



# DUG Technology Ltd

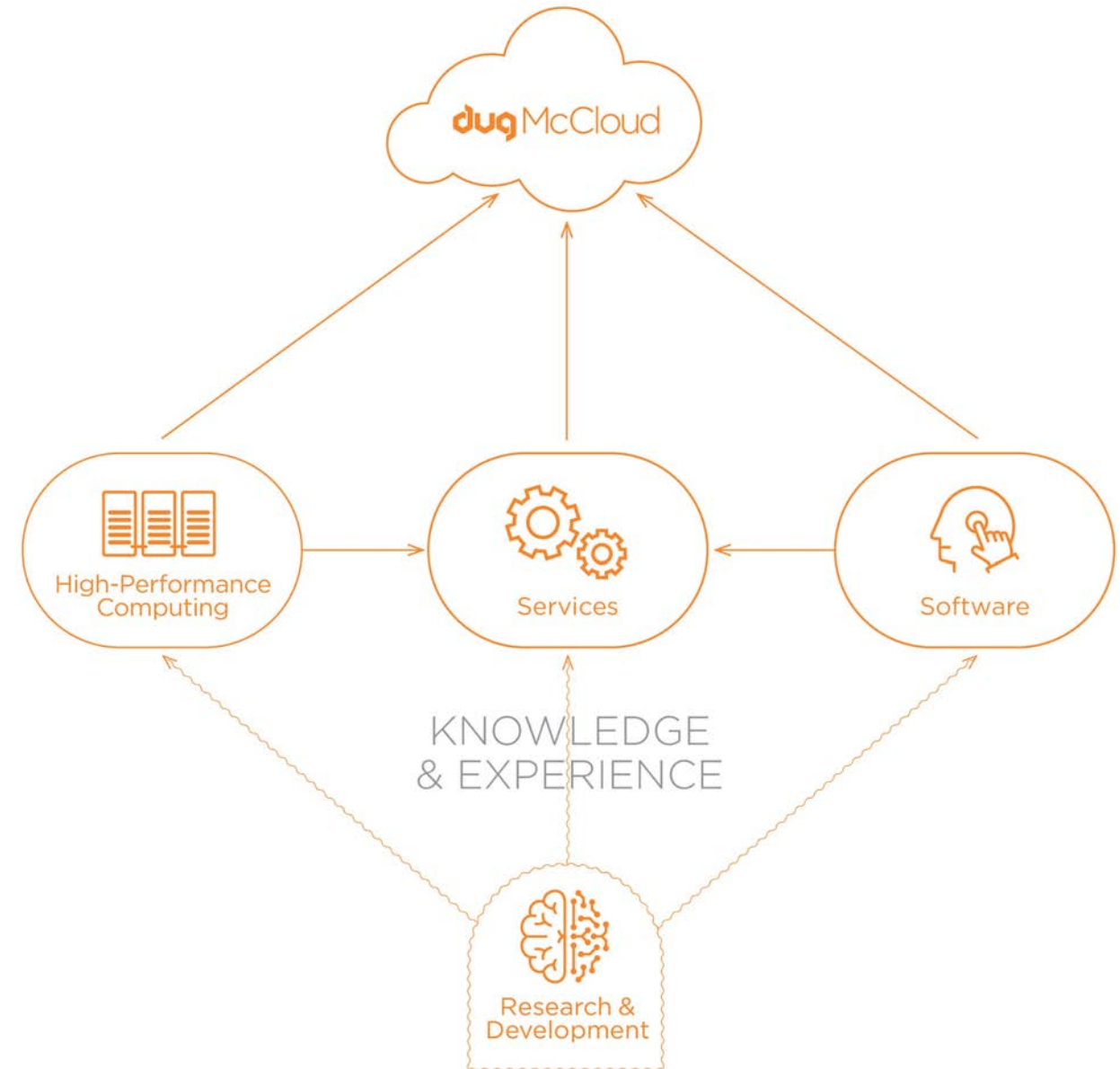
ASX Code 'DUG'

H1 FY21 Results  
22 February 2021

# DUG in a nutshell



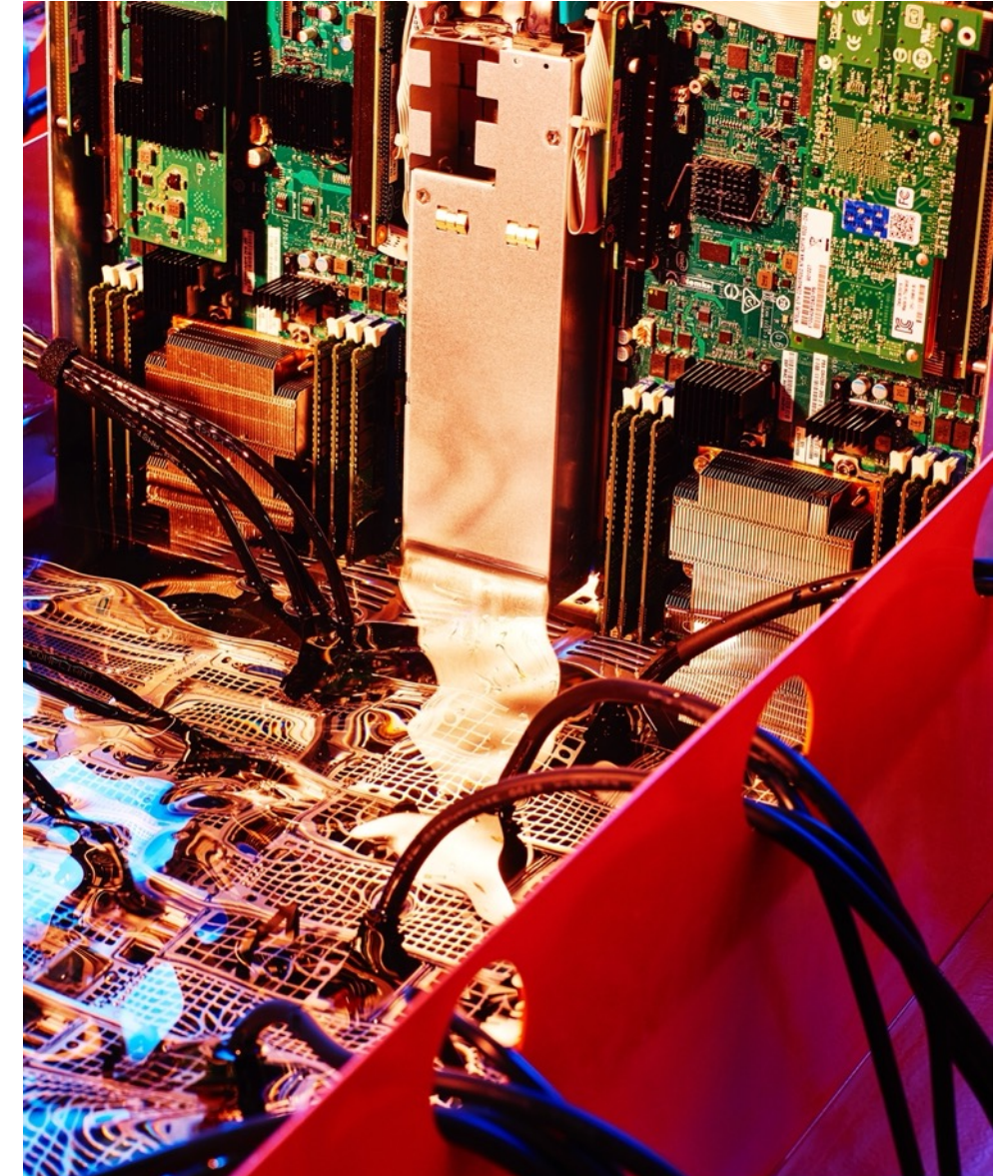
- DUG is ...
  - Software
  - Big compute
  - Big data
  - Numerical algorithms
  - Services
- Delivered through ...
  - 4 global offices and high-performance computing centres
  - 29 petaflops of compute and 35 petabytes of storage
  - c. 300 staff
- Delivered to ...
  - 200 customers
  - 48 countries



