



# DUG Technology Ltd

H1 FY23 Investor Presentation  
February 2023

# Our business



## Business Units

### National Security & Space



### Oil & Gas



### Enterprise



## Product Lines



### Software

- Analytic software development
- Algorithms and optimisation
- Data processing and visualisation
- DUG Insight in 59 countries



### High Performance Computing (HPC)

- Green HPC and storage
- Patented DUG Cool immersion technology
- Design/own/operate some of the largest and greenest supercomputers on Earth
- Deployable complete HPC system



### Services

- Data science
- Geoscience
- High-frequency Full Waveform Inversion

## Delivery Platform



- Private and secure
- Communication layers
- Manage users
- Allows usage monitoring and much more

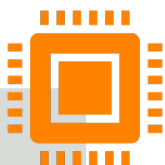
## At the forefront of technical excellence and innovation



Be a global leader in data management and oil & gas seismic imaging



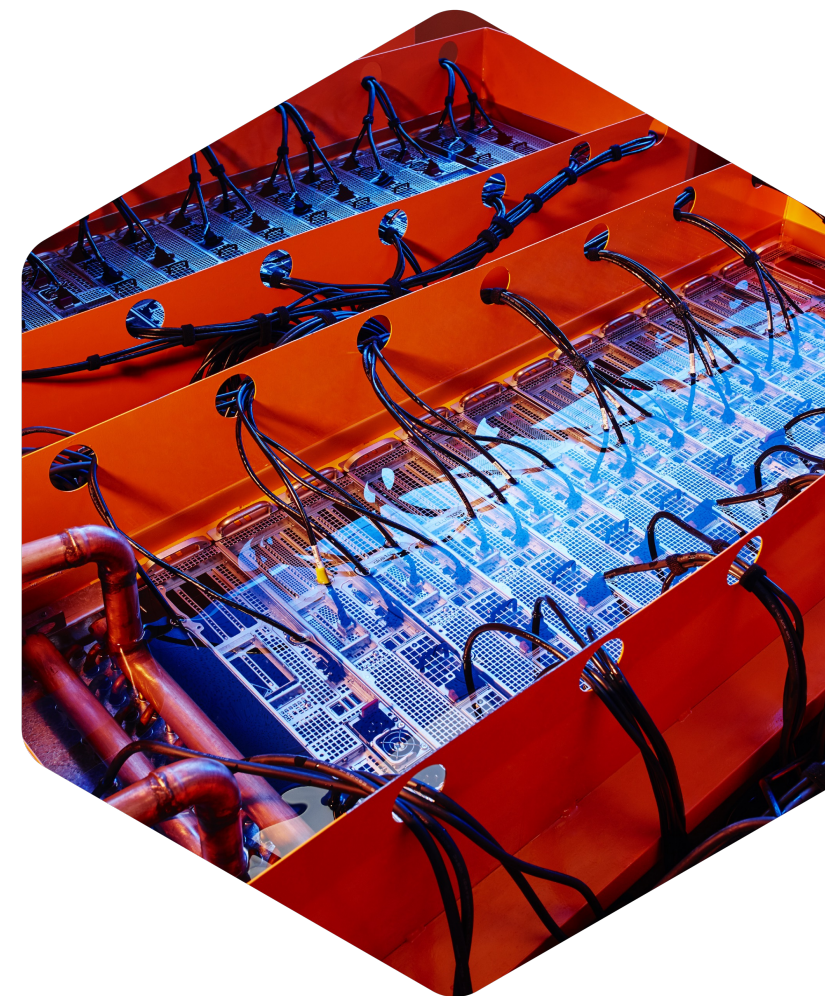
Leverage strong history into new compelling industries



Supply clients with world-class and sustainable supercomputing



Focus on R&D to foster innovation and industry leading technology







## Strong order intake

- Services contract wins of US\$24.7 million, up 19% on H2 FY22 and 305% on H1 FY22
- Strong wins follow US\$20.8 million in contracts awarded during H2 FY22



## Record breaking results

- Record breaking profit and loss results on all measures
- Revenue of US\$25.2 million  
(H1 FY22: US\$17.0 million)
  - EBITDA of US\$7.6 million  
(H1 FY22: US\$0.1 million)
  - NPAT of US\$2.6 million  
(H1 FY22: loss of US\$5.8 million)



## Positive cash flow and low net debt

- Operating cash inflows of US\$3.0 million, includes working capital outflows totalling US\$3.4 million
- Cash of US\$2.5 million
- Net debt of US\$2.0 million

