

Quadrise Fuels International plc

Company Registration No. 05267512

Interim Report and Consolidated Financial Statements

For the 6 month period to 31 December 2021

Quadrise Fuels International plc ("Quadrise", "QFI", the "Company" and together with its subsidiaries the "Group") presents its unaudited interim results for the six months ended 31 December 2021

Chairman's Statement

I am pleased and excited to have been appointed as Chairman of Quadrise and look forward to working with the Group's dedicated and talented team. The Company continues to progress its pipeline of exciting projects in the marine, industrial and upstream sectors and, having now examined the key challenges and opportunities facing the Company, I look forward to engaging with shareholders and discussing progress with them. I believe that I have joined Quadrise at a pivotal time, under the backdrop of ambitious global climate targets driven by both public and investor sentiment and when the Company's undoubtedly strong ESG credentials will come increasingly into sharp and positive relief. Given this backdrop and following discussions with management and the Board, I believe our immediate priorities are to:

1. *Determine which of our projects can drive revenues and positive cashflows within our available cash and manpower resources.*

   Our projects with MSC in the marine sector, our industrial project in Morocco and our upstream project with Greenfield Energy LLC ("Greenfield") in Utah have progressed but not at the pace originally envisaged. In addition to headwinds from the Covid-19 pandemic and subsequent destabilising global events, they each have several moving parts with many of these outside the influence and control of Quadrise. Discussions with our key counterparties are ongoing and we are determined to bring each of these projects to clear milestone points.

2. *Position Quadrise squarely amongst the growing cohort of Green Economy companies.*

   The rapid intensification of ESG and climate-change focused policies across the world presents a huge opportunity for Quadrise. The focus on largescale and immediate Net Zero carbon solutions to climate change often underplays the valuable and critical role that must be played by transitional technologies such as ours. Quadrise's proprietary MSAR® and low carbon bioMSAR™ solutions can drive tangible cost and emissions savings for adopters immediately without the need for significant capital investment.

Looking further ahead, opportunities which maximise our ESG credentials such as bioMSAR™ will be prioritised and advanced. We expect to continue to develop the next generation of bioMSAR™ fuels and energy delivery technologies, with the goal of producing a fully Net Zero product by 2030. A stronger focus on using Quadrise's unique emulsion technologies and expertise will leave the Company more squarely positioned within the ESG sector and less exposed to risks and uncertainties outside our own influence. Quadrise will aim to qualify for the LSE Green Economy Mark, which will provide third-party validation of our green credentials and increase visibility among investors and other stakeholders, including industrial partners.

As the Company's financial circumstances permit, we intend to explore and bring on complementary technologies and additional businesses to reinforce Quadrise's reputation in the ESG space and help to ensure that our products and services are part of the conversation when potential clients are looking at ESG and decarbonisation solutions.

As shareholders would rightly expect from us, Quadrise will maintain its own commitment to the highest ESG reporting standards. This is reflective not only of public sentiment, but also redoubled ESG commitments from significant institutional investors.

I am very much looking forward to helping the board and management team to deliver a prosperous future for this Company. On behalf of the Board, I would like to thank our loyal shareholders for their support and patience throughout the pandemic.

Financial Position

The Group held cash and cash equivalents of approximately £5.6 million as at 31 December 2021 (31 December 2020: £1.1 million), sufficient to reach revenue generation in H2 2022 subject to the conclusion of commercial project agreements.

The Group recorded a loss of £1.5 million for the six months to 31 December 2021 (2020: £2.3 million). This included production and development costs of £0.7 million (2020: £0.6 million) and administration expenses of £0.7 million (2020: £0.8 million). The prior year loss of £2.3 million also included a non-cash fair value loss arising on the valuation of convertible securities of £0.7 million.

Basic and diluted loss per share was 0.11p (2020: 0.21p).

The Group's total assets amounted to £9.3 million as at 31 December 2021 (£4.9 million as at 31 December 2020). In addition to the cash and cash equivalents, this included fixed tangible assets (mainly plant and equipment) of £0.4 million and MSAR® trade name of £2.9 million.

The Group has accumulated tax losses of approximately £58.4 million (2019: £53.7 million) available to be carried forward against future profits.