# H1 FY21 highlights



- DUG listed on ASX in August 2020
- Revenue at US\$24.2m with EBITDA of US\$4.2m
- DUG Insight Software revenue growth 12% year-on-year
- HPCaaS revenue growth 86% half-on-half
- Committed compute and storage revenue up 213% half-on-half
- Margin improvements in Software and HPCaaS segments
- Compute capacity increased from 18 to 29 double-precision petaflops
- Storage capacity increased from 27 to 35 petabytes
- Development of DUG Insight – Astrophysics, bringing leading edge visualisation to the Astrophysics industry
- Oil price recovery and stabilisation has bolstered the outlook for the Services business



# Industry diversification case study – Harry Perkins Institute

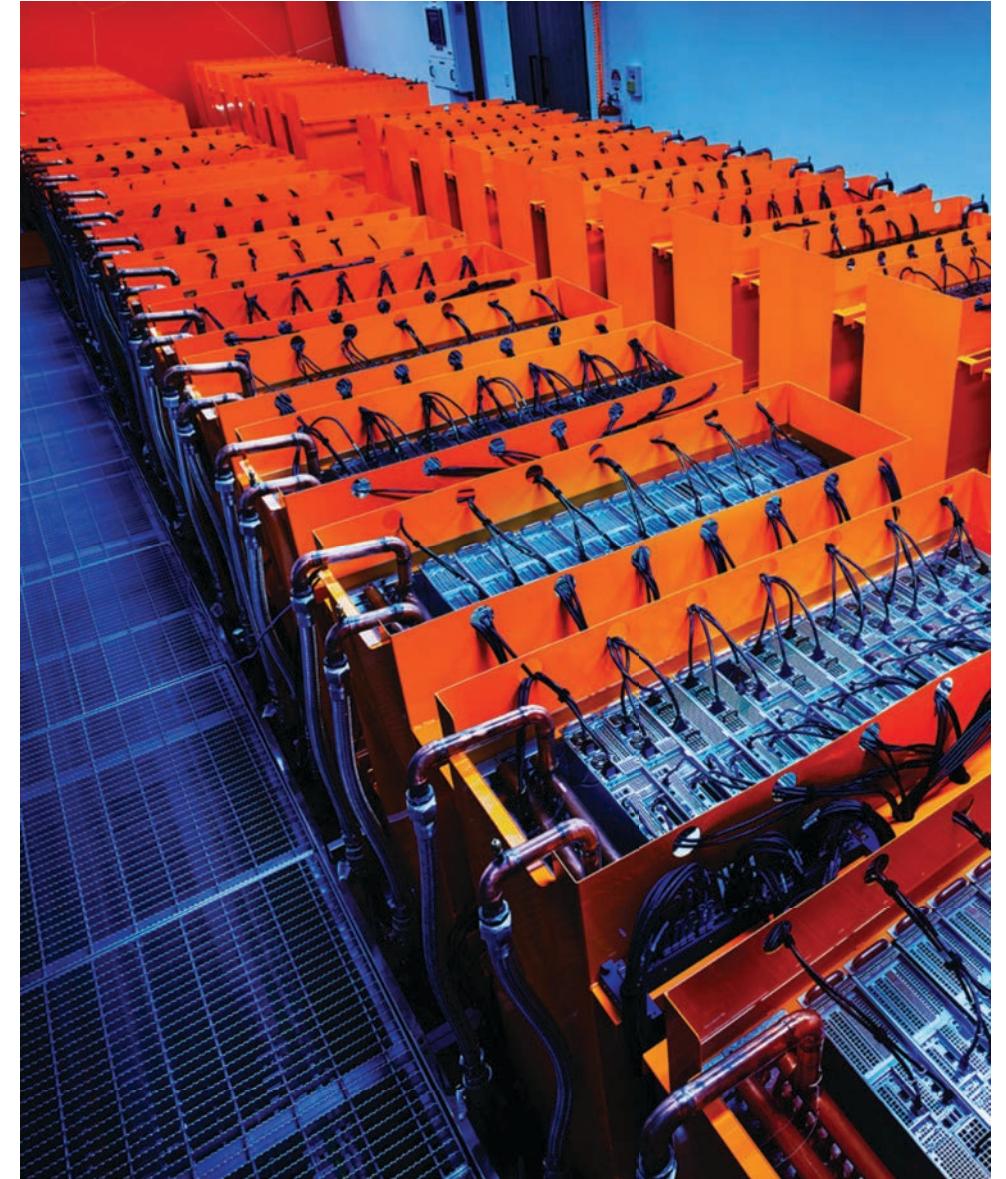


- Landmark medical research client signed in October 2020, validating DUG's industry expansion strategy
- The Harry Perkins Institute of Medical Research is one of Australia's leading medical research institutes investigating diseases affecting the community
- The institute has more than 250 researchers located on three hospital campuses in Perth
- The deal provides access to high-performance computing (HPC) cycles to boost the research output of the institute
- HPC and storage capability is needed to conduct analysis using genomics and other bioinformatics heavy technologies. Bioinformatics combines biology, computer science, information technology, mathematics and statistics to analyse and interpret biological data
- DUG HPCaaS helps the institute fast track the development of new discoveries and treatments, and provide international and local pharmaceutical and biotechnology companies the facilities to trial the latest drugs and treatments



## Success – Equinor case study

- Equinor is a c. US\$60bn market cap energy company
- They are known as an early adopter of quality, innovative new technology
- After an exhaustive evaluation period Equinor signed on to DUG McCloud and now:
  - Use the DUG Insight software suite in multiple offices
  - Use DUG's HPCaaS from multiple offices
  - Run projects and manage data using DUG's services
- DUG displaced the existing major third-party cloud provider and the incumbent software provider
- This win validates DUG's place in the industry and ability to win competitive tenders



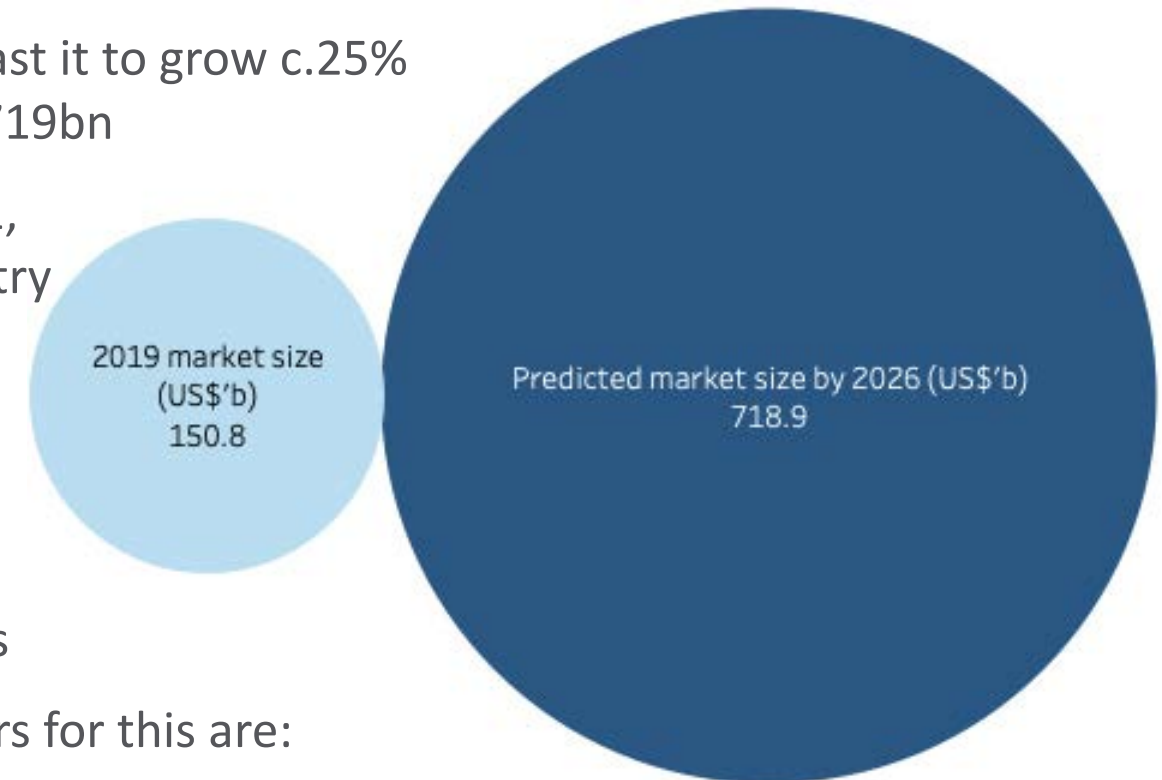
- CSO measures the HPC market as c.US\$151bn in 2019 and forecast it to grow c.25% per year from 2019 to 2026 for a predicted market size of c.US\$719bn
- DUG's HPC team completed 18 proof of concepts during H1 FY21, with 7 currently underway, outside of the Oil & Gas (O&G) industry