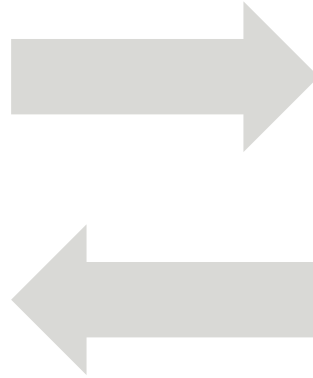


# Positioned to capitalise



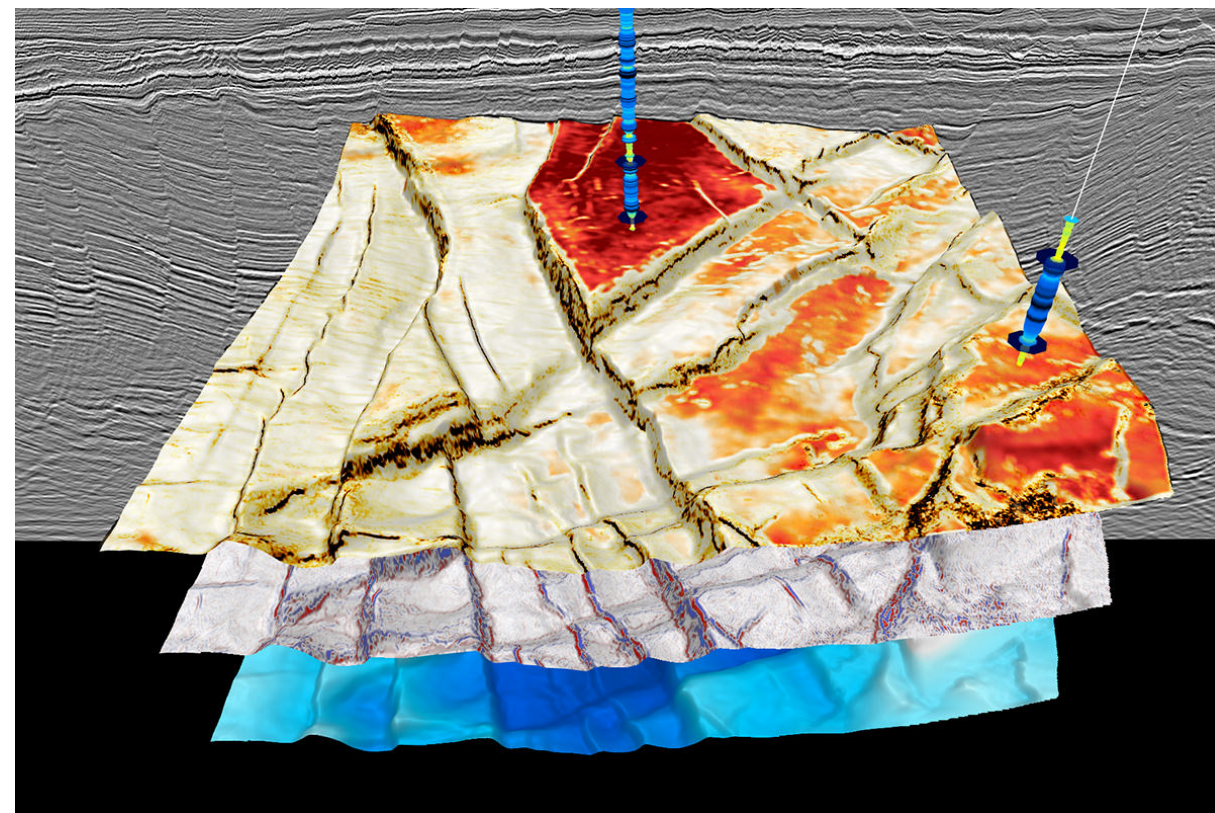
## Tailwinds from emerging global themes

- Increasing complexity and size of data
- Emphasis on agile and complex data analytics
- Growing demand for cloud storage
- Focus on environmental sustainability
- Heightening cybersecurity risks



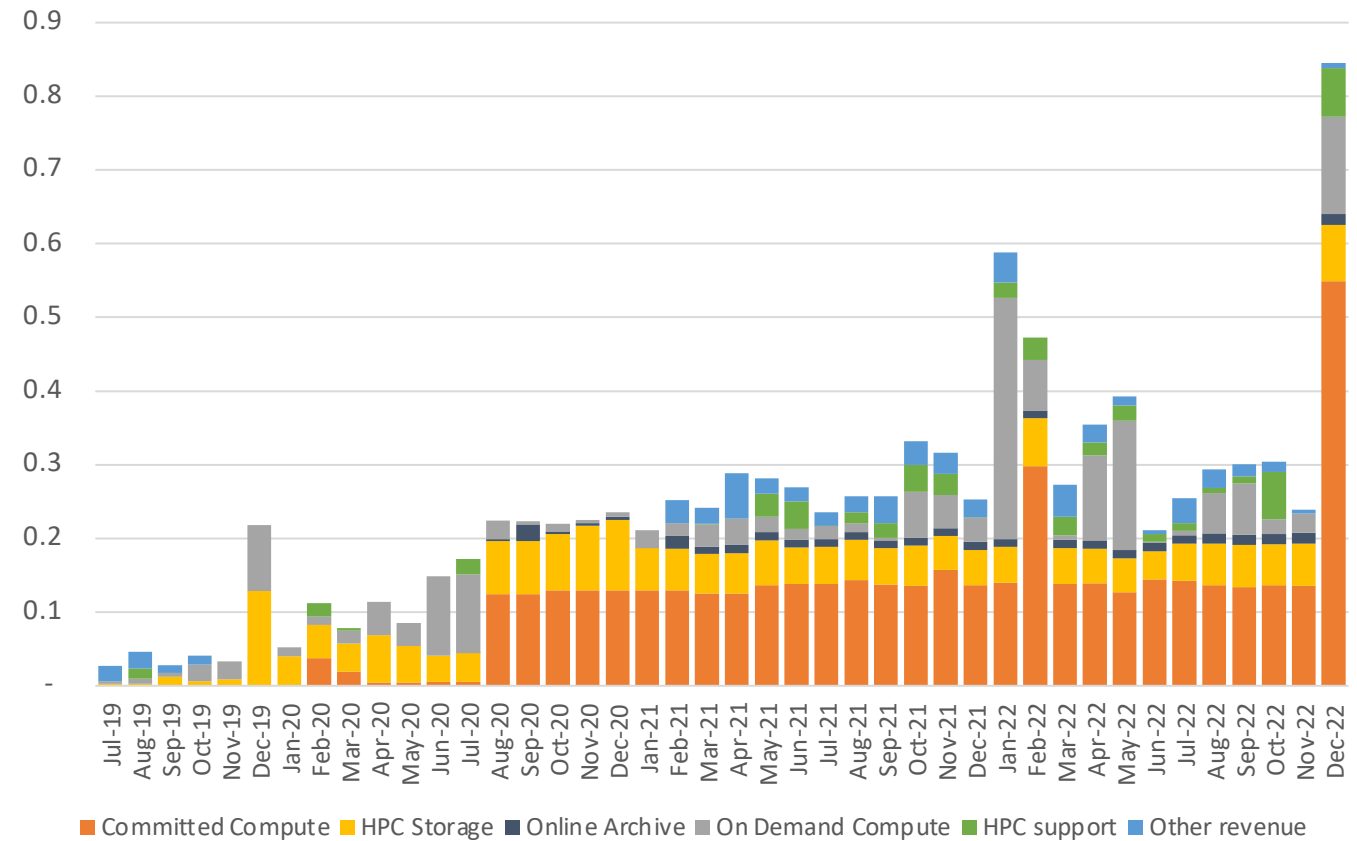
- ✓ Revolutionary geoscience imaging and analysis technology
- ✓ Bespoke data solutions and expert support
- ✓ State-of-the-art computing hardware
- ✓ Sustainable, power-efficient supercomputing
- ✓ Multi-tiered cyber and data security, ISO 9001 and ISO 27001

