Carbon Revolution Limited
Geelong Technology Precinct
75 Pigdons Road
Waurn Ponds, 3216
Australia

ABN: 96 128 274 653

Certified System
Automotive
IATF 16949
SAI GLOBAL

Certified System
Quality
ISO 9001
SAI GLOBAL

Certified System
Environment
ISO 14001
SAI GLOBAL

Carbon Revolution (ASX code: CBR)
FY22 FULL YEAR RESULTS

Geelong, Australia, Monday 29th August 2022, in accordance with ASX Listing Rules, please find attached Carbon Revolution's Appendix 4E and Annual Report for the financial year ended 30 June 2022.

The associated year end reporting documents will be provided separately as follows:

- FY22 Results Media Release
- FY22 Investor Presentation
- FY22 Corporate Governance Statement and Appendix 4G

Results Conference Call details:

Date	:	Monday, 29 August 2022 (today)
Time	:	9.30 am (AEST) today
Register at	:	https://carbonrev.zoom.us/webinar/register/WN_Dm-fyKtaTgK9FVWaTJb82w

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

A recording of the briefing will be made available on the Carbon Revolution Investor Centre website: https://investors.carbonrev.com/Investor-Centre/?page=results-and-presentations

Authorised for release by the Board of Carbon Revolution Limited

Investor contact:

Andrew Keys
andrew.keys@carbonrev.com
+61 (0)400 400 380

ABOUT CARBON REVOLUTION

Carbon Revolution is an Australian technology company, which has successfully innovated, commercialised and industrialised the advanced manufacture of carbon fibre wheels for the global automotive industry. The Company has progressed from single prototypes to designing and manufacturing high-performing wheels for some of the fastest street cars and most prestigious brands in the world. Carbon Revolution is creating a significant and sustainable advanced technology business that supplies its lightweight wheel technology to automotive manufacturers around the world.

For more information, visit carbonrev.com

Appendix 4E

Preliminary financial report for the year ended 30 June 2022 as required by ASX listing rule 4.3A

For the year ended 30 June 2022

(previous corresponding period (PCP) being the year ended 30 June 2021)

RESULTS FOR ANNOUNCEMENT TO THE MARKET

Statutory results

		% Change from PCP		$M
Total revenue from ordinary activities	Up	15%	to	40
Earnings before interest and tax (EBIT)	Down	38%	to	(42)
Profit after tax from ordinary activities (including significant items)	Down	34%	to	(43)
Underlying profit after tax (excluding significant items)	Down	34%	to	(43)

Dividend Information

No dividend was paid or declared for year ended 30 June 2022

Other information

Year ended 30 June	2022	2021
Net tangible assets per security	2.66	1.62

Additional information supporting the Appendix 4E disclosure requirements can be found in the Annual Report which contains the Directors' Report and the 30 June 2022 Financial Statements and accompanying notes

The report is based on the consolidated financial statements for the year ended 30 June 2022 which have been audited by Deloitte.

Carbon Revolution Limited

Annual Report
2022

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Carbon Revolution is a global technology company and tier one OEM supplier, which has successfully innovated, commercialised and industrialised the supply of lightweight carbon fibre wheels to the global automotive industry.

Letter from Chair and CEO

James Douglas, Chair

"In this difficult local and global environment, we are happy with the revenue growth, positive contribution, and strengthening customer demand that we've seen through FY22."

On behalf of your Board of Directors, it is our pleasure to share with you the Carbon Revolution Limited Annual Report for the financial year ended 30 June 2022 (FY22).

Carbon Revolution is an Australian technology company manufacturing advanced carbon fibre wheels. The Company was founded with the purpose to transform the performance and sustainability of the world's vehicles. True to this purpose, Carbon Revolution is the clear global leader in the manufacture and sales of lightweight carbon fibre wheels for the automotive industry.

In FY22, Carbon Revolution passed the milestone of 50,000 wheels sold and our wheels are currently available on cars made by General Motors, Ford, Ferrari and Renault. The Company achieved a 15% growth in total programs (development and production) from a year ago. At present, we have 15 active programs, 6 awarded programs in production and 9 programs in development. We look forward to new program launches in the year ahead. In our short history, this is a record number of active programs, signifying the increasing acceptance of and demand for our technology from global automotive manufacturers.

Our wheels are materially lighter, have demonstrable road noise reduction benefits, attractive aesthetics and deliver significant efficiency gains compared to steel and aluminum alternatives. The efficiency gains and road noise reduction benefits translate into enhanced performance and increased fuel efficiency or range enhancement for electric vehicles. As part of our growth into the aerospace industry, we are also teaming up with the Australian Defence Force on the design of the CH-47 (Chinook) Helicopter's wheels.

Whilst dealing with significant local and global headwinds throughout the financial year, we are pleased with our progress in FY22. Our FY22 revenue of $40.3m was 15% above the previous year. We finished the year with a record run-rate of c. 25,000 completed wheels (June production, annualised) and delivered a strong positive contribution of over $400 per wheel and almost $2m in total for the final quarter. This improvement in performance is clearly demonstrating the profit potential of the Company as volumes increase and as our manufacturing efficiency program delivers the results that we are confident it will.

The Company reported a loss after tax of $43.1m (FY21: $31.8m). The business faced challenges related to COVID-19 on different levels, including timing delays with our customers launch of their new cars, the impact of the continued global shortage of automotive semiconductor chips on our customers and significant COVID-19 related absenteeism particularly during the middle quarters of the year.

The disruption of global supply chains led to some raw material shortages and increased freight costs. There were also two operational issues that significantly impacted efficient factory production from mid Q2 to early Q4 during FY22 – thermal barrier coating (TBC) machine performance and diamond weave resin quality. Both of these issues were resolved early in Q4. In this difficult local and global environment, we are happy with the revenue growth the business has recorded in FY22.

On a positive note, we do see recovery across the automotive industry with the emergence of new program launches. Late in the 2021 financial year, 2 new Ferrari vehicles were released with Carbon Revolution wheels, the 296 GTB and the 812 Competizione and our wheels for both are now in production.

Jake Dingle, CEO and Managing Director

The depth and length of our relationship with Ferrari clearly highlights how highly we are regarded as a valued partner, and the strength and potential of our technology.

Another significant milestone for Carbon Revolution this year is our first program with General Motors, the new Chevrolet C8 Corvette Z06 & Z07, which feature our carbon fibre wheels. At the time of the vehicle launch, Corvette's chief engineer Tadge Juechter said, "… It's super light and saves over 40 pounds versus the forged aluminium wheels which are pretty lightweight wheels…" and are "much, much stronger" than an aluminium wheel. Production for the program has now commenced. We expect this to be our biggest program to date, in terms of annual wheel sales.

During the year we also strengthened our management team and leadership capabilities to support the Company's growth strategy with the appointment of Dave French as Operational Strategy Lead. Dave is a globally experienced automotive executive with extensive background in business planning and strategy, vehicle program delivery, product development systems and manufacturing plant management. We also welcomed Sam Casabene as Director of Procurement and Supply Chain, and Tim Boyd as Director of People and Culture, strengthening our leadership in both areas.

Very sadly and unexpectedly Adrian Smith, our former Director of Sales and Business Development passed away after a brief illness in April of this year. We were all shocked and saddened by Adrian's passing and our thoughts remain with his family in Michigan. Adrian was a very important member of the team and is missed by all.

In July we appointed Jesse Kalkman, formerly of Nextsteer, to fill this executive role. We are delighted to have Jesse come onboard as part of the Executive team. He brings a wealth of executive experience in global tier 1 supplier organisations.

In May 2022, we welcomed the announcement of a Commonwealth Modern Manufacturing Initiative (MMI) grant of $12 million for the Mega-line project.

This grant will help Carbon Revolution increase capacity to meet the future demand for our carbon fibre wheel wheels in the rapidly expanding global electric vehicle (EV) market. The grant will contribute to the remaining scope of Phase 1 of the Mega-Line project.

We are pleased with the progress of the Mega-line project. The construction of Phase 1 of the Mega-line has progressed well in FY22 in line with our plans. Whilst further construction continues, the completed elements have now entered the commissioning phase. The Mega-line will be commissioned in stages, with the end-to-end process expected to be in production early calendar year 2023. First production wheels are expected to come off the Mega-line in Q3 FY23.

With increasing customer demand for our wheels, as evidenced by the record number of active programs, and Mega-line development rapidly progressing towards production, we believe the Company is in its strongest position to deliver on its potential and purpose.

On behalf of the Board, we would like to thank each and every member of the Carbon Revolution team for their considerable efforts and achievements throughout the financial year, particularly in the face of the continued challenges of COVID-19 and global supply chain disruption. Carbon Revolution builds a unique and highly sophisticated product, and it has a unique team and culture which we are confident will deliver long-term, profitable growth for our shareholders.

Finally, we are grateful to our customers and shareholders for their ongoing support. Carbon Revolution's journey and ambition would not be possible without this support.

James Douglas
Chair

Jake Dingle
CEO and Managing Director

Key achievements for 2021-2022

Over 56,000 wheels sold and growing

– improved sales momentum with revenue up 15%

Strong market engagement for lightweight carbon fibre wheels

– a record 15 active programs strengthen the outlook

Operational progress made

– challenges overcome during the year exiting with strong foundations for improvement

Phase 1 Mega-line project progressed well

– first production wheels expected in FY23

Board of Directors

James Douglas R A

Independent, Non-Executive Chair

Appointed: 25 November 2011

- Over 25 years of investment banking and venture capital experience in Australia and the United States
- Partner of Co:Act Capital and non-executive director of Export Finance Australia
- Prior to his involvement in venture 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
- Science degree and Law degree from the University of Melbourne
- Graduate of the Australian Institute of Company Directors

Jake Dingle

Chief Executive Officer, Managing Director

Appointed: 20 November 2008

- 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)
- Graduate of the Australian Institute of Company Directors

Lucia Cade R

Independent, Non-Executive Director

Appointed: 3 August 2018

- Board and executive experience that spans utilities, technology and innovation, industry-led research and development, construction, global technical advisory and infrastructure investment
- Currently serves on the boards of South East Water (Chair), Paintback (Chair), Urban Utilities, Future Fuels CRC, Engineers Australia, FLAIM Systems Pty Ltd
- Former director of Water Resources Group Limited (renamed to Purifloh Limited) (April 2018 to November 2019)
- Bachelor of Engineering, Bachelor of Economics and Master of Engineering Science from Monash University and an MBA from the Melbourne Business School
- Fellow of Engineers Australia and Fellow of Australian Institute of Company Directors

Committee Membership

A Audit and Risk Committee
R Remuneration & Nomination Committee

Chair of Committee
Member of Committee

Dale McKee A

Independent,
Non-Executive Director

Appointed: 27 September 2018

- Director, Treasurer and Chair of Audit and Risk Committee, Museums Victoria
- Trustee, Marion and EH Flack Trust
- Former senior partner at PwC with extensive experience serving listed companies in audit, accounting, corporate governance, risk management and capital markets matters
- Former member of the Australian Auditing Standards Board
- Bachelor of Business from Federation University
- Fellow of the Institute of Chartered Accountants in Australia and New Zealand

Mark Bernhard A R

Independent,
Non-Executive Director

Appointed: 3 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
- Non-executive director of a not-for-profit, Healthy Male, since August 2020 and chair of their Audit and Risk Committee
- Non-executive director of Bapcor (ASX:BAP) since March 2022.
- Studied Transformational Management at Stanford University, MBA from Deakin University and a Business/Accounting degree from Monash University
- Graduate of the Australian Institute of Company Directors

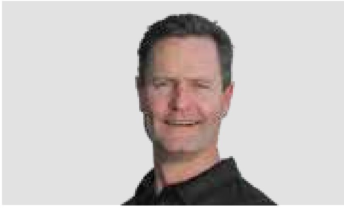
Senior Management

Jake Dingle

Chief Executive Officer,
Managing Director

Appointed: 20 November 2008

- 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)
- Graduate of the Australian Institute of Company Directors



Gerard Buckle

Chief Financial Officer

Joined: in September 2019

- An 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 and Olex
- Chartered Accountant, with a Bachelor of Business and a Graduate Diploma of Applied Finance qualifications

Dr Ashley Denmead

Chief Technology Officer

Founder of Carbon Revolution

- More than 15 years of experience in virtual and physical prototyping of composite parts for automotive, marine and industrial applications
- Double degree in Mechanical Engineering (First Class Honours), Computer Science (Software Development) and a PhD in composite materials at the Deakin University Centre for Materials and Fibre Innovation

Ron Collins

Vice President North America

Joined: in February 2021

- Experienced engineering executive with 31 years in Ford Motor Company in various engineering roles including Director of Chassis Engineering, Director of Body Engineering, and Director of Asia Pacific Engineering
- Experienced in the global auto industry, with multiple executive roles based in North America, Europe (Germany), Asia Pacific (China), and Australia
- Bachelor of Science in Electrical Engineering from the University of Iowa, MBA from the University of Michigan (High Distinction), and Masters of Engineering from Wayne State University

Tim Boyd

Director of People and Culture

Joined: in January 2022

- A People and Culture Executive with significant experience in blue chip local and multi-national, multi-site organisations in manufacturing, insurance, social services and government enterprises
- A values-driven trusted advisor with a deep understanding across all aspects of People and Culture and business acumen
- Previous roles at Ford Motor Company, GMHBA Health Insurance, GenU (Karingal St Laurence) and State Trustees
- Degree in Management (ADMgt Human Resources Major) from Deakin University

Dave French

Operational Strategy Lead

Joined: in February 2022

- Globally experienced automotive executive with an extensive background in business planning and strategy, vehicle program delivery, product development systems and manufacturing plant management
- Over 35 years' experience with Ford in Australia, China, US and Thailand including positions as global Vehicle Line Director (T6 products), Director of Cycle and Product Planning (Asia Pacific and Africa). Member of the PAC Group (USA) advisory board with a special interest in business alliance development
- Bachelor of Engineering (Mechanical) from Adelaide University (Hons)

David Nock

General Counsel and Company Secretary

Joined: in August 2017

- Appointed Company Secretary in September 2017
- Previous roles with 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 (Hons) from the University of Melbourne and an MBA from the Melbourne Business School (Dean's List)

Jo Markham

Director of Customer Excellence

Joined: in October 2020

- An experienced senior executive, with a passion for developing leaders and building effective teams within a culture of trust, fairness and transparency
- Extensive auto experience spanning product development, manufacturing, quality, customer experience, sales and logistics and warehousing
- Previous roles at General Motors/GM Holden and Fiat Chrysler Australia
- Bachelor of Engineering from the University of Melbourne

Andrew Higginbotham

Operations Director

Joined: in May 2021

- An operations leader with Ford Motor Company progressing to Operations Director and Plant Manager leading up to 1400 employees with an operating budget of $90 million
- Leadership roles in assembly, machining, stamping and quality operations with experience in the United States and Japan and also a member of the Australian Executive Committee
- Divisional General Manager of Motorised Division at Jayco leading production, R&D, purchasing and sales functions
- Masters in Advanced Manufacturing from RMIT, and First Class Honours in Bachelor of Mechanical Engineering at Monash University

Sam Casabene

Director of Procurement and Supply

Joined: in December 2021

- Globally experienced Purchasing Executive with an extensive background in strategic procurement, product development, supply chain management and start-up operations
- Focused on supplier relationships, quality and people development
- Over 42 years in automotive including Ford Australia as Vice President of Purchasing, Director of Purchasing – Ford ASEAN region based in Thailand and Vice President Purchasing at Vinfast LLC, Vietnam
- Bachelor of Business (Accounting) RMIT University Melbourne, Certificate in Logistics, Mt. Eliza Business School

Vale

It was with great sadness we acknowledged the passing of one of our Carbon Revolution family. After a short illness, Adrian Smith passed away in April. Adrian was based in North America since 2019, as Director of Sales and Business Development and member of our executive team. Adrian worked tirelessly with our customers to build strong relations based on trust and respect. He was admired by his colleagues for being a team player and an excellent communicator. He will be deeply missed and leaves a lasting legacy at Carbon Revolution.

Adrian had a passion for high performance vehicles and cutting-edge technology, but his greatest passion was reserved for his family. Our heartfelt thoughts and condolences go to Adrian's wife, his daughter and their extended family. Given the professional that he was, Adrian would want us all to get on with business. With heavy hearts, we will honour him and do just that.

Directors' Report

About

Carbon Revolution ("Carbon Revolution" or the "Company" or the "Group") is an Australian technology company manufacturing advanced carbon fibre wheels. Established in 2007, Carbon Revolution is the first company globally to have successfully developed and manufactured single-piece carbon fibre wheels to original equipment vehicle manufacturer (OEM) quality standards, with commercial adoption across several major OEM vehicle platforms. Carbon Revolution protects the design and manufacture of its wheels – some of the world's most complex carbon fibre products – with over 55 patents and precious IP.

Carbon Revolution's principal operations, which include its corporate office and manufacturing facilities, are located in Geelong, 75 kilometres southwest of Melbourne, Australia. The 10,000m^2 Geelong facility is quality accredited to international automotive supply standard IATF 16949, and has achieved ISO Quality and Environmental accreditation. Carbon Revolution also has personnel in North America and Europe to service current and prospective customers – global OEMs (Original Equipment Manufacturers, or global car makers). Since its first OEM program for Ford in 2015, the Company has progressively increased production capacity to meet increasing OEM demand. With almost 60,000 wheels on the road, Carbon Revolution's scale is without peer among carbon fibre automotive wheel manufacturers.

Business Model and Strategic Priorities

Carbon Revolution primarily generates revenue through the sale of carbon fibre wheels to global OEMs. The Company also generates revenue through 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.

The Company has prioritised the automotive new vehicle wheel market, where its lightweight wheels deliver substantial performance and efficiency benefits. The business works closely with its customers to introduce, design and develop new wheels. The business model is based on concurrently developing materials, products and processes with the aim of lower cost and higher volume industrialised production.

Carbon Revolution's wheel technology is desirable among OEMs and their customers because it delivers strong, durable and attractive wheels, which weigh up to 40–50% less than aluminium equivalents. Reducing wheel mass has significant benefits for a vehicle's overall efficiency, as it reduces the vehicle's unsprung weight and rotational inertia.

Since the first Carbon Revolution wheel was released to the market in 2009, performance benefits associated with improving wheel efficiency have become well accepted and have led to adoption in the performance and premium/luxury vehicle categories by five OEMs including Ford, Ferrari, General Motors and Renault.

However, as the automotive market rapidly transitions to electric vehicles (EVs), Carbon Revolution's efficiency technology is viewed as an ideal enabler of range extension, both through weight savings and aerodynamics. A significant proportion of wheels currently under development are for EV applications. Driving this expansion is an increased understanding of the significant efficiency benefits of this lightweight technology and desire to increase range without adding further mass and cost to a vehicle through additional batteries.

As the adoption cycle matures, designers and engineers are beginning to fully embrace the unique design characteristics afforded by carbon fibre, allowing outcomes otherwise not easily achieved in aluminium. A key benefit of carbon fibre wheels is their potential to reduce road noise – a significant challenge for EVs – coupled with weight savings which improve range. This, and the ability to create aerodynamic styling and larger wheels in unique and contemporary designs which are not as feasible with traditional materials, allow OEMs to design a vehicle that stands out from its competitors.

Carbon Revolution's growth focus includes adding higher volume OEM wheel programs for EVs, including larger formats such as SUVs and light trucks, to complement its high-performance program portfolio.

The Company is driving the industrialisation of its production processes and is commissioning the first phase of its first Mega-line. Developed with the latest Industry 4.0 technology, the Mega-line will deliver improvements in production scale and economics that will enable the Company to deliver large volume programs to a broader cross-section of the market. The business case for Phase 1 of the Mega-line is underpinned by formal agreements to initiate detailed design and engineering relating to four new OEM programs. One of these has now achieved formal award. This program is expected to enter production during the first half of 2023 and ramp up over the subsequent twelve months.

The Company also aims to leverage its technology into adjacent industries, such as the aerospace and transportation sectors. The Australian Defence Force has already accepted virtual validation of the wheel designed by Carbon Revolution for the Boeing CH-47 Chinook helicopter. This design represents a 30% weight saving compared to the existing wheels and enables retrofitting of the wheel to existing hardware, opening an opportunity on the 1,200 global fleet of CH-47 helicopters.

Carbon Revolution is committed to investing in, improving and growing its operations to further its position at the forefront of carbon fibre wheel design and development into the future, and maximising value and sustainable returns for shareholders.

1.1 Wheel Program Portfolio

In FY22 Carbon Revolution passed the milestone of 50,000 wheels sold. During the year we sold wheels for vehicles built by Ford, Ferrari and General Motors and we have contracts to provide wheels to car makers for future models.

The long-term sales outlook and pipeline for new programs continues to be very strong, with a record 15 active programs. The Company is experiencing very strong interest from current and new OEMs as evidenced by the levels of program quoting and detailed customer enquiries in the latter part of FY22. A significant proportion of the active programs and customer enquiries relate to electric vehicles.

The new Ferrari programs which launched in late FY21, the Ferrari 296 GTB and 812 Competizione programs, and the new C8 Corvette Z06/Z07 program, ramped production through FY22 as expected.

Stage of Program Lifecycle Number of Programs		June 2022	June 2021	Comments
Awarded programs in production		6	5	Corvette Z06/Z07 program commenced production
Programs in development	Awarded	3	3	SUV program and the first of the Mega-line programs expected to transition to production in FY23
	Under detailed design and engineering agreement	6	5	
Total		**15**	**13**	

As announced in April 2021, Carbon Revolution secured formal agreements to initiate detailed design and engineering on four programs with an aggregate expected volume of ~75k wheels per annum. The first of these programs was awarded in June 2022 and is expected to enter production during the first half of 2023 and ramp up over the subsequent twelve months. The other three programs are EV SUV/Pickup programs with one customer, where the wheel design and sourcing process is underway. As communicated during the year the expected start of production for the lead program in this group has been rephased by the customer with start of production moved to the first half of 2024.

1.2 Operations, Technology and Mega-line

The Company is proud to report a zero lost-time-injury frequency rate on a rolling 12 months basis, ending June 2022. This is a very pleasing result and shows the commitment of the whole team to creating a safe work environment at Carbon Revolution.

From a production perspective, operations started the year well in Q1 FY22. Through the middle of the year, operations faced external headwinds related to significant COVID-19 related staff absenteeism, raw material shortages and increased freight costs related to the disruption of global supply chains. To combat longer lead times for carbon fibre, the business increased its raw material stock levels to ensure supply of materials into production. Along with these external headwinds, the team dealt with two internal issues: Thermal Barrier Coating (TBC) machine performance issues and a quality issue with Diamond Weave resin. The resolution of both the TBC and resin issues was more difficult than would normally be expected as the overseas suppliers could not easily come to Australia to assist with issue resolution activities, due to the pandemic. These internal issues were resolved early in Q4.

With normal production levels being achieved late in the year, the Company was pleased with the production momentum the factory delivered in late FY22. The June 2022 annualised run rate for boxed wheels was c. 25,000, a new record level of output for the Company. The production momentum in the factory also provides evidence the Company is mitigating the ongoing challenges posed by labour absenteeism and global supply chain disruptions.