- Industries evaluating DUG's HPC include:

Life sciences	Astrophysics	Healthcare
Radio astronomy	Medical research	Resources
Engineering firms	Climate and weather	Universities

- Growth in the HPC segment is led by client acquisition, the drivers for this are:

Proof of concepts / Evaluations	Software optimisation and high-end support	Brand recognition
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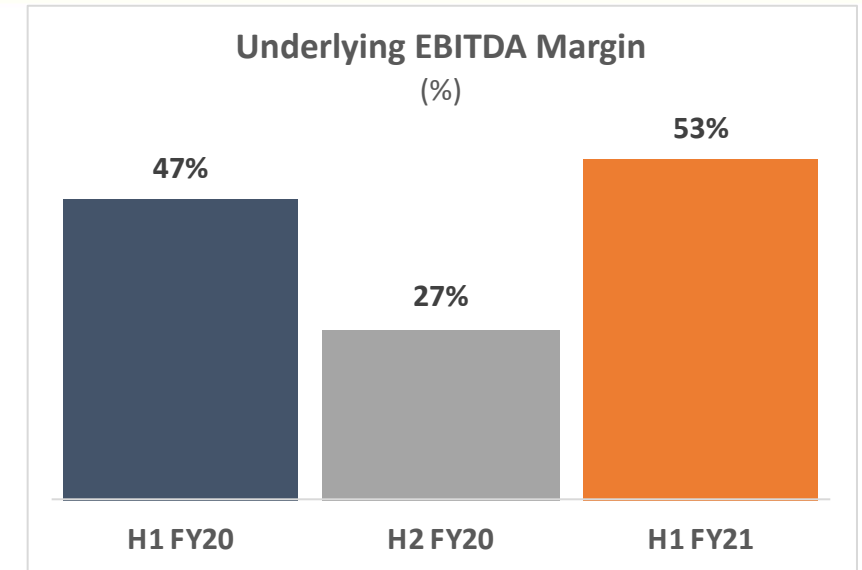
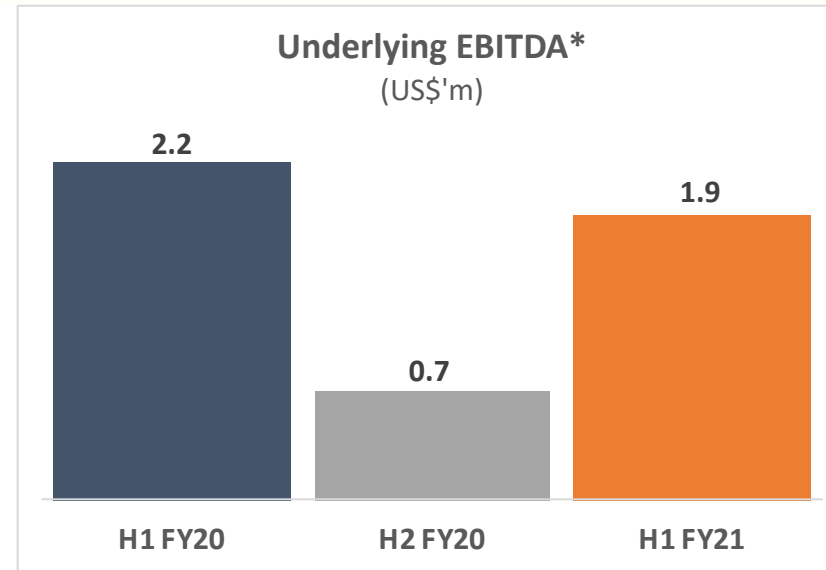
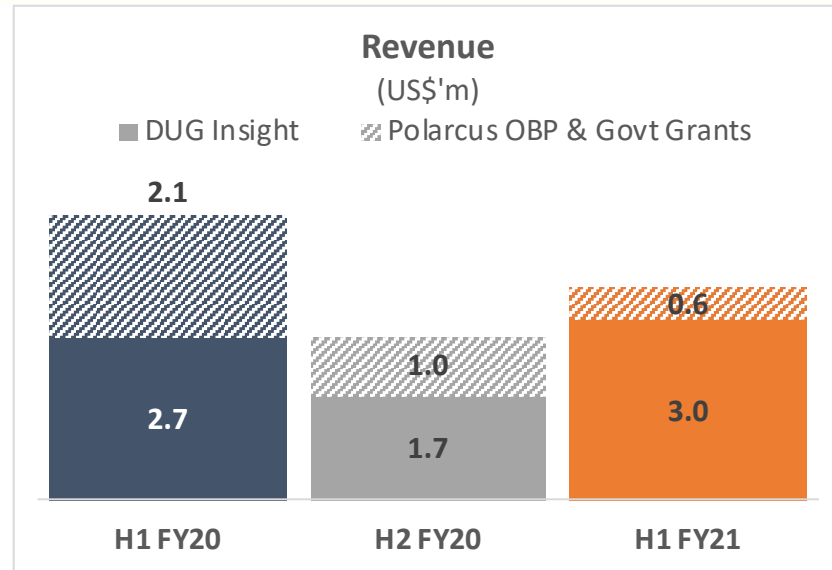


HPC market size source (CSO): <https://www2.cso.com.au/mediareleases/37086/high-performance-computing-market-garner-usd-7189/>



