revolution's contractual obligations and commitments under operating leases and capital commitments (see Section 4.6.4);
- management discussion and analysis of the Pro Forma Historical Financial Information (see Section 4.9);
- the Directors' best estimate specific assumptions (see Section 4.10.2) and general assumptions (see

Section 4.10.1) underlying the Forecast Financial Information (see Section 4.10);

- management discussion and analysis of the Pro Forma Forecast Financial Information (see Section 4.10);
- an analysis of the key sensitivities in respect of the Pro Forma Forecast Financial Information (see Section 4.11); and
- a summary of Carbon Revolution's proposed dividend policy (see Section 4.12).

All amounts disclosed in this Section 4 are presented in Australian dollars and, unless otherwise noted, are rounded to the nearest one hundred thousand dollars.

The Financial Information has been reviewed in accordance with the Australian Standard on Assurance Engagements ASAE 3450 Assurance Engagements involving Fundraising and/or Prospective Financial Information by Deloitte Corporate Finance Pty Limited (Investigating Accountant), whose Investigating Accountant's Reports on the Historical Financial Information and the Forecast Financial Information are set out in Section 8. Investors should note the scope and limitations of these reports.

The Financial Information presented in this Section 4 should be read in conjunction with the risk factors set out in Section 5 and other information contained in this Prospectus.

#### 4.1.2 Non-inclusion of long term forecasts

The Company is aware that there is forecast financial information about it, relating to periods beyond FY20 that was contained in an information memorandum issued by Carbon Revolution in connection with a pre-IPO capital raising, which has been publicly reported, and which is not included in the Forecast Financial Information. In relation to this information, the Company does not consider it has reasonable grounds to disclose the information or any other similar forecast financial information, and as such, has not done so in this Prospectus.

# **4.2** Basis of preparation and presentation of the Financial Information

#### 4.2.1 Overview

The Financial Information included in this Prospectus is intended to present potential investors with information to assist them in understanding the underlying historical financial performance, cash flows and financial position of Carbon Revolution, together with forecast financial performance and cash flows for FY20. The Directors are responsible for the preparation and presentation of the Financial Information.

The Financial Information has been prepared in accordance with the recognition and measurement principles prescribed in AAS (including the Australian Accounting Interpretations), issued by the Australian Accounting Standards Board (AASB) and the accounting policies adopted by Carbon Revolution. Compliance with AAS ensures that the Financial Information complies with the recognition and measurement principles of IFRS as adopted by the International Accounting Standards Board.

The Financial Information is presented in an abbreviated form and does not include all of the disclosures, statements or comparative information required by AAS applicable to annual financial reports prepared in accordance with the Corporations Act. The Financial Information also includes non-IFRS measures that Carbon Revolution uses to manage and report on its business that are not in accordance with AAS or IFRS (see Section 4.3).

The significant accounting policies adopted by Carbon Revolution are set out in Appendix A. In preparing the Statutory Historical Financial Information and Statutory Forecast Financial Information, the accounting policies of Carbon Revolution have been applied consistently throughout the periods.

Carbon Revolution has one reportable operating segment under AASB 8 *Operating Segments* (AASB 8) being the manufacture and sale of carbon fibre wheels.

### **4.2.2** Preparation of the Statutory and Pro Forma Historical Financial Information

The Historical Financial Information has been prepared on both a statutory and pro forma basis and has been prepared for the purpose of inclusion in this Prospectus.

The Statutory Historical Financial Information has been derived from the audited statutory consolidated general purpose financial statements of the Company and its subsidiaries for FY17, FY18 and FY19. The financial statements for FY17, FY18 and FY19 have been audited by Deloitte Touche Tohmatsu, which issued unmodified audit opinions in respect of each financial year. In FY18 and FY19 the auditor's reports also included a material uncertainty in relation to going concern (refer Section 4.7).

The Pro Forma Historical Financial Information has been prepared solely for the purpose of inclusion in this Prospectus and has been derived from the Statutory Historical Financial Information to illustrate the net loss after tax, assets, liabilities and cash flows of Carbon Revolution adjusted for certain transaction and pro forma adjustments as described below.

The pro forma adjustments are as described in Sections 4.5.3, 4.6.1 and 4.8.2. In particular pro forma adjustments have been made to reflect:

- the revaluation of financial instruments;
- the elimination of certain non-operating and non-recurring expenses;
- the impact of changes in AAS; and
- the incremental costs of being a listed company.

The Pro Forma Historical Statement of Financial Position is derived from the Statutory Historical Statement of Financial Position, and adjusted to reflect the impact of:

- the Conversion of the Convertible Notes to Shares immediately prior to Completion of the Offer, and the impact of the Anti-Dilution Arrangements; and
- the Offer, including a prepayment of \$5 million of the Ronal Loan, and costs directly attributable to the Offer offset against share capital or expensed.

The Pro Forma Historical Statement of Financial Position is provided for illustrative purposes only and is not represented as necessarily being indicative of Carbon Revolution's view of its future financial position.

Investors should note that past results do not guarantee future performance.

## **4.2.3** Preparation of the Forecast Financial Information

The Forecast Financial Information has been prepared by the Directors with due care and attention, having regard to an assessment of present economic and operating conditions, and based on a number of best estimate general and specific assumptions regarding future events and actions as set out in Sections 4.10.1 and 4.10.2.

The Directors believe the best estimate assumptions, when taken as a whole, to be reasonable at the time of preparing the Prospectus. However, this information is not fact and investors are cautioned not to place undue reliance on the Forecast Financial Information.

This information is intended to assist investors in assessing the reasonableness and likelihood of the assumptions occurring, and is not intended to be a representation that the assumptions will occur. Investors should be aware that the timing of actual events and the magnitude of their impact might differ from that assumed in preparing the Forecast Financial Information, and that this may have a materially positive or negative effect on Carbon Revolution's actual financial performance or financial position. Investors are advised to review the Forecast Financial Information in conjunction

with the general and specific assumptions set out in Sections 4.10.1 and 4.10.2, the sensitivity analysis set out in Section 4.11, the risk factors set out in Section 5 and other information set out in this Prospectus. The inclusion of these assumptions and these risks in this Prospectus are intended to assist investors in assessing the reasonableness and likelihood of the assumptions occurring, and is not intended to be a representation that the assumptions will occur.

In addition, the assumptions upon which the Forecast Financial Information is based are by their very nature subject to significant uncertainties and contingencies, many of which will be outside of the control of Carbon Revolution, the Directors and Carbon Revolution's Management, and are not reliably predictable. Accordingly, none of Carbon Revolution, the Directors, Carbon Revolution's Management, or any other person can give investors any assurance that the outcomes discussed in the Forecast Financial Information will arise.

The Statutory Forecast Financial Information has been prepared on a basis consistent with how Carbon Revolution's statutory financial statements are expected to be prepared for future financial periods, noting that forthcoming changes to AAS described in Section 4.4 have been considered in the preparation of the Statutory Forecast Financial Information.

The Statutory Forecast Financial Information for FY20 is the best estimate of the financial performance that the Directors expect to report in Carbon Revolution's general purpose audited statutory consolidated financial report for FY20.

The Forecast Financial Information has been presented on both a statutory and pro forma basis and has been prepared solely for inclusion in this Prospectus. The basis of preparation and presentation of the Statutory Forecast Financial Information and the Pro Forma Forecast Financial Information is consistent with the basis of preparation of the Statutory Historical Financial Information and Pro Forma Historical Financial Information, respectively.

The Pro Forma Forecast Financial Information has been derived from the Statutory Forecast Financial Information adjusted by the pro forma adjustments to reflect the full year effect of the operating and capital structure that will be in place upon Completion of the Offer to exclude the costs of the Offer and other non-recurring items that are not expected to occur in the future as set out in Sections 4.5.3 and 4.8.2.

The Directors have no intention to update or revise the Forecast Financial Information or other forward-looking statements following the issue of

this Prospectus, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this Prospectus, except where required by law or its continuous disclosure obligations under the ASX Listing Rules.

# **4.3** Explanation of certain non-IFRS financial measures

Carbon Revolution uses certain measures to manage and report on its business that are not recognised under AAS or IFRS. These measures are collectively known as 'non-IFRS financial measures' under Regulatory Guide 230 'Disclosing non-IFRS financial information' published by ASIC. As non-IFRS financial measures are not defined by recognised standard setting bodies, they do not have a prescribed meaning or standard definition. Therefore, the way in which Carbon Revolution calculates these measures may differ from similarly titled measures used by other companies. Although the Directors believe that these non-IFRS financial measures provide useful information about Carbon Revolution's financial performance, investors are cautioned not to place undue reliance on any non-IFRS measures and should consider the measures as supplemental to, as opposed to replacement for, financial information presented in accordance with AAS.

The principal non-IFRS financial measures that are referred to in this Prospectus are as follows:

- EBITDA, which means earnings before interest, taxation, depreciation and amortisation;
- EBIT, which means earnings before interest and taxation;
- Working capital, which includes trade and other receivables, inventories, other current assets, trade and other payables, deferred income and provisions;
- Net cash outflows from operations, which is calculated as all receipts from customers, receipts of grants and incentives, payments to suppliers and employees but excludes interest received or paid; and
- Net cash outflows before financing activities, which is calculated as net cash flows from operations plus net cash flows from capital expenditure and intangible expenditure.

# 4.4 Recently adopted and forthcoming changes to AAS

### AASB 15 Revenue from Contracts with Customers

AASB 15 Revenue from Contracts with Customers establishes a five-step model to account for revenue arising from contracts with customers. Under AASB 15, revenue is recognised at an amount that reflects the consideration to which the entity expects to be entitled in exchange for transferring goods or services to a customer. AASB 15 was effective for annual periods beginning on or after 1 January 2018 and for Carbon Revolution initially applied for the year ended 30 June 2019.

The Company has performed an assessment of the impact on a contract by contract basis with AASB 15 resulting in a reclassification of sale of tooling to revenue and cost of goods sold within the profit and loss without any impact on financial results. This prospectus presents the Pro Forma Historical Financial Information on a consistent basis to illustrate the impact of AASB 15 had the standard been applied from 1 July 2016.

#### AASB 9 Financial Instruments

AASB 9 Financial Instruments replaced AASB 139 Financial Instruments: Recognition and Measurement and all previous versions of AASB 9. AASB 9 brings together all three aspects of the accounting for financial instruments — classification and measurement, impairment and hedge accounting. AASB 9 was effective for annual periods beginning on or after 1 January 2018, and for Carbon Revolution initially applied for the year ended 30 June 2019. Given the relatively simple nature of Carbon Revolution's financial instruments, there was no impact on the financial statements.

#### **AASB 16** Leases

AASB 16 is applicable for accounting periods beginning on or after 1 January 2019.

AASB 16 removes the accounting distinction between operating and finance leases and will change how Carbon Revolution accounts for leases previously classified as operating leases which were off balance sheet.

On initial measurement of AASB 16, for all leases (except noted below), Carbon Revolution expects to:

 a) Recognise right-of-use assets and lease liabilities in the consolidated statement of financial position, initially measured at the present value of the future lease payments;

- b) Recognise depreciation of right-of-use assets and interest on lease liabilities in the statement of profit or loss; and
- c) Separate the total amount of cash paid into a principal portion (presented within financing activities) and interest (presented within operating activities) in the statement of cash flows.

For short-term leases (lease term of 12 months or less) and leases of low-value assets, Carbon Revolution will opt to recognise a lease expense on a straight-line basis as permitted by AASB 16.

As at 30 June 2019, Carbon Revolution had non-cancellable operating lease commitments for which it will recognise a right-of-use asset of \$10.2 million and a corresponding lease liability of \$10.6 million. The impact of the adoption of AASB 16 will be \$0.4 million adjustment to opening retained earnings. The impact of adopting AASB 16 is incorporated within the Forecast Financial Information.

This Prospectus presents the Pro Forma Historical Financial Information on a consistent basis to illustrate the impact of AASB 16 had the standard been applied from 1 July 2016 as follows:

Table 1: Pro forma historical impact of application of AASB 16 Leases

\$ million	FY17	FY18	FY19
Depreciation expense (included in cost of goods sold)	(0.2)	(0.2)	(0.5)
Operating lease expense (included in cost of goods sold)	0.3	0.3	0.6
Impact on gross profit and EBIT	0.1	0.1	0.1
Interest expense	(0.1)	(O.1)	(0.5)
Impact on loss after tax	(0.1)	(0.1)	(0.4)

 $Note: The\ Forecast\ Financial\ Information\ reflects\ the\ application\ of\ AASB\ 16\ for\ the\ full\ 12\ month\ period.$ 

# 4.5 Pro forma historical and forecast income statements and statutory forecast income statement

## **4.5.1** Pro Forma Historical Income Statements, Pro Forma Forecast Income Statements and Statutory Forecast Income Statements

Table 2 below sets out the Pro Forma Historical Income Statements, the Pro Forma Forecast Income Statement and the Statutory Forecast Income Statement.

Table 2: Pro forma historical and forecast consolidated statement of profit or loss and other comprehensive income, and statutory forecast consolidated statement of profit or loss and other comprehensive income

		Pro forma historical			Pro forma forecast	Statutory forecast
\$ million	Notes	FY17	FY18	FY19	FY20	FY20
Sale of wheels		7.1	6.7	13.8	60.4	60.4
Engineering services	1	0.7	1.3	0.9	1.2	1.2
Sale of tooling		0.2	0.1	0.4	0.6	0.6
Total revenue		8.0	8.1	15.1	62.2	62.2
Cost of goods sold	2	(12.3)	(11.4)	(22.4)	(62.0)	(62.0)
Gross profit / (loss)		(4.3)	(3.2)	(7.3)	0.2	0.2
Other income	3	3.1	3.1	5.0	3.4	3.4
Operational expenses	4	(2.3)	(3.4)	(3.0)	(0.2)	(0.2)
Research and development expenditure	5,6	(4.2)	(8.2)	(4.5)	(6.6)	(6.6)
Administration expenses	7	(6.4)	(6.9)	(8.3)	(11.1)	(9.9)
Marketing expenses	8	(1.3)	(1.5)	(1.7)	(1.8)	(1.8)
Gain /(loss) on revaluation of financial instruments	9	_	_	_	_	(87.2)
Capital raising transaction costs	10	_	_	_	_	(1.5)
EBIT		(15.4)	(20.0)	(19.9)	(16.1)	(103.7)
Net interest expense	11	(0.8)	(0.8)	(2.5)	(2.3)	(2.3)
Loss before tax		(16.2)	(20.8)	(22.4)	(18.4)	(106.0)
Income tax	12	_	_	_	_	_
Loss after tax		(16.2)	(20.8)	(22.4)	(18.4)	(106.0)
Add back: Depreciation and amortisation		1.8	2.3	3.8	7.8	7.8
EBITDA		(13.6)	(17.7)	(16.1)	(8.3)	(95.9)

#### Notes:

- 1. Engineering services revenue reflects Original Equipment Manufacturer (OEM) contributions to the design, engineering and testing of wheels.
- 2. Cost of goods sold includes direct costs inclusive of raw materials, production labour and other manufacturing costs, the cost of scrapped production wheels, manufacturing overheads, including depreciation and the cost of tooling sold to OEMs.
- 3. Other income includes government grant income, automotive transformation scheme payments and R&D tax incentive refunds. The Forecast Financial Information does not include any R&D tax incentive cash refunds, recorded in other income historically, as forecast turnover exceeds \$20 million.

- 4. Operational expenses include impaired and obsolete inventory, production variances and the cost of scrapped production wheels to the extent they relate to inventory on hand as well as write-offs of tooling.
- 5. Research and development expenditure is recognised in the income statement to the extent it is not capitalised in accordance with the capitalisation criteria specified by AASB 138 *Intangible Assets*. The Company commenced capitalisation of development costs in FY19. Amortisation occurs on a straight line basis over the asset's estimated useful life of 5 years from the point at which the development is ready for use.
- 6. Research and development expenditure includes the cost of engineering staff, the costs of wheels produced for testing and validation purposes, external party wheel testing facilities and the cost of third party development partners.
- 7. Administration expenses comprise operating administration costs, indirect salaries and on-costs, executive salaries and employee incentive scheme costs for all employees. This includes incremental listed company costs such as share registry fees, additional non-executive director remuneration, directors' and officers' insurance premiums, audit and legal costs, ASX listing fees, investor relation costs, and other expected costs of a listed company.
- 8. Marketing expenses comprise international and domestic marketing costs including US and European sales personnel remuneration, travel, marketing wheels, advertising, social media and tradeshows.
- 9. Gain/(loss) on revaluation of financial instruments relate to fair value movements on the derivative instrument associated with the conversion feature on the Ronal Loan and on the Convertible Notes. From a forecast perspective, the fair value adjustment reflects the impact on the Statutory Forecast Income Statement of the Conversion of the Convertible Notes, including the relevant proportion of non-cash payment in kind interest embedded in the instrument, immediately prior to Completion of the Offer and the impact of the Anti-Dilution Arrangements. The aggregated impact at a price of \$2.60 per Share is expected to result in a \$87.2 million charge to the FY20 Statutory Forecast Income Statement.
- 10. Offer related transaction costs are estimated to be \$4.4 million, of which \$1.5 million is expected to be expensed, with the balance anticipated to be offset against contributed equity.
- 11. Net interest expense primarily relates to interest expense on the Ronal Loan and interest on Leases reflecting the application of AASB 16 partially offset by interest income received on cash and cash equivalents.
- 12. The Carbon Revolution is in an accumulated net tax loss position. The Carbon Revolution has estimated accumulated tax losses of \$55.9 million at 30 June 2019 which are not recognised as an asset in the statement of financial position in accordance with AAS.

Carbon Revolution has recorded other comprehensive income in relation to the currency translation of foreign operations of less than \$100,000 in each historical financial period disclosed in this Prospectus. As such other comprehensive income has not been separately disclosed in the related Financial Information tables in this Prospectus. No other comprehensive income has been assumed by Carbon Revolution in the Forecast Financial Information.

#### 4.5.2 Key financial and operating metrics

Set out in Table 3 is a summary of Carbon Revolution's key historical financial and operating metrics for FY17, FY18 and FY19 derived from the Pro Forma Historical Financial Information, and the forecast key financial and operating metrics for FY20 derived from the Pro Forma Forecast Financial Information and the Statutory Forecast Financial Information.

Table 3: Pro forma historical and forecast key financial and operating metrics

	Pro forma historical				Pro forma forecast
\$ million	Notes	FY17	FY18	FY19	FY20
Sales volume (# wheels)		3,501	3,178	5,700	22,821
Sales volume growth (%)			(9.2%)	79.4%	300.4%
Revenue from sale of wheels		7.1	6.7	13.8	60.4
Total revenue		8.0	8.1	15.1	62.2
Average price per wheel (\$ per wheel)	1	2,033	2,116	2,428	2,646
Average cost of goods sold (\$ per wheel)	2	(3,453)	(3,527)	(3,865)	(2,692)
Gross profit / (loss)		(4.3)	(3.2)	(7.3)	0.2
Gross profit / (loss) %		(53.4%)	(40.0%)	(48.7%)	0.3%
EBIT		(15.4)	(20.0)	(19.9)	(16.1)
EBIT %		(193.0%)	(246.8%)	(132.0%)	(25.9%)
EBITDA		(13.6)	(17.7)	(16.1)	(8.3)
EBITDA %		(170.1%)	(218.2%)	(107.1%)	(13.3%)
Net cash used in operating activities		(13.7)	(16.0)	(18.5)	(12.1)
Net cash used in investing activities		(5.8)	(7.4)	(22.7)	(27.6)

#### Note:

<sup>1.</sup> Average price per wheel is calculated as sale of wheels divided by sales volume.

<sup>2.</sup> Average cost of goods sold per wheel is calculated as cost of goods sold excluding tooling divided by sales volume.

#### 4.5.3 Pro forma adjustments to the statutory historical and forecast income statements

Table 4 below sets out the pro forma adjustments to reconcile the Statutory Historical Income Statements and the Statutory Forecast Income Statement to the Pro Forma Historical Income Statements and the Pro Forma Forecast Income Statement, respectively.

Table 4: Pro forma adjustments to the statutory consolidated statements of profit or loss and other comprehensive income

			Historical		Forecast
\$ million	Notes	FY17	FY18	FY19	FY20
Statutory EBITDA		(11.9)	(17.4)	(21.9)	(95.9)
Revaluation of financial instruments	1	0.5	0.7	(0.5)	87.2
Additional listed company costs	2	(2.5)	(2.0)	(1.6)	(0.8)
Expensed capital raising transaction costs	3	_	_	7.7	1.5
Impact of AASB 15	4	_	_	_	_
Impact of AASB 16	5	0.3	0.3	0.6	_
Incentives	6	_	0.8	(0.4)	(0.5)
Pro forma EBITDA		(13.6)	(17.7)	(16.1)	(8.3)
Statutory loss after tax		(14.2)	(20.2)	(27.2)	(106.0)
Revaluation of financial instruments	1	0.5	0.7	(0.5)	87.2
Additional listed company costs	2	(2.5)	(2.0)	(1.6)	(0.8)
Expensed capital raising transaction costs	3	_	_	7.7	1.5
Impact of AASB 15	4	_	-	_	_
Impact of AASB 16	5	(O.1)	(O.1)	(0.4)	_
Incentives	6	_	0.8	(0.4)	(0.5)
Pro forma loss after tax		(16.2)	(20.8)	(22.4)	(18.4)

#### Notes:

- Adjustment to reflect movements in the fair value of the derivative instrument associated with the conversion feature on the Ronal Loan, and the Convertible Notes (proportion of non-cash interest embedded in the instrument). From a forecast perspective, the fair value adjustment reflects the impact on the Statutory Forecast Income Statement of the Conversion of the Convertible Notes, including the relevant proportion of non-cash payment in kind interest embedded in the instrument, immediately prior to Completion of the Offer and the impact of the Anti-Dilution Arrangements. The aggregated impact at a price of \$2.60 per Share is expected to result in a \$87.2 million charge to the FY20 Statutory Forecast Income Statement.
- 2. Adjustment for estimated incremental annual listed costs that Carbon Revolution will incur as a listed company. These incremental costs include share registry fees, additional non-executive director remuneration, directors' and officers' insurance premiums, audit and legal costs, ASX listing fees, investor relations costs and other expected costs associated with being a listed company. The Statutory Forecast Income Statement includes an amount paid reflecting a change in the executive management team.
- 3. FY19: Adjustment to exclude legal, advisory and other costs incurred on historical capital raising processes which were expensed to the income statement. FY20: Adjustment to exclude the transaction costs associated with the Offer including costs paid to the Joint Lead Managers, legal, tax and accounting advisory fees and ASX initial listing fees. Of the total offer costs, \$1.5 million is forecast to be expensed and the remainder (\$2.9 million) is to be offset against issued capital on the statement of financial position in accordance with accounting standards.
- 4. Adjustment to reflect the application of AASB 15 Revenue from Contracts with Customers as if it had been in place since the start of FY17. Its application resulted in Carbon Revolution including the sale of tooling within revenue and the associated costs in cost of goods sold. Prior to FY19, the net impact was included within operational expenses. There is no net impact on EBITDA or loss after tax.
- 5. Adjustment to reflect the application of AASB 16 Leases as if it had been in place since the start of FY17. AASB 16 requires recognition of most lease liabilities on the statement of finanical position, together with a related right of use asset. As a result of the adoption of AASB 16, lease expenses included within cost of goods sold will decrease and depreciation and interest will increase. The timing of expense recognition will change due to the change from straight-line rental expense to depreciation and interest expenses with an accelerated profile. See Table 1 for further information.
- 6. Adjustment to reflect the proportion of incentives taken up in FY18 and FY19 which were an over-accrual and as such written back to profit in following years.

Table 5 sets out a summary of Carbon Revolution's Statutory Historical Income Statements for FY17 to FY19, and the Statutory Forecast Income Statement for FY20.

Table 5: Statutory historical and forecast consolidated statement of profit or loss and other comprehensive income

		S	cal	Statutory forecast	
\$ million	Notes	FY17	FY18	FY19	FY20
Sale of wheels		7.1	6.7	13.8	60.4
Engineering services	1	0.7	1.3	0.9	1.2
Sale of tooling		_	_	0.4	0.6
Total revenue		7.8	8.0	15.1	62.2
Cost of goods sold	2	(12.2)	(11.3)	(22.5)	(62.0)
Gross profit / (loss)		(4.4)	(3.3)	(7.5)	0.2
Other income	3	3.1	3.1	5.0	3.4
Operational expenses	4	(2.3)	(3.4)	(3.0)	(0.2)
Research and development expenditure	5,6	(4.2)	(8.2)	(4.5)	(6.6)
Administration expenses	7	(3.9)	(5.6)	(6.4)	(9.9)
Marketing expenses	8	(1.3)	(1.5)	(1.7)	(1.8)
Gain /(loss) on revaluation of financial instrument	9	(0.5)	(0.7)	0.5	(87.2)
Capital raising transaction costs	10	_	_	(7.7)	(1.5)
EBIT		(13.5)	(19.5)	(25.2)	(103.7)
Net interest expense	11	(0.6)	(0.7)	(2.0)	(2.3)
Loss before tax		(14.2)	(20.2)	(27.2)	(106.0)
Income tax	12	_	_	_	_
Loss after tax		(14.2)	(20.2)	(27.2)	(106.0)
Add back: Depreciation and amortisation		1.6	2.1	3.3	7.8
EBITDA		(11.9)	(17.4)	(21.9)	(95.9)

#### Notes:

Carbon Revolution has recorded other comprehensive income in relation to the currency translation of foreign operations of less than \$100,000 in each historical financial period disclosed in this Prospectus. As such other comprehensive income has not been separately disclosed in the related Financial Information tables in this Prospectus. No other comprehensive income has been assumed by Carbon Revolution in the Forecast Financial Information.

#### 4.6 Pro forma historical statement of financial position

#### 4.6.1 Overview

Table 6 below sets out the Pro Forma Statement of Financial Position which is based on the Statutory Historical Statement of Financial Position, adjusted for certain pro forma adjustments, as if Completion of the Offer had occurred at 30 June 2019.

Details of the pro forma adjustments made to the Statutory Historical Statement of Financial Position are set out in the notes to Table 6. The Pro Forma Historical Statement of Financial Position is provided for illustrative purposes only and is not represented as being necessarily indicative of Carbon Revolution's view

<sup>1.</sup> to 12. Refer to notes of Table 2.

of its financial position upon Completion of the Offer or at a future date. Further information on the sources and uses of the Offer proceeds is contained in Section 4.6.2.

Table 6: Statutory and pro forma historical consolidated statement of financial position

30 June 2019 Impact of Convertible Impact of the Impact of **Notes Anti-Dilution** \$ million **Notes Statutory** the Offer<sup>1</sup> conversion<sup>2</sup> Arrangements<sup>3</sup> **Pro forma Current assets** 4 45.8 66.4 Cash and cash equivalents 20.5 Receivables 9.0 9.0 Inventories 9.7 9.7 5 Other assets 0.3 0.0 0.4 Current assets - total 64.9 20.6 85.5 Non-current assets Property, plant & equipment 31.5 31.5 7.9 7.9 Intangible assets 39.4 39.4 Non-current assets – total Assets - total 104.3 20.6 124.9 **Current liabilities Payables** (11.7)(11.7)Borrowings 6 (74.0)74.0 (0.0)Deferred income (0.6)(0.6)Provisions (2.5)(2.5)Current liabilities - current (88.9)74.0 (14.9)Non-current liabilities 6 Borrowings (25.5)5.0 (20.5)Deferred income (3.2)(3.2)**Provisions** (0.2)(0.2)Non-current liabilities - total (28.8)5.0 (23.8)Liabilities - total (117.7)5.0 74.0 (38.7)Net assets / (liabilities) (13.4)25.6 74.0 86.2 **Equity** 7 75.9 Contributed equity 27.1 120.5 35.8 259.3 Reserves (0.5)(0.5)Accumulated losses 8 (8.88)(1.5)(46.5)(35.8)(172.6)Equity – total (13.4)25.6 74.0 0.0 86.2

Notes:

<sup>1.</sup> The proforma adjustment relates to the impact of the Offer, being the proceeds (\$30 million) net of the estimated transaction costs (\$4.5 million, excluding GST). The proforma statement of financial position recognises these costs have been allocated between share capital and accumulated losses, based on those Offer transaction costs eligible to be capitalised.

- The pro forma adjustment relates to the Conversion of Convertible Notes borrowings (\$74.0 million, including accrued interest of \$0.6 million to 30 June 2019) into Shares immediately prior to the Offer plus the impact of the associated discount on the Offer price (\$46.5 million).
- The pro forma adjustment relates to the issuance of Shares to Existing Shareholders under the Anti-Dilution Arrangements.
- 4. The pro forma cash balance reflects the impact of the Offer, being the pro forma impact of Cash raised from the Offer of \$30.0 million, net of associated transaction costs of \$4.5 million (including GST) and forecast \$5.0 million repayment of borrowings.
- The pro forma other assets balance reflects the estimated GST receivable on transaction costs of less than \$0.1 million.
- The pro forma borrowings balance reflects the Conversion
  of the Convertible Notes of \$74.0 million into Shares
  immediately prior to the Offer and an amount of \$5.0 million
  which is forecast to be repaid on the Ronal Loan from the
  proceeds of the Offer.
- The pro forma contributed equity increases by \$183.4 million, being:
  - a) proceeds from the Offer net of the proportion of transaction costs eligible to be offset against issued capital (\$2.9 million);
  - b) \$74.0 million from the Conversion of the Convertible Notes immediately prior to the Offer plus \$46.5 million from the discount on the Offer price of 38.58%; and
  - s) \$35.8 million from the issue of Shares under the Anti-Dilution Arrangements.
- 8. The accumulated losses balance reflects the impacts of the Offer and the Convertible Notes Conversion as follows:
  - a) Offer: recognition of Offer transaction costs which are expected to be expensed (\$1.5 million);
  - b) Convertible Notes Conversion: Fair value adjustment on the Conversion of the Convertible Notes relating to the discount on the Offer price of 38.58% plus fair value adjustment up to Completion; and
  - Anti-Dilution Arrangements: Impact of the issue of Shares under the Anti-Dilution Arrangements.

#### 4.6.2 Liquidity and capital resources

Following Completion of the Offer, Carbon Revolution's principal source of funds is expected to be the pro forma cash presented in the pro forma statement of financial position.

Following Completion of the Offer, Carbon Revolution expects to have sufficient working capital (including proceeds from the Offer) to carry out its stated objectives, including to meet its operational requirements and planned capital investment in the business.

Carbon Revolution's ability to generate sufficient cash flow depends on its future performance, which is subject to a number of other factors beyond its control including general economic, financial and competitive conditions.

Carbon Revolution's primary use of funds from the Offer is expected to support the Company's existing operations, the pre-payment of \$5 million of the Ronal Loan and its further growth development initiatives through:

- investment in new manufacturing equipment to reduce unit costs of production and increase production capacity at the Geelong facility;
- continued investment in R&D activities; and
- general corporate purposes.

As part of its normal course operations, Carbon Revolution is currently exploring industry financing mechanisms to fund future working capital requirements arising from underlying growth.

The Directors currently intend to refinance the Ronal Loan, which is due for repayment in June 2021, and are confident that they will be able to arrange an appropriate refinancing package in the ordinary course.

Refer Section 7.1.3 for Sources and uses of Offer Proceeds.

#### 4.6.3 Indebtedness

Table 7 below sets out the pro forma indebtedness of Carbon Revolution derived from the Statutory Historical Statement of Financial Position. The pro forma adjustments reflect the intended capital structure following Completion of the Offer as if it had occurred or was in place as at 30 June 2019.

The pro forma indebtedness does not include the impact of other operating, financing or investing activities from 30 June 2019 to the date of the Offer; hence Management's forecast net cash position as at the date of the Offer (post Completion of the Offer) is also included, which is reflected in the Adjusted Pro Forma indebtedness of Carbon Revolution in the table below.

Table 7: Indebtedness as of 30 June 2019 and after Completion of the Offer

\$ million	Notes	Statutory (before Completion of the Offer)	Pro forma (after Completion of the Offer)	Adjusted pro forma (after Completion of the Offer)
Cash and cash equivalents		45.8	66.4	41.9
Borrowings	1	(99.5)	(20.5)	(20.5)
Total		(53.7)	45.9	21.4

#### Notes:

#### 4.6.4 Contractual obligations and commitments under operating leases and capital commitments

Table 8 summarises Carbon Revolution's contractual obligations and commitments (following Completion of the Offer) under operating leases and capital commitments.

Table 8: Commitments and contingencies as of 30 June 2019

\$ million	Notes	Not later than one year	Later than one year but not later than five years	Later than five years	Total
Non-cancellable operating lease commitments	1	0.8	3.4	4.1	8.3
Non-cancellable capital expenditure	2	2.7	_	_	2.7

#### Notes:

- 1. Operating lease commitments relate to leases over production and office facilities at the Geelong site.
- 2. Capital expenditure commitments relate to amounts on open purchase orders for purchases of machinery.

#### 4.7 Going concern

The Financial Information has been prepared on the going concern basis, which contemplates the continuity of normal business activities and the realisation of assets and settlement of liabilities in the ordinary course of business.

For the year ended 30 June 2019, Carbon Revolution incurred a statutory loss after tax of \$27.2 million (2018: \$20.2 million) and reported net cash outflows from operating activities of \$19.9 million (2018: \$15.9 million) and net cash outflows from investing activities of \$22.7 million (2018: net cash inflow of \$10.6 million). As at 30 June 2019, Carbon Revolution had a net current asset deficiency of \$24.0 million, a net asset deficiency of \$13.4 million and cash on hand of \$45.8 million.

Carbon Revolution is a new technology manufacturing business which is in the process of industrialising its production processes. At this early stage of Carbon Revolution's lifecycle it is essential that it has sufficient capital to fund the research and development required to fully industrialise its production facility and achieve profitability.

During the year, Carbon Revolution successfully issued \$73.4 million of Convertible Notes. These Convertible Notes automatically convert to Shares in the event of the Company listing on the ASX and raising no less than \$25 million or in limited other circumstances, otherwise they have a maturity date of 30 May 2020.

Based on the Forecast Financial Information, the ability of Carbon Revolution to remain as a going concern is dependent on its ability to successfully raise funds under the Offer and execute its strategies as envisaged in the Forecast Financial Information.

The cash flow forecast demonstrates that Carbon Revolution will have sufficient funds, based on the above factors, to meet its commitments over the next twelve months from the date of the Prospectus. Further, at the date of the Prospectus, the Directors are confident Carbon Revolution will be able to continue as a going concern and therefore the Financial Information has been prepared on the going concern basis.

Notwithstanding this, if funds under the Offer are not obtained and execution of strategies as envisaged is not achieved, a material uncertainty would exist relating to the ability of Carbon

<sup>1.</sup> The Convertible Notes borrowings of \$74.0 million will be converted to Shares immediately prior to Completion of the Offer. An amount of \$5.0 million is forecast to be repaid on the Ronal Loan from the proceeds of the Offer.

Revolution to continue as a going concern and therefore whether it will realise its assets and discharge its liabilities in the normal course of business and at the amounts stated in the Financial Information.

The Financial Information does not include any adjustments relating to the recoverability and classification of recorded asset values or to the amounts and classification of liabilities that might be necessary should Carbon Revolution be unable to continue as a going concern.

#### 4.8 Pro forma historical and forecast cash flows and statutory forecast cash flows

#### 4.8.1 Overview

Set out below is a summary of Carbon Revolution's Pro Forma Historical Cash Flow Statements for FY17 to FY19, Pro Forma Forecast Cash Flow Statement for FY20 and the Statutory Forecast Cash Flow Statement for FY20.

Table 9: Pro forma historical and forecast consolidated statement of cash flows and statutory forecast consolidated statement of cash flows

		Pr	o forma histori	Pro forma forecast	Statutory forecast	
\$ million	Notes	FY17	FY18	FY19	FY20	FY20
EBITDA		(13.6)	(17.7)	(16.1)	(8.3)	(95.9)
Non cash items in EBITDA	1	1.2	1.4	1.3	1.4	0.9
Change in working capital	2	(1.3)	0.3	(3.7)	(5.2)	(5.7)
Other	3	_	_	_	_	88.8
Net cash used in operating activities		(13.7)	(16.0)	(18.5)	(12.1)	(11.9)
Capital expenditure	4	(5.8)	(7.2)	(14.9)	(19.1)	(19.1)
Intangible expenditure	5	(0.1)	(0.1)	(7.8)	(8.5)	(8.5)
Net cash used in investing activities		(5.8)	(7.4)	(22.7)	(27.6)	(27.6)
Net cash outflows before financing activities		(19.5)	(23.4)	(41.3)	(39.7)	(39.5)
Net interest paid	6	(0.9)	(0.7)	(1.8)	(2.4)	(2.4)
Net proceeds from / (repayment of) third party borrowings	7	(0.1)	(0.1)	7.5	_	_
Net proceeds from/ (repayment of) related party borrowings	8	5.0	_	(5.0)	(5.0)	(5.0)
Proceeds from capital raising		_	_	_	_	30.0
Capital raising transaction costs		_	_	_	_	(5.3)
Principal repayments on lease liability		(0.1)	(O.1)	(O.1)	(0.5)	(0.5)
Net cash inflows/(outflows)		(15.6)	(24.3)	(40.6)	(47.6)	(22.7)
Opening cash and cash equivalents					66.4	45.8
Closing cash and cash equivalents					18.8	23.1

#### Notes:

- 1. Non cash items in EBITDA relate to the non-cash expense associated with employee share based payments and asset write-offs.
- 2. Working capital comprises trade and other receivables, inventories, other current assets, trade and other payables, deferred income and provisions.
- 3. Other FY20 statutory amounts include loss on revaluation of financial instruments (including the removal of non-cash payment in kind interest accrued on the Convertible Notes) and capital raising transaction costs expensed. Cash flow impact of capital raising transactions costs are financing cash flows.
- 4. Capital expenditure includes cost of purchase of manufacturing equipment, production tooling, facilities upgrades and office equipment.
- Intangibles expenditure includes capitalised development such as the cost of engineering staff, the costs of wheels produced
  for testing and validation purposes, external party wheel testing facilities and third party development partners capitalised in
  accordance with the criteria specified in AASB 138 Intangible Assets
- 6. Net interest paid reflects interest income derived from cash and cash equivalent holdings offset by interest expense in relation to the Ronal Loan and interest component of leases.
- 7. FY17 and FY18 amounts relate to lease payments whereas the FY19 amount relates to proceeds from borrowings under the State of Victoria Loan Facility.
- 8. Relates to proceeds from and repayment of borrowings of the Ronal Loan.

#### 4.8.2 Pro forma adjustments to the statutory historical and forecast cash flows

Table 10 sets out the pro forma adjustments to reconcile the Statutory Historical Cash Flow Statements and the Statutory Forecast Cash Flow Statements to the Pro Forma Historical Cash Flow Statements and Pro Forma Forecast Cash Flow Statement respectively.

Table 10: Pro forma adjustments to the statutory consolidated statements of cash flows

		Historical			Forecast	
\$ million	Notes	FY17	FY18	FY19	FY20	
Statutory net cash flows		18.2	(7.1)	26.7	(22.7)	
Additional listed company costs	1	(1.4)	(0.9)	(0.5)	(0.2)	
Transfer (to)/from Shareholders	2	(1.8)	1.8	_	_	
Transfer (to)/from deposit account	3	18.0	(18.0)	_	_	
Proceeds from capital raising	4	(50.4)	_	(73.1)	(30.0)	
Capital raising transaction costs	4	1.8	_	6.3	5.3	
Pro forma net cash flows		(15.6)	(24.3)	(40.6)	(47.6)	

#### Notes:

- 1. An estimate of the incremental annual costs that Carbon Revolution will incur as a listed company. These incremental costs include share registry fees, non-executive director remuneration, directors' and officers' insurance premiums, additional audit and legal costs, listing fees, investor relation costs, and other expected costs of a listed company.
- 2. Relates to a sale of Shares between Shareholders at the end of FY17, for which the Company acted as an agent. The transaction concluded in July 2017.
- 3. Relates to transfers into and out of term deposits, considered to be investing activities under AAS.
- 4. Relates to the removal of capital raising proceeds (net of associated capital raising transaction costs) associated with historical capital raising events (from FY17 to FY19) and the Offer (FY20) on a pro forma basis.

# 4.9 Management discussion and analysis of pro forma historical financial information

### **4.9.1** General factors affecting the operating results of Carbon Revolution

Below is a discussion of the general factors which affected Carbon Revolution's operations and relative financial performance in FY17, FY18 and FY19 and which the Directors expect may continue to affect financial performance in the future.

The discussion of those general factors is intended to provide a brief summary only and does not detail all factors that affected Carbon Revolution's historical operating and financial performance, nor everything which may affect operations and financial performance in the future.

#### Revenue

The key drivers of Carbon Revolution's revenue are:

- · volume of wheel sales;
- price per wheel;
- · provision of engineering services; and
- sale of tooling to customers.