With these internal issues and external headwinds, FY22 was a difficult year from a cost of production perspective. The Company did not achieve its planned reduction in production cost during FY22, although it has exited the year with improved performance momentum and maintains confidence going into FY23 that the required reduction in production cost is attainable.

The progress of the Mega-line project is on track. The construction of Phase 1 of the Mega-line has progressed well in FY22, and whilst further construction continues, the completed elements have now entered the commissioning phase. Phase 1 of the Mega-line will be commissioned in stages, with the end-to-end process expected to be in production early calendar year 2023. The first production wheels are expected to come off the Mega-line in Q3 FY23. The Mega-line project is being managed to match forecast customer demand, including a later introduction of new equipment into the Mega-line than originally anticipated in April 2021. This will result in some capital spend being moved into FY24 and FY25.

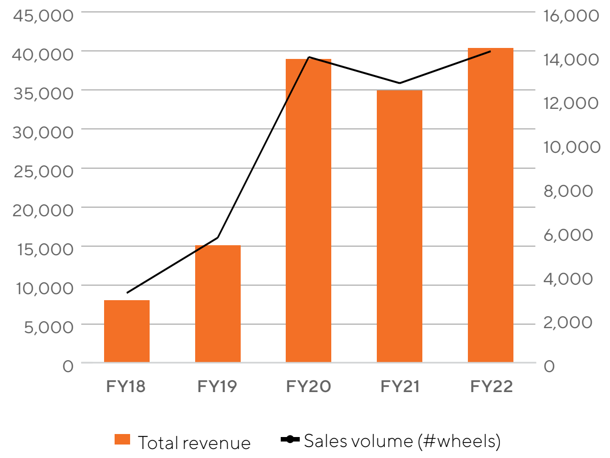
With increasing customer demand for our wheels, as evidenced by the record number of active programs, and the first stage of the Mega-line development progressing towards production, we believe the Company is well positioned to deliver on its potential and purpose.

1.3 Revenue

FY22 revenue of $40.3 million increased by 15% from FY21, representing a record level despite the industry headwinds. The growth followed the ramp up in production and sales late in the year for the new C8 Corvette Z06/Z07 program, sustained demand for the Ferrari 296 GTB and 812 Competizione programs and a stronger mix of higher priced wheels. Demand for these programs drove the 11.4% increase in wheels sold to 14,205 wheels.

The stronger production and sales levels late in the year led to record quarterly revenue and wheel sales volume in the June quarter of FY22.

Total Revenue ($'000)(LHS) & Wheel Sales (Units) (RHS)



1.4 Talent and Engagement

Carbon Revolution continues to develop a committed and diverse team capable of transforming the performance and sustainability of the world's vehicles.

During the year we continued to care for employees with the whole team focussed on providing a COVID-safe workplace, with a special focus on health and wellbeing.

We encouraged vaccinations and enacted workplace processes to minimise infection and protect our people through various waves of community transmission, lockdowns and high COVID-19 related absenteeism especially during the middle two quarters of the year.

The tight employment market has proven to be a challenge in sourcing employees, headcount has grown to facilitate the increase in production and sales volume, finishing the financial year with 547 FTEs (including 104 labour hire contractors). The team has implemented initiatives to improve attraction and retention of employees, including a refresh of our market presence focused on highlighting the variety of employment pathways we offer.

The team achieved a significant occupational health and safety milestone of zero Lost Time Injury Frequency Rate (LTIFR) for the year. The result demonstrates our sustained commitment to keeping our team safe and maintaining a safety-first culture.

The Company's commitment to people development is reflected in the number of our employees who have been promoted or advanced to more senior roles across the business. Over the year 10% of our team have built capability and skills to advance in the business.

During FY22, we further strengthened our executive team with the addition of Dave French, Sam Casabene and Tim Boyd. Dave, Sam and Tim have joined our team in the roles of Operational Strategy Lead, Procurement and Supply Chain Director and People and Culture Director respectively and all have deep automotive experience in their fields of expertise.

1.5 Financial Review

Consolidated Statement of Comprehensive Income

	Consolidated		
	FY22 $m	FY21 $m	change $m
Sale of wheels	38.2	32.2	6.0
Engineering services and tooling	2.1	2.7	(0.7)
Total revenue	**40.3**	**34.9**	**5.4**
Cost of goods sold	57.4	49.2	(8.2)
Gross loss	**(17.1)**	**(14.3)**	**(2.8)**
% of total revenue	(42%)	(41%)	(1.5%)
Research and development	12.0	6.5	(5.5)
Selling, general and admin (excl. one offs)	16.9	17.8	0.9
Total expenses	**28.9**	**24.3**	**(4.6)**
Other income	4.3	10.5	(6.2)
One off items	–	(2.2)	2.2
EBIT - reported	**(41.7)**	**(30.3)**	**(11.4)**
Net interest expense	1.2	1.6	0.5
Loss after tax	**(42.9)**	**(32.0)**	**(10.9)**

Carbon Revolution reported a loss after tax of $42.9m (FY21: loss $32.0m). Key movements from the prior year include:

Sales revenue increased by 15% to $40.3m following:

- Higher sales due to the ramp up in production for the new Corvette program which commenced in FY22, and sustained demand for two Ferrari programs launched in late FY21
- Partly offsetting this growth were lower sales for a Ford GT500 program, as this successful program nears the end of its production cycle
- Average price per wheel increased 6.7% to $2,695 due to these changes in the sales mix

In the difficult local and global environment encountered in FY22, we are happy with the revenue growth the business has recorded in FY22.

Gross loss increased to $17.1m from $14.3m in FY21.

The continued disruption to global supply chains from the pandemic created challenges in the factory in FY22. Cost of goods sold (COGS) per wheel increased 7% to $3,902 per wheel in FY22. The business faced challenges related to COVID-19 on different levels, including timing delays with our customers' launch of their new cars, the impact of the continued global shortage of automotive semiconductor chips on our customers and significant COVID-19 related absenteeism particularly during the middle quarters of the year. The disruption of global supply chains led to some raw material shortages and increased freight costs. There were also two operational issues that significantly impacted efficient factory production from mid Q2 to early Q4, Thermal Barrier Coating (TBC) machine performance and Diamond Weave resin quality. From Q2 the business also faced increases in carbon fibre prices, negatively impacting COGS in the second half. These challenges reduced flow through the factory, and caused increased scrap rates and increased COGS during the middle of the year. Carbon fibre prices appear to have stabilised and the TBC and resin quality issues were resolved early in Q4 FY22.

Selling, general and administration expenses decreased by 15.6% to $16.9m. The decrease to a more stable underlying cost base in FY22 occurred following numerous efficiency improvements and cost reduction actions implemented during the year along with the non-repeat of one off costs related to an internal strategic project and implementation of a new ERP system in FY21. The lower cost base was achieved despite the 15% increase in sales and growth in programs in development, demonstrating the commercial leverage potential from scaling the business.

The business continued to invest strongly in **Research and Development (R&D)** required to improve the product technology, bring its production processes to full industrialisation and develop an increased number of customer programs, four of those supporting the business case for the Company's Phase 1 Mega-line investment. In-line with the Company's expectations R&D expenses were $12.0m. This is a $5.5m increase on the prior year, which includes $3.9m of amortisation. Capitalised R&D costs in FY22 were $17.3m (FY21: $11.2m), which reflects the growth in the number of wheel programs in development and launch stages.

Other income decreased by $6.2m to $4.3m in FY22. The FY21 year included $6.8m of the JobKeeper allowance. The absence of the JobKeeper subsidy in FY22 was the major reason for the decrease in other income.

1.6 Cash Flow

	FY22 $m	FY21 $m	Change $m
EBIT	**(41.7)**	**(30.5)**	**(11.2)**
Change in working capital and other	(3.8)	2.2	(6.0)
Net interest paid	(1.2)	(1.6)	0.4
Other non-cash items in EBIT	14.7	20.6	(5.9)
Net cash used in operating activities	**(32.0)**	**(9.3)**	**(22.7)**
Capital Expenditure	(15.6)	(12.6)	(3.0)
Intangible Expenditure	(17.4)	(11.3)	(6.1)
Net cash used in investing activities	**(33.0)**	**(23.9)**	**(9.1)**
Net cash from financing activities	**0.7**	**86.6**	**(85.9)**
Net cash inflows/(outflows)	**(64.3)**	**53.4**	**(117.7)**

Net cash used in operating activities worsened by $22.7m driven by $2.8m higher costs of good sold due to the challenges around TBC and resin in FY22. In addition, costs for R&D were $5.5m higher while there was no income from Jobkeeper ($6.8m). The ramp up of new programs late in the financial year resulted in an increase in trade receivables of $7.6m.

Net cash used in investing activities increased by $9.1m as the Company continued to invest in industrialisation assets, specifically Phase 1 of the Mega-line, to support future growth plans. Intangible expenditure increased $6.1m to support research and development on programs in development. In addition to an increased number of programs in development, it is anticipated programs in development will lead to increased production and sales volumes in future years.

Net cash inflow from financing activities decreased by $85.9m. This decrease is mainly attributable to the completion of an equity raise in FY21 which resulted in a net financing inflow of $89.9m which was not repeated in FY22.

1.7 Capital Employed

	FY22 $m	FY21 $m	Change $m
Receivables	20.4	12.2	8.2
Inventories	20.2	18.2	2.0
Less: Payables	(14.5)	(12.1)	(2.4)
Working capital	**26.1**	**18.3**	**7.8**
Property, plant and equipment	57.6	47.3	10.3
Intangible assets	34.9	25.3	9.6
Capital employed	**118.6**	**90.9**	**27.7**
Ratios			
Working capital/ sales revenue	65%	52%	13%
Debtor days	185	127	58
Inventory days	128	135	(7)

Capital employed increased by $27.7 million from June 2021 to June 2022. In addition to the changes in working capital mentioned above with respect to cashflow there was further planned investment to support Phase 1 of the Mega-line and increased research and development to support the higher number of programs in development. This increase in investment is necessary to expand production capacity, improve production efficiency and support current and near-term future programs. Accordingly, property, plant and equipment increased by $10.3m to $57.6m and intangible assets increased by $9.6m to $34.9m.

1.8 Net Debt

	FY22 $m	FY21 $m	Change $m
Loans and borrowings			
Current	13.7	9.9	3.8
Non-current	4.3	6.5	(2.2)
Total loans and borrowings	18.0	16.4	1.6
Less: Cash and cash equivalents	(22.7)	(87.3)	64.6
Net debt/(cash)	**(4.7)**	**(70.9)**	**66.2**

Net debt/cash decreased by $66.2m mainly due to the planned investment in Phase 1 of the Mega-line, increased development costs to support the higher number and stage of programs across the development pipeline and the FY22 net loss after tax.

In addition to the $22.7m cash and $0.7m of unused facilities in place, the Company has potential funding sources of $33.5m, of which $20.0m is planned to be in place in FY23 including additional $7.5m of working capital finance, the first $6m tranche of MMI grant, the second remaining $4m Export Line of Credit and a new $2.5m of equipment lease finance.

1.9 Prospects

There is increasing customer demand for Carbon Revolution's wheels, as evidenced by the record number of active programs, and with the first phase of the Mega-line development progressing towards production, the Company is well positioned to deliver on its potential and purpose.

The Company continues to monitor the local and global impacts and risks related to COVID-19. There are ongoing COVID-19 related uncertainties and disruptions facing the global automotive industry in the near-term.

Carbon Revolution's key focus areas for FY23 include:

- Capturing demand for carbon fibre wheels from current programs, including the Corvette Z06/Z07 program
- Successful launches of the Premium SUV program and the first Mega-line program
- Development activities for contracted programs and award of the remaining Mega-line programs
- Working collaboratively with existing and new customers to apply our technology to the emerging generation of electric vehicles
- Delivering production cost improvements with the objective of materially improving contribution margin
- Ongoing construction of Phase 1 of the Mega-line with successful commissioning ahead of first production in Q3 FY23
- Reducing cash burn by minimising operating and capital spend
- Securing appropriate short and long-term funding

1.10 Forward-Looking Statements

Carbon Revolution advises that this document contains forward-looking statements which may be subject to significant uncertainties outside of Carbon Revolution's control. No representation is made as to the accuracy or reliability of forward-looking statements or the assumptions on which they are based. Actual future events may vary from these forward-looking statements and it is cautioned that undue reliance not be placed on any forward-looking statements.

Carbon Revolution does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. To the maximum extent permitted by law, the Company and each of its directors, officers, employees, partners and agents disclaim any responsibility for the accuracy or completeness of any forward looking statements whether as a result of new information, future events or otherwise.

1.11 Business Risks

Risk	Description of Risk and Potential Consequences	Mitigation strategies
Carbon Revolution is not yet profitable or cash flow positive	– Carbon Revolution has not yet become profitable and cashflow positive, as such, is currently reliant on its cash reserves and sources of new funds until it is cash flow positive. – Carbon Revolution's ability to raise additional funds if required to meet its operational requirements, repay borrowings, and fund its growth plans, through debt or the issue of securities may be subject to factors beyond the control of Carbon Revolution, including general factors affecting the economy and capital markets (including COVID-19). There is no guarantee that such funding, whether debt, equity or otherwise, will be obtained or available on favourable terms, or at all. Carbon Revolution may also experience difficulties extending or replacing its working capital financing facilities. – Carbon Revolution has certain loan covenants under the EFA loan agreement, and any failure to meet loan covenant obligations may adversely impact on Carbon Revolution's financial performance and prospects.	– The business completes an annual budget process, regular forecasts and conducts sensitivity and scenario analysis to understand possible implications on profitability and funding needs. Cash is managed carefully in order to preserve cash to enable the business to meet its stated objectives. – The Company considers that strong relationships with its debt and equity funding providers is important to the long term prospects of the business. The Company has communication plans for both current and potential shareholders and debt funding providers. In FY23, the Company plans to draw on the remaining $4m of the $8m export line of credit and to put in place $2.5m of equipment finance leasing. The Company also plans to pursue a $6m upfront payment during FY23 under the MMI grant announced in May 2022 and confirmed in August 2022 by the Federal Government. The Company is also actively working on other funding opportunities beyond these, as referenced in the going concern note of the financial statements.
Exposure to cost increases in supply chain, and other supply chain disruptions	– Some of the materials used by Carbon Revolution in its manufacturing processes are highly technical and only capable of being supplied by a small number of suppliers, or in some cases one supplier. Further, Carbon Revolution's wheels are subject to rigorous validation tests undertaken by the Company's customers, and changing the supplier of a material may require re-validation of wheels. Finally, Carbon Revolution is often exposed to changes in customer ordering patterns with limited notice. As a result of the above factors Carbon Revolution is exposed to heightened supply chain risk. – Suppliers to Carbon Revolution may seek to increase prices with or without notice. The likelihood of price increases is higher in a macro environment of inflation, global conflict (such as the Ukraine conflict), and supply chain disruptions related to COVID-19. There are limits on Carbon Revolution's ability to pass on price increases to its customers, global OEMs. Supplier cost increases may result in higher costs and lower margins and affect Carbon Revolution's financial performance. – Shortages in, or delays in shipment of, materials may impact Carbon Revolution's ability to manufacture and ship wheels to its customers on time, or at all, resulting in lost sales and potential impact on other programs, and Carbon Revolution's reputation.	– Carbon Revolution has recently strengthened its supply chain and procurement team and is currently completing the re-organisation of this team. – Carbon Revolution is increasing the focus on long range planning and early action planning, to avoid supply chain disruption and delays. – Carbon Revolution uses a detailed Sales and Operations Planning system, in conjunction with its Enterprise Resource Planning (ERP) system, to organise and plan resources in order to meet customer requirements. – Carbon Revolution has developed a list of critical materials and suppliers, and is seeking to mitigate risks by developing and trialing alternative materials to allow for validation of multiple materials. – Carbon Revolution has also developed a strategy for strengthening supplier relationships including the use of long term pricing agreements to reduce the risk and impact of price increases.

Risk	Description of Risk and Potential Consequences	Mitigation strategies
	– Supply shortages or delays may also result in the need to utilise an alternative material that results in a need to re-validate a wheel for a program, which may result in increased costs, reduced margins, or damage to customer relationships. – Supply chain disruptions and shortages may also result in increased costs, for example if Carbon Revolution elects to air freight materials, rather than sea freight, or if it is necessary to pay more to ensure supply with the same supplier, or move to an alternative supplier.	
Carbon Revolution may not be able to achieve its manufacturing quality, volume and cost targets	– Any inability of Carbon Revolution's manufacturing processes and procedures to consistently produce the required quantity of wheels at the required quality standards and specification targets and within the required customer timeframes, at the expected cost levels, may result in higher scrap rates, quality issues and/or costs per wheel, or shipping wheels late or not according to customer specifications, which may result in loss of customers, failure to obtain new wheel programs or increased costs for Carbon Revolution, which would negatively impact its financial performance. – Shipping wheels late or not according to customer specifications could result in Carbon Revolution being required to pay costs or damages to its customers, or product recall. This in turn could result in negative reputational damage and could adversely impact Carbon Revolution's ability to secure new programs or retain customers, which would have an adverse impact on its ability to generate revenues. – Failure to achieve the desired quality targets or to produce wheels at the forecast cost levels may result in reduced margins and/or an inability to access a broader cross section of the wheel market due to higher than forecast product costs. – Failure to introduce new customer wheel programs into production on time or on budget, or at the budgeted quality or cost levels, or other unforeseen or unexpected challenges involved in the introduction of new customer programs, resulting in higher costs, lower margins, or shipping wheels late or not according to customer specifications.	– The business has a quality system in place and operates with IATF 16949 and ISO9001 certifications. Quality reporting systems are used to identify where quality issues exist and appropriate problem-solving tools are used to understand and fix root causes. – Significant focus and attention is given to ensuring and improving quality and manufacturing consistency by the production quality team and the executive team. The quality team has recently conducted 8D problem solving training for cross functional teams to aid with problem identification and resolution. There is a focus on applying lessons learned in relation to quality improvements to prevent and mitigate future issues. The Company will also shortly be deploying Statistical Process Control for critical functions across the plant. – The customer excellence team uses a Wheel Development Framework for new program launches, underpinned by the execution of gateway elements and governed by scheduled executive gateway reviews. A thorough business case is developed and approved by both the executive team and Board during Gateway 1 – Business Case Program Approval and Quote. Business case confirmation then is an element of every remaining Gateway. – EDI (Electronic Data Interchange) systems allow the Company visibility of both forward orders and forecast requirements. Sales and Operations Planning systems are used to organise and plan resources in order to meet customer requirements. – Actual and forecast DIFOT (delivery in full, on time) are key measures used in the business to constantly monitor and understand the Company's ability to deliver to customer plans.

Risk	Description of Risk and Potential Consequences	Mitigation strategies
Carbon Revolution may not be able to increase its capacity to service contracted demand, or otherwise execute its industrialisation plans, including the Mega-line project, as planned	– Various technical and engineering challenges must be overcome in order for Carbon Revolution's capacity and industrialisation plans to be achieved. This process may take longer or cost more than anticipated, not achieve the outcomes anticipated such as delivering the expected volumes, production efficiencies or cost reduction benefits or unforeseen issues may arise during the engineering or commissioning process for new equipment. 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 to the extent anticipated, it may have a material adverse impact on Carbon Revolution's performance and prospects. – New and larger volume OEM wheel programs which Carbon Revolution plans to commence production on the Mega-line may experience delays or cost overruns if there are delays in completing the Mega-line, the Mega-line does not perform to expectations or other challenges arise in relation to the installation and commissioning of major equipment projects. This may result in reduction in revenues, lower margins, or contractual claims against Carbon Revolution. – Carbon Revolution may not have the internal resources or capability, or be able to employ or engage the appropriate capability, required in order to successfully build, install and commission new production assets or fully utilise the expected benefits of those assets once commissioned and in production and may not have ready access to the expertise required to support implementation due to travel restrictions. – The Mega-line project may impact production on existing customer programs, which may result in reduced revenue and damage to customer relationships and contractual claims against Carbon Revolution.	– Carbon Revolution has introduced a comprehensive capacity planning approach that identifies and systematically applies project management disciplines to close the gap between equipment cycle time and demand takt time (required production time in order to meet demand) ensuring that short and mid-term capacity is sufficient to meet expected demand, and with identified gaps addressed with engineering projects or additional investment where required. – Carbon Revolution has a robust project governance structure in place to plan and manage the Mega-line project and to manage risks relating to the project. To support our engineering lead, a project scheduler has also been engaged. The project scheduler closely monitors the timing of all critical path items and escalate any timing risk throughout the project. An active steering committee is in place, with Board representation, to monitor progress and oversee key decisions. – New industrialised equipment has been designed and tested using discrete event simulation and virtual commissioning techniques before actual acquisition and construction. – Maintenance plans are established by the Industrialisation team for all new equipment before handover to the production maintenance team. – Operations team assess risk impact on current production and factor any risk into their Sales and Operations Plans. If necessary to mitigate risk, inventory can be built ahead of time to assist the continued supply of wheels to customer orders during the project construction phase.
Loss or failure of key infrastructure or equipment	– Carbon Revolution's wheel manufacturing process is complex and contains numerous distinct processes, many of which utilise specialised and bespoke equipment that is not readily replaceable. – Loss, failure or breakdown of equipment may result in the capacity of the entire plant being reduced within a short period of time, and impact the ability to meet customer on-time delivery requirements. – Some equipment suppliers are based overseas, and the rectification of equipment may be delayed or face additional challenges if travel restrictions (such as those in place as a result of COVID-19) prevent supplier personnel from visiting Carbon Revolution's manufacturing facility.	– Business continuity and disaster recovery plans exist, which outline procedures to be undertaken in the event of loss or failure of key equipment. – Production Equipment Risks Assessment register is maintained. – Preventative maintenance schedule exists and is reviewed on a regular basis. – Critical spare parts have been identified and a register exists. Spare part holdings are regularly reviewed to ensure the required levels are maintained. – Reliability Centre Maintenance Program in place.

Risk	Description of Risk and Potential Consequences	Mitigation strategies
Carbon Revolution is subject to inherent risks in the development and use of new technology and the implementation of product and process change	– The implementation of new technology, product innovations or 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. – Carbon Revolution's strategy involves the manufacture of one-piece carbon fibre wheels at scale. This involves complex technology and processes which have not been used before, and foreseen and unforeseen challenges arise as a result. Such challenges may result in unexpected costs (in operating expenditure, cost of goods or capital expenditure), production delays, quality issues and scrap, management and engineering time, and delays to the implementation of Carbon Revolution's growth strategy. – Failure to properly implement new technology, product innovations or manufacturing processes may result in Carbon Revolution's product failing during trials, failing to gain customer approval or being difficult to profitably commercialise. – The above risks may also result in higher costs than anticipated, and/or higher scrap rates and quality issues than anticipated after customer validation and commencement of production, and may also result in delays in deliveries to customers. – Failing to deliver to customer program deliverables may result in reduced sales and 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 could have an adverse impact on its ability to generate revenues.	– New industrialised equipment is design tested using discrete event simulation and virtual commissioning techniques before actual acquisition, construction and go live. Maintenance plans are established by the industrialisation team for all new equipment before handover to the production maintenance team. – Carbon Revolution's new product introduction process involves stringent testing and validation regimes that are agreed with customers early in the life of the program. – The customer excellence team uses a Wheel Development Framework for new program launches, underpinned by the execution of gateway elements and governed by scheduled executive gateway reviews. – A process sign-off process is in place to ensure that all process requirements are met and operating as intended. – The Company's technology has been thoroughly tested by numerous OEMs and it now has multiple wheels in market on vehicles. Therefore, the Company has sufficiently developed and proven the core wheel technology that it uses in new program development. – The business has a quality system in place and operates with IATF 16949 and ISO9001 certifications. Quality reporting systems are used to identify where quality issues exist and appropriate problem-solving tools are used to understand and fix root causes.