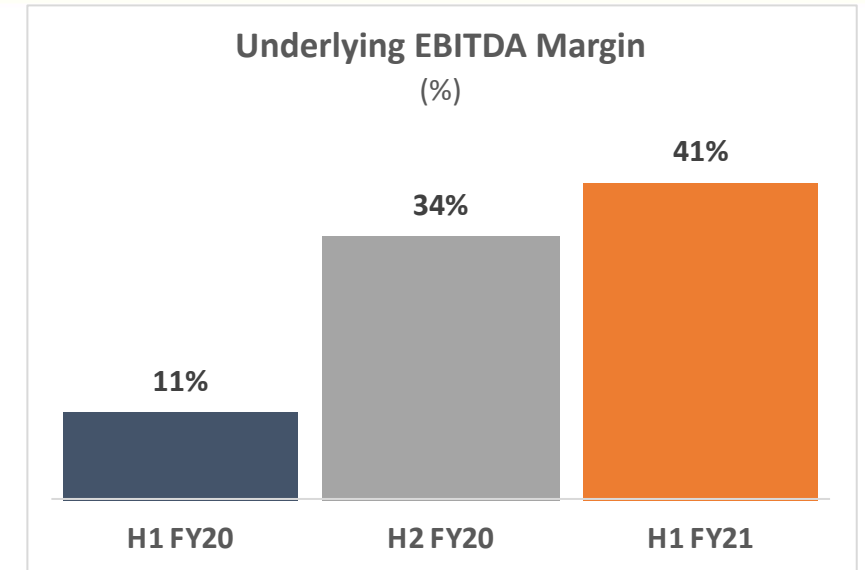
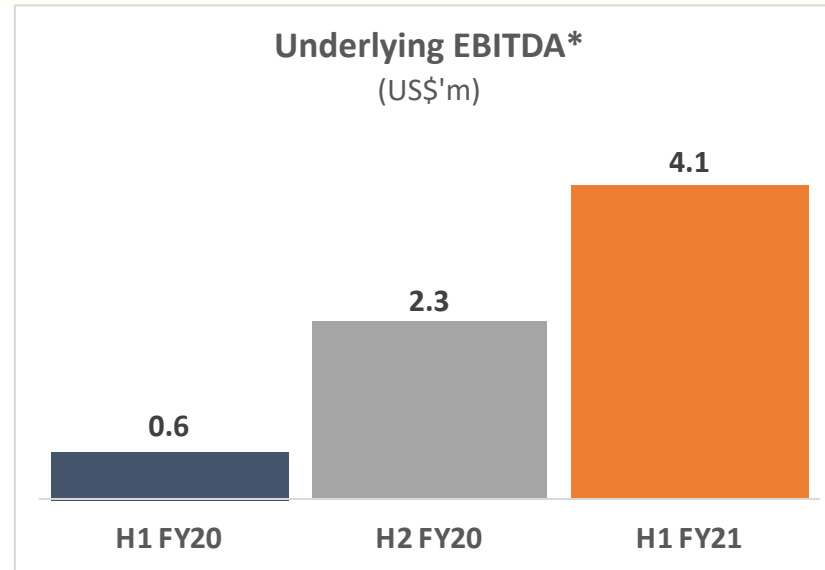
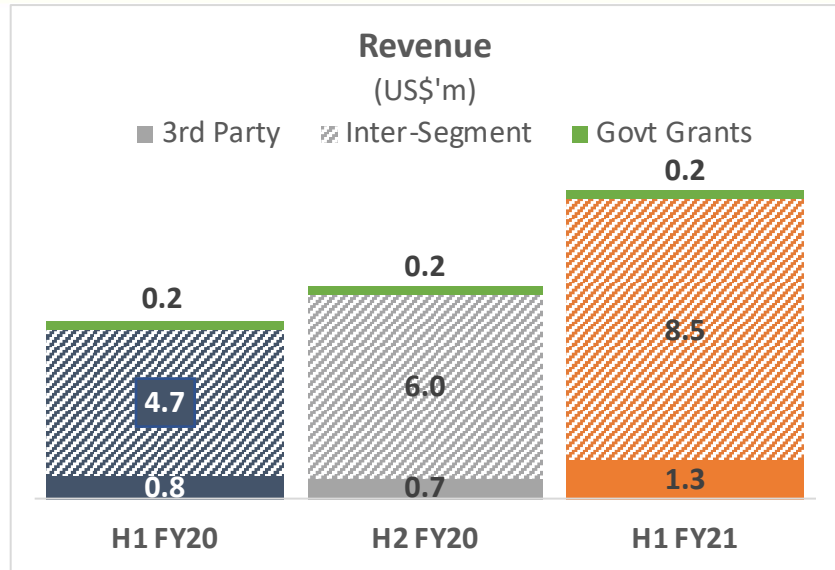
# H1 FY21 SEGMENT PERFORMANCE

# Software performance



- DUG Insight revenue increased by 12% yoy
- Growth has been driven by new licensing deals as part of DUG McCloud contract awards
- Actively pursuing opportunities to grow DUG's software suite:
  - Working in conjunction with Professor Steven Tingay, WA Scientist of the Year (2020), to bring leading edge visualisation to the astrophysics industry
  - Exploring other industries where DUG's deep software knowledge and expertise can be leveraged

