

Hydrocarbon Dynamics Limited 

(ABN 75 117 387 354)

**ANNUAL REPORT
FOR THE YEAR
ENDED 31 DECEMBER 2023**

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DIRECTORS' REPORT

In accordance with a resolution of directors, the directors present their report together with the Annual Report of Hydrocarbon Dynamics Limited and its wholly owned subsidiaries (together referred to as the 'Group' or HCD') for the financial year ended 31 December 2023 and the Independent Audit Report thereon. In order to comply with the provisions of the *Corporations Act 2001*, the Directors Report as follows:

1. INFORMATION ON DIRECTORS

The directors of HCD at any time during or since the end of the financial year were:

(a) STEPHEN MITCHELL

Non-Executive Director (appointed 12 January 2016)

Special responsibilities:

Non-Executive Chairman

Experience:

Stephen has a Masters Degree in International Economics and Foreign Policy from Johns Hopkins University in Washington DC. following which he spent 12 years as a natural resources specialist at investment banks and advisory firms in the US and Australia. From 1999-2011 Stephen was the Managing Director of Molopo Energy Ltd, an ASX-listed oil and gas Company that held assets in Australia, Canada, USA, China, India and South Africa. Under his stewardship, Molopo generated a 10 fold increase in shareholder value and expanded its market capitalisation from less than \$1 million into an ASX 200 company.

Directorships held in other listed entities in the last three years:

None

(b) RAY SHORROCKS

Non-Executive Director (appointed 12 January 2016)

Special responsibilities:

Chairman of the Remuneration and Nomination Committee

Member of the Audit Committee

Experience:

Mr Shorrocks has more than 22 years' experience in corporate finance and has advised a diverse range of mining and resource companies during his career at Patersons Securities Limited, one of Australia's largest full-service stockbroking and financial services firms. He has been instrumental in managing and structuring equity capital raisings as well as having advised extensively in the area of mergers and acquisitions.

Directorships held in other listed entities in the last three years:

He also holds, or has held, directorships in the following ASX listed companies in the last three years:

- Alicanto Minerals (appointed 7 August 2020)
- Firefly Metals (appointed 28 January 2020)
- Galilee Energy Limited (appointed 2 December 2013)
- Cygnus Metal Ltd (appointed 30 June 2020)
- Mitre Mining Limited (appointed 7 February 2023)

(c) ANDREW SEATON

Non-Executive Director (appointed 16 August 2019)

Special Responsibilities:

Chairman of Audit Committee

Member of the Remuneration and Nomination Committee

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Experience:

Andrew is an experienced energy executive with a background in finance, project management and investment banking. Andrew was a senior executive with Santos Limited for twelve years, the last six of which he served as Chief Financial Officer. Prior to joining Santos, Andrew worked in investment banking with Merrill Lynch in Melbourne and New York. His early career included 10 years as a process engineer and project manager across a range of upstream oil and gas projects and operating plants. Andrew has an Honours Degree in Chemical Engineering and a Graduate Diploma in Business Administration.

Directorships held in other listed entities in the last three years:

He also holds, or has held, directorships in the following ASX listed companies in the last three years:

- Strike Energy Limited (appointed 18 August 2017).
- Rex Minerals Limited (appointed 1 December 2021)

(d) NICK CASTELLANO

Executive Director (appointed 6 April 2017)

Special responsibilities:

Member of the Remuneration and Nomination Committee

Experience:

Nick is a Hydrocarbon Dynamics founder and is the inventor of the HCD Multi-Flow[®] technology. Nick spent a decade in the nuclear power program of the United States Navy, ultimately becoming the leading chief of the reactor laboratory division of the nuclear powered aircraft carrier the Dwight D. Eisenhower, where he assumed responsibilities for chemistries in the reactor plants. After leaving, Nick developed cutting edge chemistry and patented processes in the industrial water and oil industries. In the industrial water industry Nick founded an industrial water treatment company with clients such as Pepsi Cola, Coca Cola and United Dairymen. In the oil industry Nick focused on oil well chemistry, developing and founding the technology of HCD. Nick has a Bachelor of Science Degree in Biochemistry, a Masters Degree in Biochemistry and completed his MA PHD at Canterbury University.

Directorships held in other listed entities in the last three years:

None.

Director Interests

The relevant interest of each director in the shares, rights or options over such instruments issued by the companies within the Group, as notified by the directors to the Australian Securities Exchange in accordance with *S205G(1) of the Corporations Act 2001 and Reg. 2M.3.03(1) of the Corporations Regulations 2001*, at the date of this report is as follows:

Director	Ordinary shares
Stephen Mitchell	95,748,372
Nicholas Castellano	6,168,140
Ray Shorrocks	11,462,050
Andrew Seaton	4,090,840

There are no contracts to which a director is a party or under which a director is entitled to a benefit that confer a right for the director to call for shares in HCD.

2. COMPANY SECRETARY

Ms Julie Edwards was appointed Company Secretary on 1 July 2016 and continues in office at the date of this report.

Julie holds a Bachelor of Commerce degree, is a member of CPA Australia and holds a Public Practice Certificate. Ms Edwards is a director and manager of Lowell Accounting Services and also provides company secretarial services for a number of other ASX listed companies and unlisted companies.

3. DIRECTORS' MEETINGS

The number of meetings of the Board and of each Board Committee held during the year (while each director was a director or committee member) and the number of meetings attended by each director are set out below:

	Board of Directors		Audit Committee		Remuneration & Nomination Committee	
	Held	Attended	Held	Attended	Held	Attended
Stephen Mitchell	11	11	-	-	-	-
Nicholas Castellano	11	10	-	-	-	-
Ray Shorrocks	11	10	2	2	-	-
Andrew Seaton	11	10	2	2	-	-

This disclosure is made in accordance with *s.300(10)(c) of the Corporations Act 2001*.

4. REMUNERATION REPORT - AUDITED

The directors of the Group present the Remuneration Report, prepared in accordance with section 300A of the *Corporations Act 2001*, *AASB124 Related Party Disclosures* and Principle 8 of the ASX Corporate Governance Principles and Recommendations. This report outlines the remuneration arrangements in place for the non-executive directors, executive directors and other Key Management Personnel of the Group.

This report has been audited, as required by section 308(3C) of the *Corporations Act 2001*.

Remuneration Committee

The Board has established a Remuneration Committee which provides advice and specific recommendations on the remuneration packages and other terms of employment for executive directors, other senior executives; and non-executive directors including:

- the level of non-executive director fees;
- the amount and nature of remuneration arrangements for executive directors and other executives; and
- the type and nature of incentive arrangements including key performance targets effecting the remuneration of the executive team.

The objective of the Remuneration Committee is to ensure that the remuneration policies and arrangements are designed to ensure that the level and composition of remuneration is competitive, reasonable and appropriate for the results delivered and to attract and maintain talented and motivated directors and employees.

The level of remuneration and other terms and conditions of employment for executive directors and Company executives are reviewed annually having regard to performance and relevant comparative information, and are approved by the Board after the Remuneration Committee has sought independent professional advice, as required. In this respect, consideration is given to normal commercial rates of remuneration for similar levels of responsibility. No meeting of the Remuneration Committee was held during the year.

The Corporate Governance Statement provides further information on the role of this Committee.

Key Management Personnel

Key Management Personnel includes:

Stephen Mitchell	Non-Executive Chairman
Nicholas Castellano	Executive Director
Ray Shorrocks	Non-executive Director
Andrew Seaton	Non-executive Director
William Tarantino	CEO – Chemical Division (Resignation effective 1 April 2024)
Julie Edwards ¹	Company Secretary and Financial Controller

1. Julie Edwards is remunerated via an external accounting firm, Lowell Accounting Services Pty Ltd.

Non-executive Director Remuneration

The Board's policy is to remunerate non-executive directors at market rates for time, commitment and responsibilities. The Remuneration Committee determines payments to the non-executive directors and reviews their remuneration annually, based on market practice, duties and accountability. Independent external advice is sought when required. No meeting was held or advice was sought during the 2023 financial year.

The maximum aggregate amount of fees that can be paid to non-executive directors is subject to approval by shareholders at the Annual General Meeting. The latest determination was in the ASX announcement on 4 February 2016 after shareholders approved an aggregate pool limit of \$300,000.

Non-executive directors' fees (inclusive of superannuation) have generally been paid on the following basis:

Director fees	2023	2022
	\$	\$
Base fees	36,000	36,000
Chair of the Board	18,000	36,000
Chair of a committee	12,000	12,000
Member of a committee	6,000	6,000

All non-executive director fees were reduced by 25% from 1 July 2022 to 30 April 2023.

Executive Remuneration Policy

The objective of the executive remuneration policy is to ensure that the Group's remuneration arrangements are competitive and reasonable, enabling it to attract and retain the right calibre of staff and to align the remuneration of executive directors and other executives with shareholder and business objectives. Executive remuneration arrangements comprise a fixed remuneration component and may also include specific long-term incentives based on key performance areas affecting the Group's financial and/or operational results as follows:

- (a) a base salary (which is based on factors such as length of service, qualifications and experience), superannuation, fringe benefits and performance incentives;
- (b) short-term performance incentives in the form of cash or equity bonuses which are paid only when predetermined key performance indicators have been met. These reflect the achievement of a number of short term goals established on an annual basis;
- (c) executives engaged through professional service entities are paid fees based on an agreed market based hourly rate for the services provided and may also be entitled to short term performance based incentives; and
- (d) long-term performance-based incentives comprising performance rights which are designed to align the remuneration of executives with the business objectives of the Group and its shareholders. LTIs may be delivered in an equity award(s), which is granted upon the satisfaction of performance conditions/key performance indicators.