Risk	Description of Risk and Potential Consequences	Mitigation strategies
Key person and workforce engagement risk	– Current employment market conditions are challenging and there is high demand for quality candidates in the sectors in which Carbon Revolution operates. – There is a risk of departure of key personnel from the business, in particular those in critical roles, those with significant knowledge of Carbon Revolution's proprietary processes and know-how; and those who are key to maintaining customer relationships. – Carbon Revolution may not be able to replace key personnel with candidates of the same experience and skills, or may experience difficulties or delays in doing so. – The loss of key personnel may result in Carbon Revolution facing challenges in meeting its forecasts or objectives. – The loss of key personnel may lead to a loss of knowledge of systems and processes which may take time to rebuild. It may also result in the leakage of know-how and other intellectual property to competitors.	– Carbon Revolution views workforce engagement as a priority and adopts a wide variety of measures to foster a culture of engagement. – Carbon Revolution is finalising a formal succession planning tool in which key roles and personnel are identified, and both retention and succession plans are established – Carbon Revolution has a variety of remuneration measures (including equity based incentive plans) designed to attract and retain high performing employees and those in critical roles. – Carbon Revolution's contracts of employment include provisions designed to mitigate against the risk of intellectual property leakage to competitors.

Risk	Description of Risk and Potential Consequences	Mitigation strategies
Risks associated with COVID-19, other pandemics, and other macroeconomic factors	– Carbon Revolution's operations and future demand may be further disrupted by the ongoing spread of COVID-19 or other global or macroeconomic issues such as significant conflict. – COVID-19 may have direct or indirect impacts on Carbon Revolution via plant shutdown at Carbon Revolution's production facility, plant shutdown at vehicle production plants operated by Carbon Revolution's customers, and supply chain disruption or shortages in Carbon Revolution's upstream supply chain or the supply chain of its customers. – As a result of COVID-19, customers may reduce or cease ordering wheels, or delay the launch of new programs for which Carbon Revolution's wheels are awarded. – As a result of COVID-19, factory disruptions may cause Carbon Revolution to reduce production of its wheels or cease producing wheels altogether. Carbon Revolution may also experience issues meeting required production under customer contracts. – The Company's suppliers may be negatively impacted by COVID-19, thereby threatening the supply of raw materials and consumables. – Global conflict or other forms of global shock may impact global supply chains and/or result in price increases for material inputs for Carbon Revolution wheels, which may result in materials shortages (and production delays), or higher costs and lower margins for Carbon Revolution. – Global conflict or other forms of global shock may result in OEMs reducing production volumes or delaying production plans (including as a result of supply chain shortages), which may reduce demand for carbon fibre wheels.	– The business has regularly and quickly adopted its own working protocols to minimise the potential for outbreaks at the Waurn Ponds facility and updated these as necessary to respond to changing circumstances. – Raw materials stocks are constantly reviewed and safety stock is held to mitigate the risk of disruptions to the raw material supply chain. – Communication with customers and monitoring of customer ordering systems to enhance understanding of short term customer order fluctuations.

Risk	Description of Risk and Potential Consequences	Mitigation strategies
Carbon Revolution's business may be impacted by climate change and related risks	– Carbon Revolution's operations, suppliers, and customers may be directly or indirectly affected by climate change, extreme weather events, and other natural disasters. There has been an increased frequency of natural disasters globally in recent years and it is expected that this trend will continue in the medium to long term. Climate, weather and natural disaster events could lead to an adverse impact on Carbon Revolution's business and operational position. – Carbon Revolution's costs may increase as it implements initiatives in response to climate change. Suppliers may pass on cost increases directly related to the impact of climate change on their own operations, and Carbon Revolution may not be able to pass these cost increases on to customers via increased wheel prices. Carbon Revolution's costs may also increase as a result of increased taxes or tariffs related to climate change. – Changing regulatory requirements or customer, consumer or investor standards and expectations in relation to climate change, sustainability and environmental matters may increase Carbon Revolution's operational and compliance costs, adversely impact Carbon Revolution's reputation, or result in Carbon Revolution failing to win new business if it is not in compliance with customer requirements in relation to climate change, sustainability and social responsibility. – Carbon Revolution, its suppliers and service providers are required to comply with environmental laws and regulations. The production and transportation of Carbon Revolution's products and other inputs in the production process involve the risk of accidents, spills or contamination. Any of these occurrences could cause harm to the environment, which may lead to disruption in Carbon Revolution's operations and supply chain, regulatory sanctions and remedial costs, any of which could negatively impact Carbon Revolution's operating and financial performance. – Carbon Revolution may fail to find a feasible recycle or reuse solution for production scrap or end of life wheels, resulting in expected demand not materialising (or reducing), or the implementation of a recycle and reuse solution may cost more or take longer than anticipated.	– The Company is ISO14001 certified and maintains an environmental impacts and aspects register with mitigations and improvement plans for all items. The Company is in the process of developing its environmental impact plan including targets for reduction in impact suitable for a growing business such as Carbon Revolution. – Carbon Revolution monitors policy initiatives of its customers to ensure that policies and operations are in compliance with their requirements. – The company's electricity is supplied by its landlord, and Carbon Revolution is working with the landlord towards introducing solar power into its supply. – Carbon Revolution is currently working on its sustainability strategy. – The company's lightweight wheels assist its customers with reducing the weight of their vehicles and thus reducing emissions. The weight reduction delivers either range extension for battery electric vehicles or reduced fuel consumption for internal combustion engine vehicles, both of which reduce the environmental impact of customer vehicles as compared to heavier aluminium or steel wheels.

Risk	Description of Risk and Potential Consequences	Mitigation strategies
Workplace incidents or accidents may occur	– 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 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. – 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 also adversely impact Carbon Revolution's business and reputation. – In addition, the Phase 1 Mega-line is a construction project involving the erection of mezzanine structures and the relocation, installation and commissioning of heavy equipment, and following installation, the use of new equipment and processes in day-to-day production operations. These activities carry a greater risk to health and safety than standard production operations using existing equipment. Further, safety incidents and near misses can result in delays to project timetables which may impact Carbon Revolution's financial performance and prospects. – Employees or other personnel may have mental health issues which may be caused by or exacerbated at the workplace, or may affect work performance. Further there is a risk that behaviours or work practices take place at Carbon Revolution, that could result in a psychological safety issue for employees or other personnel. There is a risk that these matters are not identified by management or not brought to management's attention, or are not addressed appropriately.	– Carbon Revolution is focused on providing a safe workplace which supports the physical and mental well-being of its employees and contractors and the leadership team is committed to driving and embedding in the culture a proactive safety agenda. – The Company has a formal occupational health and safety policy which is supported by a variety of other policies and procedures, overseen by the full time OHSE Coordinator. – The leadership team has extensive experience managing high risk operations including transport, heavy steel and dangerous goods processing. This has ensured the team is able to closely manage and mitigate safety risks within the manufacturing process whilst building a team of safely engaged team members. – Safety is the first agenda item at production meetings, weekly management meetings and Board meetings, with a view to promoting a safe working environment and driving a safety first culture. – Carbon Revolution has implemented a bespoke mental health model named CARE which supports the mental wellbeing of team members.
Carbon Revolution's competitive position may deteriorate as a result of action by competitors	– Carbon Revolution's competitive position may deteriorate as a result of competitors entering the market and supplying one piece carbon fibre wheels to global OEMs. – Competitor activity may result in the Company having to quote lower prices in order to win programs, resulting in lower than expected margins; or programs being awarded to competitors, resulting in lower than expected sales.	– Carbon Revolution actively monitors the competitive situation. Regardless of the number of market entrants focusing on single piece carbon fibre wheels, Carbon Revolution also regards itself as in competition with aluminium wheels (and wheels made of other materials) and various other forms of technology that are currently offered as optional on vehicles. – Carbon Revolution's strategy is to protect its position in the market by measures including: expanding its customer base and the range of vehicles featuring its carbon fibre wheels, driving brand awareness, continuing to innovate and develop its technology, increase scale and reduce manufacturing costs.

Directors’ Report
continued

Risk	Description of Risk and Potential Consequences	Mitigation strategies
Carbon Revolution’s competitive position may deteriorate as a result of action by competitors (continued)	– Competitors may challenge Carbon Revolution’s intellectual property rights which Carbon Revolution may be required to defend or respond to via litigation or negotiation. Competitors may create, or have already created, intellectual property rights (including patents) that restrict Carbon Revolution’s ability to exploit its own technology. This may result in Carbon Revolution being required to modify its own technology or manufacturing processes to avoid infringement (incurring additional costs in doing so), enter into licensing or royalty arrangements (at additional cost) or risk infringing claims by such competitors potentially resulting in litigation.	– Carbon Revolution maintains a portfolio of intellectual property, including 57 granted patents across 8 patent families plus 24 pending patents across 4 patent families, which it uses to protect its core wheel technology. – The Company opts to use product patents and not process patents wherever possible. This protects the work methods and process and protects the visible technology in or on the wheel.
Carbon Revolution’s wheel programs and customers are concentrated and demand for Carbon Revolution’s wheels may be lower than expected	– Carbon Revolution has 10 awarded customer programs in production or yet to enter production with four OEMs and losing any one of these may adversely affect its financial performance and prospects. – These customers and the wheel programs Carbon Revolution has been awarded are relatively concentrated in terms of customer type and product type (being limited to premium and high performance vehicles and premium performance SUVs and their manufacturers). As a result, Carbon Revolution is exposed to a range of risks, including of customer failure, or the risk that consumer preferences shift in a way that is unfavourable to Carbon Revolution. – In order for Carbon Revolution to expand the type of customers it sells to and the wheel programs it is awarded, it may be required to reduce its wheel prices so as to open a larger addressable market. It may not be able to do so as quickly or to the extent expected, or doing so may impact gross margins and profitability more than expected, which may negatively impact on Carbon Revolution’s prospects. – Carbon Revolution’s contracts with OEMs for awarded wheel programs are not take-or-pay agreements and as such do not contain any guaranteed sales or guaranteed or minimum purchase obligations binding on the customer. Orders made by OEM customers under those agreements may be lower than forecast by Carbon Revolution. Further, programs under detailed design and engineering agreement may not result in formal program award and may not result in wheel sales, or may result in lower sales than forecast.	– The Company has well developed business plans and strategies that are regularly measured and adjusted where appropriate. Carbon Revolution expects further diversification of its customer and program base as the Company continues to penetrate the automotive new wheels market and as its wheels gain further acceptance and adoption. – Key account management is established for all customers and key target customers. Sales performance, DIFOT and growth plans for each customer are regularly reviewed and appropriate actions are in place. – Carbon Revolution is in constant communication with customers to identify any change in demand as early as possible to provide an enhanced ability to minimise impact on Carbon Revolution operations. – The Company has multi-tiered relationships with its customers, across senior executives, program directors, program design teams, marketing and procurement. These relationships are all leveraged to work on future growth opportunities, development programs, current production planning, commercial and logistics items.

Directors Meetings

The number of meetings of the Board of Directors and of each Board Committee held during the financial year and the number of meetings attended by each Director were.

	Board meetings eligible to attend	Attended	ARC meetings eligible to attend	Attended	RNC meetings eligible to attend	Attended
James Douglas	16	16	8	8	7	7
Jake Dingle	16	16	–	–	–	–
Lucia Cade	16	16	–	–	7	7
Dale McKee	16	16	8	8	–	–
Mark Bernhard	16	16	8	8	7	7

Remuneration Report

Dear fellow shareholders

On behalf of the Carbon Revolution Board of Directors, I am pleased to present the Company's Remuneration Report for the financial year ended 30 June 2022 (FY22). FY22 was a significant year in the Company's short history. We passed the milestone of 50,000 wheels sold and achieved revenue growth of 15%. We continue to deepen and strengthen relationships with existing OEMs whilst broadening our penetration with new OEMs, including the launch of the Corvette program with GM. Our pipeline looks strong with programs in development for the attractive SUV and EV vehicle segments. From an operations perspective the implementation of our Mega-line is progressing well. This will underpin plant efficiencies, cost reductions and capacity for further growth. Importantly our operations were lost time injury free in a year of significant change in our operations.

FY22 also presented significant challenges and disruptions. The ongoing impact of COVID-19 on our customers, our suppliers and our operations materially impacted a number of key result areas with delays and some inflationary impacts. We have disclosed how the Board assessed these impacts as it relates to any incentives for key management personnel.

We thank the management team and all employees for their substantial commitment and achievements in a challenging year. We acknowledge the challenging year for shareholders and appreciate your ongoing support as we implement our growth strategy.

The Remuneration Report sets out remuneration information for the Chief Executive Officer (CEO)/Managing Director, the Chief Financial Officer (CFO) and Non-Executive Directors. It describes the Carbon Revolution Remuneration Framework (Remuneration Framework) and pay outcomes for FY22 in a simple and transparent way.

Performance and Remuneration Outcomes for FY22

The Board has adopted remuneration principles, detailed in table 2, to determine the following remuneration outcomes:

i. Fixed Remuneration and Non-Executive Directors' Fees – no increase in Non-Executive Directors' fees will be made in FY23 as was the case in FY21 and FY22. Following a review of market data, broader economic indicators and performance, Fixed Annual Remuneration for the CEO will increase by 3.0% in FY23.

ii. Short Term Incentives (STI) - STIs were awarded at 40% of maximum opportunities for partial achievement of the revenue target, corporate objective and individual objectives set by the Board, and achievement of the safety target. More details are provided below and in section 3.1.6 of the report.

As disclosed in the FY21 Remuneration Report, the Board determined that the FY22 STI plan will be 70% weighted to financial results with the primary financial goals being revenue growth (35%) and EBITDA (35%). The Board also sets corporate non-financial objectives (10%) and safety performance goals (5%). The final 15% was allocated to achieving strategic or operational personal objectives related to the role. The Board made the following assessments in determining STI awards:

Revenue – Awarded 20% – Between Threshold and Target. Achieved 15% growth in Revenue. The Board also applied its discretion to recognise material impacts outside of management control. This included more than an estimated $6m of revenue deferred due to tornados that caused severe damage and delays at GM's Bowling Green plant where the Corvette vehicles are manufactured and from the ongoing impact of semiconductor chip shortages affecting budgeted demand. Whilst these impacts would have resulted in performance being awarded above target, the Board deemed performance at 20%, recognising only a small portion of these factors outside of management control.

EBITDA – Nil Award – Below Threshold. EBITDA was below the target set by the Board and whilst a number of material impacts from COVID-19, significant interruptions to our supply chain and unforeseen inflationary impacts affected these results there was no discretion applied by the Board.

Corporate Objective – Awarded 5% - Below Target. Our FY22 corporate objective focused on achieving project milestones in relation to implementation of Phase 1 of our Mega-line, improvement in direct labour hours per wheel, achieving nomination of the four new wheel programs that underpinned the decision to invest in the Mega-line, and securing new wheel programs. Phase 1 of the Mega-line is being introduced in stages, and the team has progressed Phase 1 of the Mega-line in line with operational requirements, safely and to budget. The team secured nomination of one of the four Mega-line programs and made significant progress with securing new wheel programs with the record number of programs in the pipeline demonstrating further market adoption of our technology. Our hours per wheel target was not met.

Safety Objective – Awarded 5% – Above Target. Our team achieved a LTIFR of 0 for FY22. Given the amount of change in our production processes and implementation of new technology this was an outstanding achievement.

Personal Objectives – Awarded 10% – At Target. The Board assessed personal objectives and achievements of Executive KMP at target. These achievements included growth in programs awarded, implementation of a program launch process, finance and funding arrangements, enhanced supply chain capability and significant improvements in boxed wheel rates for customers reflecting improvements in quality and operational performance. More detailed disclosures are provided in Table 8.

The CEO's fixed remuneration increased by 2% in FY22. His STI award of $153,000 was up 28% from FY21. No LTI awards vested as the plans have not reached the end of their vesting or performance periods.

Board discretion to award all STIs in equity – The Board determined that all participants would have 100% of their FY22 STI outcome delivered in the form of equity in lieu of a cash payment. This decision was made to further align employees with shareholders while also preserving cash. Consistent with the plan rules, 50% of the FY22 STI Award for Executive KMP will be deferred in rights that will vest in 12 months from grant.

iii. Long Term Incentives (LTI) – No LTIs vested given LTI plans were introduced for FY20, FY21 and FY22. None have reached the end of their performance period.

Remuneration Framework Review

Each year, the Board reviews the Remuneration Framework, ensuring that it supports our business objectives, operates sustainably and is market competitive. The Board welcomes feedback on the Remuneration Report and we consider that feedback as part of our review.

Following extensive reforms to the Remuneration Framework, disclosed in the FY21 Remuneration Report, the Board has worked to ensure these have been effectively implemented in FY22. The Board assessed the FY23 LTI Plan to ensure it meets all of its objectives. This involved a review of the performance hurdles, the form of equity that will apply and the importance of retention given our growth plans.

The Board recognises the importance of sustainability for all stakeholders. This will be integral to future revenue growth and business maturity, as exemplified by OEMs starting to include sustainability elements as part of the program quoting and award process. The Board is committed to driving sustainability across our business and with our customers and suppliers. Given the importance of sustainability to all stakeholders and to the growth of our business, the Board has determined that 25% of the overall FY23 LTI Rights grant will be allocated to a set of sustainability objectives over the performance period. Further details of this will be provided in the 2022 Notice of Meeting.

The Board also assessed both Options and Rights for the FY23 LTI plan. The Board has determined that granting Rights for the FY23 LTI plan was appropriate and fair based upon established market practice and shareholder alignment.

Whilst FY22 was a challenging year, strengthening of customer relationships, significant improvements in our process capability and visible progress of our Mega-line investment were achieved. We are confident in future demand from our business development with the outlook for existing and new customers looking strong. We are confident that our Remuneration Framework will motivate executives to create long term shareholder value.

Lucia Cade
Chair, Remuneration and Nomination Committee
26 August 2022

1.1 Purpose

This Report sets out the remuneration arrangements for the Key Management Personnel (KMP) of Carbon Revolution for the period from 1 July 2021 to 30 June 2022. It has been prepared based on the requirements of section 300A of the *Corporations Act 2001 (Cth) (Corporations Act)* and Corporations Regulation 2M.3.03 and has been audited by Carbon Revolution's external auditor. The aim of this Report is to provide shareholders a 'plain English' understanding of Carbon Revolution's remuneration framework, policies and individual KMP remuneration outcomes for FY22.

KMP for the year ended FY22 are detailed in the table below.

Table 1: Key management personnel

Name	Position	Term as KMP
Non-executive Directors (NEDs)		
James Douglas	Chair	Full year
Lucia Cade	Director	Full year
Dale McKee	Director	Full year
Mark Bernhard	Director	Full year
Peter Lewinsky	Director	Part year (to 9 July 2021)
Executive KMP		
Jake Dingle	Managing Director & CEO	Full year
Gerard Buckle	Chief Financial Officer	Full year

1.2 Remuneration Strategy and Framework

Objective: Carbon Revolution's remuneration framework is performance based and is designed to pay fairly for achieving the business strategy and delivering sustainable value to shareholders and employees.

Principles: The Remuneration and Nomination Committee (RNC) has adopted the following principles to structure the remuneration framework and to guide remuneration decisions.

Table 2: Key principles of Carbon Revolution's remuneration policy

Principle	Explanation and Practice
Performance based	All aspects of remuneration including fixed remuneration and any incentives, are based on annual performance against strategic objectives, business plans and longer-term shareholder returns. The variable components of remuneration (both short term and long term) are driven by challenging targets designed to create sustained shareholder value. A significant proportion of executive remuneration is 'performance based' as disclosed in Table 12.
Market competitive	Remuneration opportunities, including those elements which can be earned subject to performance, are set at competitive levels that will attract, motivate and retain high quality executives. The Board reviews fixed and variable remuneration by undertaking regular market benchmarking against equivalent roles from organisations with similar market capitalisation, revenue and EBITDA. The Board has set the policy for fixed remuneration at the market median for the Comparator Group and up to top quartile for total remuneration for stretch performance.
Drives strategic and shareholder value	The Board ensures that incentive plans and performance measures are designed to create sustained shareholder value. The Board ensures the performance measures in both the STI and LTI plans are sufficiently demanding and promote the delivery of both annual business plans and the long-term strategy.

Principle	Explanation and Practice
Promotes employee ownership	Carbon Revolution encourages all employees and Directors to act like owners. Increasing alignment between employees, the Directors and shareholders has been promoted through: i. STI deferral at 50% for senior executives; ii. 100% of FY22 STI granted in equity; iii. Including significant equity in the design of both STI and LTI plans. This aligns KMP and senior executives with shareholder interests through a significant emphasis on variable remuneration; and iv. NEDs, Executive KMP and senior executives are required to hold, or make progress towards the minimum shareholding requirements set out in the Minimum Shareholding Policy.
Simple and fair	Remuneration arrangements should be simple for participants and shareholders to understand. They should be cost effective to administer. The Board will oversee the design of remuneration arrangements and use appropriate discretion, where required, to ensure there are not inappropriate benefits and that performance and the creation of shareholder value is rewarded.

Elements: The key elements of Carbon Revolution's Executive KMP remuneration frameworks are outlined below, with further details provided in the body of the report.

Table 3: FY22 Executive KMP Remuneration framework

Element of Remuneration	Purpose and Market Positioning	Measures
Fixed Annual Remuneration (FAR) Includes base salary, superannuation, other eligible salary sacrifice benefits and employee rights where this has been substituted for base salary	To pay fairly against the market for comparable roles Set to attract and retain capable employees Set at the market median for Comparator Group companies defined as All Industries, excluding Financials and Resources, with a market capitalisation between $200M-$550M	Role and Responsibility Skills, experience and accountability 80-120% of the median for comparable roles Reviewed annually based upon performance and economic data Reviewed for promotions
Short-Term Incentive (STI) Annual incentive opportunity delivered in cash and equity, or 100% equity including Short Term Incentive deferral	Drive and reward the achievement of challenging annual growth and performance targets Target is set between the median and 75th percentile of the Comparator Group The Board has the discretion to adjust STI outcomes to ensure that individual outcomes are appropriate 50% of STI award is made in cash or fully vested equity and 50% deferred into Rights through the Equity Incentive Plan (EIP) which is subject to a continuous service condition. This generally requires the participant to be employed by the Group until the one-year anniversary on which the Rights are granted	Financial – includes revenue growth and EBITDA objectives Non-financial – includes corporate and safety objectives and personal objectives related to the strategy and role The Board sets financial, and non-financial objectives and determines overall weighting of the objectives annually based on business priorities Assessment of financial and non-financial objectives are made by the Board Further details are provided in Table 4

Element of Remuneration	Purpose and Market Positioning	Measures
Long-Term Incentive (LTI) Three-year incentive opportunity delivered through options or performance rights with vesting dependent on service conditions and achievement of challenging performance conditions	Drive performance and deliver strategic objectives that create long-term shareholder value Promote the opportunity for executives to build their interests in Carbon Revolution equity Attract, motivate and retain the necessary executive talent to grow the business and increase returns to shareholders Achieve shareholder alignment through equity ownership Maximum grants of options or performance rights are issued through the EIP and are set between the median and 75th percentile for Comparator Group	LTIs are issued through the FY22 LTI Options Plan Performance measures are aligned with shareholder value Full details are provided in Table 5 Holders of options and performance rights are not entitled to dividends until options are exercised or rights have vested and are converted to shares
Total Remuneration	Is designed to attract, retain and reward executives to deliver sustainable returns for shareholders with a significant proportion of Total Remuneration being 'at risk' and performance based. Allows participants to earn up to upper quartile compared with Comparator Group	

Minimum Shareholding Requirements

In FY22 the Board reviewed the Minimum Shareholding Policy and determined the current policy, which requires NEDs to hold shares equivalent in value to 12 months base fees, the CEO/Managing Director and CFO to hold shares equivalent in value to 12 months of FAR and other senior executives to hold shares equivalent in value to six months of FAR, is adequate. Participants will be provided reasonable time to acquire these interests.