Price per wheel is determined by the agreements with each OEM. Carbon Revolution has agreements with a number of OEMs, including Ford, Ferrari and Renault, to supply carbon fibre wheels. Given pricing per wheel is largely fixed under the respective agreements, volumes are typically the key drivers of revenue.

Revenue for engineering services reflects the OEM contribution to wheel design and validation activities undertaken prior to the commencement of production to assist Carbon Revolution achieve the specifications unique to each OEM vehicle program. This revenue stream is driven by the number of new products under development.

Revenue from tooling reflects the sale of OEM tooling designed to the specification of each OEM program driven by the number of new products certified for production during the year.

Revenue derived in historical periods, or to be derived in the forecast period, is denominated in Australian Dollars, Euros and US Dollars in contracts with OEMs.

#### Cost of goods sold

The cost of goods sold reflects direct costs incurred in the manufacturing of wheels, the cost of scrapped production wheels associated with OEM programs in active production, an allocation of manufacturing overheads, warranties and the cost of tooling sold to customers. Direct costs include raw materials, production labour costs and other

manufacturing costs such as outsourced supplier costs, repairs and maintenance, consumables and freight (other than to customers). Manufacturing overheads allocated to the cost of wheels include facility management and quality control labour salaries, rent, utilities, depreciation and other associated costs.

Raw material costs include, amongst other items, the cost of carbon fibre and resin. Carbon Revolution seeks to minimise these costs by avoiding highly processed and expensive forms of carbon fibre and has recently commenced sourcing key input resins locally.

Direct labour costs consist of the wages and on costs of all direct production staff.

The cost of goods sold also includes an allocation of production variances (such as buying, material usage and overheads) represented by the volume of wheels sold as a proportion of total wheels moulded.

Currently approximately 16% of cost of goods sold is denominated in foreign currencies; predominantly Euros and US Dollars.

#### **Operational expenses**

Operational expenses comprise inventory net realisable value provision adjustments, scrapped customer tooling costs, an allocation of any remaining production variances (such as buying, material usage and overheads), and the cost of scrapped production wheels (not associated with OEM programs in active production).

#### Research and development expenditure

R&D expenditure comprises labour costs, consultant costs, costs associated with funding the Innovative Manufacturing Cooperative Research Centre (see further section 9.5.9), the cost of wheels used in validation and testing, materials and consumables costs, intellectual property protection costs, computer modelling costs and third-party laboratory testing costs.

Labour costs comprise salaries and wages of product and process engineers and contractors.

The cost of the wheels used in research, validation and testing relate to the development and testing of new wheel architectures and designs, materials and processes. This also includes freight costs to international and domestic testing facilities.

In FY17 and FY18, all R&D expenditure has been expensed in accordance with AASB 138 Intangible Assets (AASB 138). Carbon Revolution met the criteria for capitalisation of development expenditure under AASB 138 in FY19 and the FY20 forecast period assumes that applicable development expenditure is also capitalised. These

amounts are amortised to the profit and loss and other comprehensive income over the expected period of benefit of the development asset, being approximately five years.

#### **Administration expenses**

Administration expenses comprise labour costs of indirect employees, general office expenses and the incremental costs of being a listed company.

Labour costs of indirect employees include salaries, superannuation, payroll tax, work cover, provisions for annual and long service leave and incentive scheme costs for all employees.

General office expenses include items such as Directors' fees (see Section 6.4), insurance, travel and accommodation, information technology, human resources, accounting and legal services costs.

#### Marketing expenses

Marketing expenses are primarily incurred in relation to US and European sales personnel including remuneration and travel. Other costs include marketing wheels, advertising, social media and tradeshows.

#### Working capital

Working capital comprises trade and other receivables, inventories, other current assets, trade and other payables, deferred income and provisions. Working capital excludes creditors or items to the extent that they relate to capital expenditure or cashflows from financing activities.

#### Capital expenditure

Capital expenditure includes payments for the acquisition of manufacturing equipment, production tooling, upgrade of facilities and office equipment.

#### 4.9.2 Pro Forma Historical Results – FY18 compared to FY17

Table 11 sets out the pro forma historical results for FY18 compared to FY17.

Table 11: Pro forma historical consolidated statement of profit or loss and other comprehensive income: FY18 compared to FY17

	Pro form	Pro forma historical		Change	
\$ million	FY17	FY18	\$	%	
Sale of wheels	7.1	6.7	(0.4)	(5.5%)	
Engineering services	0.7	1.3	0.6	84.1%	
Sale of tooling	0.2	0.1	(0.1)	(30.9%)	
Total revenue	8.0	8.1	0.1	1.5%	
Cost of goods sold	(12.3)	(11.4)	0.9	(7.4%)	
Gross profit / (loss)	(4.3)	(3.2)	1.0	(24.1%)	
Other income	3.1	3.1	0.0	1.6%	
Operational expenses	(2.3)	(3.4)	(1.0)	44.7%	
Research and development expenditure	(4.2)	(8.2)	(3.9)	93.1%	
Administration expenses	(6.4)	(6.9)	(0.5)	7.4%	
Marketing expenses	(1.3)	(1.5)	(0.2)	16.6%	
EBIT	(15.4)	(20.0)	(4.6)	29.8%	
Net interest expense	(0.8)	(0.8)	(0.0)	5.9%	
Loss before tax	(16.2)	(20.8)	(4.6)	28.7%	
Income tax	_	_	_	_	
Loss after tax	(16.2)	(20.8)	(4.6)	28.7%	
Add back: Depreciation and amortisation	1.8	2.3	0.5	27.3%	
EBITDA	(13.6)	(17.7)	(4.1)	30.2%	

Notes:

Refer to Notes of table 2

Total revenue increased by \$0.1 million to \$8.1 million.

Wheel sales revenue decreased by \$0.4 million to \$6.7 million, a decrease of 5.5%. The decline in revenue was volume driven with wheel volumes reducing by 9.2% due mainly to a temporary supply constraint arising from the commissioning of Carbon Revolution's automated paint line. The average price per wheel increased by 4.1% due to a shift in program sales mix.

Engineering services revenue increased \$0.6 million to \$1.3 million with engineering work performed under the Ford GT program reaching its final milestones, and continuing work for the Ferrari 488 Pista and other programs.

Gross loss performance during FY18 reflected a combination of an uplift in engineering services revenue and lower sales volume. Cost of goods sold decreased by \$0.9 million to \$11.4 million, representing a decrease of 7.4% in FY18. The decrease in cost of goods sold predominantly reflected the reduction in sales volume.

Operational expenses increased by \$1.0 million (or 44.7%) to \$3.4 million in FY18 mainly due to inventory provisioning for inventory on hand at the end of the year which was expected to be sold below cost.

R&D expenditure increased by \$3.9 million (or 93.1%) to \$8.2 million in FY18. This increase in R&D expenditure was driven by the design and validation phases of programs which are now in production including the Ferrari 488 Pista and Ford Mustang GT500 programs, and on other prospective programs.

Administration and marketing expenses increased by \$0.5 million (7.5%) and \$0.2m (16.6%) respectively largely driven by increases in indirect salaries as a result of executive appointments and the appointment of an additional US based resource as Carbon Revolution continued to scale its business.

Overall EBITDA loss increased by \$4.1 million to negative \$17.6 million in FY18.

#### 4.9.3 Pro Forma Historical Cash Flows – FY18 compared to FY17

Table 12 sets out the Pro forma Historical Cash Flow Statements before financing activities for FY18 compared to FY17.

Table 12: Pro forma historical consolidated statement of cash flows before financing activities: FY18 compared to FY17

	Pro forma	Change		
\$ million	FY17	FY18	\$	%
EBITDA	(13.6)	(17.7)	(4.1)	30.2%
Non cash items in EBITDA	1.2	1.4	0.2	16.4%
Change in working capital	(1.3)	0.3	1.6	(122.1%)
Net cash used in operating activities	(13.7)	(16.0)	(2.3)	16.9%
Capital expenditure	(5.8)	(7.2)	(1.5)	25.8%
Intangible expenditure	(0.1)	(0.1)	(0.0)	56.3%
Net cash used in investing activities	(5.8)	(7.4)	(1.5)	26.2%
Net cash outflows before financing activities	(19.5)	(23.4)	(3.8)	19.6%

Notes:

Refer to notes of Table 9

Net cash outflows from operations increased by \$2.3 million to \$16.0 million predominantly due to the decline in EBITDA (\$4.1 million) offset by the improvement in working capital (\$1.6 million). A significant cause of the favourable working capital movement was the receipt of FY16 and FY17 R&D incentive refunds in FY18 (\$1.3 million reduction in the amount receivable from FY17 to FY18).

Capital expenditure increased by \$1.5m to \$7.2m with the building and commissioning of a high pressure, rapid injection moulding line during FY18.

#### 4.9.4 Pro Forma Historical Results – FY19 compared to FY18

Table 13 sets out the Pro Forma Historical Income Statements for FY19 compared to FY18.

Table 13: Pro forma historical consolidated statement of profit or loss and other comprehensive income: FY19 compared to FY18

	Pro forma historical			Change		
\$ million	FY18	FY19	\$	%		
Sale of wheels	6.7	13.8	7.1	105.8%		
Engineering services	1.3	0.9	(0.4)	(30.6%)		
Sale of tooling	0.1	0.4	0.2	174.7%		
Total revenue	8.1	15.1	7.0	85.8%		
Cost of goods sold	(11.4)	(22.4)	(11.0)	97.3%		
Gross profit / (loss)	(3.2)	(7.3)	(4.1)	126.2%		
Other income	3.1	5.0	1.8	57.5%		
Operational expenses	(3.4)	(3.0)	0.3	(9.8%)		
Research and development expenditure	(8.2)	(4.5)	3.7	(45.2%)		
Administration expenses	(6.9)	(8.3)	(1.5)	21.3%		
Marketing expenses	(1.5)	(1.7)	(0.2)	10.3%		
EBIT	(20.0)	(19.9)	0.1	(0.7%)		
Net interest expense	(0.8)	(2.5)	(1.7)	204.6%		
Loss before tax	(20.8)	(22.4)	(1.6)	7.4%		
Income tax	_	_	_	_		
Loss after tax	(20.8)	(22.4)	(1.6)	7.4%		
Add back: Depreciation and amortisation	2.3	3.8	1.4	61.5%		
EBITDA	(17.7)	(16.1)	1.6	(8.8%)		

Notes:

Refer to Notes of table 2

Total revenue increased by \$7.0 million to \$15.1 million, an increase of 85.8%.

Wheel sales revenue increased by \$7.1 million (105.8%) to \$13.8 million reflecting significant volume growth (79.4% increase). While shipments were higher on all programs, over half of the volume increase related to the sale of wheels to Ferrari in respect of the 488 Pista program. The FY19 average price per wheel was 14.7% higher than FY18 principally due to a favourable shift in the sales mix.

Engineering services revenue decreased \$0.4 million to \$0.9 million with revenue earned each year based on deliverables for each development program. The majority of the engineering work in FY19 related to the completion of the Ferrari SF90 Stradale program. The majority of the FY19 tooling revenue also related to Ferrari programs.

Gross loss performance during FY19 reflected the reduction in engineering services revenue (\$0.4m) and increased wheel sales volume at a 7.5% improvement in wheel sales margin. A positive direct wheel contribution (revenues less direct cost of production including scrap and freight) was achieved for the first time in the four month period ended 30 June 2019.

Other income increased \$1.8 million to \$5.0 million in FY19 due to additional R&D tax incentive income relating to R&D related activities as described below.

R&D expenditure decreased by \$3.7 million, with FY19 being the first year in which development expenses met the criteria for capitalisation. During the year, \$7.7 million of development costs were capitalised within

intangible assets on the statement of financial position on which \$0.4 million of amortisation expense was incurred. The underlying increase on the prior year is due to continued investment in OEM programs and collaboration with external parties on development activities.

Administration expenses increased by \$1.5 million to \$8.2 million mainly due to the increase in employee incentives with a higher incentive achievement rate and an extended executive team in FY19.

Net interest expenses increased by \$1.7 million to \$2.5 million due to lower interest income earnt during FY19, facility fees on a new borrowing and higher interest expense incurred on the existing Ronal Loan.

Overall EBITDA loss reduced by \$1.6 million to negative \$16.0 million in FY19.

#### 4.9.5 Pro Forma Historical Cash Flows – FY19 compared to FY18

Table 14 sets out the Pro forma Historical Cash Flow Statements before financing activities for FY19 compared to FY18.

Table 14: Pro forma historical consolidated statement of cash flows before financing activities: FY19 compared to FY18

\$ million	Pro forma historical		Change	
	FY18	FY19	\$	%
EBITDA	(17.7)	(16.1)	1.6	(8.8%)
Non cash items in EBITDA	1.4	1.3	(O.1)	(5.6%)
Change in working capital	0.3	(3.7)	(4.0)	n/a
Net cash used in operating activities	(16.0)	(18.5)	(2.5)	15.9%
Capital expenditure	(7.2)	(14.9)	(7.7)	105.6%
Intangible expenditure	(0.1)	(7.8)	(7.7)	n/a
Net cash used in investing activities	(7.4)	(22.7)	(15.4)	208.6%
Net cash outflows before financing activities	(23.4)	(41.3)	(17.9)	76.8%

Notes:

Refer to notes of Table 9

Net cash outflows from operations increased by \$2.5 million to \$18.5 million. The increase in sales volume drove an increase in working capital requirements with the \$4.0 million increase offsetting the reduced EBITDA loss (\$1.6 million).

Capital expenditure rose by \$7.7 million to \$14.9 million as building and manufacturing equipment expansion activities were incurred to support Carbon Revolution's future growth and industrialisation initiatives. Intangible expenditure movement year on year of \$7.7m represents the FY19 capitalised development costs.

# **4.10** Management discussion and analysis of the forecast financial information

The basis of preparation of the Forecast Financial Information is set out in Section 4.2.3. This Section describes the general assumptions and specific assumptions adopted in preparation of the Forecast Financial Information.

#### 4.10.1 General assumptions

In preparing the Forecast Financial Information, the following general assumptions have been adopted:

- no significant deviation from current market expectations of the broader economic conditions relevant to the geographic markets in which Carbon Revolution operates;
- no material disruption to the continuity of operations of Carbon Revolution nor other material changes in its business;
- no material changes in Federal, State or local government legislation, tax legislation, regulatory requirements or government policies that will have a material impact on Carbon Revolution's financial performance, cash flows, financial position and accounting policies;
- no material changes in applicable accounting standards, other mandatory professional reporting requirements or the Corporations Act, which will have a material impact on Carbon Revolution's financial performance, financial

position, accounting policies, financial reporting or disclosure;

- no loss of key personnel and Carbon Revolution maintains its ability to recruit and retain the personnel required to support future growth;
- no change in Carbon Revolution's capital structure, other than changes flowing directly from the Offer as set out in or contemplated in this Prospectus;
- no risks as set out in Section 5 transpire, or if they do, they do not have a material adverse impact on Carbon Revolution's operations; and
- proceeds from the Offer are raised in accordance with the timetable and terms set out in this Prospectus.

#### 4.10.2 Specific assumptions

The Directors' specific assumptions that have been used in the preparation of the Forecast Financial Information are set out below.

#### Revenue

Revenue from the sale of wheels is forecast for each OEM program with volumes and prices determined with reference to supply agreements, purchase orders and forecasts from OEMs. Revenue forecasts also consider expected production capacity and Carbon Revolution's expected growth in demand for its products. Revenue from engineering services and customerowned tooling is forecast based on expected deliverables for each development program.

#### Cost of goods sold

Cost of goods sold is forecast based on the following factors:

- Direct labour productivity with reference to historical labour efficiency rates adjusted for expected benefits from the realisation of Carbon Revolution's industrialisation activities and program specific factors expected to be implemented;
- Direct labour unit cost reflects current labour contracts, including on-costs (superannuation, payroll tax, Workcover, annual/sick leave and leave loading) and expected usage rates per program.
- Direct raw material costs are projected based on current supply contracts or in some cases cost reductions for specific inputs based on supplier quotes;
- Consumables, minor assets and repairs and maintenance are forecast based on

- expected benefits from the realisation of its industrialisation activities;
- Indirect manufacturing costs (plant management, quality department, rent, utilities, maintenance staff, OH&S, facility supplies) and fixed asset depreciation are fully allocated to each unit of production based on forecast moulded volumes for the year. Estimates of these costs are based on historical data with increases to reflect higher business activity and growth (such as rent on the recent facility expansion, increased consumption of utilities, increased OH&S costs etc.) and economies of scale derived from forecast volume increases:
- Estimated scrap allowances by program based on historical, current performance and expected improvements, with higher rates adopted for recently, or soon to be, commenced programs;
- Allowance for costs associated with product warranty provisions;
- · Cost to produce customer-owned tooling; and
- Cost for freight and logistics, including inbound raw materials, freight to and from outsourced processes where applicable and to customers where applicable.

#### Other income

Other income includes recognition of grant income aligned with the depreciation profile of related plant & equipment or relevant milestones and quarterly Automotive Transformation Scheme (ATS) payments. The estimate for quarterly ATS payments is based on the scheme cap (5% of previous year sales).

While Carbon Revolution expects to remain eligible to claim tax incentives for R&D expenditure in FY20, it should be noted that this incentive is not available as a cash rebate to companies with a turnover that exceeds \$20 million.

#### **Operational expenses**

The key operational expenses assumption is the estimate of the movement in scrap and inventory provisioning to account for net realisable values, impaired or obsolete wheels and raw materials for forecast inventory on hand at the end of the year.

#### Research and development expenditure

R&D expenditure is forecast based on historical costs for similar OEM programs adjusted to reflect unique factors in relation to specific programs. This includes wheel architecture, process changes and the testing/validation program agreed with the relevant OEM. Estimates for internal core technology R&D are forecast

on a project-by-project basis and include costs associated with Carbon Revolution's Innovative Manufacturing Cooperative Research Centre arrangement with Deakin University (see section 9.5.9 for further information). R&D expenditure includes the salaries of product and process engineers based on existing and anticipated headcount and anticipated salary levels.

In FY17 and FY18, all R&D expenditure has been expensed in accordance with AASB 138 *Intangible Assets*. Carbon Revolution met the criteria for capitalisation of development expenditure under AASB 138 in FY19 and the FY20 forecast period assumes that applicable development expenditure is capitalised. These amounts will be amortised to the statement of profit and loss and other comprehensive income over the expected period of benefit of the development asset, being approximately five years.

#### **Administration and Marketing expenses**

The labour cost component of administration and marketing expenses is forecast assuming existing indirect finance, administration and sales roles adjusted for specific roles identified to support expansion. Salary levels inclusive of on-costs are forecast based on existing levels with allowance for inflationary increases. Incentive scheme costs assume all relevant performance metrics will be achieved.

All other general, administration and marketing costs have been forecast with reference to historical expenditure, and are adjusted to reflect the expanded facility, projected headcount, inflation and other relevant factors.

#### **Exchange rates assumptions**

The following exchange rates were assumed in preparing the Forecast Financial Information:

	AUD: EURO	AUD: USD	
FY20	0.62	0.70	

#### Working capital

Working capital comprises trade and other receivables, inventories, other current assets, trade and other payables, deferred income and provisions. Working capital excludes creditors or other items to the extent that they relate to capital expenditure or cashflows from financing activities.

#### Capital expenditure

Capital expenditure includes payments for the acquisition of manufacturing equipment, production tooling, upgrades to the building and office equipment. The table below outlines the FY20 forecast of capital expenditure by category:

Capex by category FY20	Additions (\$m)	Cash flow (\$m)
Manufacturing equipment	13.3	14.4
Tooling (excluding customer-owned)	3.1	3.5
Buildings	0.6	0.5
Office equipment	0.8	0.7
Total Capex	17.8	19.1

#### Intangible expenditure

Intangible expenditure includes capitalised development expenditure which reflects the cash paid for the portion of development expenditure that qualifies for capitalisation in accordance with AASB 138 Intangible Assets (refer to the section titled 'Research and development expenditure' above). The expenditure includes salaries, consultant costs, third party laboratory costs, licence fees and wheels used in development activities at standard cost. Capitalised development expenditure amortisation is assumed on a straight-line basis over the effective life of the associated OEM program or capital project, estimated to be five years.

#### 4.10.3 Pro Forma Forecast Results for FY20 compared to Pro Forma Historical Results for FY19

Table 15 sets out the Pro Forma Forecast Income Statement for FY20 compared to the Pro Forma Historical Income Statement for FY19.

Table 15: Pro forma historical and forecast consolidated statement of profit or loss and other comprehensive income: FY20 compared to FY19

	Pro forma historical	Pro forma forecast		Change
\$ million	FY19	FY20	\$	%
Sale of wheels	13.8	60.4	46.6	336.4%
Engineering services	0.9	1.2	0.3	30.9%
Sale of tooling	0.4	0.6	0.1	30.4%
Total revenue	15.1	62.2	47.1	312.8%
Cost of goods sold	(22.4)	(62.0)	(39.6)	176.9%
Gross profit / (loss)	(7.3)	0.2	7.5	(102.5%)
Other income	5.0	3.4	(1.6)	(32.3%)
Operational expenses	(3.0)	(0.2)	2.9	(94.5%)
Research and development expenditure	(4.5)	(6.6)	(2.1)	46.6%
Administration expenses	(8.3)	(11.1)	(2.8)	34.0%
Marketing expenses	(1.7)	(1.8)	(O.1)	6.1%
EBIT	(19.9)	(16.1)	3.8	(19.0%)
Net interest expense	(2.5)	(2.3)	0.2	(8.7%)
Loss before tax	(22.4)	(18.4)	4.0	(17.8%)
Income tax	_	_	_	_
Loss after tax	(22.4)	(18.4)	4.0	(17.8%)
Add back: Depreciation and amortisation	3.8	7.8	4.1	108.3%
EBITDA	(16.1)	(8.3)	7.8	(48.6%)

Notes:

Refer to Notes of table 2

Revenue is forecast to increase by \$47.1 million (312.8%) to \$62.2 million in FY20, with the majority (65.8%) of this forecast to be generated in the second half of the financial year consistent with the continuing growth in new and existing programs.

The significant forecast increase is driven primarily by increased wheel sales (300.4% increase in volume) in both existing OEM programs and new OEM programs that are entering production. Of the expected growth in FY20, 40% is forecast to arise from the expansion of existing programs, including the full year impact of the Ferrari 488 Pista program, while 60% of the forecast growth is forecast to arise from new programs entering production in FY20, including the Ford Mustang GT500, Ferrari SF90 Stradale and Renault Megane R.S. Trophy-R programs. Average price per wheel is

forecast to rise by 9.0% due to forecast changes in the sales mix.

Over 93% of the FY20 sale of wheels revenue comprises forecast sales in relation to the following OEM programs currently in production:

- Ford Mustang GT350R;
- Ford Mustang GT500;
- Ferrari 488 Pista: and
- Ferrari SF90 Stradale.

The remaining sale of wheels revenue relates to the other two programs also in production, being the Ford GT program and Renault Megane R.S. Trophy-R program, and sales arising during the course of development activities for programs not in production in FY20.

Revenue from engineering services and tooling is also forecast to increase due to the expected timing of deliverables for those customer programs.

Gross profit is forecast to improve by \$7.5 million to \$0.2 million, driven by a combination of:

- increased average price per wheel as a result of a change in product sales mix;
- reduced direct costs of production arising primarily from reduced raw material costs and improved direct labour productivity arising from the realisation of Carbon Revolution's industrialisation activities;
- the forecast shift in sales mix towards products, such as the Ford Mustang GT500 wheel, which have higher levels of automation in the manufacturing process; and
- improved recovery of manufacturing overheads arising from higher production volumes.

Reductions in the cost of production per wheel have been forecast to accumulate over the course of the financial year as incremental savings and efficiencies are realised. A significant proportion of the cost reduction has been forecast to come in the second half of the financial year as a result of the scaling of wheel sales volumes.

FY20 other income of \$3.4 million is forecast to fall by \$1.6 million (FY19: \$5.0 million) with no R&D concession income, partially offset by additional grant income.

Operational expenses are expected to reduce by \$2.9 million to \$0.2 million due to an improvement in gross margin achieved on new programs resulting in a reduction in inventory provisions as wheels are forecast to become profitable and no forecast asset write-offs.

R&D expenditure is forecast to increase by \$2.1 million to \$6.6 million as development activities on programs that are currently entering production are completed and development activities on programs that support Carbon Revolution's future sales pipeline are undertaken. Carbon Revolution will also continue to undertake R&D activities to develop its core technology portfolio.

Administration expenses are expected to increase by \$2.8 million to \$11.0 million due principally to an increase in employment costs including salaries, on-costs and incentives.

Overall EBITDA loss is forecast to reduce by \$7.8 million to negative \$8.3 million in FY20. Carbon Revolution has forecast to become EBITDA positive during the fourth quarter of FY20 on both a pro forma and statutory basis.

#### 4.10.4 Pro Forma Forecast Cash Flow Statement for FY20 compared to Pro Forma Historical Cash Flow Statement for FY19

Table 16 sets out the Pro Forma Forecast Cash Flow Statement for FY20 compared to the Pro Forma Historical Cash Flow Statement for FY19, in each case before financing activities.

Table 16: Pro forma historical and forecast consolidated statement of cash flows before financing activities: FY20 compared to FY19

	Pro forma historical	Pro forma forecast	(	Change
\$ million	FY19	FY20	\$	%
EBITDA	(16.1)	(8.3)	7.8	(48.6%)
Non cash items in EBITDA	1.3	1.4	0.1	4.3%
Change in working capital	(3.7)	(5.2)	(1.5)	38.9%
Net cash used in operating activities	(18.5)	(12.1)	6.4	(34.8%)
Capital expenditure	(14.9)	(19.1)	(4.2)	28.2%
Intangible expenditure	(7.8)	(8.5)	(0.6)	8.2%
Net cash used in investing activities	(22.7)	(27.6)	(4.8)	21.3%
Net cash outflows before financing activities	(41.3)	(39.7)	1.6	(3.9%)

Notes:

Refer to notes of Table 9

The improved EBITDA loss of \$8.3 million will largely flow through to forecast net cash outflows from operations of \$12.1 million, a favourable movement of \$6.4 million. The significant increase in sales volumes will cause an increase in working capital requirements of \$1.5 million.

Capital expenditure is forecast to increase by \$4.2 million to \$19.1 million as expansion activities required to support the FY20 volume increase are completed and further investment to support Carbon Revolution's future expansion are undertaken. Intangible expenditure of capitalised development cost is forecast to increase by \$0.6 million to \$8.5 million as R&D activities are continued.

#### **4.11** Sensitivity analysis

The Forecast Financial Information is based on a number of estimates and assumptions, as described in Section 4.10. These estimates and assumptions are subject to business, economic and competitive uncertainties and contingencies, many of which are beyond the control of Carbon Revolution, the Directors and Management, and upon assumptions with respect to future business decisions, which are subject to change. The Forecast Financial Information is also subject to a number of risks including those outlined in Section 5.

Investors should be aware that future events cannot be predicted with certainty and as a result, deviations from the amounts forecast in this Prospectus are to be expected. To assist investors in assessing the impact of these assumptions on the Forecast Financial Information, the sensitivity of the forecast pro forma loss after tax for FY20 of \$18.4 million to changes in certain key assumptions is set out below. The changes in the key variables set out in the sensitivity analysis are not intended to be indicative of the complete range of variations that may be experienced.

Care should be taken in interpreting these sensitivities. In order to illustrate the likely impact on the Forecast Financial Information, the estimated impact of changes in each of the assumptions has been calculated in isolation from changes in other assumptions. In practice, changes in assumptions may offset each other or be additive, and it is likely that Carbon Revolution's Management would respond to any changes in one item to seek to minimise the net effect on Carbon Revolution's earnings and cash flow.

The sensitivity analysis set out below is intended to provide a guide only and variations in actual performance could exceed the ranges shown, and these variances may be substantial. For example, the forecast is premised on a significant increase in sales volume, particularly driven by the commencement of new programs and it is possible that the rate of increase in sales volume from new programs does not increase at the rate forecast in the financial year.

Table 17: Sensitivity analysis on the pro forma forecast net loss after tax

\$ million	Notes	Increase / decrease	FY20 pro forma net loss after tax impact
Change in sales volume in the second half of FY20	1	+/-10%	0.7 / (0.7)
Change in average price per wheel	2	+/-2%	1.2 / (1.2)
Change in average direct cost per wheel (including scrap)	3	+/-5%	(2.2) / 2.5
Change in A\$:US\$ exchange rate	4	+/-10%	(0.1) / 0.1
Change in A\$:Euro exchange rate	5	+/-10%	2.0 / (2.0)

#### Notes:

- 1. The impact of an increase or decrease in sales volumes has been calculated with reference to the second half of FY20 given the forecast concentration of sales volumes growth in that half of the financial year. Similarly, the second half of FY20 captures the impact of accumulated incremental forecast cost and efficiency savings.
- 2. The average price per wheel sensitivity factor of 2% has been assessed by Carbon Revolution with reference to the pricing terms set out in OEM contracts.
- 3. Direct cost per wheel includes raw materials, production labour costs and other manufacturing costs such as outsourced supplier costs, the cost of scrapped production wheels for active OEM programs, repairs and maintenance, consumables and internal freight.
- 4. In FY20, a proportion of revenue is forecast to be transacted in US\$, and a proportion of the cost of goods sold and operating costs are forecast in US\$. This reflects the sensitivity of Carbon Revolution's reported earnings in A\$ to actual translation rates that will fluctuate during FY20 relative to the forecast assumptions.

5. In FY20, a proportion of revenue is forecast to be transacted in EURO, and a proportion of the cost of goods sold and operating costs are forecast in EURO. This reflects the sensitivity of Carbon Revolution's reported earnings in A\$ to actual translation rates that will fluctuate during FY20 relative to the forecast assumptions.

#### 4.12 Dividend policy

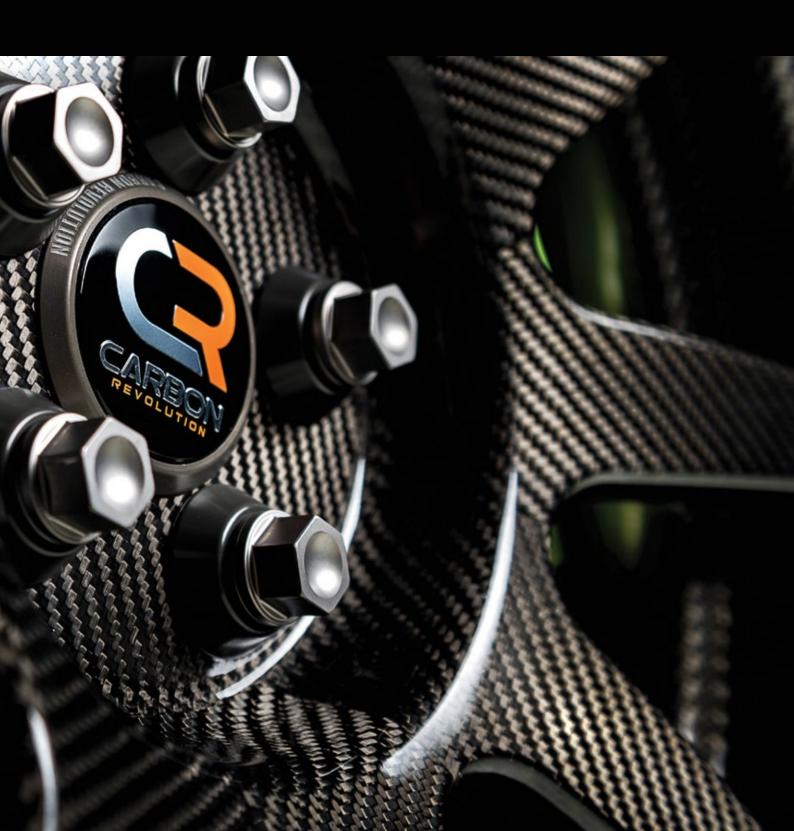
The Company does not expect to pay dividends in the foreseeable future as its focus will primarily be on using available funds to grow and develop its business. Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend upon matters such as the availability of distributable earnings, the operating results and financial condition of Carbon Revolution, future capital requirements as well as general business and other factors considered relevant by the Directors. Even if dividends are paid in the future, no assurances are given in relation to whether such dividends may attach franking credits.

For further information in relation to the Company's ability to pay franked dividends, see Section 5.1.24.

# 

# KEY RISKS





### 5 Key risks

This Section 5 outlines some of the potential risks associated with Carbon Revolution's business and an investment in its Shares.

An investment in Carbon Revolution is subject to risk factors, some of which are specific to Carbon Revolution's business activities and others that are of a more general nature.

Any single risk, or a combination of these risks, may have a material adverse impact on Carbon Revolution's business, financial performance and operations. This Section does not purport to list every risk that may be associated with an investment in Shares now or in the future. While Carbon Revolution seeks to manage risks to prevent adverse outcomes, many of these risks are outside the control of Carbon Revolution, the Board and Management.

The selection of risks in this Section has been based on an assessment of a combination of the likelihood of the risk occurring, and the impact of the risk if it did occur. This assessment is based on the knowledge of the Board and Management as at the Prospectus Date. There is no guarantee or assurance that the importance of different risks will not change or other risks will not emerge.

There can be no guarantee that Carbon Revolution will deliver on its business strategy, or that the forecasts or any forward-looking statement contained in this Prospectus will be achieved or realised. You should note that past performance is not an indicator of future performance.

Before applying for Shares, you should satisfy yourself that you have a sufficient understanding of these matters and you should consider whether Shares are a suitable investment for you, having regard to your own investment objectives, financial circumstances and taxation position. If you do not understand any part of this Prospectus or are in any doubt as to whether to invest in Shares, you should seek professional guidance from your solicitor, stockbroker, accountant or other independent and qualified professional adviser before deciding whether to invest.

# 5.1 Risks specific to an investment in Carbon Revolution

# **5.1.1** Carbon Revolution may not be able to execute its plans and forecasts

Carbon Revolution is currently an early stage business which does not yet generate profits and produces only a limited number of wheels per annum. As outlined in Section 3 of this Prospectus, Carbon Revolution intends to further industrialise its operations to achieve a material reduction in its unit costs of production. Carbon Revolution also intends to further grow its wheel sales.

As such, Carbon Revolution's ability to achieve its anticipated growth is dependent to a significant degree on the successful implementation of its industrialisation plans and growth strategy. There is a risk that these plans may not be successful, or may take longer or cost more than anticipated, which would adversely affect Carbon Revolution's financial position and performance.

#### **5.1.1.1** Failure to achieve industrialisation plans

Carbon Revolution's plan to further industrialise its manufacturing activities is required to substantially increase wheel production volumes while also achieving a material reduction in unit costs of production. This process poses a significant engineering challenge as it involves simultaneous engineering of product, materials, process and equipment.

Carbon Revolution's industrialisation plans and approach are set out in detail in Section 3.4.2. The achievement of these plans requires Carbon Revolution to overcome technological and logistical challenges, and will require Carbon Revolution and its suppliers to design, construct and commission a range of equipment for its manufacturing facilities, including equipment that further automates existing processes currently completed by more manual processes. The industrialisation plan, and the reduction in unit costs of production dependent on that plan, includes forecasts for efficiencies resulting from reduced manual labour, reduced processing times or other efficiencies achieved from introduction of this equipment. There is a risk that this process may take longer than anticipated, cost more than anticipated, not achieve the forecast manual labour or processing time reductions, or that unforeseen issues may arise during the engineering or commissioning process. There is also a risk that the capital cost of expanding operations may be higher than anticipated resulting in a lower return on investment than expected.

As such, Carbon Revolution may not be able to automate and scale its manufacturing capacity to increase production and reduce the unit costs of production of its wheels when it anticipates or at all, or it may be forced to incur additional unanticipated costs to do so (for example by purchasing additional equipment if planned equipment purchases do not perform as anticipated). The ability to automate and scale its manufacturing capacity is a key factor

in its plans to meet obligations under its existing OEM supply contracts, increase its wheel sales volumes and revenues, and achieve its forecasts, and if it cannot do so it will have a material adverse impact on Carbon Revolution's performance and prospects.

Inability to reach its industrialisation targets, or delays in doing so, may occur for a range of reasons, including if:

- installation and commissioning of new or upgraded equipment falls behind schedule, for example due to inadequate human resourcing, or if estimated design, construction, installation and/or commissioning times are insufficient. A material, current example of this is the installation of an additional automated rim lay-up machine. This machine is an additional machine with the same design as machines already in use by Carbon Revolution. A delay in installation and commissioning would delay an increase in production capacity from 120 wheels per day (the expected rate at the time of commissioning of this equipment) to 150 wheels per day. Additional challenges may occur in the design, construction, installation and/or commissioning of other equipment that is "next generation" equipment that is an improvement on equipment already in use:
- the capital cost of the equipment is more expensive than targeted. The design process can result in equipment being more expensive than initially planned. For example, Carbon Revolution's industrialised press knife equipment is still being designed and may cost more than anticipated based on the lower scale equipment trials already conducted;
- upgraded equipment does not achieve the cycle times or footprints estimated in Carbon Revolution's industrialisation plan, either at all or at the commencement of production. For example, the Ferrari 488 Pista wheel is currently being produced on a semi-automated rim layup machine, however Programs 4 and 5 require the next generation of this technology to deliver improved cycle times in order to meet customer volume expectations, but given this equipment is not yet in production there is a risk that the anticipated cycle times will not be achieved, either initially or in the longer term;
- upgraded equipment does not achieve the quality targets estimated in Carbon Revolution's industrialisation plan, either at all or at the commencement of production;
- actual product design and specifications change or do not satisfactorily fulfil customer requirements. This may necessitate the use of alternative materials and processes which in

- turn may require alternative industrialisation solutions to be applied. If such changes are made without sufficient time to develop, commission and validate industrialised processes in time for the start of production, then this may result in less industrialised processes being implemented or additional validation costs being incurred subsequently to implement industrialised processes on customer programs. In each of the six programs already in production, Carbon Revolution was required to make some level of changes to materials or processes during the wheel design and validation process. In some cases, interim solutions such as proto-type industrialised equipment were designed and commissioned with a view to full industrialisation on subsequent programs;
- unforeseen technical production issues occur following commencement of operation of new equipment, new processes, materials or product designs.

## **5.1.1.2** Demand for Carbon Revolution's wheels may be lower than anticipated

As noted above, Carbon Revolution's growth is predicated on various assumptions relating to demand for its wheels, including conversion of its existing OEM customer pipeline into additional OEM supply contracts. There are a range of factors which may result in demand for Carbon Revolution's wheels being lower than anticipated. For example, notwithstanding experience to date, under Carbon Revolution's current OEM supply contracts, which are typical of the industry, customers are not committed to purchase a minimum number of wheels and therefore there is no quarantee that Carbon Revolution will secure the sales volume it anticipates from its existing customer contracts. This may occur for reasons outside Carbon Revolution's control, including if demand for the OEM's vehicle on which Carbon Revolution's wheels are included is lower than expected or, where Carbon Revolution's wheels are an option on the relevant vehicle, the customer take up rate of the option is lower than anticipated. Additionally, Carbon Revolution is in early stage discussions with a range of other OEMs, and failure to convert this pipeline of potential customers into additional contracts, or any other failure to sell the volume of wheels, at the targeted price, that Carbon Revolution anticipates (for example if Carbon Revolution cannot reduce production costs (see Section 5.1.1.1) or if its addressable market is smaller than anticipated (see Section 5.1.8)), will result in Carbon Revolution failing to meet its growth targets, which will adversely impact Carbon Revolution's ability to generate revenue. Failure to generate sufficient revenue in the future may

in turn impact on Carbon Revolution's long-term financial performance.

# **5.1.2** Carbon Revolution has only a limited number of **OEM** customers and relationships with them may be lost or deteriorate

As noted in Section 3.1 Carbon Revolution currently has supply contracts in place for nine vehicle programs (with less than nine OEM customers). As such, the effect of losing any one OEM customer, or customer program, may significantly adversely affect Carbon Revolution's financial performance and prospects, and Carbon Revolution's OEM customers can readily terminate their relationship with Carbon Revolution should they choose to do so (for further information in relation to Carbon Revolution's customer contracts, see section 9.5.3). Further, an inability to enter into additional supply contracts and attract additional OEM customers may negatively impact on Carbon Revolution's prospects and likely future financial performance.

There are a range of factors which may lead to an OEM terminating its existing supply Contract with Carbon Revolution, existing OEM customers not seeking additional supply Contracts with Carbon Revolution, or may lead OEMs to discontinue their relationships or discussions with Carbon Revolution (including where an engineering contract is in place). These factors include but are not limited to many of the risks outlined in this Section 5, for example if Carbon Revolution fails to achieve its industrialisation plans and does not supply OEMs in the volumes required under the supply Contracts (or at all) (see Section 5.1.1.1), if Carbon Revolution loses relationships to competitors (see Section 5.1.9), if one or more failures of Carbon Revolution's manufacturing facilities causes delays in production (see Section 5.1.12), if Carbon Revolution suffers from worse than anticipated production quality issues (see Section 5.1.4), if key staff of Carbon Revolution leave and key customer relationships are lost (see Section 5.1.6) or if Carbon Revolution suffers reputational damage or has product performance issues (see Section 5.1.7).