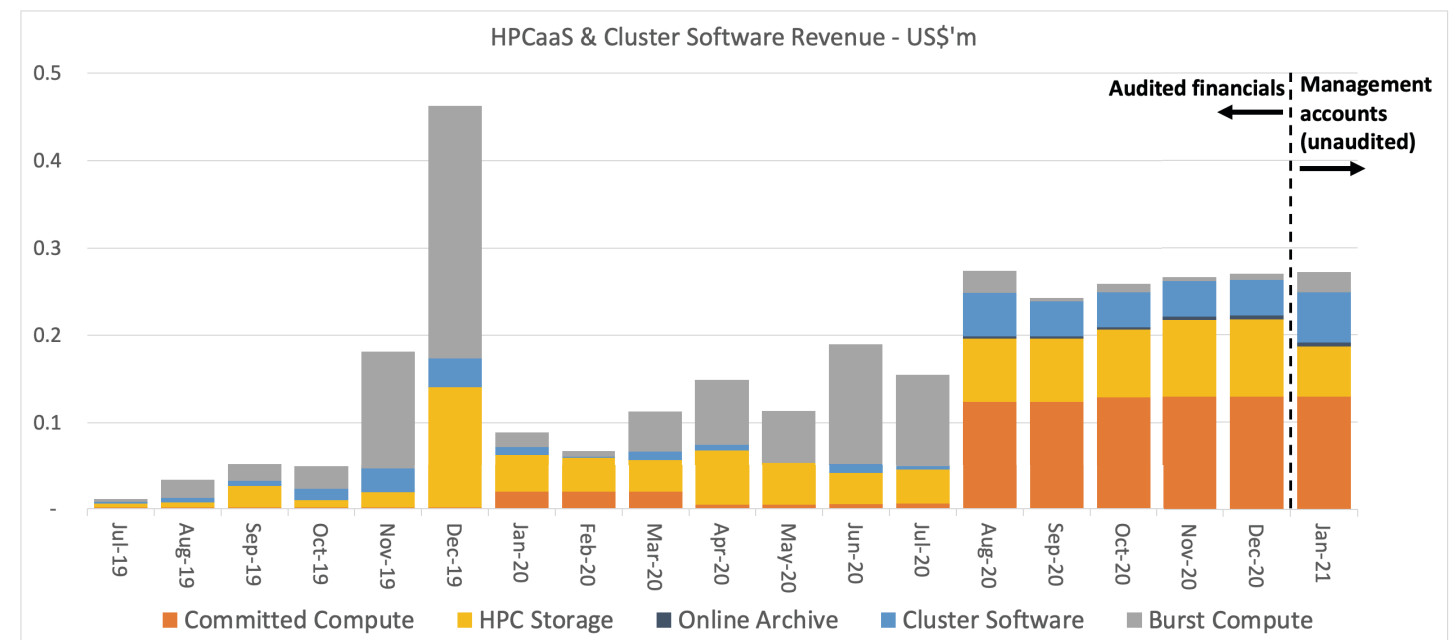
# HPCaaS performance



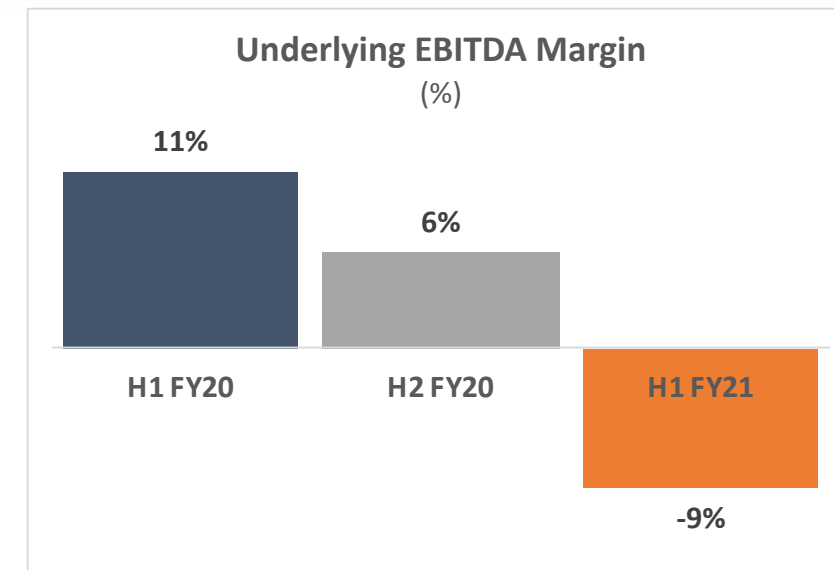
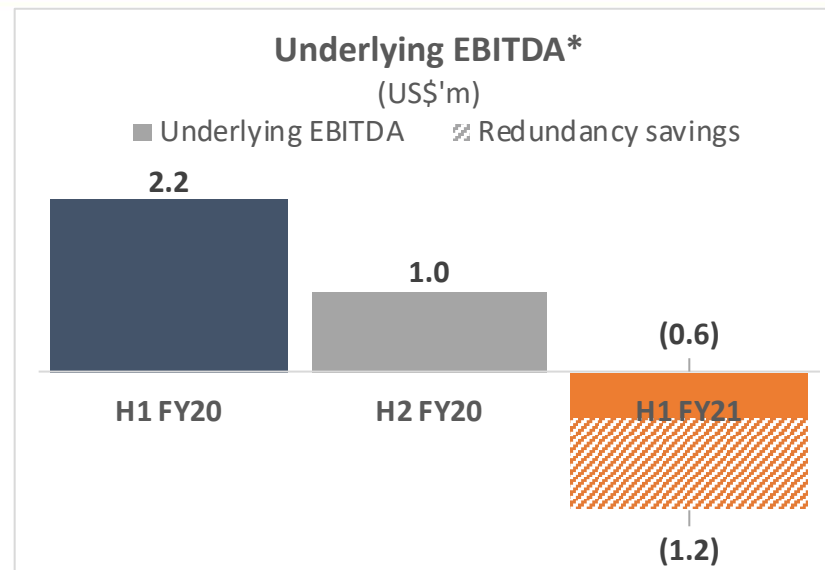
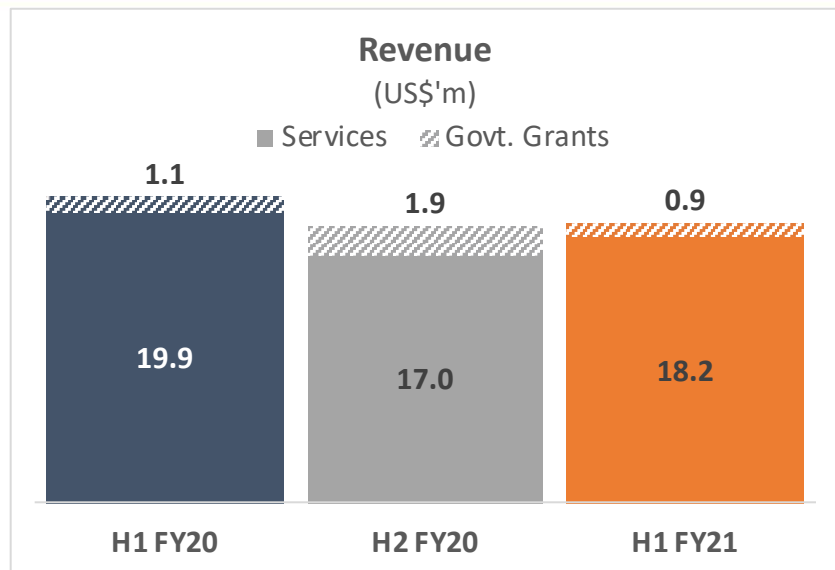
**Key HPCaaS signings H1 FY21:**

- Equinor
- Harry Perkins
- INPEX
- UWA School of Population and Global Health
- Optic Earth

- HPCaaS revenue up 86% hoh
- Committed Compute and Storage revenue up 213% hoh
- Non O&G revenue up 168% hoh
- US\$1.1m contracted revenue from Feb-21 to Jun-21



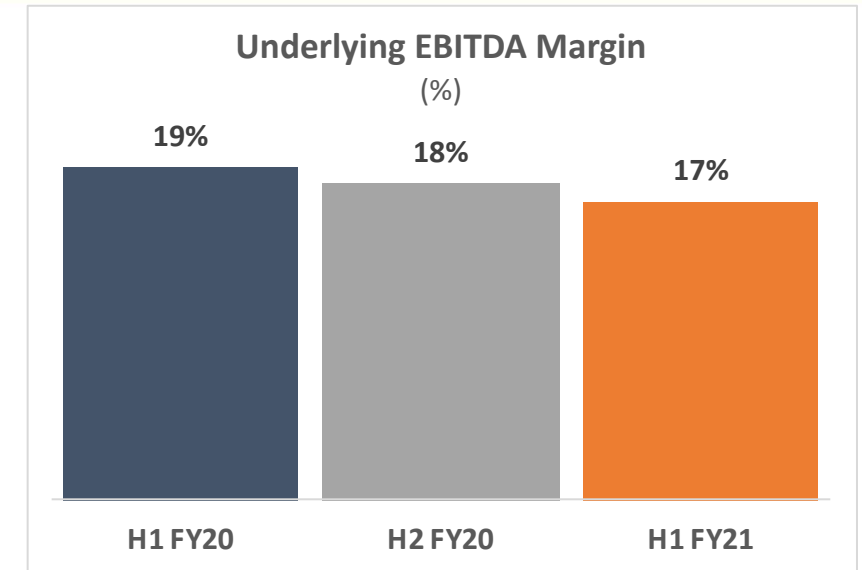
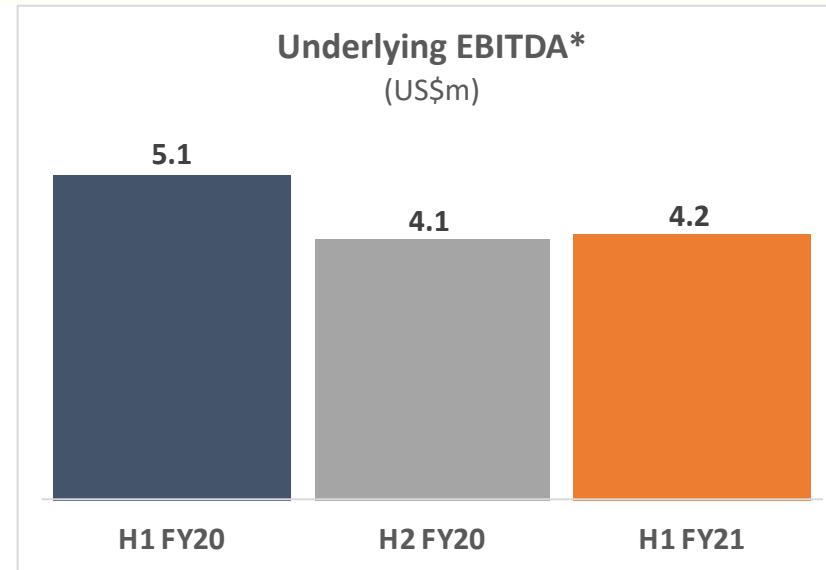
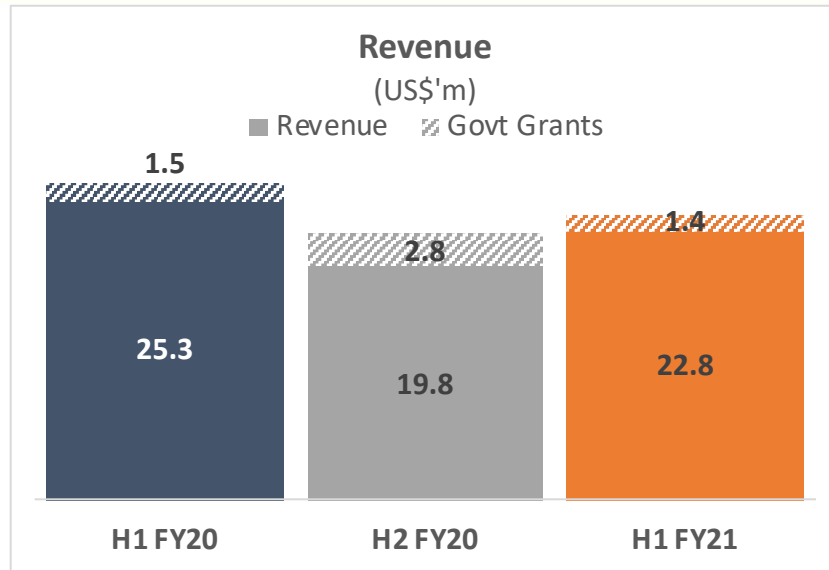
# Services performance



- Sustainable business with oil price recovery and stabilisation
- Revenue growth of 7% hoh
- Increasing levels of activity and proposals – industry is waking up
- Redundancies implemented in Dec-20 reduced headcount by c. 10% to right size this division. Expect annual cost savings of c. US\$2.4m