The Remuneration Committee charter requires to review executive remuneration arrangements annually by reference to the Group's performance, executive performance and comparable information from industry sectors. However, during 2023 no meetings were held for the Committee and any related matters were directly reviewed by the board of directors due to the limited size of the entity. Such reviews may include, but are not limited to, changing the total proportion of executive remuneration which is 'at-risk', the payment of short term/long term incentives and the proportion of the at risk remuneration between short term/long term incentives.

All remuneration paid is valued at either cost or the fair value to the Group and expensed.

Summary of Executive Remuneration

Name / position	Contract	Terms per annum	Total remuneration per annum
Nicholas Castellano Executive Director	Yes	US\$120,000 per annum. Remuneration increases to US\$180,000 once the Group achieves at least three consecutive months of 40 HCD drum sales. Contract has no specified end date but either party may terminate the agreement by giving at least 2 months notice. No termination benefits apply other than outstanding and owing consultant fees at the date of termination.	US\$120,000
William Tarantino CEO Chemical Division	Yes	US\$235,000 per annum. Contract ended on 1 September 2022 and was automatically renewed for 1 year. Employee's contract may be terminated at any time by the Group without cause or by voluntary resignation by the employee, provided that 90 days notice is given. Employee is entitled to 3 months of base salary plus unreimbursed expenses, accrued leave or other entitlements. Mr Tarantino has resigned effective 1 April 2024.	US\$235,000

Total Reward Mix

The amount of remuneration 'at-risk' is generally expressed as a proportion of fixed remuneration and is related to the agreement on remuneration between the Group and the executive, the Group's expectations of executive performance, and the executive's position in the Group. The proportion of fixed remuneration will generally not change on a year to year basis, but may be reviewed and modified by the Board.

Fixed remuneration (including the superannuation levy payable as employer contribution) is set with reference to market data, reflecting the scope of the role and the performance of the person in the role.

The mix of short term and long term incentives offered to executives will depend on their position in the Group. Generally, long term incentives are only offered to members of the senior executive team and short term incentives are only offered to other employees. Short and long term incentives are classified as 'at-risk' remuneration.

The Board believes that remuneration arrangements for executives should typically incorporate an at-risk component which is performance related and rewards employees for the achievement of goals which contribute to shareholder wealth. The Board believes that such arrangements should both incentivise and reward performance of executives that adds value to the Group for all shareholders.

Share Trading Policy

Shares issued under any of the Group's employee equity plans are subject to, and conditional upon, compliance with the Group's Securities Trading Policy. Executives are prohibited from limiting risk attached to those instruments by use of derivatives or other means. The Group's equity plan participants are required to confirm that they have not entered into any such prohibited transactions.

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Details of Remuneration

Details of remuneration of each of the Key Management Personnel of the Group during the financial year are set out in the following table:

	YEAR	SHORT TERM BENEFITS		LONG TERM BENEFITS	POST EMPLOYMENT	EQUITY BASED PAYMENTS	TOTAL	PERFORMANCE RELATED
		CASH, SALARY & FEES	RELATED PARTY FEES ¹		SUPER-ANNUATION	PERFORMANCE RIGHTS		
		\$	\$		\$	\$		\$
NON-EXECUTIVE DIRECTORS								
Stephen Mitchell	2023	54,000	-	-	-	-	54,000	0%
	2022	58,444	-	-	4,556	-	63,000	0%
Ray Shorrocks	2023	-	49,500	-	-	-	49,500	0%
	2022	-	47,250	-	-	-	47,250	0%
Andrew Seaton	2023	49,500	-	-	-	-	49,500	0%
	2022	47,250	-	-	-	-	47,250	0%
EXECUTIVE DIRECTORS								
Nicholas Castellano	2023	180,343	-	-	-	-	180,343	0%
	2022	174,419	-	-	-	-	174,419	0%
OTHER KEY MANAGEMENT								
William Tarantino ²	2023	380,628	-	-	-	-	380,628	0%
	2022	340,213	-	-	-	-	340,213	0%
Julie Edwards	2023	-	18,000	-	-	-	18,000	0%
	2022	-	18,000	-	-	-	18,000	0%
TOTAL	2023	664,471	67,500	-	-	-	731,971	
TOTAL	2022	620,326	65,250	-	4,556	-	690,132	

1. Remuneration paid via Director and Company Secretary related entities.

2. Mr. Tarantino will resign effective from 1 April 2024, however, it has no impact on his remuneration in 2023.

Comparison of Key Management Personnel Remuneration to Group Performance

The table below shows the total remuneration cost of the Key Management Personnel, earnings per ordinary share (EPS), dividends paid or declared, and the closing price of ordinary shares on ASX at year end for the current year and previous four years.

Relation to performance	2023	2022	2021	2020	2019
Total remuneration (\$)	731,971	690,132	388,244	1,058,373	833,502
EPS (loss) cents	(0.57)	(0.31)	(0.76)	(0.62)	(1.26)
Dividends paid	-	-	-	-	-
Share price at year end (cents)	0.004	0.014	0.013	0.03	0.09

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Key Management Personnel Shareholdings

The number of ordinary shares in the Group held by each of the Key Management Personnel of the Group is as follows:

KMP	Balance at beginning of the year	Shares purchased	Shares sold	Shares subscribed	Balance at end of the year
Stephen Mitchell	76,598,697	-	-	19,149,675	95,748,372
Nicholas Castellano	6,168,140	-	-	-	6,168,140
Ray Shorrocks	8,405,640	1,000,000	-	2,056,410	11,462,050
Andrew Seaton	3,272,672	-	-	818,168	4,090,840
William Tarantino	2,000,000	-	-	-	2,000,000
Julie Edwards	168,000	-	-	-	168,000

All shares purchased by KMP were either on-market or part of the Group's capital raises.

Unlisted Options

The movements in the current year of the number of options held by Key Management Personnel are as follows:

KMP	Balance at beginning of the year	Acquired during the year	Number of options exercised	Expired during the year	Number at end of year
Stephen Mitchell	-	19,149,675	-	-	19,149,675
Ray Shorrocks	-	2,056,410	-	-	2,056,410
Andrew Seaton	-	818,168	-	-	818,168

The unlisted options were issued under the Rights Issue Prospectus dated 17 April 2023. One free option was allocated for every share subscribed for under the Rights Issue. Therefore, the options were not granted as remuneration and are not considered as a share-based payment, as they are part of a capital issue applicable to all shareholders. The options are exercisable at \$0.02/option and will expire 2 years from their issue date.

Related Party Transactions

During the year, the Group paid the following amounts to related party entities:

- \$49,500 (2022: \$47,250) of board fees to Spring Street Holdings Pty Ltd, a company associated with Ray Shorrocks.
- \$180,343 (2022: \$174,419) of salaries and wages, \$291,427 (2022: \$276,417) of royalties and \$179,445 (2022: \$161,749) of inventory purchases to NC2 LLC, a company associated with Nicholas Castellano.
- \$144,000 (2022: \$142,000) was invoiced from Lowell Accounting Services for accounting and secretarial services and rent, an entity of which Julie Edwards is a Director and Stephen Mitchell was a director for part of the year. \$12,000 (2022: \$12,000) remains payable at balance date.

Transactions between related parties are on normal commercial terms and conditions no more favourable than those available to other parties unless otherwise stated.

END OF AUDITED REMUNERATION REPORT

5. PRINCIPAL ACTIVITIES

The principal activities of the Group during the year under review were sales and marketing of HCD's proprietary products as well as the evaluation of oil and gas projects and energy technologies in North America and internationally.

There have been no significant changes in the nature of the Group's principal activities during the financial year.

6. OPERATING AND FINANCIAL REVIEW

The Group produced a loss of \$3,550,243 (2022: \$1,688,163) of which 1,789,215 (2022: nil) was a non-cash item related to the impairment of goodwill. Year on year revenue from contracts with customers showed an improvement during the year, growing from \$346,469 in 2022 to \$574,153 in 2023. The Group had a net outflow from operating activities of \$1,661,591 (2022: \$1,580,722) and a net asset position on 31 December 2023 of \$1,214,329 (2022: \$3,561,547).

The Group successfully undertook a 1-for-4 non-renounceable entitlement offer in May raising \$751,265, which included one free option for each new share issued, exercisable at 2 cents and expiring 12 May 2025. A share placement in December 2023 raised \$540,000, the placement included one free option for every three shares issued, exercisable at 1.5 cents and expiring 2 years from the issue date.

The Group's activities are subject to a number of risks which may impact future financial performance. In order to fund the future growth of the Group's business it will be necessary for the Board to consider potential capital raising or joint ventures thereby creating a funding risk. There is uncertainty about the Group as a going concern as the Group has limited current revenue and there is no certainty that further product sales will be generated. Further details can be found at Note 2.

Activities within the oil and gas industry by its nature are risky. The operations of customers can be affected by a significant number of factors, risks, issues and costs. These have a potential flow on effect as far as the Group is concerned, potentially putting strain on its customer and channel relationships. Competitive pressures can impact on the Group's ability to successfully engage with the more established channel partners. There is also a risk that the Group's competitors may seek to reverse engineer the Group's products.