# **5.1.3** Carbon Revolution is not yet profitable or cash flow positive

Carbon Revolution is not yet profitable and does not generate enough funds from its operations to continue those operations, it is anticipated that Carbon Revolution will not become profitable in the forecast period.

Carbon Revolution is party to the Ronal Loan, under which Carbon Revolution must pay Ronal the principal amount outstanding, which will be \$13 million after a pre-payment of \$5 million using some of the proceeds raised under the Offer, plus accrued interest, by 30 June 2021, and may be

required to make additional pre-payments before this time (see Section 9.5.7 for further details). Carbon Revolution is also party to the Grant Agreement with the State of Victoria, under which Carbon Revolution was provided with an Early Advance, \$5.5 million of which is outstanding and expected to be repayable on 30 June 2021 (to the extent not set-off against grant moneys which become payable as the Company satisfies the relevant grant deliverables and conditions).

Carbon Revolution's ability to raise funds if required, to meet its operational requirements and repay Ronal or the State of Victoria, through debt or the issue of securities will be subject to factors beyond the control of Carbon Revolution and its Directors, including cyclical factors affecting the economy and capital markets. There is no guarantee that such funding, whether debt, equity or otherwise, will be obtained or available on favourable terms, or at all. Any inability to raise funds when required may adversely impact on Carbon Revolution's financial performance and prospects.

Conversely, if additional funds are raised through the issue of further equity, this could dilute the interests of Shareholders, and debt financing, if available, may involve restrictions on financing and operating activities.

Finally, Carbon Revolution has a limited operating history and has not yet become profitable and, as such, its operating history does not provide a meaningful basis for investors to evaluate the business or its financial performance and future prospects. Accordingly, investors should consider Carbon Revolution's business and prospects in light of the risks, uncertainties, expenses and challenges that a business may face as an early stage business.

# **5.1.4** Carbon Revolution is subject to inherent risks in the development and use of new technology

There are many risks inherent in the development and use of new technology, and in particular, the manufacturing of composite materials is known to be complex. Carbon Revolution is now in the process of improving its manufacturing technology and establishing industrialised processes, the implementation of which may be challenging and involves the risks inherent in the development and use of new technology.

This may result in Carbon Revolution's product being difficult to profitably commercialise. Due to wheels being an important structural component, the cost and time required to develop new wheel technology and to obtain customer validation for new wheels can be uncertain. If Carbon Revolution is unable to successfully continue to develop its existing or new technology, it may not be able to achieve its growth plans, which would adversely affect its operations, financial position and performance.

The above risks may also result in higher scrap rates and quality issues than anticipated after customer validation and commencement of production. For example, recently Carbon Revolution implemented an automated grit blasting process to reduce labour time associated with preparing the surface of the wheel prior to painting. This process has been successful but for a period it resulted in a higher than anticipated level of scrap parts (for aesthetic reasons) due to an unforeseen issue with some areas of some wheels being blasted too aggressively. Work was successfully undertaken to improve the consistency of this process.

Higher scrap rates or quality issues may result in higher costs, and/or delays in deliveries to customers, which could result in Carbon Revolution being required to pay costs or damages to its customers, or result in negative customer perception about Carbon Revolution's ability to meet its supply obligations under its supply contracts. This in turn could adversely impact Carbon Revolution's ability to secure new programs, which would have an adverse impact on its ability to generate revenues.

## **5.1.5** Carbon Revolution's operations may be restricted by third-party intellectual property rights

Carbon Revolution relies on its own technology to develop, manufacture and sell its carbon fibre wheels. A number of Carbon Revolution's competitors are also developing carbon fibre wheel technology. There is a risk that these competitors may create, or have already created, intellectual property rights (including patents) that restrict Carbon Revolution's ability to exploit its own technology. Such competitors may also seek patent protection in geographical areas not covered by Carbon Revolution's patents. These actions by competitors may restrict the type of carbon fibre wheels Carbon Revolution is able to develop or sell, or require Carbon Revolution to develop non-infringing technology or enter into royalty or licensing agreements with those competitors. Carbon Revolution may not be able to enter into such agreements, or if it does, they might be on terms which are unfavourable to Carbon Revolution. Carbon Revolution may be required to pay damages (referable to lost sales or a reasonable royalty) to such competitors. It may also be liable to its customers for loss those customers suffer if Carbon Revolution infringes a third party's intellectual property.

Carbon Revolution is aware of certain granted patents and patent applications relating to certain key technologies used in carbon fibre wheels which have been filed by competitors and industry participants in countries which are key markets into which Carbon Revolution supplies its carbon fibre wheels (including the US, Australia, Europe, Japan, and China).

To the extent it might be claimed that Carbon Revolution infringes any such patent or patent application (if granted), Carbon Revolution believes that it has reasonable grounds to defend any such claim either on the basis that it does not infringe or that it could successfully challenge the validity of these patents or patent applications (if granted). Carbon Revolution also believes that, in the case of certain patent applications, the applicant is likely to face difficulties having the patents granted (at least in their current form). Furthermore, even if one or more of these patents are granted and are not challenged by Carbon Revolution (or others), and assuming the patent holder seeks to prove Carbon Revolution is infringing the relevant patents, Carbon Revolution may be able to take alternative steps to avoid infringement of any valid claim in those patents, prove that it is not infringing the patents, challenge those patents in court, seek a royalty or licensing arrangement with the applicant or modify its products in order to avoid patent infringement. In particular, Carbon Revolution believes that technological developments that it has recently made, which could be applied to both future and existing wheel programs, are likely to reduce the risk of infringement.

Challenging a patent or seeking to take alternative steps may be costly and time-consuming and there is no guarantee Carbon Revolution will successfully be able to do so.

If any such patent exists or is granted and is found to be valid, then, to the extent that:

- Carbon Revolution's technology is found to infringe such a patent; and
- Carbon Revolution is not able to take any other alternative steps (including implementing technological changes which mean that Carbon Revolution no longer infringes the relevant patent),

#### this may:

- require Carbon Revolution to pay damages to the patent holder;
- restrict Carbon Revolution's ability to sell to its OEM customers the wheels which use the technology that is the subject of the granted patent; and

 in the case of one such patent application, prevent Carbon Revolution supplying wheels under 5 of its 6 wheel programs currently in production, which may affect Carbon Revolution's ability to operate on a viable basis.

It is also possible that third parties may challenge Carbon Revolution's intellectual property rights or assert intellectual property infringement, breach of confidentiality or make similar claims against Carbon Revolution (or its customers) under patent, trade secret or other intellectual property laws. Such claims, if made, may harm Carbon Revolution's business. If Carbon Revolution is forced to defend claims of intellectual property infringement or breach of confidentiality, whether they are with or without merit or are determined in Carbon Revolution's favour, the costs of such litigation will potentially be significant and will divert Management's attention from normal commercial operations.

Further, Carbon Revolution's customer contracts contain provisions in respect of intellectual property which are largely in favour of the respective OEM customers, for example including the grant of a licence in favour of the customer over intellectual property developed by Carbon Revolution for the OEM, or in some instances customer ownership of such intellectual property, and/or restrictions on how Carbon Revolution uses such intellectual property. In addition, in certain instances (such as where Carbon Revolution is unable to supply in accordance with the contract or an order, or the contract with the OEM is terminated), Carbon Revolution's intellectual property may be the subject of a licence in favour of the relevant OEM to make the relevant wheels. As a result of these provisions, there is a risk that a customer may claim that Carbon Revolution has used intellectual property developed for that customer for another customer, is otherwise in breach of the contracted intellectual property provisions, or that the customer owns or is entitled to license (exclusively or otherwise) certain intellectual property. This could in turn have a material adverse effect on Carbon Revolution's operations and financial position and performance.

#### 5.1.6 Carbon Revolution's performance and execution of its growth plans are linked to its ability to retain key staff, attract sufficiently skilled staff, and effectively manage its workforce

Carbon Revolution's ability to effectively execute its business strategy depends upon the performance and expertise of its key Management personnel (outlined in Section 6.2). These employees are important to Carbon Revolution's business strategy and success, as they have extensive industry experience, technical knowledge and are responsible for maintaining relationships with customers and suppliers. The loss of key Management personnel, or any delay in their replacement, may therefore adversely affect Carbon Revolution's operations and future performance.

The successful development and growth of Carbon Revolution will require the services of additional technical, manufacturing and sales staff, particularly if Carbon Revolution is to achieve its growth plans. There can be no assurance that Carbon Revolution will be able to attract and retain the services of such people, particularly given the competitive and specialised nature of the industry in which Carbon Revolution operates. This may limit Carbon Revolution's growth and consequently adversely affect Carbon Revolution's prospects and future financial performance.

The most recent Enterprise Agreement covering Carbon Revolution's production workforce has passed its nominal expiry date. The outcome of the negotiation of new Enterprise Agreements or changes to awards from time to time may increase the overall costs of running Carbon Revolution's business and such increased costs may not be able to be passed through to customers in full or at all. If employees take industrial action, Carbon Revolution could be exposed to loss to the extent the industrial action impairs Carbon Revolution's ability to meet production demand or causes disruption to Carbon Revolution's customers, if the relevant customer contracts do not include industrial action as a force majeure event or, even if they do, the action becomes materially extended.

## 5.1.7 Carbon Revolution may suffer reputational damage or incur liability due to product performance or failures or other issues with its wheels

Carbon Revolution's brand and the reputation of its wheels are an important factor in Carbon Revolution being able to continue selling wheels and growing its volumes. There is a risk that events, including many of the risks described in this Section 5, may result in damage to Carbon Revolution's reputation and brand, including through negative publicity, disputes and negative customer experiences.

Carbon Revolution's reputation and its relationships with customers may be damaged as a result of negative end-user experience due to poor product performance or product failures, adverse media coverage or other publicity (in relation to matters such as manufacturing defects, product recalls, warranty issues, product liability claims or failure to deliver to customer expectations), and other issues which may impact its brand include failure

to protect its intellectual property rights from third party infringements, infringement of third party intellectual property rights, or disputes with suppliers, customers, landlord, employees and its various government grant providers.

For example, Carbon Revolution products are validated during industry standard laboratory and on-vehicle testing. Initial laboratory testing for wheels is not fully representative of operational conditions, but is used in the development process to gain confidence in the wheel design. For final validation all Carbon Revolution's OEM customers conduct their own on vehicle testing which aims to be fully representative of the wheel's integration into the vehicle system and performance under real world operational conditions. However, there is a risk that the OEM customer's testing does not capture all conditions that their end users may impart on Carbon Revolution wheels or that the end user misuses wheels (for example using them on inappropriate vehicles or undertaking unauthorised modifications or repairs), and as a result Carbon Revolution's wheels may not function as expected which could lead to reputation and brand damage.

Damage to Carbon Revolution's reputation as a result of one or a combination of these factors may reduce the demand for Carbon Revolution's wheels. adversely impact existing relationships with key customers, suppliers, employees or government grant providers, and diminish the prospects of securing new programs with existing and new OEM customers, which in turn may adversely impact Carbon Revolution's performance. Damage to Carbon Revolution's reputation or the reputation of its wheels may also occur where another vehicle component that interacts with or relates to the wheel (for example the tyres or brakes) malfunctions or performs poorly and it is perceived (whether correctly or not) that this is related to the use or performance of Carbon Revolution's wheels.

Furthermore, if issues arise with Carbon Revolution's wheels, Carbon Revolution will become exposed to the risk of product liability claims being brought against it, either by OEMs or end users of Carbon Revolution's wheels. This may result in Carbon Revolution paying damages, an increase in insurance premiums, or reputational harm. Even if insured, such claims can be costly and could have adverse effects on Carbon Revolution's activities, business, operating results, financial position and reputation. Likewise, a failure to succeed in defending any such claims may have a materially adverse effect on Carbon Revolution's activities, business, operating results and financial position.

Further, if Carbon Revolution is not able to obtain sufficient product liability insurance

at an acceptable cost this could prevent the commercialisation of the products that Carbon Revolution develops.

## **5.1.8** Carbon Revolution's estimates of carbon fibre wheel acceptance and addressable wheel market may be incorrect, and adjacent markets may not be available to it

The growth of Carbon Revolution is dependent on its ability to increase the volume of wheels that it sells. As set out in Section 2.3.4 Carbon Revolution currently assesses the total addressable market segment for carbon fibre wheels to be approximately 10-15% of the overall total automotive new vehicle wheel market (equivalent to approximately 36 million to 56 million wheels).

However, this is a judgment question, and the addressable wheel market may be smaller than anticipated. Furthermore, market acceptance of Carbon Revolution's wheels may not be as wide as anticipated. This may occur if the anticipated benefits from carbon fibre wheels are not as great as contemplated, if the cost of carbon fibre wheels remains too high, or if market and industry trends cause changes in demand for lightweight, high-performance wheels.

If the acceptance of Carbon Revolution's wheels is lower or if the size of the market in which it operates is smaller than anticipated, this may restrict Carbon Revolution's ability to sell wheels and generate revenue which, in turn, may adversely affect the profitability of Carbon Revolution.

Additionally, as noted in Section 3.7 Carbon Revolution also intends to pursue growth opportunities in adjacent markets, including the aerospace industry, and the industrial, freight and logistics market. There is no guarantee Carbon Revolution's products will be accepted in these markets to the extent Carbon Revolution anticipates, or at all, and this may impact Carbon Revolution's ability to diversify into adjacent markets.

### **5.1.9** Carbon Revolution's competitive position may deteriorate

Carbon Revolution operates in a competitive industry, and its competitors could include existing wheel manufacturers, new entrants and OEMs. Carbon Revolution's competitive position may deteriorate, as a result of the action of any of these participants.

For example, there are various market participants who are also developing lightweight wheel technologies and/or carbon fibre wheels, which could ultimately be superior or gain greater market approval than Carbon Revolution's wheels. These competitors may include other early stage

businesses such as Carbon Revolution, but also may include companies with significantly greater resources than Carbon Revolution.

For example, certain OEMs may seek to develop their own carbon fibre wheels, and existing manufacturers of steel or aluminium wheels may respond to the competitive threat posed by Carbon Revolution and similar market entrants, by seeking to produce their own carbon fibre wheels. Any increase in the number of players manufacturing carbon fibre wheels may affect the demand for Carbon Revolution's wheels.

Any such actions of new or existing competitors may reduce the volume of wheels sold by Carbon Revolution or the price at which it can sell wheels. This, in turn, may adversely affect Carbon Revolution's operating and financial performance.

## 5.1.10 Carbon Revolution may not be able to enforce its intellectual property rights and may be involved in disputes regarding intellectual property or contractual obligations

Carbon Revolution has a portfolio of intellectual property rights that supports the commercialisation of its wheels. The commercial value of the intellectual property is dependent on legal protections provided by a combination of patent rights, registered trademarks, copyright, confidentiality obligations, trade secrecy laws and other intellectual property rights. These legal mechanisms, however, do not guarantee that Carbon Revolution will be able to enforce its intellectual property rights and stop relevant infringement or breaches of its intellectual property, or that Carbon Revolution's competitive position will be maintained.

Although Carbon Revolution seeks patent protection in relation to key features of its carbon fibre wheels, which could be reverse engineered and copied, it generally does not seek patent protection in relation to its processes, which it keeps confidential and treats as a trade secret. However, no assurances can be given that employees, former employees or third parties will not breach confidentiality agreements, or infringe or misappropriate Carbon Revolution's intellectual property. Any loss of confidentiality of Carbon Revolution's processes may adversely impact Carbon Revolution's competitive advantage and therefore its operations.

In addition, competitors may be able to develop and produce competing carbon fibre wheels without infringing Carbon Revolution's intellectual property rights. In particular attempts to do so will not be restricted by Carbon Revolution's patent rights once the relevant patents expire, which in the case of the majority of its current patents, will occur from 2029 to 2036. Any successful replication of similar carbon fibre wheels could reduce Carbon Revolution's competitive position, which will in turn adversely impact Carbon Revolution's sales volume and profitability.

Litigation may be necessary, where commercially feasible, from time to time to enforce Carbon Revolution's rights in its technology and intellectual property. Such litigation can be costly and could have adverse effects on Carbon Revolution's activities, business, operating results and financial position. Likewise, a failure to succeed in protecting any such rights may equally have a materially adverse effect on Carbon Revolution's activities, business, operating results and financial position.

### **5.1.11** Workplace incidents or accidents may occur

Carbon Revolution's manufacturing facilities are currently located in Geelong, Victoria. The manufacturing of Carbon Revolution's wheels involves certain labour intensive processes, exposure to hazardous chemicals and the use of various machinery and equipment. There is also a relatively high incidence of new production equipment being commissioned which inherently increases the risk of workplace incidents or accidents occurring during the commissioning and training phase. There may be an incident or accident at Carbon Revolution's facility that results in serious injury or death to employees, contractors or other third parties, or damage to property.

Employees of Carbon Revolution or other organisations may also suffer injuries from engaging in R&D and product testing activities, which can involve driving vehicles fitted with Carbon Revolution's wheels at various speeds and in various conditions.

The occurrence of any workplace incident may result in a fine imposed by a regulatory authority, an interruption of manufacturing operations, a worker's compensation claim, a work health and safety claim or a damages claim against Carbon Revolution. Such claims or events may not be covered by Carbon Revolution's insurance or may exceed Carbon Revolution's insured limits. They may also adversely impact Carbon Revolution's business and reputation.

## **5.1.12** Carbon Revolution's existing manufacturing facilities may break down, perform poorly or fail

Carbon Revolution currently uses a range of complex and bespoke manufacturing equipment to produce its carbon fibre wheels, and intends to substantially increase the size and complexity of its manufacturing facilities in connection with its

industrialisation program described in Section 3.4.2 of this Prospectus.

There is a risk that the equipment and processes necessary for the production of Carbon Revolution's wheels may break down, perform poorly, fail or be impacted by events outside Carbon Revolution's control, such as a fire, resulting in production delays, increased production costs or inability to meet vehicle program volume requirements.

Any significant or sustained interruption to Carbon Revolution's production processes, may adversely impact production capacity. This could result in Carbon Revolution having to pay costs or damages to its customers, or result in negative customer perception about Carbon Revolution's ability to meet its supply obligations under its contracts. This in turn could damage relationships with customers and adversely impact Carbon Revolution's ability to secure new programs with existing and new customers, reducing Carbon Revolution's sales and profitability.

### **5.1.13** Carbon Revolution's key manufacturing cost inputs may increase

Carbon Revolution depends on suppliers for raw materials, including carbon fibre and resins, which are key manufacturing inputs into carbon fibre wheels. Further, as a manufacturing business, Carbon Revolution uses a substantial amount of energy in its production process, with the result that Carbon Revolution may be exposed to changes in energy prices or energy policy. Labour costs also represent a material proportion of Carbon Revolution's overall costs.

Carbon Revolution is exposed to changes in prices of key inputs including raw materials, energy and labour costs. Any increase in the cost of labour, carbon fibre, resins, energy costs or other key manufacturing inputs will increase the costs incurred by Carbon Revolution in production of its wheels, and if Carbon Revolution is unable to pass on such cost increases to its customers or if it is forced to increase the price of its wheels resulting in a decrease in demand, this could reduce Carbon Revolution's profitability.

### **5.1.14** Carbon Revolution is subject to fluctuations in exchange rates

The financial information in Carbon Revolution's financial statements is presented in Australian Dollars, and Carbon Revolution incurs the majority of its costs in Australian Dollars. However, Carbon Revolution forecasts that a substantial amount of its revenues from wheel sales will be generated in currencies other than Australian Dollars.

Although these forecast foreign exchange exposures will be reduced by the natural hedging

that arises from the purchase of raw materials and manufacturing equipment also denominated in foreign currencies, Carbon Revolution is subject to adverse exchange movements, particularly, adverse movements in the USD:AUD exchange rate and EUR:AUD exchange rate. This risk is expected to become more significant in the future (as offshore revenue is anticipated to grow).

Furthermore, Carbon Revolution may not have the ability to enter into foreign exchange hedging contracts with financial institutions, or may not be able to enter into these contracts on favourable terms. As such, adverse movements in exchange rates mentioned above may materially impact on Carbon Revolution's financial performance and position.

## **5.1.15** Carbon Revolution's relationships with suppliers and technical partners may deteriorate or there may be other issues with goods received from suppliers

Certain suppliers to Carbon Revolution may not be not readily replaceable, either due to their strategic importance or because of Carbon Revolution's OEM customers' validation of the product supplied by that supplier (this occurs where an OEM customer has 'validated' Carbon Revolution's wheel, which includes a component or treatment provided by a supplier, and there are inherent challenges in revalidating new suppliers). On certain vehicle programs, Carbon Revolution only has one supplier validated for a particular key material input – for example the resin system used in the moulding process.

If suppliers of OEM validated components or manufacturing equipment were to suffer force majeure, cease trading, collaborating or otherwise reduce business with Carbon Revolution for any reason, this may adversely impact Carbon Revolution's ability to meet customer requirements and consequently, have an adverse impact on Carbon Revolution's operating and financial performance.

Furthermore, Carbon Revolution anticipates that the price it pays for key raw material inputs for production of its wheels will decrease as its wheel volumes (and consequently raw material orders) increase. It also intends to pass risk onto its suppliers should they fail to supply Carbon Revolution as required. However, there is no guarantee that Carbon Revolution will be able to negotiate the favourable outcomes with suppliers that it intends.

In addition, Carbon Revolution relies on technical relationships with various parties for the development, manufacturing, testing and validation of its wheels. Carbon Revolution has developed a number of relationships with technology organisations and institutes that are key participants in the global advancement of carbon fibre and resin technology (for example, Deakin). Deterioration of relationships with these parties may impact on Carbon Revolution's operations. In particular, this could result in inferior technological outcomes and additional cost and time in further developing Carbon Revolution's carbon fibre wheels.

Furthermore, Carbon Revolution relies on the timely supply of materials and parts with the required quality and specifications from its suppliers. In the event that there are delays in receiving materials or parts from its suppliers, or materials Carbon Revolution receives are outside specification, this may result in Carbon Revolution failing to supply its OEM customers on time or with products of the required quality. There is no guarantee that in these cases, Carbon Revolution will be able to pass on any liability it incurs to its suppliers.

Carbon Revolution relies on suppliers of services, such as freight providers, in order to provide timely delivery of products to customers. There is a risk that delays or failure in the delivery of services by such suppliers may result in delay in delivery of Carbon Revolution's products to its customers. There is no guarantee that in these cases, Carbon Revolution will be able to pass on any liability it incurs to its suppliers.

Finally, Carbon Revolution operates from one premises at Deakin's Geelong Campus (for further details in relation to the lease, see Section 9.5.11). Although this lease is a long term lease with options to extend, in the event that this lease was terminated (for example for breach) or Carbon Revolution was otherwise required to relocate, this could cause material disruption to Carbon Revolution's operations.

## **5.1.16** IT system failure or security breaches may adversely impact Carbon Revolution's operations

Carbon Revolution relies on third party IT software and service providers to support its business operations, including its production processes. Carbon Revolution also holds sensitive employee and customer data and information related to its proprietary designs and processes. Carbon Revolution's IT systems may be adversely affected by damage to computer equipment or network systems, equipment faults, power failures, computer viruses, misuse of systems or inadequate business continuity planning.

Any failure of Carbon Revolution's IT systems as a result of these factors may compromise Carbon Revolution's data integrity (which may result in an inadvertent security breach in relation to such data) and lead to unauthorised access to Carbon's Revolution's intellectual property or automated aspects of its manufacturing. This in turn may adversely affect Carbon Revolution's reputation, business operations, and financial performance and profitability or expose Carbon Revolution to third party liability.

Additionally, as Carbon Revolution's operations grow they will also become more complex and require more complex IT support. Introducing more complex and sophisticated IT systems may require additional resources, or divert management attention. Further, any failure or delay in implementing required IT systems may adversely impact Carbon Revolution's operations, and consequently its financial position or performance.

Exploitation, unauthorised access or hacking of the systems or networks on which Carbon Revolution data is stored, could lead to corruption, theft or loss of the Company's data and proprietary information. This could cause disruption to the Company's operations, unauthorised disclosure of confidential and proprietary information to third parties, and may result in regulatory action against the Company for breach of privacy and data protection laws, and may have a material adverse effect on the Company's operations, financial position or performance.

## **5.1.17** Carbon Revolution may be impacted by environmental regulations and may also suffer reputational damage from an inability to recycle and dispose of the materials it uses

Carbon Revolution's operations involve the use of hazardous and environmentally harmful materials and chemicals, including the paints and resins it uses in production of its wheels. For this and other reasons, its operations are subject to environmental protection laws and regulations, including those regulating air emissions, water discharges and waste management and disposal. Some of these laws and regulations impose substantial fines and sanctions for non-compliance or breaches. If Carbon Revolution were to breach or otherwise fail to comply with any such law or regulation, the cost of curing a breach or resolving associated enforcement actions initiated by government authorities could be substantial and may impact Carbon Revolution's financial position.

Additionally, as Carbon Revolution's operations grow, it is likely to be subject to increased regulation relating to environmental matters, which may require it to obtain licences. The failure or delay in obtaining such licences may restrict its operations and impact its ability to generate revenues.

There is an additional risk that could arise if Carbon Revolution is unable to create an effective recycling process for the materials it uses in its production process or the finished products at their end of life. There may be a shift in customer expectations in relation to environmental issues relating to Carbon Revolution's products, and a growing demand that its products be fully recyclable. If the end of life materials cannot be recycled or disposed of in an environmentally friendly manner, there may be reputational damage to the development and use of carbon fibre in Carbon Revolution's operations. This would negatively impact on the Company's reputation and its future financial prospects.

## 5.1.18 Changes in regulations and policies may negatively impact on Carbon Revolution and it is also exposed to risks of non-compliance with applicable laws, regulations and OEM standards

Government legislation and policies are subject to review and change from time to time. Carbon Revolution's operations may be affected by changes in international, federal, state or local government laws, regulations or policies which impact on Carbon Revolution's ability to operate, or sell products in particular markets. In particular, Carbon Revolution sells all of its products overseas, and the introduction of tariffs or other regulations impacting international trade could impact its ability to sell its products or the price it receives for them, and this could adversely impact its ability to generate revenue, and consequently its financial performance and position.

In addition, Carbon Revolution is exposed to risks arising from failure or inability to comply with applicable laws, regulations and OEM standards and conditions that apply in Australia and the international jurisdictions in which Carbon Revolution operates and sells its wheels. As a result, Carbon Revolution may be exposed to fines, litigation, or compensation to customers, regulators or other stakeholders. This may adversely impact Carbon Revolution's reputation and financial performance and position.

To the extent that Carbon Revolution's plans involve operating in the defence supply chain, Carbon Revolution will be required to comply with additional requirements and obligations in relation to security and export control. These requirements may require Carbon Revolution to incur expenditure in order to comply, and may cause delays in meeting defence program requirements.

### **5.1.19** Carbon Revolution may be required to prepay \$5 million or more of the Ronal Loan

Under the terms of the Ronal Loan, the Company is required to prepay a minimum of \$5 million immediately on demand if the Company conducts

a capital raising that raises more than \$40 million, and also if the State of Victoria sells or transfers 20% or more of its interest in the Company. This may occur more than once, until such time as the amount outstanding under the Ronal Loan is repaid in full.

Although the Company can largely control when it undertakes a capital raising and the amount sought to be raised, (aside from the sale of Shares to SaleCo that the State of Victoria is making in connection with the Offer) the sale or transfer of the State of Victoria's interest in the Company is beyond the control of the Company, subject to the escrow arrangements described in section 9.5.2, and could occur at a time which is difficult or inconvenient for the Company to make the \$5 million prepayment (for example, because funds used to satisfy the prepayment obligation will not be available to the Company for the purposes of pursuing its stated objectives). Further, the Company may need to raise additional capital to make any repayment to Ronal, which could dilute the interests of Shareholders. As such, any prepayment required may adversely affect the Company's financial performance and financial position or the market price of the Shares.

### **5.1.20** Carbon Revolution may fail to meet forecasts in the Financial Information

The forward-looking statements, opinions and estimates provided in this Prospectus, including the Forecast Financial Information, rely on various contingencies and assumptions, some of which are described in Section 4. Various factors, both known and unknown, may impact upon the performance of Carbon Revolution and cause actual performance to vary significantly from expected results.

There can be no guarantee that Carbon Revolution will achieve its stated objectives or that any forward-looking statement or forecast will eventuate.

## **5.1.21** Existing Shareholders will continue to have a significant stake in Carbon Revolution after Listing

Following Completion, the Existing Shareholders will hold at least 72.9% of the Shares. As such, the Existing Shareholders may be in a position to exercise influence over matters requiring the approval of Company's Shareholders, including but not limited to the election of Directors and the approval of significant corporate activities (unless prevented from voting under the Corporations Act or ASX Listing Rules).

The interests of the Existing Shareholders may differ from the interests of the Company and its other Shareholders, and this may adversely affect the price of the Shares and other Shareholders. The Existing Shareholders' retained shareholding in the Company may also reduce the liquidity of trading in the Shares.

Following Completion of the Offer, Shares held by certain Existing Shareholders (amounting to approximately 8.0% of the Shares on Issue at Completion) will be subject to escrow arrangements for a period of up to 24 months from Completion of the Offer.

The escrow restrictions are subject to certain exceptions as set out in more detail in Section 9.5.2. The inability of these Existing Shareholders to sell Escrowed Shares during the relevant Escrow Period may cause, or at least contribute to, limited liquidity in the market for the Shares. This could affect the prevailing market price at which Shareholders are able to sell their Shares. Following the end of the relevant Escrow Period, Shares held by the relevant Existing Shareholders will be able to be freely traded on ASX. A significant sale of Shares by the relevant Existing Shareholders, or the perception that such a sale might occur, could adversely affect the market price of the Shares.

#### 5.1.22 R&D tax incentive "clawback"

The Company has claimed the Australian R&D tax incentive in prior income years and it is currently the intention of the Company to claim the 43.5% refundable R&D tax offset in respect of FY19 eligible R&D activities.

The Company has also previously received funds from Australian Federal and State governments under various grant arrangements. To the extent these government grants were in relation to expenditure or activities that are also subject to the R&D tax incentive, the Company may be subject to the R&D "clawback" provisions. Broadly, the clawback provisions prevent claimants from obtaining a "double benefit" through the receipt of a government grant and the R&D tax incentive. The R&D clawback takes the form of extra income tax, at the rate of 10 per cent, on an amount equal to the amount related to the recoupment (i.e. the government grant) on which an R&D tax incentive offset is also received. The R&D clawback provisions apply even when the Company is in a tax loss position.

The Company has been subject to the R&D clawback in prior income years. It is difficult to estimate the amount of the R&D clawback that may apply in any particular future income year. However, based on the R&D clawback that has applied in prior income years, it is not expected that any future R&D clawback would be material to the Company in that particular income year.

### **5.1.23** There is a risk that existing Government grant funding may be clawed back

Carbon Revolution currently receives funds from the Australian Federal Government and the State of Victoria under various grant arrangements to assist with funding of its R&D activities and the overall growth of the business (see Section 9.5.5 for further information). These grants are subject to claw back provisions which may be triggered if Carbon Revolution does not meet project timelines, or certain targets or criteria (for example with respect to its industrialisation process, or the number of employees it employs). For further details on the claw back provisions in the Grant Agreement with the State of Victoria refer to section 9.5.5. Any failure to meet these timelines, targets or criteria may also impact on Carbon Revolution's eligibility for government funding under existing grant arrangements.

These grants are currently an important means of supplementing the funding of Carbon Revolution's expansion. If existing funding is materially clawed back due to Carbon Revolution not meeting project timelines, targets or criteria, this would be adverse to its financial position and may reduce the rate of expansion of the Company's operations.

## **5.1.24** Carbon Revolution may not be able to pay dividends and may not be able to frank the dividends it does pay

As noted above in Section 5.1.3, Carbon Revolution is currently not profitable. As such, the Company may not pay dividends for a significant period of time, if at all.

Further, the Company receives Australian tax incentives in relation to its R&D activities. From FY12 to FY16, the Company claimed 45% of its eligible R&D expenditure as refundable tax offsets. In FY17 and FY18, the Company claimed 43.5% of its eligible R&D expenditure as refundable R&D tax offsets and it is currently the intention of the Company to claim the 43.5% refundable R&D tax offset in respect of FY19 eligible R&D activities. Broadly, refundable R&D tax offsets reduce the amount of income tax the Company is liable to pay in a particular income year and if the R&D tax offset exceeds the amount of income tax payable, the Company receives a cash refund equal to the excess. Between FY12 to FY18, the Company received cash refunds of approximately \$13,345,863 under the Australian R&D tax incentive program.

As a consequence, future income tax payments made by the Company on its Australian taxable income will not generate franking credits for the Company until it has made income tax payments at least equal to the amount of the cash refunds

received with respect to the refundable R&D offset. The Company will not be able to pay franked dividends until it starts to generate franking credits.

### **5.2** General risks relating to an investment in Carbon Revolution

#### **5.2.1** Price of Shares may fluctuate

Once Carbon Revolution becomes a publicly listed company on the ASX, it will become subject to general market risks that are inherent in all securities listed on a securities exchange.

The price at which Shares are quoted on ASX may increase or decrease due to a number of factors, many of which are outside of Carbon Revolution's control and are not attributable to the underlying operations and activities specific to Carbon Revolution. These factors may cause the Shares to trade at prices below the Offer Price. There is no assurance that the price of the Shares will increase following quotation on ASX, even if Carbon Revolution's financial position or performance improves.

Some of the factors which may affect the price of the Shares in addition to Carbon Revolution's financial position or performance include fluctuations in the domestic and international market for listed stocks, general economic conditions, including interest rates, inflation rates, exchange rates, commodity and oil prices, changes to government fiscal, monetary or regulatory policies, legislation or regulation, inclusion in or removal from market indices, the nature of the markets in which Carbon Revolution operates, force majeure events and general operational and business risks.

#### **5.2.2** The trading in Shares may not be liquid

Prior to the Offer, there has been no public market in the Shares. Once the Shares are quoted on ASX, there can be no guarantee that an active trading market for the Shares will develop or that the price of the Shares will increase.

There may be relatively few potential buyers or sellers of the Shares on ASX at any time. This may increase the volatility of the market price of the Shares. It may also affect the prevailing market price at which Shareholders are able to sell their Shares. This may result in Shareholders receiving a market price for their Shares that is less than the price that Shareholders paid.

As noted in Section 9.5.2, certain Shares will be escrowed for a period of up to 24 months from Completion of the Offer. The fact that these Shares cannot be traded until they are released from escrow will also reduce the liquidity of trading in Shares for the duration of the escrow periods.

Following release of escrow restrictions on the Shares, a significant sale of Shares by the Existing Shareholders, or the perception that such a sale might occur, could adversely affect the market price of Carbon Revolution's Shares.

#### 5.2.3 There is a risk of Shareholder dilution

In the future, Carbon Revolution may elect to issue Shares (or securities convertible into Shares). While Carbon Revolution will be subject to the constraints of the Listing Rules regarding the percentage of its capital that it is able to issue within a 12 month period (other than where exceptions apply), Shareholders may be diluted as a result of such issues of Shares or securities.

#### 5.2.4 Taxation changes may occur

Taxation law is complex and frequently changing, both prospectively and retrospectively. Changes in taxation law (including goods and services taxes and stamp duties), or changes in the way taxation laws are interpreted, create a degree of uncertainty and may impact the tax liabilities or future profitability of Carbon Revolution or the tax treatment of a Shareholder's investment. In particular, both the level and basis of taxation may change.

Tax authorities may review the tax treatment of transactions entered into by Carbon Revolution. Any actual or alleged failure to comply with, or any change in the application or interpretation of, taxation laws applied in respect of such transactions, may increase Carbon Revolution's tax liabilities or expose it to legal, regulatory or other actions. An interpretation of taxation law by a revenue authority that is contrary to Carbon Revolution's or its adviser's interpretation of those taxation laws may also increase the amount of tax to be paid.

In addition, an investment in the Shares involves tax considerations which may differ for each Shareholder. Each prospective Shareholder is encouraged to seek professional tax advice in connection with any investment in Carbon Revolution.

### **5.2.5** Commissioner of Taxation may amend an income tax assessment

Broadly, under Australia's income tax rules, the Commissioner of Taxation generally has four years after the date of lodgement of an income tax return to review and issue an amended assessment. An amended assessment limitation period does not apply in cases of fraud or evasion, nor in the case of Australian transfer pricing adjustments in respect of income years commenced prior to 29 June 2013.

In particular, AusIndustry or the Australian Taxation Office may review the Company's claim of the refundable R&D tax offset in prior income years and, depending on the outcome of that review, the Commissioner of Taxation may issue an amended assessment with respect to any over claimed R&D tax incentive offsets. The Company is comfortable with its claims for the refundable R&D tax offset in its prior year Australian income tax returns and has not previously been subject to an Australian Taxation Office review or audit. However, it is difficult to say with any certainty the likelihood of any future review or audit, the period/s that may covered by the review or audit, and further still whether an amended assessment would be issued by the Commissioner of Taxation, in this respect.

### **5.2.6** Australian Accounting Standards may change

Australian Accounting Standards are set by the Australian Accounting Standards Board (AASB) and are outside the control of either Carbon Revolution or its Board.

The AASB may introduce new or refined Australian Accounting Standards, which may affect future measurement and recognition of key income statement and statement of financial position items.

There is also a risk that interpretations of existing Australian Accounting Standards, including those relating to the measurement and recognition of key income statement and statement of financial position items, including revenue and receivables, may differ. Changes to Australian Accounting Standards issued by the AASB or changes to the commonly held views on the application of those standards could materially adversely affect the financial performance and position reported in Carbon Revolution's consolidated financial statements.

#### **5.2.7** Force majeure events may occur

Events may occur within or outside Australia that could impact upon the Australian economy, the operations of Carbon Revolution and the price of the Shares. The events include but are not limited to acts of terrorism, an outbreak of international hostilities, fires, floods, earthquakes, labour strikes, civil wars, natural disasters, outbreaks of disease or other natural or man-made events or occurrences that can have an adverse effect on Carbon Revolution's business. Carbon Revolution has only a limited ability to insure against some of these risks.

#### **5.2.8** Expected future events may not occur

Certain statements in this Prospectus constitute forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance and achievements of Carbon Revolution to differ materially from any future results, performance or achievements expressed or implied in such forward-looking statements.

Given these uncertainties, prospective investors should not place undue reliance on such forward-looking statements. In addition, under no circumstances should a forward-looking statement be regarded as a representation or warranty by Carbon Revolution or any other person referred to in this Prospectus that a particular outcome or future event is guaranteed.



## KEY INDIVIDUALS, INTERESTS AND BENEFITS





#### Key individuals, interests and benefits 6

#### 6.1 **Board of Directors**

The Directors bring to the Board a breadth of expertise and skills, including industry and business knowledge, financial management skills and corporate governance experience.

#### **Director**



**James Douglas Independent, Non-Executive** Chairman

- **Experience**
- Chairman of Carbon Revolution since 2012
- Over 20 years of investment banking and venture capital experience in Australia and the United States
- Founder and general partner of Newmarket Capital, a late stage venture capital business
- Prior to establishing Newmarket Capital, James spent 15 years in investment banking, including as co-head of Global Banking at Citi (Australia) and Global Head of Consumer Products Investment Banking for Merrill Lynch in New York
- Investment Director at Acorn Capital
- Science degree and Law degree from Melbourne University



**Jake Dingle CEO, Managing Director** 

- Started at Carbon Revolution in 2008 as one of the initial investors. and founders
- Background in engineering, operations, strategy and M&A within Australian listed companies
- Former head of M&A and Corporate Development for Goodman Fielder and has also held positions at, BCG, L.E.K. and Tenix **Defence Systems**
- Mechanical Engineering degree from RMIT with First Class Honours and an MBA from the Melbourne Business School (Dean's List and Rupert Murdoch Fellow)



**Bruce Griffiths** Independent, Non-Executive **Director** 

- Joined the Board in 2014
- Held a number of senior Executive roles within the manufacturing industry and is a Board Member of the Industry Capability Network Limited (ICNL) and has served as a Non-Executive Director of Quickstep Holdings Limited
- · Awarded the Order of Australia Medal for services to the automotive manufacturing industry and to the community

#### **Director**



Lucia Cade
Independent, Non-Executive
Director



Dale McKee
Independent, Non-Executive
Director



Mark Bernhard
Independent, Non-Executive
Director

#### **Experience**

- Joined the Board in 2018 and has a board portfolio that spans utilities, technology and innovation, industry led research & development and infrastructure investment
- Chair of South East Water (Victorian state owned utility with a commercial subsidiary business)
- Independent director of the Future Fuels Co-operative Research Centre
- Director of Engineers Australia; chair of Audit & Risk Committee
- Director of the Regional Investment Corporation (federal loan facility for agriculture and water sectors)
- Director PurifIOH Ltd, an early stage technology development and commercialisation company
- Chair of Paintback, an independent company set up by Australia's major paint manufacturers to manage the recycling of excess paint and its containers to divert it from landfill
- Bachelor degrees in civil engineering (honours) and economics from Monash University, a Masters of Engineering Science from Monash University and an MBA from the Melbourne Business School at the University of Melbourne
- Joined the Board in September 2018
- Former senior partner at PwC with extensive experience serving listed companies in audit, accounting, corporate governance, risk management and capital markets matters
- Former lead partner of PwC's risk management practice in Australia
- Former member of the Australian Auditing Standards Board
- Bachelor of Business from Federation University and a Fellow of the Institute of Chartered Accountants in Australia and New Zealand
- Joined the Board in June 2019
- Significant board and executive management experience in the automotive industry, having served as Chairman and Managing Director of General-Motors Holden Australia from 2015 to 2018
- Chief Financial Officer and Vice-President of Shanghai-GM from 2011 to 2015
- Recently studied Transformational Management at Stanford University, holds an MBA from Deakin University and a Business/ Accounting degree from Monash University

#### **Director**



Peter Lewinsky
Independent, Non-Executive
Director

#### **Experience**

- Joined the Board in June 2019
- Significant board, investment banking and corporate advisory experience
- He has served or is currently serving on the boards of Ambulance Victoria, Holmesglen Institute of TAFE (Chair), Australian Centre of the Moving Image (President), TAL Superannuation Ltd, the Tasmanian Water and Sewerage Corporation, and Australian Red Cross
- MBA from the University of Melbourne, Bachelor of Economics from Monash University. He also is a Fellow of the Institute of Chartered Accountants (FCA) and is a Fellow of the Australian Institute of Company Directors (FAICD)

#### **6.2** Executive management team

#### **Key Management**

## Jake Dingle CEO, Managing Director

#### **Experience**

• See 6.1.