Andy Morrison
Chairman
25 March 2022

Chief Executive's Statement

Our global opportunity

The past few weeks have witnessed major market upheaval following the Russian invasion of Ukraine. The resulting increases in both energy prices and volatility have further emphasised the reliance that the global economy has on fossil fuels and the need to use these resources more efficiently as the world transitions to a Net Zero future. We believe that Quadrise's unique MSAR® and bioMSAR™ technology can play a significant role in helping achieve this goal and establishing the Company as an attractive investment in the wider ESG context. During the period we accelerated the development and commercialisation of our bioMSAR™ technology and fuel, and in parallel continued to develop energy transition technology and Net Zero fuel solutions to offer to our global clients. According to the Intergovernmental Panel for Climate Change (IPCC), the world has until 2030 to cut human-caused CO_2 emissions by half, in addition to other greenhouse gas ("GHG") emissions such as methane, to have a 50% chance of avoiding the worst effects of climate change by 2050. As part of the Glasgow Climate Pact, 153 countries have put forward new or updated emissions targets, covering around 80% of the world's GHG emissions. At COP 26, 100 countries also committed to reduce global methane emissions by 30% by 2030 by signing the Global Methane Pledge. We believe that Quadrise's unique MSAR® and bioMSAR™ technology can play a significant role in attaining these goals.

bioMSAR™ and our transition to Net Zero

The focus on large-scale and immediate Net Zero carbon solutions to climate change often neglects the fact that hydrocarbons in different forms will remain a large part of the global energy mix for decades to come, in light of the lack of current and planned renewable energy capacity. There are however fuels which can be adopted immediately to bridge the gap between the carbon intensive fuels of today and the Net Zero energy sources of the future. These "transition fuels" allow emissions savings to be made immediately, and include our innovative low carbon bioMSAR™ fuel, which takes advantage of our proven emulsion fuel technology platform. bioMSAR™ utilises clean, renewable glycerine, a by-product of current biodiesel manufacturing processes, to create a low cost, low carbon biofuel.

When evaluating transition fuels, there are a number of factors that are important:

1. Fuel composition and "global warming potential", which takes into account CO_2, methane, soot ("Black Carbon") and NOx- emissions.
2. The efficiency of the transition fuel in converting energy to power at a commercial scale.
3. The resulting emissions from combustion.
4. The overall cost to the consumer.

Testing of bioMSAR™ on a high-speed 4-stroke Cummins diesel engine at Aquafuel and on a medium-speed 4-stroke Wärtsilä diesel engine at the VTT facility in Finland has shown that bioMSAR™ use results in an increase in engine efficiency of over 3%, and NOx reductions of over 20% when compared with marine diesel fuel. The most recently completed round of testing at Aquafuel used an engine that had been modified to simulate larger, high compression engines, like the low-speed 2-stroke engines used in the marine sector. Engine efficiency was increased by over 13% by advancing injection timing, and unlike marine diesel, there was no increase in NOx emissions with increased engine efficiency.

Switching from marine diesel to bioMSAR™ would therefore allow shipping operators to reduce both fuel consumption and CO_2 emissions. Further development and test work is planned during 2022, but the positive results to date support our plans for larger scale trials on commercial diesel engines for bioMSAR™. Commercial trials are planned with MSC, as well as for use in industrial and boiler applications.

The glycerine content of bioMSAR™ can be adjusted to meet the client's demands for CO_2 savings, providing a cost-effective transition fuel solution to meet and go beyond increasingly stringent decarbonisation requirements. When compared to LNG and FAME, transition fuels which are increasingly being adopted by the marine industry, the superior efficiency of bioMSAR™ leads to proven higher CO_2 emissions savings. bioMSAR™ delivers energy at a lower cost per unit, and unlike LNG uses a biofuel that is dispersible in water, non-flammable, non-toxic and biodegradable. An international patent application for bioMSAR™ has been submitted jointly with Nouryon and complements our existing MSAR® IP.

The marine sector has reduced CO_2 emissions by 30% from 2008 to 2020, but still contributes 940 million tons or 2.5% of global emissions. Based on recent results from VTT testing, bioMSAR™ could reduce emissions of CO_2 by over 25%. For a large vessel consuming 25,000 tons of HFO annually, equating to 23,000 tons of CO_2, that is equivalent to the annual emissions of 11,000 average petrol cars.

We strongly believe that both MSAR® and bioMSAR™ will have an important role to play in the transition to a sustainable future. We recognise that Net Zero energy solutions will become mandatory in the future, and we have an RDI strategy in place to take advantage of this opportunity. Our emulsion technology platform is innovative and adaptable. Our RDI team are investigating the use of other renewable fuels to produce a fuel blend with a Net Zero carbon contribution. In parallel, we are also investigating alternative methods of sourcing renewable glycerine from non-conventional sources, as well as contacting biodiesel suppliers to source the required volumes and quality of renewable, fuel-grade glycerine and other biofuels to provide a platform for future growth.

Key projects

Our key projects in the marine, upstream and industrial sectors have each been subject to delays during the period under review, and our focus is now to finalise a number of commercial project agreements expeditiously that will demonstrate MSAR® and bioMSAR™ technology at commercial scale during 2022 and to prioritise our available resources.

