

Quadrise
ENERGY DECARBONISATION

Annual General Meeting

27th November 2023

Disclaimer

This document ("Presentation") has been prepared by Quadrise plc (the "Company"). It has not been verified and is for information purposes only. Where used in this document, Presentation shall mean and include the slides that follow, the oral presentation of the slides by the Company's officers, any question and answer session that follows the oral presentation and hard copies of this document. This Presentation does not constitute a prospectus or admission document relating to the Company, nor does it constitute or form part of any offer or invitation to purchase, sell or subscribe for, or any solicitation of any such offer to purchase, sell or subscribe for, any securities in the Company nor shall this Presentation or any part of it, or the fact of its distribution, form the basis of, or be relied on in connection with, any contract therefor.

This document has been provided to each recipient at their request, solely for their information, and may not be reproduced, copied, published, distributed or circulated, to any third party, in whole or in part, or published in whole or in part for any purpose, without the express prior written consent of the Company.

The content of this Presentation has not been approved by an "authorised person" within the meaning of section 21 of the Financial Services and Markets Act 2000, as amended ("FSMA"). Reliance on this Presentation for the purpose of engaging in any investment activity may expose an individual to a significant risk of losing all of the property or other assets invested. This Presentation should not be considered as the giving of investment advice by the Company or any of its shareholders, directors, officers, agents, employees or advisers. This Presentation is not being made available to persons in Australia, Canada, Japan, the Republic of South Africa or any other jurisdiction in which it may be unlawful to do so and it should not be delivered or distributed, directly or indirectly, into or within any such jurisdictions. If the recipient of the Presentation cannot lawfully receive the Presentation such recipient must not act or rely on the Presentation or any of its contents and must immediately return the Presentation to the Company.

Certain of the information contained in this Presentation has been obtained from published sources prepared by other parties. Certain other information has been extracted from unpublished sources prepared by other parties which have been made available to the Company. Although it has acted diligently, the Company has not carried out an independent investigation to verify the accuracy and completeness of such published and unpublished third-party information. No responsibility is accepted by the Company or any of its directors, officers, employees or agents for the accuracy or completeness of such information. Save in the case of fraud, no liability is accepted for any errors, omissions or inaccuracies in such information or opinions by the Company, its directors, officers, associates or advisers and such persons shall under no circumstance be liable to any for any lost profits or lost opportunity, indirect , incidental, consequential, special or punitive damages whatsoever.

No reliance may be placed, for any purposes whatsoever, on the information contained in this Presentation or on its completeness and this Presentation should not be considered a recommendation by the Company or any of their respective affiliates in relation to any purchase of or subscription for securities of the Company as it is for information purposes only and reflects what is in the public domain. While the information contained in this Presentation has been prepared in good faith, no representation or warranty, express or implied, is made or given by or on behalf of the Company or any of its directors, officers, employees or agents as to the accuracy, completeness, sufficiency or fairness of the information or opinions contained in this Presentation and no responsibility or liability is accepted by any person for such information or opinions. No person has been authorised to give any information or make any representations other than those contained in this Presentation and, if given and/or made, such information or representations must not be relied upon as having been so authorised.

Certain statements included in this Presentation contain forward-looking information regarding the Company's strategy, operations, financial performance, outlook, growth opportunities and circumstances in the sectors or markets in which the Company operates. By their nature, forward-looking statements involve uncertainty because they depend on future circumstances, and relate to events, not all of which are within the Company's control or can be predicted by the Company. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Actual results could differ materially from those set out in the forward-looking statements. The forward-looking statements made in this Presentation relate only to events as of the date on which the statements are made. Words such as “may”, “will”, “to”, “expect”, “plan”, “believe”, “anticipate”, “intent”, “could”, “would”, “estimate” or “continue” or the negative or other variations thereof or comparable terminology is intended to identify forward-looking statements. Nothing in this Presentation should be construed as a profit forecast and no part of these results constitutes, or shall be taken to constitute, an invitation or inducement to invest in the Company, and must not be relied upon in any way in connection with any investment decision. Except as required by law, the Company undertakes no obligation to update any forward-looking statements.

By attending the Presentation or requesting a copy of the Presentation, each attendee or recipient of the Presentation agrees to be bound by the foregoing and, in particular, will be taken to have represented, warranted and undertaken to the Company that: (i) they have read and agreed to comply with the contents of this disclaimer; and (ii) they are a person to whom the Presentation can be lawfully made, supplied or distributed; and (iii) they have agreed to keep the information contained in the Presentation or made available in connection with any further enquiries confidential.