Gerard Buckle
CFO

- Experienced senior executive with a demonstrated capacity to develop and implement strategic plans and improve business performance
- Previous roles at Incitec Pivot Fertilisers, Olex, Repco, Jetstar and Orica. With previous CFO roles at Jetstar, Orica & Olex
- Bachelor of Business from University of Ballarat, Graduate Diploma of Applied Finance and CA qualified



Brett Gass
Chief Technology Officer

- Founder of Carbon Revolution
- Expert in vehicle dynamics
- Over 20 years' experience in the development of advanced automotive and transportation chassis systems
- Senior management positions at Polaris Industries and suspension technical positions at Ford and General Motors
- Engineering Physics degree from the University of Saskatchewan, Canada

#### **Key Management**



Dr Ashley Denmead

Engineering Director



- Founder of Carbon Revolution
- More than ten years of experience in virtual and physical prototyping of composite parts for motorsports, marine and industrial applications
- Double degree in Mechanical Engineering (First Class Honours) and Computer Science (Software Development) and a PhD in composite materials at the Deakin University Centre for Materials and Fibre Innovation



Luke Maunsell

Manufacturing Director

- Extensive experience in Manufacturing and Operations Management
- Previous roles at GM Holden, Toll Logistics and Vinfast Automotive Group, Vietnam
- Bachelor of Engineering from RMIT



Luke Preston
Industrialisation Director

- An internationally experienced manufacturing engineering leader, delivering highly automated and process efficient production lines
- Experience developing advanced tools that enable thoroughly engineered solutions to be implemented in significantly reduced timeframe
- Led major product launches including the FG Falcon in Final Assembly for Ford Australia, the Model X in the automated Body-in-White at Tesla and the Model 3 launch at Tesla
- Bachelor of Engineering and Computer Science from RMIT

#### **Key Management**



David Nock

General Counsel, Company
Secretary

#### **Experience**

- Joined Carbon Revolution in August 2017
- Previous roles within listed Australian, US and European entities including Regional Commercial Director, Oakley Asia Pacific (Luxottica Group S.p.A.), Regional General Counsel, Quiksilver Asia Pacific (Quiksilver, Inc.), and roles at Publishing & Broadcasting Limited and Village Roadshow Limited
- Arts and Law Degrees from the University of Melbourne and an MBA from the Melbourne Business School (Dean's List)



Adrian Smith

Sales and Business

Development Director

- Joined Carbon Revolution in August 2019
- Internationally experienced automotive business executive, most recently working as Vice President of the High-Performance Division of Akebono Brake Corporation, with previous roles at Brembo North America
- Bachelor of Science (Honours) majoring in mechanical engineering from the University of Birmingham, UK

#### 6.3 Interests and Benefits

This section sets out the nature and extent of the interests and fees of certain persons involved in the Offer. Other than as set out below or elsewhere in this Prospectus, no:

- Director or proposed Director of Carbon Revolution;
- person named in this Prospectus and who has performed a function in a professional, advisory or other capacity in connection with the preparation or distribution of this Prospectus;
- · promoter of the Company; or
- underwriter to the Offer or financial services licensee named in this Prospectus as a financial services licensee involved in the Offer,

holds as at the time of lodgement of this Prospectus with ASIC, or has held in the two years before lodgement of this Prospectus with ASIC, an interest in:

the formation or promotion of the Company;

- property acquired or proposed to be acquired by the Company in connection with its formation or promotion or the Offer; or
- · the Offer,

and no amount (whether in cash, Shares or otherwise) has been paid or agreed to be paid, nor has any benefit been given or agreed to be given, to any such person for services in connection with the formation or promotion of Carbon Revolution or the Offer or to any Director or proposed Director to induce them to become, or qualify as, a Director of Carbon Revolution.

#### 6.4 Directors' interests

#### 6.4.1 Chief Executive Officer

Refer to Section 6.5.1 for a description of the CEO's remuneration.

#### **6.4.2** Non-Executive Directors

Under the Constitution, the Board of Directors decides the total amount paid to each Director as remuneration for his or her services as a Director of

Carbon Revolution. However, under the ASX Listing Rules, the total amount paid to all Non-Executive Directors for their services must not exceed in aggregate in any financial year the amount fixed by Carbon Revolution in general meeting. This amount has been fixed by Carbon Revolution at \$800,000 per annum.

Annual Directors' fees, inclusive of superannuation, currently agreed to be paid by Carbon Revolution are \$180,000 to the Chairman, James Douglas, and \$90,000 to each other Non-Executive Director. In addition, the chair of the Audit and Risk Committee and the chair of the Remuneration and Nomination Committee will each be paid \$10,000 annually. Members of the Audit and Risk Committee and the Remuneration and Nomination Committee will each be paid \$5,000 annually.

The remuneration of Directors (who are not executive Directors) must not include a commission on, or a percentage of profits or operating revenue.

#### **6.4.3** Other remuneration arrangements

Directors may be reimbursed for travel and other expenses incurred in attending to the Company's affairs, including attending and returning from Board or committee meetings or general meetings. Any Director who performs extra services, makes any special exertions for the benefit of the Company or who otherwise performs services which, in the opinion of the Board, are outside

the scope of ordinary duties of a Non-Executive Director, may be remunerated for the services (as determined by the Board) out of the funds of the Company.

There are no retirement benefit schemes for Directors, other than statutory superannuation contributions.

### **6.4.4** Deeds of indemnity, insurance and access

The Company has entered into a deed of indemnity, insurance and access with each Director, which confirms the Director's right of access to Board papers and requires the Company to indemnify the Director, on a full indemnity basis and to the full extent permitted by law, against all losses or liabilities (including all reasonable legal costs) incurred by the Director as an officer of the Company or of a related body corporate on the terms set out in the deed. Under the deeds of indemnity, insurance and access, the Company must maintain a directors and officers' insurance policy insuring a Director (among others) against liability as a director and officer of the Company and its related bodies corporate until seven years after a Director ceases to hold office as a Director or a director of a related body corporate (or the date any relevant proceedings commenced (and notified by the Director to the Company) during the seven year period have been finally resolved).

#### **6.4.5** Directors' interests in Shares

The Directors are not required by the Constitution to hold any Shares.

The Directors are entitled to apply for Shares under the Offer. Final Directors' shareholdings will be notified to the ASX on Listing. The Directors' holdings (either personally or through entities associated with the Director) immediately prior to and on Completion of the Offer are outlined below.

Shares issued on

Directors	Shares held prior to the Offer (#)	Conversion of the Convertible Notes and under the Anti-Dilution Arrangements (#)	transferred to SaleCo in connection with the Offer (#)	Shares acquired in the Offer (#)	Shares held at Completion of the Offer	Shares held at Completion of the Offer (%)
James Douglas	1,448,000	129,952	_	76,923	1,654,875	1.30%
Jake Dingle	3,972,000	64,975	-	_	4,036,975	3.17%
Bruce Griffiths	105,000	99,799	_	_	204,799	0.16%
Lucia Cade	_	32,877	_	_	32,877	0.03%
Dale McKee	_	49,316	_	17,307	66,623	0.05%
Peter Lewinsky	_	_	_	9,615	9,615	0.01%
Mark Bernhard	_	_	_	38,461	38,461	0.03%
Total	5,525,000	376,919	_	142,306	6,044,225	4.75%

The Shares held on Completion of the Offer recorded in the above table are subject to the escrow restrictions as outlined in Section 9.5.2.

### **6.5** Executive employment arrangements

#### **6.5.1** Chief Executive Officer

Jake Dingle is employed by Carbon Revolution Operations as Chief Executive Officer under a written employment contract and reports to the board.

Mr Dingle is entitled to a fixed annual remuneration of \$496,834 per annum (inclusive of superannuation).

Mr Dingle is entitled to receive an STI award of up to 60% of his fixed annual remuneration for FY19, subject to the achievement of specified performance conditions set by the Board (see Section 6.5.3.1.1). Mr Dingle will be granted a one-off equity award of a maximum of 1,273,419 Options under the Equity Incentive Plan (see Section 6.5.3.1.2) and will be granted LTI awards from FY21 (see Section 6.5.3.1.3).

Mr Dingle's employment may be terminated by Carbon Revolution Operations:

- giving 12 months' notice in writing; or
- without notice in certain circumstances including serious misconduct.

Carbon Revolution Operations can elect to make payment of all or part of the 12 months' fixed annual remuneration in lieu of notice. Any payments made to Mr Dingle upon termination will be subject to the termination benefits cap under the Corporations Act 2001 (Cth). The shareholders of Carbon Revolution Operations and the Company have approved the provision of benefits on cessation of employment to Mr Dingle, including the benefits summarised in Section 6.5.3.

Mr Dingle can resign by giving 6 months' notice in writing.

Mr Dingle is subject to a restraint of trade for a maximum period of 24 months after his employment with Carbon Revolution Operations ends, in a maximum area of Australia, Europe, North America, South America, Asia and India. The enforceability of the restraint clause is subject to the usual legal requirements.

#### **6.5.2** Other members of senior management

The other members of senior management are employed by Carbon Revolution Operations under written employment contracts.

Members of senior management may be entitled to bonuses for performance or may be eligible to participate in short and/or long-term incentive plans. Certain members of senior management may be entitled to an unconditional sign on bonus, which may be provided through the grant of equity.

Members of senior management's written employment contracts provide for notice of termination by Carbon Revolution Operations, ranging from between 3 months and 6 months. Carbon Revolution Operations may also terminate employment without notice in circumstances including serious misconduct. Carbon Revolution Operations can elect to make payment in lieu of notice of termination for all or part of the notice period. Any payments made to the members of senior management upon termination may be subject to the termination benefits cap under the Corporations Act 2001 (Cth). The shareholders of Carbon Revolution Operations and the Company have approved the provision of benefits on cessation of employment to current and future members of key management personnel of the Company and its related bodies corporate, including the benefits summarised in Section 6.5.3.

The members of senior management may resign by providing 3 months' notice in writing. They have post-employment restraints in their employment contracts which are different between the members of senior management. Generally, these provide that the members of senior management may be restrained from certain activities for a maximum period of 24 months after their employment with Carbon Revolution Operations ends. The enforceability of the restraint clause is subject to the legal requirements in the relevant jurisdiction.

#### **6.5.3** Employee equity incentive arrangements

#### 6.5.3.1 Equity Incentive Plan

The Company has established the Carbon Revolution Equity Incentive Plan (**Equity Incentive Plan**) to assist in the motivation, retention and reward of senior executives and other employees that may be invited to participate in the plan from time to time.

The Equity Incentive Plan is designed to align the interests of employees with the interests of Shareholders by providing an opportunity for employees to receive an equity interest in the Company.

The Carbon Revolution Equity Incentive Plan Rules (**Plan Rules**) provide flexibility for the Company to grant Rights, Options and/or restricted Shares as incentives, subject to the terms of individual offers and the satisfaction of performance and vesting conditions determined by the Board from time to time.

The key features of the Plan Rules are outlined in the table below:

Term	Description			
Eligibility	Offers may be made at the Board's discretion to employees of Carbon Revolution or any other person that the Board determines to be eligible to receive a grant under the Plan Rules.			
Types of securities	The Company may grant Rights, Options and/or restricted Shares as incentives, subject to the terms of individual offers.			
	Options are an entitlement to receive Shares upon satisfaction of applicable conditions and payment of an applicable exercise price.			
	Rights are an entitlement to receive Shares subject to the satisfaction of applicable conditions.			
	Restricted Shares are Shares that are subject to dealing restrictions, vesting conditions or other restrictions or conditions.			
	Unless otherwise specified in an offer document, the Board has the discretion to settle Rights or Options with a cash equivalent payment.			
Offers under the Plan Rules	Under the Plan Rules, the Board may make offers at its discretion, subject to any requirements for Shareholder approval. The Board has the discretion to set the terms and conditions on which it will offer incentives in individual offer documents. An offer must be accepted by the participant and can be made on an opt-in or opt-out basis.			
Issue price	Unless the Board determines otherwise, no payment is required for a grant of a Right, Option or restricted Share allocated under the Plan Rules.			
Vesting	Vesting of the incentives is subject to any vesting or performance conditions determined by the Board and specified in the offer document. Subject to the Plan Rules and the terms of the specific offer document, incentives will either lapse or be forfeited if the relevant vesting and performance conditions are not satisfied.			
	Options must be exercised by the employee and the employee is required to pay any exercise price applicable. Rights may also have an exercise mechanism, however no exercise price is payable.			
Cessation of employment	Under the Plan Rules, the Board has a broad discretion in relation to the treatment of entitlements on cessation of employment. It is intended that individual offer documents will provide more specific information on how the entitlements will be treated if the participating employee ceases employment.			
Clawback and preventing inappropriate benefits	The Plan Rules provide the Board with broad clawback powers if, for example, the participant has acted fraudulently or dishonestly or there is a material financial misstatement.			
Change of control	The Board may determine that all or a specified number of a participant's incentives will vest or cease to be subject to restrictions where there is a change of control event in accordance with the Plan Rules.			

Reconstructions, corporate action, rights issues, bonus issues etc.

#### **Description**

The Plan Rules include specific provisions dealing with rights issues, bonus issues, and corporate actions and other capital reconstructions. These provisions are intended to ensure that there is no material advantage or disadvantage to the participant in respect of their incentives as a result of such corporate actions.

Participants are not entitled to participate in new issues of securities by the Company prior to the vesting (and exercise if applicable) of their Options or Rights. In the event of a bonus issue, Options or Rights will be adjusted in the manner allowed or required by the ASX Listing Rules.

Restrictions on dealing

Prior to vesting, the Plan Rules provide that participants must not sell, transfer, encumber, hedge or otherwise deal with their incentives. After vesting, participants will be free to deal with their incentives, subject to the Securities Dealing Policy.

Other terms

The Plan Rules contain customary and usual terms for dealing with administration, variation, suspension and termination of any incentive plan.

#### 6.5.3.1.1 STI awards

Under the Company's STI arrangements, STI awards may be made to the CEO, other members of the senior executive team and any other employees as determined by the Board from time to time. The STI performance conditions are tested over a one-year performance period (being, 1 July to 30 June of the following year). If the applicable performance conditions for STI awards are met, the STI awards will be delivered to participants partly in cash and partly in equity.

The Equity Incentive Plan described above in section 6.5.3.1 will be used to deliver the deferred equity component of STI awards.

For FY19, the CEO is eligible to receive an STI award of up to 60% of his fixed annual remuneration, subject to the achievement of specified performance conditions set by the Board. Any award will be delivered 50% in cash and 50% in Rights.

The following table summarises the proposed terms of the equity component of the STI arrangements.

#### **Term**

#### Eligibility

#### **Description**

Offers may be made at the Board's discretion to executives, senior executives and other employees.

For the FY19 STI, it is intended that the participants will be the CEO and other senior executives. In future years, participation in the STI arrangements may be broadened at the Board's discretion. The CEO is the only director who is eligible to receive an STI award.

#### Grant of Rights

If a participant becomes entitled to receive an STI award, the award will be delivered partly in cash and partly in equity. The FY19 STI awards are intended to be delivered 50% in cash and 50% in Rights. Rights are being used in order to align the interests of the executives with those of shareholders.

A Right entitles the participant to acquire a Share at no cost on vesting, subject to the satisfaction of vesting conditions. The Board retains a discretion to make a cash payment to participants on vesting of the Rights in lieu of an allocation of Shares.

Quantum of grants

#### **Description**

It is intended that the first awards of Rights under the STI plan will be the equity component of the FY19 STI awards for the CEO and other senior executives employed by Carbon Revolution during FY19. These Rights will have a total face value of \$253,477.

The number of Rights to be granted to each participant will be determined by dividing the value of the equity component of the participant's STI award by the Offer Price for FY19 awards and for future years, by the volume weighted average price of Shares traded on ASX during the 20-trading day period prior to 30 June. The maximum number of securities that will be issued under the FY19 STI award is 97.491.

For the FY19 STI award, the CEO will be granted 35,006 Rights which have a face value of \$91,016.

Grant date and timing of future awards

The first equity STI awards (in relation to FY19) are intended to be made shortly after listing (and in any event, within 12 months of listing).

Equity STI awards for future years will generally be made after the release of the full year results for the relevant financial year or where Shareholder approval is required, after the Company's annual general meeting.

Issue and exercise price

Rights will be issued to the participant at no cost and no exercise price is payable on vesting of Rights.

Vesting period and vesting conditions

Rights will be subject to a continuous service condition, which generally requires the participant to be employed by the Group until the one-year anniversary of the date on which the Rights are granted.

Dividends and voting rights

Rights do not carry dividend or voting rights prior to vesting.

Shares allocated on vesting of Rights carry the same dividend and voting rights as other Shares.

Cessation of employment

Unless the Board determines otherwise:

- if a participant's employment is terminated for cause or a participant resigns (or gives notice of their resignation), all of their unvested Rights will lapse; and
- if a participant ceases employment for any other reason (such as retirement, redundancy, death, total & permanent disability, or termination by mutual agreement), the Rights will remain on foot and will vest in the ordinary course.

Change of control

If there is a takeover bid or the Board considers a change of control is likely to occur, the Board has the discretion to accelerate vesting of some or all of a participant's unvested Rights. Where only some of the Rights vest, the remainder will lapse, unless the Board determines otherwise.

If an actual change of control occurs before the Board has exercised its discretion, all unvested Rights will vest.

#### **6.5.3.1.2 ESOP** awards

The Equity Incentive Plan above in section 6.5.3.1 will be used to deliver a one-off equity award to a number of senior executives and other employees, including the CEO, to reward their efforts in the Company achieving Listing, to align their interests with those of shareholders from Listing, and for retention purposes (**ESOP award**). The ESOP award also represents the executives' LTI award for FY20.

The ESOP award will be delivered in the form of Options and the key terms are summarised below.

Term	Description		
Eligibility	Offers may be made at the Board's discretion to certain senior executives and other employees. The CEO is the only director who is eligible to receive an ESOP award.		
Grant of Options	The ESOP award will be delivered in Options. An Option entitles the participant to acquire a Share on vesting and exercise, subject to the satisfaction of vesting conditions and payment of an exercise price. The Board retains a discretion to make a cash payment to participants on vesting and exercise of the Options in lieu of an allocation of Shares.		
Quantum of grants	The ESOP awards will be capped at 4% of the issued share capital of the Company at the time of Listing. At the time of Listing, all of the ESOP awards will have been allocated. The maximum number of Options that will be issued under the ESOP award is 5,093,678.		
	The CEO will be granted a maximum of 1,273,419 Options under the ESOP (which is approximately equal to 25% of the total Options available under the ESOP). The CEO's Options have a face value of \$2.60.		
Grant date	Options are intended to be granted shortly after listing (and in any event, within 12 months of listing).		
Issue and exercise price	The Options will be issued to the participant at no cost.		
	Participants must pay an exercise price to exercise their Options. The exercise price for Options issued under the ESOP will be the Offer Price.		
Vesting	The Options vest three years from the date of Listing.		
	ESOP Options will vest at the end of the vesting period (subject to the cessation of employment provisions outlined below). There are no performance conditions attaching to the ESOP Options.		
Exercise of Options	Participants may exercise any vested ESOP Options from the date the Options vest until the 5th anniversary of the date on which the Options are granted. After that time, any unexercised Options will lapse.		
	In order to exercise an Option, a participant must submit an exercise notice and pay the exercise price.		
Dividends and voting rights	Options do not carry dividend or voting rights prior to vesting and exercise. Shares allocated on exercise of Options carry the same dividend and voting rights as other Shares.		

#### Cessation of employment

#### **Description**

Unless the Board determines otherwise:

- if a participant's employment is terminated for cause or a participant resigns (or gives notice of their resignation) prior to the vesting date, all of their unvested Options will lapse;
- if a participant ceases employment for any other reason (such as retirement, redundancy, death, total & permanent disability, or termination by mutual agreement) prior to the vesting date, all of their unvested Options will remain on foot and vest in the ordinary course; and
- all vested Options will remain on foot if a participant ceases employment after the vesting date and must be exercised within 90 days.

#### Change of control

If there is a takeover bid or the Board considers a change of control is likely to occur, the Board has the discretion to accelerate vesting of some or all of a participant's unvested Options. Where only some of the Options vest, the remainder will lapse, unless the Board determines otherwise. Any vested but unexercised Options will be exercisable for a period of 60 days or otherwise for a period notified by the Board and will lapse after the end of that period if they are not exercised.

If an actual change of control occurs before the Board has exercised its discretion, all unvested Options will vest and participants will have 60 days to exercise vested Options.

#### 6.5.3.1.3 Future LTI plan

The Equity Incentive Plan described in section 6.5.3.1 will be used to deliver LTI awards from FY21 to the CEO, other senior executives and any other employees that may be invited to receive an LTI award from time to time.

The key terms of the Company's intended LTI plan for FY21 are summarised below:

Eligibility	

Term

#### Description

Offers may be made at the Board's discretion to executives, senior executives and other employees.

The CEO is the only director who is eligible to receive an LTI award.

**Grant of Rights** 

It is intended that the FY21 LTI awards will be delivered in Rights. A Right entitles the participant to acquire a Share on vesting, subject to the satisfaction of vesting conditions. The Board retains a discretion to make a cash payment to participants on vesting of the Rights in lieu of an allocation of Shares.

Grants made under the LTI for FY21 and beyond do not fall under the ESOP cap.

It is intended that the CEO will be granted Rights for his FY21 LTI award, approximately equivalent in value to 75% of his fixed annual remuneration.

#### Grant date

LTI awards for future years will generally be made after the release of the full year results or where Shareholder approval is required, after the Annual General Meeting.

Issue and exercise price

Performance period

Performance conditions

#### **Description**

Rights will be issued to the participant at no cost and no exercise price is payable on vesting of Rights.

LTI awards will generally be subject to a 3-year performance period.

The number of Rights that vest will be determined by the Board by reference to a comparison of the compound annual growth rate (CAGR) in the Company's total shareholder return (TSR) relative to the CAGR of the ASX300 Index over the performance period.

Vesting will occur based on the following schedule, where the benchmark is the ASX300 Index CAGR:

Level of achievement	Percentage of Rights that will vest
Below the benchmark	Nil
Benchmark	25%
Outperform the benchmark by 75% 100%	

Straight-line vesting applies for performance between the thresholds above, although no vesting will occur below the benchmark.

The Board will test the performance condition following the release of Carbon Revolution's full year results after the end of the performance period and determine the appropriate vesting outcome.

Any Rights that remain unvested following testing will lapse immediately.

Dividends and voting rights

Rights do not carry dividend or voting rights prior to vesting. Shares allocated on vesting of Rights carry the same dividend and voting rights as other Shares.

Cessation of employment

Unless the Board determines otherwise:

- if a participant's employment is terminated for cause or a participant resigns (or gives notice of their resignation) prior to vesting, all of their unvested Rights will lapse;
- if a participant ceases employment for any other reason (such as retirement, redundancy, death, total & permanent disability, or termination by mutual agreement) prior to vesting, a pro-rata portion of unvested Rights based on the proportion of the performance period that has elapsed up to the date of cessation will remain on foot and will continue to be subject to the original performance condition.

#### Change of control

#### **Description**

If there is a takeover bid or the Board considers a change of control is likely to occur, the Board has the discretion to accelerate vesting of some or all of a participant's unvested Rights based on performance. Where only some of the Rights vest, the remainder will lapse, unless the Board determines otherwise.

If an actual change of control occurs before the Board has exercised its discretion, all unvested Rights will vest.

#### 6.5.3.2 Tax exempt plan

The Company has also established a Tax Exempt Employee Share Plan to provide eligible employees of Carbon Revolution (other than the CEO and other senior executives) with an opportunity to receive a grant of Shares on a tax-exempt basis.

Under the Tax Exempt Employee Share Plan, eligible employees of Carbon Revolution may be invited to receive an allocation of up to \$1,000 in Shares per annum.

Shares will be issued to participants that accepted the FY19 offers prior to Completion of the Offer.

The current intention is that future offers under the Employee Plan be made annually, at the Board's discretion.

## **6.6** Agreements with Shareholders, or related parties

Carbon Revolution has entered into agreements with Shareholders or related parties, including Deakin, Ronal and the State of Victoria, as described below.

#### 6.6.1 Deakin

Deakin has entered into a funding agreement with the Commonwealth, under which the Commonwealth agrees to provide funding to Deakin for the purpose of facilitating the development of carbon fibre wheel technology. In connection with this, Deakin, Carbon Revolution and others have entered into agreements to form a research hub and undertake research.

Carbon Revolution and Deakin have also entered into a Research and Collaboration Framework Agreement which sets out the terms and conditions on which Deakin will be given the opportunity to participate in research projects undertaken by Carbon Revolution and under which Carbon Revolution agrees to target undertaking approximately \$1 million worth of research per year with Deakin.

Finally, Carbon Revolution has entered into the Lease with Deakin in respect of Carbon Revolution's Geelong facilities at Deakin's Geelong Campus. The term of the Lease commenced on 22 November 2018 and is for 10 years, with 2 options for Carbon Revolution to renew of 5 years each. The rent payable by Carbon Revolution under the lease is approximately \$800,000 per annum.

Please refer to Sections 9.5.9, 9.5.10, and 9.5.11 for more details on the arrangements in place with Deakin.

#### **6.6.2** Ronal Financing Arrangements

The Company (as borrower), Carbon Revolution Operations (as guarantor) and Ronal (as lender) are parties to the Ronal Loan. The Ronal Loan has an \$18 million facility limit and the principal amount outstanding as at the date of this Prospectus is \$18 million, however \$5 million of the proceeds raised under the Offer will be used to make a pre-payment on this loan, such that the principal amount outstanding will be \$13 million). The Ronal Loan carries an interest rate of 10% per annum, payable quarterly in arrears. The Company must pay Ronal the principal amount outstanding plus accrued interest on 30 June 2021 unless such amounts are repaid or converted to Shares earlier.

The Ronal Loan is secured by a general security interest granted by the Company and Carbon Revolution Operations. The Ronal Loan is guaranteed by Carbon Revolution Operations.

Under an Intercreditor Deed between the Company, Carbon Revolution Operations, Carbon Revolution Technology Pty Ltd, Ronal and the State of Victoria:

- all amounts payable by the Company in respect of the Early Advance (see section 9.5.5) are subordinated to the amounts owed by the Company and Carbon Revolution Operations to Ronal under the Ronal Financing Arrangements; and
- following conversion of the Convertible Notes issued to the State of Victoria at Completion of the Offer, security granted in favour of Ronal has priority over, and ranks ahead of, all security granted in favour of the State of Victoria.

Further, the Company, Ronal and the State of Victoria are parties to a subordination deed, under

which amounts owing to holders of Convertible Notes (other than the State of Victoria) are subordinated to, and rank in priority after, amounts that the Company is liable to pay under the Ronal Financing Arrangements and the State of Victoria Convertible Note Financing Arrangements.

Please refer to Sections 9.5.6, 9.5.7 and 9.5.8 of the Prospectus for more details on the Ronal Financing Arrangements.

#### **6.6.3** State of Victoria Grant Agreement

The Company is party to a grant agreement with the State of Victoria for the purposes of assisting the Company to establish and operate a commercial scale carbon fibre wheel manufacturing facility in Geelong. The Grant Agreement provides for the provision of grants of up to \$10 million in total by the State of Victoria to the Company over a period of approximately 5 years until October 2023, subject to the Company satisfying certain deliverables and other conditions.

The Grant Agreement also allows for an early advance of up to \$7.5 million, and this Early Advance was advanced to the Company (in 3 tranches) between January and March 2019. \$5.5 million of this Early Advance remains outstanding, after the set-off of \$2 million which become payable to the Company in October 2019 under the Grant Agreement. A facility fee of \$37,000 per month is payable in arrears on the date of repayment of the Early Advance.

The amount of the Early Advance which is outstanding is expected to be repayable on 30 June 2021. The Early Advance may be set-off against grant moneys which become payable by the State of Victoria to the Company under the Grant Agreement, as the Company satisfies the relevant grant deliverables and conditions.

Under the Intercreditor Deed, the State of Victoria has, until the Early Advance has been repaid, a first right of refusal to purchase the Company's intellectual property rights, licences and know-how.

The obligations of the Company in respect of the Early Advance are secured by a general security deed between the Company and the State of Victoria.

Please refer to Sections 9.5.5 and 9.5.8 of the Prospectus for more details on the Grant Agreement, State Grant Security Deed and Intercreditor Deed.

### **6.6.4** State of Victoria Convertible Note Financing Arrangements

As at the date of this Prospectus, the State of Victoria is the registered holder of approximately 19.5 million Convertible Notes. The obligations of the Company, Carbon Revolution Operations

and Carbon Revolution Technology Pty Ltd owing to the State of Victoria under the Convertible Notes, Intercreditor Deed and Subordination Deed are secured by the State Note General Security Deed (together, these documents are the State of Victoria Convertible Note Financing Arrangements).

Other than the Intercreditor Deed, the State of Victoria Convertible Note Financing Arrangements will cease to apply or be discharged on Conversion of the Convertible Notes on Completion of the Offer. Please refer to Sections 9.5.6 and 9.5.8 of the Prospectus for more details on the State of Victoria Convertible Note Financing Arrangements.

#### 6.7 Interests of advisors

The following professional advisors have been engaged in relation to the Offer.

- Evans Dixon and Bell Potter have acted as Joint Lead Managers and Underwriters to the Offer.
   Carbon Revolution has agreed to pay Evans Dixon and Bell Potter the fees described in Section 9 for these services;
- Herbert Smith Freehills has acted as Australian legal advisor (other than in relation to taxation, stamp duty, banking, finance and patents) to Carbon Revolution in relation to the Offer. Carbon Revolution has paid or agreed to pay approximately A\$900,000 (excluding disbursements and GST) for these services up until the Prospectus Date. Further amounts may be paid to Herbert Smith Freehills in accordance with its normal time-based charges;
- Deloitte Corporate Finance Pty Ltd has acted as the Investigating Accountant in relation to the Offer and has prepared the Investigating Accountant's Reports and has performed work in relation to due diligence enquiries.
   Carbon Revolution has paid or agreed to pay approximately A\$497,500 (excluding disbursements and GST) for these services up until the Prospectus Date. Further amounts may be paid to Deloitte Corporate Finance Pty Ltd in accordance with its normal time-based charges;
- L.E.K. has acted as consultant to Carbon Revolution in relation to the Offer and prepared certain information relating to the industry in which the Company operates for inclusion in this prospectus. Carbon Revolution has paid or agreed to pay approximately A\$6,400 (excluding disbursements and GST) for these services up until the Prospectus Date; and
- PwC has acted as taxation advisor to Carbon Revolution in relation to the Offer.
   Carbon Revolution has paid or agreed to pay approximately A\$167,878 (excluding disbursements and GST) for these services up

until the Prospectus Date. Further amounts may be paid to PwC in accordance with its normal time-based charges.

These amounts, and other expenses of the Offer, will be borne by Carbon Revolution out of funds raised under the Offer or available cash. Further information of the use of proceeds and payment of expenses of the Offer is set out in Section 7.

#### 6.8 Corporate governance

This Section 6.8 explains how the Board will oversee the management of the Carbon Revolution business. The Board is responsible for the overall corporate governance of Carbon Revolution.

In conducting Carbon Revolution's business, the Board's role is to:

- represent and serve the interests of Shareholders by overseeing and appraising Carbon Revolution's strategies, policies and performance;
- protect and optimise company performance and build sustainable value for Shareholders in accordance with any duties and obligations imposed on the Board by law and the Constitution;
- set, review and monitor compliance with Carbon Revolution's values and governance framework; and
- ensure that Shareholders are kept informed of Carbon Revolution's performance and major developments affecting its state of affairs.

Accordingly, the Board has created a framework for managing Carbon Revolution, including adopting relevant internal controls, risk management processes and corporate governance policies and practices that it believes are appropriate for Carbon Revolution's business and that are designed to promote the responsible management and conduct of Carbon Revolution.

The main policies and practices adopted by Carbon Revolution, which will take effect from Listing, are summarised below. Copies of Carbon Revolution's key policies and the charters for the Board and each of its committees will be available from Listing at www.carbonrev.com.

## **6.8.1** ASX Corporate Governance Council's Corporate Governance Principles and Recommendations

Carbon Revolution is seeking a listing on the ASX. The ASX Corporate Governance Council has developed the third edition of the Corporate Governance Principles and Recommendations (ASX Recommendations), which set out recommended corporate governance practices for entities listed on ASX in order to assist listed entities achieve good corporate governance

outcomes and meet investor expectations. The ASX Corporate Governance Council has released the fourth edition of the Corporate Governance Principles and Recommendations, which come into effect for a company's first full financial year commencing after 1 January 2020.

The ASX Recommendations are not prescriptive, but guidelines. Under the ASX Listing Rules, Carbon Revolution must prepare a corporate governance statement disclosing the extent to which it has followed the ASX Recommendations during each reporting period. Where Carbon Revolution does not follow an ASX Recommendation, it must identify the recommendation that has not been followed and give reasons for not following it. Carbon Revolution intends to comply with all of the ASX Recommendations from the time of its Listing and will endeavour to comply with the fourth edition ASX Recommendations from 1 July 2020.

#### 6.8.2 Board of Directors

The Board of Directors is comprised of seven Directors, comprising an Independent Chairman, the Chief Executive Officer and five Non-Executive Directors (all of whom are independent).

Detailed biographies of the Board members on Listing are provided in Section 6.1.

The Board considers a Director to be independent where he or she is free of any interest, position or relationship that might influence, or might reasonably be perceived to influence, in a material respect, his or her capacity to bring independent judgment to bear on issues before the Board and to act in the best interests of Carbon Revolution as a whole rather than an individual Shareholder or other party. The Board reviews the independence of each Non-Executive Director in light of information disclosed to the Board.

The Board Charter sets out guidelines to assist in considering the independence of Directors and has adopted a definition of independence that is based on the fourth edition ASX Recommendations.

The Board considers that each of James Douglas, Lucia Cade, Bruce Griffiths, Dale McKee, Mark Bernhard and Peter Lewinsky is free from any interest, position, association or relationship that might influence, or might reasonably be perceived to influence, in a material respect, his or her capacity to bring independent judgment to bear on issues before the Board and to act in the best interests of Carbon Revolution and its Shareholders generally and is able to fulfil the role of an Independent Director for the purposes of the ASX Recommendations.

James Douglas previously held an executive position with Carbon Revolution as Chief Financial Officer within three years of his appointment to the

position of Chairman. The Board has concluded that Mr Douglas' previous executive position does not interfere with or compromise his ability to exercise objective or independent judgment in relation to matters before the Board, or with his ability to act in the best interests of the Company as a whole. Accordingly, the Board has determined that Mr Douglas is an Independent Director.

As described in Section 6, Jake Dingle is not considered by the Board to be an Independent Director as he is the Chief Executive Officer of Carbon Revolution.

#### 6.8.3 Board charter

The Board has adopted a written charter to provide a framework for the effective operation of the Board, which sets out:

- the Board's composition;
- the Board's role and responsibilities;
- the relationship and interaction between the Board and management; and
- the authority delegated by the Board to management and Board committees.

The Board's role is to:

- represent and serve the interests of Shareholders by overseeing and appraising Carbon Revolution's strategies, policies and performance. This includes overseeing the financial and human resources Carbon Revolution has in place to meet its objectives and reviewing management performance;
- protect and optimise Carbon Revolution's performance and build sustainable value for Shareholders in accordance with any duties and obligations imposed on the Board by law and the Constitution and within a framework of prudent and effective controls that enable risk to be assessed and managed;
- set, review and monitor compliance with Carbon Revolution's values and governance framework (including establishing and observing high ethical standards); and
- ensure Shareholders are kept informed of Carbon Revolution's performance and major developments affecting its state of affairs.

While the Board retains ultimate responsibility for the strategy and performance of Carbon Revolution, the day-to-day operation of Carbon Revolution is conducted by, or under the supervision of, the Chief Executive Officer as directed by the Board. Management must supply the Board with information in a form, timeframe and quality that will enable the Board to discharge its duties effectively. Directors are entitled to request

additional information at any time when they consider it appropriate.

The Board collectively, and each Director individually, has the right to seek independent professional advice, subject to the approval of the Chair or the Board as a whole.

#### **6.8.4** Board committees

The Board may from time to time establish appropriate committees to assist in the discharge of its responsibilities. The Board has established an Audit and Risk Committee and a Remuneration and Nomination Committee. Other committees may be established by the Board as and when required.

#### 6.8.4.1 Audit and Risk Committee

Under its charter, this committee must consist of a minimum of three members of the Board, only Non-Executive Directors, a majority of Independent Directors and an Independent Chair who is not the Chair of the Board. The Audit and Risk Committee comprises:

- Dale McKee (chair);
- James Douglas; and
- · Peter Lewinsky.

The Audit and Risk Committee's responsibilities include:

- reviewing financial and other periodic reports;
- overseeing the relationship with the external auditor and the external audit function generally;
- overseeing the relationship with the internal auditor and the internal audit function generally, where an internal audit function exists;
- overseeing the effectiveness of the operation of internal controls and systems;
- overseeing processes for identifying and managing financial and non-financial risk; and
- overseeing processes for monitoring compliance with laws and regulations.

All non-executive directors have a standing invitation to attend Audit and Risk Committee meetings. Non-committee members, including members of management and the external auditor, may attend meetings of the committee at the invitation of the committee chair.

### 6.8.4.2 Remuneration and Nomination Committee

Under its charter, this committee must consist of a minimum of three members of the Board, only Non-Executive Directors, a majority of Independent Directors and an Independent Director as chair. The Remuneration and Nomination Committee comprises:

- · Bruce Griffiths (chair);
- · Lucia Cade; and
- · Mark Bernhard.

The responsibilities of the Remuneration and Nomination Committee include:

- reviewing and recommending to the Board remuneration arrangements for Non-Executive Directors;
- reviewing and recommending to the Board employment and remuneration arrangements for the CEO and the senior executive team;
- approving major changes and developments in Carbon Revolution's policies and procedures related to remuneration, recruitment, retention, termination, and performance assessment for senior management;
- reviewing Carbon Revolution's remuneration framework to confirm it encourages a culture aligned with the Company's values, supports the Company's strategic objectives and is aligned with the Company's risk management framework;
- overseeing the operation of Carbon Revolution's employee equity incentive plans and recommending to the Board whether offers are to be made under any of Carbon Revolution's employee incentive plans in respect of a financial year;
- reviewing and recommending to the Board the terms of any incentive offers made to the CEO and other members of the senior executive team;
- reviewing and recommending to the Board the size and composition of the Board, including reviewing Board succession plans and the succession of the Chair;
- reviewing the succession plans for the CEO and other senior executives; and
- in accordance with the Diversity and inclusion Policy, developing and recommending to the Board measurable objectives for achieving gender diversity in the composition of the Board, senior executives and workforce generally, and, assessing Carbon Revolution's progress in achieving those objectives.

All non-executive directors have a standing invitation to attend Remuneration and Nomination Committee meetings. Non committee members, including members of management, may attend all or part of a meeting of the Committee at the invitation of the Committee Chair.