1.3 Remuneration Governance

Carbon Revolution's remuneration governance framework is set out below. The Board oversees the remuneration policy both directly and through the RNC. The composition and functions of the RNC, which oversees remuneration issues and human resources matters, are set out in the charter available from the Carbon Revolution website. The charter was reviewed during FY22.

Figure 1: Carbon Revolution's remuneration governance framework

Carbon Revolution Board

Overall responsibility to:

- Satisfy itself that Carbon Revolution's remuneration framework is aligned with the Company's purpose, values, strategic objectives and risk appetite
- Review and approve recommendations from the RNC with regards to remuneration arrangements for Non-Executive Directors, Executive KMP (including exercise of discretion) and other senior executives

Remuneration and Nomination Committee (RNC)

Overall responsibility to:

- Review and recommend to the Board remuneration arrangements for Non-Executive Directors within an aggregate pool approved by shareholders
- Review and recommend to the Board remuneration arrangements for the CEO/ Managing Director and the senior executive team
- Approve major changes to the Company's policies and procedures related to retention, termination, performance assessment and remuneration policies
- Conduct regular reviews of the remuneration framework to confirm that 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 and risk appetite
- Review and recommend to the Board major changes in relation to employee equity incentive plans
- Review and recommend to the Board the size and composition of the Board, including reviewing Board succession plans and the succession of the Chair
- Review succession plans for the CEO/Managing Director and other senior executives and identify and recommend to the Board candidates where required
- Review and make recommendations to the Board on the overall HR strategy
- Monitor the outcomes of employee engagement surveys, exit interviews and any grievances and recommend to the Board any actions in relation to them
- In accordance with the Diversity and Inclusion policy, develop and recommend to the Board measurable objectives for achieving gender diversity in the composition of the Board, senior executives and the workforce generally and assessing progress against those objectives

External Advisors

- Provide independent advice, information and recommendations relevant to remuneration decisions
- Throughout the year, the RNC and management received information from external providers related to remuneration market data and analysis, market practice on the structure and design of incentive programs (both LTI and STI), and legislative and regulatory requirements
- Carbon Revolution was not provided with a remuneration recommendation, as defined by the *Corporations Act 2001*, from external providers during the year

Management

Provides information to the RNC on:

- Incentive targets and outcomes
- Remuneration benchmarking and policy
- LTI and STI participation
- Individual remuneration and contractual arrangements for executives
- Talent management and succession plans for senior executives
- Diversity and inclusion data and policies that promote achieving gender equality and an inclusive workplace

CONSULTATION WITH SHAREHOLDERS AND OTHER STAKEHOLDERS

1.4 Activities of the RNC in FY22

The RNC completed a review of its performance and its charter in December 2021 and set some key focus areas for FY22:

- Reviewing fixed remuneration and other incentives in line with our job evaluation and market benchmarking
- Talent management and retaining staff in a very competitive local and global labour market. This included ensuring our remuneration framework and incentive designs support the attraction and retention of talent
- Reviewing our performance hurdles for the FY23 LTI plan. This included consideration of introducing sustainability objectives into the plan. Having reviewed a range of alternatives, and given the importance of sustainability to all stakeholders and to business growth, the Board has determined that 25% of the overall FY23 Rights grant will be allocated to a set of sustainability objectives over the performance period

The RNC will undertake regular reviews of performance and its charter after considering feedback from shareholders.

1.5 Composition of Remuneration

The components of the fixed and variable or 'at risk' remuneration (STI and LTI) are detailed below.

i. Fixed remuneration

FAR comprises base salary, superannuation and other eligible salary sacrifice benefits. FAR may be substituted for employee rights where such a plan is approved by the Board and offered to employees. FAR is targeted at the median of the market for jobs of comparable size and responsibility in the Comparator Group defined as ASX All Industries, excluding Financials and Resources, with a market capitalisation between $200M-$550M. In some cases, superior performance or strong market demand for specific job categories may justify above-median FAR.

FAR is reviewed annually or on promotion. There are no guaranteed increases included in any Executive KMP's contracts.

ii. At risk remuneration – STI plan

Table 4: Details of the FY22 STI plan

Purpose	To drive individual and team performance to deliver annual business plans and increase shareholder value
Frequency and timing	Awards are determined on an annual basis with performance measured over the year to 30 June and payment made in approximately September
Financial measures	All eligible employees have a common set of financial KPIs set at the commencement of the performance period. Financial goals are weighted at 70% of the overall plan. The key financial goals in FY22 were revenue growth (35%) and EBITDA (35%). For further information see Table 6
Non-financial objectives	Non-financial objectives include strategic and operational goals that are aligned to the business plan. Non-financial objectives are weighted at 30% of the overall plan. In FY22, these goals include corporate wide goals of achieving milestones relating to implementation of Phase 1 of the Mega-line, securing program award of the four wheel programs that underpinned the decision to invest in Phase 1 of the Mega-line, improvement in direct labour hours per wheel and securing new wheel programs (10%) and safety performance (5%). Other goals relating to specific roles are weighted at 15% and include: – customer and product launch goals – finance and funding goals – operational improvements including quality, delivery and cost – enhancing our supply chain capability, and – implementation of the industrialisation program, technology and productivity. For further information see Table 8
Why the performance conditions were chosen	The Board believes that having a mix of financial and non-financial KPIs will provide measurable financial performance criteria strongly linked to growth and year-on-year shareholder returns and encourage the achievement of business goals consistent with the Company's overall objectives

Assessment of performance against measures	At the end of the Carbon Revolution financial year, an assessment is made of the Company's financial performance, the corporate and safety objectives and each participant's performance compared with the performance goals set. A review of the CEO/Managing Director's performance is completed by the Chair and discussed by the Board. Reviews of senior executives are completed with the CEO/Managing Director to determine performance against the relevant individual objectives The Board approves Executive KMP and senior executive STIs and the overall STI pool in aggregate These methods of assessing performance were chosen because they are, as far as practicable, objective, fair and are the most appropriate way to assess true financial performance of the Company, the Executive KMP's individual contribution and determine remuneration outcomes
Board discretion	The intention is to minimise discretionary adjustments to STI outcomes, however, the Board retains overriding discretion to adjust the final STI outcome. This is an important measure to ensure any STI award is appropriate in the circumstances and that performance and the creation of shareholder value is rewarded
Equity deferral	The EIP will be used to deliver the deferred equity component of STI awards. Typically, any STI award to Executive KMP and senior executives will be delivered 50% in cash and 50% in Rights. In FY22 the Board determined that all participants would have 100% of their STI outcome delivered in Rights. For Executive KMP and senior executives, 50% is subject to a 12-month service condition (STI Deferred Rights) and the other 50% granted as fully vested (STI Non-Deferred Rights). This decision was made to further align employees with shareholders while also preserving cash
Quantum of Grants	For FY22, the number of Rights granted is determined by the volume weighted average price (VWAP) of Shares traded on the ASX during the 20-trading day period following release of the full-year financial results
Dividends and Voting Rights	A Right entitles the participant to acquire a Share at no cost on vesting, subject to the satisfaction of vesting conditions. 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
Clawback and preventing inappropriate benefits	Under the EIP rules the Board has broad clawback powers if, for example, the participant has acted fraudulently or dishonestly or there is a material financial misstatement
Exercise Period	Vested STI Rights may be exercised by the participant within the Exercise Period. The Exercise Period is the period commencing when STI Rights vest (at the Grant Date for STI Non-Deferred Rights and 12 months following the Grant Date grant for the STI Deferred Rights, subject to continued employment) and ending on the Expiry Date. The Expiry Date is the 10-year anniversary of the Grant Date. There will be nominated exercise windows during the year which sit within trading windows in accordance with the Securities Dealing Policy
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 and will vest in the ordinary course.
Change of control	Subject to the Board's discretion to determine otherwise, all STI Rights will vest (if applicable) and automatically convert to Shares on a change of control (as defined in the Plan Rules).

iii. At risk remuneration – LTI plan

Carbon Revolution's LTI program aims to:

- drive performance and deliver strategic objectives that create long-term shareholder value;
- promote the opportunity for executives to build their interests in Carbon Revolution equity; and
- attract, motivate and retain the necessary executive talent to grow the business and increase returns to shareholders.

All securities referred to in this report are granted by Carbon Revolution Limited.

A summary of the FY22 Plan, their performance hurdles and vesting conditions are detailed below:

Table 5: Features of the FY22 LTI Plan

Eligibility	CEO/Managing Director, senior executives and a small number of other key staff as approved by the Board
Grant date	A one-off grant made on 20th December 2021
Type of award	Grants are subject to service conditions and performance hurdles For the FY22 award, the Board determined to use Options as determined by the Board in order to meet the objectives of the LTI Plan and consistent with the stage of business development Options entitle the participant to acquire a Share on vesting and exercise, subject to the satisfaction of vesting conditions and payment of an exercise price
Quantum of Grants	Maximum grant values were made consistent with market benchmarking and policies set by the Board The maximum number of FY22 Options allocated was calculated by taking the maximum grant value and dividing this by an option price determined by the Board. Further details are provided in Table 15
Vesting and performance period	Awards are subject to a three-year vesting period, performance hurdles and cessation of employment provisions outlined below. Immediately following completion of the vesting period, the performance conditions are tested to determine whether, and to what extent, awards vest. To the extent that Options have not vested following the testing, they will lapse (i.e. participants forfeit their interests in the options) Participants may exercise any vested Options from the date the Options vest until the fifth 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 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

Performance hurdle

- **Tranche A:** 50% of the FY22 Options granted are subject to Relative TSR;
- **Tranche B:** the remaining 50% of FY22 Options granted are subject to Strategic Objectives.

These performance measures are described in further detail below:

Relative TSR Tranche A
TSR is the percentage growth in shareholder value, which measures the changes in share price, taking into account dividends and capital returns. The Board determined this measure as it is highly aligned with shareholders and is an established market practice

Relative TSR (rTSR) ranks TSR performance of Carbon Revolution against the TSR of ASX300 comparator group companies defined at the start of the performance period. The Board determined this was an appropriate comparator group given the breadth of the constituent companies

The following vesting schedule applies:

Level of achievement	Percentage of Options that will vest
Below the target	Nil
Equal to target - median (P50)	50%
Between target and stretch	Straight line pro-rata vesting between 50% and 100%
Stretch – 75th percentile	100%

In order to smooth out the impact of short-term share price fluctuations, averaging periods will be used to determine the start and end share prices when calculating the TSR. The start Share price will be based on the VWAP for the 90 days up to (but not including) the first day of the Performance Period. The end Share price will be based on the VWAP for the 90 days up to and including the final day of the Performance Period

The Board may adjust the comparator group to take into account events, including but not limited to takeovers, mergers or de-mergers that might occur during the performance period

Strategic Objectives – Tranche B
The investment in Phase 1 of the Mega-line represents the single biggest operational investment in the Company's history and is a critical part of our growth strategy. This investment will extend across the 3-year performance period. The Board believes the successful implementation of the industrialisation program will improve shareholder returns over the long term and have therefore aligned the FY22 Options with this strategic investment. In assessing this performance condition and any vesting at the end of the performance period, the Board will review the following strategic goals:

- Delivery of the Mega-line Phase 1 project safely, within budgeted costs and timeframes, and delivering expected capacity, hours per wheel and quality targets
- Bringing the four wheel programs that underpin the Phase 1 investment to production within the target timeframes
- Business development goals that secure further programs and future revenue growth

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	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 (for example, in circumstances such as retirement, redundancy, death, total and permanent disablement, or mutual separation) prior to the vesting date, a pro-rata portion of unvested Options (based on the proportion of the Performance Period that has elapsed up to the date of cessation) will remain on foot and will be subject to the Performance Conditions being met at the end of the Performance Period. To the extent that the relevant performance conditions are satisfied, participant's Options will vest on the Vesting Date – 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	In the event of a change of control, or where the Board determines a change of control is likely to occur, the Board may exercise discretion to determine an appropriate treatment for the FY22 Options, subject to compliance with the LTI Plan Rules, applicable law and 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
Clawback and preventing inappropriate benefits	The Board has broad clawback powers if, for example, the participant has acted fraudulently or dishonestly or there is a material financial misstatement

1.6 Linking Remuneration to Performance

A key underlying principle of Carbon Revolution's executive remuneration strategy is the link between company performance and executive reward. This section outlines how key financial and non-financial performance have driven remuneration outcomes. Tables 6, 7 and 8 summarise key performance measures for financial and non-financial objectives. Table 9 provides the FY22 outcomes approved by the Board for Executive KMP.

While the LTI plans have not reached the end of the relevant performance periods, they are linked to company performance as the value of options and rights ultimately depends on share price performance and achievements against the performance measure.

As Carbon Revolution only listed on the ASX on 29 November 2019 it is not possible to address the statutory requirement that Carbon Revolution provides a five-year explanation of the link between company performance and remuneration. Table 7 will be expanded in future years to address this requirement.

The Board assessed the financial and non-financial performance in determining the STI outcomes for Executive KMP and other participants. The Board believes that financial and strategic targets that drive the growth of the business will deliver sustainable shareholder value and weighted these accordingly. The Board determined that 40% of maximum STI opportunities would be awarded.

Table 9 provides the FY22 STI outcomes approved by the Board for Executive KMP.

Board Discretion

In reaching the FY22 STI determination, the Board thoroughly assessed the significant and material impact of the tornados at GM's Corvette Manufacturing plant at Bowling Green in Kentucky, the ongoing impacts of semiconductor chip shortages and COVID-19, and unforeseen interruptions to global supply chains and inflationary pressures. Despite these impacts the Board only exercised its discretion in relation to the revenue growth objective to provide fair outcomes for Executive KMP as set out in Table 6.

The Board also exercised its discretion to determine that all participants would have their entire FY22 STI outcome delivered in the form of Rights. This decision was made to further align employees with shareholders while also preserving cash. Fifty per cent of the Rights awarded to Executive KMP and senior executives in FY22 are subject to a 12-month continuous service condition from their grant date. Further details of this for Executive KMP are provided in table 13.

i. STI and financial measures

Table 6: Financial Goals and achievements

Performance area	Weighting	Performance and Award
Revenue Growth	35%	**Awarded 20% - Between Threshold and Target.** Achieved 15% growth in Revenue despite significant challenges for our customers. The Board considered material impacts outside of management control. This included in an estimated $6m of revenue deferred from tornados impacting a customer facility and the ongoing impact of semiconductor chip shortages affecting budgeted demand. Whilst these impacts would have resulted in performance being awarded above target, the Board deemed performance at 20%, recognising only a small portion of these factors outside of management control.
EBITDA	35%	**Nil Award - below threshold set.** EBITDA was negatively impacted by significant impacts of COVID-19 on operations and disruptions to our supply chain as well as inflationary effects on raw materials. The Board did not exercise any discretion on this component

Table 7: Key Indicators of financial performance and shareholder returns

	Financial performance					
	Revenue ($ million)	EBITDA ($million)	Dividend (cents)	Total Shareholder Return %[1]	Earnings Per Share ($)	Closing Share at 30 June ($)[2]
FY22	40.3	(26.4)	nil	(73.4)	(0.21)	0.295
FY21	34.9	(19.5)	nil	(39.7)	(0.20)	1.11
FY20	38.9	(17.1)	nil	(29.2)	(1.14)	1.84

1 TSR for FY2020 is calculated as the change in share price since listing on the ASX plus dividends paid during the financial year divided by the opening share price on listing being 29 November 2019. This differs to the full-year TSR where existing shareholders prior to listing were able to realise part of their investment. TSR for FY22 is calculated as the change in share price from 1 July 2021 – 30 June 2022 on the ASX plus dividends paid during the financial year divided by the share price at the commencement of the financial year.

2 The listing price on listing on the ASX on 29 November 2019 was $2.60.

ii. STI and non-financial measures

Each year the Board approves a range of strategic and operational goals that support the growth of the business. Table 8 summarises the key non-financial goals and assessments of performance made by the Board.

Table 8: Non-financial goals and achievements

Performance area	Weighting and Measure	Performance and Award
Workplace Health, Safety (WHS)	5% Lost Time Injury Frequency Rate (LTIFR)	**5% Awarded – Above Target**. Achieved LTIFR of 0. This is an outstanding achievement given substantial changes to production processes and implementing new plant, equipment and technology
Corporate Objective	10% Phase 1 of Mega-line implementation Improvement in direct labour hours per wheel Securing nomination of the four wheel programs underpinning the decision to invest in Phase 1 of the Mega-line, and Material progress towards securing additional programs	**5% Awarded - Below Target.** The construction of Phase 1 of the Mega-line progressed safely and to plan in FY22. Whilst further construction continues, the completed elements have now entered the commissioning phase. Phase 1 of the Mega-line will be commissioned in stages, with the end-to-end process expected to be in production early calendar year 2023. First production wheels are expected to come off the Mega-line in Q3 FY23. We are pleased with the progress of the project in FY22. Nomination was secured for one of the four Mega-line programs. The team made significant progress with securing new wheel programs showing further market adoption of our technology. Our hours per wheel target was not met
Personal Objectives	15% Customer and Business Development, Product Launch, Finance and Funding, Supply Chain Capability and Productivity, Quality and Delivery	**10% Awarded – At Target.** Achieved 25% growth in programs (development and production) reflecting broader and deeper adoption of our technology Implemented a systematic program launch process to improve customer experiences, future demand and internal efficiencies Improved EFA Finance arrangements including Term Debt repayments extended by 12 months saving $1.5 million cash on an annualised basis, extending working capital and equipment leasing limits by $7.5m each and securing a $8 million export line of credit Award of the Commonwealth Modern Manufacturing Initiative (MMI) grant of $12 million Established a strategic pathway to implement large scale expansion Enhanced our supply chain capability delivering cost savings and reliability of supply in FY22 whilst positioning for greater sustainability and potential expansion In June 2022, achieved a record annualised rate of c. 25,000 for boxed wheels, underpinned by extensive progress in operational planning, process capability and quality performance

Table 9: FY22 STI Awards

		FY22 STI Awarded[1]		
	$ Maximum STI opportunity	**$ STI Awarded**	**% of Max STI Awarded**	**% of Max STI Forfeited**
CEO/Managing Director – Jake Dingle	382,500	153,000	40	60
Chief Financial Officer – Gerard Buckle	178,500	71,400	40	60

1 As part of approving the FY22 STI awards, the Board determined that Executive KMP and senior executives would have 100% of their STI outcome delivered in Rights with 50% of those Rights deferred and subject to a 12 month service condition. The number of STI Rights awarded will be calculated by dividing the $STI awarded by the 20-day VWAP of Shares traded on the ASX during the 20 trading day period following release of the full-year financial results. The minimum value of this award is nil and the maximum value will be determined by the share price of the Company.

iii. LTI Plan

During FY22, no LTIs vested given the LTI plans were introduced for FY20, FY21 and FY22 and have not reached the end of their performance period.

1.7 Service Agreements

CEO/Managing Director – Executive service agreement

Jake Dingle was appointed as CEO/Managing Director of Carbon Revolution effective 18 April 2012. Mr Dingle's remuneration package is summarised as follows:

Table 10: CEO/Managing Director's remuneration package

Fixed remuneration	Fixed annual remuneration of $510,000 inclusive of superannuation contributions effective from 1 September 2021. Fixed remuneration is reviewed annually. Increases are not guaranteed
Notice period	Under the Executive's Service Agreement there is no fixed term and Mr Dingle's employment can be terminated by: – the Company giving him twelve months' notice of termination; or – Mr Dingle giving six months' notice of resignation
STI	There is no minimum entitlement to an STI payment and the maximum STI opportunity is 75% of fixed annual remuneration for exceptional performance. Under the STI deferral plan, typically 50% of the STI value will be deferred into Rights which vest in twelve months. Further detail on the STI deferral plan is contained in Table 4
LTI	Details of the FY22 LTI Plan and performance conditions set by the Board are set out in Table 5. For Mr Dingle, the maximum value of FY22 Options is 75% of fixed annual remuneration. Details of the proposed FY23 LTI Plan, award and performance conditions set by the Board will be set out in the 2022 Notice of Meeting.

Chief Financial Officer – Executive service agreement

Gerard Buckle was appointed as Chief Financial Officer effective 9 September 2019. Mr Buckle's remuneration package is summarised as follows:

Table 11: Chief Financial Officer's remuneration package

Fixed remuneration	Fixed annual remuneration of $357,000 inclusive of superannuation contributions effective from 1 September 2021. Fixed remuneration is reviewed annually, but with no guarantee of an increase
Notice period	Under the Executive's Service Agreement, there is no fixed term, and Mr Buckle's employment can be terminated by: – the Company giving him six months' notice of termination; or – Mr Buckle giving six months' notice of resignation
STI	There is no minimum entitlement to an STI payment and the maximum STI opportunity is 50% of fixed annual remuneration for exceptional performance Under the STI deferral plan, typically 50% of the STI value will be deferred into Rights which vest in twelve months. Further detail on the STI deferral plan is contained in Table 4
LTI	Details of the FY22 LTI Plan and performance conditions set by the Board are set out in Table 5. For Mr Buckle, the maximum value of FY22 LTI Options is set at a maximum of 60% of fixed annual remuneration
Transition Benefit	To attract high calibre talent, it is customary market practice to compensate new employees for the loss of earned but unpaid variable remuneration with their previous employer. As a result, Mr Buckle was granted 100,962 shares on Listing with a face value of $262,501. These shares will meet their service condition on 9 September 2022. No other performance conditions apply

1.8 Statutory Remuneration

Remuneration of the CEO/Managing Director and Chief Financial Officer

The remuneration table below shows total remuneration expensed for accounting purposes for executive KMP in FY22.