Welcome & Opening Statement

With proven technology solutions for today and a promising pipeline for the future, Quadrise is now preparing resources for scale-up

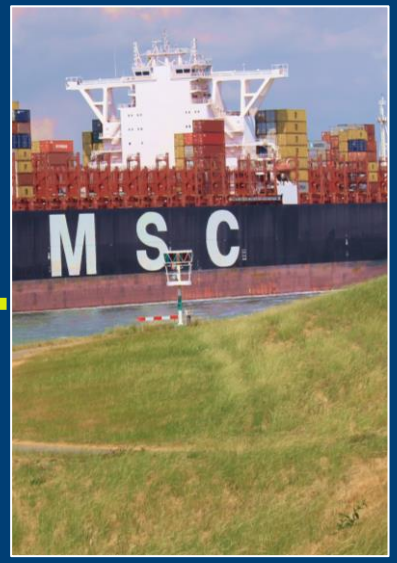
bioMSAR™ proven for the first time in an industrial scale application at high power, full load and fuel stable after 1 year





Entry into North America with scalable solution for low-carbon fuel

Planned commercial trial with MSC, as blueprint for decarbonisation of shipping

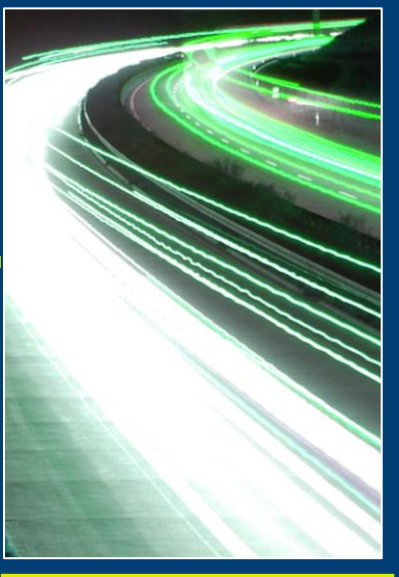




New patent applications for Blend-on-Board solution and Crude Sugar Oil bioMSAR™

Opportunity for a viable net-zero fuel using biomass-derived sugars as a feedstock





Structured process with investment bank to secure partners for decarbonisation of shipping & low carbon fuels in N.America

Quadrise



Introduction

Quadrise
ENERGY DECARBONISATION

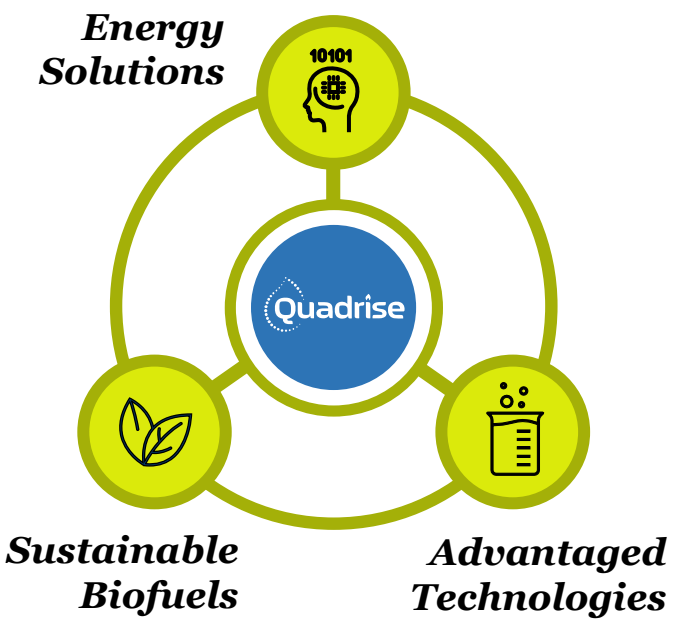
CLEANER, CHEAPER, SIMPLER, & SAFER ENERGY

A GLOBAL IMPERATIVE

- Global phase-out of fuel oil for marine, power & industrials.
- A $236 billion market (2022)*.
- Cleaner, more efficient, lower carbon options are needed.
- Legislation, led by EU is impacting energy plans and demand for new options.
- Global fleet of existing plants & diesel engines for power generation & propulsion needs a simple solution.

* Based on 2022 HFO market data and prices on 28 April 2022.