## Brent Crude Price Per Barrel US\$





- Strong performance in midst of current economic turmoil
- Revenue of US\$24.2m down year-on-year, due to diminishing revenue from the Polarcus On Board Processing (OBP) deal and falling Services revenue. Revenue excluding government grants is up 15% half-on-half, with revenue growth across all segments
- Underlying EBITDA steady at US\$4.2m with an EBITDA margin of 17%



# H1 FY21 FINANCIALS

# Profit and loss



US\$'m	H1 FY21	H2 FY20	Change (hoh)	H1 FY20	Change (yoy)
HPCaaS	1.3	0.7	0.6	0.8	0.5
Services	18.2	17.0	1.2	19.9	(1.7)
Software	3.3	2.1	1.2	4.6	(1.3)
Government grants	1.4	2.8	(1.4)	1.5	(0.1)
<b>Total Revenue</b>	<b>24.2</b>	<b>22.6</b>	<b>1.6</b>	<b>26.8</b>	<b>(2.6)</b>
Employee Benefits	15.1	14.5	0.6	15.9	(0.8)
Other Operating Costs	4.9	4.0	0.9	5.8	(0.9)
<b>Total Operating Costs</b>	<b>20.0</b>	<b>18.5</b>	<b>1.5</b>	<b>21.7</b>	<b>(1.7)</b>
<b>Underlying EBITDA</b>	<b>4.2</b>	<b>4.1</b>	<b>0.1</b>	<b>5.1</b>	<b>(0.9)</b>
Depreciation and Amortisation	3.8	4.4	(0.6)	4.8	(1.0)
<b>Underlying EBIT</b>	<b>0.4</b>	<b>(0.3)</b>	<b>0.7</b>	<b>0.3</b>	<b>0.1</b>
<b>Underlying NPAT</b>	<b>(0.9)</b>	<b>(1.0)</b>	<b>0.1</b>	<b>(2.5)</b>	<b>1.6</b>
Non-recurring and listed company costs	(1.7)	-	(1.7)	-	(1.7)
Non-recurring finance costs related to IPO	(1.8)	(4.8)	3.0	-	(1.8)
<b>Statutory NPAT</b>	<b>(4.4)</b>	<b>(5.8)</b>	<b>1.4</b>	<b>(2.5)</b>	<b>(1.9)</b>

- DUG has increased its focus on Software and has successfully broadened to include HPCaaS. All provided through our DUG McCloud platform.
- HPCaaS revenue up 86% half-on-half and DUG Insight revenue up 12% year-on-year
- Pre-COVID, year-on-year revenue comparison reflects the impact of delayed projects in Services
- Earnings base has proved resilient with marginal improvement in the half-on-half underlying EBITDA
- Research and development is fully expensed within the underlying EBITDA
- Underlying EBITDA excludes non-recurring costs relating to redundancies within the Services segment and bad debt write-offs. Listed company costs are excluded due to not being incurred in comparative periods
- Underlying NPAT excludes one-off finance expenses and transaction fees relating to the IPO in August 2020 and the pre-IPO in February 2020

# Balance sheet



US\$m	31-Dec-20	30-Jun-20
Cash	14.7	12.0
Trade and other receivables	12.8	10.7
<b>Current assets</b>	<b>27.5</b>	<b>22.7</b>
Fixed assets	25.5	22.7
Right of use assets	11.8	12.3
Long-term receivables and other	7.6	7.0
<b>Non-current assets</b>	<b>44.9</b>	<b>42.0</b>
<b>Total assets</b>	<b>72.4</b>	<b>64.7</b>
Trade payables	2.4	3.0
Other payables and accruals	2.5	2.3
Lease liabilities	2.2	2.3
Loans and borrowings	0.3	15.7
<b>Current liabilities</b>	<b>7.4</b>	<b>23.3</b>
Loans and borrowings	18.6	24.4
Provisions and others	0.2	0.2
Lease liabilities	13.2	13.0
<b>Non-current liabilities</b>	<b>32.0</b>	<b>37.6</b>
<b>Total liabilities</b>	<b>39.4</b>	<b>60.9</b>
<b>Net assets</b>	<b>33.0</b>	<b>3.8</b>
Share capital	39.2	5.5
Retained earnings	(0.9)	(1.0)
Reserves	(5.3)	(0.7)
<b>Total equity</b>	<b>33.0</b>	<b>3.8</b>

- Fixed assets reflect the net book value of compute, storage, network and data room infrastructure
- DUG builds long-lead time data centre infrastructure upfront, with short lead-time items (compute and storage) added just-in-time as demand dictates
- US\$5.5m invested in H1 FY21 to increase compute and storage capacity, mainly in the Houston facility
- Net debt, excluding lease liabilities, down from US\$28.1m to US\$4.2m, with the main reductions from:
  - Convertible notes of US\$15.4m converted to equity at IPO
  - CBA revolving facility repayment of US\$6.0m
- Debt facilities:
  - Maturity date on US\$17.8m term debt facility extended to January 2022
  - Discussions underway regarding further extension/amortisation
- Capitalised for growth with cash of US\$14.7m
- The Loan Funded Share Plan can introduce US\$8.3m of cash to DUG which is not recorded on the balance sheet

US\$m	H1 FY21	H1 FY20
<b>Underlying operating cashflow</b>	<b>0.6</b>	<b>1.2</b>
Non-recurring cash items	(1.3)	-
<b>Statutory net cashflow from operating act</b>	<b>(0.7)</b>	<b>1.2</b>
Capital expenditure	(5.5)	(0.3)
Other investing	0.5	-
<b>Net cash used in investing activities</b>	<b>(5.0)</b>	<b>(0.3)</b>
Net IPO proceeds	16.6	-
Proceeds from borrowings	-	2.4
Repayment of borrowings & interest	(6.6)	(1.2)
Repayment of lease liabilities & interest	(1.6)	(2.0)
<b>Net cash flows from financing activities</b>	<b>8.4</b>	<b>(0.8)</b>
Net increase in cash and equivalents	2.7	0.1
Cash and equivalents at beginning of half	12.0	2.0
<b>Cash and equivalents at end of half</b>	<b>14.7</b>	<b>2.1</b>

- Underlying operations are cash generative
- Invested US\$5.5m in increasing compute, storage and networking capacity in the Houston facility
- Net IPO proceeds of \$16.6m after payment of transaction fees