Table 12: Executive KMP statutory remuneration for full year to 30 June 2022

$ Year end	Short-term Employee Benefit			Post Employment Benefits	Share-based Payment					Total	'Performance based'[6]	
30-Jun	**Cash**	**Other benefits**	**Leave benefits**	**Super-annuation**	**Salary Granted as Base Rights[1]**	**FY21 Matched Rights[2]**	**STI Expense[3]**	**LTI Expense[4]**	**One-off Equity Award[5]**		**STI**	**LTI**
Managing Director – Jake Dingle												
2022	**443,538**	**–**	**37,038**	**27,500**	**–**	**–**	**221,211**	**402,528**	**–**	**1,131,816**	**20%**	**36%**
2021	369,230	–	36,538	25,000	69,232	2,500	212,608	358,679	–	1,073,787	20%	33%
Chief Financial Officer – Gerard Buckle												
2022	**310,735**	**–**	**21,351**	**23,568**	**–**	**–**	**106,629**	**151,229**	**13,380**	**626,892**	**17%**	**25%**
2021	257,153	–	11,153	21,694	60,000	2,500	72,887	125,237	131,250	681,874	13%	23%
Total Executive KMP												
2022	**754,274**	**–**	**58,389**	**51,068**	**–**	**–**	**327,841**	**553,757**	**13,380**	**1,758,708**	**–**	**–**
2021	626,383	–	47,691	46,694	129,232	5,000	285,495	483,916	131,250	1,755,661	–	–

1 Salary contributed to the FY21 Employee Rights Plan. For further detail, please refer to the 2021 Remuneration Report.
2 The value of Matched Rights allocated in the FY21 Employee Rights Plan. For further detail, please refer to the 2021 Remuneration Report.
3 STI expense for FY22 plus amortisation of STI relating to prior years grants.
4 ESOP and FY21 & FY22 LTI grants are expensed over the vesting period at a valuation determined on grant date by a third party detailed in Table 15.
5 Total expense of the one-off equity grant made to Mr Buckle on 29 November 2019 as a sign on award to replace a portion of an incentive from his previous employer which he forfeited on joining Carbon Revolution. The face value of these shares was $262,501 and they will vest on 9th September 2022.
6 STI and LTI as a percentage of total remuneration. For Mr Buckle the one-off equity award has been removed from the Total to provide a better disclosure of the performance-based components.

1.9 STI Deferred Rights and Vested STI Rights

Typically, any STI award to Executive KMP and senior executives will be delivered 50% in cash and 50% in Rights deferred for 12 months. In FY22 the Board determined that all participants would have 100% of their STI outcome delivered in Rights, with 50% subject to a 12-month service condition (STI Deferred Rights) and the other 50% granted as fully vested Rights (STI Non-Deferred Rights).

Table 13: STI deferred rights and non-deferred STI Rights for Executive KMP

		Number of STI deferred rights and STI Non deferred rights									
	Plan	Balance 1 July 2021	Granted as Remuenration	Vested and Exercised[1]	Lapsed	Balance 30 June 2022[1]	Grant Date	Vesting Date	Expiry Date	Face Value	Fair Value
Managing Director – Jake Dingle[3]	FY21 Non-Deferral	–	50,645	–	–	50,645	29-Nov-21	29-Nov-21	29-Nov-31	1.180	1.05
	FY21 STI Deferral	–	50,645	–	–	50,645	29-Nov-21	29-Nov-22	29-Nov-31	1.180	1.18
	FY20 Non-Deferral	33,549	–	33,549	–	–	12-Nov-20	12-Nov-20	12-Nov-30	2.012	2.65
	FY20 STI Deferral	33,548	–	–	–	33,548	12-Nov-20	12-Nov-21	12-Nov-30	2.012	2.012
Chief Financial Officer – Gerard Buckle	FY21 Non-Deferral	–	23,634	–	–	23,634	29-Nov-21	29-Nov-21	29-Nov-31	1.180	1.24
	FY21 STI Deferral	–	23,634	–	–	23,634	29-Nov-21	29-Nov-22	29-Nov-31	1.180	1.18
	FY20 Non-Deferral	12,654	–	12,654	–	–	02-Oct-20	02-Oct-20	02-Oct-30	2.012	2.77
	FY20 STI Deferral	12,653	–	–	–	12,653	02-Oct-20	02-Oct-21	02-Oct-30	2.012	2.012

1 Deferred rights relating to FY20 STI with grant date of 12th November 2020. The number of rights granted to each participant was calculated by dividing the STI Awarded by the 20-day VWAP of Shares traded on ASX during the 20-trading day period following release of the full-year financial results (on 25 August 2020), being $2.012.

2 The closing balance of STI deferred rights at 30 June 2022 represents FY20 Deferred STI Rights that have not been exercised and unvested STI Deferred rights for FY21 STI. The closing balance of STI Non deferred rights at 30 June 2022 represents FY20 & FY21 Non deferred STI Rights that have not been exercised The number of FY21 STI Rights allocated is calculated by dividing the STI Awarded by the 20-day VWAP of Shares traded on ASX during the 20 trading day period following release of the full-year financial results (on 24 August 2021), being $1.18. Rights for the FY22 STI will be granted in November 2022.

3 Mr Dingle was granted 101,290 STI Rights (50,645 STI Deferred Rights and 50,645 STI Non-Deferred Rights) as part of his remuneration package approved at the 2021 Annual General Meeting under Listing Rule 10.14. This grant relates to the FY21 STI Award.

1.10 FY21 Employee Rights

To encourage share ownership Executive KMP were able to choose an amount of their FY21 base salary to be delivered in Rights.

Table 14: FY21 Employee Rights

	Number of FY22 Employee Rights									
	Balance 1 July 2021	Rights purchased	Matching rights	Rights Vested and Exercised	Lapsed	Balance 30 June 2022	Grant Date commencing	Fair Value	Face Value	Vesting Date[1]
Managing Director – Jake Dingle[2]	35,650	–	–	35,650	–	–	Nov-20	$2.012	$2.58	Nov-20 to 30 June-21
Chief Financial Officer – Gerard Buckle	31,063	–	–	31,063	–	–	Nov-20	$2.012	$2.58	Nov-20 to 30 June-21

1 Base rights purchased vested on a monthly basis from November 2020 to June 2021. Matched rights vested on 30 June 2021.

2 Mr Dingle was granted 35,650 FY21 Employee Rights as part of his remuneration package approved at the 2020 Annual General Meeting under Listing Rule 10.14. This grant relates to the FY21 Employee Rights Plan. The minimum value of the award is nil and the maximum value will be determined by the share price at the time of vesting.

Remuneration Report

continued

1.11 Long Term Incentives

As detailed in Table 5, Executive KMP are granted awards as part of the long-term incentive plans. Incentives only vest if the performance and service conditions of the Plan are met.

Table 15: Executive KMP LTI

	Plan	Number of LTI Awards[5] Balance 1 July 2021	Granted as Remuneration[4]	Vested and Exercised	Lapsed	Balance 30 June 2022	Grant Date	Vesting Date	Expiry Date	Exercise Price	Face Value[1]	Fair Value[2]
Managing Director - Jake Dingle	FY22 Options[3]	-	1,210,826	-	-	1,210,826	20-Dec-21	28-Oct-24	20-Sep-26	$1.60	$0.32	0.12 & 0.13
	FY21 Rights	186,381	-	-	-	186,381	12-Nov-20	20-Sep-23	20-Sep-23	nil	$2.01	$2.16
	FY20 ESOP Options	1,273,419	-	-	-	1,273,419	23-Dec-19	29-Nov-22	29-Nov-24	$2.60	$2.60	$0.77
Chief Financial Officer - Gerard Buckle	FY22 Options[3]	-	678,062	-	-	678,062	20-Dec-21	28-Oct-24	20-Sep-26	$1.60	$0.32	0.12 & 0.13
	FY21 Rights	104,373	-	-	-	104,373	12-Nov-20	20-Sep-23	20-Sep-23	nil	$2.01	$2.16
	FY20 ESOP Options	356,557	-	-	-	356,557	23-Dec-19	29-Nov-22	29-Nov-24	$2.60	$2.60	$0.77

1 The face value of each FY22 Option was determined provided by an independent external consultant using a binomial tree methodology as at 20 September 2021 (Preliminary Allocation Price). The starting Share price input for the valuation was the VWAP of a Share over the 20 trading days following the announcement of the Company's FY21 full-year results. The 20-day VWAP calculation period commenced on 24 August and concluded on 20 September. The Preliminary Allocation Price has been calculated as $0.2124. The Board determined that a premium of approximately 50% should be applied to the Preliminary Allocation Price determined above, resulting in a final Allocation Price of $0.3159.

2 The fair value is provided by a third party valuation at the time of grant. The fair value of the FY22 Options that relate to the tranche associated with rTSR was $0.12 and for the tranche associated with the strategic objective was $0.13

3 The maximum number of FY22 Options allocated was calculated by taking the maximum grant value consistent with policies set by the Board and dividing by the final Allocation Price, being $0.3159. The minimum value of the award is nil and the maximum value will be determined by the share price at the end of the performance period.

4 The FY22 Options were granted as part of the 2022 remuneration package as approved at the 2021 Annual General Meeting, under Listing Rule 10.14.

5 Further details regarding each of the prior year LTI grants are described in the 2019 Prospectus and past Carbon Revolution Annual Reports.

1.12 Executive KMP Shareholdings

Table 16: Executive KMP shareholdings

	Number of Carbon Revolution shares[1] Balance 1 July 2021	Granted as Remuneration	Acquired	Sold or transferred	Other	Balance 30 June 2022
CEO/Managing Director – Jake Dingle[2]	4,078,231	–	69,199	410,000	–	3,737,430
Chief Financial Officer – Gerard Buckle[3]	133,527	–	43,717	43,717	–	133,527

1 Carbon Revolution shares in which Executive KMP has a beneficial interest, including via related parties and spousal shareholders.

2 Mr Dingle had 33,548 STI deferred rights that vested on 12 November 2021. These relate to the FY20 STI Plan. Includes 35,651 vested Rights from the FY21 Employee Rights Plan.

3 Mr Buckle had 12,653 STI deferred rights that vested on 12 November 2021. These relate to the FY20 STI Plan. Includes 31,063 vested Rights from the FY21 Employee Rights Plan. Includes 100,962 shares issued to Mr Buckle as part of his employment contract and which requires Mr Buckle to be in employment with the Company until 9 September 2022 for these shares to fully vest. The minimum value of this award is nil and the maximum value will be determined by the share price of the Company

1.13 Non-Executive Director Remuneration

Policy and Arrangements

NEDs receive a base fee in relation to their service as a Director of the Board, and an additional fee for membership of, or for chairing, a Committee.

NEDs do not participate in the Company's STI or LTI plans or receive any variable remuneration. No retirement allowances are payable to NEDs other than statutory superannuation allowances.

To further align NEDs' interests with those of shareholders, the Company expects all NEDs to acquire the equivalent of twelve months base fees in Carbon Revolution shares over a reasonable time period.

The fees are set with consideration to the fees paid in companies of a similar size and complexity, with the most recent benchmarking using the Comparator Group of ASX200-300 companies.

The maximum amount of fees (including superannuation contributions) that can be paid to NEDs is capped by a pool approved by shareholders. The fee pool as approved by shareholders is currently $800,000 per annum including superannuation. The current fee schedule is set out in the table below.

Table 17: Non-Executive Director (NED) fee schedule

Role	Annual fee for FY22 (including super guarantee)
Chair – Board (base fees)	$180,000
Other NED (base fees)	$90,000
Chair of the Audit and Risk Committee	An additional $10,000
Chair of the Remuneration and Nomination Committee	An additional $10,000
Committee memberships	An additional $5,000 per committee

The Board has determined not to increase NED fees for FY23.

Table 18: Non-Executive Directors' fees paid

Year ended 30 June 2022		Directors' fees $	Directors' Fees Allocated in Rights $	Superannuation $	Total $
James Douglas (Chair)	FY22	172,727	–	17,273	190,000
	FY21	119,692	56,792	11,592	188,076
Bruce Griffiths	FY22	–	–	–	–
	FY21	35,125	–	3,337	38,462
Lucia Cade	FY22	90,909	–	9,091	100,000
	FY21	62,254	29,792	6,031	98,077
Dale McKee	FY22	90,909	–	9,091	100,000
	FY21	63,820	30,000	6,180	100,000
Mark Bernhard	FY22	90,909	–	9,091	100,000
	FY21	34,502	56,998	3,500	95,000
Peter Lewinsky[1]	FY22	5,188	–	519	5,707
	FY21	47,567	42,747	4,686	95,000
Total NEDs	FY22	450,642	–	45,064	495,707
	FY21	362,960	216,329	35,326	614,615

1 Ceased as a Director on 9 July 2021.

1.14 Shareholdings

Table 19: Non-Executive Directors' shareholdings

	Number of Carbon Revolution shares[1]				
	Balance 1 July 2021	Granted as Remuneration	Acquired	Other	Balance 30 June 2022
James Douglas	1,828,102	–	50,000	–	1,878,102
Lucia Cade	79,757	–	–	–	79,757
Dale McKee	124,717	–	–	–	124,717
Mark Bernhard	106,607	–	–	–	106,607
Peter Lewinsky[2]	49,027	–	–	–	49,027

1 Carbon Revolution shares in which the Director has a beneficial interest, including via related parties and spousal shareholders.
2 Ceased as a Director on 9 July 2021.

Table 20: NED Rights

Non-Executive Directors participated in the NED Salary Sacrifice Plan in FY21. The table below details movements and balances of NED Rights in FY22.

	Number of NED Rights								
	Balance 1 July 2021	Granted as Remuneration	Vested and Exercised	Lapsed	Balance 30 June 2021	Grant Date	Exercise Price	Face Value[3]	Fair Value[4]
James Douglas	28,226	–	–	–	28,226	12-Nov-20	nil	$2.012	2.65
Lucia Cade	14,807	–	–	–	14,807	12-Nov-20	nil	$2.012	2.65
Dale McKee	14,910	–	14,910	–	–	12-Nov-20	nil	$2.012	2.65
Mark Bernhard	28,329	–	28,329	–	–	12-Nov-20	nil	$2.012	2.65
Peter Lewinsky[1]	21,246	–	21,246	–	–	12-Nov-20	nil	$2.012	2.65

1 Ceased as a Director on 9 July 2021.
2 These shares are the NED Rights that were exercised under the NED Fee Sacrifice Plan. The NED Rights were granted as part of the 2021 remuneration package as approved at the 2020 Annual General Meeting, under Listing Rule 10.14. The restriction period ends for Mr Douglas and Ms Cade on 26 February 2024 and on 26 February 2022 for Mr McKee and Mr Bernhard consistent with their elections under the FY21 NED Fee Sacrifice Plan. Mr Lewinsky's NED Rights were exercised when he ceased as a director on 9th July 2021. The maximum number of NED Rights allocated was calculated by taking the Fee Sacrifice nominated by each NED and dividing this amount by the VWAP of a Share over the 20 trading days following the release of the Company's FY20 full-year financial results (on 25th August 2020), being $2.012. The minimum value of the award is nil and the maximum value will be determined by the share price on exercising.
3 The face value of each NED Right was determined using a 20-day VWAP of a Share over the 20 trading days following the release of the Company's FY20 full-year financial results (on 25 August 2020), being $2.012.
4 The fair value is provided by a third party valuation at the time of grant.

1.15 Rights and Options Issued During or Since FY22

In compliance with section 300(1)(e) and (f) of the Corporations Act: a total of 705,978 rights were issued with 747,919 rights exercised, and 57,377 forfeited during FY22. A total of 6,668,360 options were issued, and nil were exercised or forfeited during FY22. Since the end of FY22 up to the date of this report, no new rights or options were issued or exercised. A total of 364,459 options and 30,203 rights have been forfeited since the end of FY22 and the date of this report.

1.16 Other Transactions with KMP

There were no other transactions, including loans between Carbon Revolution and KMP (including their related parties), during FY22.

Other Disclosures

Principal activities

The principal activity of the Group during the financial year was the manufacture and sale of carbon fibre wheels and research and development projects related to carbon fibre wheel technology. There have been no significant changes in the nature of these activities during the year.

Significant changes in the state of affairs

The financial position and performance of the Company was particularly affected by the COVID-19 global pandemic, related semiconductor chip shortages and supply chain constraints.

Events arising since the end of the reporting period

There have not been any matters or circumstances that have significantly affected, or may significantly affect, the results reported in the financial statements.

Likely future developments

There is increasing customer demand for Carbon Revolution's wheels, as evidenced by the record number of active programs, and with the first stage of the Mega-line development progressing towards production, the Company is well-positioned to deliver on its potential and purpose.

The Company continues to monitor the local and global impacts and risks related to COVID-19. There are ongoing COVID-19 related uncertainties and disruptions facing the global automotive industry in the near-term. The ongoing global shortage in the supply of semiconductors, other raw materials and general global supply chain constraints also continue to impact global car production and suppliers to it.

The Company expects another two wheel programs to be announced by our customers during FY23 as a part of OEM vehicle launches and to further progress other wheel development programs. Carbon Revolution expects to commence commissioning of the first stage of the Mega-line project with the first programs using its infrastructure in FY23.

The focus for FY23 lies in achieving production efficiencies, successful launches of new programs, award of the remaining Mega-line programs and securing additional funding.

Environmental regulation

The Group's operations are subject to environmental regulations under the following laws of the Commonwealth or of a State or Territory:

- The Environmental Protection Act
- The Dangerous Goods Act

No breaches have occurred of the above regulations during the financial year and up to the date of this report.

Dividends paid, recommended and declared

The Group has not declared nor paid any dividends in respect of the 30 June 2022 financial year.

Proceedings on behalf of the Group

No proceedings have been brought or intervened in on behalf of the Group, nor any application made under section 237 of the *Corporations Act*.

Non-audit services and auditor independence

Deloitte continues in office as the Company's external auditor in accordance with section 327 of the *Corporations Act*. The Company has a policy on non-audit services that is intended to support the independence of the external auditor by regulating the provision of services by the external auditor.

The external auditor will not be engaged to perform any service that may impair or be perceived to impair the external auditor's judgement or independence.

The external auditor has provided only services in relation to the audit and review of financial reports during the year. Details of amounts paid or payable to the external auditor during the year are outlined in Note 6.6 to the financial statements.

Deloitte, has provided an independence declaration in accordance with section 307C of the *Corporations Act*, which is set out on page 49 and forms part of this Report.

Other Disclosures

continued

Indemnification and insurance of Directors, Officers and Auditors

During the financial year, the Company paid a premium in respect of a contract insuring the Directors of the Company and all executive officers of the Company and of any related body corporate against a liability incurred as such a Director or executive officer to the extent permitted by the *Corporations Act*. The contract of insurance prohibits disclosure of the nature of the liability and the amount of the premium.

The Company has not otherwise, during or since the end of the financial year, except to the extent permitted by law, indemnified or agreed to indemnify an officer or auditor of the Company or of any related body corporate against a liability incurred as such an officer or auditor.

Rounding of amounts

The Company has applied the Australian Securities and Investments Commission (ASIC) Corporations (Rounding in Financial/Directors' reports) Instrument 2016/191 to this report and amounts in the Financial Statements have been rounded to the nearest thousand dollars, unless stated otherwise.

Signed in accordance with a resolution of the Directors pursuant to section 298(2) of the *Corporations Act 2001*.

James Douglas
Chair
Geelong,
26 August 2022

Jake Dingle
Managing Director
Geelong,
26 August 2022

Auditor’s Independence Declaration

Deloitte Touche Tohmatsu
ABN 74 490 121 060
477 Collins Street
Melbourne VIC 3000

Tel: +61 3 9671 7000
www.deloitte.com.au

26 August 2022

The Board of Directors
Carbon Revolution Limited
75 Pigdons Road
Waurn Ponds VIC 3216

Dear Board Members,

Auditor’s Independence Declaration to Carbon Revolution Limited

In accordance with section 307C of the Corporations Act 2001, I am pleased to provide the following declaration of independence to the directors of Carbon Revolution Limited.

As lead audit partner for the audit of the financial report of Carbon Revolution Limited for the year ended 30 June 2022, I declare to the best of my knowledge and belief, there have been no contraventions of:

- the auditor independence requirements of the Corporations Act 2001 in relation to the audit; and
- any applicable code of professional conduct in relation to the audit.

Yours faithfully

Deloitte Touche Tohmatsu

DELOITTE TOUCHE TOHMATSU

Stephen Roche
Partner
Chartered Accountants

Corporate Governance Statement

The Board is committed to conducting the business of Carbon Revolution in accordance with high standards of corporate governance and with a view to creating and delivering value for Carbon Revolution's shareholders while taking into account the interests of other stakeholders, including employees, customers, suppliers and the wider community.

The Board considers that high standards of corporate governance are a cornerstone to creating long-term and sustainable shareholder value and fostering a culture of personal and corporate integrity and compliance that values ethical, lawful and responsible behaviour, accountability, fairness, transparency and respect for others.

The Board is committed to fulfilling its corporate governance responsibilities in the best interests of Carbon Revolution and its stakeholders. 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. The framework promotes responsible management and conduct of Carbon Revolution.

Carbon Revolution's governance framework is consistent with the 4th edition of the ASX Corporate Governance Principles and Recommendations ('ASX Recommendations'), unless otherwise indicated in the Carbon Revolution 2022 Corporate Governance Statement. Carbon Revolution's Corporate Governance Statement is released to the ASX simultaneously as the 2022 Annual Report and available at https://investors.carbonrev.com/Investor-Centre/?page=corporate-governance

Copies of Carbon Revolution's Code of Conduct (including its Values), key corporate governance policies and the charters for the Board and each of its committees are available at https:// investors.carbonrev.com/Investor-Centre/?page=corporate-governance

The Corporate Governance Statement was approved by the Board and is current as of 26 August 2022.

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Consolidated Statement of Comprehensive Income

for the year ended 30 June 2022

	Note	2022 $'000	2021 $'000
Sale of wheels		**38,276**	32,205
Engineering services		**464**	2,732
Sale of tooling		**1,596**	–
Revenue	2.1	**40,336**	34,937
Cost of goods sold		**(57,445)**	(49,232)
Gross margin		**(17,109)**	(14,295)
Other income	2.2	**4,320**	10,506
Operational expenses		**(2,013)**	(3,366)
Research and development		**(12,027)**	(6,506)
Administrative expenses		**(13,359)**	(15,750)
Marketing expenses		**(1,550)**	(938)
Finance costs	2.4	**(1,177)**	(1,644)
Loss before income tax expense		**(42,915)**	(31,993)
Income tax expense	5	**–**	–
		(42,915)	(31,993)
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss:			
Foreign currency translation differences – foreign operations		**(147)**	150
Other comprehensive income		**(147)**	150
Total comprehensive loss for the year, net of tax		**(43,062)**	(31,843)

Earnings per share			
Basic	2.5	**($0.21)**	($0.20)
Diluted	2.5	**($0.21)**	($0.20)

The accompanying notes form an integral part of these financial statements.