MSC – Our discussions with MSC regarding the proposed LONO fuel trials on board their commercial container vessels are progressing to the key decision points for both parties. Since the signature of the Joint Development Agreement with MSC in Q1 2021, the scope of this project has evolved from conducting the planned vessel trials using MSAR® to instead using bioMSAR™ following the positive test results on 4-stroke diesel engines. The testing of bioMSAR™ on a marine vessel opens up the opportunity to test and use MSAR® in the future.

The Original Engine Manufacturer ("OEM") resources required to facilitate the trials are currently very limited due to a significant backlog caused by the Covid-19 pandemic and a full programme of testing on multiple future fuel solutions. Participation of the OEMs is important to verify test plans and results, which then leads to the required support from Class Societies and Flag States for the vessel testing. As a result of this backlog, OEMs are focusing their resources solely on fuels which offer higher CO_2 reductions such as bioMSAR™. Testing of MSAR® and bioMSAR™ by Wärtsilä Switzerland on their optical combustion chamber is now scheduled for late Q2-2022, with injector wear rig testing on bioMSAR™ scheduled for late Q3-2022.

We are currently working to finalise the LONO trial programme and subsequent bioMSAR™ commercial terms with MSC, with trial preparations commencing in Q2 2022 leading to the trials themselves commencing before the end of this calendar year, and taking 9 months to conclude thereafter.

Utah – Our project in Utah involves using MSAR® technology to emulsify low-sulphur 10-13° API heavy oil, which can be recovered from the billions of barrels of oil-sand deposits located at Asphalt Ridge in Utah, USA. Some of the oil sands are mined, but there are also high-quality heavy oil seams sub-surface at around 1000 feet. Oil samples were provided from the Petroteq Oil Sands Plant operated by our client, Greenfield Energy LLC ("Greenfield"), which is now wholly owned by AIM-listed TomCo Energy PLC ("TomCo"), after their purchase of the remaining 50% stake in the Greenfield JV in August last year from Valkor Technologies LLC ("Valkor"). The oil samples were successfully converted to both MSAR® and bioMSAR™ by our RDI team at QRF. Quadrise is now working with TomCo and Valkor to source new commercial opportunities for MSAR® and bioMSAR™ at sites in in Utah. The proposed means of oil extraction at one such site in Utah is anticipated to be "carbon negative" through the application of carbon capture and sequestration. Exploration drilling at this site is well underway. The current expectation is that production drilling at this site will take place in the summer, following the receipt of the required permits, with oil then available for conversion to bioMSAR™ and MSAR® for client site trials during H2 2022. These trials would then be expected to lead to commercial supply. Discussions with stakeholders to finalise agreements and commercial supply are in progress.

Morocco – We are currently working with the new client team to update our Material Transfer and Cooperation Agreement, with the intention of conducting site trials from Q2 2022. The first of these trials will be at "Site B", which consumes around one third of the client's annual HFO consumption, where 60mt of MSAR® will be combusted. The Quadrise trial equipment is in Morocco, and with the testing of bitumen samples for the MSAR® fuel production now complete, production of the 60mt of MSAR® can commence upon signature of the updated agreement. Following the Site B trial, the results and a feasibility study for MSAR® use at a second client site ("Site A") will be delivered to the client. A subsequent commercial trial will then take place at Site A later in 2022, subject to the client's maintenance programme. Assuming the successful conclusion of these trials, the intention would then be to conclude a commercial supply agreement covering one or more of the client's sites in Morocco during H2 2022.

Americas – Discussions continue to progress with regard to potential projects with power generators in Panama and Honduras, and with the state oil companies and utility operators in Mexico. Our regional agent network is being utilised to progress these projects with Quadrise support as we expand our footprint in the region.

Outlook

The downstream oil sector has had to adapt rapidly to changes in demand driven by the IMO 2020 restrictions on marine sulphur emissions, followed by the ongoing pandemic and, most recently, Russia's invasion of Ukraine and the associated sanctions on Russian oil exports. These changes affected the availability and prices (relative to HFO) of refinery residuals utilised in MSAR® and bioMSAR™.

Despite changes to oil consumption, the underlying crude oil price has seen a very significant increase, which is positive for the upstream sector and for Quadrise. The demand for HFO in the power and marine sectors has also remained strong, the latter driven by the increasing use of exhaust gas cleaning systems (or "scrubbers") to comply with IMO 2020. Quadrise expects that distillate fuel demand will continue to recover in 2022 driven by the transportation sector. This will be positive for refinery margins and the HFO-distillate spread, underpinning the economic value of refinery residuals as an energy source for MSAR® and bioMSAR™ in our key markets.