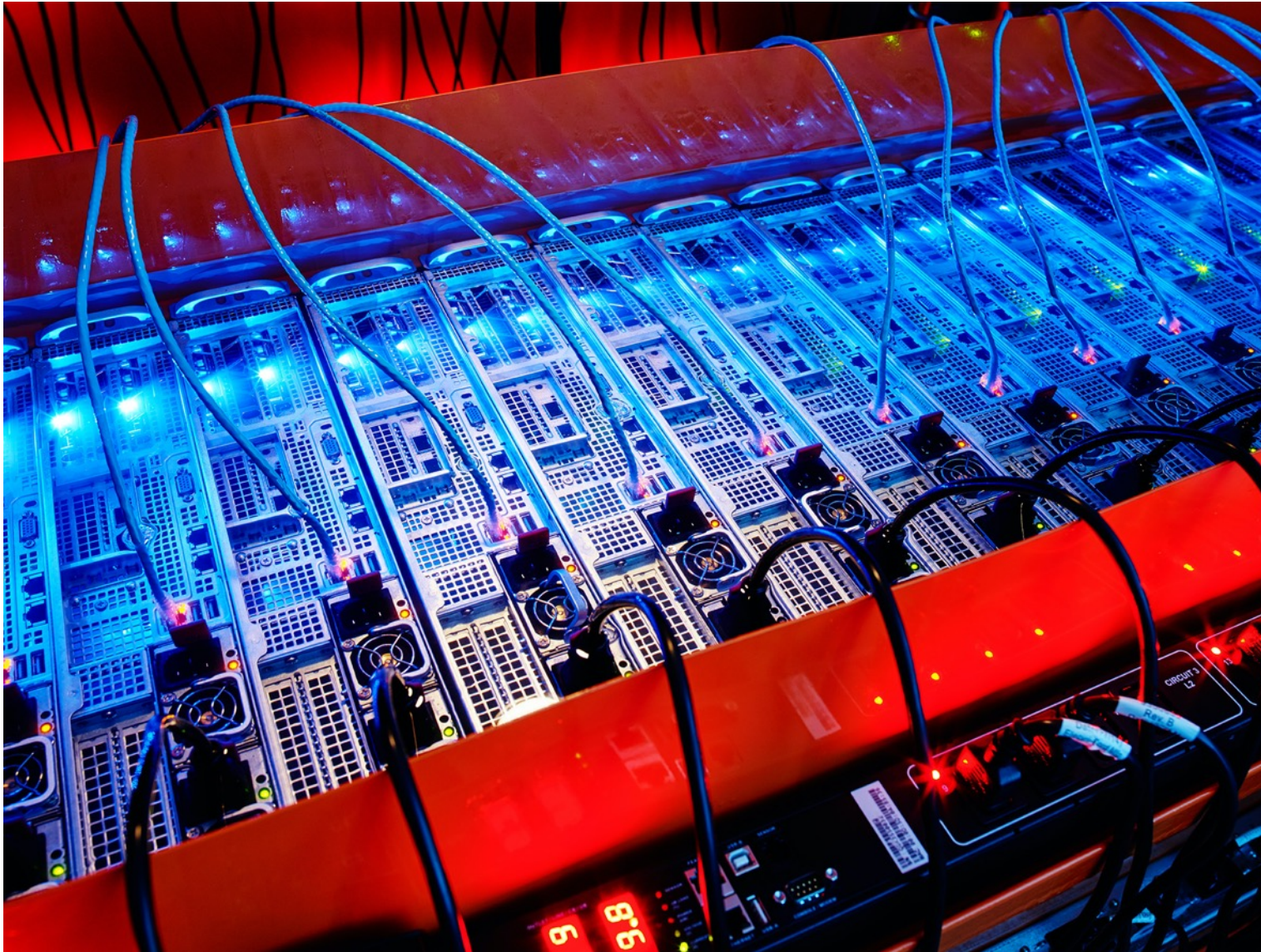
# Summary & outlook



- DUG is well positioned to grow revenue and earnings
- DUG is in multiple discussions to extend its software and HPC expertise into other industries
  - Harry Perkins and ICRAR are just the start
  - Large amounts of DUG's deep seated expertise are applicable in many other industries
- Oil price recovery and stabilisation has heightened activity in the O&G industry
  - DUG's BD staff are busy with increased activity in the first few months of 2021
- DUG is gaining traction in non-Oil and Gas sectors
  - Increasing levels of interest
  - Leveraging DUG's recognition in the marketplace



# Staying Connected



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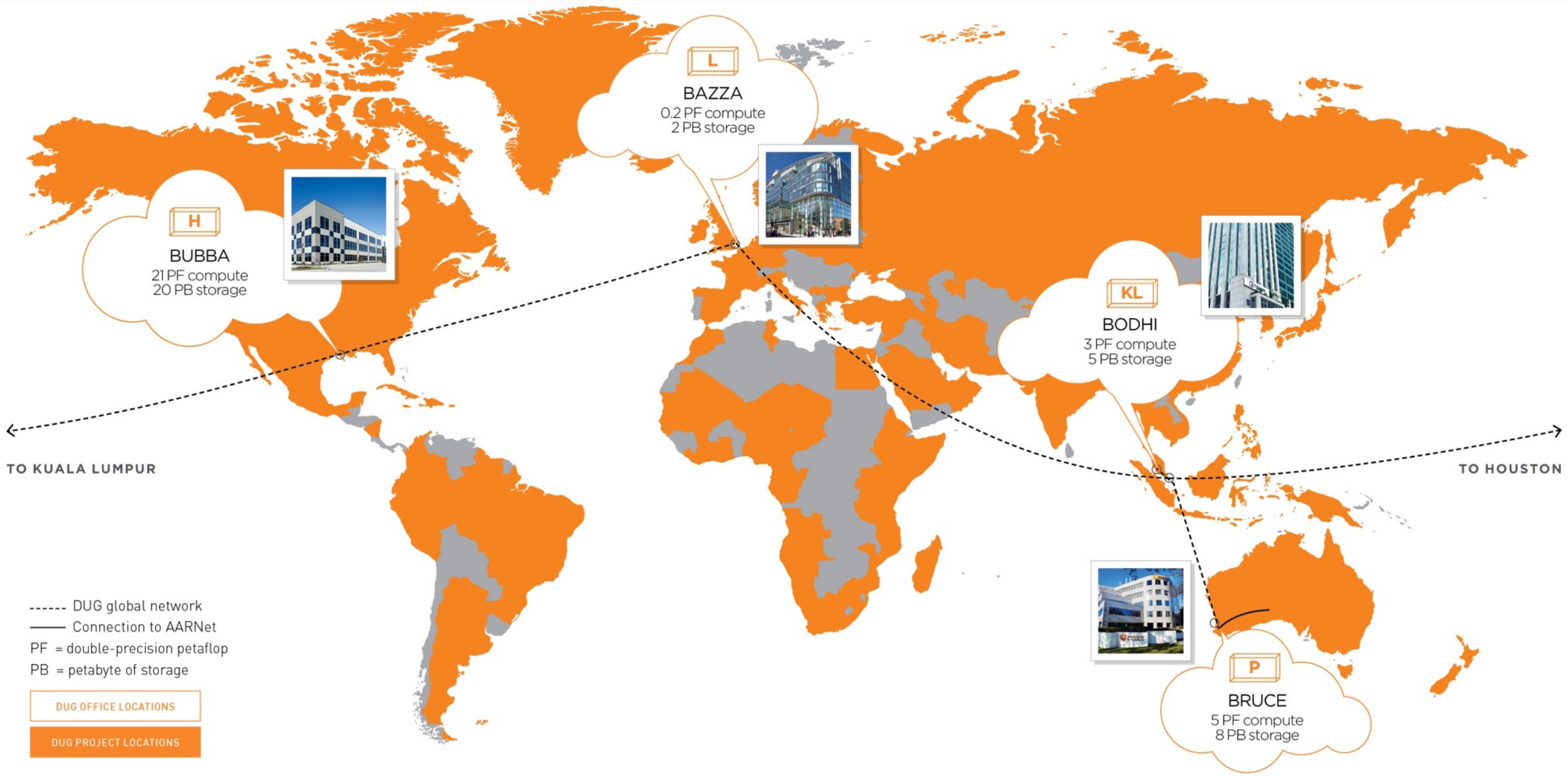
[investor@dug.com](mailto:investor@dug.com)



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# Appendix

# DUG's global footprint and capacity



# The Evolution of DUG



# Board of Directors



**Hon. Wayne Martin AC QC - Independent Non-Executive (appointed February 2020).** Wayne was formerly Chief Justice of Western Australia (2006 to 2018) and prior to being appointed Chief Justice was a Barrister from 1988. Wayne has a Bachelor of Law with first class honours from the University of Western Australia, and a Master of Laws from King's College London.



**Dr Matthew Lamont - Founder and Managing Director.** He sets the Company's strategic direction and remains intimately involved in its R&D and DUG McCloud. Prior to founding DUG, Matt held senior technical positions at Woodside in Perth and BHP Billiton in Houston. Matt holds a Ph.D. in geophysics from Curtin University, Australia. He is an adjunct Associate Professor at Curtin University.



**Ms Louise Bower - Director.** Louise held the role of Chief Financial Officer at DUG for 10 years and was responsible for global commercial operations including financial planning, management of financial risks, and governance. Prior to joining DUG in 2009, Louise held financial roles in different industry sectors and jurisdictions, including South Africa and the UK. She holds an honours degree in accounting science and a chartered accountant qualification.



**Mr Frank Sciarrone - Independent Non-Executive Director (appointed July 2015).** Over the past 35 years, he held various positions in investment banking including in the banking industry, funds management and corporate/private client financial advisory services. Frank is the current Managing Director of Vantage Wealth Management, Chair of the Fire and Emergency Services Super Fund, Director of the Government Employees Superannuation Board and Biovision Pty Ltd and Chair of 12 Buckets, a children's charity.