Consolidated Statement of Financial Position

as at 30 June 2022

	Note	30 June 2022 $'000	30 June 2021 $'000
Current assets			
Cash and cash equivalents	4.1	**22,693**	87,257
Receivables	3.1	**20,392**	12,152
Inventories	3.2	**20,164**	18,179
Other current assets		**1,587**	1,054
Total current assets		**64,836**	118,642
Non-current assets			
Property, plant and equipment	3.3	**57,616**	47,319
Right-of-use assets	3.4	**7,564**	7,983
Intangible assets	3.5	**34,860**	25,339
Total non-current assets		**100,040**	80,641
Total Assets		**164,876**	199,283
Current liabilities			
Payables	3.6	**14,456**	12,117
Borrowings	4.2	**13,732**	9,858
Lease liability	3.4	**579**	542
Deferred income	3.7	**1,486**	1,060
Provisions	3.8	**4,161**	3,655
Total current liabilities		**34,414**	27,232
Non-current liabilities			
Borrowings	4.2	**4,333**	6,529
Lease liability	3.4	**7,461**	7,813
Deferred income	3.7	**5,534**	4,782
Provisions	3.8	**713**	611
Total non-current liabilities		**18,041**	19,735
Total Liabilities		**52,455**	46,967
Net Assets		**112,421**	152,316
Equity			
Contributed equity	4.4	**383,822**	381,890
Reserves	4.6	**6,747**	5,659
Accumulated losses		**(278,148)**	(235,233)
Total Equity		**112,421**	152,316

The accompanying notes form an integral part of these financial statements.

Consolidated Statement of Changes in Equity

for the year ended 30 June 2022

	Note	Contributed equity $'000	Share buyback reserve $'000	Share based payment reserve $'000	Accumulated losses $'000	Foreign currency translation reserve $'000	Total equity $'000
Balance as at 30 June 2020		291,226	(311)	1,394	(203,240)	(159)	88,910
Net loss after tax for the full year		–	–	–	(31,993)	–	(31,993)
Other comprehensive profit/(loss) for the full year		–	–	–	–	150	150
Total comprehensive loss for the full year		**–**	**–**	**–**	**(31,993)**	**150**	**(31,843)**
Transactions with owners in their capacity as owners							
Issue of share capital	4.4	95,047	–	–	–	–	95,047
Share-based payments	4.4	1,138	–	4,585	–	–	5,723
Share issue costs	4.4	(5,521)	–	–	–	–	(5,521)
Total transactions with owners in their capacity as owners		**90,664**	**–**	**4,585**	**–**	**–**	**95,249**
Balance as at 30 June 2021		**381,890**	**(311)**	**5,979**	**(235,233)**	**(9)**	**152,316**
Balance as at 30 June 2021		**381,890**	**(311)**	**5,979**	**(235,233)**	**(9)**	**152,316**
Net loss after tax for the full year		–	–	–	(42,915)	–	(42,915)
Other comprehensive profit/(loss) for the full year		–	–	–	–	(147)	(147)
Total comprehensive loss for the full year		**–**	**–**	**–**	**(42,915)**	**(147)**	**(43,062)**
Transactions with owners in their capacity as owners							
Share-based payments	4.4	1,932	–	1,235	–	–	3,167
Total transactions with owners in their capacity as owners		**1,932**	**–**	**1,235**	**–**	**–**	**3,167**
Balance as at 30 June 2022		**383,822**	**(311)**	**7,214**	**(278,148)**	**(156)**	**112,421**

The accompanying notes form an integral part of these financial statements.

Consolidated Statement of Cash Flows

for the year ended 30 June 2022

	Note	2022 $'000	2021 $'000
Cash flow from operating activities			
Receipts from customers		**33,643**	30,236
Receipt of grants and research and development incentives		**3,767**	11,888
Payments to suppliers and employees		**(67,239)**	(49,896)
Interest received		**94**	69
Finance costs		**(2,329)**	(1,615)
Net cash used in operating activities	4.1.1	**(32,064)**	(9,318)
Cash flow from investing activities			
Payments for property, plant and equipment	3.3	**(15,634)**	(12,571)
Payments for intangible assets	3.5	**(17,339)**	(11,278)
Net cash used in investing activities		**(32,973)**	(23,849)
Cash flow from financing activities			
Proceeds from third-party borrowings	4.2	**23,768**	13,000
Repayment of third-party borrowings		**(22,061)**	(2,316)
Repayment of related party borrowings	4.2	**–**	(13,000)
Proceeds from share issues	4.4	**–**	95,046
Capital raising transaction costs	4.4	**(422)**	(5,119)
Repayment of lease liability		**(596)**	(1,040)
Net cash provided by financing activities		**689**	86,571
Net increase/(decrease) in cash held		**(64,348)**	53,404
Cash at beginning of financial year		**87,257**	33,861
Effects of exchange rate changes on cash and cash equivalents		**(216)**	(8)
Cash at end of financial year		**22,693**	87,257

Notes to the Financial Statements

for the year ended 30 June 2022

1 Basis of preparation

1.1. Corporate information

This note sets out the accounting policies adopted by Carbon Revolution Limited (the "Company" or "parent") and its consolidated entities, collectively known as the "consolidated entity" or the "Group" in the preparation and presentation of the financial report. Where an accounting policy is specific to one note, the policy is described within the note to which it relates.

The financial report was authorised for issue by the directors as at the date of the Directors' Report.

Carbon Revolution Limited is a listed public company limited by shares, incorporated and domiciled in Australia. Its principal activity is the manufacture and sale of carbon fibre wheels, as well as research and development projects relating to carbon fibre wheel technology.

The address of the Company's registered office and its principal place of business is:

Building NR
75 Pigdons Road
Waurn Ponds VIC 3216

1.2. Basis of preparation

The Group financial statements are general purpose financial statements which:

- Have been prepared in accordance with the *Corporations Act 2001*, Australian accounting standards, and other authoritative pronouncements of the Australian Accounting Standards Board;
- Have adopted all accounting policies in accordance with Australian accounting standards, and where a standard permits a choice in accounting policy, the policy adopted by the Group has been disclosed in these financial statements;
- Do not early adopt any accounting standards or interpretations that have been issued or amended but are not yet effective;
- Comply with International financial reporting standards ('IFRS') as issued by the International Accounting Standards Board ('IASB');
- Have been prepared for a for profit entity under the historical cost convention, except for certain non-current assets and financial instruments that are measured at revalued amounts or fair values, as explained in the accounting policies below. Historical cost is generally based on the fair values of the consideration given in exchange for assets;
- Are presented in Australian dollars, which is the Group's functional and presentation currency;
- Have been rounded to the nearest thousand dollars, unless otherwise stated, in accordance with ASIC Corporations (Rounding in Financial/Director's Reports) Instrument 2016/191.

1.3. Going concern

The financial statements have been prepared on a going concern basis.

Carbon Revolution is an advanced technology manufacturing business which is in the process of industrialising its production processes. At this pre-profitability stage of Carbon Revolution's business lifecycle, it is essential that it has sufficient capital to fund its working capital requirements, ongoing research and development of product, material and process technologies and invest in the Mega-line equipment required to achieve profitability.

The Group incurred an operating loss after tax of $42.9 million (2021 $32.0 million) and generated negative cashflows from operating activities of $32.1 million (2021 $9.3 million) but as at 30 June 2022 it is in a net current asset position and has cash balances of $22.7 million (2021 $87.3 million).

In addition to the $23.4m cash and facilities in place, the Company currently has potential funding opportunities of $33.5m, of which $20.0m is planned to be in place in FY23. These opportunities relate to additional working capital financing and equipment leasing which are in negotiation and the MMI grant.

The Company is managing spending carefully and monitoring the working capital position closely through this pre-profit period. The following controls are also in place:

- Research is only undertaken if it is grant funded
- Development spend is confined to contracted wheel programs which will lead to future wheel sales, unless the OEM has paid up front for development activities
- The Mega-line project and the related spend has been reset. Expansion of capacity outside this current phase will only be brought on when existing capacity is fully utilised and customer forecasts clearly support additional capacity
- Other growth capital spend (e.g. tooling) is being matched very closely to growth in customer demand.

Given the year end cash balance, positive net current assets and working capital, potential funding sources and on the basis of detailed cash flow forecasts, the Group believes sufficient, appropriate funding is available to it and therefore has prepared the financial statements on a going concern basis.

1 Basis of preparation (continued)

1.4. Basis of consolidation

The consolidated financial statements are presented in Australian dollars which is also the functional currency of the parent entity and its Australian subsidiaries.

Controlled entities

The consolidated financial statements comprise the financial statements of the parent and of its subsidiaries as at reporting date. The Group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

The financial statements of subsidiaries are prepared for the same reporting period as the parent entity, using consistent accounting policies. Adjustments are made to bring into line any dissimilar accounting policies which may exist. Subsidiaries are consolidated from the date on which control is established and are de-recognised from the date that control ceases.

All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Any changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions.

Foreign currency translation

The Group has one overseas subsidiary in the United States of America ("US") and one in the United Kingdom ("UK"). The UK subsidiary was dormant during the financial year.

The results and financial position of all of the Group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities are translated at the closing rate at the reporting date;
- income and expenses are translated at average exchange rates throughout the course of the year (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rates on the dates of the transactions); and
- all resulting exchange differences are recognised in other comprehensive income and accumulated in the foreign currency translation reserve, a separate component of equity.

1.5. Significant accounting judgements, estimates and assumptions

In preparing these consolidated financial statements, management has made judgements, estimates and assumptions that affect the application of the Group's accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to estimates are recognised prospectively. The significant judgements made by management in applying the Group's accounting policies and the key sources of estimation uncertainty are outlined in detail within the specific note to which they relate.

Information about critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the consolidation financial statements are included in the following notes.

Note 3.2 Inventories

Note 3.4 Leases

Note 3.5 Intangible assets

Note 3.8 Provisions

Note 5.1 Income tax

1.6. Goods and Services Tax (GST)

Goods and Services Tax (GST) is recognised in these financial statements as follows:

1. Revenues, expenses and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the taxation authority;
2. Receivables and payables are stated inclusive of the amount of GST receivable or payable;
3. The net amount of GST recoverable from, or payable to, the taxation authority is included with other receivables or payables in the consolidated balance sheet;
4. Cash flows are presented on a gross basis. The GST components of cash flows arising from investing and financing activities are presented as operating cash flows; and
5. Commitments are disclosed net of GST.

2 Operating performance

Revenue is recognised either at a point in time or over time, when (or as) the Group 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. The Group 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.

2.1 Revenue

Disaggregation of revenue

	2022 $'000	2021 $'000
External revenue by product line		
Sale of wheels	**38,276**	32,205
Engineering services	**464**	2,732
Sale of tooling	**1,596**	–
Total revenue	**40,336**	34,937
External revenue by timing of revenue		
Goods transferred at a point in time	**38,276**	32,205
Services transferred at a point in time	**1,277**	1,422
Services transferred over time	**783**	1,310
Total revenue	**40,336**	34,937

2.2 Other income

	2022 $'000	2021 $'000
Government grants	**3,506**	3,504
Jobkeeper	**–**	6,835
Interest income	**94**	84
Foreign exchange gain	**448**	–
Other income	**272**	83
Total other income	**4,320**	10,506

2.2.1 Information about revenue and other income

Sale of goods

Revenue from the sale of Carbon Revolution wheels and tooling is based on the contracted sales price. Revenue is recognised at a point in time, being when the Company has transferred to the buyer the significant risks and rewards of ownership of the wheels or tooling, in accordance with the relevant customer contracted commercial terms.

Under the Group's standard contract terms, end customers have a right to claim for faulty wheels within a specified warranty period. While a warranty provision and corresponding adjustment to revenue is recorded at the time of the product sale based on an assessment of possible future claims, historically, Carbon Revolution has not experienced warranty claims.

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.

In certain circumstances where a contract to provide engineering, design and testing services is only fulfilled with the delivery of certain prototypes, the revenue is recognised at a point in time. The recognition occurs when Carbon Revolution transfers the prototype wheels to the buyer and with it the significant risks and rewards of ownership, in accordance with the relevant customer contracted commercial terms.

2 Operating performance (continued)

Interest income

Interest income is recognised on a time proportionate basis that takes into account the effective yield on the financial asset.

Government grants

Government grants income includes government grants and amounts received or receivable by the Group. Grants 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.

JobKeeper

The Federal Government's JobKeeper scheme effectively provided a wage subsidy to the Group, which was materially impacted by COVID-19. The JobKeeper scheme ended on 28 March 2021. The group was acting as principal and the JobKeeper payments represent a government grant, which is recognised under AASB 120 *Accounting for Government Grants and Disclosure of Government Assistance.* This grant is recognised as a receivable when there is reasonable assurance that the entity will comply with the conditions attached to the grant and the grant will be received. The grant is recognised in profit or loss in the period in which the entity recognises the related costs as expenses. The grant is disclosed in other income in the profit and loss and within the cashflow in government grants.

Other income

Other income is recognised on the satisfaction of the performance obligations.

2.3 Segments

The Group operates in one business segment, being the manufacture and sale of carbon fibre wheels. This single segment is based on the internal reports that are reviewed and used by the Chief Executive Officer, who is also the Chief Operating Decision Maker ('CODM'), in assessing performance and determining allocation of resources. The accounting policies adopted for internal reporting to the CODM are consistent with those adopted in the financial statements. While revenue is almost entirely international, all non- current assets are domestic.

Included in revenues, are revenues of approximately $39.3 million (2021: $32.6 million) which arose from sales to the Group's three major international customers, representing more than 90% of the Group's revenue. No other single customers contributed 10 per cent or more to the Group's revenue in either 2021 or 2022.

Revenue and non-current assets by geography comprise:

	2022 $'000	2021 $'000
Revenue		
International	**40,336**	34,937
Domestic	**–**	–
	40,336	34,937
Non-current assets		
International	**–**	–
Domestic	**100,040**	80,641
	100,040	80,641

2 Operating performance (continued)

2.4 Expenses

	2022 $'000	2021 $'000
Finance costs		
Interest on Ronal AG loan	–	668
Facility costs	–	435
Interest on third-party loans	**552**	400
Interest on lease liabilities	**301**	50
Interest other	**324**	91
	1,177	1,644
Salaries and employee benefit expense		
Wages and salaries	**33,370**	26,034
Post-employment benefits	**2,838**	2,259
Share-based payments expense	**3,167**	5,723
	39,375	34,016
Depreciation and amortisation		
Property, plant and equipment	**6,919**	6,391
Right of use assets	**656**	687
Capitalised development costs	**7,734**	3,801
Patents and trademarks	**84**	85
	15,393	10,964

2.4.1 Information about expenses

Finance costs

Finance costs are expensed in the period in which they occur.

Share based payments

The Group operates several employee incentive schemes to remunerate employees, including senior executives, in the form of share-based payments. Refer to Note 4.5 for information on share-based payments.

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.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option or if the lease transfers ownership of the underlying asset to the lessee by the end of the lease term, the right-of-use asset is depreciated over the underlying asset's useful life.

The depreciation periods and method for each class of assets are:

Class of fixed asset	Depreciation period	Depreciation method
Leasehold improvements	20 years	Straight line
Manufacturing plant and equipment	2 to 10 years	Diminishing value
Tooling	3 to 10 years	Diminishing value
Other equipment	3 to 5 years	Diminishing value

2 Operating performance (continued)

Amortisation

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Refer to Note 3.5 Intangible assets for further information in relation to capitalised development costs, patents and trademarks.

2.5 Earnings per share

The calculation of the basic and diluted earnings per share is based on the following data:

	2022 $'000	2021 $'000
Earnings		
Earnings for the purposes of basic earnings per share being loss for the year	**(42,915)**	(31,993)
Effect of dilutive potential ordinary shares	**–**	–
Earnings for the purposes of diluted earnings per share	**(42,915)**	(31,993)

	2022 No. '000	2021 No. '000
Number of shares		
Weighted average number of ordinary shares for the purposes of basic earnings per share	**205,938**	155,501
Effect of dilutive potential ordinary shares	**–**	–
Total number of shares	**205,938**	155,501

3 Operating assets and liabilities

This section shows the assets used to generate the Group's revenue and the liabilities incurred. Assets and liabilities relating to the Group's financing activities are disclosed in Note 4. Deferred tax assets and liabilities are disclosed in Note 5.

3.1 Receivables

	2022 $'000	2021 $'000
Trade receivables		
Not past due	**13,500**	5,618
Past due 1 – 30 days	**3,433**	2,662
Past due 31 – 90 days	**1,445**	3,174
Past due 90 days and over	**684**	2
	19,062	11,456
Allowance for impairment losses	**–**	–
Trade receivables net of allowance for impairment losses	**19,062**	11,456
Apprenticeship funding	**479**	–
Other receivables	**236**	277
GST recoverable	**615**	419
Trade and other receivables	**20,392**	12,152

3 Operating assets and liabilities (continued)

3.1.1 Information about receivables

Trade receivables are measured at the transaction price in accordance with AASB 15. Receivables are measured at amortised cost using the effective interest method, less any impairment.

The Group 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 Group 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.

See Note 4.3.2 regarding credit risk of trade receivables, which explains how the Group manages and measures credit quality of trade receivables. There is currently no provision for expected credit losses which has been deemed by management in consideration of historically collected debt as well as expected collectability of customers as at 30 June 2022.

In reaching this view on expected credit losses and having regard to the current environment management has performed a review on an individual customer basis including monitoring customer performance and timing of payments. More than 90% of sales are from three major international customers, all are seen to not have any risk of credit loss on the basis of viability and transaction history.

3.2 Inventories

	2022 $'000	2021 $'000
Current		
Raw materials	**7,646**	6,095
Work in progress	**8,969**	14,314
Finished goods	**5,037**	3,929
Consumables and spare parts	**3,276**	2,820
Provision for trial wheels, obsolescence and scrap	**(4,764)**	(8,979)
Inventories at the lower of cost and net realisable value	**20,164**	18,179

3.2.1 Information about inventories and significant estimates

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 quarterly;
- Finished goods and work-in-progress – cost of direct materials, labour, outsourced processing costs and a proportion of manufacturing overheads based on normal operating capacity but excluding finance costs. Includes inventory in transit reflecting the relevant customer incoterm;
- 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.

Amounts recognised in profit or loss

Inventories recognised as an expense during the year ended 30 June 2022 amounted to $57.0 million (2021 $46.9 million). These were included in cost of goods sold.

During the year $4.0 million (2021: $5.6 million) of obsolescence and scrap were recognised as an expense and included in 'cost of goods sold' in the consolidated statement of profit or loss and other comprehensive income.

3 Operating assets and liabilities (continued)

Critical accounting estimates and judgement

Determining the NRV of work in process requires assessments of costs to complete and ship and judgements about ultimate customer demand levels. This assessment is made more complex as constantly evolving production processes and emerging technologies significantly affect the cost of production and customer appeal.

Management's judgement is applied in determining the provision for trial wheels, obsolescence and scrap. All trial wheels are fully expensed as they are manufactured. All after-market wheels have also been expensed in full on the basis that this sales channel is not currently a strategic focus of Carbon Revolution.

Scrapped wheel provisioning has been calculated using historical data as well as management experience in determining an adequate provision. Carbon Revolution uses a traceability system for all wheels which is used to identify and isolate wheels at risk of non-recoverability. Management judgement is applied to assign a probability of recovery to individual groups of wheels.

3.3 Property, plant and equipment

	Capital works in progress $'000	Leasehold improvements $'000	Manufacturing equipment $'000	Tooling $'000	Other equipment $'000	Total $'000
Gross cost	7,138	5,540	40,370	10,312	2,136	65,496
Less accumulated depreciation	–	(1,074)	(10,654)	(5,575)	(874)	(18,177)
At 30 June 2021	7,138	4,466	29,716	4,737	1,262	47,319
Gross cost	**18,950**	**5,649**	**40,454**	**14,326**	**2,784**	**82,163**
Less accumulated depreciation	**–**	**(1,355)**	**(14,070)**	**(7,618)**	**(1,504)**	**(24,547)**
At 30 June 2022	**18,950**	**4,294**	**26,384**	**6,708**	**1,280**	**57,616**
Movement in carrying amounts						
Balance at 30 June 2020	10,521	4,739	21,766	5,880	1,130	44,036
Additions	10,059	–	–	–	–	10,059
Transfer into/(out of) capital WIP	(13,442)	63	11,920	945	514	–
Depreciation expense	–	(281)	(3,866)	(1,861)	(382)	(6,390)
Disposals/write-offs	–	(55)	(104)	(227)	–	(386)
Balance at 30 June 2021	7,138	4,466	29,716	4,737	1,262	47,319
Additions	**17,496**	**–**	**–**	**–**	**–**	**17,496**
Transfer into/(out of) capital WIP	**(5,684)**	**109**	**947**	**4,231**	**397**	**–**
Depreciation expense	**–**	**(281)**	**(4,089)**	**(2,173)**	**(376)**	**(6,919)**
Disposals/write-offs	**–**	**–**	**(190)**	**(87)**	**(3)**	**(280)**
Balance at 30 June 2022	**18,950**	**4,294**	**26,384**	**6,708**	**1,280**	**57,616**

3.3.1 Information about how the Group accounts for 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.

Capital works in progress includes leasehold improvements, manufacturing equipment, tooling and other equipment that are under construction as at the reporting date.

The Group has capital commitments of $7.5 million for manufacturing equipment as at 30 June 2022 (2021: $2.7 million).

3 Operating assets and liabilities (continued)

3.4 Leases

Amounts recognised in the balance sheet

	2022 $'000	2021 $'000
Right-of-use assets		
Property	**7,564**	7,983
Lease liabilities		
Current	**579**	542
Non-current	**7,461**	7,813
	8,040	8,355

Amounts recognised in the statement of profit or loss

The statement of profit or loss shows the following amounts relating to leases:

	2022 $'000	2021 $'000
Depreciation charge of right of use assets		
Equipment	**–**	49
Property	**656**	639
	656	688
Interest expense	**301**	50
Expense relating to short-term leases (included in costs of goods sold and administrative expenses)	**246**	258

3.4.1 Information about leases and significant estimates

The Group has one lease for the head office. The lease agreement does not impose any covenants other than the security interests in the leased assets that are held by the lessor. Leased assets may not be used as security for borrowing purposes.

Right-of-use assets

Right-of-use assets are measured at cost comprising the amount of the initial measurement of lease liability, any initial direct costs and restoration costs reduced by any lease incentives received. The Group 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 critical accounting estimate.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option or if the lease transfers ownership of the underlying asset to the lessee by the end of the lease term, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases of equipment are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less.

Lease liabilities

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, the Group uses its incremental borrowing rate.

Refer to Note 4.3.3 for maturity analysis relating to lease liabilities.

Expense relating to low value leases (included in administrative expenses) for year ending 30 June 2022 was $0.2m (2021: $0.2m).

Critical accounting estimates and judgement

Management's judgement is applied in determining whether any impairment is required on the right of use assets. Management have used judgement in determining whether the option of the property lease will be extended. An estimate has been made in calculating the incremental borrowing rate

3 Operating assets and liabilities (continued)

3.5 Intangible assets

	Development costs $'000	Patents and trademarks $'000	Total $'000
Gross cost	30,898	1,268	32,166
Less accumulation amortisation	(6,418)	(409)	(6,827)
At 30 June 2021	24,480	859	25,339
Gross cost	**48,150**	**1,354**	**49,504**
Less accumulation amortisation	**(14,151)**	**(493)**	**(14,644)**
At 30 June 2022	**33,999**	**861**	**34,860**
Movement in carrying amounts			
Balance at 1 July 2020	17,121	826	17,947
Additions	11,160	118	11,278
Amortisation	(3,801)	(85)	(3,886)
Balance at 30 June 2021	24,480	859	25,339
Additions	**17,253**	**86**	**17,339**
Amortisation	**(7,734)**	**(84)**	**(7,818)**
Balance at 30 June 2022	**33,999**	**861**	**34,860**

3.5.1 Information about intangible assets and significant estimates

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 is recognised in profit or loss. The Group has no intangible assets with an indefinite life.