Whilst the Group will own the intellectual property relating to the Multi-Flow products as long as it continues to pay the royalty, it will not be granted access to the formulas and related know-how until completion of the maximum royalty agreement payment in the absence of certain specified exceptions. There is a potential risk which arises simply because these formulas and related know-how are not held directly by the Group and are held by an escrow agent.

Projects and Activities

Hydrocarbon Dynamics' oilfield chemical technology is a unique technology that reduces the viscosity of oil. The technology can be applied to: 1) lowering the temperature at which paraffins and asphaltenes in some crude oils solidify; 2) improve oil flow rates in wells and pipelines producing or transporting viscous crudes; 3) enhance production by reversing formation damage resulting in increased field recovery and economics, 4) reduce the requirement of expensive light crude oil (diluent) traditionally mixed in with the viscous crudes to enable them to be pumped from the reservoir and to meet pipeline viscosity and gravity specifications and; 5) recover saleable oil from sludge in storage facilities.

Sales and Marketing Activities

HCD's strategy focuses on geographical locations that will provide the greatest probability of success for continuous applications such as ongoing paraffin and asphaltene inhibition treatments, pipeline treatment, heavy oil treatment and enhanced oil recovery, while maintaining a strong sales pipeline.

HCD's strategic priorities include building a network of agents and distributors globally and assisting in their sales efforts. HCD also aggressively pursues direct sales utilising already established networks to shorten the sales cycle and hasten growth.

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United States

HCD received a second purchase order for HCD Multi-Flow on an offshore subsea pipeline in the Gulf of Mexico for the mid-sized oil and gas producer. This producer previously trialled HCD Multi-flow on two separate offshore wells. The trials demonstrated the product's efficacy at remediating and inhibiting paraffin deposition and led to these additional opportunities. HCD's new US based distributor, who has a significant presence in the Gulf of Mexico, will lead HCD's marketing push in the G of M.

HCD continued trials with three new US customers. The first with a supermajor integrated oil and gas company for a one-well paraffin control trial in the Delaware Basin of New Mexico. The trial started in mid-December 2023. The second one-well, paraffin control trial by HCD's new Oklahoma based distributor is for an independent oil & gas producer in Bakersfield, California, which also started in mid-December 2023. The third trial is with HCD's new North Dakota based distributor. No paraffin related issues have been reported since start of testing in April 2023. The current extreme cold season will test the effectiveness of the product in this region. The producer has approximately 100 similar waxy wells in the region that are candidates for HCD technology upon a successful trial. All three sales are of inconsequential amounts, but the opportunities can lead to significant business upon success.

Canada

Alberta, Canada distributor's paraffin control business with a mid-sized oil & gas producer is now ongoing. The number of wells being treated with HCD Multi-Flow has been revised to a total of 21 wells. The distributor intends to expand its use of HCD Multi-Flow for paraffin control in Alberta as well as evaluate it for heavy oil viscosity and diluent reduction opportunities.

Australia

The HCD Multi-Flow paraffin control program continued to perform well through the 2023 winter season. HCD anticipates new opportunities in the client's other fields because of the effective treatment in their Cooper Basin production.

South Sudan

A trial in South Sudan commenced in December 2023. The operator had previously evaluated HCD chemistry for viscosity reduction on several of their crude oils, with in-house laboratory tests demonstrating that HCD technology is very effective at reducing the viscosity on two of their crude oil grades. The reduction in viscosity of the heavy crude oil is required to meet specifications for pipeline transportation during the winter months. If the initial field treatment proves successful, the potential revenue associated with this opportunity is estimated to be approximately \$3,000,000 annually.

United Arab Emirates

A paid tank cleaning job with a large national oil company operating in the United Arab Emirates was delayed due to organisational changes, then put back on the schedule for cleaning in October 2023, only to be postponed again. HCD's Dubai based distributor continues to work on getting the job back on the docket and is in the process of attaining full product registration for Kleen-Flow with the National Oil Company.

HCD received a purchase order from its Dubai based distributor for approximately A\$130,000 for HCD Multi-Flow. The product is scheduled to arrive in Dubai in the middle of February 2024 and will be used by an operator in Africa to clean a pipeline containing organic deposits in preparation for running a smart pig.

India

HCD shipped 38 drums of product in October to India for multiple Tri-Phase squeeze trials and a pour point reduction trial, with two different independent producers. The trials provide HCD with an opportunity to break into the independent producer market in India and are on a "no cure no pay" basis.

North Sea

HCD received the approval required for a trial of HCD Multi-Flow in the North Sea. Platform infrastructure problems continue to delay the startup of the HCD Multi-flow paraffin control trial. We have been informed to expect the long-awaited trial to commence in March 2024. The initial purchase order was for approximately A\$80,000 of HCD Multi-Flow.

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Oil Projects

The Group has no tenement interests at the date of this report. HCD continues to review upstream and other energy and energy innovation investment opportunities.

7. SIGNIFICANT AFFAIRS

There have not been any significant changes in the state of affairs of the Group for the financial year ended 31 December 2023.

8. LIKELY DEVELOPMENTS

The Group is reviewing exploration opportunities in the energy sector on a regular basis. The Company is also reviewing several energy and energy technology opportunities. HCD will also continue to consider options to finance its existing chemical business through joint ventures, private equity and other avenues.

9. DIVIDENDS PAID OR RECOMMENDED

The directors recommend that no dividend be paid or declared at this point in time. No amounts have been paid or declared by way of dividend during the financial year.

10. ENVIRONMENTAL REGULATIONS AND PERFORMANCE

The Group is subject to various environmental regulations in relation to the export and transport of its HCD products internationally.

The Board believes that the Group has adequate systems in place for the management of its environmental requirements and is not aware of any breach of those environmental requirements as they apply to the Group. No government agency has notified the Group of any environmental breaches during the year ended 31 December 2023.

11. UNISSUED SHARES UNDER OPTION

The Group has the following unissued shares under option at the date of the Directors' Report:

- 62,605,411 unissued shares under option outstanding which are exercisable at 2.0 cents and expire 12 May 2025.
- 40,000,001 unissued shares under option outstanding which are exercisable at 1.5 cents and expire on 5 February 2026.

12. INDEMNIFICATION AND INSURANCE OF OFFICERS AND AUDITORS

Directors, executives and the company secretaries are indemnified by the Group against any liability incurred in their capacity as an officer of the Group or a related body corporate to the maximum extent permitted by law. The Group has not paid any premiums in respect of any contract insuring the directors of the Group against a liability for legal costs.

The Group has not paid any premiums in respect of any contract insuring its auditor against a liability incurred in that role as an auditor of the Group. In respect of non-audit services, Pitcher Partners have the benefit of an indemnity to the extent they reasonably rely on information provided by the Group which is false, misleading or incomplete. No amount has been paid under this indemnity during the financial year ending 31 December 2023 or to the date of this report.

13. NON-AUDIT SERVICES

The Group may decide to employ the auditor on assignments additional to their statutory audit duties where the auditor's expertise and experience with the Group are important.

The following fees were paid or payable for services provided by Pitcher Partners, the auditor of the Group:

	2023	2022
	\$	\$
Auditing or reviewing the financial statements	59,000	54,500
Non-audit services	-	-
	59,000	54,500

This disclosure is made in accordance with s.300(2A)(11B(a)) and (11C(b)) of the Corporations Act 2001.

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The Board of Directors will continuously consider the position and, in accordance with advice received from the Audit Committee, ensure that the provision of the non-audit services is compatible with the general standard of independence for auditors imposed by the *Corporations Act 2001*. The directors are satisfied that the provision of non-audit services (where applicable) by the auditor, does not compromise the auditor independence requirements of the *Corporations Act 2001* for the following reasons:

- all non-audit services will be reviewed to ensure they do not impact the impartiality and objectivity of the auditor; and
- none of the services (where applicable) undermine the general principles relating to auditor independence as set out in APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)*.

The auditor's independence declaration under section 307C of the *Corporations Act 2001* forms a part of the Annual Report for the year ended 31 December 2023.

14. PROCEEDINGS ON BEHALF OF THE GROUP

No person has applied for leave of Court under section 237 of the *Corporations Act 2001* to bring proceedings on behalf of the Group or intervene in any proceedings to which the Group is a party for the purpose of taking responsibility on behalf of the Group for all or any part of those proceedings. The Group was not a party to any such proceedings during the year.

15. ROUNDING OFF

The Group is of a kind referred to in *ASIC Corporations (Rounding in Financial / Directors' Reports) Instrument 2016/191* and in accordance with that instrument, amounts in the Financial Report and Directors' Report have been rounded off to the nearest dollar, unless otherwise stated.

16. EVENTS SUBSEQUENT TO REPORTING DATE

A Share Purchase Plan closed on 7 February 2024 raising \$175,124 before costs for the issue of 38,916,451 new shares. 40,000,001 unlisted options were issued in relation to the share placement in December 2023 on the basis of one free option for every three shares issued, exercisable at 1.5 cents and expiring 2 years from the issue date. In the opinion of the directors, there are no events that have arisen in the interval between the end of the financial year and the date of this report that has significantly affected, or may significantly affect the Group's operations, results or the state of affairs in future financial years.

This report is signed in accordance with a resolution of the directors.