#### **6.8.5** Corporate governance policies

The Board has adopted the following corporate governance policies, each having been prepared having regard to the ASX Recommendations and which will be available from Listing on Carbon Revolution's website at www.carbonrev.com.

#### 6.8.5.1 Anti-bribery and Corruption Policy

Carbon Revolution is committed to acting ethically and has zero tolerance for bribery and corruption. Carbon Revolution has developed an Anti-bribery and Corruption Policy for countering bribery and corruption.

The Anti-bribery and Corruption Policy requires that personnel and business partners of Carbon Revolution must not pay, offer, promise or accept, directly or indirectly, any bribe, kickback, secret commission, facilitation payment, or other form of improper payment, or otherwise breach relevant anti-corruption laws.

The Anti-bribery and Corruption Policy also requires that personnel and business partners of Carbon Revolution must not do any of the following if doing so would constitute a breach of the Anti-bribery and Corruption Policy:

- make political donations on behalf of Carbon Revolution contrary to the terms of the Anti-Bribery and Corruption Policy;
- make any charitable or community donations or sponsorships which are or could be perceived as bribes;
- offer, provide or accept gifts, hospitality or travel contrary to the terms of the Anti-Bribery and Corruption Policy;
- falsify or mis-describe any book, record or account relating to Carbon Revolution's business; or
- cause or authorise any of the above conduct or any other conduct which is inconsistent with the Anti-Bribery and Corruption Policy or any anticorruption laws.

#### **6.8.5.2** Disclosure Policy

Once listed, Carbon Revolution will be required to comply with the continuous disclosure requirements of the ASX Listing Rules and the Corporations Act. Carbon Revolution is aware of its obligation to keep the market fully informed of any information Carbon Revolution becomes aware of concerning Carbon Revolution, which may have a material effect on the price or value of Carbon Revolution's securities, subject to certain exceptions. Carbon Revolution has adopted a Continuous Disclosure Policy to take effect from Listing to reinforce its commitment to addressing its continuous disclosure obligations and to

describe the processes in place that enable Carbon Revolution to provide Shareholders with the timely disclosure of material price-sensitive information.

#### 6.8.5.3 Communications Strategy

Carbon Revolution aims to keep Shareholders informed of major developments affecting the state of affairs of Carbon Revolution. Carbon Revolution recognises that potential investors and other interested stakeholders may wish to obtain information about Carbon Revolution from time to time. To achieve this, Carbon Revolution will communicate information regularly to Shareholders and other stakeholders through a range of forums and publications, including Carbon Revolution's website, at the annual general meeting, and through Carbon Revolution's annual report and ASX announcements.

#### 6.8.5.4 Securities Dealing Policy

Carbon Revolution has adopted a Securities
Dealing Policy that is intended to explain the types
of conduct in relation to dealings in securities that
are prohibited by law and establish procedures for
the buying and selling of securities to ensure the
public confidence is maintained in the reputation of
Carbon Revolution, the Directors, and employees
and in the trading of Carbon Revolution's securities.
The policy provides that Directors and employees
must not:

- deal in Carbon Revolution's or another company's securities when they are aware of 'inside' information; and
- hedge unvested equity remuneration or vested equity subject to holding locks.

Directors and employees must also not deal in Carbon Revolution's securities during any of the following blackout periods (except in exceptional circumstances with approval):

- the period from the close of trading on the ASX on the date that is two weeks before 30 June each year until the day following the announcement to the ASX of the full year results;
- the period from the close of trading on the ASX on the date that is two weeks before 31 December each year until the day following the announcement to the ASX of the half year results; and
- any other period that the Board specifies from time to time.

In addition, for so long as the Company is required to lodge quarterly reports with the ASX, the following periods are also blackout periods:

 the period from the close of trading on the ASX on the date that is two weeks before 30 September each year until the day following

- the announcement to ASX of the first quarter results; and
- the period from the close of trading on the ASX on the date that is two weeks before
   31 March each year until the day following the announcement to ASX of the third quarter results.

Outside these periods, Directors and employees must receive prior approval for any proposed dealing in Carbon Revolution's securities, and in all instances, buying or selling securities is not permitted at any time by any person who possesses 'inside' information.

#### 6.8.5.5 Code of Conduct

Carbon Revolution is committed to integrity and ethical standards in all business practices. Accordingly, the Board has adopted a Code of Conduct that outlines how Carbon Revolution expects its employees and Directors to behave and conduct business in the workplace on a range of issues.

The Code is designed to:

- provide a benchmark for professional behaviour;
- support Carbon Revolution's business reputation and corporate image within the community; and
- make Directors and employees aware of the consequences of breaching the Code.

#### 6.8.5.6 Diversity and Inclusion Policy

The Board has approved a Diversity and Inclusion Policy in order to, among other matters, actively facilitate a more diverse and representative management structure and workforce and address the representation of women in senior management positions and on the Board. The Company will include in the corporate governance statement each year the measurable objectives set for that reporting period to achieve gender diversity and Carbon Revolution's progress towards achieving the measurable objectives.

#### 6.8.5.7 Speak Up Policy

Carbon Revolution has adopted a Speak Up Policy to provide a means for anyone with information about potential misconduct to report that information to the Company.

The Speak Up Policy:

- outlines Carbon Revolution's commitment to encouraging its people to speak up if they become aware of potential misconduct;
- explains how to make a report and what protections a discloser will receive; and
- outlines Carbon Revolution's processes for responding to reports.



# DETAILS OF THE OFFER





#### 7 Details of the Offer

#### 7.1 The Offer

The Offer is an initial public offering of Shares at an offer price of A\$2.60 per Share (**Offer Price**). The Offer contained in this Prospectus is an invitation to apply for:

- 11,538,462 Shares offered for issue by the Company, to raise proceeds of approximately \$30.0 million: and
- 23,133,093 Shares offered for sale by SaleCo, to raise proceeds of approximately \$60.1 million.

The total number of Shares on issue at Completion of the Offer will be 127,341,942. The Shares to be issued or transferred under the Offer will represent approximately 27.2% of the Shares on issue on Completion of the Offer. All Shares available under the Offer are fully paid ordinary shares and will rank equally with the Shares on issue as at the date of this Prospectus. A summary of the rights attaching to the Shares is set out in Section 7.10.

On Completion of the Offer, 92,870,384 Shares will be held by the Existing Shareholders (representing 72.9% of the Shares on issue) and 52,345,575 Shares will be subject to the mandatory and voluntary escrow arrangements described in Section 9.5.2.

The Offer will be fully underwritten by the Joint Lead Managers. A summary of the Underwriting Agreement, including the events which would entitle the Joint Lead Managers to terminate the Underwriting Agreement, is set out in Section 9.5.1.

The Offer is made with disclosure under this Prospectus and is made on the terms, and is subject to the conditions, set out in this Prospectus.

#### **7.1.1** Structure of the Offer

The Offer comprises:

- the Broker Firm Offer, which is open to Australian resident retail clients of Brokers who have received a firm allocation of Shares from their Broker:
- the Institutional Offer, which consists of an offer to Institutional Investors in Australia and a number of other eligible jurisdictions, made under this Prospectus; and
- the Priority Offer, which is open to selected investors in Australia nominated by the Company who receive a Priority Offer Letter to apply for Shares.

No general offer of Shares will be made under the Offer.

The allocation of Shares between the Broker Firm Offer, the Institutional Offer and the Priority Offer will be determined by agreement between the Company and the Joint Lead Managers.

For further details of the:

- Broker Firm Offer and allocation policy under it, see Section 7.3;
- Institutional Offer and allocation policy under it, see Section 7.4; and
- Priority Offer and allocation policy under it, see Section 7.5.

#### 7.1.2 Purpose of the Offer

The purpose of the Offer is to:

- raise additional capital for investment in:
  - new manufacturing equipment to reduce unit costs of production and increase production capacity at the Geelong facility;
- continued R&D activities;
- general corporate purposes;
- pre-pay \$5 million of the Ronal Loan;
- provide Carbon Revolution with additional financial flexibility through improved access to capital markets;
- provide a liquid market for Shares and an opportunity for others to invest in the Company;
- provide certain Existing Shareholders the ability to realise part of their investment; and
- provide Carbon Revolution with the benefits of an increased profile that arises from being a listed entity.

#### 7.1.3 Sources and uses of Offer Proceeds

The following table details the sources and the uses of funds.

Sources	A\$ million	Uses	A\$ million
Cash proceeds received by	\$30.0	Capital expenditure	\$9.6
the Company for the issue of Shares under the Offer		Research and Development	\$6.2
		Working capital	\$4.7
		Pre-payment of the Ronal Loan	\$5.0
		Offer costs <sup>1</sup>	\$4.4
Cash proceeds received for the transfer of Shares by SaleCo under the Offer	\$60.1	Payment by SaleCo of cash proceeds to Existing Shareholders as consideration for the acquisition of Shares being transferred under the Offer	\$57.7
		Offer costs <sup>1</sup>	\$2.4
Total sources	\$90.1	Total uses	\$90.1

The majority of the Joint Lead Managers' management and underwriting fees referable to the sale of Shares by SaleCo into the Offer will be deducted by SaleCo from the proceeds due to Existing Shareholders who have sold Shares to SaleCo in connection with the Offer.

#### 7.1.4 Other information about Carbon Revolution and the Offer

Carbon Revolution's Pro Forma Historical Statement of Financial Position following Completion of the Offer, including details of pro forma adjustments, is set out in Section 4.6.

The Company's capital structure and indebtedness as at 30 June 2019 is set out in Section 4.6.

The Company is an Australian resident public company for tax purposes. The financial year of the Company ends on 30 June annually.

#### 7.1.5 Potential effect of the Offer on the future of Carbon Revolution

The Board believes that, on Completion, the Company will have sufficient funds available to fulfil the purposes of the Offer and meet its stated business objectives.

#### **7.1.6** Shareholding structure

The details of the ownership of Shares immediately prior to Completion of the Offer, and on Completion of the Offer, are set out below.

Shareholders	Shares held prior to the Offer¹ (#)	Shares held prior to the Offer (%)	Shares issued on Conversion of the Convertible Notes and under the Anti-Dilution Arrange- ments (#)	Shares transferred to SaleCo in connection with the Offer (#)	Shares acquired in the Offer (#)	Shares held at Completion of the Offer (#) <sup>2</sup>	Shares held at Compl- etion of the Offer (%)
Directors / Management (and associated entities)	11,283,731	22.04%	396,373	(500,000)	199,997	11,380,101	8.94%
Ronal	16,553,000	32.33%	5,367,248	(7,692,307)	_	14,227,941	11.17%
Deakin	5,085,000	9.93%	3,292,592	_	_	8,377,592	6.58%
State of Victoria	_	_	12,833,226	(7,411,484)	-	5,421,742	4.26%
Other Existing Shareholders	18,281,472	35.70%	42,710,838	(7,529,302)	_	53,463,008	41.98%
New Shareholders <sup>2</sup>		_	_	_	34,471,558	34,471,558	27.07%
Total	51,203,203	100.00%	64,600,277	(23,133,093)	34,671,555	127,341,942	100.00%

#### Notes:

- 1. This includes 38,269 Shares to be issued prior to Completion of the Offer to employees of the Company under a tax exempt employee share plan the Company has in place and 272,336 Shares in connection with certain employment arrangements of current and former employees.
- 2. This table assumes Existing Shareholders do not acquire any Shares under the Broker Firm Offer.
- 3. At Completion of the Offer, 41.1% of the Shares will be subject to mandatory and voluntary escrow arrangements. See Section 9.5.2 for further information.

#### 7.2 Terms and conditions of the Offer

Topic	Summary
What is the type of security being offered?	Shares (being fully paid ordinary shares in the Company).
What are the rights and liabilities attached to the Shares being offered?	A description of the Shares, including the rights and liabilities attaching to them, is set out in Section 7.10.
What is the consideration payable for each security being offered?	The Offer Price is A\$2.60 per Share.

What is the Offer period?

#### Summary

The key dates, including details of the Offer Period, are set out on page 9.

No Shares will be issued or transferred on the basis of this Prospectus later than the Expiry Date of 13 months after the Original Prospectus Date.

The key dates are indicative only and may change. Unless otherwise indicated, all times are stated in Sydney time.

The Company and SaleCo, in consultation with the Joint Lead Managers, reserve the right to vary any and all of the times and dates without notice (including, subject to the ASX Listing Rules and the Corporations Act, to close the Offer early, to extend the Offer Period relating to any component of the Offer, or to accept late Applications, either generally or in particular cases, or to cancel or withdraw the Offer before Completion, in each case without notifying any recipient of this Prospectus or any Applicants).

If the Offer is cancelled or withdrawn before Completion, then all Application Monies will be refunded in full (without interest) as soon as possible in accordance with the requirements of the Corporations Act.

What are the cash proceeds being raised?

How is the Offer structured?

Approximately \$90.1 million will be raised under the Offer based on the Offer Price if the Offer proceeds.

#### The Offer comprises:

- the Broker Firm Offer, which is open only to Australian clients of participating Brokers who are not Institutional Investors and who have received a firm allocation from their Broker to acquire Shares under this Prospectus;
- the Institutional Offer, which consists of an invitation to bid for Shares made to Institutional Investors in Australia and a number of other eligible jurisdictions; and
- the Priority Offer, which is open to selected investors in Australia nominated by the Company who receive a Priority Offer Letter to apply for Shares.

What is the minimum and maximum Application size under the Offer?

The minimum Application size under the Offer is A\$2,000 worth of Shares. There is no maximum value of Shares that may be applied for under the Offer.

The Company, SaleCo and the Joint Lead Managers reserve the right to reject any Application or to allocate a lesser number of Shares than that applied for. In addition, the Company, SaleCo and the Joint Lead Managers reserve the right to aggregate any Applications which they believe may be multiple Applications from the same person or reject or scale back any Applications (or aggregation of Applications) in the Offer which are for more than A\$250,000 worth of Shares.

#### What is the allocation policy?

#### **Summary**

The allocation of Shares between the Broker Firm Offer, Institutional Offer and the Priority Offer will be determined by agreement between the Joint Lead Managers and the Company, having regard to the allocation policies outlined in Sections 7.3.5, 7.4.2 and 7.5.5.

#### **Broker Firm Offer**

With respect to the Broker Firm Offer, each Broker will decide how it allocates Shares among its retail clients, and it (and not the Company, SaleCo nor the Joint Lead Managers) will be responsible for ensuring that eligible retail clients who have received an allocation from it, receive the relevant Shares. For further information on the Broker Firm Offer, see Section 7.3.

#### Institutional Offer

The allocation of Shares under the Institutional Offer was determined by agreement between the Joint Lead Managers and the Company. For further information on the Institutional Offer, see Section 7.4.

#### **Priority Offer**

With respect to the Priority Offer, the Company will decide how to allocate Shares amongst investors nominated by the Company who receive a Priority Offer Letter. For further information on the Priority Offer, see Section 7.5.

Will the Shares be listed?

The Company applied to ASX on 1 November 2019 for admission to the Official List of, and quotation of its Shares by, ASX under the code 'CBR'.

Completion of the Offer is conditional on ASX approving this application. If approval is not given within three months after such application (or any longer period permitted by law), the Offer will be withdrawn and all Application Monies received will be refunded without interest as soon as practicable in accordance with the requirements of the Corporations Act.

It is anticipated that quotation will initially be on a deferred settlement basis.

The Company will be required to comply with the Listing Rules, subject to any waivers obtained by the Company from time-to-time.

ASX takes no responsibility for this Prospectus or the investment to which it relates. The fact that ASX may admit the Company to the Official List is not to be taken as an indication of the merits of the Company or the Shares offered for subscription.

When are the Shares expected to commence trading?

#### **Summary**

It is expected that trading of the Shares on ASX will commence on or about 29 November 2019, initially on a deferred settlement basis until the Company has advised ASX that initial holding statements have been dispatched to Shareholders.

It is expected that initial holding statements will be dispatched by standard post on or about 2 December 2019. Normal settlement trading is expected to commence on or about 3 December 2019.

It is the responsibility of each Applicant to confirm their holding before trading in Shares. Applicants who sell Shares before they receive an initial statement of holding do so at their own risk.

The Company, SaleCo, the Share Registry and the Joint Lead Managers disclaim all liability, whether in negligence or otherwise, to persons who sell Shares before receiving their initial holding statement, whether on the basis of a confirmation of allocation provided by any of them, by the Carbon Revolution Offer Information Line, by a Broker or otherwise.

When will I receive confirmation of whether my Application has been successful?

It is expected that initial holding statements will be mailed to successful Applicants by standard post on or about 2 December 2019.

Refunds (without interest) to Applicants who make an Application and receive an allocation of Shares, the value of which is smaller than the amount of the Application Monies received from them, will be made as soon as practicable after Completion of the Offer.

Is the Offer underwritten?

Yes. The Joint Lead Managers will fully underwrite the Offer. Details are provided in Section 9.5.1.

Who are the Joint Lead Managers of the Offer?

The Joint Lead Managers are Evans Dixon and Bell Potter.

Are there any escrow arrangements?

Yes. Details are provided in Section 9.5.2.

Has any ASX waiver or confirmation or ASIC relief been obtained or been relied on?

Yes. Details are provided in Section 9.12.

Are there any taxation considerations?

Yes. Please refer to Section 9.10 and note that given the taxation consequences of an investment will depend upon the investor's particular circumstances, it is the obligation of each investor to make their own enquiries (including consulting independent tax advisers) concerning the taxation consequences of an investment in Shares.

If you are in doubt as to the course you should follow, you should consult your stockbroker, solicitor, accountant, tax adviser or other independent and qualified professional adviser.

Are there any brokerage, commission or stamp duty considerations?

No brokerage, commission or stamp duty is payable by Applicants on the acquisition of Shares under the Offer.

See Section 9.5.1 for details of various fees payable by the Company and SaleCo to the Joint Lead Managers.

#### How can I apply?

#### **Summary**

Broker Firm Applicants should refer to section 7.3.2 for details on how to apply.

Priority Offer Applicants should refer to section 7.5.2 for details on how to apply.

Institutional Offer Applicants were contacted by the Joint Lead Managers in relation to applying under the Institutional Offer.

To the extent permitted by law, an Application by an Applicant under the Offer is irrevocable.

What should I do with any enquiries?

All enquiries in relation to this Prospectus or the Offer should be directed to the Carbon Revolution Offer Information Line on 1800 677 648 (within Australia) or +61 1800 677 648 (outside Australia) 8.30am to 5.00pm (Sydney time), Monday to Friday (excluding public holidays).

All enquires in relation to the Broker Firm Offer should be directed to your Broker.

If you are unclear in relation to any matter or are uncertain as to whether Shares are a suitable investment for you, you should seek professional guidance from your solicitor, stockbroker, accountant or other independent and qualified professional adviser before deciding whether to invest.

#### 7.3 Broker Firm Offer

#### 7.3.1 Who can apply

The Broker Firm Offer is open only to Australian resident retail clients who have received an invitation from their Broker to participate and who have a registered address in Australia. If you have received an invitation from your Broker, you will be treated as an Applicant under the Broker Firm Offer in respect of that allocation.

You should contact your Broker to determine whether they may allocate Shares to you under the Broker Firm Offer. The Broker Firm Offer is not open to persons in the United States.

#### 7.3.2 How to apply

If you are an investor applying under the Broker Firm Offer, you should complete and lodge your Broker Firm Application Form attached to or accompanying this Prospectus with the Broker from whom you received your invitation. Broker Firm Application Forms must be completed in accordance with the instructions given to you by your Broker and the instructions set out on the Broker Firm Application Form.

By making an Application, you declare that you were given access to this Prospectus (and any supplementary or replacement prospectus), together with the Broker Firm Application Form. The

Corporations Act prohibits any person from passing an Application Form to another person unless it is included in, or accompanied by, a hard copy of this Prospectus or the complete and unaltered electronic version of this Prospectus.

The minimum Application under the Broker Firm Offer is A\$2,000 worth of Shares. There is no maximum value of Shares that may be applied for under the Broker Firm Offer. However, the Company, SaleCo and the Joint Lead Managers reserve the right to aggregate any Applications which they believe may be multiple Applications from the same person or reject or scale back any Applications (or aggregation of Applications) in the Broker Firm Offer which are for more than A\$250,000 worth of Shares. The Company and SaleCo may determine a person to be eligible to participate in the Broker Firm Offer, and may amend or waive the Broker Firm Offer Application procedures or requirements, in their discretion in compliance with applicable laws.

Applicants under the Broker Firm Offer must lodge their Broker Firm Application Form and Application Monies with the relevant Broker in accordance with the relevant Broker's directions. Applicants under the Broker Firm Offer must not send their Broker Firm Application Forms to the Share Registry.

The Company, SaleCo, the Joint Lead Managers and the Share Registry take no responsibility for

any acts or omissions committed by your Broker in connection with your Application.

The Broker Firm Offer opens at 9.00am (Sydney Time) on 18 November 2019 and is expected to close at 5.00pm (Sydney Time) on 25 November 2019. The Company, SaleCo and the Joint Lead Managers may elect to extend the Offer or any part of it, or accept late Applications either generally or in particular cases. The Offer, or any part of it, may be closed at any earlier date and time, without further notice (subject to the ASX Listing Rules and the Corporations Act). Your Broker may also impose an earlier closing date. Applicants are therefore encouraged to submit their Applications as early as possible. Please contact your Broker for instructions.

#### **7.3.3** How to pay

Applicants under the Broker Firm Offer must pay their Application Monies in accordance with the instructions received from their Broker.

#### 7.3.4 Acceptance of Applications

An Application in the Broker Firm Offer is an offer by an Applicant to the Company and / or SaleCo to apply for Shares in the amount specified on the Broker Firm Application Form at the Offer Price on the terms and conditions set out in this Prospectus (including any supplementary or replacement prospectus) and the Broker Firm Application Form. To the extent permitted by law, an Application by an Applicant under the Offer is irrevocable.

An Application may be accepted in respect of the full number of Shares specified on the Broker Firm Application Form or any lesser amount, without further notice to the Applicant. Acceptance of an Application will give rise to a binding contract on allocation of Shares to successful Applicants, conditional on the quotation of Shares on ASX.

#### 7.3.5 Broker Firm Offer allocation policy

The allocation of Shares to Brokers will be determined by agreement between the Joint Lead Managers and the Company. Shares which have been allocated to Brokers for allocation to their Australian resident retail clients will be issued to the Applicants who have received a valid allocation of Shares from those Brokers (subject to the right of the Company, SaleCo and the Joint Lead Managers to reject or scale back Applications). It will be a matter for those Brokers how they allocate Shares among their retail clients, and they (and not the Company, SaleCo or the Joint Lead Managers) will be responsible for ensuring that retail clients who have received an allocation from them, receive the relevant Shares.

#### 7.4 Institutional Offer

#### 7.4.1 Invitation to bid

The Company, SaleCo and the Joint Lead Managers invited certain Institutional Investors to bid for Shares in the Institutional Offer.

The Institutional Offer was an invitation to Australian resident Institutional Investors and Institutional Investors in certain other jurisdictions to bid for Shares in transactions exempt from any local prospectus or registration requirements. The Joint Lead Managers separately advised the Institutional Investors of the Application procedures for the Institutional Offer.

# 7.4.2 Allocation policy under the Institutional Offer

The allocation of Shares among Applicants in the Institutional Offer was determined by agreement between the Joint Lead Managers and the Company. The Joint Lead Managers and the Company had absolute discretion regarding the basis of allocation of Shares among Institutional Investors.

Participants in the Institutional Offer have been advised of their allocation of Shares, if any, by the Joint Lead Managers.

The allocation policy was influenced, but not constrained, by the following factors:

- the number of Shares bid for by particular Applicants;
- the timeliness of the bid by particular Applicants;
- the Company's desire for an informed and active trading market following listing on ASX;
- the Company's desire to establish a wide spread of Institutional Shareholders;
- the overall anticipated level of demand under the Broker Firm Offer, Priority Offer and the Institutional Offer;
- the size and type of funds under management of particular Applicants;
- the likelihood that particular bidders will be longterm Shareholders; and
- any other factors that the Company and the Joint Lead Managers considered appropriate.

#### **7.5** Priority Offer

#### 7.5.1 Who can apply

The Priority Offer is open to selected investors in Australia nominated by the Company who receive a letter from the Company inviting them to apply for Shares (**Priority Offer Letter**).

#### 7.5.2 How to apply

Applicants who receive a Priority Offer Letter to apply for Shares under the Priority Offer and wish to apply for Shares must apply in accordance with the instructions provided in the Priority Offer Letter. Applicants declare by making an Application that they were given access to the Prospectus, together with an Application Form. The Corporations Act prohibits any person from passing an Application Form to another person unless it is attached to, or accompanied by, a hard copy of this Prospectus or the complete and unaltered electronic version of this Prospectus.

Applications under the Priority Offer must be for a minimum of \$2,000 worth of Shares.

The Company reserves the right to scale back or reject Applications in whole or in part, without giving any reason. Applicants under the Priority Offer whose Applications are not accepted, or who are allocated a lesser number of Shares than the amount applied for will receive a refund of all or part of their Application Monies, as applicable. Interest will not be paid on any monies refunded. The Company may amend or waive the Priority Offer Application procedures or requirements, in its discretion in compliance with applicable laws.

#### **7.5.3** How to pay

Applicants must pay their Application Monies in accordance with the instructions on the Application Form and their Priority Offer Letter.

It is the Applicant's responsibility to ensure Application Monies are received by the end of the Offer Period, being 5:00pm (Sydney time) on Monday 25 November 2019. The Company and the Joint Lead Managers take no responsibility for any failure to receive Application Monies before the close of the Offer Period arising as a result of, amongst other things, delays in processing of payments by financial institutions.

If the amount of your Application Monies (or the amount for which those payments clear in time for allocation) is insufficient to pay for the dollar amount of Shares you have applied for, you may be taken to have applied for such lower dollar amount of Shares as the number for which your cleared Application Monies will purchase (and to have specified that amount on your Application Form) or your Application may be rejected.

#### **7.5.4** Acceptance of Applications

Application Monies received under the Priority Offer will be held in a special purpose account until Shares are issued to successful Applicants. Applicants under the Priority Offer whose Applications are not accepted will receive a refund (without interest) of their Application Monies. Interest will not be paid on any monies refunded and any interest earned on Application Monies pending the allocation or refund will be retained by the Company.

Applicants whose Applications are accepted in full will receive the whole number of Shares calculated by dividing their Application Monies by the Offer Price. Where the Offer Price does not divide evenly into the Application Monies, the number of Shares to be allocated will be rounded down. For Applicants applying under the Priority Offer no refunds pursuant solely to rounding will be provided.

#### 7.5.5 Allocation policy

Allocations under the Priority Offer will be at the absolute discretion of the Company.

#### **7.6** Acknowledgements

Each Applicant under the Offer will be deemed to have:

- agreed to become a member of the Company and to be bound by the terms of the Constitution and the terms and conditions of the Offer;
- acknowledged having personally received a printed or electronic copy of the Prospectus (and any supplementary or replacement prospectus) including or accompanied by the Application Form and having read them all in full;
- declared that all details and statements in their Application Form are complete and accurate;
- declared that the Applicant(s), if a natural person, is/are over 18 years of age;
- acknowledged that, once the Company, SaleCo or a Broker receives an Application Form, it may not be withdrawn:
- applied for the number of Shares at the Australian dollar amount shown on the front of the Application Form;
- agreed to being allocated and issued or transferred the number of Shares applied for (or a lower number allocated in a way described in this Prospectus), or no Shares at all;
- authorised the Company, SaleCo and the Joint Lead Managers and their respective officers or agents, to do anything on behalf of the Applicant(s) necessary for Shares to be allocated to the Applicant(s), including to act on instructions received by the Share Registry upon using the contact details in the Application Form;
- acknowledged that, the Company may not pay dividends, or that any dividends paid may not be franked;

- acknowledged that the information contained in this Prospectus (or any supplementary or replacement prospectus) is not financial product advice or a recommendation that Shares are suitable for the Applicant(s), given the investment objectives, financial situation or particular needs (including financial and tax issues) of the Applicant(s);
- declared that the Applicant(s) is/are a resident of Australia (except as applicable to the Institutional Offer);
- acknowledged and agreed that the Offer may be withdrawn by the Company or SaleCo or may otherwise not proceed in the circumstances described in this Prospectus; and
- acknowledged and agreed that if Listing does not occur for any reason, the Offer will not proceed.

#### 7.7 Underwriting arrangements

The Offer is fully underwritten. The Joint Lead Managers, the Company and SaleCo have entered into the Underwriting Agreement under which the Joint Lead Managers have been appointed as managers and underwriters of the Offer. The Joint Lead Managers agree, subject to certain conditions and termination events, to underwrite Applications for all Shares under the Offer. The Underwriting Agreement is subject to a number of conditions precedent and sets out a number of circumstances under which the Joint Lead Managers may terminate the Underwriting Agreement and their underwriting obligations.

A summary of certain terms of the Underwriting Agreement, including the termination provisions, is provided in Section 9.5.1.

#### **7.8** Discretion regarding the Offer

The Company and SaleCo may withdraw the Offer at any time before Completion of the Offer. If the Offer, or any part of it, does not proceed, all relevant Application Monies will be refunded (without interest).

The Company, SaleCo and the Joint Lead Managers also reserve the right to, subject to the Corporations Act and the ASX Listing Rules, close the Offer or any part of it early, extend the Offer or any part of it, accept late Applications generally or in particular cases, reject any Application, waive or correct any errors made by any Applicant in completing an Application Form, or allocate to any Applicant fewer Shares than the amount applied for. Applications received under the Offer are irrevocable and may not be varied or withdrawn except as required by law.

# 7.9 ASX listing, registers and holding statements and deferred settlement

# 7.9.1 Application to ASX for listing and quotation of Shares

The Company applied to ASX on 1 November 2019 for admission to the Official List and quotation of the Shares on ASX. The Company's code is expected to be 'CBR'.

Completion of the Offer is conditional on ASX approving this application. If approval is not given for the official quotation of the Shares on the ASX within three months after the Prospectus Date (or any longer period permitted by law), the Offer will be withdrawn and all Application Monies received will be refunded without interest, as soon as practicable in accordance with the requirements of the Corporations Act.

The Company will be required to comply with the Listing Rules, subject to any waivers obtained by the Company from time-to-time.

ASX takes no responsibility for this Prospectus or the investment to which it relates. The fact that ASX may admit the Company to the Official List is not to be taken as an indication of the merits of Carbon Revolution or the Shares offered for subscription.

#### 7.9.2 CHESS and issuer sponsored holdings

The Company applied to participate in ASX's Clearing House Electronic Subregister System (CHESS) and will comply with the Listing Rules and ASX Settlement Operating Rules. CHESS is an electronic transfer and settlement system for transactions in securities quoted on ASX under which transfers are effected in an electronic form.

When the Shares become approved financial products (as defined in ASX Settlement Operating Rules), holdings will be registered in one of two subregisters, being an electronic CHESS subregister or an issuer sponsored subregister.

For all successful Applicants, the Shares of a Shareholder who is a participant in CHESS or a Shareholder sponsored by a participant in CHESS will be registered on the CHESS subregister. All other Shares will be registered on the issuer sponsored subregister.

Following Completion of the Offer, Shareholders will be sent a holding statement that sets out the number of Shares that have been allocated to them. It is expected that holding statements will be dispatched by standard post on or about 2 December 2019. This statement will also provide details of a Shareholder's HIN for CHESS holders or, where applicable, the Securityholder Reference Number (SRN) of issuer sponsored holders. Shareholders will subsequently receive statements

showing any changes to their Shareholding. Certificates will not be issued.

Shareholders will receive subsequent statements during the first week of the following month if there has been a change to their holding on the register and as otherwise required under the Listing Rules and the Corporations Act. Additional statements may be requested at any other time either directly through the Shareholder's sponsoring broker in the case of a holding on the CHESS subregister or through the Share Registry in the case of a holding on the issuer sponsored subregister. The Company and the Share Registry may charge a fee for these additional issuer sponsored statements.

## 7.9.3 Deferred settlement trading and selling of Shares on the market

It is expected that trading of the Shares on ASX, on a deferred settlement basis, will commence on or about 29 November 2019. Trading will be on a deferred settlement basis until the Company has advised ASX that initial holding statements have been dispatched to Shareholders, which is expected to occur on or about 2 December 2019, at which point trading will be on a normal settlement basis.

It is the responsibility of each person who trades in Shares to confirm their holding before trading in Shares. If you sell Shares before receiving a holding statement, you do so at your own risk. The Company, SaleCo, the Share Registry and the Joint Lead Managers disclaim all liability, whether in negligence or otherwise, if you sell Shares before receiving your holding statement, even if you obtained details of your holding from the Carbon Revolution Offer Information Line or confirmed your firm allocation through a Broker.

# 7.10 Constitution and rights attaching to the Shares

The rights and liabilities attaching to ownership of Shares arise from a combination of the Constitution, statute, the ASX Listing Rules and general law.

A summary of the significant rights, liabilities and obligations attaching to the Shares and a description of other material provisions of the Constitution are set out below. This summary is not exhaustive nor does it constitute a definitive statement of the rights and liabilities of Shareholders. The summary assumes that the Company is admitted to the official list of ASX.

#### 7.10.1 Meetings of members

Every Shareholder is entitled to receive notice of, attend and vote at, general meetings of the Company and to receive all notices, accounts and other documents required to be sent

to Shareholders under the Constitution, the Corporations Act and the ASX Listing Rules.

#### 7.10.2 Voting at a general meeting

At a general meeting of the Company, every Shareholder present in person or by proxy, representative or attorney and entitled to vote is entitled to one vote on a show of hands and, on a poll, one vote for each Share held by the Shareholder (with adjusted voting rights for partly paid shares). If the votes are equal on a proposed resolution, the chairperson of the meeting has a casting vote in addition to any deliberative vote.

#### 7.10.3 Dividends

The Board may pay any dividends that, in its judgment, the financial position of the Company justifies. The Board may also pay any dividend required to be paid under the terms of issue of a Share, and fix a record date for a dividend and method of payment. For further information in respect of the Company's proposed dividend policy, see Section 4.12.

#### 7.10.4 Transfer of Shares

Subject to the Constitution and to any restrictions attached to a Shareholder's Shares, Shares may be transferred in accordance with the ASX Settlement Operating Rules, Corporations Regulations and ASX Listing Rules or by a written transfer in any usual form or in any other form approved by the Board and permitted by the relevant laws and ASX requirements.

The Board may decline to register, or prevent registration of, a transfer of Shares or apply a holding lock to prevent a transfer in accordance with the Corporations Act or the ASX Listing Rules.

#### 7.10.5 Issue of further Shares

The Board may, subject to the Constitution, Corporations Act and ASX Listing Rules issue, allot, or grant options for, or otherwise dispose of Shares in the Company on such terms as the Board decides.

#### 7.10.6 Preference shares

The Company may issue preference shares including preference shares which are, or at the option of the Company or a holder are, liable to be redeemed or convertible to Shares. The rights attaching to preference shares are those set out in the Constitution unless other rights have been decided by the Board under the terms of issue.

#### **7.10.7** Winding up

If the Company is wound up, then subject to the Constitution, the Corporations Act and any rights or restrictions attached to any Shares or classes of shares, Shareholders will be entitled to share in any surplus property of Carbon Revolution in proportion to the number of shares held by them.

If the Company is wound up, the liquidator may, with the sanction of a special resolution, divide among the shareholders all or part of the Company's property and decide how the division is to be carried out as between shareholders or different classes of shareholders.

#### 7.10.8 Non-marketable parcels

In accordance with the ASX Listing Rules, the Board may sell Shares that constitute less than a marketable parcel by following the procedures set out in the Constitution.

#### 7.10.9 Variation of class rights

The procedure set out in the Constitution must be followed for any variation of rights attached to the Shares. Under the Constitution, and subject to the Corporations Act and the terms of issue of a class of shares, the rights attaching to any class of shares may be varied:

- with the written consent of the holders of 75% of the shares of the class; or
- by a special resolution passed at a separate meeting of the holders of shares of the class.

#### 7.10.10 Directors – appointment and retirement

Under the Constitution, the number of Directors shall be a minimum of three Directors and a maximum of ten Directors unless the Company resolves otherwise at a general meeting. Directors are elected or re-elected at general meetings of the Company.

No Director (excluding the managing director) may hold office without re-election beyond the third annual general meeting following the meeting at which the Director was last elected or re-elected. The Board may also appoint any eligible person to be a Director, either to fill a casual vacancy on the Board or as an addition to the existing Directors, who will then hold office until the conclusion of the next annual general meeting of the Company following their appointment.

A person is eligible for election to the office of a Director at a general meeting if they are nominated or recommended by the Board or if not less than the number of Shareholders required to give notice of a resolution under the Corporations Act (subject to timing requirements) nominate a person in accordance with the Constitution.

#### 7.10.11 Directors – voting

Questions arising at a meeting of the Board will be decided by a majority of votes of the Directors present at the meeting and entitled to vote on the matter. If the votes are equal on a proposed resolution, the chairperson of the meeting has a casting vote in addition to his or her deliberative vote, unless there are only two Directors present or entitled to vote at the meeting, in which case the chairperson of the meeting does not have a second or casting vote and the proposed resolution is taken as lost.

A written resolution of the Board may be passed without holding a meeting of the Board, if 75% of the Directors who are entitled to vote on the resolution and would have constituted a quorum at a physical meeting of Directors sign or consent to the resolution.

#### 7.10.12 Directors – remuneration

Under the Constitution, the Board may decide the remuneration from the Company to which each Director is entitled for his or her services as a Director. The total aggregate amount provided to all Non-Executive Directors for their services as Directors must not exceed in any financial year the amount fixed by the Company in general meeting. The remuneration of a Director (who is not an Executive Director) must not include a commission on, or a percentage of, profits or operating revenue. The current maximum aggregate sum of Non-Executive Director remuneration is set out in Section 6. Any change to that maximum aggregate amount needs to be approved by Shareholders in a general meeting.

Directors are entitled to be paid for all travelling and other expenses incurred in attending to the Company's affairs, including attending and returning from general meetings of the Company or of the Board or of committees of the Board. Any Director who performs extra services, makes any special exertions for the benefit of the Company or otherwise performs services, which, in the opinion of the Board, are outside the scope of ordinary duties of a Non-Executive Director, may be remunerated for the services (as determined by the Board) out of funds of the Company.

Directors' remuneration is discussed further in Section 6.

#### 7.10.13 Powers and duties of Directors

The business and affairs of the Company are to be managed by or under the direction of the Board, which (in addition to the powers and authorities conferred on it by the Constitution) may exercise all powers and do all things that are within the power of the Company and are not required by law or the Constitution to be done by the Company in a general meeting.

#### 7.10.14 Access to records

The Company may enter into contracts with a Director or former Director agreeing to provide continuing access, for a specified period after the Director ceases to be a Director, to board papers, books, records and documents of the Company which relate to the period during which the Director or former Director was a Director on such terms and conditions as the Board thinks fit. The Company may procure that its subsidiaries provide similar access to board papers, books, records or documents.

#### 7.10.15 Indemnities

The Company must indemnify each officer of the Company on a full indemnity basis and to the full extent permitted by law against all losses, liabilities, costs, charges and expenses incurred by that person as an officer of the Company or its related bodies corporate.

The Company, must, to the extent permitted by law, purchase and maintain insurance or pay, or agree to pay, a premium for insurance for each officer of the Company against any liability incurred by that person as an officer of the Company or its related bodies corporate, including but not limited to a liability for negligence or for reasonable costs and expenses incurred in defending or responding to proceedings (whether civil or criminal and whatever the outcome).

#### 7.10.16 Amendment

The Constitution may be amended only by special resolution passed by at least 75% of the Shareholders present (in person or by proxy, attorney or representative) and entitled to vote on the resolution at a general meeting of the Company.

#### 7.10.17 Share capital

On Completion of the Offer, the only classes of security on issue by the Company will be fully paid ordinary shares.

#### **7.11** Restrictions on distribution

No action has been taken to register or qualify this Prospectus, the Shares or the Offer or otherwise to permit a public offering of the Shares in any jurisdiction outside Australia.

This Prospectus does not constitute an offer of Shares in any jurisdiction in which it would be

unlawful to make such an offer or invitation or issue under this Prospectus. In particular, this Prospectus may not be distributed to any person, and the Shares may not be offered or sold, in any country outside Australia except to the extent permitted below.

#### **7.11.1** Hong Kong

WARNING: This document has not been, and will not be, registered as a prospectus under the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong, nor has it been authorised by the Securities and Futures Commission in Hong Kong pursuant to the Securities and Futures Ordinance (Cap. 571) of the Laws of Hong Kong (the "SFO"). No action has been taken in Hong Kong to authorise or register this document or to permit the distribution of this document or any documents issued in connection with it. Accordingly, the Shares have not been and will not be offered or sold in Hong Kong other than to "professional investors" (as defined in the SFO and any rules made under that ordinance).

No advertisement, invitation or document relating to the Shares has been or will be issued, or has been or will be in the possession of any person for the purpose of issue, in Hong Kong or elsewhere that is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Shares that are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors. No person allotted Shares may sell, or offer to sell, such securities in circumstances that amount to an offer to the public in Hong Kong within six months following the date of issue of such securities.