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.

Capitalised development costs

Research costs are recognised as an expense in the period in which they are incurred. An internally generated intangible asset arising from development (or from the development phase of an internal project) is recognised only if it is probable that the project will be a success considering its commercial and technical feasibility, sufficient resources exist and the Group has the intention to complete the project and is able to use or sell the asset and costs can be measured reliably.

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.

Patents and trademarks

The Group has paid to acquire patents and trademarks and these are recorded at cost. Patents are amortised over their useful life of 15 years.

3 Operating assets and liabilities (continued)

Software-as-a-Service (SaaS) arrangements

In 2021, the Group incurred costs in relation to upfront configuration and customisation for the new enterprise resource management system, a SaaS arrangement. In light of the IFRIC agenda decision clarifying its interpretation of how current accounting standards apply to these types of arrangements the expenses relating to the arrangement were expensed according to the accounting policy provided below.

SaaS arrangements are service contracts providing the Company with the right to access the cloud provider's application software over the contract period. Costs incurred to configure or customise, and the ongoing fees to obtain access to the cloud provider's application software, are recognised as operating expenses when the services are received.

Critical accounting estimates and judgements

Internal development expenditure is capitalised if it meets the recognition criteria of AASB 138 Intangible Assets. This is considered a key judgment. The Group regularly assesses the probable future cashflows supporting the capitalisation of development costs in accordance with the Accounting Standard. Where programs or other uncertainties are such that the criteria are not met, the expenditures is recognised in profit and loss.

The Group has no indefinite life assets and therefore is only required to perform an impairment test in case of any impairment indicators. The impairment testing is performed at a CGU level, being the Company itself, due to the unique nature of the business.

The Group calculated the recoverable amount of the CGU using a value-in-use (VIU) discounted cash flow model. Key estimates included future cash flow projections relating to revenue, operating costs, capital expenditure, working capital, in addition to EBITDA and the terminal growth rate and discount rates noted below. Given the growth trajectory of the Company a 6 year cash flow forecast was used with data sourced from internal budgets and a long-term management forecast. Management's forecast is developed with reference to key structural and market factors, utlising past experience, external data and internal analysis. The key structural and market factors considered are in relation to the automotive new vehicle wheel market, the increase in carbon fibre wheel demand, the continued structural migration from alloy wheels to carbon fibre wheels and GDP growth. Management also anticipates growth from market penetration and continued evolution of products.

In addition, management has had due regard for the impacts of COVID-19 on the business, including the impact on industrialisation of production and the expected timeframe to meet revenue and EBITDA milestones as a result. We are satisfied the recoverable amount of assets exceed their carrying amount having undertaken a value in use calculation in accordance with the accounting standard which indicated a headroom of $28.7m and therefore no impairment charge has been recognised during the year.

The following key assumptions were used in testing for impairment:

- Post-tax discount rate: 11.5%
- Terminal value growth rate beyond 6 years: 3.0%
- Average EBITDA growth rate: 332.9%[1]

Sensitivity analysis

Included in the table below is a sensitivity analysis of the recoverable amount of the CGU. No impairment charge is theoretically required under any reasonable change scenario relating to key assumptions at 30 June 2022.

Each of the sensitivities below assumes that a specific assumption moves in isolation, while all other assumptions are held constant. A change in one assumption could be accompanied by a change in another assumption, which may increase or decrease the net impact.

	Post-tax discount rate 1%	Terminal value growth rate (1%)	EBITDA (5%)
Change in recoverable amount in $m	(23.5)	(16.7)	(12.4)
Impairment charge	–	–	–

1 The movement in EBITDA includes moving from a loss making EBITDA position to a positive EBITDA position.

3 Operating assets and liabilities (continued)

3.6 Payables

	2022 $'000	2021 $'000
Current		
Unsecured liabilities		
Trade payables	**10,082**	6,743
Accruals	**3,847**	3,793
Interest accrued	**17**	1,067
Other payables	**510**	514
	14,456	12,117

3.6.1 Information about payables

Trade and other payables and accruals are carried at amortised cost and represent liabilities for goods and services provided to the Group prior to the end of the financial year that are unpaid and arise when the Group becomes obliged to make future payments in respect of the purchase of these goods and services.

In 2021 the Group entered into a supply chain finance agreement with a logistics company. Under the arrangement the logistics company agrees to pay amounts to the participating supplier in respect of invoices owed by the Group and receives settlement from the Group at a later date. The principal purpose of this arrangement is to facilitate efficient ordering, importation, warehousing, invoice management and payment processing.

The Group has not derecognised the original liabilities to which the arrangement applies because neither a legal release was obtained nor was the original liability substantially modified on entering into the arrangement. The arrangement is only for a limited number of suppliers and specific materials. From the Group's perspective, the arrangement does not significantly extend payment terms beyond the normal terms agreed with other suppliers that are not participating. The Group therefore discloses the amounts factored by suppliers within trade payables because the nature and function of the financial liability remain the same as those of other trade payables. All payables under the agreement are classified as current as at 30 June 2022.

The payments to the logistic company are included within operating cash flows because they continue to be part of the normal operating cycle of the Group and their principal nature remains operating. That is, they represent payments for the purchase of goods and services.

Payables are non-interest bearing and are settled based on the specific creditor's terms.

Payables includes interest payable on borrowings.

For further policy detail regarding the Group's liquidity risk management processes refer to Note 4.3.3.

3.7 Deferred income

Deferred income consists of government grants and prepaid engineering services.

Government grants have been received to assist with the purchase of certain items of plant and equipment as well as the cost of employment of new employees. The conditions attached to these grants will be fulfilled progressively over the period of the grant. For revenue recognition policy, refer to Note 2.2.1.

In FY22 the Group has invoiced an engineering service contract. As this relates to a program in development it has been recognised within deferred income and will be released over time in revenue based on the stage of completion of the contract.

	2022 $'000	2021 $'000
Balance as at 1 July	**5,842**	4,214
Received during the year	**3,983**	3,839
Released to the statement of profit or loss	**(2,805)**	(2,211)
Balance as at 30 June	**7,020**	5,842
Current	**1,486**	1,060
Non-current	**5,534**	4,782
	7,020	5,842

3 Operating assets and liabilities (continued)

3.8 Provisions

	Employee benefits $'000	Make good provision $'000	Warranty claims $'000	Total $'000
Current	2,496	–	1,159	3,655
Non-current	393	218	–	611
At 30 June 2021	2,889	218	1,159	4,266
Current	**2,666**	**–**	**1,495**	**4,161**
Non-current	**479**	**234**	**–**	**73**
At 30 June 2022	**3,145**	**234**	**1,495**	**4,874**

	Make good provision $'000	Warranty claims $'000	Total $'000
Movement in carrying amounts			
Balance at 1 July 2020	203	729	932
Provided for/ (released) during the year	15	430	445
Balance at 30 June 2021	218	1,159	1,377
Provided for/(released) during the year	**16**	**336**	**352**
Balance at 30 June 2022	**234**	**1,495**	**1,729**

3.8.1 Information about individual provisions and significant estimates

Non-employee provisions are recognised when the Group 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.

Make good provision

Carbon Revolution is required to restore its leased premises to their original condition at the end of the lease team. A provision has been recognised for the present value of the estimated expenditure required to remove any leasehold improvements. These costs have been capitalised as part of the cost of leasehold improvements and are amortised over the shorter of the term of the lease and the useful life of the assets.

Warranty claims

Provisions for warranty-related costs are recognised when the wheel is sold to the customer based on management judgement and a growing body of historical experience. The estimate of warranty related costs is reassessed annually.

Critical accounting estimates and judgements

Management's judgement is applied in determining the key assumptions used in the calculation of the provision for warranty claims at reporting date, being a percentage of wheel sales that may be subject to future warranty claims and the future costs of honouring the warranty for those claims.

Employee provisions

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 superannuation funds are recognised as an expense when employees have rendered service entitling them to the contributions.

4 Capital structure and financing

This section outlines how the Group manages its capital structure, including its balance sheet liquidity and access to capital markets.

When managing capital, the Board's objective is to ensure the Group continues to maintain sufficient capital to enable it to pursue its commercial objectives. This is achieved through the monitoring of historical and forecast performance and cash flows.

4.1 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 values.

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 in operating cash flows.

4.1.1 Notes to the consolidated statement of cash flow

For information on cash flows relating to financing activity see Note 4.3 and 4.4

Reconciliation of profit for the period to cash flows from operating activities

	2022 $'000	2021 $'000
Loss after income tax	**(42,915)**	(31,993)
Non-cash items from ordinary activities		
Depreciation and amortisation	**15,393**	10,964
Share based payment expenses	**3,167**	5,723
Reduction of borrowings from achievement of grant milestones	**–**	(2,000)
Movement in inventory provision	**(4,216)**	4,563
Write off of property, plant and equipment	**280**	1,230
Changes in assets and liabilities		
(Increase)/decrease in assets:		
- Receivables	**(8,240)**	(4,272)
- Inventories	**2,231**	5,084
- Other assets	**(533)**	(242)
Increase/(decrease) in liabilities:		
- Payables	**983**	(2,895)
- Deferred income	**1,178**	3,627
- Provisions	**608**	893
Cash used in operating activities	**(32,064)**	(9,318)

4 Capital structure and financing (continued)

4.2 Borrowings and other financial liabilities

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.

	Interest rate %	Maturity	2022 $'000	2021 $'000
Current borrowings				
Secured				
Working capital facility	7.44%	August 2022	**6,843**	5,525
Term loan	6.15%	December 2024	**2,889**	4,333
Letter of credit facility	6.45%	November 2022	**4,000**	–
			13,732	9,858
Non-current borrowings				
Secured				
Term loan	6.15%	December 2024	**4,333**	6,529
			4,333	6,529

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.

Working capital facility

In 2021 the Group entered a working capital facility of $7.5m that provides the opportunity to factor receivables. As the credit risk remains with the Group, it continues to recognise the full carrying amount of the receivables and has recognised the cash received in short term borrowings.

Term loan

In 2021 the Group entered a loan arrangement for $13.0m which was used to repay $13.0m Ronal loan facility in December 2020. In 2022 the Group reached an agreement to extend this loan until December 2024 reducing the amounts payable each quarter to $0.7m. The Group has repaid $5.8m of this debt as at 30 June 2022.

Letter of credit facility

In 2022 the Group entered a 12-month revolving facility arrangement for $8.0m. As at 30 June 2022 the Group has drawn down $4.0m against this facility. Drawdown of the remaining $4.0m is conditional upon agreed milestones.

Finance costs

Finance costs can include interest expense, finance charges in respect of finance leases, amortisation of discounts or premiums and ancillary costs relating to finance.

Finance costs are expensed in the period in which they are incurred, except for finance 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.

Refer to Note 2.4 for more information

4 Capital structure and financing (continued)

4.3 Financial risk management

The Group is exposed to foreign currency risk, interest rate risk, credit risk and liquidity risk. The Group's senior management oversees the management of these risks to ensure the most appropriate use of the capital the Group has available to achieve its commercial objectives.

4.3.1 Market risk

a) Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Group's exposure to foreign currency risk relates primarily to the Group's operating activities (when revenue or expense is denominated in a different currency from the Group's presentation currency).

38% of the Group's revenues and 18.5% of costs are denominated in currencies other than AUD. The Group does not currently have a sufficiently material exposure to any foreign currency for movements in the exchange rate to be considered a material financial risk. The primary currencies the Group has exposure to are US Dollars and Euros.

The Group's exposure to foreign currency risk in relation to non-derivative financial instruments at 30 June 2022 was as follows, based upon notional amounts

2022	EUR $'000	USD $'000
Trade receivables	5,650	–
Trade payables	(3,596)	(246)
Balance sheet exposure	**2,054**	**(246)**

2021	EUR $'000	USD $'000
Trade receivables	1,489	42
Trade payables	(189)	(266)
Balance sheet exposure	**1,300**	**(224)**

The aggregate net foreign exchange gains/losses recognised in profit or loss were:

	2022 $'000	2021 $'000
Net foreign exchange gain/(loss) included in other income	**448**	(234)

Sensitivity

As shown in the table above the Group is primarily exposed to changes in US/AUD and EUR/ AUD. The sensitivity of profit or loss to changes in the exchange rates arises mainly from EUR dollar denominated financial instruments and the impact on other components of equity arises from the foreign exchange reserve and is not material.

The below table discloses the impact of the AUD strengthened and weakened by 5%

+/- 5% exchange rate	2022 $'000	2021 $'000
Impact on profit after tax	**90**	54
Impact on equity	**(90)**	(54)

b) Interest rate risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates is not significant because of the fixed interest rate nature of the loans and working capital facility. The Group does not currently hedge its exposure to interest rate fluctuations due to the low level of exposure.

4 Capital structure and financing (continued)

4.3 Financial risk management (continued)

The exposure to fixed or floating interest rates is described below:

	Variable interest rate		Fixed interest rate		Total	
	2022 $'000	**2021 $'000**	**2022 $'000**	**2021 $'000**	**2022 $'000**	**2021 $'000**
Financial assets						
Cash	22,301	86,865	–	–	22,301	86,865
Short term deposits	–	–	392	392	392	392
Total financial assets	**22,301**	**86,865**	**392**	**392**	**22,693**	**87,257**
Financial liabilities						
Working capital facility	6,843	5,525	–	–	6,843	5,525
Letter of credit facility	4,000	-	–	–	4,000	-
Term loan	7,222	10,862	–	–	7,222	10,862
Total financial liabilities	**18,065**	**16,387**	**–**	**–**	**18,065**	**16,387**

Fixed interest rate on short term deposits is 0.15% (2021: 0.15%). Fixed interest rates on financial liabilities are disclosed in Note 4.2

The Group holds $392,000 (2021: $392,000) on deposit as collateral for lease and banking facility obligations. The operating cash account received an average interest rate of 0.13% (2021: 0.14%) per annum.

c) Price risk
The Group is not exposed to any significant price risk.

4.3.2 Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions.

Cash and cash equivalents
The Group held cash and cash equivalents of $22.7 million at 30 June 2022 (30 June 2021: $87.3 million). The credit risk associated with cash and cash equivalents is considered as minimal as the cash and cash equivalents are held with reputable financial institutions in Australia. Cash and cash equivalents comprise cash balances and call deposits with an original maturity of three months or less. The Group holds $0.4 million (2021: $0.4 million) on deposit as collateral for lease and banking facility obligations.

Receivables
The Group held receivables of $20.4 million at 30 June 2022 ($12.2 million at 30 June 2021). The assessment of customer credit risk is straightforward as a result of the concentrated nature of receivables with only a few customers and a simplified approach has been taken. Depending on the customer, the Group's credit terms vary between 30 and 100 days. The Group uses a working capital facility as outlined in Note 4.2. An impairment analysis is performed at each reporting date to account for the lifetime expected credit losses for all receivables. Outstanding customer receivables are regularly monitored and shipments to customers, to the extent that the Group retains ownership of the goods, are covered by insurance.

There is currently no allowance for expected credit losses as the Group has historically collected all customer debt amounts and expects to continue to do so for the customers contained within the balance at year end.

4.3.3 Liquidity risk

The Group's objective is to maintain a balance between the continuity of funding and flexibility through the use of operating cash flows and committed available credit facilities. The Group actively reviews its funding position to ensure the available facilities are adequate to meet its current and anticipated needs. The Group manages liquidity risk by monitoring forecast cash flows and ensuring that adequate cash and borrowing facilities are maintained, including an assessment of the impact of COVID-19 on the business.

Maturity analysis
The table below represents the estimated and undiscounted contractual settlement terms for financial instruments and management's expectation for settlement of undiscounted maturities.

4 Capital structure and financing (continued)

	On demand $'000	< 3 months $'000	3-12 months $'000	1-5 years $'000	> 5 years $'000	Total $'000
2022						
Working capital facility	–	6,843	–	–	–	6,843
Letter of credit facility	–	–	4,000	–	–	4,000
Term loan	–	–	2,889	4,333	–	7,222
Lease Liabilities	–	95	483	2,541	4,921	8,040
	–	**6,938**	**7,372**	**6,874**	**4,921**	**26,105**
2021						
Working capital facility	–	3,860	1,665	–	–	5,525
Term loan	–	–	4,333	7,028	–	11,361
Lease Liabilities	–	89	453	2,387	5,478	8,407
	–	**3,949**	**6,451**	**9,415**	**5,478**	**25,293**

4.3.4 Fair value risk

The fair value of financial assets and financial liabilities not measured at fair value approximates their carrying amounts as disclosed in the statement of financial position and notes to the financial statements.

As at 30 June 2022 there were no assets or liabilities impacted by fair value risk (30 June 2021: Nil).

4.4 Contributed equity

	30 June 2022 # Ordinary shares	30 June 2021 # Ordinary shares	30 June 2022 $'000	30 June 2021 $'000
Ordinary shares – fully paid	**206,326,138**	205,421,449	**383,822**	381,890
Ordinary shares – restricted	**527,889**	377,642	**–**	–
Total share capital	**206,854,027**	205,799,091	**383,822**	381,890

Movements in ordinary share capital

2021	Date	# Shares	Issue Price	$'000
Balance	**1 July 2020**	**145,632,909**		**291,226**
Institutional entitlement offer	26 April 2021	45,932,235	$1.60	73,492
Retail entitlement offer	21 May 2021	13,471,671	$1.60	21,555
Shares issued under Employee Share Plan		384,634		1,138
Share issue transaction costs				(5,521)
Balance of fully paid shares	**30 June 2021**	**205,421,449**		**381,890**

2022	Date	# Shares	Issue Price	$'000
Balance	**1 July 2021**	**205,421,449**		**381,890**
Shares issued under Employee Share Plan		904,689		1,932
Balance of fully paid shares	**30 June 2022**	**206,326,138**		**383,822**

In 2021 the Group issued additional equity through an institutional and retail entitlement offer. 59.4 million shares were issued with equity proceeds of $95.0 million received (before transaction costs). Transaction costs of $5.5 million were incurred.

4 Capital structure and financing (continued)

4.4.1 Information about contributed equity

Ordinary shares

Ordinary shares participate in dividends and the proceeds on winding up of the Company in proportion to the number of shares held. At shareholders' meetings each ordinary share is entitled to one vote when a poll is called, otherwise each shareholder has one vote on a show of hands.

During the financial year ended 30 June 2022, the Company did not pay a dividend (30 June 2021: $nil).

4.5 Share-based payment plan arrangements

The Group 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 the Group'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 taken into account when determining the grant date fair value of the equity instruments, but the likelihood of the conditions being met is assessed as part of the Group'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.

Tax-exempt employee share ownership plan

The tax-exempt employee share ownership plan ("TESP") was introduced in June 2018 and enables eligible employees to acquire shares in the Company and take advantage of certain income tax concessions available. Eligible employees will be annually invited to apply for shares up to a value of $1,000. The shares will be held in trust for the employee and may be sold by the employee at any time after the last to occur of either:

a) Elapse of three years from the date of grant; or

b) Earlier release of exercise restrictions by the Board.

4 Capital structure and financing (continued)

4.5 Share-based payment plan arrangements (continued)

The employee participant is entitled to receive any dividends or other income associated with the shares held in trust but is not entitled to participate in any dividend reinvestment plan operated by the Company

	2022	2021
Grant date	**Dec 2021**	Dec 2020
Number of employees granted shares	**266**	287
Value of shares granted per employee (on FTE and length of service pro-rata basis)	**$279-$1,000**	$300-$1,000
Total number of shares	**255,281**	87,378
Fair value at grant date	**$1.01**	**$2.74**

The fair value of shares granted under the TESP is determined based on the market price of the shares at grant date.

Short term incentive plan

The employee short term incentive ("STI") plan was approved in November 2021. Under the STI plan, senior executives and other employees, as determined by the Board, will defer a portion of their short-term incentive payment in the form of rights. In 2022 the Board determined that all participants would have 100% of their STI outcome delivered in the form of rights in lieu of a cash payment.

Each right is equivalent to one share and is settled only in shares with no cash alternative. The fair value of each right is determined based on the market price of the share at grant date. Rights have a one-year service period.

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.

162,833 rights were granted on the 29th November 2021 valued at $192,833, (2021: 122,315 rights valued at $228,099). These rights will vest 12 months from the date of granting. No rights were forfeited, exercised or expired during the year.

530,526 rights were granted on 29th November 2021 valued at $648,771, (2021: 346,300 rights valued at $955,947). These rights automatically vest on granting. Of these rights 220,569 were exercised during the year and no shares were forfeited or expired.

Employee stock ownership plan

The employee stock ownership plan (ESOP) was 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 the shareholders from listing and for retention purposes. Participation was at the discretion of the Board and options are subject to vesting conditions determined by the Board.

The exercise price of the options is equal to the market price of the underlying shares at IPO. 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.

5,093,678 options were granted to members of the executive team and a small number of other employees on 23 December 2019 under the one-off ESOP award on listing.

In September 2019, an independent valuation was undertaken of these options using a modified form of the Black-Scholes option pricing model which assumed a 12.5% departure rate, expected share price volatility of 40%, a 50% probability of no dividends through the 5-year option term and a 5% discount for marketability annual share price.

The terms of the options are:

- Issue date 23 December 2019
- Term of 5 years
- First exercise date – 3 years
- Exercise price $2.60 (IPO price)

The options were valued at $3,241,000. This cost is being amortised over the three-year vesting period. 96,780 options were forfeited during the year.

4 Capital structure and financing (continued)

4.5 Share-based payment plan arrangements (continued)

FY21 LTI Award

The FY21 LTI Award was to deliver a one-off equity award to a number of senior executives. These performance rights entitle the participant to acquire shares at nil cost on vesting, subject to the meeting of the vesting conditions.

778,050 performance rights were granted on 12th November 2020. The performance period commenced on 21 September 2020 and ends on 20 September 2023

The performance rights were valued at $1,507,894. The cost is being amortised over the three-year vesting period.

NED fee sacrifice

The Non-executive director fee sacrifice plan was added in FY21 as a way to promote further employee ownership. The offer to the NEDs was made on 11 September 2020 and the rights were granted on 12th November 2020. These rights vested on 26th February 2021 and were issued on the same date.

107,518 rights were issued under this scheme in FY2021.

Salary restructure scheme

The Salary restructure scheme was added in FY21. The offer to the eligible employees was made on 29 September 2020 and the rights were granted on 29th October 2020 for all employees excluding the CEO which was made on 12th November 2020 following the AGM. The offer was valid in relation to an employee's salary between the 12th October and the 20th June 2021 and includes an offer of matched rights to the maximum value of $2,500 per employee.

In total 80 employees took up the offer to restructure their salary and a total number of 351,569 rights were granted under the scheme. Base rights vested on a pro-rata basis over the period in equal monthly instalments on the last day of each month (such that base rights were fully vested by 30 June 2021). The matched rights vested in full on 30 June 2021.

Vested rights may be exercised by the employee with the exercise period commencing when the rights vest and ending on the expiry date. The expiry date is the 10-year anniversary of the grant date.