Prices of underlying biofuels and derivatives have also increased dramatically during the last six months and this increase continues to be driven by reduced supply as a result of Covid-19. Price rises seen during 2021 appeared to be flattening and softening at the start of 2022, however underlying biofuel prices have spiked again, along with oil prices following the Russian invasion of Ukraine. Crude glycerine prices have been subject to similar trends as other biofuels and feedstocks. However, glycerine pricing remains competitive based on refining of crude glycerine to fuel grade when compared with biofuels such as FAME on both a unit energy basis and relative CO_2 emissions savings "well-to-wake".

The publicly supported global energy transition towards the adoption of renewables and low emission fuel options is accelerating interest in bioMSAR™ and increasing the market opportunity in various sectors. During the next 12 months we plan to demonstrate the long-term economic and environmental benefits of MSAR® and bioMSAR™ projects through commercial-scale trials which, on successful completion, will lead to supply contracts and commercial revenues. In parallel, our RDI team is focused on identifying and developing new Net Zero fuel solutions, as well as looking into opportunities to deploy our MSAR® emulsion technology platform in new applications.

During the period, there were some changes to our senior team. Our former Chairman, Mike Kirk stepped down from his role following the AGM on 26 November 2021 after six years with the Company. Mike made a huge contribution during his time with Quadrise and left with our very best wishes. I am glad to report that we welcomed Phil Hill as our new COO in January, and then in February we were delighted to announce the appointment of our new non-executive Chairman, Andy Morrison. Both Phil and Andy have hit the ground running and are supporting the Company in progressing projects through to commercialisation. Our new arrivals and current team will be instrumental in shaping the future of the Company as it helps drive and benefit from the global energy transition to Net Zero.

On behalf of the team at Quadrise, I would like to thank our shareholders for their support and patience during the financial year to date, and we look forward to being able to announce material progress across our projects over the course of 2022.

Jason Miles
Chief Executive Officer
25 March 2022

Consolidated Statement of Comprehensive Income

For the 6 months ended 31 December 2021

	Note	**6 months ended 31 December 2021 Unaudited £'000**	6 months ended 31 December 2020 Unaudited £'000	Year ended 30 June 2021 Audited £'000
Continuing operations				
Revenue		**75**	8	17
Production and development costs		**(686)**	(645)	(1,377)
Other administration expenses		**(743)**	(770)	(1,527)
Fair value adjustments arising on Convertible Securities		**-**	(668)	(1,257)
Share option charge	3	**(165)**	(147)	(303)
Warrant charge		**-**	-	-
Foreign exchange gain/(loss)		**1**	(5)	(9)
Operating loss		**(1,518)**	(2,227)	(4,456)
Finance costs		**(1)**	(51)	(4)
Finance income		**-**	-	50
Loss before tax		**(1,519)**	(2,278)	(4,410)
Taxation		**-**	-	150
Total comprehensive loss for the period from continuing operations		**(1,519)**	(2,278)	(4,260)
Loss per share – pence				
Basic	4	**(0.11)p**	(0.21)p	(0.36) p
Diluted	4	**(0.11)p**	(0.21)p	(0.36) p

Consolidated Statement of Financial Position

As at 31 December 2021

	Note	As at 31 December 2021 Unaudited £'000	As at 31 December 2020 Unaudited £'000	As at 30 June 2021 Audited £'000
Assets				
Non-current assets				
Property, plant and equipment	5	**417**	523	460
Intangible assets	6	**2,924**	2,924	2,924
Non-current assets		**3,341**	3,447	3,384
Current assets				
Cash and cash equivalents		**5,590**	1,111	7,006
Trade and other receivables		**132**	193	117
Prepayments		**168**	113	95
Stock		**61**	61	61
Current assets		**5,951**	1,478	7,279
TOTAL ASSETS		**9,292**	4,925	10,663
Equity and liabilities				
Current liabilities				
Trade and other payables		**259**	314	276
Convertible securities	7	**-**	1,521	-
Current liabilities		**259**	1,835	276
Equity attributable to equity holders of the parent				
Issued share capital		**14,069**	10,774	14,069
Share premium		**77,189**	75,708	77,189
Merger reserve		**3,777**	-	3,777
Share option reserve		**3,229**	3,188	3,344
Warrant reserve		**1,017**	1,122	1,017
Reverse acquisition reserve		**522**	522	522
Accumulated losses		**(90,770)**	(88,224)	(89,531)
Total shareholders' equity		**9,033**	3,090	10,387
TOTAL EQUITY AND LIABILITIES		**9,292**	4,925	10,663