- Revenue of US\$3.2 million
- Growth in revenue of 9% on H1 FY22
- Strong renewals and client wins during the period
- Top 3 software clients tied to multi-year (3-5 year) agreements. Total combined revenue >US\$1.3 million per annum
- Incremental opportunities from FWI technology



- Revenue of US\$2.2 million
- Growth in revenue of 29% on H1 FY22
- Record billings in December 2022 support H2 FY23 revenue
- Strategically important new clients including:
  - Committed compute and storage with Monash University
  - On-demand services for University of Western Australia and Murdoch University signed in recent months
- Investment in equipment to further support, asset financing available to continue to invest
- ISO 9001 and ISO 27001 attained during the period; Defence Industry Security Program application lodged and under assessment

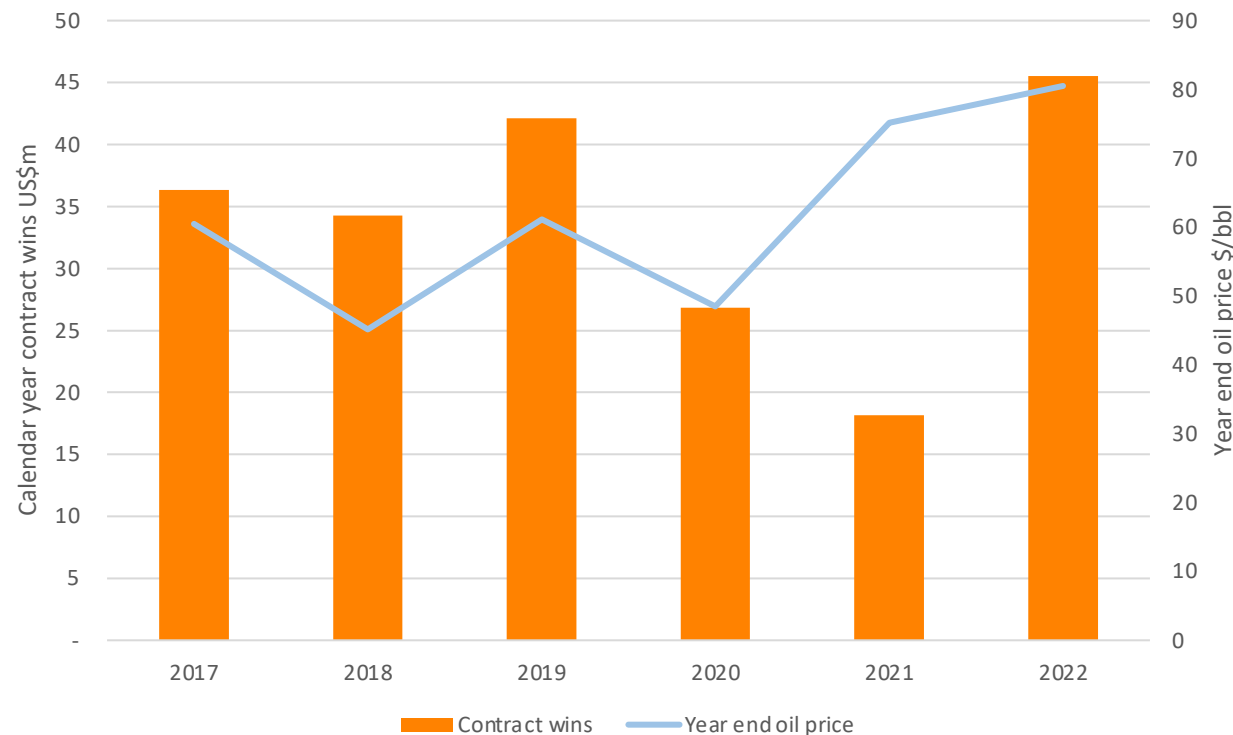
Third Party HPCaaS Billings (US\$millions)