Stephen Mitchell
Chairman
Melbourne, Victoria
20 March 2024

The Directors
Hydrocarbon Dynamics Limited
Level 6, 412 Collins Street
Melbourne VIC 3000

Auditor's Independence Declaration

In relation to the independent audit for the year ended 31 December 2023, to the best of my knowledge and belief there have been:

- (i) No contraventions of the auditor independence requirements of the *Corporations Act 2001*; and
- (ii) No contraventions of APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)*.

This declaration is in respect of Hydrocarbon Dynamics Limited and the entities it controlled during the year.

Pitcher Partners

PITCHER PARTNERS



DAN COLWELL
Partner

Brisbane, Queensland
20 March 2024

HYDROCARBON DYNAMICS LIMITED
(ABN 75 117 387 354)

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 2023

	Note	Group	
		2023	2022
		\$	\$
REVENUE AND OTHER INCOME			
Revenue from contracts with customers	5	574,153	346,469
Other income	5	18,125	7,610
		592,278	354,079
EXPENSES			
Impairment costs	10	(1,789,215)	-
Director and employee related costs	5	(741,101)	(697,529)
Productions costs	5	(515,216)	(322,941)
Royalties	18	(291,427)	(276,417)
General and administration costs		(224,086)	(177,704)
Accounting and audit fees		(171,950)	(164,951)
Professional consultant and contractor fees		(162,120)	(101,697)
Insurance costs		(122,512)	(120,465)
Property expenses		(97,981)	(97,087)
Development and testing expenses		(24,951)	(83,937)
Depreciation and amortisation costs	5	(1,954)	(2,505)
Finance expenses		(8)	(2,884)
Reversal of bad and doubtful debts		-	5,875
		(4,142,521)	(2,042,242)
LOSS BEFORE INCOME TAX		(3,550,243)	(1,688,163)
Income tax benefit/(expense)	6	-	-
LOSS FOR THE YEAR		(3,550,243)	(1,688,163)
OTHER COMPREHENSIVE INCOME, NET OF INCOME TAX			
Items that may be reclassified subsequently to profit or loss:			
Exchange differences on translation of foreign operations		(7,371)	17,733
TOTAL OTHER COMPREHENSIVE INCOME, NET OF INCOME TAX		(7,371)	17,733
TOTAL COMPREHENSIVE LOSS FOR THE YEAR		(3,557,614)	(1,670,430)
Loss attributable to owners of the parent		(3,550,243)	(1,688,163)
Comprehensive loss attributable to owners of the parent		(3,557,614)	(1,670,430)
Earnings per share for loss attributable to the ordinary equity holders of the company:			
Basic loss per share (cents)	15	(0.57)	(0.31)
Diluted loss per share (cents)	15	(0.57)	(0.31)

The above Consolidated Statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes.

HYDROCARBON DYNAMICS LIMITED
(ABN 75 117 387 354)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION
AS AT 31 DECEMBER 2023

	Note	Group 2023 \$	Group 2022 \$
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents	7	974,082	1,380,882
Trade and other receivables	8	138,122	59,896
Prepayments		57,822	49,971
Inventory	9	262,131	446,285
TOTAL CURRENT ASSETS		1,432,157	1,937,034
NON-CURRENT ASSETS			
Plant and equipment		7,558	9,507
Intangible assets	10	-	1,789,215
TOTAL NON-CURRENT ASSETS		7,558	1,798,722
TOTAL ASSETS		1,439,715	3,735,756
CURRENT LIABILITIES			
Trade and other payables	11	149,630	124,408
Annual leave provision		75,756	49,801
TOTAL CURRENT LIABILITIES		225,386	174,209
TOTAL LIABILITIES		225,386	174,209
NET ASSETS		1,214,329	3,561,547
EQUITY			
Issued capital	12	68,433,925	67,223,529
Reserves	12	(778,684)	(771,313)
Accumulated losses		(66,440,912)	(62,890,669)
TOTAL EQUITY		1,214,329	3,561,547

The above Consolidated Statement of Financial Position should be read in conjunction with the accompanying notes.

HYDROCARBON DYNAMICS LIMITED
(ABN 75 117 387 354)

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR YEAR ENDED 31 DECEMBER 2023

Consolidated	Issued Capital	Foreign Currency Translation Reserve	Accumulated Losses	Total
	\$	\$	\$	\$
Balance at 1 January 2022	65,663,764	(789,046)	(61,202,506)	3,672,212
Loss for the year	-	-	(1,688,163)	(1,688,163)
Other comprehensive income for the year	-	17,733	-	17,733
Total comprehensive income/(loss) for the year	-	17,733	(1,688,163)	(1,670,430)
Transactions with owners in their capacity as owners:				
Contributions of equity net of transaction costs	1,559,765	-	-	1,559,765
	1,559,765	-	-	1,559,765
Balance at 31 December 2022	67,223,529	(771,313)	(62,890,669)	3,561,547
Balance at 1 January 2023	67,223,529	(771,313)	(62,890,669)	3,561,547
Loss for the year	-	-	(3,550,243)	(3,550,243)
Other comprehensive loss for the year	-	(7,371)	-	(7,371)
Total comprehensive loss for the year	-	(7,371)	(3,550,243)	(3,557,614)
Transactions with owners in their capacity as owners:				
Contributions of equity net of transaction costs	1,210,396	-	-	1,210,396
	1,210,396	-	-	1,210,396
Balance at 31 December 2023	68,433,925	(778,684)	(66,440,912)	1,214,329

The above Consolidated Statement of Changes in Equity should be read in conjunction with the accompanying notes.

HYDROCARBON DYNAMICS LIMITED
(ABN 75 117 387 354)

CONSOLIDATED STATEMENT OF CASH FLOWS
FOR YEAR ENDED 31 DECEMBER 2023

	Note	Group	
		2023	2022
		\$	\$
CASH FLOWS FROM OPERATING ACTIVITIES			
Receipts from customers		498,522	334,692
Payments to suppliers and employees		(2,180,184)	(1,917,962)
Interest received		20,079	5,432
Interest paid		(8)	(2,884)
NET CASH USED IN OPERATING ACTIVITIES	7(a)	<u>(1,661,591)</u>	<u>(1,580,722)</u>
CASH FLOWS FROM INVESTING ACTIVITIES			
Payment for property, plant and equipment		-	(9,869)
NET CASH USED IN INVESTING ACTIVITIES		<u>-</u>	<u>(9,869)</u>
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from issue of shares		1,291,265	1,614,617
Share issue costs		(29,101)	(54,852)
NET CASH PROVIDED BY FINANCING ACTIVITIES		<u>1,262,164</u>	<u>1,559,765</u>
Net decrease in cash held		(399,427)	(30,826)
Cash at beginning of financial year		1,380,882	1,393,960
Effect of exchange rate movement		(7,373)	17,748
CASH AT THE END OF THE YEAR	7	<u>974,082</u>	<u>1,380,882</u>

The above Consolidated Statement of Cash Flows should be read in conjunction with the accompanying notes.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 CORPORATE INFORMATION

This Annual Report covers the consolidated financial statements and notes of Hydrocarbon Dynamics Limited and its controlled entities (or 'Group'). Hydrocarbon Dynamics Limited is a listed public company, incorporated and domiciled in Australia. The Group is a for-profit entity for the purpose of preparing the consolidated financial statements.

The Group's registered office is Level 6, 412 Collins Street, Melbourne VIC 3000.

The financial report was approved by the directors on 20 March 2024.

NOTE 2 BASIS OF PREPARATION

Compliance with accounting standards

The Annual Report is a general purpose financial report that has been prepared in accordance with Australian Accounting Standards, and Interpretations, issued by the Australian Accounting Standards Board and the *Corporations Act 2001*.

The consolidated financial statements of the Group also comply with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standard Board (IASB).

Historical cost convention

The consolidated financial statements have been prepared on an accruals basis and are based on historical costs modified, where applicable, by the measurement at fair value of selected financial assets and financial liabilities.

Comparatives

When required by Accounting Standards, comparative figures have been adjusted to conform to changes in presentation for the current year.

Going concern

The consolidated financial statements have been prepared on a going concern basis which contemplates that the Group will continue to meet its commitments and will therefore continue normal business activities and the realisation of assets and settlement of liabilities in the ordinary course of business.

As at 31 December 2023, the Group has \$974,082 in cash and cash equivalents and net assets of \$1,214,329. The Group incurred a loss for the year \$3,550,243, including impairment losses, of \$1,789,215, and a net cash outflow from operating activities of \$1,661,591.

The ability of the Group to continue to adopt the going concern assumption will depend upon a number of matters including the successful raising in the future of necessary funding through debt, equity or the commercialisation of the Group's HCD product. The Group is reviewing new business opportunities, including joint ventures, investments, acquisitions and reverse acquisitions in the energy sector on a regular basis. The Group is also reviewing several energy technology investment opportunities. HCD will also continue to consider options to finance its existing chemical business through joint ventures, private equity and other avenues.

The Group continually monitors its cash flow requirements to ensure that it has sufficient funds to meet its contractual commitments and adjusts its spending with respect to discretionary corporate overhead accordingly.

If the above matters are unsuccessful, there exists a material uncertainty that may cast significant doubt on the Group's ability to continue as a going concern with the result that the Group may have to realise its assets and extinguish its liabilities other than in the ordinary course of business, and at amounts different from those stated in the consolidated financial statements. No adjustments for such circumstances have been made in the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 3 MATERIAL ACCOUNTING POLICIES

The principal accounting policies adopted in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all of the years presented unless otherwise stated.