OUR STRATEGIC FOCUS



TODAY'S AGENDA:

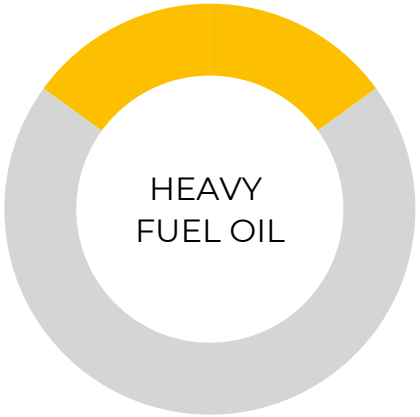
1 INTRODUCTION

2 BUSINESS UPDATE

3 QUESTIONS & ANSWERS

Quadrise's products offer viable decarbonisation pathways as 'drop-in' solutions into existing infrastructure

30% Distillates



70% Residuals

Conventional **Heavy Fuel Oil** (HFO) incorporates valuable distillates in order to achieve required viscosity.

30% Water
(incl. < 1% additives)

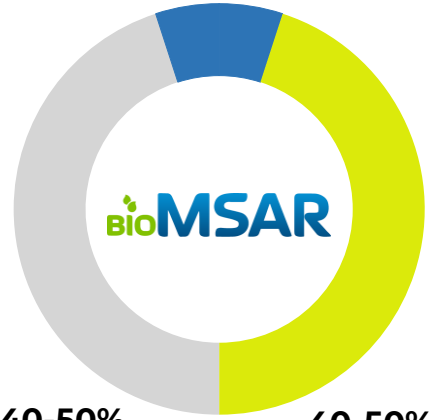


70% Residuals

MSAR® oil-in-water emulsion, with 9% lower CO2 vs HFO.

As CCS (Carbon Capture & Storage) technologies mature, fuel produced with CCS could be used in MSAR® production from heavy oil to create '**MSAR® Zero**', a net-zero fuel.

10% Water
(incl. < 1% additives)



40-50% Residuals

40-50% Biofuel

bioMSAR™ is the renewable version of MSAR® incorporating c.40% renewable glycerine. This results in 20% lower CO2, 20-25% lower NOx and 7% higher efficiency vs marine diesel.

A formulation with 70% renewable glycerine is also possible, giving 50% lower CO2.

10% Water
(incl. < 1% additives)



90% Biofuel

bioMSAR™ Zero aims to replace the hydrocarbon components with zero carbon substitutes.

R&D is in progress.

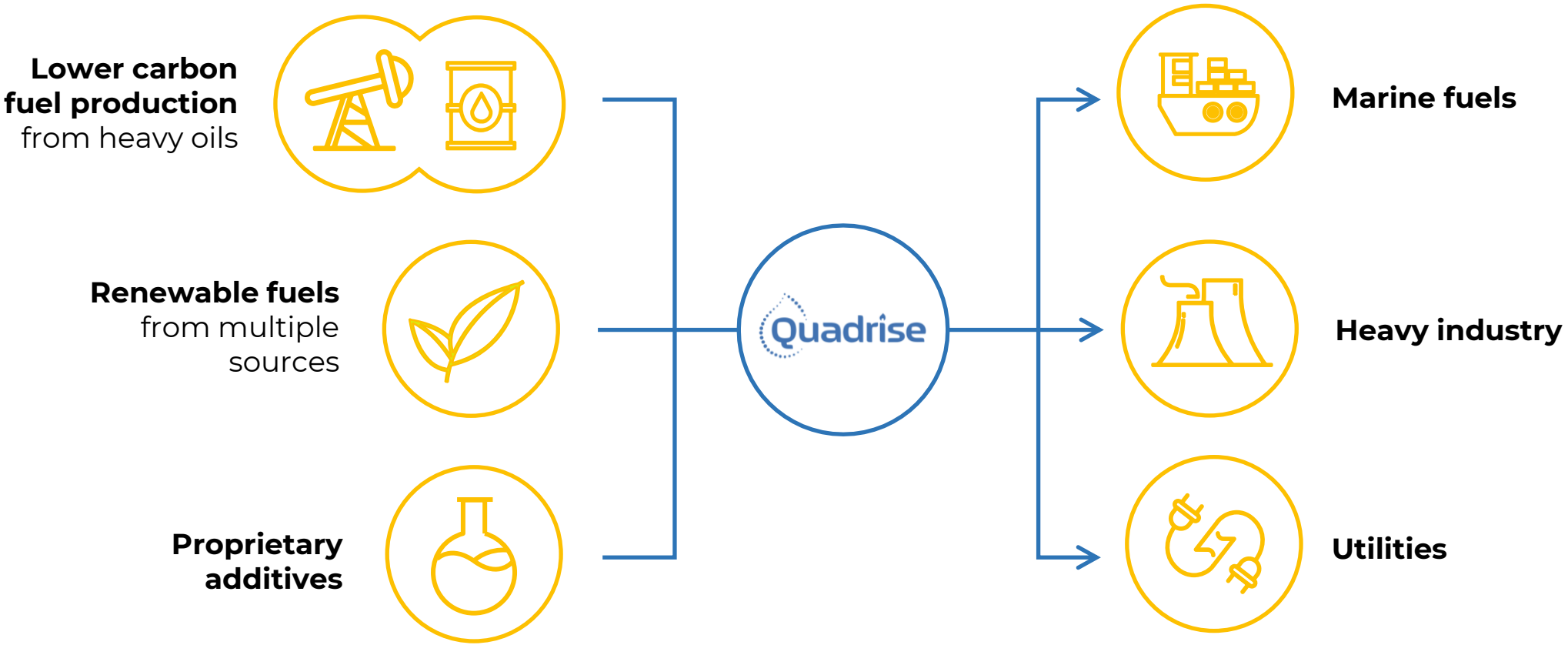
Target launch by 2030.