- Revenue of US\$19.8 million
- Growth in revenue of 60% on H1 FY22
- Record calendar year order intake of US\$45.5 million supported by improved oil prices
- Access to larger projects from enhanced reputation in the market
- Reduced cost base and localised incentives driving improved EBITDA
- Successful FWI Imaging trials, further opportunities expected

## Historic Services Calendar Year Order Intake



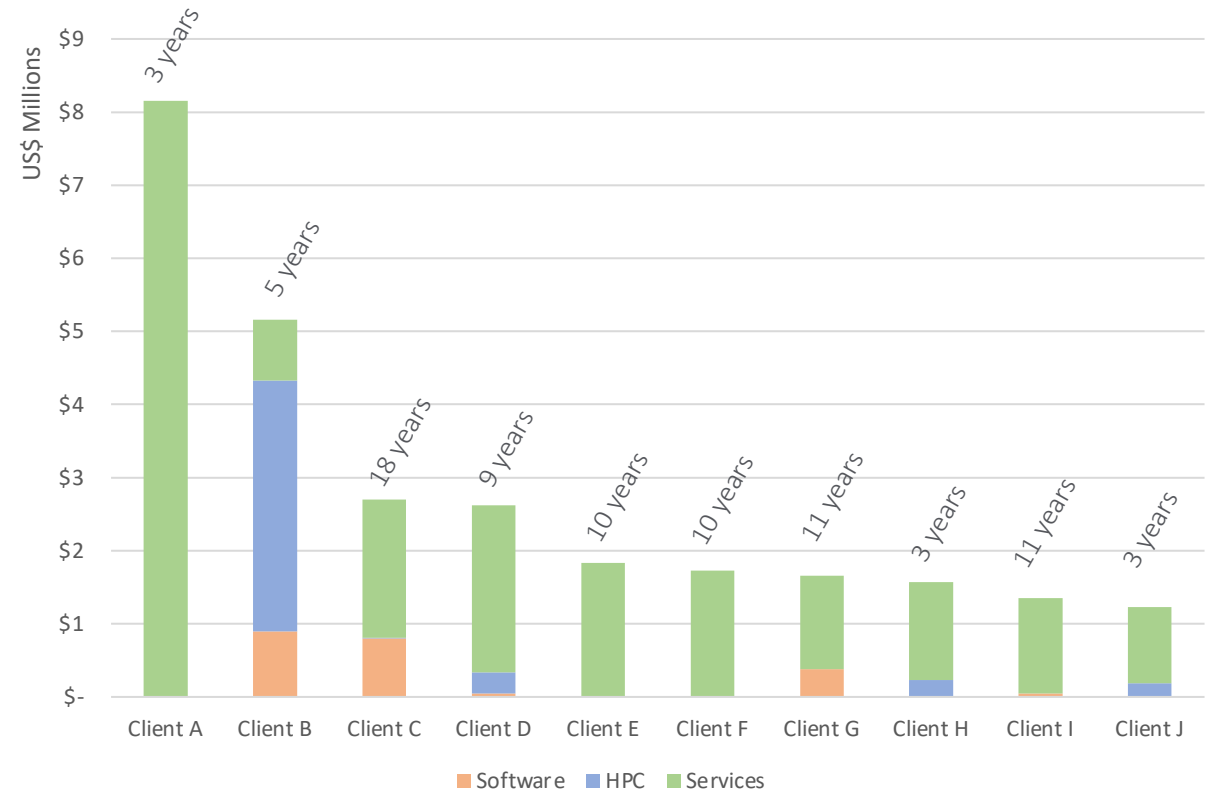
Source: <https://www.macrotrends.net/> and Company Data

# Deep Client Relationships



- Our top 10 clients accounted for 50% of revenue for the last 18 months
- Deep longevity of relationships with large clients, across multiple product lines
- Relationships developed have led to larger, longer-term projects with major clients
- Important recent client wins supplementing long-standing relationships

Top 10 customers by revenue and by relationship length  
(FY22 and H1 FY23 combined)



- Services order intake has increased work in hand to US\$28.8 million at 31 December 2022, up 30% compared to 30 June 2022.
- Software revenues will be supported by strong renewals with existing clients as well as contracted client wins during H1 FY23.
- HPCaaS expected to continue to penetrate the Australian non-oil and gas market with a key client win in Monash University. DUG broadened its customer mix over the current period.
- FWI Imaging expected to continue to create opportunities in the market, further differentiating DUG from its competitors.
- Unaudited January 2023 EBITDA result of US\$2.7 million, including US\$2.5 million from the sale of multi-client data previously announced.
- H2 FY23 is expected to deliver improved operating cash returns compared to H1 FY23. Unaudited operating cash flows for the month of January 2023 were US\$1.6 million, with an unaudited cash balance of US\$3.2 million and net debt of US\$0.8 million at 31 January 2023.
- Cash has continued to grow throughout February 2023 with unaudited US\$5.4 million on hand at 24 February 2023.
- DUG does not intend to issue earnings guidance for H2 FY23.



# Financials

# Profit and Loss



- US\$8.6 million (52%) increase in total revenue from H2 FY22:
  - Software – seasonal revenue business due to timing of renewals. Growth of 9% on H1 FY22.
  - HPCaaS – steady revenue overall to H2 FY22, continued growth in non-oil and gas revenues.
  - Services – strong performance following high order flow since March 2022, driven by buoyant US and London markets and supported by DUG's new FWI technology.
- Reset cost base and high operating leverage paying off through increased EBITDA margins.
- Reduced financing costs from debt repayment.
- Return to positive Net Profit after Tax.