Consolidated Statement of Changes in Equity

For the 6 months ended 31 December 2021

	Issued share capital £'000	Share premium £'000	Merger reserve £'000	Share option reserve £'000	Warrant reserve £'000	Reverse acquisition reserve £'000	Accumulated losses £'000	Total £'000
As at 1 July 2021	**14,069**	**77,189**	**3,777**	**3,344**	**1,017**	**522**	**(89,531)**	**10,387**
Loss and total comprehensive loss for the period	-	-	-	-	-	-	(1,519)	(1,519)
Share option charge	-	-	-	165	-	-	-	165
Transfer of balances relating to expired share options	-	-	-	(280)	-	-	280	-
Shareholders' equity at 31 December 2021 - unaudited	**14,069**	**77,189**	**3,777**	**3,229**	**1,017**	**522**	**(90,770)**	**9,033**
As at 1 July 2020	**10,351**	**75,431**	**-**	**3,927**	**1,122**	**522**	**(87,324)**	**4,029**
Loss and total comprehensive loss for the period	-	-		-	-	-	(2,278)	(2,278)
Fair value adjustment arising on Convertible Securities	-	-	-	-	-	-	492	492
Share option charge	-	-	-	147	-	-	-	147
Transfer of balances relating to expired share options	-	-	-	(886)	-	-	886	-
Shares issued upon exercise of Convertible Security	423	277	-	-	-	-	-	700
Shareholders' equity at 31 December 2020 – unaudited	**10,774**	**75,708**	**-**	**3,188**	**1,122**	**522**	**(88,224)**	**3,090**
As at 1 January 2021	10,774	75,708	-	3,188	1,122	522	(88,224)	3,090
Loss and total comprehensive loss for the period	-	-	-	-	-	-	(1,982)	(1,982)
Fair value adjustment arising on Convertible Security	-	-	-	-	-	-	1,072	1,072
Share option charge	-	-	-	156	-	-	-	156
Transfer of balances relating to expired warrants	-	-	-	-	(105)	-	105	-
New shares issued	2,599	639	3,777	-	-	-	-	7,015
Share issue costs	-	-	-	-	-	-	(502)	(502)
Shares issued upon exercise of Convertible Security	696	842	-	-	-	-	-	1,538
Shareholders' equity at 30 June 2021 - audited	**14,069**	**77,189**	**3,777**	**3,344**	**1,017**	**522**	**(89,531)**	**10,387**

Consolidated Statement of Cash Flows

For the 6 months ended 31 December 2021

	Note	**6 months ended 31 December 2021 Unaudited £'000**	6 months ended 31 December 2020 Unaudited £'000	Year ended 30 June 2021 Audited £'000
Operating activities				
Loss before tax from continuing operations		**(1,519)**	(2,278)	(4,110)
Fair value adjustments arising on convertible securities		**-**	668	1,257
Finance costs paid		**1**	51	4
Finance income received		**-**	-	(50)
Depreciation	5	**61**	70	135
Loss on disposal of fixed assets		**-**	-	16
Share option charge	3	**165**	147	303
Working capital adjustments				
(Increase)/decrease in trade and other receivables		**(15)**	20	96
(Increase)/decrease in prepayments		**(73)**	(1)	17
(Decrease)/increase in trade and other payables		**(17)**	116	78
Cash utilised in operations		**(1,397)**	(1,207)	(2,554)
Finance costs paid		**(1)**	(51)	(4)
Taxation received		**-**	-	150
Net cash outflow from operating activities		**(1,398)**	(1,258)	(2,408)
Investing activities				
Finance income received		**-**	-	50
Purchase of fixed assets	5	**(18)**	(11)	(29)
Net cash (outflow)/inflow from investing activities		**(18)**	(11)	21
Financing activities				
Issue of ordinary share capital		**-**	-	7,015
Issue costs		**-**	-	(502)
Increase in convertible securities	7	**-**	-	500
Net cash inflow from financing activities		**-**	-	7,013
Net (decrease)/ increase in cash and cash equivalents		**(1,416)**	(1,269)	4,626
Cash and cash equivalents at the beginning of the period		**7,006**	2,380	2,380
Cash and cash equivalents at the end of the period		**5,590**	1,111	7,006

Notes to the Group Financial Statements

1. General Information

Quadrise Fuels International plc ("QFI", "Quadrise", or the "Company") and its subsidiaries (together with the Company, the "Group") are engaged principally to develop markets for its proprietary emulsion fuels, MSAR® and bioMSAR™ as low-cost, more environmentally friendly substitutes for conventional heavy fuel oil for use in power generation plants, industrial and upstream oil applications, and marine diesel engines. The Company's ordinary shares are quoted on the AIM market of the London Stock Exchange.

QFI was incorporated on 22 October 2004 as a limited company under UK Company Law with registered number 05267512. It is domiciled and registered at Eastcastle House, 27,28 Eastcastle Street, London, W1W 8DH.