The contents of this document have not been reviewed by any Hong Kong regulatory authority. You are advised to exercise caution in relation to the offer. If you are in doubt about any contents of this document, you should obtain independent professional advice.

#### 7.11.2 New Zealand

This document has not been registered, filed with or approved by any New Zealand regulatory authority under the Financial Markets Conduct Act 2013 (the "FMC Act"). The Shares are not being offered or sold in New Zealand (or allotted with a view to being offered for sale in New Zealand) other than to a person who:

- is an investment business within the meaning of clause 37 of Schedule 1 of the FMC Act;
- meets the investment activity criteria specified in clause 38 of Schedule 1 of the FMC Act;

- is large within the meaning of clause 39 of Schedule 1 of the FMC Act;
- is a government agency within the meaning of clause 40 of Schedule 1 of the FMC Act; or
- is an eligible investor within the meaning of clause 41 of Schedule 1 of the FMC Act.

#### 7.11.3 Singapore

This document and any other materials relating to the Shares have not been, and will not be, lodged or registered as a prospectus in Singapore with the Monetary Authority of Singapore. Accordingly, this document and any other document or materials in connection with the offer or sale, or invitation for subscription or purchase, of Shares, may not be issued, circulated or distributed, nor may the Shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore except pursuant to and in accordance with exemptions in Subdivision (4) Division 1, Part XIII of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), or as otherwise pursuant to, and in accordance with the conditions of any other applicable provisions of the SFA.

This document has been given to you on the basis that you are (i) an existing holder of the Company's shares, (ii) an "institutional investor" (as defined in the SFA) or (iii) an "accredited investor" (as defined in the SFA). In the event that you are not an investor falling within any of the categories set out above, please return this document immediately. You may not forward or circulate this document to any other person in Singapore.

Any offer is not made to you with a view to the Shares being subsequently offered for sale to any other party. There are on-sale restrictions in Singapore that may be applicable to investors who acquire Shares. As such, investors are advised to acquaint themselves with the SFA provisions relating to resale restrictions in Singapore and comply accordingly.

#### 7.11.4 United States

This document does not constitute an offer to sell, or a solicitation of an offer to buy, Shares in the United States. The Shares have not been, and will not be, registered under the US Securities Act and may not be offered or sold in the United States except in transactions exempt from, or not subject to, the registration requirements of the US Securities Act and applicable US state securities laws.

This document may be distributed in the United States only (i) by Bell Potter's US broker-dealer affiliate to a limited number of institutional

accredited investors and (ii) if it is attached to the US Offering Circular.

#### **7.11.5** Representations of Applicants

Each Applicant will be taken to have represented, warranted and agreed as follows:

- it understands that the Shares have not been, and will not be, registered under the US Securities Act and may not be offered or sold in the United States except in transactions exempt from, or not subject to, the registration requirements of the US Securities Act and applicable US state securities laws;
- it is not in the United States and is purchasing the Shares outside the United States;
- it has not sent, and will not send, the Prospectus or any other material relating to the Offer to any person in the United States or elsewhere outside Australia; and
- it will not offer or sell the Shares in the United States or in any other jurisdiction outside Australia.

Each Applicant under the Institutional Offer will be required to make certain representations, warranties and covenants set out in the confirmation of allocation letter distributed to it.

# 08

# INVESTIGATING ACCOUNTANT'S REPORTS





Deloitte Corporate Finance Pty Limited ACN 003 833 127 AFSL 241457 550 Bourke Street Melbourne, VIC, 3000 Australia

Phone: +61 3 9671 7000 www.deloitte.com.au

The Directors Carbon Revolution Limited Building NR 75 Pigdons Road Waurn Ponds VIC 3216

The Directors
Carbon Revolution SaleCo Limited
Building NR
75 Pigdons Road
Waurn Ponds VIC 3216

1 November 2019

**Dear Directors** 

## INVESTIGATING ACCOUNTANT'S REPORT ON THE HISTORICAL FINANCIAL INFORMATION AND FINANCIAL SERVICES GUIDE

#### Introduction

This report has been prepared at the request of the Directors of Carbon Revolution Limited (the **Company**) and the Directors of Carbon Revolution SaleCo Limited (**SaleCo**) for inclusion in the Prospectus to be issued by the Company and SaleCo in respect of the initial public offering of fully paid ordinary shares in the Company (the **Offer**) and subsequent listing on the Australian Securities Exchange.

Deloitte Corporate Finance Pty Limited is wholly owned by Deloitte Touche Tohmatsu and holds the appropriate Australian Financial Services licence under the Corporations Act 2001 (Cth) for the issue of this report.

References to the Company, SaleCo, Carbon Revolution and other terminology used in this report have the same meaning as defined in the Glossary of the Prospectus.

#### Scope

#### Statutory Historical Financial Information

Deloitte Corporate Finance Pty Limited has been engaged by the Directors of the Company and the Directors of SaleCo to review:

- the statutory historical consolidated statements of profit or loss and other comprehensive income and statutory historical consolidated statements of cash flows for the financial years ended 30 June 2017, 30 June 2018 and 30 June 2019; and
- the statutory historical consolidated statement of financial position as at 30 June 2019,

as set out in tables 5, 6 and 10 of the Prospectus (together the **Statutory Historical Financial Information**).

The Statutory Historical Financial Information has been prepared in accordance with the stated basis of preparation, being the recognition and measurement principles contained in Australian Accounting Standards and the adopted accounting policies of Carbon Revolution.

The Statutory Historical Financial Information has been extracted from the financial reports of Carbon Revolution for the financial years ended 30 June 2017, 30 June 2018 and 30 June 2019, which were audited by Deloitte Touche Tohmatsu in accordance with Australian Auditing Standards. Deloitte Touche Tohmatsu issued an unmodified audit opinion on the respective financial reports. The unmodified audit opinions for the financial years ended 30 June 2018 and 30 June 2019 included a paragraph on material uncertainty related to the ability of Carbon Revolution to continue as a going concern.

The Statutory Historical Financial Information is presented in the Prospectus in an abbreviated form, insofar as it does not include all of the presentation and disclosures required by Australian Accounting Standards and other mandatory professional reporting requirements applicable to general purpose financial reports prepared in accordance with the Corporations Act 2001.

#### Pro Forma Historical Financial Information

Deloitte Corporate Finance Pty Limited has been engaged by the Directors of the Company and the Directors of SaleCo to review:

- the pro forma historical consolidated statements of profit or loss and other comprehensive income and pro forma historical consolidated statements of cash flows for the financial years ended 30 June 2017, 30 June 2018 and 30 June 2019
- the pro forma historical consolidated statement of financial position as at 30 June 2019,

as set out in tables 2, 6 and 9 of the Prospectus (together the **Pro Forma Historical Financial Information**).

The Pro Forma Historical Financial Information has been derived from the Statutory Historical Financial Information after adjusting for the effects of pro forma adjustments described in sections 4.5.3, 4.6.1 and 4.8.2 of the Prospectus (the **Pro forma Adjustments**).

The stated basis of preparation is the recognition and measurement principles contained in Australian Accounting Standards applied to the Statutory Historical Financial Information and the event(s) or transaction(s) to which the Pro forma Adjustments relate, as described in section 4.2 of the Prospectus, as if those event(s) or transaction(s) had occurred as at the date of the Statutory Historical Financial Information. Due to its nature, the Pro Forma Historical Financial Information does not represent the actual or prospective financial position, financial performance, or cash flows of Carbon Revolution.

#### Directors' Responsibility

The Directors of the Company are responsible for:

- the preparation and presentation of the Statutory Historical Financial Information and the Pro Forma Historical Financial Information, including the selection and determination of Pro forma Adjustments made to the Statutory Historical Financial Information and included in the Pro Forma Historical Financial Information; and
- the information contained within the Prospectus.

This responsibility includes for the operation of such internal controls as the Directors of the Company determine are necessary to enable the preparation of the Statutory Historical Financial Information and the Pro Forma Historical Financial Information that are free from material misstatement, whether due to fraud or error.

#### Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Statutory Historical Financial Information and the Pro Forma Historical Financial Information based on the procedures performed and the evidence we have obtained. We have conducted our engagement in accordance with Australian Standard on Assurance Engagement (ASAE) 3450 Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information.

A review consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement. Accordingly, we will not express an audit opinion.

Our engagement did not involve updating or re-issuing any previously issued audit or review report on any financial information used as a source of the financial information.

We have performed the following procedures as we, in our professional judgement, considered reasonable in the circumstances:

#### Statutory Historical Financial Information

- a review of the extraction of Statutory Historical Financial Information from the audited consolidated financial statements of Carbon Revolution for the financial years ended 30 June 2017, 30 June 2018 and 30 June 2019;
- analytical procedures on the Statutory Historical Financial Information for the financial years ended 30 June 2017, 30 June 2018 and 30 June 2019;
- a consistency check of the application of the stated basis of preparation, as described in the Prospectus, to the Statutory Historical Financial Information;
- a review of work papers, accounting records and other documents of Carbon Revolution and its auditors, including those dealing with the extraction of Statutory Historical Financial Information from the relevant audited financial statements of Carbon Revolution;
- a review of the accounting policies adopted and used by Carbon Revolution over the relevant periods for consistency of application; and
- enquiry of Directors, management and others in relation to the Statutory Historical Financial Information.

#### Pro Forma Historical Financial Information

- consideration of the appropriateness of Pro forma Adjustments described in Section 4 of the Prospectus:
- enquiry of Directors, management, personnel and advisors of Carbon Revolution;
- the performance of analytical procedures applied to the Pro Forma Historical Financial Information;
- a review of work papers, accounting records and other documents of Carbon Revolution and its auditors; and
- a review of the accounting policies adopted and used by Carbon Revolution as disclosed in the Prospectus over the relevant periods for consistency of application.

#### Conclusions

#### Statutory Historical Financial Information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Statutory Historical Financial Information is not presented fairly, in all material respects, in accordance with the stated basis of preparation as described in Section 4.2 of the Prospectus.

#### Pro Forma Historical Financial Information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Pro Forma Historical Financial Information is not presented fairly, in all material respects, in accordance with the stated basis of preparation as described in Section 4.2 of the Prospectus.

#### Material uncertainty related to going concern

We draw attention to Section 4.7 of the Prospectus which relates to the ability of Carbon Revolution to continue as a going concern. The matters stated in Section 4.7 indicate that a material uncertainty would exist relating to the ability of Carbon Revolution to continue as a going concern if funds under the Offer are not obtained and execution of Carbon Revolution's strategies is not achieved. Our conclusions are not modified in respect of this matter.

#### **Restrictions on Use**

Without modifying our conclusions, we draw attention to the 'Important Notices' of the Prospectus, which describe the purpose of the Statutory Historical Financial Information and Pro Forma Historical Financial Information, being for inclusion in the Prospectus. As a result, the Investigating Accountant's Report may not be suitable for use for another purpose.

#### Consent

Deloitte Corporate Finance Pty Limited has consented to the inclusion of this limited assurance report in the Prospectus in the form and context in which it is included.

#### **Disclosure of Interest**

Deloitte Corporate Finance Pty Limited does not have any interest in the outcome of this Offer other than the preparation of this report and participation in the due diligence procedures for which normal professional fees will be received.

Deloitte Touche Tohmatsu is the auditor of the Company.

Yours sincerely

**Chris Biermann** 

Authorised Representative of Deloitte Corporate Finance Pty Limited (AFSL Number 241457) AR number 466792

November 2018

#### Financial Services Guide (FSG)

#### What is an FSG?

An FSG is designed to provide information about the supply of financial services to you.

Deloitte Corporate Finance Pty Limited (DCF) (AFSL 241457) provides this FSG to you, so you know how we are remunerated and who to contact if you have a complaint.

#### Who supplies the financial services?

We provide this FSG to you where you engage us to act on your behalf when providing financial services.

Alternatively, we may provide this FSG to you because our client has provided financial services to you that we delivered to them.

The person who provides the financial service to you is our Authorised Representative (AR) and DCF authorises the AR to distribute this FSG.

#### What financial services are we licensed to provide?

We are authorised to provide financial product advice and to arrange for another person to deal in financial products in relation to securities, interests in managed investment schemes, government debentures, stocks or bonds, to retail and wholesale clients. We are also authorised to provide personal and general financial product advice and deal by arranging in derivatives and regulated emissions units to wholesale clients, and general financial product advice relating to derivatives to retail clients.

#### General financial product advice

We provide general advice when we have not taken into account your personal objectives, financial situation or needs, and you would not expect us to have done so. In this situation, you should consider whether our general advice is appropriate for you, having regard to your own personal objectives, financial situation or needs.

If we provide advice to you in connection with the acquisition of a financial product, you should read the relevant offer document carefully before making any decision about whether to acquire that product.

#### Personal financial product advice

When we give you advice that takes into account your objectives, financial situation and needs, we will give you a Statement of Advice to help you understand our advice, so you can decide whether to rely on it.

#### How are we remunerated?

Our fees are usually determined on a fixed fee or time cost basis plus reimbursement of any expenses incurred in providing the services. Our fees are agreed with, and paid by, those who engage us. Clients may request particulars of our remuneration within a reasonable time after being given this FSG.

Apart from these fees, DCF, our directors and officers, and any related bodies corporate, affiliates or associates, and their directors and officers, do not receive any commissions or other benefits.

All employees receive a salary, and, while eligible for annual salary increases and bonuses based on overall performance, they do not receive any commissions or other benefits as a result of the services provided to you.

The remuneration paid to our directors reflects their individual contribution to the organisation and covers all aspects of performance.

We do not pay commissions or provide other benefits to anyone who refers prospective clients to us.

#### Associations and relationships

The Deloitte member firm in Australia (Deloitte Touche Tohmatsu) controls DCF. Please see <a href="https://www.deloitte.com/au/about">www.deloitte.com/au/about</a> for a detailed description of the legal structure of Deloitte Touche Tohmatsu.

We, and other entities related to Deloitte Touche Tohmatsu, do not have any formal associations or relationships with any entities that are issuers of financial products. However, we may provide professional services to issuers of financial products in the ordinary course of business.

#### What should you do if you have a complaint?

Please contact us about a concern:

The Complaints Officer
PO Box N250
Grosvenor Place
Sydney NSW 1220
complaints@deloitte.com.au

Phone: +61 2 9322 7000

If an issue is not resolved to your satisfaction, you can lodge a dispute with the Australian Financial Complaints Authority (AFCA). AFCA provides fair and independent financial services dispute resolution free to consumers.

#### www.afca.org.au

1800 931 678 (free call)

Australian Financial Complaints Authority Limited

GPO Box 3 Melbourne VIC 3001

#### What compensation arrangements do we have?

Deloitte Australia holds professional indemnity insurance that covers the financial services we provide. This insurance satisfies the compensation requirements of the Corporations Act 2001 (Cth).

Deloitte Corporate Finance Pty Limited, ABN 19 003 833 127, AFSL number 241457 of Level 1 Grosvenor Place, 225 George Street, Sydney NSW 2000 Member of Deloitte Touche Tohmatsu Limited

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity.

Deloitte Corporate Finance Pty Limited ACN 003 833 127 AFSL 241457 550 Bourke Street Melbourne, VIC, 3000 Australia

Phone: +61 3 9671 7000 www.deloitte.com.au

The Directors
Carbon Revolution Limited
Building NR
75 Pigdons Road
Waurn Ponds VIC 3216

The Directors
Carbon Revolution SaleCo Limited
Building NR
75 Pigdons Road
Waurn Ponds VIC 3216

1 November 2019

**Dear Directors** 

# INVESTIGATING ACCOUNTANT'S REPORT ON THE FORECAST FINANCIAL INFORMATION AND FINANCIAL SERVICES GUIDE

#### Introduction

This report has been prepared at the request of the Directors of Carbon Revolution Limited (the **Company**) and the Directors of Carbon Revolution SaleCo Limited (**SaleCo**) for inclusion in the Prospectus to be issued by the Company and SaleCo in respect of the initial public offering of fully paid ordinary shares in the Company (the **Offer**) and subsequent listing on the Australian Securities Exchange.

Deloitte Corporate Finance Pty Limited is wholly owned by Deloitte Touche Tohmatsu and holds the appropriate Australian Financial Services licence under the Corporations Act 2001 (Cth) for the issue of this report.

References to the Company, SaleCo, Carbon Revolution and other terminology used in this report have the same meaning as defined in the Glossary of the Prospectus.

#### Scope

Deloitte Corporate Finance Pty Limited has been engaged by the Directors of the Company and the Directors of SaleCo to review:

- the statutory forecast consolidated statement of profit or loss and other comprehensive income and the statutory forecast consolidated statement of cash flows of Carbon Revolution for the financial year ending 30 June 2020 as set out in tables 2, 5 and 9 of the Prospectus (the **Statutory Forecast Financial Information**). The Director's best-estimate assumptions underlying the Statutory Forecast Financial Information are described in Section 4.10.2 of the Prospectus. The stated basis of preparation used in the preparation of the Statutory Forecast Financial Information is the recognition and measurement principles contained in Australian Accounting Standards and Carbon Revolution's adopted accounting policies; and
- the pro forma forecast consolidated statement of profit or loss and other comprehensive income and the
  pro forma forecast consolidated statement of cash flows of Carbon Revolution for the financial year
  ending 30 June 2020 as set out in tables 2 and 9 of the Prospectus (the Pro Forma Forecast Financial
  Information). The Pro Forma Forecast Financial Information has been derived from the Statutory
  Forecast Financial Information, after adjusting for the effects of the pro forma adjustments described in
  sections 4.5.3 and 4.8.2 of the Prospectus (the Pro forma Adjustments). An audit has not been
  conducted on the source from which the unadjusted financial information was prepared. The stated basis

of preparation used in the preparation of the Pro Forma Forecast Financial Information is the recognition and measurement principles contained in Australian Accounting Standards applied to the Statutory Forecast Financial Information and the event(s) or transaction(s) to which the Pro forma Adjustments relate, as if those event(s) or transaction(s) had occurred as at 1 July 2019. Due to its nature the Pro Forma Forecast Financial Information does not represent Carbon Revolution's actual prospective financial performance and/or cash flows for the year ending 30 June 2020.

The Statutory Forecast Financial Information and Pro Forma Forecast Financial Information have been prepared by management and adopted by the Directors of the Company in order to provide prospective investors with a guide to the potential financial performance of Carbon Revolution for the financial year ending 30 June 2020. There is a considerable degree of subjective judgement involved in preparing forecasts since they relate to event(s) and transaction(s) that have not yet occurred and may not occur. Actual results are likely to be different from the Statutory Forecast Financial Information and Pro Forma Forecast Financial Information since anticipated event(s) or transaction(s) frequently do not occur as expected and the variation may be material.

The Directors' best estimate assumptions on which the Statutory Forecast Financial Information and Pro Forma Forecast Financial Information are based relate to future events and /or transactions that management expect to occur and actions that management expect to take and are also subject to uncertainties and contingencies, which are often outside the control of Carbon Revolution. Evidence may be available to support the assumptions on which the Statutory Forecast Financial Information and Pro Forma Forecast Financial Information are based, however such evidence is generally future orientated and therefore speculative in nature. We are therefore not in a position to express a reasonable assurance conclusion on those best estimate assumptions, and accordingly, provide a lesser level of assurance on the reasonableness of the Directors' best estimate assumptions. We do not express any opinion on the achievability of the results. The limited assurance conclusion expressed in this report has been formed on the above basis.

Prospective investors should be aware of the material risks and uncertainties relating to an investment in Carbon Revolution, which are detailed in the Prospectus, and the inherent uncertainty relating to the prospective financial information. Accordingly, prospective investors should have regard to the investment risks and sensitivities set out respectively in Section 5 and Section 4.11 of the Prospectus.

The sensitivity analysis set out in Section 4.11 of the Prospectus demonstrates the impacts on the Pro Forma Forecast Financial Information of changes in key assumptions. The Pro Forma Forecast Financial Information is therefore only indicative of the financial performance which may be achievable. We express no opinion as to whether the Pro Forma Forecast Financial Information will be achieved.

We have assumed, and relied on representations from certain members of management of Carbon Revolution, that all material information concerning the prospects and proposed operations of Carbon Revolution has been disclosed to us and that the information provided to us for the purpose of our work is true, complete and accurate in all respects. We have no reason to believe that those representations are false.

#### Directors' Responsibility

The Directors of the Company are responsible for:

- the preparation of the Statutory Forecast Financial Information and Pro Forma Forecast Financial Information, including the best estimate assumptions underlying the Statutory Forecast Financial Information and Pro Forma Forecast Financial Information and the selection and determination of the pro forma adjustments made to the Statutory Forecast Financial Information and included in the Pro Forma Forecast Financial Information; and
- the information contained within the Prospectus.

This responsibility includes for the operation of such internal controls as the Directors of the Company determine are necessary to enable the preparation of the Statutory Forecast Financial Information and the Pro Forma Forecast Financial Information that are free from material misstatement, whether due to fraud or error.

#### **Our Responsibility**

Our responsibility is to express a limited assurance conclusion on the Statutory Forecast Financial Information and the Pro Forma Forecast Financial Information based on the procedures performed and the evidence we have obtained. We have conducted our engagement in accordance with Australian Standard on Assurance Engagement (ASAE) 3450 Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information.

A review consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement. Accordingly, we will not express an audit opinion.

Our engagement did not involve updating or re-issuing any previously issued audit or review report on any financial information used as a source of the financial information.

We have performed the following procedures as we, in our professional judgement, considered reasonable in the circumstances:

- enquiries, including discussions with management and Directors of the factors considered in determining the best estimate assumptions;
- comparison and analytical review procedures we considered necessary including examination, on a test basis, of evidence supporting the best estimate assumptions, amounts and other disclosures in the Statutory Forecast Financial Information and Pro Forma Forecast Financial Information;
- review of the accounting policies adopted and used in the preparation of the Statutory Forecast Financial Information and Pro Forma Forecast Financial Information; and
- consideration of the Pro forma Adjustments applied to the Statutory Forecast Financial Information in preparing the Pro Forma Forecast Financial Information.

#### **Conclusions**

#### The Statutory Forecast Financial Information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that:

- (i) the Directors' best estimate assumptions as described in Section 4.10.2 of the Prospectus, used in the preparation of the Statutory Forecast Financial Information do not provide reasonable grounds for the Statutory Forecast Financial Information; or
- (ii) in all material respects, the Statutory Forecast Financial Information:
  - a. is not prepared on the basis of the Directors' best estimate assumptions as described in Section 4.10.2 of the Prospectus;
  - is not presented fairly in accordance with the stated basis of preparation as described in Section
     4.2 of the Prospectus, being the accounting policies adopted and used by Carbon Revolution and the recognition and measurement principles contained in Australian Accounting Standards;
- (iii) the Statutory Forecast Financial Information itself is unreasonable.

#### The Pro Forma Forecast Financial Information

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that:

- (i) the Directors' best estimate assumptions as described in Section 4.10.2 of the Prospectus, used in the preparation of the Pro Forma Forecast Financial Information do not provide reasonable grounds for the Pro Forma Forecast Financial Information:
- (ii) in all material respects, the Pro Forma Forecast Financial Information:
  - a. is not prepared on the basis of the Directors' best estimate assumptions as described in Section 4.10.2 of the Prospectus,
  - b. is not presented fairly in accordance with the stated basis of preparation as described in Section 4.2 of the Prospectus, being the accounting policies adopted and used by Carbon Revolution and the recognition and measurement principles contained in Australian Accounting Standards, applied to the Statutory Forecast Financial Information and the Pro forma Adjustments as if those adjustments had occurred as at 1 July 2019; and
- (iii) the Pro Forma Forecast Financial Information itself is unreasonable.

#### **Restrictions on Use**

Without modifying our conclusions, we draw attention to the 'Important Notices' of the Prospectus, which describe the purpose of the Statutory Forecast Financial Information and Pro Forma Forecast Financial Information, being for inclusion in the Prospectus. As a result, the Investigating Accountant's Report may not be suitable for use for another purpose.

#### Consent

Deloitte Corporate Finance Pty Limited has consented to the inclusion of this limited assurance report in the Prospectus in the form and context in which it is included.

#### **Disclosure of Interest**

Deloitte Corporate Finance Pty Limited does not have any interest in the outcome of this Offer other than the preparation of this report and participation in the due diligence procedures for which normal professional fees will be received.

Deloitte Touche Tohmatsu is the auditor of the Company.

Yours sincerely

**Ashley Miller** 

Authorised Representative of Deloitte Corporate Finance Pty Limited (AFSL Number 241457) AR number 461007

November 2018

#### Financial Services Guide (FSG)

#### What is an FSG?

An FSG is designed to provide information about the supply of financial services to you.

Deloitte Corporate Finance Pty Limited (DCF) (AFSL 241457) provides this FSG to you, so you know how we are remunerated and who to contact if you have a complaint.

#### Who supplies the financial services?

We provide this FSG to you where you engage us to act on your behalf when providing financial services.

Alternatively, we may provide this FSG to you because our client has provided financial services to you that we delivered to them

The person who provides the financial service to you is our Authorised Representative (AR) and DCF authorises the AR to distribute this FSG.

#### What financial services are we licensed to provide?

We are authorised to provide financial product advice and to arrange for another person to deal in financial products in relation to securities, interests in managed investment schemes, government debentures, stocks or bonds, to retail and wholesale clients. We are also authorised to provide personal and general financial product advice and deal by arranging in derivatives and regulated emissions units to wholesale clients, and general financial product advice relating to derivatives to retail clients.

#### General financial product advice

We provide general advice when we have not taken into account your personal objectives, financial situation or needs, and you would not expect us to have done so. In this situation, you should consider whether our general advice is appropriate for you, having regard to your own personal objectives, financial situation or needs.

If we provide advice to you in connection with the acquisition of a financial product, you should read the relevant offer document carefully before making any decision about whether to acquire that product.

#### Personal financial product advice

When we give you advice that takes into account your objectives, financial situation and needs, we will give you a Statement of Advice to help you understand our advice, so you can decide whether to rely on it.

#### How are we remunerated?

Our fees are usually determined on a fixed fee or time cost basis plus reimbursement of any expenses incurred in providing the services. Our fees are agreed with, and paid by, those who engage us.

Clients may request particulars of our remuneration within a reasonable time after being given this FSG.

Apart from these fees, DCF, our directors and officers, and any related bodies corporate, affiliates or associates, and their directors and officers, do not receive any commissions or other benefits.

All employees receive a salary, and, while eligible for annual salary increases and bonuses based on overall performance, they do not receive any commissions or other benefits as a result of the services provided to you.

The remuneration paid to our directors reflects their individual contribution to the organisation and covers all aspects of performance.

We do not pay commissions or provide other benefits to anyone who refers prospective clients to us.

#### Associations and relationships

The Deloitte member firm in Australia (Deloitte Touche Tohmatsu) controls DCF. Please see <a href="https://www.deloitte.com/au/about">www.deloitte.com/au/about</a> for a detailed description of the legal structure of Deloitte Touche Tohmatsu.

We, and other entities related to Deloitte Touche Tohmatsu, do not have any formal associations or relationships with any entities that are issuers of financial products. However, we may provide professional services to issuers of financial products in the ordinary course of business.

#### What should you do if you have a complaint?

Please contact us about a concern:

The Complaints Officer
PO Box N250
Grosvenor Place
Sydney NSW 1220
complaints@deloitte.com.au

Phone: +61 2 9322 7000

If an issue is not resolved to your satisfaction, you can lodge a dispute with the Australian Financial Complaints Authority (AFCA). AFCA provides fair and independent financial services dispute resolution free to consumers.

#### www.afca.org.au

1800 931 678 (free call)

Australian Financial Complaints Authority Limited

GPO Box 3 Melbourne VIC 3001

#### What compensation arrangements do we have?

Deloitte Australia holds professional indemnity insurance that covers the financial services we provide. This insurance satisfies the compensation requirements of the Corporations Act 2001 (Cth).

Deloitte Corporate Finance Pty Limited, ABN 19 003 833 127, AFSL number 241457 of Level 1 Grosvenor Place, 225 George Street, Sydney NSW 2000 Member of Deloitte Touche Tohmatsu Limited

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity.

# 

# ADDITIONAL INFORMATION





### 9 Additional information

#### 9.1 Registration

The Company was registered in Victoria, Australia on 1 November 2007 and converted to a public company on 7 April 2017.

SaleCo was incorporated in Victoria, Australia on 18 September 2019.

#### 9.2 Company tax status

The Company, as head company of the Carbon Revolution Limited income tax consolidated group, which comprises the following subsidiary members: Carbon Revolution Operations Pty Ltd and Carbon Revolution Technology Pty Ltd, will be taxed as an Australian resident public company for the purposes of Australian income tax law. The Company will be subject to tax at the applicable Australian corporate tax rate. The Company's tax year ends on 30 June.

#### 9.3 Sale of Shares by SaleCo

SaleCo is a special purpose vehicle that has been established to facilitate the sale of Shares by certain Existing Shareholders (**Selling Shareholders**).

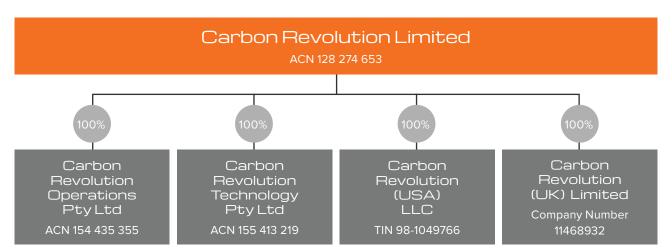
Each of the Selling Shareholders has executed an irrevocable sale deed with SaleCo or otherwise entered into arrangements with SaleCo under which they irrevocably offer to sell some or all of their Shares to SaleCo free from encumbrances and

third party rights, and conditional on Completion of the Offer.

The Selling Shareholders have agreed to sell approximately 23,133,093 Shares to SaleCo (being 43.2% of the Shares held by them immediately prior to Completion of the Offer). The Shares which SaleCo acquires from the Selling Shareholders will be transferred to successful Applicants at the Offer Price. The price payable by SaleCo for these Shares is the Offer Price, less the majority of the Joint Lead Managers' management and underwriting fees referable to the sale of these Shares by SaleCo into the Offer, which will deducted by SaleCo from the proceeds due to the relevant Existing Shareholders.

SaleCo has no material assets, liabilities or operations other than its interests in and obligations under the Underwriting Agreement and sale deeds and other arrangements described above. The shareholders and directors of SaleCo are James Douglas, Dale McKee and Bruce Griffiths. Carbon Revolution has agreed to provide such resources and support as are necessary to enable SaleCo to discharge its functions in relation to the Offer and has indemnified SaleCo in respect of costs of the Offer. The Company has also indemnified SaleCo and each director of SaleCo for any loss which SaleCo or any director of SaleCo may incur in connection with the Offer.

#### 9.4 Corporate Structure



The diagram above sets out the corporate structure of Carbon Revolution before and after Completion of the Offer.

Each of the entities shown above are in the business of producing and/or selling carbon fibre wheels, except for Carbon Revolution Technology Pty Ltd and Carbon Revolution (UK) Limited which currently do not undertake any operations. Each entity is incorporated in Australia and its business activities are principally

conducted in Australia, except for Carbon Revolution (UK) Limited which is incorporated in the United Kingdom and does not undertake operations, and Carbon Revolution (USA) LLC which is incorporated in the United States and principally conducts its business activities in the United States.

#### 9.5 Material contracts

#### 9.5.1 Underwriting agreement

The Offer is being underwritten by the Joint Lead Managers pursuant to an underwriting agreement, dated 31 October 2019, between the Joint Lead Managers, the Company and SaleCo (**Underwriting Agreement**). Under the Underwriting Agreement, subject to the satisfaction of certain customary conditions, the Joint Lead Managers have agreed to arrange, manage and underwrite the Offer.

#### 9.5.1.1 Commissions, fees and expenses

On Settlement, the Company and SaleCo must pay the Joint Lead Managers an underwriting fee of 2.25% of the Offer proceeds and a management fee of 1.65% of the Offer Proceeds. These percentage fees are the weighted average fees payable by the Company and SaleCo under the underwriting agreement and will be payable in proportions set out in the agreement.

In relation to the above fees, the Company will pay the proportion of the fees which are referable to the issue of new Shares pursuant to the Offer and SaleCo will pay the majority of the proportion of the fees which are referable to the sale of Shares sold by SaleCo (the remainder of such fees will be paid by the Company).

The Joint Lead Managers' fees may be payable as a deduction from the total Offer proceeds upon issue and transfer of the Shares.

Carbon Revolution has also agreed to reimburse the Joint Lead Managers for reasonable out of pocket costs and expenses incurred by the Joint Lead Managers in relation to the Offer.

The Joint Lead Managers have agreed to pay any fees or expenses of syndicate members or sub-underwriters on behalf of the Company.

# 9.5.1.2 Termination events not subject to materiality

A Joint Lead Manager may terminate the Underwriting Agreement, at any time after the date of the Underwriting Agreement and any time prior to 10.00am on the date for Settlement by notice to the other parties if any of the following events occur:

 (disclosures) in the Joint Lead Manager's reasonable opinion a statement in this Prospectus or related offering documents is or becomes misleading or deceptive or is likely to mislead or deceive, or a matter required by the Corporations Act (having regard to sections 710, 711 and 716) to be included is omitted from the relevant document;

- (supplementary prospectus) the Company or SaleCo, in the reasonable opinion of the Joint Lead Manager, is required under section 719(1) of the Corporations Act to lodge a supplementary prospectus and fails to lodge a supplementary prospectus or the Company or SaleCo lodges a supplementary prospectus in a form and substance that has not been approved by the Joint lead Managers;
- (market fall) at any time the S&P/ASX 200 Index falls to a level that is 90% or less of the level as at the close of trading on the day immediately prior to the date of the Underwriting Agreement and is at or below that level at the close of trading
  - for 2 consecutive Business Days during any time after the date of the Underwriting Agreement and prior to the date for Settlement; or
  - on the Business Day immediately prior to the date for Settlement;
- (adverse change) any material adverse change occurs in the assets, liabilities, Shares, share structure, financial position or performance, profits, losses or prospects of the Company or the Company group from those respectively disclosed in the Company's accounts or in this Prospectus;
- (escrow deeds and notices) any voluntary or mandatory escrow deed or escrow notice described in section 9.5.2 is withdrawn, varied, terminated, rescinded, altered, amended or breached or failed to be complied with in any material respect;

#### (forecasts):

- in the reasonable opinion of the Joint Lead Manager, there are not, or there ceases to be, reasonable grounds for any statement in this Prospectus or related offering documents which relates to a future matter; or
- any statement or estimate in this Prospectus or related offering documents which relate to a future matter (including in each case financial forecasts) is, in the reasonable opinion of the Joint Lead Manager, unlikely to be met in the projected timeframe;
- (fraud) SaleCo, a Company group member or any of their respective directors or officers (as those terms are defined in the Corporations Act) engage, in any fraudulent conduct or activity;

- (quotation approval) approval for the Company's admission to the official list of the ASX is refused or not granted, or approval is granted subject to conditions other than customary conditions, or if approval is granted, the approval is subsequently withdrawn, qualified (other than by customary conditions) or withheld before Completion;
- (quotation conditions) if reasonable grounds exist for the Joint Lead Manager to believe that any conditions imposed by the ASX which affect the ASX giving final approval to quotation will not be completed, fulfilled or waived by ASX so as to result in the Shares not being granted official quotation by the Allotment Date;
- (notifications) any of the following notifications are made in respect of the Offer:
  - ASIC issues an order in relation to the Prospectus under section 739 of the Corporations Act and such order becomes public and is not withdrawn within 2 Business Days of when it is made, or if it is made within 2 Business Days of the Allotment Date, it has not been withdrawn by the date for Allotment;
  - ASIC holds a hearing under section 739 of the Corporations Act in relation to this Prospectus;
  - an application is made by ASIC for an order under Part 9.5 of the Corporations Act in relation to the Offer, this Prospectus or ASIC commences any investigation or hearing under Part 3 of the ASIC Act in relation to this Prospectus and any such application, inquiry or hearing becomes public and is not withdrawn within 2 Business Days of when it is made, or if it is made within 2 Business Days of the Allotment Date, it has not been withdrawn by 10.00am on the Allotment Date;
  - any person who has previously consented to the inclusion of its name in this Prospectus withdraws that consent after lodgment; or
  - any person (other than a terminating Joint Lead Manager) gives a notice under section 730 of the Corporations Act in relation to this Prospectus;
- (certificate not provided) the Company or SaleCo does not provide a certificate as and when required by the Underwriting Agreement;
- (withdrawal) the Company or SaleCo withdraws this Prospectus or terminates the Offer or indicates that it does not intend to proceed with the Offer or any part of the Offer;
- (insolvency events) any of the following events occur:
  - the Company or SaleCo, or any member of the Company group is or becomes insolvent; or

- a member of the Company group enters into or resolves to enter into any arrangement, composition or compromise with, or assignment for the benefit of, its creditors or any class of them; or
- a member of the Company group suspends payment of its debts generally;
- a member of the Company group suspends payment of its debts generally;
- (timetable) an event specified in the timetable set out in the Underwriting Agreement up to and including the date of Settlement is delayed by more than 2 Business Days (other than any delay agreed between the Company and the Joint Lead Managers (who must act reasonably));
- (unable to proceed) except for an agreed delay between the Company and the Joint Lead Managers, the Company or SaleCo is prevented from conducting or completing the Offer by or in accordance with the Listing Rules, ASIC, ASX, any applicable laws or an order of a court of competent jurisdiction;
- (change to the Company) except as expressly disclosed in this Prospectus or as approved by Shareholders prior to lodgment of this Prospectus, the Company:
  - alters the issued capital or capital structure of the Company; or
  - changes its constitution,

without the prior written consent of the Joint Lead Managers;

- (change in laws) if legislation is introduced, a
   public announcement of prospective legislation
   or policy is made or ASX or its respective
   delegates adopts any regulation or policy, which
   does or is likely to prohibit, materially restrict or
   regulate the Offer or materially affect the success
   of the Offer;
- (change in management) without the consent of the Joint Lead Managers (who must act reasonably in providing or withholding such consent):
  - the Chief Executive Officer or Chief Financial Officer of the Company or a Company group member changes; or
- there is a change to the board of directors of the Company or a Company group member;
- (offer of refund to investors) any circumstance arises after lodgment of this Prospectus that results in the Company or SaleCo either repaying the money received from persons who have applied for Shares (other than returning money to those who require refunds following allocation) or

- offering persons who have applied for Shares an opportunity to withdraw their application and be repaid their application money;
- (ceasing business) the Company or a member of the Company group ceases or threatens to cease to carry on business, or disposes, or agrees to dispose, of the whole, or a substantial part of its business or property;
- (ASIC modifications) reasonable grounds exist for the Joint Lead Manager to believe that any modification to or exemption required to be obtained by the Company or SaleCo from ASIC to enable it to conduct the Offer in compliance with the Corporations Act, as detailed in section 9.12.1 of this Prospectus, will not be granted or if granted will be withdrawn;

#### 9.5.1.3 Termination subject to materiality

A Joint Lead Manager may terminate the Underwriting Agreement, at any time after the date of the Underwriting Agreement and any time prior to 10.00am on the date for Settlement by notice to the other parties, if any of the following events occur and the Joint Lead Manager has reasonable grounds to believe the event: (i) has or is likely to have a material adverse effect on the financial condition, financial position or financial prospects of the Company or the Company group, or on the ability of the Joint Lead Manager to market or promote or settle the Offer or on the subsequent market for the Shares; or (ii) will, or is likely to, give rise to a liability of the Joint Lead Manager under, or a contravention by the Joint Lead Manager or its affiliates, or the Joint Lead Manager or its affiliates being involved in a contravention of, any applicable law:

- (intellectual property) other than as already disclosed to the Joint Lead Managers, a member of the Company group receives notice of, or becomes aware of any potential, infringement of, or conflict with, asserted rights of others with respect to any intellectual property rights required to conduct the business;
- (bankruptcy) a director or proposed director of SaleCo or a group Company is or becomes unable to pay their debts when they are due, is declared or taken to be insolvent or an order is made for their bankruptcy;
- (consents) the State of Victoria withdraws, rescinds or otherwise varies the terms on which the State of Victoria has provided any consent under the Grant Agreement or the Grant General Security Deeds in relation to the Offer, the terms of which are summarised in section 9.5.5 of this Prospectus;

- (product recall) any product of any member of the Company group is involved in any product recall, an after sale warning, or an investigation by a regulatory authority as to its safety or as to its compliance with applicable law or standards, or with any warranty given or representation made by that member of the Company group, or a member of the Company group becomes aware of circumstances that could give rise to such recall, warning or investigation;
- (no defects) a member of the Company group becomes aware of a material defect, fault or other condition, actual, potential or threatened, of any product supplied or manufactured by a member of the Company group;
- (judgment) any judgment is obtained against the Company, SaleCo or any other member of the Company group, or a director of any member of the Company group;
- (disclosures) any public statement made by or on behalf of the Company or SaleCo in relation to the business or affairs of the Company or the Offer is or becomes misleading or deceptive or is likely to mislead or deceive;
- (material contracts) any of the obligations of the relevant parties under any of the contracts that are material to the business of the Company group are not capable of being performed in accordance with their terms (in the reasonable opinion of the Joint Lead Manager) or if all or any part of any of such contracts:
  - is terminated, withdrawn, rescinded, avoided or repudiated;
  - is altered, amended or varied in any material respect without the consent of the Joint Lead Managers (acting reasonably);
  - is breached, or there is a failure by a party to comply with its terms;
  - ceases to have effect, otherwise than in accordance with its terms; or
  - is or becomes void, voidable, illegal, invalid or unenforceable (other than by reason only of a party waiving any of its rights) or capable of being terminated, rescinded or avoided or of limited force and affect, or its performance is or becomes illegal;
- (disclosures in the due diligence materials)
   there is an omission from the results of the due
   diligence investigations performed in respect
   of the Company or SaleCo or the verification
   material or the results of the due diligence
   investigations or the verification material are false
   or misleading;

- (breach of laws) there is a contravention by the Company or any other member of the Company group of the Corporations Act, the listing rules, the Company's constitution or any other applicable law or regulation;
- (compliance with law) any of this Prospectus, other associated offering documents or any aspect of the Offer does not comply with the Corporations Act or any other applicable law or regulation;
- (notifications) the Company, SaleCo or a member of the Company group issues a public statement concerning the Offer which has not been approved by the Joint Lead Managers in accordance with the Underwriting Agreement;
- (prescribed occurrence) except as contemplated by this Prospectus and as outlined in section 652(C)(1)(d) of the Corporations Act, an event specified in section 652C(1) or section 652C(2) of the Corporations Act occurs, but replacing 'target' with 'Company';
- (failure to comply) the Company, SaleCo or any member of the Company group fails to comply with a provision of its constitution, any legislation, the listing rules, a requirement, order or request made by or on behalf of ASIC, the ASX or any regulatory authority or any agreement entered into by it;
- (representations and warranties) any representation or warranty contained in the Underwriting Agreement on the part of the Company or SaleCo is breached or becomes false, misleading or incorrect;
- (breach) the Company or SaleCo breaches any of its undertakings or obligations under the Underwriting Agreement;
- (legal proceedings) the commencement of legal proceedings against the Company, SaleCo, or any Director or senior manager of the Company or any other member of the Company group in that capacity, or any Director or senior manager is disqualified from managing a corporation;
- (information supplied) any information supplied by or on behalf of the Company, SaleCo, a member of the Company group or their respecive representatives to the Joint Lead Managers in respect of the Offer or the Company group is, or is found to be misleading or deceptive, or likely to mislead or deceive (including, by omission);
- (hostilities) hostilities, political or civil unrest not presently existing commence (whether war has been declared or not) or a major escalation in existing hostilities, political or civil unrest occurs (whether war has been declared or not) involving any one or more of Australia, New

- Zealand, Singapore, Japan, Malaysia, the United Kingdom, Hong Kong, the People's Republic of China any member States of the European Union or the United States or a significant terrorist act is perpetrated on any of those countries or any diplomatic, military, commercial or political establishment of any of those countries;
- (sale shares) the sale and transfer of any Shares that are proposed to be sold by SaleCo under the Offer does not occur by Completion; or
- (certificate incorrect) a statement in any certificate provided under the Underwriting Agreement is misleading, deceptive, incorrect or untrue in any material respect;
- (disruption in financial markets) any of the following occurs:
  - a general moratorium on commercial banking activities in Australia, New Zealand, Singapore, Hong Kong, the United Kingdom, the United States or a member state of the European Union is declared by the relevant central banking authority in those countries, or there is a disruption in commercial banking or security settlement or clearance services in any of those countries;
  - any material adverse effect change or disruption occurs in the financial markets, political or economic conditions of Australia, New Zealand, Japan, Singapore, the United Kingdom, Hong Kong, the People's Republic of China, the United States or a member state of the European Union, or in international financial markets which in the reasonable opinion of the Joint Lead Manager reached in good faith after consultation with the Company, makes it impracticable to market the Offer or enforce contracts to issue or transfer the Shares or that the success of the Offer is likely to be adversely affected; or
  - trading in securities quoted or listed on ASX,
     New York Stock Exchange, London Stock
     Exchange or NASDAQ is suspended or limited in a material respect for at least 1 day on which that exchange is open for trading.