USD'm	H1 FY23 <sup>1</sup>	H2 FY22	H1 FY22	% Change HoH	% Change YoY
<b>Revenue</b>					
Software	3.2	3.2	2.9	-	9%
HPCaaS	2.2	2.2	1.7	-	29%
Services	19.8	11.2	12.4	77%	60%
<b>Total Revenue</b>	<b>25.2</b>	<b>16.6</b>	<b>17.0</b>	<b>52%</b>	<b>48%</b>
Other income	1.2	1.6	2.3	(25%)	(48%)
Employee benefits	(13.7)	(11.3)	(14.1)	(21%)	3%
Other operating costs	(5.1)	(4.2)	(5.2)	(21%)	2%
<b>EBITDA</b>	<b>7.6</b>	<b>2.7</b>	<b>-</b>	<b>181%</b>	<b>n/a</b>
<b>EBITDA margin</b>	<b>30%</b>	<b>16%</b>	<b>-</b>	<b>14%</b>	<b>n/a</b>
<b>Depreciation and amortisation</b>	<b>(3.2)</b>	<b>(4.0)</b>	<b>(3.7)</b>	<b>20%</b>	<b>14%</b>
<b>EBIT</b>	<b>4.4</b>	<b>(1.3)</b>	<b>(3.7)</b>	<b>↑</b>	<b>↑</b>
<b>Finance expense</b>	<b>(0.6)</b>	<b>(0.8)</b>	<b>(0.8)</b>	<b>25%</b>	<b>25%</b>
<b>Net profit before tax</b>	<b>3.8</b>	<b>(2.1)</b>	<b>(4.5)</b>	<b>↑</b>	<b>↑</b>
<b>Net profit after tax</b>	<b>2.6</b>	<b>(3.6)</b>	<b>(5.8)</b>	<b>↑</b>	<b>↑</b>

<sup>1</sup> Note – financial information is in USD and is provided based on preliminary 1H FY23 unaudited results

# Balance Sheet



- Debt levels in line with 30 June 2022 at US\$4.5 million gross debt and US\$2.0 million net debt
- Net debt : EBITDA (Last 12 Months) is 0.19x
- New asset financing facilities utilised during the period to support growth capital expenditure
- Increase in all working capital lines, driven by revenue growth and some timing differences which will flow through to increase H2 FY23 cash flows
- Increase in right of use assets and lease liabilities from a new office lease in London, as part of the cost saving measures.

USD'm	31 Dec 2022 <sup>1</sup>	30 Jun 2022
<b>Current Assets</b>		
Cash and cash equivalents	2.5	2.7
Trade and other receivables	10.1	4.9
Contract assets	2.5	0.3
Other	1.5	1.7
<b>Total Current Assets</b>	<b>16.6</b>	<b>9.6</b>
<b>Non Current Assets</b>		
Property, plant and equipment	18.1	19.1
Right of use assets and other	11.2	10.4
<b>Total Non Current Assets</b>	<b>29.3</b>	<b>29.5</b>
<b>Total Assets</b>	<b>45.9</b>	<b>39.1</b>
<b>Current Liabilities</b>		
Trade and other payables	5.3	2.7
Loans and borrowings	2.8	2.0
Contract liabilities	4.0	2.7
Lease liabilities	1.4	1.6
Provisions	2.4	2.8
<b>Total Current Liabilities</b>	<b>15.9</b>	<b>11.8</b>
<b>Non Current Liabilities</b>		
Loans and borrowings	1.7	2.5
Lease liabilities	11.6	10.8
Provisions	0.1	0.1
<b>Total Non Current Liabilities</b>	<b>13.4</b>	<b>13.4</b>
<b>Total Liabilities</b>	<b>29.3</b>	<b>25.2</b>
<b>Net Assets</b>	<b>16.6</b>	<b>13.9</b>

<sup>1</sup> Note – financial information is in USD and is provided based on preliminary 1H FY23 unaudited results



# Cash Flow



- Operating cash inflows of US\$3.0 million included a build up of US\$3.6 million of working capital, a portion of which is expected to unwind during H2 FY23
- Financing cash outflows of US\$2.0 million included term debt repayments of US\$0.5 million (US\$1.5 million expected in H2 FY23) and an inflow of US\$0.3 million from asset financing
- During the period, US\$1.2 million was invested into growth capital expenditure for new computer hardware in Australia to support clients outside the oil and gas industry

USD'm	1H FY23 <sup>1</sup>	2H FY22	1H FY22
<b>Cash flow from operating activities</b>			
- EBITDA	7.6	2.7	-
- Movement in working capital	(3.6)	0.9	(0.5)
- Non-cash items in EBITDA	(1.2)	(1.6)	(2.3)
- Other	0.2	0.1	0.3
<b>Total net cash flows from operating activities</b>	<b>3.0</b>	<b>2.1</b>	<b>(2.5)</b>
<b>Cash flows from financing activities</b>			
- Net proceeds from issue of shares	-	-	11.7
- Drawdowns on asset financing facilities	0.3	-	-
- Net repayment of bank debt	(0.5)	(8.0)	(5.3)
- Net repayment of leases and other financing facilities	(1.2)	(1.1)	(1.1)
- Financing costs	(0.6)	(0.6)	(0.7)
- Other	-	(0.1)	(0.1)
<b>Total net cash flows from financing activities</b>	<b>(2.0)</b>	<b>(9.8)</b>	<b>4.5</b>
<b>Cash flows from investing activities</b>			
- Purchase of assets	(1.2)	(0.6)	(0.9)
- Disposals of assets	0.1	-	-
<b>Total net cash flows from investing activities</b>	<b>(1.1)</b>	<b>(0.6)</b>	<b>(0.9)</b>
Opening cash balance	2.7	11.2	10.0
Net cash flows	(0.1)	(8.3)	1.2
Effect of foreign exchange	(0.1)	(0.2)	-
<b>Closing cash balance</b>	<b>2.5</b>	<b>2.7</b>	<b>11.2</b>