(a) Principles of consolidation

Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date that control ceases.

The acquisition method of accounting is used to account for the acquisition of subsidiaries by the Group.

Intercompany transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of the impairment of the asset transferred.

Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group. The financial statements of subsidiaries are prepared for the same reporting period as the parent entity. Investments in subsidiaries are accounted for at cost in the separate financial statements of Hydrocarbon Dynamics Limited.

(b) Deferred tax

Deferred tax assets are ascertained based on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax assets also result where amounts have been fully expensed but future tax deductions are available.

Deferred tax assets are calculated at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates enacted or substantively enacted at reporting date.

Deferred tax assets relating to temporary differences and unused tax losses are recognised only to the extent that it is probable that future taxable profit will be available against which the benefits of the deferred tax asset can be utilised.

(c) Foreign currency translation

Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in Australian dollars, which is the Group's functional and presentation currency.

Group companies

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

- assets and liabilities for each Statement of Financial Position presented are translated at the closing rate at the date of that Statement of Financial Position;
- income and expenses for each Statement of Profit or Loss and Other Comprehensive Income are translated at average exchange rates (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 dates of the transactions); and
- all resulting exchange differences are recognised in other comprehensive income.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

On consolidation, exchange differences arising from the translation of any net investment in foreign entities are recognised in other comprehensive income and accumulated as a separate component of equity. When a foreign operation is sold or any borrowings forming part of the net investment are repaid, a proportionate share of such exchange differences that have been accumulated in equity are recognised in the Consolidated Statement of Profit or Loss and Other Comprehensive Income, as part of the gain or loss on sale where applicable.

(d) Revenue and other income

Sale of goods

Revenue from the sale of goods is recognised when the performance obligation is satisfied. This is the point in time when the customer obtains control of the goods, which is generally at the time of delivery.

Revenue is recognised at amounts that reflect the consideration to which the entity is expected to be entitled in exchange for transferring goods to a customer.

Interest

Interest revenue is recognised as interest accrues using the effective interest method.

Other revenue

Other revenue is recognised when it is received or when the right to receive payment is established.

All revenue is stated net of the amount of goods and services tax (GST).

(e) Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts.

(f) Trade and other receivables

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. Trade receivables are generally due for settlement within 30 days. They are presented as current assets unless collection is not expected more than 12 months after reporting date.

The group applies the simplified approach under AASB 9 to measuring the allowance for credit losses for receivables from contracts with customers and contract assets. Under the AASB 9 simplified approach, the group determines the allowance for credit losses for receivables from contracts with customers, contract assets and lease receivables on the basis of the lifetime expected credit losses of the financial asset. Lifetime expected credit losses represent the expected credit losses that are expected to result from default events over the expected life of the financial asset.

(g) Inventories

The cost of inventory includes all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. The Group's cost generally includes the purchase price and the cost of transferring the inventory to the warehouse. Inventory is purchased from a third party. Inventories are measured at the lower of cost and net realisable value.

(h) Intangible assets

Goodwill

Goodwill represents the future economic benefits arising from other assets acquired in a business combination that are not individually identifiable or separately recognised. Goodwill is initially recognised at an amount equal to the excess of: (a) the aggregate of the consideration transferred, the amount of any non-controlling interest, and the acquisition date fair value of the acquirer's previously held equity interest (in the case of a step acquisition); over (b) the net fair value of the identifiable assets acquired and liabilities assumed. For accounting purposes, such measurement is treated as the cost of goodwill at that date.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Goodwill is not amortised but is tested annually for impairment, or more frequently if events or changes in circumstances indicate that it might be impaired. Goodwill is carried at cost less any accumulated impairment losses.

Intellectual property acquired in a business combination

The intellectual property was acquired in a business combination and was initially recognised at fair value (which, for accounting purposes, is treated as the cost of the intangible asset). The intellectual property is not being amortised as it is deemed to be an indefinite useful life asset. The intellectual property is tested for impairment annually.

(i) Impairment of non-financial assets

Goodwill and intangible assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or Groups of assets (cash-generating units). Non-financial assets other than goodwill that suffered impairment are reviewed for possible reversal of impairment at each reporting date.

(j) Trade and other payables

These amounts represent liabilities for goods and services provided to the entity prior to the end of the year and which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition. Trade payables are included in current liabilities except for those with maturities greater than 12 months after the reporting period which are classified as non-current liabilities.

(k) Provisions

Short term obligations

Liabilities for salary and wages, including non-monetary benefits, annual leave and accumulating sick leave expected to be settled within 12 months after the end of the period in which the employees render the related service are recognised in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liability for annual leave is recognised in the provision for employee benefits.

(l) Contributed equity

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds. Incremental costs directly attributable to the issue of new shares or options for the acquisition of a business are not included in the cost of acquisition as part of the purchase consideration.

(m) Changes in accounting policies

Mandatory accounting pronouncements effective from 1 January 2023 have been adopted by the Group and have had no material impact on the financial results or position except for the adoption of amended AASB 101 which required to disclose material rather than significant accounting policies. Accordingly accounting policies are only included where these are reasonably expected to influence decisions that the primary users of these financial statements make based on these financial statements.

(n) New accounting standards and interpretations for application in future periods

At the date of authorisation of these consolidated financial statements, several new, but not yet effective, Standards and amendments to existing Standards, and Interpretations have been published by the IASB. None of these Standards or amendments to existing Standards have been adopted early by the Group. Management anticipates that all relevant pronouncements will be adopted for the first period beginning on or after the effective date of the pronouncement. New Standards, amendments and Interpretations not adopted in the current year have not been disclosed as they are not expected to have a material impact on the Group's financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 4 CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS

The preparation of the Annual Report requires the use of certain critical accounting estimates. It also requires management to exercise its judgement when applying the Group's accounting policies. These estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that may have a financial impact on the Group and that are believed to be reasonable under the circumstances.

The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities in future years.

The critical estimates and judgements applied in the preparation of the Annual Report are as follows:

a) Recoverability of goodwill and other intangible assets

The Group acquired 100% of the issued shares in Hydrocarbon Dynamics ("HCD") in April 2017, upon which the goodwill, intellectual property and patents were acquired. The Board views the Group as one cash generating unit ("CGUs"), being HCD. Goodwill and identifiable intangible assets were allocated to the HCD CGU.

Impairment assessment:

The goodwill and identifiable intangible assets are required to be assessed for impairment annually (or earlier if impairment indicators exist) by comparing the carrying value of the CGU to its recoverable amount.

During the year the Group changed its method used to estimate the recoverable amount of the CGU from the fair value less cost of disposal method, to the value in use method, because the previously applied 'market valuation' approach was not considered appropriate. As a result, the Group has recognised an impairment loss of \$1,789,215 (2022: \$nil).

The value in use of the CGU was determined using the discounted cash flow method, and by applying various discount rates in the range of 0% to 30%. Due to historical losses which are forecasted to continue, no reduction in the discount rate would result into a reversal of impairment in a foreseeable future.

b) Non-recognition of deferred tax asset

The Group have not recognised a deferred tax asset in respect of items noted in note 6 because it is not probable that future taxable profit will be available against which the Group can utilise the benefits from the deferred tax assets.

NOTE 5 REVENUE AND EXPENDITURE

	2023	2022
	\$	\$
Loss before income tax includes the following specific revenue and expenses:		
(a) Revenue from contracts with customers		
<i>Recognised at a point in time:</i>		
Australia	104,708	145,630
North America	76,701	67,745
United Kingdom	78,872	-
Africa	185,519	-
Middle East and Asia	128,353	133,094
	574,153	346,469

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

	2023	2022
	\$	\$
(b) Other income		
Interest income	18,125	7,360
Other	-	250
	18,125	7,610
(c) Director and employee related costs		
Salaries and wages expense	(741,101)	(692,973)
Defined contribution superannuation expense	-	(4,556)
	(741,101)	(697,529)
(d) Depreciation and amortisation costs		
Depreciation expense – PP&E	(1,954)	(2,505)
	(1,954)	(2,505)
(e) Auditor’s remuneration		
During the year the following fees were paid or payable for services provided by Pitcher Partners, the auditor of the Group:		
- Auditing or reviewing the consolidated financial statements	(59,000)	(54,500)
	(59,000)	(54,500)
There were no non-audit services during the year (2022: Nil).		
(f) Other expenses		
Inventory expense (arising on sale or consumption)	(515,216)	(322,941)
	(515,216)	(322,941)

NOTE 6 INCOME TAX EXPENSE

	2023	2022
	\$	\$
(a) Recognised in the Consolidated Statement of Profit or Loss and Other Comprehensive Income		
Current tax expense	-	-
Deferred tax expense	-	-
Income tax expense	-	-

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 6 INCOME TAX EXPENSE (CONTINUED)

	2023	2022
	\$	\$
(b) Numerical reconciliation of income tax expense to prima facie tax on accounting profit or loss		
Loss before income tax	3,550,243	1,688,163
Tax benefit at the Australian tax rate of 25% (2022: 25%)	887,561	422,041
Tax effect of amounts which are not deductible/(taxable) in calculating taxable income:		
- Impairment of goodwill	(447,304)	-
- Other non-deductible items	12,492	(14,736)
- Losses not recognised in deferred tax assets	(452,749)	(407,305)
	-	-

The deductible temporary differences and tax losses do not expire under current tax legislation. Deferred tax assets have not been recognised in respect of these items because it is not probable that future taxable profit will be available against which the Group can utilise the benefits from the deferred tax assets.