Quadrise

Multiple global sectors can benefit from leveraging Quadrise's technology & fuels

Production of MSAR® or bioMSAR™ using Quadrise's technology

Consumption of Quadrise's MSAR® or bioMSAR™ products



Quadrise

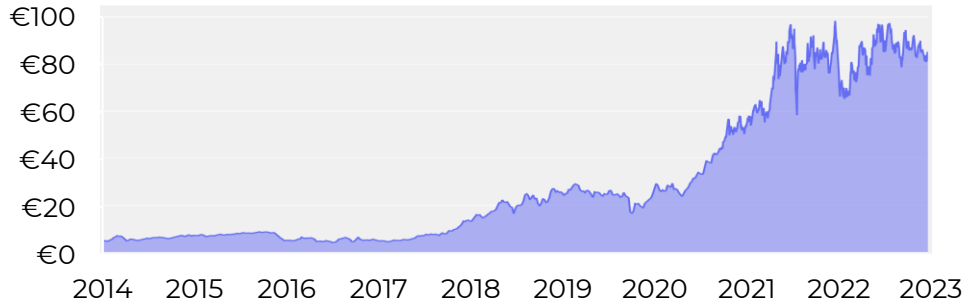
Sectors benefitting from Quadrise's technology

The global challenge of decarbonisation and the rising prices of carbon create a favourable environment for solutions such as ours

Europe's carbon price topped €100 this year; other regions will follow

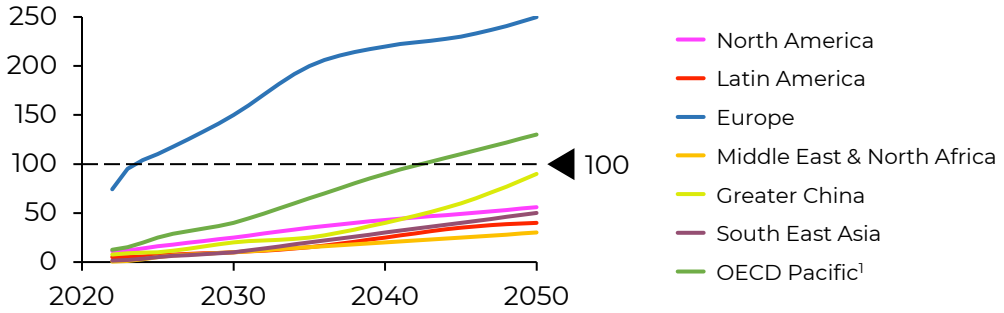
EU Carbon Allowance Futures

€/tCO_2



Carbon Price by Region

USD/tCO_2

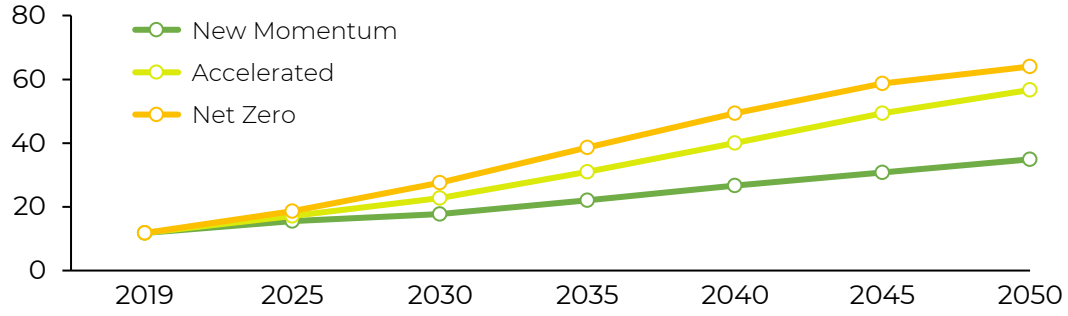


Source: DNV Energy Transition Outlook 2023

In any scenario, the world needs to decarbonise and renewables will displace fossil fuels