#### 9.5.1.4 Indemnity

The Company and SaleCo, on a joint and several basis, agrees to keep the Joint Lead Managers and certain of the Joint Lead Manager's affiliated parties indemnified from losses suffered in connection with the Offer, subject to customary exclusions (including gross negligence, recklessness, fraud or willful default).

# **9.5.1.5** Representations, warranties and undertakings

The Underwriting Agreement contains representations, warranties and undertakings provided by the Company and SaleCo to the Joint Lead Managers.

The representations and warranties relate to matters such as the Company and SaleCo's powers and capacities, information provided, insurance, litigation, this Prospectus and other offering documents, due diligence, internal controls and conduct (including relating to compliance with laws, the undertaking of the Offer and the operation of the business).

The Company's undertakings include that it will, from the date of the Underwriting Agreement until:

- 180 days after completion of the Offer, not issue or agree to issue, without the prior written consent of the Joint Lead Managers (which must not be unreasonably withheld) any Shares or other securities of the Company or any member of the Company group, other than the issue of equity securities pursuant to a share purchase plan, a dividend or distribution plan or any equity incentive plan or pursuant to any arrangement disclosed in this Prospectus;
- 90 days after completion of the Offer, carry on the business in the ordinary course and, except as expressly disclosed in this Prospectus and other offering documents, not dispose of or charge any material part of the business;

- 90 days after completion of the Offer, not amend the Company's constitution except as approved by Shareholders of the Company prior to lodgment of this Prospectus or with the prior written consent of the Joint Lead Managers (not to be unreasonably withheld or delayed); and
- 120 days after completion of the Offer, not vary in any material respect any term of the contracts described in section 9.5 of this Prospectus without prior notification of the Joint Lead Managers of any such variation.

#### 9.5.2 Escrow arrangements

Shares in the Company are subject to mandatory escrow arrangements (see Section a) and voluntary escrow arrangements (see Section b).

#### a) Mandatory Escrow

As a condition of Listing, ASX will classify certain Shares as 'restricted securities' and impose mandatory escrow on these Shares.

As a result of this, prior to listing, certain Existing Shareholders (and entities and persons associated with them) will be required to enter into mandatory escrow restriction agreements with the Company in relation to certain Shares held by them, and other Existing Shareholders will be provided with a 'restriction notice' by the Company. The table below sets out the number of Shares subject to ASX imposed escrow and the escrow periods.

Shareholders	Shares held on Completion of the Offer (#)	Shares subject to mandatory escrow (#)	% of Shareholder's Shareholding subject to mandatory escrow	Shares in the Company on Completion of the Offer subject to mandatory escrow	End of escrow period
Directors / Management (and associated entities)	11,380,101	5,182,702	45.54%	4.07%	29 November 2021
Ronal	14,227,941	4,242,587	29.82%	3.33%	29 November 2021
Deakin	8,377,592	1,211,073	14.46%	0.95%	30 May 2020 to 29 November 2021
State of Victoria	5,421,742	5,421,742	100.00%	4.26%	30 May 2020 to 29 November 2020

Total	127,341,942	30,225,455		23.74%	
Successful applicants under the Offer (excluding Directors / Management (and associated entitites))	34,471,558	_	0.00%	0.00%	NA
Other Existing Shareholders	53,463,008	14,167,351	26.50%	11.13%	30 May 2020 to 29 November 2021
Shareholders	Shares held on Completion of the Offer (#)	Shares subject to mandatory escrow (#)	% of Shareholder's Shareholding subject to mandatory escrow	% of total issued Shares in the Company on Completion of the Offer subject to mandatory escrow	End of escrow period

The effect of the mandatory escrow arrangements will be that the Shares cannot be dealt with for the duration of the relevant mandatory escrow period, except as set out in paragraph (c) below.

#### b) Voluntary Escrow

Certain Existing Shareholders (and entities and persons associated with them) have each entered into voluntary escrow arrangements with the Company in relation to the remainder of their Shares held on Completion of the Offer which are not subject to mandatory escrow as set out in the table below<sup>26</sup>. Under their respective escrow arrangements these Shareholders agree, subject to certain limited exceptions, not to deal in those Shares for the duration of the voluntary escrow period. The table below sets out the number of Shares subject to voluntary escrow and the escrow period.

Shareholders	Shares held on Completion of the Offer (#)	Shares subject to voluntary escrow (#)	% of Shareholder's Shareholding subject to voluntary escrow	% of total issued Shares in the Company on Completion of the Offer subject to voluntary escrow	End of escrow period
Directors / Management (and associated entities)	11,380,101	4,968,247	43.66%	3.90%	1 December 2020
Ronal	14,227,941	9,985,354	70.18%	7.84%	1 December 2020
Deakin	8,377,592	7,166,519	85.54%	5.63%	1 December 2020
State of Victoria	5,421,742	_	0.00%	0.00%	NA
Other Existing Shareholders	53,463,008	_	0.00%	0.00%	NA
Successful applicants under the Offer (excluding Directors / Management (and associated entitites))	34,471,558	-	0.00%	0.00%	NA
Total	127,341,942	22,120,120		17.37%	

<sup>26</sup> The only exception to this is that the voluntary escrow arrangements that have been entered into by Brett Gass only apply to 66.66% of his Shares which are held on Completion of the Offer which are not subject to mandatory escrow.

#### c) Restrictions on dealings and release of escrow

The mandatory escrow and voluntary escrow arrangements contain restrictions on dealing that are broadly defined and include, among other things, selling, transferring or otherwise disposing of any interest in the relevant Shares, encumbering or granting a security interest over the Shares, doing, or omitting to do, any act where the act or omission would have the effect of transferring effective ownership or control of any of the Shares or agreeing to do any of those things.

There are limited circumstances in which the mandatory or voluntary escrow may be released, namely:

- to allow the Shareholder to accept an offer under a bona fide third party takeover bid made in relation to the Company in accordance with the Corporations Act, provided that the holders of at least half of the Shares the subject of the bid that are not subject to escrow have accepted the takeover bid (in the case of mandatory escrow, this requires consent of the ASX);
- to allow the Escrowed Shares to be transferred or cancelled as part of a merger by a scheme of arrangement under Part 5.1 of the Corporations Act (in the case of mandatory escrow, this requires consent of the ASX);
  - provided that, in each case, if for any reason any or all Escrowed Shares are not transferred or cancelled in accordance with such a takeover bid or scheme of arrangement, then the holder of such Escrowed Shares agrees that the restrictions applying to the Escrowed Shares will continue to apply; or
- as a requirement by applicable law.

Additionally, in the case of the voluntary escrow, the relevant Existing Shareholders are permitted to deal in their Escrowed Shares during the escrow period if the dealing arises solely as a result of:

- participation in an equal access share buyback, equal capital return or equal capital reduction made in accordance with the Corporations Act;
- the encumbrance of any or all of their Shares by a bona fide third party financial institution as security for a loan, hedge or other financial accommodation, provided that:
  - the encumbrance does not in any way constitute a direct or indirect disposal of the economic interests, or decrease an economic interest, that the relevant Existing Shareholder has in any of its Escrowed Shares;
  - no Escrowed Shares (or other interest in them) may be transferred or delivered to the

- financial institution in connection with the encumbrance: and
- the financial institution must agree that the Escrowed Shares are to remain in escrow and be subject to the terms of the voluntary escrow deed as if it were a party to the voluntary escrow deed;
- a disposal of any or all of the Escrowed Shares (or interests in them) to an affiliate of the relevant Existing Shareholder, provided such affiliate agrees to be bound by the voluntary escrow arrangements by entering into such further agreements as the Company may reasonably require.

#### 9.5.3 Key customer contracts

Carbon Revolution has entered into contracts with five leading global OEMs to supply its carbon fibre wheels for nine vehicle programs, six of which have entered production.

Although the OEM agreements are each on different terms (particularly when the contract is with a different OEM), typically, a vehicle program commences with Carbon Revolution and the OEM agreeing an advanced wheel design, following which Carbon Revolution and the relevant OEM enter into a supply agreement, which sets out the pathway forward including timeline for expected program lifecycle, daily or weekly production requirement of Carbon Revolution, the OEM engineering and tooling contribution and wheel pricing.

The supply contracts are typical automotive industry supply agreements that are entered into prior to the commencement of production of a particular vehicle program. A wheel program typically lasts for around 3 to 7 years. For each of the nine vehicle programs for which CR has a supply contract, the supply contract imposes on Carbon Revolution an obligation to have capacity to produce and supply, if requested, a stated minimum number of wheels (the required daily or weekly production requirement referred to above) for the OEM over a specified period (given the OEM wishes to have contractual certainty that there will be enough wheels available for its vehicle production program). The production capacity obligation is not a commitment on the OEM to purchase any wheels.

Typically OEMs also provide blanket purchase orders (forecasts) two to three months in advance of required production.

Legally binding purchase orders (subject to change by the OEM), are issued closer to the required production date (typically 2-3 weeks). The period covered by the purchase order varies from OEM to OEM. Updates to program volume requirements are commonly communicated via the exchange of an Excel spreadsheet attached to an email and subsequently incorporated into blanket purchase orders (forecasts) and purchase orders.

Given the time required for wheel development, testing and validation, the long multi-year duration of many vehicle programs, and as a result of various factors (including the OEM's applicable vehicle production program, end customer vehicle demand, carbon fibre wheel take up rate, OEM production challenges not related to wheels etc.) it is common for the relevant OEM to seek to update program volume requirements before the start of production and/or during the program lifecycle.

Accordingly, as the start of production for a program approaches, Carbon Revolution is provided with updated information regarding likely wheel production volumes (i.e. volumes set out in the supply contracts are amended by either purchase orders or clarifying forecasts or both).

Although the OEM agreements are binding on the parties, and in particular, Carbon Revolution is subject to the production capacity obligation, the OEMs have the ability to amend the number of wheels that they wish to purchase, including by cancelling, amending or not providing purchase orders (although in certain cases contractually the OEM is obliged to pay some level of compensation in such circumstances). As such, if applicable, the purchase orders and clarifying forecasts contain the most up to date information about likely wheel production volumes, with the production capacity obligation as amended by the purchase orders and clarifying forecasts representing the required production capacity which Carbon Revolution must plan for.

The wheels requested in a purchase order are subject to the specifications set out in the relevant OEM's supply contract in addition to those in the specific purchase order. These may include imposing particular standards of quality, requiring the inclusion of the OEM's trade marks, or providing adequate support in the diagnosis and repair of goods for a set period of time. In addition to the ability of OEMs to amend the number of wheels that they wish to purchase, including by cancelling, amending or not providing purchase orders, a number of the OEM supply contracts explicitly permit the OEM to terminate for convenience upon written notice. Carbon Revolution provides a number of warranties and indemnities to each OEM under the relevant supply contract, including in relation to the quality of the goods supplied and compliance with required specifications and government requirements. Generally, each indemnity is not capped, and can cover costs (including direct and indirect costs) resulting from

any defects in the goods supplied by Carbon Revolution, non-compliance with the terms of the purchase order or negligence of Carbon Revolution.

The OEM agreements also contain provisions in respect of intellectual property which are largely in favour of the respective OEM, for example including, in relation to intellectual property developed by Carbon Revolution for the OEM, the grant of a licence in favour of the OEM of such intellectual property, or in some instances OEM ownership of such intellectual property, and/or restrictions on how Carbon Revolution uses such intellectual property.

#### 9.5.4 Supplier contracts

Where possible and appropriate, Carbon Revolution uses its template supply of goods agreement with suppliers for the supply of equipment. It also has template production general terms and conditions for the supply of materials which it is increasingly seeking to use to govern such arrangements. However, this is not always possible or appropriate and Carbon Revolution is party to a range of arrangements with its suppliers, including contracting through individual purchase orders, bespoke supply agreements and on the suppliers' terms. In some cases, there is no formal contract.

# 9.5.4.1 Template supply of goods agreement for suppliers of equipment

The term of Carbon Revolution's template supply of goods agreement continues until the supplier has performed all its obligations to the satisfaction of Carbon Revolution. The supplier must supply the relevant goods in accordance with the specified specifications and standards. In addition, the supplier must do all things necessary to procure the delivery, installation and commissioning of such goods at the site specified, including bearing the associated costs. The contract also provides for the provision of 'after sales' services in relation to the goods, such as dealing with faults and defects, training Carbon Revolution's representatives in using the goods, and answering requests for assistance.

Typically, Carbon Revolution is not subject to any minimum volume commitments, and has the right to terminate for convenience with 30 days' written notice. There is no equivalent right in favour of the supplier. The supplier typically also provides a number of uncapped indemnities to Carbon Revolution, and must maintain adequate insurance policies. The supplier must seek Carbon Revolution's consent to assign its rights under the supply agreement, or to any change of control of the supplier.

## 9.5.4.2 Purchasing general terms and conditions for the supply of materials

Carbon Revolution's purchasing general terms and conditions apply to each supply of goods from a supplier who has accepted the terms, and apply in addition to any purchase orders of separately agreed terms between the parties. The supplier must supply the relevant goods in accordance with the specified specifications and standards and agrees to package and ship the goods in accordance with Carbon Revolution's instructions and at the suppliers expense.

Under the purchasing general terms and conditions where accepted by the Supplier, the supplier also provides a number of uncapped indemnities to Carbon Revolution, and must maintain adequate insurance policies. If, in the reasonable opinion of Carbon Revolution, the goods are not supplied in accordance with the general terms and conditions or purchase order, Carbon Revolution is entitled to various remedies, including the rejection of the goods in whole or part, the provision of replacement goods by the supplier, a reduction of the purchase price by an adequate proportion, or to treat the purchase orders as terminated.

Under the purchasing general terms and conditions where accepted by the Supplier, Carbon Revolution is not subject to any minimum volume commitments and may immediately terminate any outstanding purchase orders the subject of the terms in whole or in part for 'operational reasons'. There is no equivalent right in favour of the supplier. The supplier must seek Carbon Revolution's written consent to assign or subcontract its rights under the production general terms and conditions and Carbon Revolution may immediately terminate if there is a change of control of the supplier.

#### 9.5.5 Grant agreements

Carbon Revolution is party to a number of research agreements and funding agreements with departments of the Commonwealth Government and the State of Victoria. The value of the grants under the funding agreements range from approximately A\$1 million to A\$10 million, with the amounts typically paid in instalments upon satisfaction of specific project milestones and/or payment deliverables. The funding agreements with the Commonwealth Government and State of Victoria include rights to withhold payment, require repayment of grants and/or reduce, suspend or terminate the agreement for non-compliance with the terms of the agreement or failure to achieve project milestones. In addition, the party providing funding typically has a right to terminate the agreement for fault, change in government policy or change in control.

Under the agreements, Carbon Revolution retains ownership of its intellectual property and typically becomes the owner of intellectual property relevant to Carbon Revolution's core business that has been generated in the course of carrying out the projects or research contemplated in the agreements (**Project IP**) with certain rights to use counterparty background intellectual property, although in some instances, Carbon Revolution has agreed that it jointly owns Project IP together with the counterparty, typically where the Project IP has been jointly developed, and in one instance, has agreed to transfer Project IP to the counterparty if it is not used by Carbon Revolution. The Project IP is generally subject to limited licences to counterparties. Carbon Revolution has also provided a number of warranties and indemnities under these agreements to the relevant counterparties.

In particular, the Company is party to an existing Grant Agreement dated 19 July 2018 as amended on 11 January 2019 and subsequently with the State of Victoria (Grant Agreement). The grant is provided to assist Carbon Revolution to undertake the "Project", being the establishment and operation of a commercial scale carbon fibre wheel manufacturing facility in Geelong (Project). The Grant Agreement provides for the provision of funds of up to \$10 million in total over a period of approximately 5 years until October 2023 (as may be extended by the State of Victoria in its absolute discretion), subject to certain deliverables and other conditions being satisfied. The Grant Agreement allows for an early advance of up to \$7.5 million (**Early Advance**), and this Early Advance was advanced to the Company (in 3 tranches) between January and March 2019. \$5.5 million of this Early Advance remains outstanding, after the set-off of \$2 million which become payable to the Company later in 2019 under the Grant Agreement. A facility fee of \$37,500 per month (calculated on a pro-rata basis for any period less than one month) is payable in arrears on the date of repayment of the Early Advance.

The amount of the Early Advance which is outstanding is repayable on or before 30 June 2021. Under the Intercreditor Deed (see section 9.5.8), it is agreed that the Early Advance is not repayable and may not be repaid during the Subordination Period (as defined in section 9.5.8(a)) (which is anticipated to end on 30 June 2021), however it is possible for the Early Advance to be set-off against grant moneys which become due to the Company, as it satisfies the relevant grant deliverables and conditions. The State of Victoria may, in its absolute discretion, agree that the Company retain the whole or part of the Early Advance. Until the Company no longer has any

payment obligations owing to the State of Victoria pursuant to the Early Advance, the Company must provide the State of Victoria or its nominated representative the option to attend as an observer, all Carbon Revolution board meetings.

The Grant Agreement contains various events of default applicable to the Company. These include (and are subject to, in some cases, grace periods and materiality thresholds) failure to comply with any obligation, misrepresentation and the occurrence of insolvency events.

The Grant Agreement also contains an event of default if, in the State of Victoria's opinion, there is a change in the management, ownership or control of Carbon Revolution.

In addition to the provisions mentioned above, there are also certain events in the Grant Agreement which, if they occur, allow the State of Victoria in its absolute discretion to (among other things) terminate the Grant Agreement and in the cases of paragraphs (a)(i), (a)(iii) and (a)(iv) also seek a refund of the whole or part of the monies provided pursuant to the Grant Agreement. These include where:

- a) in the opinion of the State of Victoria:
  - (i) Carbon Revolution has not or is unlikely to perform or complete the Project;
  - (ii) continued association with the Project or Carbon Revolution, may bring a minister or the State of Victoria into disrepute;
  - (iii) Carbon Revolution has engaged or may engage in any conduct which affects or may adversely affect the goodwill or reputation of Carbon Revolution, the Project, a minister or the State of Victoria; or
  - (iv) a "Refund Event" has occurred, being Carbon Revolution failing to:
    - (v) by 30 June 2023 complete the Project in accordance with the Grant Agreement, spend at least \$96,700,000 of capital expenditure on the Project and have in its employ at least 500 project employees (and maintain that number of employees for at least 5 years following 30 June 2023);
    - (vi) maintain and operate the facility for the Project, and maintain and operate its head office in Victoria, in each case for a period of at least 5 years after 30 June 2023; and
    - (vii)where applicable, comply with certain Victorian Industry Participation Policy commitments given by the Company relating to opportunities for local

businesses to deliver goods and services required for the Project.

The occurrence, in the opinion of the State of Victoria, of a "Refund Event" also allows the State of Victoria in its absolute discretion to require Carbon Revolution to pay interest on any amount advanced under the Grant Agreement at a rate of 2% per annum above the rate fixed from time to time under section 2 of the *Penalty Interest Rates Act 1983* (calculated from the date of payment of amounts advanced to the date of repayment); or

 b) without the consent of the State of Victoria, Carbon Revolution is subject to a change of control.

Pursuant to the Grant Agreement, the Company also grants to the State of Victoria a world-wide, perpetual, royalty free paid up non-exclusive licence (including the right to sub-licence) to reproduce, publish, adapt, modify or otherwise use for non-commercial purposes any report, documents and other materials provided by the Company to the State of Victoria under the Grant Agreement.

The obligations of the Company in respect of the Early Advance are secured by a General Security Deed dated 13 February 2019 between the Company and the State of Victoria, pursuant to which the Company grants a security interest over all of its present and future property (**Grant General Security Deed**).

## **9.5.6** Convertible Notes and Anti-Dilution Arrangements

In connection with the issue of Convertible Notes by the Company in May 2019, the Company executed the Convertible Note Deed Poll. Under the terms of the Convertible Note Deed Poll, Convertible Note Holders (which include certain Directors and entities and persons associated with them, as well as Deakin and the State of Victoria) will receive, prior to Completion of the Offer, 0.6575580 Shares for every Convertible Note held by them by way of conversion of the Convertible Notes into Shares. The number of Shares issued on Conversion is based on the face value of the Convertible Notes plus accrued but unpaid interest.

Under Anti-Dilution Arrangements between the Company and certain Existing Shareholders that participated in a capital raising conducted by the Company in 2016 (which include certain Directors and entities and persons associated with them, as well as Ronal and Deakin), a total of 16,356,588 Shares will be issued to those Existing Shareholders for nil consideration (**Top Up Shares**) following the issue of Shares on Conversion of the Convertible Notes. The effect of the issue of

the Top Up Shares is that Existing Shareholders who participated in the 2016 capital raising, will effectively have paid the same price per Share for the aggregate of the Shares purchased in 2016 plus the Top Up Shares, as the price at which the Shares are issued on Conversion of the Convertible Notes.

The obligations of the Company, Carbon Revolution Operations and Carbon Revolution Technology Pty Ltd (Obligors) owing to the State of Victoria pursuant to Convertible Notes issued to the State of Victoria under the Convertible Note Deed Poll, the Intercreditor Deed (see section 9.5.8 below) and the Subordination Deed (described below) are secured by a General Security Deed dated 29 May 2019 between the Obligors and the State of Victoria (State Note General Security Deed), pursuant to which the Obligors grant security over all of their present and future property in favour of the State of Victoria. Under the State Note General Security Deed, the State of Victoria will release the secured property and discharge the security once the State is satisfied that all secured liabilities have been fully satisfied.

Further, the Company, the State of Victoria and Ronal are party to a Subordination Deed dated 29 May 2019 (**Subordination Deed**), pursuant to which amounts owing to holders of Convertible Notes (other than the State of Victoria) under the Convertible Note Deed Poll are subordinated to, and rank in priority after, amounts that the Company is liable to pay to Ronal and the State of Victoria in connection with the financing documents Carbon Revolution has entered into with Ronal and the State of Victoria described elsewhere in this section 9 (other than the Grant Agreement and the Grant General Security Deed).

However, the Subordination Deed permits the conversion of amounts owing under the Convertible Notes which will occur prior to Completion of the Offer. Once the Convertible Notes are converted, the Subordination Deed is no longer relevant (because the debts that it subordinates have been converted).

#### 9.5.7 Ronal Loan

#### a) Overview

The Company (as borrower), Carbon Revolution Operations (as guarantor) and Ronal (as lender) entered into a convertible loan facility agreement on or around 17 April 2015 as amended and restated from time to time (Ronal Loan). The Ronal Loan has an \$18 million facility limit and may be used for capital expenditure, operational expenses and to fund the working capital requirements of the Company. The principal amount outstanding as at the date of this Prospectus is \$18 million, however \$5 million of the proceeds raised under the Offer will be used to make a pre-payment on this loan, such that the principal amount outstanding will be \$13 million). The facility is repayable (together with all accrued but unpaid interest, costs and taxes) on 30 June 2021 unless required under the Ronal Loan to be repaid earlier or converted to Shares earlier.

#### b) Conversion right

Ronal is entitled to convert to Shares any or all of the aggregate amount of all outstanding advances under the Ronal Loan together with any accrued but unpaid interest (Conversion Amount) by issuing a notice to the Company (Conversion Notice) within 30 business days upon certain events occurring, including:

- the Company or Carbon Revolution
   Operations notifying Ronal in writing that it
   intends to undertake an initial public offering
   of shares under a prospectus where, in
   conjunction with the offering, the Company
   or Carbon Revolution Operations will apply
   for quotation on the ASX (the Company gave
   this notification to Ronal in respect of the
   Offer, and the 30 business day period lapsed
   without Ronal notifying the Company of an
   intent to convert);
- 2. it becoming illegal for Ronal to provide the facility due to a change in law; or
- 3. an event of default under the Ronal Loan occurring.

The number of Shares issued to Ronal on conversion under paragraphs 2 and 3 above will be determined by dividing the Conversion Amount by the "Conversion Price" which is the greater of:

 the most recent (by reference to the date of the Conversion Notice) of the following prices:

- (i) 20% less than the most recent Share issue price in a capital raising in excess of \$1 million by the Company; and
- (ii) 20% less than the most recent Share sale or purchase transaction, where the aggregate price of all the Shares forming part of that transaction, or a transaction which may be reasonably considered to be a related transaction, was in excess of \$1 million; and

#### 2. \$3.50.

#### c) Mandatory prepayments

Under the Ronal Loan, there are two mandatory prepayment events, which, if they occur, require the Company immediately on demand to prepay Ronal a minimum of \$5 million for each time such an event occurs:

- i. the Company undertaking a capital raising which results in the issue of Shares or other securities in the Company and receipt by the Company of proceeds of an amount equal to or greater than \$40 million; or
- ii. the State of Victoria selling or transferring 20% or more of its interest in the Shares or other securities in the Company held by it.

Given the Company is raising \$30 million under the Offer and the State of Victoria is transferring more than 20% of its interest in its Shares in connection with the Offer, a pre-payment of \$5 million will be required to Ronal in connection with the Offer.

#### d) Interest and fees

Interest payable on advances under the Ronal Loan is calculated based on a fixed interest rate of 10% per annum. There is also a fee payable on any voluntary prepayment of advances which is calculated based on 10% of the amount prepaid. This fee is not payable on the mandatory prepayments described in paragraph (c) above.

#### e) Security and guarantees

The Ronal Loan is secured by a security interest granted by the Company and Carbon Revolution Operations over all of their present and future property (Ronal General Security Deed).

The Ronal Loan is guaranteed by Carbon Revolution Operations.

#### f) Representations, warranties and undertakings

The Ronal Loan contains representations, warranties and undertakings which are usual for facilities of this nature.

#### g) Events of default

The Ronal Loan contains events of default which are customary for facilities of this nature. These include (and are subject to, in some cases, grace periods and materiality thresholds) failure to comply with obligations, misrepresentation, cross default, the occurrence of insolvency events and the occurrence of any event or circumstance that has or is likely to have a material adverse effect on:

- i. the Company or Carbon Revolution
   Operations' ability to comply with their
   obligations under the Ronal Loan, the Ronal
   General Security Deed (see section 9.5.7 e)),
   the Intercreditor Deed (see section 9.5.8
   below), the Subordination Deed (see section 9.5.6), the Convertible Note Deed Poll
   (and any Convertible Notes) and the State
   Note General Security Deed (together, the
   Transaction Documents);
- ii. the validity or enforceability of Ronal's rights under, or Ronal's rights in or the value of any property secured under, the Transaction Documents; or
- iii. the business, assets, operations or financial condition of the Company or Carbon Revolution Operations.

#### 9.5.8 Intercreditor Deed

The Company, Carbon Revolution Operations, Carbon Revolution Technology Pty Ltd (together, the **Obligors**), Ronal and the State of Victoria are party to an Intercreditor deed dated 29 May 2019 (**Intercreditor Deed**).

#### a) Subordination

Under the Intercreditor Deed, during the subordination period (which is until all amounts that the Company and Carbon Revolution Operations are liable at any time to pay to Ronal in connection with the Intercreditor Deed, Ronal Loan, the Ronal General Security Deed or the Subordination Deed (see section 9.5.6) (Ronal Financing Arrangements) have been paid in full) (Subordination Period):

(i) all amounts that the Company is liable at any time to pay to the State of Victoria in respect of the Early Advance (see Section 9.5.5) are subordinated to (and rank in priority after), all amounts that the Company and Carbon Operations are liable to pay under the Ronal Financing Arrangements; and (ii) none of the Early Advance is payable or repayable (except for certain permitted payments).

#### b) Priority

The Intercreditor Deed also governs the priority of security granted in favour of Ronal and the State of Victoria as follows:

- a) until the Conversion of Convertible Notes issued to the State of Victoria into Shares prior to Completion of the Offer (Conversion Time):
  - (i) firstly, security granted in favour of Ronal and in favour of the State of Victoria (other than the Grant General Security Deed – see Section 9.5.5) rank equally without priority of one over the other; and
  - (ii) secondly, the Grant General Security Deed ranks second; then
- after the Conversion Time, security granted in favour of Ronal has priority over, and ranks ahead of, all security granted in favour of the State of Victoria (including pursuant to the Grant General Security Deed).

## c) First right of refusal in favour of the State of Victoria on disposal of Obligor IP

The Intercreditor Deed provides the State of Victoria with a first right of refusal in respect of "Obligor IP" which broadly means all Carbon Revolution's intellectual property rights, licences and know-how. The first right of refusal applies during the period on and from 4 April 2019 to and including the later of:

- (1) the date on which amounts the Company is liable to pay to the State of Victoria in connection with the Early Advance have been paid; and
- (2) the earlier of:
  - (i) Completion of the Offer; and
  - (ii) 30 June 2021,

#### (First ROR).

Pursuant to the terms of the First ROR, no Obligor may:

- (3) enter into any arrangement under which any Obligor IP is assigned or transferred to a third party; or
- (4) accept any offer from a third party to purchase any of the Obligor IP,

unless and until the Company has provided the State of Victoria and Ronal with written notice (**Offer Notice**) of the terms and other details of the arrangement, and the State of Victoria has not exercised its First ROR.

Upon receipt of an Offer Notice from the Company, the State of Victoria may in its sole and absolute discretion, offer to purchase the Obligor IP for an equal or greater price than the amount stated in the Offer Notice, on the same or substantially similar terms.

## **9.5.9** Deakin research hub project and funding arrangements

Deakin has entered into a funding agreement with the Commonwealth dated 9 June 2015 (Commonwealth Funding Agreement), under which the Commonwealth agrees to provide funding to Deakin for the purpose of facilitating the development, optimisation and commercialisation of carbon fibre wheel technology (the Purpose). In connection with the Commonwealth Funding Agreement, Deakin, Carbon Revolution and other partner organisations entered into an agreement dated 31 May 2016 to form a research hub to conduct a range of research projects to further the Purpose. Carbon Revolution has agreed to contribute \$100,000 per annum towards these projects and has contributed \$400,000 to date since the first payment was made in June 2016.

In respect of the project being undertaken by Carbon Revolution, this is governed by a research project agreement dated 5 August 2016 between Carbon Revolution and Deakin which requires the parties to comply with the Commonwealth Funding Agreement. Activities conducted by the parties under this agreement include testing of resin systems to determine suitability for use in Carbon Revolution's wheels. All Project IP developed through the project will be owned by Carbon Revolution. Deakin has a limited licence to use Project IP for research, education and training and publication purposes.

Deakin and Carbon Revolution have also separately entered into a funding agreement dated 16 May 2018 with the Innovative Manufacturing Cooperative Research Centre (IMCRC). Under this agreement, IMCRC will match every dollar invested by Carbon Revolution and Deakin on the project up to a maximum contribution of \$3 million.

## 9.5.10 Research and Collaboration Framework Agreement

Carbon Revolution and Deakin entered into a Research and Collaboration Framework Agreement dated 28 March 2018, which sets out the terms and conditions on which Deakin will be given the opportunity to participate in research projects undertaken by Carbon Revolution (Research and Collaboration Framework Agreement). Under the Research and Collaboration Framework Agreement, Carbon Revolution agrees to target undertaking approximately A\$1 million worth of research per year with Deakin (with no binding obligations to do so) to provide research and learning opportunities for Deakin students. Each research project undertaken collaboratively by Deakin and Carbon Revolution pursuant to this agreement is also governed by a project schedule that sets out the arrangements specific to that research project.

Unless provided otherwise in the relevant project schedule, ownership of intellectual property created jointly as a result of undertaking a research project (**Project IP**) vests in Carbon Revolution immediately upon its creation. Deakin has a limited licence to use Project IP for teaching, non-commercial research and scholarly purposes, subject to not disclosing Carbon Revolution's confidential information or prejudicing Carbon Revolution's ability to protect or commercialise the Project IP.

The term of the Research and Collaboration Framework Agreement is five years and is renewable for a further five years by mutual consent of the parties. Either party may terminate the agreement immediately for a material breach which is unable to be or is not rectified within 14 days' written notice, or insolvency of the other party.

#### 9.5.11 Lease

Carbon Revolution has entered into a lease with Deakin in respect of Carbon Revolution's Geelong facilities at Deakin's Geelong Campus (**Lease**). The permitted use under the Lease is light manufacturing of carbon fibre products including automotive wheels and associated R&D and office. The term of the Lease commenced on 22 November 2018 and is for 10 years, with 2 options for Carbon Revolution to renew of 5 years each.

The rent payable by Carbon Revolution under the lease is approximately A\$800,000 per annum, increased for inflation annually during the term and subject to a market review upon exercise of any option to renew. The rent payable was determined based on market conditions at the time the previous lease agreement with Deakin was entered into in November 2014 (adjusted annually for inflation) plus additional rent in respect of the cost of construction of new improvements recently completed in November 2018. The lease is on arm's length terms.

Under the Lease, Carbon Revolution has the right to procure Deakin to undertake expansion works if Carbon Revolution wishes, comprising an additional production area, a two-storey office as well as 130 car parking spaces. Upon completion

of the expansion works, the term of the Lease will be varied to end 10 years after the date of practical completion of the expansion works (and any options to renew remaining at that time will be preserved).

In connection with the Lease, Carbon Revolution has also provided two bank guarantees for a total amount of approximately \$390,000 in favour of Deakin, being an amount equivalent to approximately 6 months' rent.

#### 9.6 Participant in issues of securities

Except as described in this Prospectus, the Company has not granted, or proposed to grant any rights to any person, or to any class of person, to participate in an issue of the Company's securities.

#### 9.7 Litigation and claims

As at the Prospectus Date, so far as the Board is aware, there is no current or threatened civil litigation, arbitration proceedings or administrative appeals, or criminal or Governmental prosecutions of a material nature involving Carbon Revolution which is likely to have a material adverse impact on the business or financial position of Carbon Revolution.

#### 9.8 Description of syndicate

The Joint Lead Managers to the Offer are Evans Dixon Corporate Advisory Pty Ltd and Bell Potter Securities Limited.

## 9.9 Consents to be named and inclusion of statements and disclaimers of responsibility

Each of the parties referred to below (each a Consenting Party) has given and has not, before the lodgement of the Prospectus with ASIC, withdrawn its written consent to be named in this Prospectus in the form and context in which it is named, but has not authorised or caused the issue of this Prospectus, does not make any offer of Shares and, to the maximum extent permitted by law, expressly disclaims all liabilities in respect of, makes no representations regarding and takes no responsibility for, any statements in or omissions from this Prospectus, and has not made any statement that is included in this Prospectus or any statement on which a statement which is made in this Prospectus is based, other than the reference to its name in the form and context in which it is named and a statement or report included in this Prospectus with its consent as specified below:

 Evans Dixon Corporate Advisory Pty Ltd and Bell Potter Securities Limited as Joint Lead Managers to the Offer;

- Herbert Smith Freehills as Australian legal adviser (except in relation to taxation, stamp duty, banking, finance and patents) to the Company in relation to the Offer;
- Deloitte Corporate Finance Pty Limited as Investigating Accountant to the Company and to the inclusion in this Prospectus of its Investigating Accountant's Report on the Historical Financial Information in the form and context in which it is included;
- Deloitte Corporate Finance Pty Limited as Investigating Accountant to the Company and to the inclusion in this Prospectus of its Investigating Accountant's Report on the Forecast Financial Information in the form and context in which it is included;
- PricewaterhouseCoopers as taxation adviser to the Company in relation to the Offer;
- Deloitte Touche Tohmatsu as auditor to the Company;
- L.E.K. as consultants to the Company and to the inclusion in this Prospectus of information relating to the industry in which the Company operates which is attributed to L.E.K.; and
- Link Market Services Limited as the Company's Share Registry.

#### 9.10 Australian taxation considerations

The comments below provide a general summary of Australian tax issues for Australian tax resident Shareholders (**Australian Shareholders**) who acquire Shares under this Prospectus. The categories of Australian Shareholders considered in this summary are limited to individuals, certain companies, trusts and complying superannuation funds, each of whom hold their Shares on capital account.

These comments do not apply to:

- Australian Shareholders that hold their Shares on revenue account or as trading stock;
- Australian Shareholders that are employees of Carbon Revolution;
- Australian Shareholders that are banks, insurance companies, managed investment trusts, partnerships;
- Australian Shareholders who are exempt from Australian tax: or
- Shareholders that are not Australian tax residents or tax residents of another country.

This summary also does not cover the consequences for Australian Shareholders who are subject to the Taxation of Financial Arrangements

rules (i.e. TOFA regime) contained in Division 230 of the *Income Tax Assessment Act 1997* (Cth).

The precise implications of ownership or disposal of the Shares will depend upon each Shareholder's specific circumstances. Shareholders, including Australian Shareholders, should seek professional advice on the taxation implications of acquiring, owning and disposing of Shares, taking into account their specific circumstances.