(c) Reconciliation of deferred tax assets/(liabilities)

Deferred tax asset	-	-
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The balance of deferred tax asset comprises:

Deferred tax assets

- Tax losses	11,082,263	10,629,514
- S40-880 deductions	28,104	21,491
- Provisions	18,939	30,306
	11,129,306	10,681,311
Net deferred tax asset	11,129,306	10,681,311
Deferred tax asset not recognised	(11,129,306)	(10,681,311)
Deferred tax asset recognised in accounts	-	-

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 6 INCOME TAX EXPENSE (CONTINUED)

	2023	2022
	\$	\$
Movements in deferred tax asset		
Opening balance	-	-
Deferred tax (credited) to profit or loss	-	-
Closing balance	<u>-</u>	<u>-</u>
(d) Franking tax credits		
Franking credits available for subsequent years based on a tax rate of 25% (2022: 25%)	<u>-</u>	<u>-</u>

The above amounts represent the balance of the franking account as at the end of the year, adjusted for:

- (i) franking credits that will arise from the payment of the amount of the provision for income tax;
- (ii) franking debits that will arise from the payment of dividends recognised as a liability at the reporting date; and
- (iii) franking credits that will arise from the receipt of dividends recognised as receivable at the reporting date.

NOTE 7 CASH AND CASH EQUIVALENTS

	2023	2022
	\$	\$
Cash at bank	974,082	478,670
Cash on deposit	-	902,212
	<u>974,082</u>	<u>1,380,882</u>

The effective interest rate on short-term bank deposits was 2.5% (2022: 2.58%).

(a) Reconciliation of cash flow from operations

Loss for the year	(3,550,243)	(1,688,163)
Non-cash items:		
Depreciation expense	1,954	2,505
Impairment expense	1,789,215	-
Bad and doubtful debts	-	(5,875)
Change in assets and liabilities:		
(Increase)/decrease in trade and other receivables	(78,228)	(13,955)
(Increase)/decrease in inventories	184,154	97,579
(Increase)/decrease in other assets	(7,851)	32,925
Increase/(decrease) in trade and other payables	(26,547)	(10,284)
Increase/(decrease) in provisions	25,955	4,546
Net cash used in operating activities	<u>(1,661,591)</u>	<u>(1,580,722)</u>

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 8 TRADE AND OTHER RECEIVABLES

	2023	2022
	\$	\$
Trade receivables	126,452	50,822
GST receivable	11,670	7,120
Other receivables	-	1,954
	138,122	59,896

The group has determined the expected credit loss in relation to trade and other receivables to not be material at balance date.

NOTE 9 INVENTORIES

Stock on hand (finished goods)	262,131	284,536
Stock on hand (work in progress)	-	161,749
	262,131	446,285

NOTE 10 INTANGIBLE ASSETS

Goodwill at cost	3,282,899	3,282,899
Less: accumulated impairment losses	(3,282,899)	(2,156,902)
	-	1,125,997
Intellectual property	663,218	663,218
Less: accumulated impairment losses	(663,218)	-
	-	1,789,215

2023:

Movements in intangible assets:	Goodwill	Intellectual Property	Total
Balance at the beginning of the year	1,125,997	663,218	1,789,215
Impairment expense	(1,125,997)	(663,218)	(1,789,215)
Balance at the end of the year	-	-	-

2022:

Movements in intangible assets:	Goodwill	Intellectual Property	Total
Balance at the beginning of the year	1,125,997	663,218	1,789,215
Balance at the end of the year	1,125,997	663,218	1,789,215

The goodwill, intellectual property and patents were acquired as part of a business combination on 6 April 2017 which have been fully impaired at the end of current year as detailed in note 4.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 11 TRADE AND OTHER PAYABLES

	2023	2022
	\$	\$
Trade creditors	145,173	104,944
GST payable	-	16,030
Accrued expenses	4,457	3,434
	149,630	124,408

NOTE 12 EQUITY

Issued capital

Issued capital	72,386,595	71,095,330
Capital raising costs	(3,952,670)	(3,871,801)
	68,433,925	67,223,529

Ordinary shares entitle the holder to participate in dividends and the proceeds on winding up of the Group in proportion to the number of and amounts paid on the shares held. Every holder of ordinary shares present at a meeting in person or by proxy, is entitled to one vote, and upon a poll, each share is entitled to one vote.

	2023		2022	
Movement in number of shares:	No.	\$	No.	\$
Balance at the beginning of the year	587,060,500	67,223,529	440,290,106	65,663,764
<i>Movements during the year:</i>				
Entitlement offer ⁽ⁱ⁾	62,605,411	\$751,265	146,762,894	1,614,392
Placement ⁽ⁱⁱ⁾	120,000,000	\$540,000		
Exercise of options	-	-	7,500	225
Capital raising costs	-	(80,869)	-	(54,852)
	182,605,411	1,210,396	146,770,394	1,559,765
Balance at the end of the year	769,665,911	68,433,925	587,060,500	67,223,529

(i) Shares issued under an entitlement offer on 18 May 2023 at an issue price of 1.2 cents per share.

(ii) Share issued under a placement on 29 December 2023 at an issue price of 0.45 cents per share.

Unlisted options

	2023	2022
Movement in number of options:	No.	No.
Balance at the beginning of the year	-	46,269,645
<i>Movements during the year:</i>		
Entitlement offer ⁽ⁱ⁾	62,605,411	-
Exercise of options	-	(7,500)
Expired	-	(46,262,145)
	62,605,411	(46,269,645)
Balance at the end of the year	62,605,411	-

(i) Options issued under an entitlement offer on 18 May 2023 with one free option issued for each share purchased.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 12 EQUITY (CONTINUED)

The Group had the following unlisted options on issue at the end of the year (2022: nil)

Description	Issue date	Number	Expiry date	Exercise price	Vested %
Unlisted	18 May 20223	62,605,411	12 May 2025	\$0.02	100%

Reserves	2023	2022
	\$	\$
Foreign currency translation reserve	(778,684)	(771,313)
	(778,684)	(771,313)

The currency translation reserve records exchange differences arising on translation of foreign controlled entities.

Capital risk management

When managing capital, management's objective is to ensure the Group continues as a going concern and to maintain a structure that ensures the lowest cost of capital available and to ensure adequate capital is available to meet its commitments as they fall due. In order to maintain or adjust the capital structure, the Group may seek to issue new shares. Total capital is calculated as 'equity' as shown in the Consolidated Statement of Financial Position. There were no changes in the Group's approach to capital management during the year. The Group is not subject to externally imposed capital requirements.

NOTE 13 SEGMENT INFORMATION

The Chief Operating Decision Makers (CODM) do not receive information which is disaggregated by geographic area, by product or service, or by customer group and therefore only one reportable segment exists at balance date.

The Group's revenue, results and assets for this reportable segment can be determined by reference to the Consolidated Statement of Profit or Loss and Other Comprehensive Income and the Consolidated Statement of Financial Position. Revenue is earned predominantly from one product. 86% of the revenue is from three customers in the current year (2022: 90% from three customers).

NOTE 14 FINANCIAL RISK MANAGEMENT

Overview

The Group's principal financial instruments comprise cash and cash equivalents, trade and other receivables, loans to and from subsidiaries, and trade and other payables. The main risks arising from the Group's financial assets and liabilities are interest rate risk, foreign currency risk, credit risk and liquidity risk. This note presents information about the Group's exposure to each of the above risks, its objectives, policies and processes for measuring and managing risk.

The Group regularly analyses financial risk exposure and evaluates treasury management strategies in the context of the most recent economic conditions and forecasts. Key risks are monitored and reviewed as circumstances change (e.g. acquisition of new entity or project) and policies are created or revised as required. The overall objective of the Group's financial risk management policy is to support the Group in meeting its financial targets, whilst minimizing potential adverse effects on financial performance.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 14 FINANCIAL RISK MANAGEMENT (CONTINUED)

Given the nature and size of the business and uncertainty as to the timing and amount of cash inflows and outflows, the Group does not enter into derivative transactions to mitigate the financial risks. In addition, the Group's policy is that no trading in financial instruments shall be undertaken for the purpose of making speculative gains. As the Group's operations change, the directors will review this policy.

The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework. The Board reviews and agrees policies for managing the Group's financial risks as summarised below.

The Group holds the following financial instruments which are carried at amortised cost unless otherwise stated:

	2023	2022
	\$	\$
Financial assets		
Cash and cash equivalents	974,082	1,380,882
Trade and other receivables	138,122	59,896
	<u>1,112,204</u>	<u>1,440,778</u>
Financial liabilities		
Trade and other payables	149,630	124,408
	<u>149,630</u>	<u>124,408</u>

Interest rate risk

Exposure to interest rate risk arises on cash and cash equivalents recognised at reporting date whereby a future change in interest rates will affect future cash flows or the fair value of fixed rate financial instruments.

A forward business cash requirement estimate is made, identifying cash requirements for the following period (generally up to one year) and interest rate term deposit information is obtained from a variety of banks over a variety of periods (usually one month up to six month term deposits) accordingly. The funds to invest are then scheduled in an optimised fashion to maximise interest returns.

Interest rate sensitivity

A sensitivity of 1% interest rate has been selected as this is considered reasonable given the current market conditions. A 1% movement in interest rates at the reporting date would have increased/(decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant. The analysis is performed on the same basis for 2022.