*Note – financial information is in USD and is provided based on preliminary unaudited results. Cash flow from operating activities disclosed in Appendix 4C's lodged with the ASX include financing costs, the group have elected to include financing costs in financing cash flows for statutory reporting purposes, as presented above*

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All amounts are in United States Dollars (US\$) unless otherwise stated.

# Appendices and Case Studies



# DUG Overview



- ASX-listed global technology company with offices in London, Houston and Kuala Lumpur—HQ in Perth
- Founded in 2003 by Dr Matthew Lamont and Dr Troy Thompson to introduce an enhanced Decision Support System to the Oil & Gas industry
- Designs, owns and operates some of the largest and greenest supercomputing installations on Earth
- World-leading innovators with almost two decades of experience in high performance computing and 10 years in immersion cooling
- Over 250 employees, with 100 based right here in Australia
- R&D-focus—strong team of data scientists and big-data experts
- 14 patents granted and in application



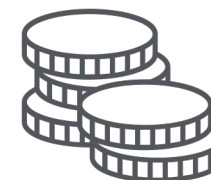
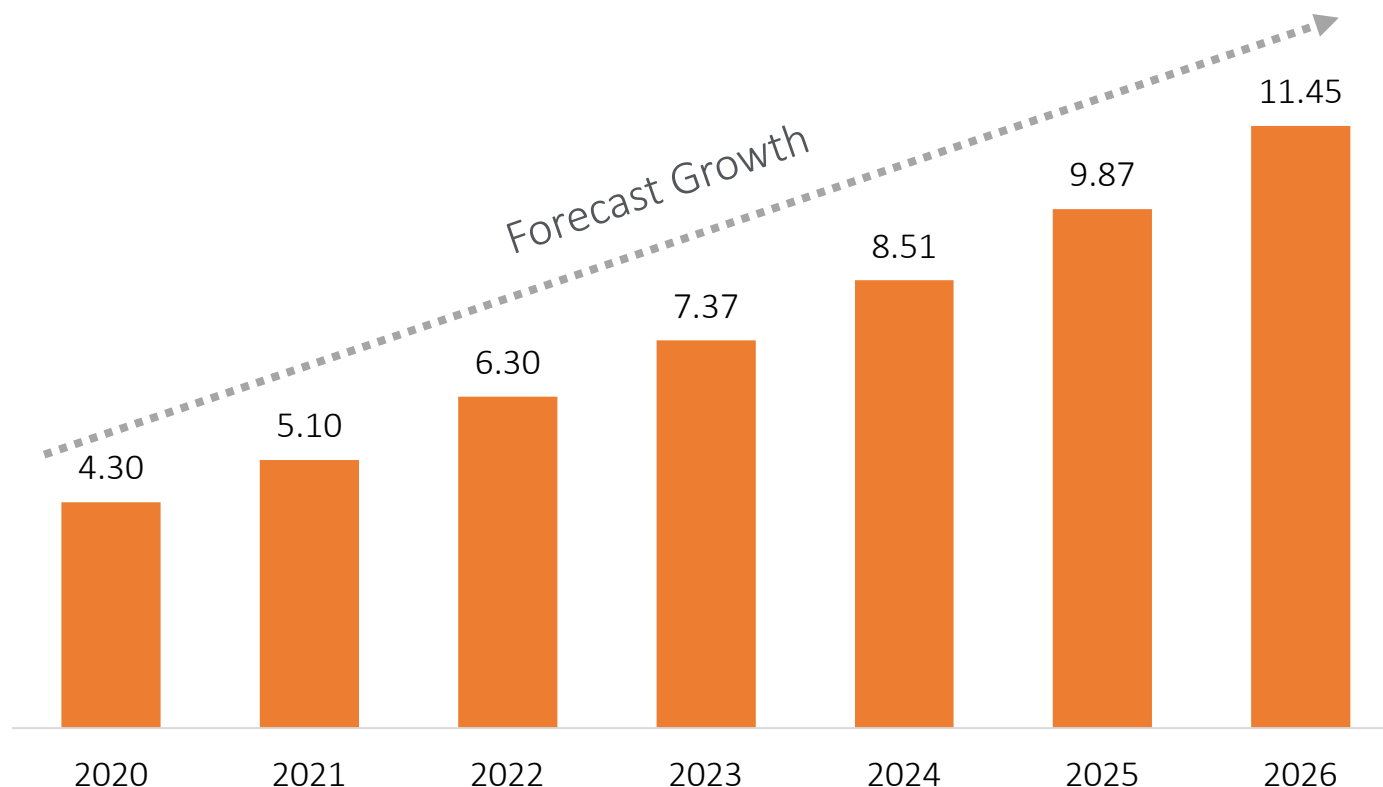
# DUG's global footprint