2. Summary of Significant Accounting Policies

2.1 Basis of Preparation

The financial information contained in this results announcement has been prepared on the basis of the accounting policies set out in the statutory financial statements for the year ended 30 June 2021. Whilst the financial information included in this announcement has been prepared in accordance with the recognition and measurement requirements of UK IFRS, this announcement does not itself contain sufficient disclosures to comply with IFRS. The financial information does not constitute the Group's statutory financial statements for the years ended 30 June 2021 or 30 June 2020, but is derived from those financial statements. Financial statements for the year ended 30 June 2021 have been delivered to the Registrar of Companies and those for the year ended 30 June 2022 will be delivered following the Company's Annual General Meeting. The auditors' report on both the 30 June 2021 and 30 June 2020 financial statements were unqualified and did not contain statements under section 498 (2) or (3) of the Companies Act 2006. The auditors' report on the 30 June 2020 financial statements did draw attention to matters by way of emphasis while the auditors' report on the 30 June 2021 financial statements did not.

The directors have carried out a detailed assessment of going concern as part of the financial reporting process. Following a full review of the updated business plan, detailed budgets, associated commitments and potential future risks associated with COVID-19, Russia/Ukraine and Brexit, the directors have concluded that the Group has adequate financial resources to continue in operational existence for the going concern period, and therefore continue to adopt the going concern basis in preparing the accounts.

The interim accounts for the six months ended 31 December 2021 were approved by the Board on 25 March 2022.

The directors do not propose an interim dividend.

3. Share Option charge

On 3 September 2021 the Company granted a total of 14.5m share options to Directors and Employees with a weighted average exercise price of 5.7p and a weighted average fair value of 3.1p. The options were granted in accordance with the provisions of (a) the Company's Enterprise Management Incentive Plan ("EMI Plan"), in respect of awards of an aggregate of 1,462,929 Options (the "EMI Options") and (b) the Company's Unapproved Option Scheme 2016 ("2016 Scheme") in respect of awards of an aggregate of 13,052,793 Options ("2016 Scheme Options").

Director	Number of Options	Plan	Exercise price
Mike Kirk	3,776,931	2016 Scheme	7.5p (3m options) 1p (776,931 options)
Jason Miles	9,275,862	2016 Scheme	7.5p (7.5m options) 1p (1,775,862 options)
Employees	1,462,929	EMI Plan	1p
Total	14,515,722	-	-

The EMI Options and the 2016 Scheme Options granted with an exercise price of 1p will vest on the first anniversary of grant date. The 2016 Scheme Options granted with an exercise price of 7.5p will vest 50% on the first anniversary of the grant and 50% on the second anniversary of the date of grant. All vestings are subject to the satisfaction of certain performance conditions prior to the vesting date. The 2016 Scheme Options and the EMI Options will be exercisable from vesting until the eighth and tenth anniversaries of grant respectively.

Due to the departure of Mike Kirk from his role as Chairman of the Company effective 26 November 2021, the options above granted to him shall not vest further and as a result these options lapsed in full during the period.

During the period to 31 December 2020 the Company granted a total of 10.0m share options to Directors with a weighted average exercise price of 7.5p and a weighted average fair value of 2.1p. On 21 August 2021 these options lapsed in full due to the specific performance conditions of these options not having been met.

The Share Option Schemes are equity settled plans, and fair value is measured at the grant date of the option. Options issued under the Schemes vest over a one to three year period provided the recipient remains an employee of the Group. Options may be also exercised within one year of an employee leaving the Group at the discretion of the Board.

4. Loss Per Share

The calculation of loss per share is based on the following loss and number of shares:

	6 months ended 31 December 2021 Unaudited	6 months ended 31 December 2020 Unaudited	Year ended 30 June 2021 Audited
Loss for the period from continuing operations (£'000s)	**(1,519)**	(2,278)	(4,260)
Weighted average number of shares:			
Basic	**1,406,903,048**	1,063,639,425	1,175,406,844
Diluted	**1,406,903,048**	1,063,639,425	1,175,406,844
Loss per share:			
Basic	**(0.11)p**	(0.21)p	(0.36)p
Diluted	**(0.11)p**	(0.21)p	(0.36)p

Basic loss per share is calculated by dividing the loss for the period from continuing operations of the Group by the weighted average number of ordinary shares in issue during the period.

For diluted loss per share, the weighted average number of ordinary shares in issue is adjusted to assume conversion of all potential dilutive options and warrants over ordinary shares. Potential ordinary shares resulting from the exercise of share options and warrants have an anti-dilutive effect due to the Group being in a loss position. As a result, diluted loss per share is disclosed as the same value as basic loss per share.