Tax laws are complex and subject to ongoing change. The comments below are based on the Income Tax Assessment Act 1936 (Cth), the Income Tax Assessment Act 1997 (Cth), the A New Tax System (Goods and Services Tax) Act 1999 (Cth), relevant stamp duty legislation, applicable case law and published Australian Taxation Office and State/ Territory Revenue Authority rulings, determinations and statements of administrative practice at the date of this Prospectus. The tax consequences discussed below may alter if there is a change to the tax law after the date of this Prospectus. If there is a change, including a change having retrospective effect, the income tax, stamp duty and GST consequences of the share issue should be reconsidered by Australian Shareholders in light of the changes. The summary provided below does not take into account the tax law of countries other than Australia.

This summary is general in nature and is not intended to be an authoritative or complete statement of the applicable law. This summary does not constitute financial product advice as defined in the Corporations Act. The Company and its advisors disclaim all liability to any Shareholder or other party for all costs, loss, damage and liability that the Shareholder or other party may suffer or incur arising from, relating to or in any way connected with the contents of this summary or the provision of this summary to the Shareholder or other party or the reliance on this summary by the Shareholder or other party.

### 9.10.1 Dividends received by Australian Shareholders

Dividends distributed by the Company on a Share will constitute assessable income of an Australian Shareholder. Australian Shareholders should include the dividend in their assessable income in the year they derive the dividend, together with any franking credit attached to that dividend provided that the Shareholder is a "qualified person". To the extent a dividend distributed by the Company is unfranked, the Australian Shareholders should include the dividend in their assessable income in the year of receipt and claim no franking tax offset.

Where a franking credit is included in the Australian Shareholder's assessable income, the Australian Shareholder will generally be entitled to a corresponding tax offset against tax payable on the Australian Shareholder's taxable income. Where an Australian Shareholder is an individual or a complying superannuation entity, the Australian Shareholder will generally be entitled to a refund of tax to the extent that the franking credit tax offset exceeds the Australian Shareholder's income tax liability for the income year.

To be eligible for the franking credit tax offset, an Australian Shareholder must be a "qualified person". Broadly, to be a qualified person, an Australian Shareholder must satisfy the "holding period" rule, including if necessary, the "related payment" rule.

The holding period rule broadly requires that an Australian Shareholder hold the Shares "at risk" for at least 45 days continuously (measured as the period commencing the day after the Australian Shareholder acquires the Shares and ending on the 45th day after the Shares become ex-dividend, i.e. excluding the days of acquisition and disposal). Any day on which an Australian Shareholder has a materially diminished risk or loss of opportunity for gain (through transactions such as granting options or warrants over Shares or entering into a contract to sell the Shares) will not be counted as a day on which the Australian Shareholder held the Shares "at risk". This holding period rule is subject to certain exceptions, including that it will not apply to an Australian Shareholder who is an individual whose tax offset entitlement (from all franked distributions received in the income year) does not exceed A\$5,000. Special rules apply to trusts and beneficiaries.

An Australian Shareholder or their associate who passes the benefit of a franked dividend to another person will make a "related payment" and will need to satisfy the qualified person test for a continuous period of 45 days within the period commencing on the 45th day before, and ending on the 45th day after, the day the Shares become ex-dividend.

Dividend washing rules can apply such that no tax offset is available (nor is an amount required to be included in assessable income) for a dividend received. Australian Shareholders should consider the impact of these as well as other integrity measures which may apply to the claiming of tax offsets, having regard to their own facts and circumstances.

#### **Corporate Shareholders**

Where an Australian Shareholder is a company, the Shareholder is required to include both the dividend and associated franking credit in their assessable income, subject to being a qualified person. A tax offset is then allowed up to the amount of the franking credit on the dividend. A corporate Australian Shareholder should be entitled to a credit in its own franking account to the extent of the franking credit attached to the dividend received. Such corporate Australian Shareholders can then pass on the benefit of franking credits to their own Shareholders(s) on the payment of dividends. Excess franking credits received cannot give rise to a refund, but may be able to be converted into carry forward tax losses. Shareholders, including Australian Shareholders, which are companies should seek specific advice regarding the tax consequences of dividends received in respect of the Shares they hold and the calculation and availability of carry forward tax losses arising from excess tax offsets.

#### **Trusts**

Australian Shareholders who are trustees (other than trustees of complying superannuation entities) should include the franking credit in assessable income for the purpose of determining the net income of the trust. Subject to being a qualified person, the relevant beneficiary may be entitled to a tax offset equal to the beneficiary's share of the franking credit received by the trust. Shareholders, including Australian Shareholders, who are trustees or beneficiaries should seek specific advice regarding the tax consequences of dividends received in respect of Shares held.

## 9.10.2 Disposal of Shares by Australian Shareholders

The disposal of a Share by an Australian Shareholder will be a capital gains tax (**CGT**) event. The Australian Shareholder will make a capital gain where the capital proceeds received on the disposal of the Share exceeds the cost base of the Share, and will make a capital loss where the reduced cost base of the Share exceeds the capital proceeds from the disposal of that Share. Capital losses may only be offset against capital gains made by the Australian Shareholder in the

same income year or future income years. Capital losses cannot be offset against other forms of assessable income.

Broadly, the cost base and reduced cost base of a Share will be equal to the amount paid to acquire the Share (including certain other costs, such as incidental costs of acquisition and disposal). In the case of an arm's length on-market sale, the capital proceeds will generally be the cash proceeds from the sale.

Generally, all capital gains and losses made by an Australian Shareholder for an income year, plus any net capital losses carried forward from an earlier income year, will need to be aggregated to determine whether the Australian Shareholder has made a net capital gain or net capital loss for the year. A net capital gain is included in an Australian Shareholder's assessable income whereas a net capital loss is carried forward and may be available to be offset against capital gains of later years (subject to the satisfaction of the loss recoupment rules for companies).

If an Australian Shareholder is an individual, complying superannuation entity or trust, and has held the Share for at least 12 months or more before disposal of the Share, the Australian Shareholder may be entitled to apply a "CGT discount" against the net capital gain made on the disposal of the Share. Where the CGT discount applies, any net capital gain arising to individuals and entities acting as trustees (other than a trust that is a complying superannuation entity) may be reduced by one half. For a complying superannuation entity, any net capital gain may be reduced by one third.

Where the Australian Shareholder is the trustee of a trust that has held the Shares for more than 12 months before disposal, the CGT discount may flow through to the beneficiaries of the trust if those beneficiaries are not companies. Shareholders, including Australian Shareholders, that are trustees should seek specific advice regarding the tax consequences of distributions to beneficiaries who may qualify for discounted capital gains.

#### 9.10.3 Tax File Numbers

Australian Shareholders are not required to quote their Tax File Number (**TFN**) or, where relevant, Australian Business Number (**ABN**) to the Company. However, if a valid TFN, a valid ABN or exemption details are not provided, Australian income tax may be required to be deducted by the Company from distributions and/or unfranked dividends at the maximum marginal tax rate plus any relevant levy (e.g. Medicare levy). Australian tax should not be required to be deducted by the Company in respect of fully franked dividends.

An Australian Shareholder that holds Shares as part of an enterprise may quote their ABN instead of their TFN.

#### 9.10.4 GST implications

No GST should be payable by Australian Shareholders in respect of the acquisition or disposal of their Shares, regardless of whether or not the Australian Shareholder is registered for GST.

Australian Shareholders may not be entitled to claim full input tax credits in respect of any GST included in the costs they have incurred in connection with their acquisition of the Shares. Separate GST advice should be sought by Australian Shareholders in this respect, relevant to their particular circumstances.

No GST should be payable by Australian Shareholders on receiving dividends distributed by the Company.

#### **9.10.5** Stamp duty

Australian Shareholders should not be liable for stamp duty in respect of the acquisition of their Shares, unless they acquire, either alone or with an associated/related person, an interest of 90% or more in the Company. Under current stamp duty legislation, no stamp duty would ordinarily be payable by Australian Shareholders on any subsequent transfer of their Shares while the Company remains listed. Investors should seek their own advice as to the impact of stamp duty in their own particular circumstances.

#### 9.11 Ownership restrictions

#### 9.11.1 Corporations Act

The takeover provisions in Chapter 6 of the Corporations Act restrict acquisitions of shares in listed companies if the acquirer's (or another party's) voting power would increase to above 20%, or would increase from a starting point that is above 20% and below 90%, unless certain exceptions apply. The Corporations Act also imposes notification requirements on persons having voting power of 5% or more in the Company, either themselves or through an associate.

#### 9.11.2 Foreign Acquisitions and Takeovers Act

Generally, the Foreign Acquisitions and Takeovers Act 1975 (Cth) (**FATA**) applies to acquisitions of shares and voting power in a company of 20% or more by a single foreign person and its associates (substantial interest), or 40% or more by two or more unassociated foreign persons and their associates (aggregate substantial interest). Where a foreign person holds a substantial interest in the Company

or foreign persons hold an aggregate substantial interest in the Company, the Company itself will be a 'foreign person' for the purposes of the FATA.

Where an acquisition of a substantial interest meets certain criteria, the acquisition may not occur unless notice of it has been given to the Federal Treasurer, and the Federal Treasurer has either stated that there is no objection to the proposed acquisition in terms of the Commonwealth Government's Foreign Investment Policy (Policy) or a statutory period has expired without the Federal Treasurer objecting. An acquisition of a substantial interest or an aggregate substantial interest meeting certain criteria may also lead to divestment orders unless a process of notification, and either a statement of non-objection or expiry of a statutory period without objection, has occurred.

In addition, in accordance with the Policy, acquisitions of a direct investment in an Australian company by foreign governments and their related entities should be notified to the Foreign Investment Review Board for approval, irrespective of value. According to the Policy, a 'direct investment' will typically include any investment of 10% or more of the shares (or other securities or equivalent economic interest or voting power) in an Australian company but may also include investment of less than 10% where the investor is building a strategic stake in the target or obtains potential influence or control over the target investment.

#### 9.12 ASX waivers and ASIC relief

#### 9.12.1 ASIC relief

The Company has applied for, and unless otherwise specified, received certain exemptions from, modifications to, and relief from, the following provisions of the Corporations Act from ASIC:

- a) an exemption from the pre-prospectus advertising and publicity rules in section 734(2) of the Corporations Act to permit the provision of information relating to the Offer to the Group's employees, contractors and securityholders prior to lodgement of the Prospectus;
- b) an exemption from section 606 of the Corporations Act to allow SaleCo to acquire a relevant interest in 20% or more of the Shares;
- c) an exemption from section 1020B of the Corporations Act to avoid any breach of the short selling restrictions contained in that provision as a result of an offer of Shares by SaleCo under this Prospectus; and
- d) relief so that certain defences in relation to prospectus liability under sections 728(3) and 729 of the Corporations Act apply to liability

under section 728(4) of the Corporations Act (as at the date of this Prospectus, this relief has not been granted).

#### 9.12.2 ASX waivers

The Company has received from ASX an in principle decision to grant the following confirmations and waivers:

- a) Carbon Revolution will not be required to obtain Shareholder approval under Listing Rule 10.1 in respect of its agreements with Ronal and the State of Victoria;
- b) Carbon Revolution will not be required to obtain Shareholder approval under Listing Rule 10.11 in respect of the Directors of Carbon Revolution electing to participate in the Offer by applying for Shares, having Convertible Notes they hold converted into Shares or being issued Shares under the Anti-Dilution Arrangements; and
- c) Carbon Revolution will be able to early adopt certain new listing rules relating to ASX imposed escrow, including with respect to provisions in its Constitution;
- d) Carbon Revolution will not be required to obtain Shareholder approval under Listing Rule 10.14 in respect of the issue of shares to a Director under the IPO Bonus, STI Plan or LTI Plan within 12 months of Listing and which are disclosed in this Prospectus.

Details of any securities issued under the Equity Incentive Plan will be published in the annual report of the Company relating to the period in which they were issued, along with a statement that a waiver from the requirement to seek shareholder approval for the issue of securities under ASX Listing Rule 10.14 was granted from the ASX.

Any additional persons covered by listing rule 10.14 who become entitled to participate in an issue of securities under the Equity Incentive Plan after the ASX waiver has been granted and who were not named in this Prospectus will not participate in the Equity Incentive Plan until approval is obtained if required under ASX Listing Rule 10.14.

#### 9.13 Costs of the Offer

The costs of the Offer are expected to be approximately A\$6.8 million (including advisory, legal, accounting, tax and duty, listing and administrative fees, the Joint Lead Managers' management and underwriting fees, Prospectus design and printing, advertising, marketing, Share Registry and other expenses).

These costs have been, or will be, borne by the Company from the proceeds of the Offer, except in relation to the majority of the Joint Lead Managers' management and underwriting fees referable to the sale of Shares by SaleCo into the Offer, which will deducted by SaleCo from the proceeds due to Existing Shareholders who have sold Shares to SaleCo in connection with the Offer.

#### 9.14 Governing law

This Prospectus and the contracts that arise from the acceptance of the Applications and bids under this Prospectus are governed by the law applicable in Victoria, Australia, and each Applicant and bidder submits to the exclusive jurisdiction of the courts of Victoria, Australia.

#### 9.15 Statement of Directors

The issue of this Prospectus has been authorised by each Director of the Company and of SaleCo. Each Director of the Company and SaleCo has consented to lodgement of the Prospectus and issue of the Prospectus and has not withdrawn that consent.

# 

## GLOSSARY





## **10 Glossary**

#### **10.1** Technical glossary

Term	Meaning		
Aftermarket	the wheel aftermarket is a secondary market of the automotive industry, for the purchase of wheels after the sale of a vehicle by an OEM to a consumer		
Chassis	the outer structural framework of a motor vehicle		
Cure time	length of time required to cure at a certain temperature		
Cycle time	the average time between the start of production of one unit and the start of production of the next unit		
Differential	the differential is a gear train with three shafts that allows the outer drive wheel to rotate faster than the inner drive wheel during a turn		
Dry carbon fibre	carbon fibre without resin		
Driveshaft	a mechanical component used for transmitting torque and rotation, usually used to connect other components of a drive train that cannot be connected directly because of distance or the need to allow for relative movement between them		
Micron	a unit of length equalling 1×10 <sup>-6</sup> metre (i.e. one millionth of a metre)		
NVH	an industry term which means noise, vibration and harshness. Noise is unwanted sound; vibration is oscillation that is felt; harshness is generally used to describe the severity and discomfort associated with unwanted sound and/or vibration		
Payload	the carrying capacity of a vehicle, usually measured in terms of weight		
Powertrain	the components of a vehicle that generate power and deliver it to the road surface		
Resin	resin is a solid or highly viscous substance of organic or synthetic origin that is typically convertible into polymers		
Rotating unsprung weight	the total weight of parts that are not supported by the car's suspension. Rotating unsprung weight refers to parts that are not supported by the car's suspension that are accelerated or decelerated when the speed of the vehicle changes (principally the wheels and tyres of the car). Additional information regarding unsprung weight (including the benefits of reducing unsprung weight) is provided in Section 2.3.3		
R&D	Research and Development		
RFQ	Request For Quote		
Subframe	a structural component of the car that uses a discrete, separate structure within the larger frame of the vehicle to carry certain components, such as the engine, drivetrain, or suspension		
Tensile strength	the resistance of a material to breaking under tension		
Torque	a measure of rotational power		
Viscous	having a thick, sticky consistency between solid and liquid		

#### 10.2 General glossary

**Business Day** 

Term	Meaning				
AAS or the Australian Accounting Standards	AAS or the Australian Accounting Standards and other authoritative pronouncements issued by the Australian Accounting Standards Board				
ABN	Australian Business Number				
Anti-Dilution Arrangements	the anti-dilution arrangements between the Company and certain Existing Shareholders that participated in a capital raising conducted by the Company in 2016 described in section 9.5.6.				
Applicant	a person who submits an Application				
Application	an application for Shares under the Offer				
Application Form	the relevant form included in or accompanying this Prospectus, pursuant to which Applicants apply for Shares				
Application Monies	the amount of money submitted or made available by an Applicant in connection with an Application				
ASIC	Australian Securities and Investments Commission				
ASX	ASX Limited ABN 98 008 624 691 or the securities exchange that it operates, as the context requires				
ASX Corporate Governance Principles or ASX Recommendations	ASX Corporate Governance Principles and Recommendations (Fourth Edition) as issued by the ASX Corporate Governance Council				
ASX Listing Rules or Listing Rules	the listing rules of the ASX				
ASX Operating Rules	Operating Rules of the ASX (covering access to trading facilities and the conduct of market participants) as amended or replaced from time to time, except to the extent of any express written waiver by the ASX				
ASX Settlement	ASX Settlement Pty Limited ABN 49 008 504 532				
ASX Settlement Operating Rules	the settlement operating rules of ASX Settlement				
AUD, A\$, \$ or Australian dollar	the lawful currency of the Commonwealth of Australia				
Australian Shareholders	Australian tax resident Shareholders				
Bell Potter	Bell Potter Securities Ltd ABN 25 006 390 772				
BMW	Bayerische Motoren Werke AG is a German multinational company which currently produces luxury automobiles and motorcycles				
Board of Directors or Board	the board of directors of the Company				
Broker	any ASX participating organisation selected by the Joint Lead Managers and Carbon Revolution to act as a broker to the Offer				
Broker Firm Offer	the offer of Shares under this Prospectus to Australian resident retail clients of Brokers who have received an invitation to participate from their Broker				
Broker Firm Applicant	an Australian resident client of a Broker who is offered a firm allocation of Shares under the Broker Firm Offer				

business day as defined in the ASX Listing Rules

Term	Meaning				
CAGR	compound annual growth rate				
Carb Consult	Carb Consult GmbH				
Carbon Revolution	means the Company and its controlled entities and the business carried on by them				
Carbon Revolution Operations	Carbon Revolution Operations Pty Ltd ACN 154 435 355, a subsidiar of the Company.				
Carbon Revolution Offer	<ul> <li>within Australia: 1800 677 648; or</li> </ul>				
Information Line	<ul> <li>outside Australia: +61 1800 677 648,</li> </ul>				
	and in each case, open from 8.30am to 5.00pm (Sydney time), Monday to Friday during the Offer Period (Business Days only).				
Carbo Tech	Mubea Carbo Tech is a German manufacturer of structural carbon fibre components				
Centre for Automotive Research	an independent, non-profit organisation producing industry-driven automotive research and fostering dialogue on issues facing the automotive industry				
ССТ	Capital Gains Tax				
CHESS	Clearing House Electronic Subregister System operated by ASX Settlement				
Closing Date	the date by which Applications must be lodged for the Offer, being 25 November 2019, unless varied				
Company	Carbon Revolution Limited ACN 128 274 653				
Completion of the Offer	Carbon Revolution Limited ACN 128 274 653  Completion in respect of the issuance and transfer of Shares in the Offer				
Consenting Party	has the meaning given in Section 9				
Constitution	the constitution of the Company				
Conversion	the conversion of Convertible Notes into Shares, pursuant to the terms of the Convertible Note Deed Poll				
Convertible Notes	the convertible notes issued by the Company in May 2019, as described further in section 9.5.6				
Convertible Note Deed Poll	the Convertible Note Deed Poll executed by the Company dated in or about May 2019, as described further in section 9.5.6				
Convertible Note Holder	a registered holder of a Convertible Note				
Corporations Act	Corporations Act 2001 (Cth)				
Deakin	Deakin University, an internationally recognised research institute and a leader in carbon fibre research				
Director or Directors	a director of the Company or all of the directors of the Company				
Early Advance	has the meaning given to it in section 9.5.5				
EBITDA	Earnings before interest, taxation, depreciation and amortisation				

Term	Meaning					
Enterprise Value	calculated as the Company's indicative market capitalisation, based the Offer Price, less pro forma net cash on Completion of the Offer					
Escrow Period	the period for which Shares are subject to mandatory or voluntary escrow arrangements as set out in Section 9.5.2  the Shares which are subject to mandatory or voluntary escrow arrangements as set out in Section 9.5.2					
Escrowed Shares						
Evans Dixon	Evans Dixon Corporate Advisory Pty Ltd ABN 21137 980 520					
Existing Shareholders	the shareholders of the Company immediately prior to the Completion of the Offer, which includes Convertible Note Holders					
Expiry Date	1 December 2020, being the date which is 13 months after the date of the Original Prospectus, after which no Shares will be issued or transferred under this Prospectus					
Exposure period	the seven day period commencing after lodgement of the Original Prospectus with ASIC					
FATA	Foreign Acquisitions and Takeovers Act 1975 (Cth)					
FY16	Financial year ended 30 June 2016					
FY17	Financial year ended 30 June 2017					
FY18	Financial year ended 30 June 2018					
FY19	Financial year ended 30 June 2019					
FY20	Financial year ending 30 June 2020					
FY21	Financial year ending 30 June 2021					
FY23	Financial year ending 30 June 2023					
Financial Information	the Historical Financial Information together with the Forecast Financial Information					
Forecast Financial Information	the Statutory Forecast Financial Information together with the Pro Forma Forecast Financial Information					
FTE	Full-time equivalent employee					
Grant Agreement	the grant agreement between the State of Victoria and the Company as described further in section 9.5.5					
GST	Goods and Services Tax imposed in Australia					
HIN	Holder identification Number					
Historical Financial Information	the Statutory Historical Financial Information together with the Pro Forma Historical Financial Information					
IASB	International Accounting Standards Board					
IFRS	International Financial Reporting Standards					

Term	Meaning
Institutional Investors	investors who are:
	<ul> <li>persons in Australia who are wholesale clients under section 761G of the Corporations Act and either 'professional investors' or 'sophisticated investors' under sections 708(11) and 708(8) of the Corporations Act; or</li> </ul>
	<ul> <li>institutional investors in certain other jurisdictions, as agreed by the Company and the Joint Lead Managers, to whom offers of Shares may lawfully be made without the need for a locally compliant prospectus or registration or any filing with, or approval by, any government agency.</li> </ul>
Intercreditor Deed	has the meaning given in section 9.5.8
Institutional Offer	the invitation to bid for Shares made to Institutional Investors to acquire Shares under this Prospectus, as described in Section 7.4
IP	Intellectual Property
Investigating Accountant	Deloitte Corporate Finance Pty Limited ABN 19 003 833 127
Investigating Accountant's Reports	the Investigating Accountant's Reports and financial services guide prepared by the Investigating Accountant and set out in Section 8
JEC	JEC Group is a global information company in the composite sector, which uses its information services to represent, promote and develop the markets for composite materials
Joint Lead Managers	Evans Dixon Corporate Advisory Pty Ltd ACN 137 980 520 and Bell Potter Securities Limited ACN 006 390 772
L.E.K.	L.E.K Consulting Australia Pty Limited ABN 13 619 136 748
Listing	admission of the Company to the Official List and quotation of the Shares
Lease	the lease of Carbon Revolution's facility between Carbon Revolution and Deakin, as described in section 9.5.11.
Koenigsegg	Koenigsegg Automotive AB is a Swedish manufacturer of high- performance sports cars
Management	the management of Carbon Revolution
MOU	Memorandum Of Understanding
MSRP	Manufacturer's Suggested Retail Price
New Shareholders	Applicants who are allocated Shares under the Offer
OEM	means automotive Original Equipment Manufacturer, an industry term used to describe car manufacturers
Offer	the offers of Shares under this Prospectus for issue by the Company or for sale by SaleCo
Offer Period	the period commencing on the Opening Date and ending on the Closing Date
Offer Price	the price payable for a Share under the Offer, being A\$2.60 per share

Term	Meaning			
Ronal Loan	the convertible loan facility agreement between the Company, Carbo Revolution Operations and Ronal (described further in section 9.5.7)			
SAE	Society of Automotive Engineers International, a U.S. based, globally active professional association of engineering professionals			
SaleCo	Carbon Revolution SaleCo Limited (ACN 636 286 078)			
Settlement	the settlement in respect of the Shares the subject of the Offer			
Selling Shareholders	Existing Shareholders who elect to sell Shares to SaleCo			
Share	a fully paid ordinary share in the capital of the Company			
Shareholder	the registered holder of a Share			
Share Registry	Link Market Services Limited (ABN 54 083 214 537)			
SRN	Securityholder Reference Number			
State of Victoria	the Crown in Right of the State of Victoria or The State of Victoria acting through the Department of Jobs, Precincts and Regions (as applicable)			
State Note General Security Deed	has the meaning given in section 9.5.6			
State of Victoria Convertible Note Financing Arrangements	the Convertible Notes issued to the State of Victoria, Intercreditor Deed, Subordination Deed, State Note General Security Deed, Convertible Note Deed Poll and subscription deed between the Company and the State of Victoria			
Statutory Forecast Cash Flow Statement	the statutory forecast consolidated statement of cash flows for FY20			
Statutory Forecast Financial Information	the Statutory Forecast Income Statement together with the Statutory Forecast Cash Flow Statement			
Statutory Forecast Income Statement	the statutory forecast consolidated statement of profit or loss and othe comprehensive income for FY20			
Statutory Historical Cash Flow Statements	the statutory historical consolidated statements of cash flows for FY17, FY18 and FY19			
Statutory Historical Financial Information	the Statutory Historical Income Statements together with the Statutor Historical Cash Flow Statements and the Statutory Historical Statements of Financial Position			
Statutory Historical Income Statements	the statutory historical consolidated statements of profit or loss and other comprehensive income for FY17, FY18 and FY19			
Statutory Historical Statement of Financial Position	the statutory historical consolidated statement of financial position as at 30 June 2019			
SUV	Sports Utility Vehicle			
Sydney Time	the time in Sydney, Australia			
TFN	Tax File Number			
Thyssenkrupp	Thyssenkrupp AG is a German multinational conglomerate with focus on industrial engineering and steel production			

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**Underwriting Agreement** 

**US Offering Circular** 

**US Securities Act** 

#### **Meaning**

the underwriting agreement described in Section 9.5.1

means the offering circular attached to the Prospectus to be distributed by Bell Potter's US broker-dealer affiliate to a limited number of institutional "accredited investors" (as defined Rule 501(a)(1), (2), (3) or (7) under the US Securities Act) in the United States

United States Securities Act of 1933, as amended

## APPENDIX A:

SIGNIFICANT ACCOUNTING POLICIES





### **Appendix A: Significant Accounting Policies**

Set out below is a summary of the significant accounting policies adopted in preparing the Pro Forma Historical Financial Information and Pro Forma Forecast Financial Information.

#### Revenue

Revenue is recognised either at a point in time or over time, when (or as) Carbon Revolution satisfies performance obligations by transferring the promised goods or services to its customers, regardless of when the payment is received. Revenue is measured at the fair value of consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duty. Carbon Revolution has concluded that it is the principal in all of its revenue arrangements since it is the primary obligor in all the revenue arrangements, has pricing discretion, and is also exposed to inventory and credit risks.

#### Sale of goods

Revenue from the sale of wheels and tooling is recognised at a point in time, being when Carbon Revolution has transferred to the buyer the significant risks and rewards of ownership of the wheels or tooling, usually on delivery.

#### **Rendering of services**

Revenue from a contract to provide engineering, design and testing services is recognised over time based on the stage of completion of the contract. The Directors have assessed that the stage of completion determined as the proportion of the milestones achieved under the customer contract is an appropriate measure of progress towards complete satisfaction of these performance obligations under AASB 15.

#### Interest revenue

Interest revenue is recognised on a time proportionate basis that takes into account the effective yield on the financial asset.

#### Other revenue

Other revenue is recognised on the satisfaction of the performance obligations.

#### **Government Grants**

Government grants income includes government grants and research and development incentive rebate amounts received or receivable by Carbon Revolution. Grants and rebates are recognised where there is reasonable assurance that the grant will be received and all attached conditions have been complied with. When the grant relates to an expense item, it is recognised as income on a

systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognised as income in equal amounts over the expected useful life of the related asset.

#### **Expenses**

#### **Borrowing costs**

Borrowing costs directly attributable to the acquisition, construction or production of an asset that take a substantial period of time to be ready for its intended use or sale are capitalised as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur.

#### **Depreciation**

Property, plant and equipment, including leasehold improvements, are depreciated over their estimated useful lives, commencing from the time the asset is held ready for use. Leasehold improvements are depreciated over the lesser of the assets estimated useful life and the expected term of the lease. Assets under finance lease are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that Carbon Revolution will obtain ownership by the end of the lease term.

#### Research and development expenditure

Expenditure on research activities is recognised as an expense in the period in which it is incurred. An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognised if, and only if, all of the criteria outlined in capitalised development costs have been demonstrated (refer below).

The amount initially recognised for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognised, development expenditure is recognised in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

Amortisation is calculated using a straight-line method to allocate the cost of intangible assets over their estimated useful lives (5 year period).

Amortisation commences when the intangible asset is available for use.

#### **Goods and Services Tax**

Revenue, expenses and assets are recognised net of the amount of GST tax, except where the taxes incurred are not recoverable from the Australian Taxation Office ("ATO") and is therefore recognised as part of the asset's cost or as part of the expense item. Receivables and payables are stated inclusive of taxes.

The net amount of GST recoverable from, or payable to, the ATO is included as part of receivables or payables in the consolidated statement of financial position.

#### **Receivables**

Trade receivables, loans, and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as loans or receivables. Trade receivables are measured at the transaction price in accordance with AASB 15. Loans and receivables are measured at amortised cost using the effective interest method, less any impairment. Where applicable, interest income is recognised by applying the effective interest rate, except for short-term receivables when the effect of discounting is immaterial.

The Company makes use of the simplified approach in the accounting for expected credit losses related to the trade and other receivables and records the loss allowance at the amount equal to the expected lifetime credit losses. In using this practical expedient, the Company uses its historical experience, external indicators and forward looking information to calculate the expected credit losses which are reviewed at each reporting period. Debts that are known to be uncollectible are written off when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery.

#### **Inventories**

Inventories are valued at the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs necessary to make the sale.

Costs incurred in bringing each product to its present location and condition are accounted for as follows:

- Raw materials recorded at standard cost, reassessed against actual costs annually.
- Finished goods and work-in-progress standard cost of direct materials, labour, outsourced processing costs and a proportion

- of manufacturing overheads based on normal operating capacity but excluding borrowing costs.
- Consumables and spare parts recorded at purchase price. Consumables and spares are assessed for ongoing usefulness and written off if they are no longer likely to be of use.

Inventory provisions include an allowance for trial wheels, obsolete stock and production scrap.

#### **Property, Plant and Equipment**

Property, plant and equipment is measured at cost less accumulated depreciation and any accumulated impairment losses.

An asset's residual value and useful life is reviewed, and adjusted if appropriate, at the end of each reporting period. Any depreciation and impairment losses of an asset are recognised in profit or loss.

Gains and losses on disposal are determined by comparing proceeds with the carrying amount. These gains and losses are included in profit or loss when the asset is derecognised.

#### Intangible assets

#### **Patents and trademarks**

Intangible assets are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses.

An intangible asset's residual value and useful life is reviewed, and adjusted if appropriate, at the end of each reporting period or more frequently if appropriate. Any amortisation or impairment losses are recognised in profit or loss. The Company has no indefinite lived intangible assets.

Gains and losses on disposal or derecognition are determined by comparing proceeds with the carrying amount. These gains and losses are included in profit or loss when the asset is derecognised.

Patents and trademarks are amortised over a 15 year period.

#### Capitalised development costs

Development expenditure is capitalised when Carbon Revolution can demonstrate:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;

- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognised for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognised, development expenditure is recognised in profit or loss in the period in which it is incurred.

#### **Payables**

Trade and other creditors and accruals are carried at amortised cost and represent liabilities for goods and services provided to Carbon Revolution prior to the end of the financial year that are unpaid and arise when Carbon Revolution becomes obliged to make future payments in respect of the purchase of these goods and services.

Payables are non-interest bearing and are settled based on the specific creditor terms.

Payables includes interest payable on borrowings.

#### **Provisions**

Non-employee provisions are recognised when the Carbon Revolution has a present obligation (legal or constructive) as a result of past events, for which it is probable that an outflow of economic benefits will result in an amount that can be reliably measured.

#### **Employee Benefits**

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave, and long service leave when it is probable that settlement will be required, and they are capable of being measured reliably.

Liabilities recognised in respect of employee benefits expected to be settled within 12 months, are measured at their nominal values using the remuneration rate expected to apply at the time of settlement.

Liabilities recognised in respect of employee benefits which are not expected to be settled within 12 months are measured as the present value of the estimated future cash outflows to be made by the Company in respect of services provided by employees up to reporting date.

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

#### **Warranty claims**

Provisions for warranty-related costs are recognised when the wheel is sold to the customer based on management judgment and a growing body of historical experience. The estimate of warranty related costs is reassessed annually.

#### **Onerous contracts**

Provisions for onerous contracts are recognised when the tooling in progress is expected to be sold to the customer below cost. The onerous provision estimate on tooling exposure is reassessed annually.

#### Fair Value Measurements

When measuring the fair value of an asset or a liability, Carbon Revolution uses observable market data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that Carbon Revolution can access at the measurement date;
- Level 2: Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable: and
- Level 3: Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

If the inputs used to measure the fair value of an asset or a liability fall into different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

#### Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, deposits held at call with banks and investments in money market instruments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Cash flows are presented in the statement of cash flows on a gross basis, except for the GST component of investing and financing activities, which are disclosed as operating cash flows.

#### **Financial assets**

#### **Recognition and derecognition**

Financial assets are recognised when Carbon Revolution becomes a party to the contractual provisions of the financial instruments. Financial assets are derecognised when the contractual rights to the cash flows from the financial asset expire or when the financial asset and substantially all the risks and rewards are transferred.

#### Classification of financial assets

Debt instruments that meet the following conditions are measured subsequently at amortised cost:

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments that meet the following conditions are measured subsequently at fair value through other comprehensive income (FVTOCI):

- The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

By default, all other financial assets are measured subsequently at fair value through profit or loss (FVTPL). Despite the foregoing, the Company may make irrevocable election / designation at initial recognition of a financial asset at FVTPL.

#### Initial measurement of financial assets

Financial assets are classified according to their business model and the characteristics of their contractual cash flows. Except for those trade receivables that do not contain a significant financing component and are measured at the transaction price in accordance with AASB 15, all financial assets are initially measured at fair value adjusted for transaction costs.

#### **Subsequent measurement of financial assets**

For the purpose of subsequent measurement, financial assets have been classified financial assets at amortised cost. The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest income over the relevant period.

#### Impairment of financial assets

Carbon Revolution recognises a loss allowance for expected credit losses on investments in debt instruments that are measured at amortised cost and trade receivables. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

#### Financial liabilities and equity

#### Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

#### **Equity instruments**

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the entity are recognised at the proceeds received, net of direct issue costs.

Repurchase of Carbon Revolution's own equity instruments is recognised and deducted directly in equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of Carbon Revolution's own equity instruments.

#### Financial liabilities

#### Financial liabilities at FVTPL

Financial liabilities at FVTPL are measured at fair value, with any gains or losses arising on changes in fair value recognised in profit or loss to the extent that they are not part of a designated hedging relationship. The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability and is included in the 'other gains and losses' line item in profit or loss.

## Financial liabilities measured subsequently at amortised cost

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or (where appropriate) a shorter period, to the amortised cost of a financial liability.

#### **Borrowing costs**

Borrowing costs can include interest expense, finance charges in respect of finance leases, amortisation of discounts or premiums, ancillary costs relating to borrowings, and exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

Borrowing costs are expensed in the period which they are incurred, except for borrowing costs incurred as part of the cost of the construction of a qualifying asset which are capitalised until the asset is ready for its intended use or sale.

#### Leasing - Up to 30 June 2019

The determination of whether an arrangement is (or contains) a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset (or assets), even if that asset is (or those assets are) not explicitly specified in an arrangement.

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to Carbon Revolution is classified as a finance lease.

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised in finance costs in the statement of profit or loss.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that Carbon Revolution will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

An operating lease is a lease other than a finance lease. Operating lease payments are recognised as an operating expense in the statement of profit or loss on a straight-line basis over the lease term.

#### Leasing - Post 30 June 2019

Under AASB 16 Leases, Carbon Revolution assesses whether a contract is or contains a lease, at inception of the contract. Carbon Revolution recognises a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low value assets. For these leases, Carbon Revolution recognises the lease payments as an operating expense on a straight-line basis over the term of the lease unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, Carbon Revolution uses its incremental borrowing rate.

Lease payments included in the measurement of the lease liability comprise:

- Fixed lease payments less any lease incentives
- The exercise price of purchase options, if the lessee is reasonably certain to exercise the options
- Payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

The lease liability is presented as a separate line in the consolidated statement of financial position.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

Carbon Revolution remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use assets) whenever:

- The lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the lease liabilities is remeasured by discounting the revised lease payments using a revised discount rate
- The lease payments change due to changes in an index or rate or a change in expected payment under guaranteed residual value, in which cases the lease liability is remeasured by discounting the revised leased payments using the initial discount rate (unless the lease payments change is due to a change in a floating interest rate, in which case a revised discount rate is used)
- A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.

The right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses.

Whenever Carbon Revolution incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease, a provision is recognised and measured under AASB 137

Provisions, Contingent Liabilities and Contingent Assets. The costs are included in the related right-of-use asset, unless those costs are incurred to produce inventories.

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that Carbon Revolution expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

The right-of-use assets are presented as a separate line in the consolidated statement of financial position.

Carbon Revolution applies AASB 136 Impairment of Assets to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as described in the 'Property, plant and equipment' policy.

#### **Share-Based Payment Arrangements**

Carbon Revolution operates several employee incentive schemes to remunerate employees, including senior executives, in the form of share-based payments.

The cost of share-based payments is determined by the fair value of the equity instruments granted at the date when the grant is made using an appropriate valuation model. That cost is recognised in employee benefits expense together with a corresponding increase in equity over the period of service and, where applicable, when the performance conditions are fulfilled (the vesting period).

The cumulative expense recognised for share-based payments at each reporting date until the vesting date reflects the extent to which the vesting period has expired and Carbon Revolution's best estimate of the number of equity instruments that will ultimately vest. The expense or credit in the statement of profit or loss for a period represents the movement in cumulative expense recognised as at the beginning and end of that period.

Service and non-market performance conditions are not considered when determining the grant date fair value of the equity instruments, but the likelihood of the conditions being met is assessed as part of Carbon Revolution's best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to a share-based payment, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an instrument and lead to an immediate

expensing of the instrument unless there are also service and/or performance conditions.

No expense is recognised for instruments that do not ultimately vest because non-market performance and/or service conditions have not been met. Where awards include a market or non-vesting condition, the transactions are treated as vested irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

## Foreign Currency Translations and Balances

#### Functional and presentation currency

The consolidated financial statements are presented in Australian dollars which is also the functional currency of the parent entity and its Australian subsidiaries. The financial statements of each entity within the Carbon Revolution group are measured using the currency of the primary economic environment in which that entity operates (the functional currency). The Company has one overseas subsidiary in the United States of America ("US") and one in the United Kingdom ("UK"). The UK subsidiary has been dormant since incorporation on 17 July 2018.

#### **Transactions and balances**

Transactions in US dollars are initially recorded by the Australian entities within the Carbon Revolution group at spot rates at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in US dollars are translated at the spot rates of exchange at the reporting date. Differences arising on settlement or translation of monetary items are recognised in profit or loss as there are no items designated as hedges of the net investment in the foreign operation.

Non-monetary items that are measured in terms of historical cost in US dollars are translated using the exchange rates at the dates of the initial transactions and are not remeasured unless they are carried at fair value.

#### **Overseas subsidiary**

On consolidation, the assets and liabilities of the US operations are translated into Australian dollars at the closing rate on the reporting date. Income and expenses are translated at average exchange rates for the period, unless the exchange rate fluctuated significantly during the period, in which case the exchange rates at the dates of the transactions are used. All resulting exchange differences are recognised in Other Comprehensive Income and accumulated in the foreign currency translation reserve, a separate component of equity.

### **Corporate directory**

#### **Company's Registered Office**

Building NR, Geelong Technology Precinct 75 Pigdons Road Geelong, Victoria, 3220

#### **Share Registry**

Link Market Services Limited Level 12, 680 George Street Sydney, NSW, 2000

#### **Australian Legal Adviser**

Herbert Smith Freehills Level 42, 101 Collins Street Melbourne, Victoria, 3000

#### **Investigating Accountant**

Deloitte Corporate Finance Pty Limited 550 Bourke Street Melbourne, Victoria, 3000

#### **Auditor**

Deloitte Touche Tohmatsu 550 Bourke Street Melbourne, Victoria, 3000

#### **Joint Lead Managers**

Evans Dixon Corporate Advisory Pty Ltd 171 Collins Street Melbourne, Victoria, 3000

Bell Potter Securities Ltd 101 Collins Street Melbourne, Victoria, 3000

#### **Carbon Revolution Offer Information Line**

1800 677 648 (within Australia)

+61 1800 677 648 (outside Australia)

8.30am to 5.00pm (Sydney time), Monday to Friday (excluding public holidays)

#### **Offer Website**

https://events.miragle.com/carbonrevolution-ipo

#### **Corporate Website**

http://www.carbonrev.com/