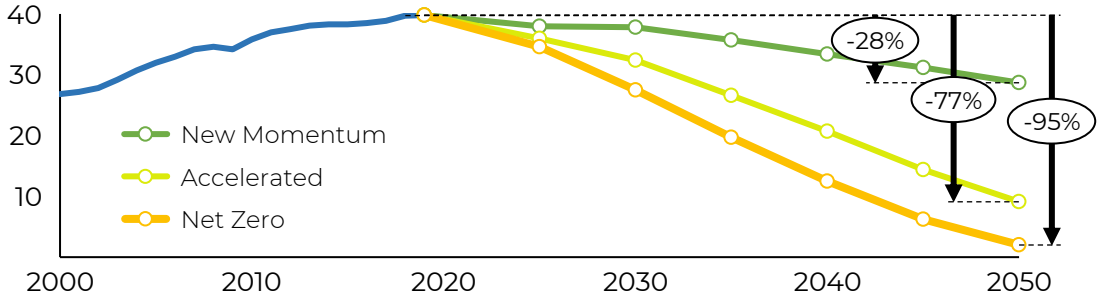
Renewables

% Share of Primary Energy



Carbon emissions

Gt of CO_2e



Source: BP Energy Outlook 2023[2]

[1] OECD Pacific includes Australia, New Zealand, Japan and Republic of Korea

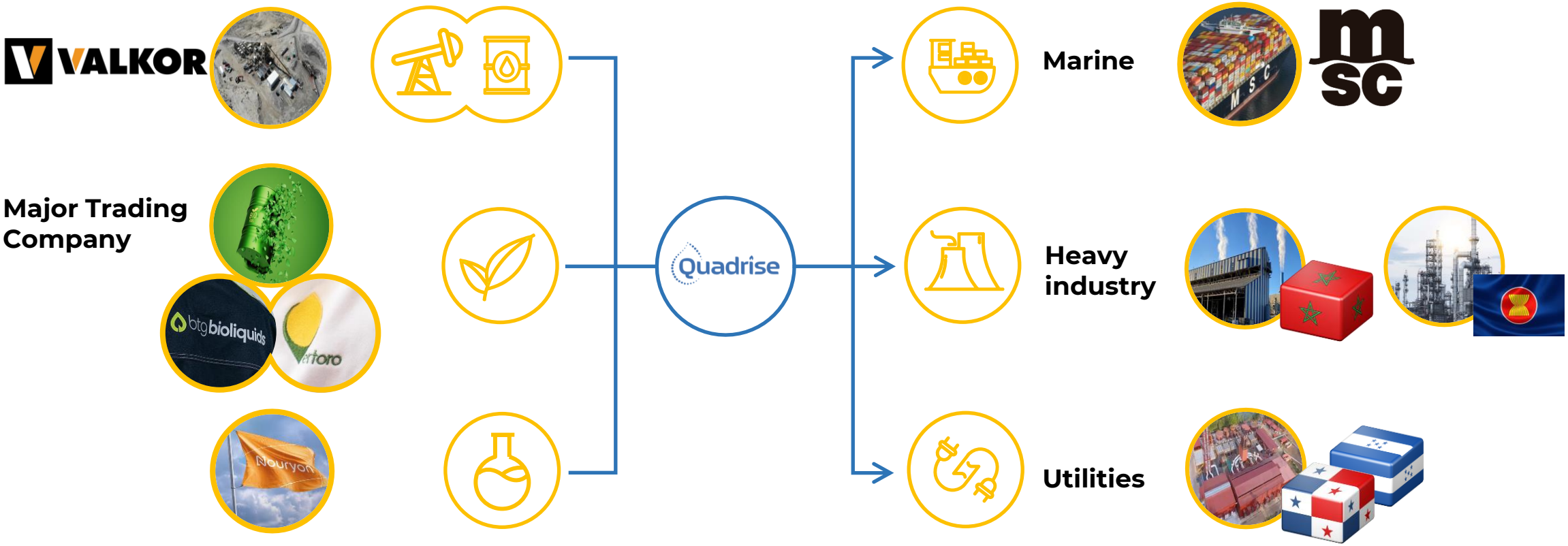
[2] Three scenarios: **New Momentum** reflects the current broad trajectory of the world's energy system. By 2050, global carbon emissions are around 30% below 2019 levels. **Accelerated** achieves around 75% reduction, and **Net Zero** achieves over 95% reduction.