# Global opportunity



Global HPC Cloud Market Size (US\$ billion)<sup>1</sup>



**US\$11.5bn**

Global HPC Market Value 2026  
Forecast

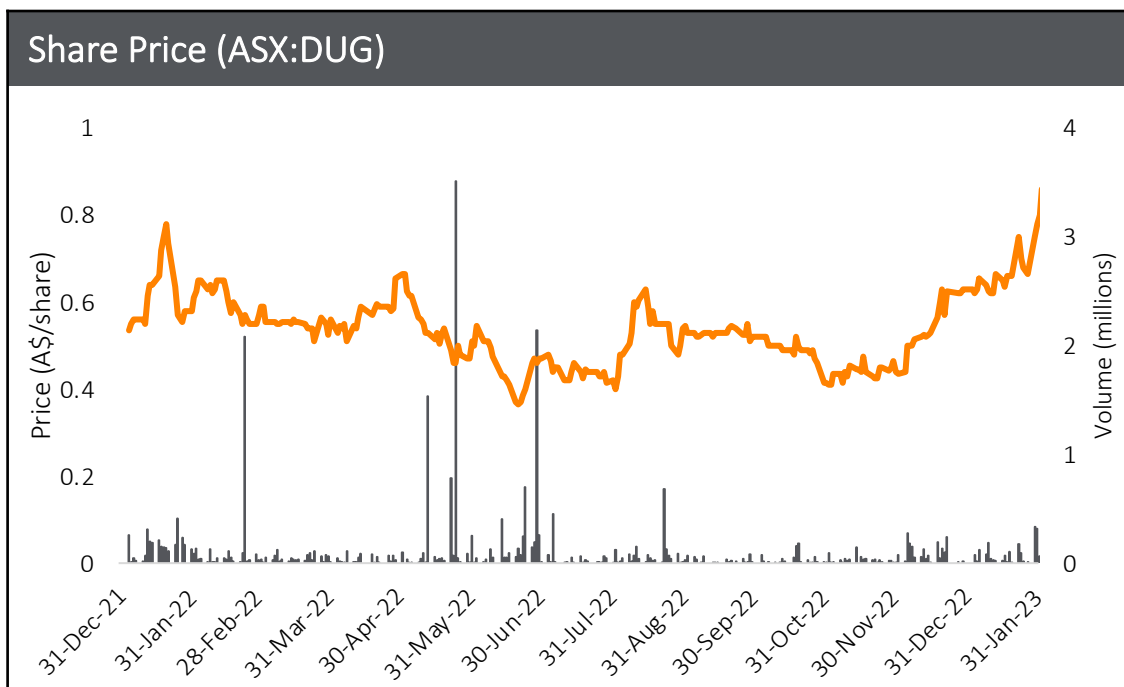


**+17.6%**

Forecast CAGR 2022 to 2026

(1) <https://www.hpcwire.com/2022/05/30/hyperion-hpc-market-is-stabilizing-and-headed-to-50b-by-2026/>

# Corporate summary



Board of Directors	
Frank Sciarrone	Non-Executive Chairman
Matthew Lamont Ph.D.	Managing Director
Louise Bower	Non-Executive Director
Mark Puzey	Non-Executive Director

Corporate Structure	Units	
Share Price (as at 22 Feb 2023)	A\$/sh	0.85
Shares on Issue	#m	118.1
<b>Market Capitalisation</b>	<b>A\$m</b>	<b>100.4</b>
(+) Financial Debt <sup>1</sup> (as at 31 Dec 2022)	A\$m	6.6
(-) Cash at Bank <sup>1</sup> (as at 31 Dec 2022)	A\$m	3.7
Enterprise Value	A\$m	103.3

Substantial Shareholders (as at 4 November 2022)	
Mr Matthew Lamont	20.4%
Perennial Value Management Limited	15.0%
Regal Funds Management Pty Ltd	9.2%
Thorney Investment Group	7.0%
Mr Philip Imperial Schwan	6.1%
<b>Top 20 Shareholders</b>	<b>73.2%</b>

# Case study – Sharpening Earth observation capabilities



- Smart-satellite provider LatConnect 60 is working to promote a subscription-based monitoring service to enhance crop management
- To sustain a large-scale deployment of the service, LatConnect 60 required a tailored, cost-effective and efficient solution
- DUG provided the required compute capacity and an optimal software environment for LatConnect 60 to run its workflows and analyses

*“We have been thoroughly impressed by the speed and scale at which DUG’s HPC offering has been able to support our agriculture analytics services. Data-processing tasks which took us weeks in the past can now be completed in hours. This is a game-changing development for us.”*

Venkat Pillay, CEO of LatConnect60

LatConnect 60°





# Case study – Supercharging medical research at Perkins



- Researchers at the Harry Perkins Institute of Medical Research (Perkins) must constantly develop new algorithms and methodologies to keep pace with the rapid evolution of bioinformatics
- Perkins required a fully supported HPC system designed to let them store, process and analyse colossal amounts of genomic data in their unconventional ways
- DUG provided Perkins researchers with tailored HPC expertise and support, ensuring their workflows could leverage state-of-the-art processors and storage systems such as VAST Data's massive scalable storage system that can service any I/O load



**DUG's bespoke HPC solution gave Perkins researchers quick and easy access to their huge datasets without computational restriction**

*Perkins said: "Trusting the technology to the experts at DUG, we can now get back to our #1 priority - saving lives."*