	Profit or Loss		Equity	
	1% increase	1% decrease	1% increase	1% decrease
2023	\$	\$	\$	\$
Cash and cash equivalents	9,741	(9,741)	9,741	(9,741)
2022				
Cash and cash equivalents	13,809	(13,809)	13,809	(13,809)

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Board's approach to managing liquidity is to ensure, as far as possible, that the Group will always have sufficient resources to meet its obligations when due.

Ultimate responsibility for liquidity risk management rests with the Board of Directors. The Group manages liquidity risk by monitoring forecast cash flows and ensuring that adequate funds from capital raising are maintained for future expenditure on working interest assets. This involves the monitoring of actual cash flows and matching the maturity profiles of financial assets and liabilities. This is based on the undiscounted cash flows of the financial liabilities based on the earliest date on which they are required to be paid.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 14 FINANCIAL RISK MANAGEMENT (CONTINUED)

The following table details the remaining contractual maturity for non-derivative financial liabilities.

	<1 year	Total Contractual Cash Flows	Carrying Amount
	\$	\$	\$
2023			
Trade and other payables	149,630	149,630	149,630
	149,630	149,630	149,630
2022			
Trade and other payables	124,408	124,408	124,408
	124,408	124,408	124,408

Foreign exchange risk

The Group is exposed to fluctuations in foreign currencies arising from the sale and purchases of goods and services in currencies other than the Group's presentation currency. The Group is also exposed to transactional currency movements. Such exposures arise from transactions which are denominated in currencies other than the functional currency of the Group. The Group's exposure to foreign currency risk primarily arises from the Group's operations overseas, namely in the United States.

The Group is also exposed to fluctuations in foreign currencies arising from the loans advanced by the Australian-based parent entity (denominated in AUD) to its United States based subsidiaries. Foreign currency gains/losses are recorded by the subsidiaries and are eliminated on consolidation via the foreign currency translation reserve.

The Group currently does not engage in any hedging or derivative transactions to manage foreign currency risk. The Group's policy is to generally convert its local currency to US dollars at the time of transaction.

Based on financial instruments held in a foreign currency at 31 December 2023 and 31 December 2022, had the Australian dollar strengthened/weakened by 10%, there would be an increase/decrease in the US net assets by \$2,042 (2022: \$4,570) and an increase/decrease in the Canadian net assets by \$4,840 (2022: \$10,181). The exposure to foreign exchange is considered to be immaterial as the majority of the foreign liabilities relate to related party payables which are eliminated on consolidation.

Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. This arises principally from cash and cash equivalents and trade and other receivables. The Group exposure and the credit ratings of its counterparties are continuously monitored by the Board of Directors.

The maximum exposure to credit risk at the reporting date is the carrying amount of the financial assets as summarised in the table above.

Credit risk exposures

Trade and other receivables

Trade and other receivables comprise receivables from the sale of products and services to predominantly unrelated entities. All potential customers are rated for credit worthiness, taking into account their size, market position and financial standing. The receivable balances are monitored on an ongoing basis. The Group's exposure to bad debts is not significant. At 31 December 2023 \$126,452 (2022: \$50,822) of the Group's receivables were past due but not impaired.

Cash and cash equivalents, restricted cash and term deposits

The Group has credit risk with respect to cash deposits held with banks. However, significant cash deposits are invested across three to four banks to mitigate credit risk exposure to a particular bank. AAA rated banks are mostly used and non AA banks are utilised where commercially attractive returns are available.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 14 FINANCIAL RISK MANAGEMENT (CONTINUED)

The Group does not have any material credit risk exposure to any single receivable or Group of receivables under arrangements entered into by the Group.

Fair value measurement

The fair value of financial assets and financial liabilities must be estimated for recognition and measurement and for disclosure purposes.

Fair value hierarchy

AASB 7 *Financial Instruments: Disclosures* requires disclosure of fair value measurements by level as determined by the following fair value measurement hierarchy:

- (a) Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- (b) Level 2: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices); and
- (c) Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Other fair value disclosures

The directors consider that the carrying amount of trade and other receivables and trade and other payables recorded in the consolidated financial statements approximates their fair values due to their short-term nature.

NOTE 15 EARNINGS PER SHARE

	2023	2022
	\$	\$
(a) Reconciliation of earnings to profit and loss:		
Loss attributable to the ordinary equity holders of the Company used in calculating basic and diluted earnings per share:		
Net loss for the year	(3,550,243)	(1,688,163)
(b) Weighted average number of ordinary shares used as the denominator:		
Weighted average number of ordinary shares used in calculating basic earnings per share	626,653,454	551,298,014
<i>Adjustments for the calculation of diluted earnings per share - Options</i>	-	-
Weighted average number of ordinary shares used in calculating dilutive earnings per share	626,653,454	551,298,014
Options are considered to be “potential ordinary shares” and have been included in the determination of diluted earnings per share to the extent to which they are dilutive. Details relating to options are set out in Note 12.		
(c) basic and diluted earnings per share:		
Basic loss per share (cents)	(0.57)	(0.31)
Diluted loss per share (cents)	(0.57)	(0.31)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 16 CONTINGENCIES AND COMMITMENTS

The Group is party to a royalty agreement with director Mr Nicholas Castellano, whereby the Group is obliged to pay a monthly royalty equal to the greater of:

- (a) US\$20,000; subject to adjustment as described below; or
- (b) 5% of net revenue (gross revenue minus taxes and commissions) from the HCD business.

Until the amount of US\$19.5 million is paid in full.

The minimum royalty instalment described above was adjusted due to a material change in the business, in which a customer (“the Customer”) elected to stop using Multi-Flow, causing a reduction in ongoing revenue. The parties agreed that the minimum royalty instalment be reduced from USD\$20,000 per month to USD\$16,000 per month, until HCD has entered into a firm contract with either:

- (a) the Customer and/or a related party of the Customer for the sale by HCD of at least 140 drums of Multi-Flow per month for a minimum period of 6 months; or
- (b) one or more credible third parties other than the Customer and/or a related party of the Customer for the sale by the Group of at least 35 drums of Multi-Flow per month for a minimum period of 6 months.

The royalty agreement is non-recourse and may be terminated by either party at any time without penalty. Royalty payments to date have been expensed as incurred.

NOTE 17 SUBSEQUENT EVENTS

A Share Purchase Plan closed on 7 February 2024 raising \$175,124 before costs for the issue of 38,916,451 new shares. 40,000,001 unlisted options were issued in relation to the share placement in December 2023 on the basis of one free option for every three shares issued, exercisable at 1.5 cents and expiring 2 years from the issue date.

In the opinion of the directors, there are no events that have arisen in the interval between the end of the financial year and the date of this report that has significantly affected, or may significantly affect the Group’s operations, results or the state of affairs in future financial years.

NOTE 18 RELATED PARTY DISCLOSURE

Related party transactions

During the year, the Group paid the following amounts to related party entities:

- \$49,500 (2022: \$47,250) of board fees to Spring Street Holdings Pty Ltd, a company associated with Ray Shorrocks.
- \$180,343 (2022: \$174,419) of salaries and wages, \$291,427 (2022: \$276,417) of royalties and \$179,445 (2022: \$161,749) of inventory purchases to NC2 LLC, a company associated with Nicholas Castellano.
- \$144,000 (2022: \$142,000) was invoiced from Lowell Accounting Services for accounting and secretarial services and rent, an entity of which Julie Edwards is a director. \$12,000 (2022: \$12,000) remains payable at balance date.

Transactions between related parties are on normal commercial terms and conditions no more favourable than those available to other parties unless otherwise stated.

Key management personnel

Key management personnel includes:

Stephen Mitchell	Non-Executive Chairman
Nicholas Castellano	Executive Director
Ray Shorrocks	Non-Executive Director
Andrew Seaton	Non-Executive Director
William Tarantino	CEO – Chemical Division (resigning on 1 st April 2024)
Julie Edwards	Company Secretary (paid via external accounting firm, Lowell Accounting Services Pty Ltd)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 18 RELATED PARTY DISCLOSURE (CONTINUED)

	2023	2022
	\$	\$
Short-term benefits	713,971	685,576
Post-employment benefits	-	4,556
	713,971	690,132

NOTE 19 PARENT ENTITY DISCLOSURE

The legal parent entity is Hydrocarbon Dynamics Limited. Details of the controlled entities are set out in Note 20. Transactions between Hydrocarbon Dynamics Limited and its subsidiaries during the year included:

- loans advanced to/repayments from subsidiaries; and
- investments in subsidiaries.

The loans and investments have been impaired in the accounts of the parent entity so that the net assets of the parent do not exceed the net assets of the Group. The loans to subsidiaries are interest free, repayable in cash at call and are unsecured.

ASSETS

Current assets	899,631	1,174,800
Non-current assets	430,677	2,457,382
TOTAL ASSETS	1,330,308	3,632,182

LIABILITIES

Current liabilities	115,979	70,635
Non-current liabilities	-	-
TOTAL LIABILITIES	115,979	70,635
NET ASSETS	1,214,329	3,561,547

EQUITY

Issued capital	68,445,278	67,234,881
Accumulated losses	(67,230,949)	(63,673,334)
TOTAL EQUITY	1,214,329	3,561,547

COMPREHENSIVE LOSS FOR THE YEAR

Loss for the year	(3,557,614)	(1,670,430)
TOTAL COMPREHENSIVE LOSS FOR THE YEAR	(3,557,614)	(1,670,430)

The parent entity did not have any contingent liabilities, contractual commitments or guarantees at 31 December 2023 (2022: nil). The parent entity's accounting policies are the same as the group.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 20 GROUP STRUCTURE

The consolidated financial statements incorporate the assets, liabilities and results of the following subsidiaries in accordance with the accounting policy described in Note 3(a).