Business Update:

Projects & Resources

Multiple projects are progressing towards commercial agreements, presenting tangible opportunities for partnering to drive scale and speed



Segment: Industrial
HSFO, Biofuel

Morocco refueling opportunity (2-5 kbpd total)

2022 **2023** **2024** **2025**

★ June '22: Signed Material Transfer & Cooperation Agreement

Safety reviews, fuel production and equipment delivery

Equipment delivery & commissioning

Resolving pump equipment failure

Negotiating fuel supply agreement with refinery

★ Successful completion of trial at Client's 'Site B'

★ Conclude commercial supply T&Cs for 'Site B' **

Complete other site trials as needed **



** Forward-looking statements outline Quadrise intentions rather than contractual agreements at this time.

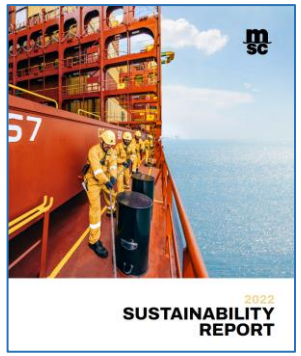
multi-product opportunity (0.5 kbpd/ship)

Segment: Marine
HSFO, VLSFO, Biofuel

2022 **2023** **2024** **2025**

★ July '22: Signed agreement

bioMSAR™ fuel tested by Wärtsilä and confirmed to have similar injection and combustion properties as MSAR®



Vessel MSC Leandra in dry dock for refitting ahead of proof-of-concept trials

Negotiation with fuel suppliers for trial

Hazard identification and operability workshop involving Quadrise, MSC, Wärtsilä and Lloyds Register

★ Dec '23: Sign agreements with MSC, Major Trader & Terminal **

★ Expected trial for 4000 operating hours (6-8 months)** Review Blend-on-Board Opportunities.



** Forward-looking statements outline Quadrise intentions rather than contractual agreements at this time.

Segment: Upstream (to Marine) *VLSFO, Biofuel*

VALKOR *heavy sweet oil (multi-site 3-10 kbpd ea.)*

2022 **2023** **2024** **2025**

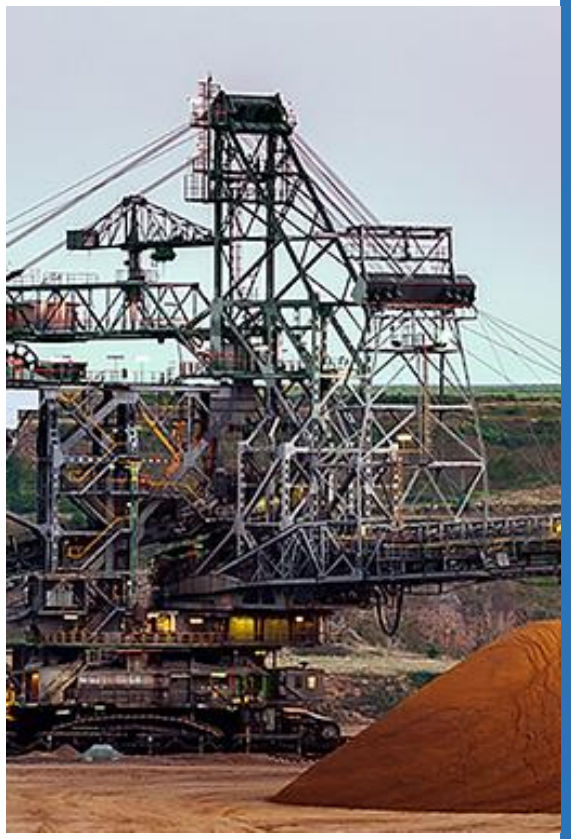
★ April '22: Signed agreement

Technical and commercial discussions. Valkor initiate project finance initiatives

★ June '22: Site license and supply agreement (SLA), & heads of agreement signed with Valkor

★ Valkor drilling permit awards, project finance approvals pending releasing $1m to QED* for SLA

★ Deliver QED equipment to site ($0.5m), initiate client trials & supply agreements*



Quadrise

* Pending Q4 Utah Valkor project financing of min. US$15m.
** Forward-looking statements outline Quadrise intentions rather than contractual agreements at this time.