# Case study – Better and greener shipbuilding



- Ship design specialists at Austal perform resource-intensive computational analyses to improve the efficiency and performance of its industry-leading defence and commercial vessels
- Austal required quick access to different hardware and an efficient, flexible cloud platform to meet its increasing computational demands, while reducing its greenhouse-gas emissions
- Providing tailored HPC expertise and bespoke optimisation support such as benchmarking and job scheduling, DUG experts ensured Austal's computational fluid dynamics software and workflows could leverage DUG McCloud

**DUG's bespoke HPC solution and expert support encouraged Austal to fully embrace cloud computing for its research and design processes**

DUG's patented immersion-cooling technology helped reduce energy consumption by up to 51%, enabling Austal to meet its ESG requirements



# Case study – The SKA project



- The Square Kilometre Array (SKA) Project is one of the largest international scientific research projects in history
- The Murchison Widefield Array (MWA) telescope had amassed a backlog of data that was being processed using the Pawsey Supercomputing Centre
- DUG HPC experts took two weeks to optimise the academic code used to process the MWA data and achieved run-times that were **125x faster**

DUG's support and HPC expertise allowed the ICRAR team to process their data backlog in three hours, using just a fifth of DUG's supercomputer in Perth

DUG's green HPC was credited for lowering emissions

ICRAR published a paper two years ahead of schedule, with 100+ citations





# Case study – Outsmarting bushfires with AI



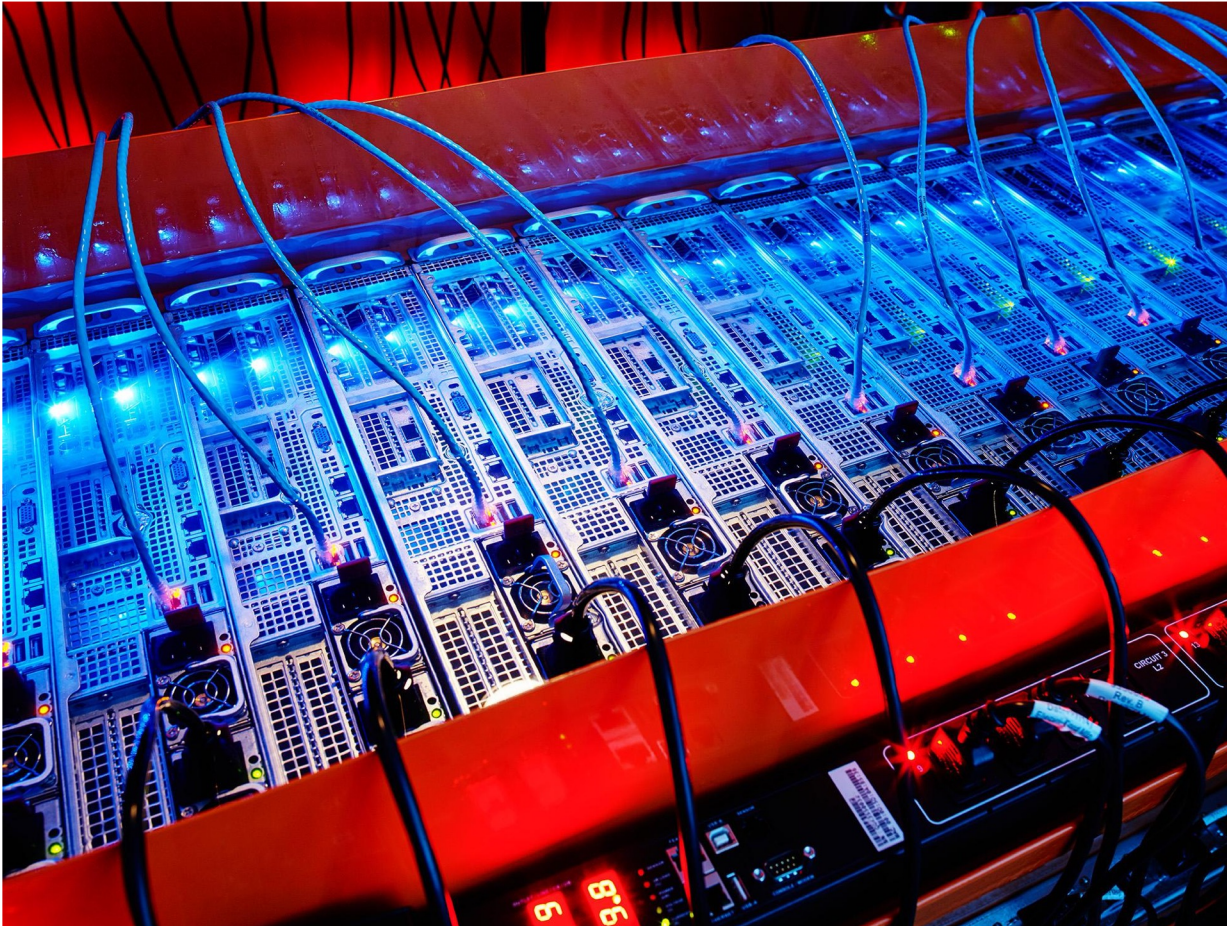
- The Frontier Development Lab AusNZ approached DUG to provide the HPC service and support for Data Quest 2020—a research sprint incorporating artificial intelligence (AI) into firefighting
- Predicting and preventing bushfires are arduous tasks due to the complexity of the processes involved, coupled with obsolete tools that require manual input
- DUG supplied HPC resources and data science expertise, enabling the researchers to efficiently test AI-powered systems by leveraging **terabytes of satellite data**

**A number of innovative AI solutions for bushfire prevention and management were successfully developed**

Clear, demonstrable pathways and deployable tools for future use by fire experts and first responders



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