FY22 LTI Award

The FY22 LTI Award was to deliver a one-off equity award to a number of senior executives and selected senior employees. These performance options entitle the participant to acquire shares at an exercise price of $1.60 on vesting, subject to the meeting of the vesting conditions.

6,668,360 performance options were granted on 20th December 2021. The performance period commenced on 21 September 2021 and ends on 20 September 2024.

The performance rights were valued at $416,772. The cost is being amortised over the three-year vesting period.

4.6 Reserves

	2022 $'000	2021 $'000
Share-based payments	**7,214**	5,979
Share buyback	**(311)**	(311)
Foreign currency translation	**(156)**	(9)
	6,747	5,659

4.6.1 Information about reserves

Share-based payments reserve

The reserve is used to recognise the value of equity benefits provided to employees and directors as part of their remuneration.

Share buy-back reserve

The share buy-back reserve relates to shares brought back from former owners of the business.

Foreign currency translation reserve

Exchange differences relating to the translation of the results and net assets of the Group's foreign operations from their functional currency to Australian dollars are recognised directly in other comprehensive income and accumulated in the foreign currency translation reserve.

5 Taxes

Income and other taxes consist of income tax and goods and services tax ("GST").

Income tax

Current income tax expense or benefit for the current and prior periods is measured at the amount expected to be recovered from or paid to the tax authorities. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period.

Deferred tax is provided using the asset-liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognised for all taxable temporary differences, except when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except when the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is not probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax relating to items recognised outside profit or loss is recognised outside profit or loss. Deferred tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity.

The Group offsets deferred tax assets and deferred tax liabilities if and only if it has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

5.1 Critical accounting estimates and judgements

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits, together with future tax planning strategies. Management have determined that it is not appropriate to recognise a deferred tax asset until consistent levels of profitability can be demonstrated. No deferred tax assets have been recognised as at 30 June 2022 (2021: Nil).

Refer to Note 5.4 for details regarding unrecognised tax amounts.

5 Taxes (continued)

5.2 Income tax expense

The major components of income tax expense are:

	2022 $'000	2021 $'000
Consolidated statement of profit or loss		
Current income tax charge/benefit	–	–
Adjustment for current tax relating to prior periods	–	–
Deferred income tax relating to the origination and reversal of temporary differences	–	–
	–	–

	2022 $'000	2021 $'000
The prima facie tax benefit on loss before tax differs from the income tax expense as follows:		
Accounting loss before tax	**(42,915)**	(31,993)
Benefit at the Australian statutory income tax rate of 30% (2020: 30%)	**12,875**	9,598
Tax impact of:		
Non-deductible expenses	**(3,601)**	(3,762)
Non-assessable income	–	–
Impact of different tax rates in foreign jurisdictions	**54**	(50)
Current year taxable loss not recognised	**(9,328)**	(5,786)
Income tax benefit	–	–

5.3 Deferred taxes

	2022 $'000	2021 $'000
Deferred tax assets		
Provisions and accruals	**3,785**	5,102
Capital raising	**1,960**	2,776
Tax losses	**55,925**	38,546
Other	**89**	147
	61,759	46,571
Deferred tax liabilities		
Receivables	**(25)**	(24)
Other	–	–
	(25)	(24)
Net deferred tax asset	**61,734**	46,547
Deferred tax asset not recognised	**61,734**	46,547

5.4 Unrecognised deferred tax assets

At 30 June 2022 the Group has unrecognised deferred tax assets of $61.7 million including an amount of $55.9 million arising from the Group's tax losses not booked (2021: unrecognised deferred tax assets of $46.5 million including an amount of $38.5 million arising from the Group's tax losses not booked).

The Group has not recognised the net deferred tax asset as described in accounting judgements and estimates at Note 5.1.

6 Other notes

6.1 Information about subsidiaries

The table below lists the controlled entities of the Group.

Name	Principal activities	Country of incorporation	% equity interest 2022	% equity interest 2021
Carbon Revolution Operations Pty Ltd	Carbon fibre wheels	Australia	100	100
Carbon Revolution Technology Pty Ltd	Carbon fibre wheels	Australia	100	100
Carbon Revolution (USA) LLC	Carbon fibre wheels	United States	100	100
Carbon Revolution (UK) Limited	Carbon fibre wheels	United Kingdom	100	100

6.2 Deed of cross guarantee

Carbon Revolution Limited and Carbon Revolution Operations Pty Ltd are parties to a deed of cross guarantee under which each company guarantees the debts of the other. By entering into the deed dated 25 June 2019, Carbon Revolution Operations Pty Ltd has been relieved from the requirement to prepare a financial report and directors' report under ASIC Corporations (wholly owned companies) Instrument 2016/785 issued by the Australian Securities and Investments Commission. Refer below for the statement of profit and loss and other comprehensive income for the parties to the deed of cross guarantee for the year ended 30 June 2022:

	2022 $'000	2021 $'000
Sale of wheels	**38,276**	32,189
Engineering services	**464**	2,732
Sale of tooling	**1,596**	–
Revenue	**40,336**	34,921
Cost of goods sold	**(57,445)**	(49,217)
Gross margin	**(17,109)**	(14,296)
Other income	**4,170**	10,431
Operational expenses	**(2,009)**	(3,362)
Research and development	**(12,027)**	(6,506)
Administrative expenses	**(13,455)**	(15,690)
Marketing expenses	**(1,518)**	(873)
Borrowing costs	**(1,177)**	(1,644)
Loss before income tax expense	**(43,125)**	(31,940)
Income tax expense	**–**	–
Loss for the year after income tax	**(43,125)**	(31,940)
Other comprehensive income	**–**	–
Total comprehensive loss for the year, net of tax	**(43,125)**	(31,940)

6 Other notes (continued)

6.2 Deed of cross guarantee (continued)

Refer below for the statement of financial position for the parties to the deed of cross guarantee as at 30 June 2022:

	2022 $'000	2021 $'000
Current assets		
Cash and cash equivalents	**22,594**	87,241
Receivables	**20,307**	12,152
Inventories	**20,042**	18,066
Other current assets	**1,587**	1,053
Total current assets	**64,530**	118,512
Non-current assets		
Property, plant and equipment	**57,616**	47,319
Right of use asset	**7,564**	7,983
Intangible assets	**34,860**	25,339
Total non-current assets	**100,040**	80,641
Total assets	**164,570**	199,153
Current liabilities		
Payables	**14,457**	12,232
Borrowings	**13,732**	9,858
Lease liability	**579**	542
Deferred income	**1,809**	1,060
Provisions	**4,161**	3,654
Total current liabilities	**34,738**	27,347
Non-current liabilities		
Borrowings	**4,333**	6,529
Lease liability	**7,461**	7,813
Deferred income	**5,211**	4,782
Provisions	**713**	611
Total non-current liabilities	**17,718**	19,735
Total liabilities	**52,456**	47,082
Net liabilities	**112,114**	152,072
Equity		
Contributed equity	**383,822**	381,890
Reserves	**6,894**	5,659
Accumulated losses	**(278,602)**	(235,477)
Total equity/(deficiency in equity)	**112,114**	152,072

6 Other notes (continued)

6.3 Directors and Key management personnel

	2022 $	2021 $
Compensation by category		
Short-term employment benefits	**2,195,825**	1,037,034
Post-employment benefits	**96,132**	82,020
Share based payments	**–**	1,251,222
	2,291,957	2,370,276

6.4 Transactions with related parties

There were no transactions with related parties in 2022.

6.5 Parent entity disclosures

As at, and throughout, the financial year ended 30 June 2022 the parent entity of the Group was Carbon Revolution Limited. The parent entity applied the same accounting policies as the Group.

	2022 $'000	2021 $'000
Results of parent entity		
Loss for the year	**43,489**	31,691
Other comprehensive loss	**–**	–
Total comprehensive loss for the year	**43,489**	31,691
Financial position for the parent entity at year end		
Current assets	**14,253**	81,323
Total assets	**127,096**	168,846
Current liabilities	**(12,545)**	(12,528)
Total liabilities	**(15,433)**	(16,681)
Total equity of the parent company comprising of		
Contributed equity	**383,822**	381,890
Reserves	**6,903**	5,668
Accumulated losses	**(279,062)**	(235,572)
Total equity/(deficiency in equity)	**111,663**	151,986

6.6 Auditor's remuneration

The auditor of the Group for the year ended 30 June 2022 is Deloitte (30 June 2021: Deloitte).

	2022 $	2021 $
Audit Services		
Audit and review of the financial report	**152,500**	132,500

6 Other notes (continued)

6.7 Unrecognised items

6.7.1 Guarantees

The Group has entered into property lease rental guarantees with a face value of $391,763 (30 June 2021: $271,763).

6.7.2 Capital commitments

The Group has capital commitments for manufacturing equipment as at 30 June 2022 totaling $7.5 million (30 June 2021: $2.7 million).

6.7.3 Contingent liabilities

The Group has no contingent liabilities as at 30 June 2022 (30 June 2021: nil).

6.8 Changes in accounting policies

There were no changes in accounting policies during the financial year.

6.9 Accounting standards issued but not yet effective at 30 June 2022

At the date of authorisation of the consolidated financial statements, other Standards and Interpretations issued but not yet effective and relevant for the Group were listed below.

Standard and Interpretation	Effective for annual reporting periods beginning on or after	Expected to be initially applied in the financial year ending
AASB 2014-10 Amendments to Australian Accounting Standards – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture AASB10 & AASB128, AASB 2015-10 Amendments to Australian Accounting Standards – Effective Date of Amendments to AASB 10 and AASB 128 and AASB 2017-5 Amendments to Australian Accounting Standards – Effective Date of Amendments to AASB 10 and AASB 128 and Editorial Corrections	1 January 2022	30 June 2023
AASB 2020-1 Amendments to Australian Accounting Standards – Classifications of Liabilities as Current or Non-Current *AASB 2020-6 Amendments to Australian Accounting Standards— Classification of Liabilities as Current or Non-current – Deferral of Effective Date*	1 January 2022	30 June 2023
AASB 2020-3 Amendments to Australian Accounting Standards – Annual Improvements 2018-2020 and Other Amendments	1 January 2022	30 June 2023
AASB 2020-4 Amendments to Australian Accounting Standards – Covid-19 Rent Concessions	1 June 2020	30 June 2023
AASB 2021-2 Amendments to Australian Accounting Standards – Disclosure of Accounting Policies and Definition of Accounting Estimates	1 January 2023	30 June 2024

The Directors of the Group do not anticipate that the adoption of above amendments will have a material impact in future periods on the financial statements of the Group.

6.10 Subsequent events

There were no subsequent events.

Directors' Declaration

In accordance with a resolution of the Directors of Carbon Revolution Limited, I state that:

In the opinion of the Directors:

(a) the Financial Statements and Notes of Carbon Revolution Limited for the financial year ended 30 June 2022 are in accordance with the *Corporations Act 2001*, including:

  (i) giving a true and fair view of the Group's financial position at 30 June 2022 and of its performance for the year ended on that date; and

  (ii) complying with Accounting Standards and the *Corporations Regulations 2001*;

(b) the Financial Statements and Notes also comply with International Financial Reporting Standards; and

(c) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

James Douglas
Chair

Geelong
26 August 2022

Independent Auditor's Report

Deloitte Touche Tohmatsu
ABN 74 490 121 060
477 Collins Street
Melbourne VIC 3000

Tel: +61 3 9671 7000
www.deloitte.com.au

Independent Auditor's Report to the Members of Carbon Revolution Limited

Report on the Audit of the Financial Report

Opinion

We have audited the financial report of Carbon Revolution Limited (the "Company") and its subsidiaries (the "Group") which comprises the consolidated statement of financial position as at 30 June 2022, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of the Group is in accordance with the *Corporations Act 2001*, including:

- Giving a true and fair view of the Group's financial position as at 30 June 2022 and of its financial performance for the year then ended; and
- Complying with Australian Accounting Standards and the Corporations Regulations 2001.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Report section of our report. We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional & Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report for the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Deloitte.

Key Audit Matter	How the scope of our audit responded to the Key Audit Matter
Capitalisation of development costs' *Refer to Note 3.5 Intangible assets* As at 30 June 2022 the Group's capitalised development costs total $34m as disclosed in Note 3.5. Capitalisation of development costs requires management judgement to determine whether: - Expenditure relates to development activity and not research activity, - Expected future economic benefits attributable to the intangible assets will flow to the Group, - The amortisation of intangible assets should commence when revenue has been generated, and - The useful lives assigned are appropriate.	*Our procedures included, but were not limited to:* - Obtaining an understanding of the process undertaken by management to determine whether expenditure should be capitalised as intangible assets; - Assessing the appropriateness of management's accounting policy; - Assessing capitalised development costs at balance date to determine whether they have been correctly capitalised and it is probable that expected future economic benefits attributable to those assets will flow to the Group; and - Reviewing the listing of capitalised intangible assets at balance date to verify that: - Amortization has commenced on intangible assets that are available for use; and - The useful lives assigned to each intangible asset are appropriate. We have also assessed the appropriateness of the disclosures in Note 3.5.1 to the financial statements.
Valuation of inventory *Refer to Note 3.2 Inventories* As at 30 June 2022 the Group inventory balances total $20.2m, as disclosed in Note 3.2. Provided against this, is a total inventory provision of $4.8m. The Group holds significant stock of finished goods and work in progress inventory, the measurement of which is an important input into gross margin. Valuation of inventory at the lower of its cost and net realisable value requires management judgement to determine whether: - Finished goods are in a saleable condition in order to meet quality specifications; - There are any indicators of technical or functional obsolescence; - Customers are willing to purchase finished goods that had previously been identified to be defective, and at what price.	*Our procedures included, but were not limited to:* - Obtaining an understanding of management's processes and judgements applied in estimating the net realisable value of inventory; - Evaluating management's judgements in estimating net realisable value by comparing the carrying value of a sample of finished goods to contractual sales prices; - Validating the quantity and cost of inventory subject to provision. We have also assessed the appropriateness of the disclosures in Note 3.2.1to the financial statements.

Deloitte.

- Selling costs that may impact the net realisable value of finished goods on hand are appropriate.	
Carrying Value of Property, Plant and Equipment and Intangible Assets *Refer to Note 3.3 Property, Plant and Equipment, Note 3.5 Intangibles assets and Note 3.5.1 Information about intangible assets and significant estimates* As at 30 June 2022 the Group's carrying value of Property, Plant and Equipment and Intangible Assets totals $94.5 million. These assets are required to be assessed for impairment where an indicator of impairment exists. Management has determined that indicators of impairment exist as at 30 June 2022. Management has assessed that there is one CGU, being the Company itself, due to the nature of its business. During the year, management changed its methodology for assessing the recoverable amount of the CGU, from fair value less costs to sell approach, to using a Value in Use ('ViU') model. The determination of recoverable amount is complex and involves significant judgements in respect of the assumptions and estimates used in preparing ViU models, including the determination of: - Forecasts of Earnings before Interest, Tax, Depreciation & Amortisation ("EBITDA") for the years 2023 to 2028; - The terminal growth rate applied; and - The discount rate applied. Management has applied judgement to determine its best estimates for assumptions within the ViU model, using internal and external data as inputs.	*Our procedures included, but were not limited to:* - Obtaining an understanding of the controls implemented to address the risk relevant to the accuracy of key assumptions within the ViU valuation model; - Assessing the adequacy of the Group's disclosure in Note 3.5.1 to the financial statements. - In conjunction with our valuation specialists, our procedures included, but were not limited to: o Evaluating management's identification of CGUs; o Comparing the forecast cash flows to the latest Board approved budget; o Comparing the forecast cash flows to the actual cash flows generated in the current year, and challenging material differences o Comparing the discount rate applied to ViU with an independently developed rate; o Challenging the reasonableness of key assumptions including, but not limited to: ▪ revenue and EBITDA forecasts ▪ long-term growth rates ▪ forecast growth in the budget period and terminal value ▪ working capital levels ▪ committed capital expenditure and comparing them to historical performance, industry benchmarks, and internal and external evidence available. - Assessing the integrity of the value in use model, including the mathematical accuracy of the underlying calculation formulas; - Performing sensitivity analysis on the future cash flows, growth and discount rates.

Other Information

The directors are responsible for the other information. The other information comprises the information included in the Group's annual report for the year ended 30 June 2022 but does not include the financial report and our auditor's report thereon.

Our opinion on the financial report does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Directors for the Financial Report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the Corporations Act 2001 and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the financial report. We are responsible for the direction, supervision and performance of the Group's audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the directors, we determine those matters that were of most significance in the audit of the financial report of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on the Remuneration Report

Opinion on the Remuneration Report

We have audited the Remuneration Report included on page 28 for the year ended 30 June 2022.

In our opinion, the Remuneration Report of Carbon Revolution Limited, for the year ended 30 June 2022, complies with section 300A of the Corporations Act 2001.

Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the Corporations Act 2001. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

Deloitte Touche Tohmatsu

DELOITTE TOUCHE TOHMATSU

Stephen Roche
Partner
Chartered Accountants

Melbourne, 26 August 2022

Shareholder Information

as at 28 July 2022

In accordance with ASX Listing Rule 4.10, the Company provides the following information to shareholders not elsewhere disclosed in this Annual Report.

The Shareholder Information set out below was applicable as at 28 July 2022 unless indicated otherwise.

1 Distribution and number of shareholders of equity securities

The distribution and number of holders of equity securities on issue in the Company as at 28 July 2022, and the number of holders holding less than a marketable parcel of the Company's ordinary shares, based on the closing market price as at the 28 July 2022, is as follows:

Range	Securities	%	No. of holders
100,001 and Over	153,662,096	74.29	151
10,001 to 100,000	38,672,776	18.70	1,222
5,001 to 10,000	6,917,962	3.34	896
1,001 to 5,000	6,490,163	3.14	2,426
1 to 1,000	1,111,030	0.54	1,984
Total	**206,854,027**	**100**	**6,679**

Unmarketable parcels: 1,143 holders of less than a marketable parcel of $500 are included in the above total. Details of those holdings are:

	Securities	%	No. of holders
Unmarketable Parcels	1,521,968	0.74	2,326

1.1 Distribution of holders of rights and options

Range	Securities	%	No. of holders
100,001 and Over	12,179,128	95.91	17
10,001 to 100,000	290,052	2.28	8
5,001 to 10,000	116,893	0.92	16
1,001 to 5,000	112,009	0.89	37
1 to 1,000	–	–	–
Total	**12,697,364**	**100.00**	**78**

Shareholder Information

as at 28 July 2022

2 Twenty Largest Quoted Equity Security Holders

The Company only has one class of quoted securities, being ordinary shares. The names of the twenty largest holders of ordinary shares, the number of ordinary shares and the percentage of capital held by each holder is as follows:

Rank	Name	28 Jul 2022	%IC
1	CITICORP NOMINEES PTY LIMITED	22,952,111	11.10
2	BNP PARIBAS NOMS PTY LTD	22,136,308	10.70
3	HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	14,428,658	6.98
4	BNP PARIBAS NOMINEES PTY LTD	11,451,238	5.54
5	UBS NOMINEES PTY LTD	10,696,631	5.17
6	J P MORGAN NOMINEES AUSTRALIA PTY LIMITED	10,099,988	4.88
7	DEAKIN UNIVERSITY	8,377,592	4.05
8	ARGO INVESTMENTS LIMITED	6,133,107	2.96
9	CROWN IN RIGHT OF THE STATE OF VICTORIA	5,421,742	2.62
10	POINT GREY INVESTMENTS PTY LTD	3,737,430	1.81
11	MATTHEW DINGLE	2,085,378	1.01
12	MR LUKE JUSTIN MARTIN ROSER CARTER	1,691,517	0.82
13	MR DONALD BRETT GASS	1,499,473	0.72
14	MR ASHLEY JAMES DENMEAD	1,303,000	0.63
15	FIRST SAMUEL LTD ACN 086243567	1,092,391	0.53
16	HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED - A/C 2	1,023,410	0.49
17	MR XIAOWEI CHOU	1,021,130	0.49
18	BNP PARIBAS NOMINEES PTY LTD HUB24 CUSTODIAL SERV LTD	727,521	0.35
19	NATIONAL NOMINEES LIMITED	654,216	0.32
20	PACIFIC CUSTODIANS PTY LIMITED	646,075	0.31
	Total	**127,178,916**	**61.48%**
	Balance of register	**79,675,111**	**38.52%**
	Grand total	**206,854,027**	

3 Substantial Holders

As at 28 July 2022, the names of the substantial holders of the Company and the number of equity securities in which those substantial holders and their associates have a relevant interest, as disclosed in substantial holding notices given to the Company, are as follows:

Name	Date Notice Provided	Number Held*
Ronal AG	23/08/2021	14,227,941
ECP Asset Management Pty Ltd	21/10/2021	12,757,256
UniSuper Limited as trustee for UniSuper Management Pty Ltd	11/07/2022	11,961,056
Quest Asset Partners Pty Ltd	21/08/2020	10,627,385
Mitsubishi UFG Financial Group, Inc	30/05/2022	10,415,798
Tiga Trading Pty Ltd	7/05/2021	10,193,099
Commonwealth Bank of Australia	26/08/2021	7,591,335

* Number of votes attached to all voting shares in the Company in which the substantial holder or its associates have a relevant interest

4. Voting Rights

The voting rights attaching to each class of equity securities are set out below:

4.1 Ordinary shares

At a general meeting of the Company, every holder of ordinary shares present in person or by proxy, attorney or representative has one vote on a show of hands and on a poll, one vote for each ordinary share held.

4.2 Rights and options

Rights and options do not carry any voting rights.

5 Unquoted Equity Securities

ASX Code	Class	Number of securities
CBRAF	Performance Rights	1,397,285
CBRAE	Options expiring 23 December 2024	4,996,896
CBRAE	Options expiring 28 October 2026	6,303,901

Holders of more than 20% of unquoted securities other than under an Employee Incentive Scheme: n/a as there are now no unquoted securities.

6 On-Market Buy-Back

The Company is not currently conducting an on-market buy-back.

7 On-Market Purchase of Securities

The Company did not purchase securities on market during the reporting period.

Corporate Directory

Directors
James Douglas
Jake Dingle
Lucia Cade
Dale McKee
Mark Bernhard

Company Secretary
David Nock

Annual General Meeting
16 November 2022

Director nomination deadline
27 September 2022

Registered office
Carbon Revolution
Building NR, Geelong Technology Precinct
75 Pigdons Road, Waurn Ponds
Victoria, 3216 Australia

Phone: +61 3 5271 3500

Share register
Share Registry
Link Market Services
Level 12, 680 George Street
Sydney, NSW, 2000 Australia

Phone: +61 1300 554 474

Auditor
Deloitte Touche Tohmatsu
477 Collins Street
Melbourne, Victoria, 3000

Stock exchange listing
Carbon Revolution Limited shares are listed on the Australian Securities Exchange (ASX code: CBR)

Business objectives
In accordance with the Listing Rule ASX 4.10.19, the Directors confirm that the Group has used cash and cash equivalents that are held at the time of listing in a way consistent with its stated business objectives

Website
www.carbonrev.com

Building NR
Geelong Technology Precinct
75 Pigdons Road, Waurn Ponds
Victoria 3216 Australia

+61 3 5271 3500
info@carbonrev.com carbonrev.com