Other early-stage opportunities

Segment: Power, Refining, *HSFO, Biofuel*

Central American powerplants & refineries



Technical exchanges and preparation of Letters of Intent (LOI)

Signed LOI with Central American power provider for MSAR® & bioMSAR™ commercial tests

Proceedings suspended due to national power emergency

Commercial Test Agreement signed. Equipment delivery and trial**



2022 **2023** **2024** **2025**

South-east Asian refineries



Scoping of refinery refuelling & proof of concept trial

Testing of Client refinery samples of residue and water streams

Commercial Test Agreement signed. Equipment delivery and trial**



** Forward-looking statements outline Quadrise intentions rather than contractual agreements at this time

Segment:
Biofuels

bioMSAR *product development, targeting* bioMSAR ZERO

APPRAISE

SHORT-LIST

Bio-lactic Acid

Limited availability of feedstock.

Bio-methanol

Bio-methanol was blended and reached up to 2% using standard bioMSAR™ formulation.

LAB TEST

SVO

Test blending with Straight Vegetable Oil planned Q1'24.

TPO

bioMSAR™ has been successfully produced using Tyre Pyrolysis Oils.

WPO

JDA with BTG Bioliquids BV. Investigating blending Wood Pyrolysis Oils and pyrolytic sugars into bioMSAR™.

ENGINE TEST

Methyl Esters

Blending tests at QRF with Methyl Esters have been successful. Tests completed at Aquafuel using FAME B30 in bioMSAR™. More testing planned (UCO, bio-oils etc).

Sugars

JDA with Vertoro BV. Stable blends achieved with 40% Crude Sugar Oil.



Quadrise

Our purpose, values & mission shape our ESG-aligned strategy

OUR PURPOSE

Delivering innovative energy solutions for a cleaner planet

OUR VALUES

Drive | Expertise | Integrity

OUR MISSION

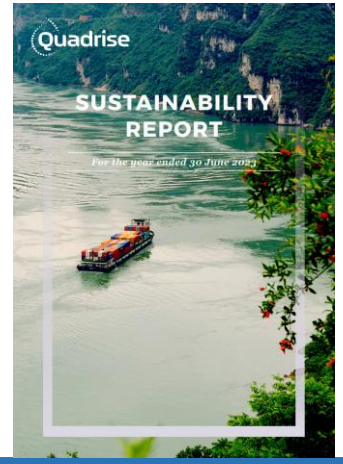
To be the leading emulsion-based energy solutions provider to benefit the environment and create value for our stakeholders

OUR STRATEGIC PRIORITIES

- Disciplined project & commercial delivery
- Continued innovation towards net-zero fuels
- Partner to build holistic customer propositions

OUR POSITIVE IMPACT

- Cleaner, cheaper energy
- Advance the energy transition
- Value for investors, customers, employees & society



Quadrise

Resources



Strategic

Ongoing initiatives are underway to secure strategic partners to support and accelerate the growth of future marine and US low carbon fuels businesses, respectively.



Financial

- Cash of £1.34 million at 30 June 2023. Fundraise of £1.94m (gross) in July 2023.
- With planned receipt of US$1.5m from Valkor, at current spend rate of ~£240k per month (plus discretionary net project/RDI costs) this is sufficient until end June 2024.
- Tax losses of £62 million potentially available to offset against future profits.

Team

- The Quadrise team of nine staff includes engineering and chemistry specialists based in our London head office and Essex RDI facility.
- With additional support from our team of consultants, the Quadrise team are fully equipped to take the company through to commercialisation.
- Vicky Boiten-Lee recently appointed as NED, to replace Phil Snaith.

Quadrise

Summary

ENERGY DECARBONISATION

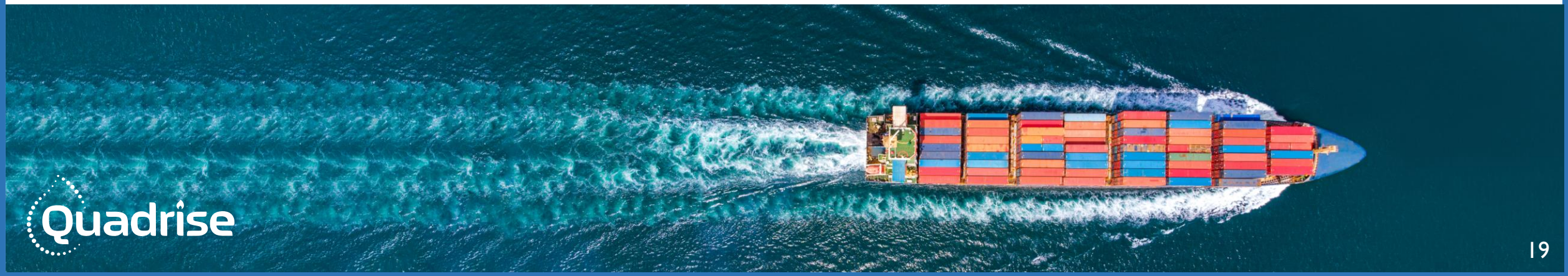
- External environment is conducive to our business.
- Well-positioned to serve energy-intensive sectors.
- Proven technology that meets customer needs: Cleaner, Cheaper, Simpler & Safer energy.