The 27.2 million exercisable share options and 40.2 million exercisable warrants issued by the Company and which are outstanding at the period-end could potentially dilute earnings per share in the future if exercised when the Group is in a profit-making position.

5. Property, Plant and Equipment

	Leasehold improvements £'000	Computer equipment £'000	Software £'000	Office equipment £'000	Plant and machinery £'000	Total £'000
Cost						
Opening balance – 1 July 2021	74	98	43	16	1,397	1,628
Additions	5	1	-	-	12	18
Disposals	-	-	-	-	-	-
Closing balance – 31 December 2021	**79**	**99**	**43**	**16**	**1,409**	**1,646**
Depreciation						
Opening balance – 1 July 2021	(74)	(92)	(43)	(16)	(943)	(1,168)
Depreciation charge for the period	-	(1)	-	-	(60)	(61)
Disposals	-	-	-	-	-	-
Closing balance – 31 December 2021	**(74)**	**(93)**	**(43)**	**(16)**	**(1,003)**	**(1,229)**
Net book value at 31 December 2021 - unaudited	**5**	**6**	**-**	**-**	**406**	**417**
Cost						
Opening balance – 1 July 2020	181	95	43	16	1,410	1,745
Additions	-	3	-	-	8	11
Disposals	-	-	-	-	-	-
Closing balance – 31 December 2020	**181**	**98**	**43**	**16**	**1,418**	**1,756**
Depreciation						
Opening balance – 1 July 2020	(181)	(89)	(43)	(16)	(834)	(1,163)
Depreciation charge for the period	-	(2)	-	-	(68)	(70)
Disposals	-	-	-	-	-	-
Closing balance – 31 December 2020	**(181)**	**(91)**	**(43)**	**(16)**	**(902)**	**(1,233)**
Net book value at 31 December 2020 - unaudited	**-**	**7**	**-**	**-**	**516**	**523**
Cost						
Opening balance – 1 July 2020	181	95	43	16	1,410	1,745
Additions	-	3	-	-	26	29
Disposals	(107)	-	-	-	(39)	(146)
Closing balance – 30 June 2021	**74**	**98**	**43**	**16**	**1,397**	**1,628**
Depreciation						
Opening balance – 1 July 2020	(181)	(89)	(43)	(16)	(834)	(1,163)
Depreciation charge for the year	-	(3)	-	-	(132)	(135)
Disposals	107	-	-	-	23	130
Closing balance – 30 June 2021	**(74)**	**(92)**	**(43)**	**(16)**	**(943)**	**(1,168)**
Net book value at 30 June 2021 - audited	**-**	**6**	**-**	**-**	**454**	**460**

6. Intangible Assets

	QCC royalty payments £'000	MSAR® trade name £'000	Technology and know-how £'000	Total £'000
Cost				
Balance as at 1 July 2021 and 31 December 2021	**7,686**	**3,100**	**25,901**	**36,687**
Amortisation and Impairment				
Balance as at 1 July 2021 and 31 December 2021	**(7,686)**	**(176)**	**(25,901)**	**(33,763)**
Net book value at 31 December 2021 - unaudited	**-**	**2,924**	**-**	**2,924**
Cost				
Balance as at 1 July 2020 and 31 December 2020	7,686	3,100	25,901	36,687
Amortisation and Impairment				
Balance as at 1 July 2020 and 31 December 2020	(7,686)	(176)	(25,901)	(33,763)
Net book value at 31 December 2020 - unaudited	-	2,924	-	2,924
Cost				
Balance at 1 July 2020 and 30 June 2021	7,686	3,100	25,901	36,687
	-	-	-	-
Amortisation and Impairment				
Balance at 1 July 2020 and 30 June 2021	(7,686)	(176)	(25,901)	(33,763)
Net book value at 30 June 2021 - audited	-	2,924	-	2,924

Intangibles comprise intellectual property with a cost of £36.69m, including assets of finite and indefinite life. QCC royalty payments of £7.69m and the MSAR® trade name of £3.10m are termed as assets having indefinite life as it is assessed that there is no foreseeable limit to the period over which the assets are expected to generate net cash inflows for the Group. The assets with indefinite life are not amortised. The remaining intangibles amounting to £25.90m, primarily made up of technology and know-how, are considered as finite assets and are now fully amortised. The Group does not have any internally generated intangibles.

The Group tests intangible assets annually for impairment, or more frequently if there are indications that they might be impaired. As at 30 June 2021, the QCC royalty payments asset was fully impaired and the MSAR® trade name asset had a net book value of £2.924m. For the six month period to 31 December 2021, there was no indication that the MSAR® trade name asset may be impaired.