Name of entity	Country of incorporation	Class of shares	Equity holding % ¹	
			2023	2022
Hydrocarbon Dynamics Australia Pty Ltd	Australia	Ordinary	100	100
HCD Canada Ltd	Canada	Ordinary	100	100
HCDI Holdings Ltd	Hong Kong	Ordinary	100	100
Hydrocarbon Dynamics Ltd	Hong Kong	Ordinary	100	100
HCD Offshore SDN BND	Malaysia	Ordinary	100	100
Hydrocarbon Dynamics UK Ltd	United Kingdom	Ordinary	100	100
HCD Blending LLC	United States of America	Ordinary	100	100
Indago Oil and Gas Inc	United States of America	Ordinary	100	100
TOC LLC dba Triopco LLC	United States of America	Ordinary	100	100
Hydrocarbon Dynamics LLC	United States of America	Ordinary	100	-

1. percentage of voting power is in proportion to ownership interest.

In the directors' opinion:

1. the attached consolidated financial statements and notes are in accordance with the *Corporations Act 2001*, including:
 - a. complying with Australian Accounting Standards (including the Australian Accounting Interpretations) and the *Corporations Regulations 2001*; and
 - b. giving a true and fair view of the financial position as at 31 December 2023 and of the performance for the year ended on that date of the Group.
2. As stated in Note 2, the consolidated financial statements also comply with International Financial Reporting Standards.
3. There are reasonable grounds to believe that the Group will be able to pay its debts as and when they become due and payable.

The directors have been given the declarations by the managing director and financial controller required by section 295A of the *Corporations Act 2001*.

This declaration is made in accordance with a resolution of the Board of Directors.



Stephen Mitchell
Chairman
Melbourne, Victoria
20 March 2024

Independent Auditor's Report to the Members of Hydrocarbon Dynamics Limited Report on the Audit of the Financial Report

Opinion

We have audited the financial report of Hydrocarbon Dynamics Limited ("the Company") and its controlled entities ("the Group"), which comprises the consolidated statement of financial position as at 31 December 2023, the consolidated statement of profit or loss and other 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 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:

- (a) giving a true and fair view of the Group's financial position as at 31 December 2023 and of its financial performance for the year then ended; and
- (b) 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 and 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 Group, 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.

Material Uncertainty Related to Going Concern

We draw attention to note 2 in the financial report which states that the ability of the Group to continue as a going concern is dependent on its ability to successfully raise funds through debt, equity or the commercialisation of its HCD product.

As stated in note 2, these events or conditions indicate that a material uncertainty exists that may cast significant doubt on the Group's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

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 of 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.

Key audit matter	How our audit addressed the matter
IMPAIRMENT OF ASSETS <i>Refer to Note 4 and 10</i>	
<p>The Group acquired 100% of the issued shares in HCDI Holdings Limited ('HCDI') in April 2017, which resulted in the recognition of goodwill and intellectual property in the Group's consolidated statement of financial position.</p> <p>In accordance with AASB 136 <i>Impairment of Assets</i>, goodwill and indefinite life intangible assets are required to be tested for impairment at least annually.</p> <p>During the year the directors assessed that the Group's goodwill and intellectual property was fully impaired, resulting in impairment expense of \$1,789,215 reported in the Group's consolidated statement of profit or loss and other comprehensive income.</p>	<p>Our procedures included, amongst others:</p> <ul style="list-style-type: none"> ▪ Understanding and evaluating the design and implementation of the controls pertaining to the impairment assessment of goodwill and intellectual property; ▪ Assessing management's determination of the Group's Cash Generating Units ("CGUs") based on our understanding of the Group's operations and internal reporting; ▪ Challenging the appropriateness of the methods used to determine the recoverable amount of the CGUs; ▪ Evaluating management's value in use assessment of goodwill and other non-financial assets, which included challenging revenue growth rate assumptions used by management; and ▪ Assessing the adequacy of the Group's disclosures at note 4 and 10 to the financial report.

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 31 December 2023, 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 accordingly 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 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 pages 5 to 9 of the directors' report for the year ended 31 December 2023. In our opinion, the Remuneration Report of Hydrocarbon Dynamics Limited, for the year ended 31 December 2023, 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.

Pitcher Partners

PITCHER PARTNERS



Dan Colwell
Partner

Brisbane, Queensland
20 March 2024

HYDROCARBON DYNAMICS LIMITED

(ABN 75 117 387 354)

SHAREHOLDER INFORMATION

Additional information required by the Australian Securities Exchange Ltd Listing Rules and not disclosed elsewhere in this report is as follows. The information is current as at 12 March 2024.

1. Substantial shareholders

The number of securities held by substantial shareholders and their associates are set out below:

Fully paid Ordinary Shares

Name	Number	%
Stephen Mitchell	95,748,372	11.83
Sterling McGregor Super Pty Ltd	75,749,095	9.36
Equity Trustees Ltd <Lowell Resources Fund A/C>	51,285,735	6.34

2. Number of security holders and securities on issue

Hydrocarbon Dynamics Limited has issued the following equity securities:

808,582,362 fully paid ordinary shares held by 1,696 shareholders;

3. Voting rights

Ordinary shares

The voting rights attached to ordinary shares are that on a show of hands, every member present, in person or proxy, has one vote and upon a poll, each share shall have one vote.

4. Distribution of security holders

Quoted securities

Fully paid ordinary shares

Category	Fully paid ordinary shares		
	Holders	Shares	%
1 - 1,000	397	185,289	0.02%
1,001 - 5,000	292	772,474	0.10%
5,001 - 10,000	91	669,231	0.08%
10,001 - 100,000	485	20,123,028	2.49%
100,001 and over	431	786,832,340	97.31%
Total	1,696	808,582,362	100.00%

HYDROCARBON DYNAMICS LIMITED

(ABN 75 117 387 354)

5. Unmarketable parcel of shares

The number of security investors holding less than a marketable parcel of securities is 1,294 with a combined total of 24,945,947 securities.

6. Twenty largest shareholders of quoted equity securities

Fully paid ordinary shares

Details of the 20 largest shareholders by registered shareholding are:

	Name	No. of shares	%
1	MALANGI PTY LTD	71,748,368	8.87%
2	STIRLING MCGREGOR SUPER PTY LTD <STIRLING MCGREGOR SUPER A/C>	64,637,984	7.99%
3	EQUITY TRUSTEES LIMITED <LOWELL RESOURCES FUND A/C>	51,285,735	6.34%
4	CHAG PTY LTD	32,766,668	4.05%
5	MR S P MITCHELL & MRS S C MITCHELL <S P MITCHELL SUPER FUND A/C>	24,000,004	2.96%
6	YAVERN CREEK HOLDINGS PTY LTD	20,044,445	2.48%
7	HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	17,155,280	2.12%
8	WHEELBARROW INVESTMENTS PTY LTD <WILLIAM BURRELL FAMILY A/C>	14,427,202	1.78%
9	MR BRUCE JAMES SEYMOUR	14,000,000	1.73%
10	MR CRAIG MACBRIDE	13,966,667	1.73%
11	HAROLD CRIPPS HOLDINGS PTY LTD	12,948,094	1.60%
12	GATTENSIDE PTY LTD	12,446,306	1.54%
13	SPRING STREET HOLDINGS PTY LTD	11,282,050	1.40%
14	STIRLING MCGREGOR SUPER P/L <STIRLING MCGREGOR S/F A/C>	11,111,111	1.37%
15	BUDWORTH CAPITAL PTY LTD <ROLLING HILLS CAPITAL A/C>	11,111,111	1.37%
16	RIGGERS SPLASH FOR CASH PTY LTD <RIGGERS SPLASH FOR CASH A/C>	11,111,111	1.37%
17	G & J SUPER FUND PTY LTD <G & J SUPER FUND A/C>	11,000,000	1.36%
18	MR J F BENJAMIN & MISS H A BENJAMIN <JOHN BENJAMIN SUPER A/C>	9,934,680	1.23%
19	MR BRIAN FRANCIS BERUDE	9,270,307	1.15%
20	BUDERIM PANORAMA PTY LTD	9,025,560	1.12%
	Total	433,272,683	53.58%

HYDROCARBON DYNAMICS LIMITED

(ABN 75 117 387 354)

CORPORATE DIRECTORY

Registered and Principal Office

Hydrocarbon Dynamics Limited
Level 6, 412 Collins Street
Melbourne VIC 3000

Phone: +61 3 9642 2899

Fax: +61 3 9642 5177

Website: www.hydrocarbodynamics.com

Share Registry

Automic
Level 5, 126 Phillip Street
SYDNEY NSW 2000

Phone: 1300 288 664

Fax: +61 2 9698 5414

Auditors

Pitcher Partners
Level 38, Central Plaza,
345 Queen Street
Brisbane QLD 4000

Stock Exchange

Australian Securities Exchange Limited (ASX)

Code: HCD

Australian Company Number

117 387 354

Australian Business Number

75 117 387 354