BUSINESS UPDATE

- Portfolio of projects in major energy sectors.
- Strong collaboration with leading global companies.
- Leadership and technical capability in place, ready for project delivery.

PLANNING FOR GROWTH

- Delivering trials to reach commercial agreements.
- Progressing net zero biofuels.
- Current cash plus planned Valkor receipts of US$1.5m sufficient to fund Quadrise operations to end June 2024.
- Strategic partnership initiative underway.



Quadrise

Quadrise

Business address:
Foresight House,1
0/10A Arthur Street
London EC4R 9AY

+44 20 7031 7321

General Enquiries: info@quadrise.com
Investor Relations: ir@quadrise.com

Quadrise plc is registered in England & Wales
Company registration number: 5267512
Quadrise International Ltd is registered in England & Wales
Company registration number: 5587832



Questions & Answers



Appendices

Financial results, year ended 30 June 2019 – 2023

	2023 (£m)	2022 (£m)	2021 (£m)	2020 (£m)	2019 (£m)
INCOME STATEMENT					
Revenue	-	0.08	0.01	-	0.02
Operating loss	(3.26)	(2.76)	(4.45)	(4.85)	(3.16)
Net loss after tax	(3.09)	(2.60)	(4.26)	(4.84)	(2.98)
EPS – Basic (p)	(0.22)	(0.18)	(0.36)	(0.49)	(0.34)

BALANCE SHEET					
Total Assets	**5.02**	**8.03**	**10.66**	**6.27**	**5.05**
Non-current Assets	3.30	3.32	3.38	3.51	3.65
Current assets	1.72	4.70	7.28	2.77	1.40
Total liabilities	**0.17**	**0.26**	**0.28**	**2.24**	**0.29**
Current liabilities	0.17	0.26	0.28	2.24	0.29
Net Assets	**4.85**	**7.77**	**10.38**	**4.03**	**4.76**
Total Equity	**4.85**	**7.77**	**10.38**	**4.03**	**4.76**
Equity and liabilities	**5.02**	**8.03**	**10.66**	**6.27**	**5.05**

Quadrise

Board & Senior Management



Andy Morrison, NED Chair

Experience: 17 years Royal Dutch Shell (oil products, lubricants, specialty chemicals), BG Group, BOC Group, joined Quadrise in 2022.

Education: BSc (Chem.Eng, Sheffield),



Vicky Boiten-Lee, NED

Experience: 20 years Royal Dutch/Shell (EU, Eastern/AP, USA, Lubricants & Downstream), Net-zero Consultant.

Education: B.Eng (Chem.Eng, Malaya), MBA (Strathclyde), Business & Sustainability Leadership (Cambridge)



Laurie Mutch, NED

Experience: 25 years Royal Dutch/Shell (Gas & Power, Coal & Chemicals), Management Consultant.

Education: BSc (Maths & Physics), MSc (Astrophysics)



Jason Miles, CEO

Experience: 30 years oil and emulsion fuels with BP, PDVSA, OpenLink, joined Quadrise in 2006

Education: B.Eng (Chem.Eng, Loughborough), Exec MBA (Cass/City)



David Scott, CFO

Experience: KPMG, Cable & Wireless, Consolidated Water Co Ltd (NASDAQ-listed), joined Quadrise in 2011.

Education: MSc.Physics (Durham), Chartered Accountant



Philip Hill, COO

Experience: 20 years BP, INEOS (fuels & chemicals manufacturing, sales & distribution, production ops, tech licensing), joined Quadrise 2022.

Education: B.Eng (Chem.Eng, UMIST)



Dilip Shah, NED

Experience: 25 years commercial experience trading & manufacturing in West Africa focusing on fertilisers, chemicals and food products.



MSP Corporate Services Limited (Ian Farrelly),

Company Secretary

Quadrise