As a result, the Directors concluded that no impairment is necessary for the six month period to 31 December 2021.

7. Convertible securities

On 22 August 2019, the Company entered into an agreement with Bergen Global Opportunity Fund LP ('the Investor') whereby the Investor agreed to provide up to £4.0 million of interest free unsecured funding in two tranches via the issue by the Company of Convertible Securities with a nominal value of up to £4.3 million, convertible into Ordinary Shares.

An initial tranche of Convertible Securities with a nominal value of £2.15 million was subscribed for by the Investor for £2.0 million on 30 August 2019. A second tranche of Convertible Securities, with a nominal value of up to £537.5k was subscribed for by the Investor for £0.5 million on 10 February 2021. Both tranches had 24 month maturity dates from the dates of their respective issuance, and any Convertible Securities not converted prior to such dates will automatically convert into Ordinary Shares at such time.

The Company also issued 4.9 million 36 month warrants to subscribe for new Ordinary Shares to the Investor by way of a Warrant Instrument initially exercisable at 5.78p per Ordinary Share, subject to anti-dilution and exercise price reduction provisions.

In connection with the Agreement, on 30 August 2020 the Company also issued to the Investor 3,888,889 new Ordinary Shares in settlement of a commencement fee of £140,000 and a further 4,500,000 new Ordinary Shares to collateralise the Agreement subscribed for at nominal value by the Investor.

The Convertible Securities were only convertible to the extent that the Company has corporate authority to do so, and it was a term of the agreement that the Company must retain sufficient authority to issue and allot (on a non-pre-emptive basis) a sufficient number of Ordinary Shares potentially required to be issued under the terms of the Agreement (and the Warrant Instrument).

The Agreement was completed and both tranches funded to the Company on the basis of the remaining Authority from the 2018 Annual General Meeting, and the updated authority obtained at the 27 September 2019 General Meeting of shareholders.

Debt and equity instruments issued by the Company are classified as either financial liabilities or as equity. An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Under the terms of the Convertible Securities agreement of 22 August 2019, the Company had no obligation to repay the securities in cash (unless the Company defaulted on the terms) and the number of shares which may be issued upon conversion was variable. As there was no residual interest in the assets of the Company after conversion of the Convertible Securities, the Convertible Securities met the criteria to be classified entirely as a financial liability.

Tranches 1 and 2 of the Convertible Securities instrument were designated at fair value on initial recognition. The fair value of tranche 1 was assessed as £1.86m, being the nominal value of £2.15m less interest and warrant charges. The fair value of tranche 2, which had a nominal value of £537.5k was assessed as £1.19m, with tranche 2 being fully converted on 30 April 2021, and therefore no balance remains outstanding. Upon each exercise of conversion rights, the portion of the Convertible Securities converted was assessed at fair value, with the resulting fair value adjustment being recorded in the Statement of Comprehensive Income.

The fair value adjustment charge arising for the period of £nil (2020: £668k) comprises fair value adjustments arising upon initial recognition, revaluation as at balance sheet dates and upon subsequent conversion.

During the term of the Convertible Securities agreement, the Investor exercised their conversion rights as follows:

Conversion date	Convertible Securities converted (£)	Conversion price (p)	No. of shares awarded upon conversion	Share price on conversion date	Fair value adjustment (£'000)
23 March 2020	100,000	1.2	8,333,333	1.68	40
15 April 2020	100,000	1.2	8,333,333	1.64	36
22 June 2020	250,000	1.1	22,727,273	2.98	426
19 August 2020	300,000	1.6	18,750,000	2.90	244
7 September 2020	400,000	1.7	23,529,412	2.76	248
5 January 2021	500,000	1.8	27,777,778	3.01	336
26 January 2021	500,000	2.0	25,000,000	3.40	350
30 April 2021	537,500	3.2	16,796,875	5.50	386
Total	2,687,500		151,248,004		2,066

As at 31 December 2021, both tranches have been converted in full, and no nominal value remains outstanding to the investor under the terms of the Convertible Security instrument.

8. Related Party Transactions

Non-executive Director Laurie Mutch is also a Director of Laurie Mutch & Associates Limited, which has provided consulting services to the Group. The total fees charged for the period amounted to £5k (31 December 2020: £5k). The balance payable at the statement of financial position date was £nil (31 December 2020: £5k).

QFI defines key management personnel as the Directors of the Company. Other than the above, and the issuance of share options to Directors (note 3) there are no transactions with Directors other than their remuneration.

9. Events After the End of the Reporting Period

On 1 February 2022 the Company announced the appointment of Andy Morrison as Non-Executive Chairman with immediate effect.

10. Copies of the Interim Accounts

Copies of the interim accounts are available on the Company's website at www.quadrisefuels.com.