**Mr Michael Malone - Independent Non-Executive Director (appointed June 2020).** Michael founded iiNet Limited, an ASX listed telecommunications company in 1993 and continued as CEO until his retirement in 2014. He brings to the board extensive experience as an ASX listed company director. Michael is a current Independent NED of the National Broadband Network (nbnco), Axicom Group and SpeedCast Ltd and the Australian representative director of the Asia Pacific Network Information Centre Foundation.



**Mr Mark Puzey - Independent Non-Executive Director (appointed June 2020).** He is also Chair of the Audit and Risk Committee. Mark spent 33 years with KPMG where his roles extended across audit, IT advisory, risk management, governance, strategy and business transformation; focussed on ASX listed companies. Mark is current Audit and Risk Committee Chairman and NED of ASX listed M8 Sustainable Ltd, as well as NED and One-Future Committee Chairman of Gold Corporation.

The Square Kilometre Array (SKA) project is an international effort to build the world's largest radio telescope, with sites in Western Australia and South Africa. With a multi-billion dollar budget SKA represents a huge leap forward in both engineering and R&D in radio astronomy.

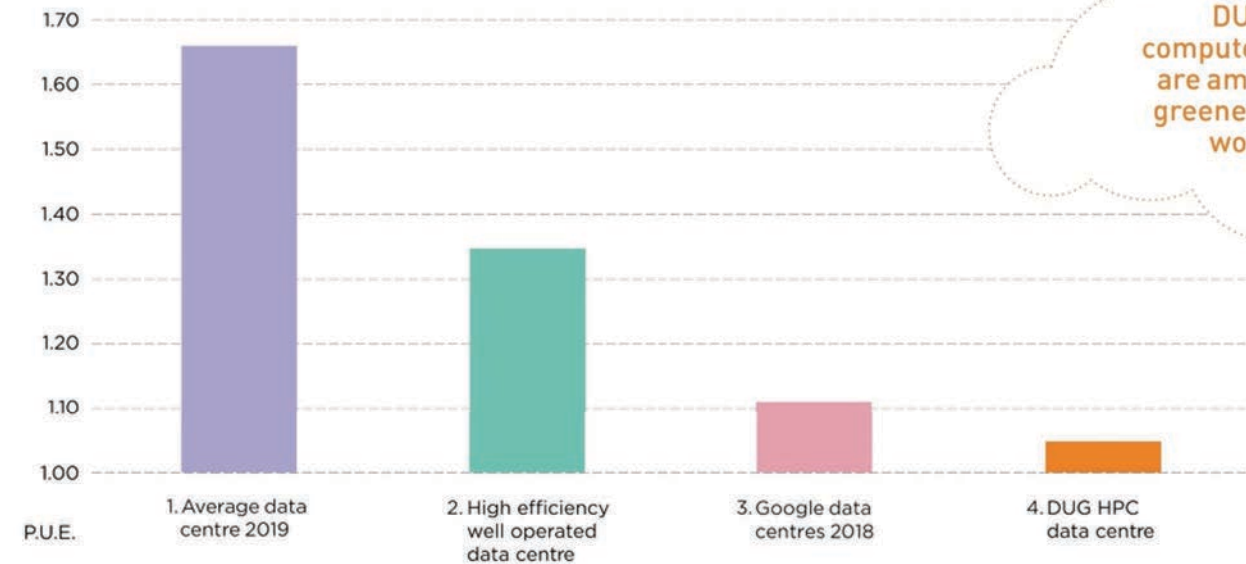
- SKA has been capturing data using the Murchison Widefield Array (MWA) telescope for two years, amassing a backlog of data that they have been working through using the Pawsey Supercomputing Centre.
- DUG HPC experts worked on academic code used to process the MWA data for two weeks and achieved run-times that were **125x faster**. This allowed a team from the International Centre for Radio Astronomy (ICRAR) to process their data backlog in a day, using a fifth of DUG's Perth machine, 'Bruce', they had previously managed to process a sixth of their total backlog in two years.
- This collaboration is set to deliver transformational changes to the industry, allowing for the highest resolution images in the history of radio astronomy – accomplishing this will require a large amount of HPC power.



# Orange is the New Green!



- DUG Cool – Patented Technology.
  - A reduction of c.46% in facility energy use compared to conventional computer rooms;
  - Significantly reduced hardware failure rates, thereby extending the useful life of computers and reducing maintenance CAPEX;
  - Streamlined modular system design to reduce maintenance, increase uptime and reduce computer room construction costs.
- HPC demand is growing exponentially. Environmental consciousness is growing exponentially. Patented technology underpinning DUG's computer rooms being among the greenest on Earth, is a big deal.
- The DUG Cool solution means that the rooms 'Bubba' and 'Bruce' are housed in require no air-conditioning and are quiet compared to normal HPC-rooms.
- DUG is in the planning stages for a building a HPC campus in Western Australia. This is likely to be located north of Perth with the aim of achieving triple green credentials:
  - DUG Cool computer room technology.
  - Renewables energy source.
  - Hydrogen based energy storage system.



“Bruce”

# Segment Profit and loss



US\$m	H1 FY21					H2 FY20					H1 FY20				
	CONSOL	Software	HPC	Services	ELIM	CONSOL	Software	HPC	Services	ELIM	CONSOL	Software	HPC	Services	ELIM
External customers	22.8	3.3	1.3	18.2	-	19.8	2.1	0.7	17.0	-	25.3	4.6	0.8	19.9	-
Inter-segment	-	-	8.5	-	(8.5)	-	-	6.0	-	(6.0)	-	-	4.7	-	(4.7)
Government grants	1.4	0.3	0.2	0.9	-	2.8	0.6	0.2	2.0	-	1.5	0.2	0.2	1.1	-
<b>Total revenue</b>	<b>24.2</b>	<b>3.6</b>	<b>10.0</b>	<b>19.1</b>	<b>(8.5)</b>	<b>22.6</b>	<b>2.7</b>	<b>6.9</b>	<b>19.0</b>	<b>(6.0)</b>	<b>26.8</b>	<b>4.8</b>	<b>5.7</b>	<b>21.0</b>	<b>(4.7)</b>
Employee benefits	15.1	1.1	3.5	10.5	-	14.5	1.1	2.7	10.7	-	15.9	1.2	3.0	11.7	-
Other operating costs	4.9	0.6	2.4	10.4	(8.5)	4.0	0.9	1.9	7.2	(6.0)	5.8	1.4	2.1	7.0	(4.7)
<b>Total operating costs</b>	<b>20.0</b>	<b>1.7</b>	<b>5.9</b>	<b>20.9</b>	<b>(8.5)</b>	<b>18.5</b>	<b>2.0</b>	<b>4.6</b>	<b>17.9</b>	<b>(6.0)</b>	<b>21.7</b>	<b>2.6</b>	<b>5.1</b>	<b>18.7</b>	<b>(4.7)</b>
<b>Underlying EBITDA</b>	<b>4.2</b>	<b>1.9</b>	<b>4.1</b>	<b>(1.8)</b>	<b>-</b>	<b>4.1</b>	<b>0.7</b>	<b>2.3</b>	<b>1.1</b>	<b>-</b>	<b>5.1</b>	<b>2.2</b>	<b>0.6</b>	<b>2.3</b>	<b>-</b>
<b>Underlying EBITDA %</b>	<b>17%</b>	<b>53%</b>	<b>41%</b>	<b>-9%</b>		<b>18%</b>	<b>27%</b>	<b>34%</b>	<b>6%</b>		<b>19%</b>	<b>47%</b>	<b>11%</b>	<b>11%</b>	
Non-recurring and listed company costs	(1.7)	(0.1)	(0.7)	(0.9)	-	-	-	-	-	-	-	-	-	-	-
<b>Statutory EBITDA</b>	<b>2.5</b>	<b>1.8</b>	<b>3.4</b>	<b>(2.7)</b>	<b>-</b>	<b>4.1</b>	<b>0.7</b>	<b>2.3</b>	<b>1.1</b>	<b>-</b>	<b>5.1</b>	<b>2.2</b>	<b>0.6</b>	<b>2.3</b>	<b>-</b>

Reach for the Sky

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