PITT STREET RESEARCH

De.mem Ltd

Robust pipeline validates solid growth potential

Share Price: A$0.29

De.mem Ltd (ASX:DEM) is an Australian–Singaporean provider of decentralised water and wastewater treatment systems. It provides proprietary membrane-based water treatment solutions, mainly for industrial use. Despite the challenges caused by COVID-19, DEM registered record order inflows in Q3 2020, worth ~A$6m, which underlines the resilience and high potential of its business model.

Investment case

DEM's business model is backed by several competitive advantages, including a one-stop product and service offering, a blue-chip client base, R&D collaboration with Nanyang Technological University, Singapore, and diversification across end markets and geographies. We believe DEM's solid performance during the first 9 months of 2020 highlights management's success in its inorganic growth strategies and in its quest to expand the recurring revenue base. The company's positive momentum is expected to continue in 2021, which we believe will help unlock its profitability and cash flow potential in the medium term.

Valuation remains intact at A$0.62 per share

Our blended valuation (equally weighted between DCF and EV/Sales) remains largely intact at A$0.62 – A$0.72. We believe that re-rating will be driven by DEM's growth in recurring revenue base, new acquisitions, and attainment of cash breakeven. Key risks we see include: (1) competitors bringing superior or cheaper products; (2) ability to scale the business profitably and (3) execution across product innovation and implementation.

Year to Dec (AUD)	2019A	2020F	2021F	2022F	2023F
Revenue (m)	10.1	17.1	26.2	31.6	37.1
EBITDA (m)	(3.2)	(1.3)	1.2	3.2	5.1
Net Profit (m)	(3.5)	(1.6)	0.8	2.7	4.4
EPS	(2.6)	(0.9)	0.5	1.5	2.5
EBITDA Margin (%)	NM	NM	4.6%	10.2%	13.6%
RoA (%)	NM	NM	5.7%	15.5%	20.0%
EV/Sales	2.8x	2.7x	1.8x	1.5x	1.2x
EV/EBITDA	NM	NM	40.1x	14.7x	8.8x
P/E	NM	NM	59.7x	18.4x	11.3x

Source: Company, Pitt Street Research

ASX: DEM

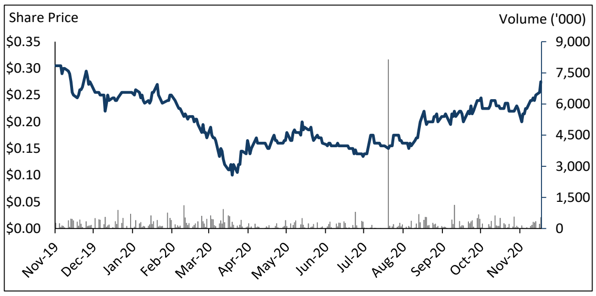
Sector: Utilities

19 November 2020

Market Cap. (A$ m)	50.0
# shares outstanding (m)	175.6
# shares fully diluted (m)	185.1
Market Cap Ful. Dil. (A$ m)	52.7
Free Float	61.8%
52-week high/low (A$)	0.32 / 0.10
Avg. 12M daily volume ('1000)	238.1
Website	www.demembranes.com

Source: Company, Pitt Street Research

Share price (A$) and avg. daily volume (k, r.h.s.)



Source: Refinitiv Eikon, Pitt Street Research

Valuation metrics	
DCF fair valuation range (A$)	0.62 – 0.72
WACC	11.2%
Assumed terminal growth rate	2%

Source: Pitt Street Research

Analysts: Cheng Ge, Marc Kennis

Tel: +61 (0)4 3483 8134

cheng.ge@pittstreetresearch.com

marc.kennis@pittstreetresearch.com

Disclosure: Pitt Street Research directors own shares in De.mem Ltd.

Profit & Loss (A$M)	2017a	2018a	2019a	2020e	2021e	2022e	2023e	2024e
Sales Revenue	**2.9**	**10.5**	**10.1**	**17.1**	**26.2**	**31.6**	**37.1**	**42.5**
Operating expenses	(9.2)	(12.3)	(13.4)	(18.4)	(25.0)	(28.4)	(32.0)	(35.8)
EBITDA	**(6.3)**	**(1.7)**	**(3.3)**	**(1.3)**	**1.2**	**3.2**	**5.1**	**6.8**
Depn & Amort	(0.1)	(0.2)	(0.3)	(0.2)	(0.3)	(0.4)	(0.6)	(0.7)
EBIT	**(6.4)**	**(1.9)**	**(3.6)**	**(1.5)**	**0.9**	**2.8**	**4.5**	**6.0**
Net Interest	(0.0)	(0.0)	(0.1)	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)
Profit before tax	**(6.4)**	**(1.9)**	**(3.5)**	**(1.6)**	**0.8**	**2.7**	**4.4**	**6.0**
Tax expense	0.0	-	(0.0)	-	-	-	-	(1.0)
NPAT	**(6.3)**	**(1.9)**	**(3.5)**	**(1.6)**	**0.8**	**2.7**	**4.4**	**5.0**

Cash Flow (A$M)	2017a	2018a	2019a	2020e	2021e	2022e	2023e	2024e
Profit after tax	(6.3)	(1.9)	(3.5)	(1.6)	0.8	2.7	4.4	5.0
Depreciation	0.1	0.2	0.3	0.2	0.3	0.4	0.6	0.7
Change in trade and other receivables	0.2	(0.4)	0.4	(1.2)	(1.4)	(0.7)	(0.7)	(0.7)
Change in trade payables	(0.4)	0.2	1.5	0.7	0.6	(0.1)	(0.1)	(0.0)
Other operating activities	4.1	0.4	(0.4)	0.0	0.1	0.2	0.2	0.3
Operating cashflow	**(2.4)**	**(1.5)**	**(1.7)**	**(1.8)**	**0.4**	**2.6**	**4.5**	**5.3**
Capex	0.1	(0.5)	(0.2)	(0.5)	(0.8)	(0.9)	(1.1)	(1.3)
Other investing activities	(0.8)	(0.2)	(2.0)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Investing cashflow	**(0.6)**	**(0.7)**	**(2.2)**	**(0.6)**	**(0.9)**	**(1.1)**	**(1.2)**	**(1.4)**
Dividends	-	-	-	-	-	-	-	-
Equity raised	6.3	0.6	10.2	-	-	-	-	-
Debt drawdown (repaid)	(0.2)	0.1	(0.0)	(0.7)	-	-	-	-
Other financing activities	-	-	(0.2)	-	-	-	-	-
Financing cashflow	**6.1**	**0.7**	**10.0**	**(0.7)**	**-**	**-**	**-**	**-**
Net change in cash	**3.1**	**(1.5)**	**6.1**	**(3.2)**	**(0.5)**	**1.5**	**3.3**	**3.9**
Cash at End Period	3.3	1.8	7.9	4.7	4.2	5.8	9.1	13.0
Net Debt (Cash)	(2.8)	(1.2)	(6.3)	(4.0)	(3.6)	(5.1)	(8.4)	(12.3)

Balance Sheet (A$M)	2017a	2018a	2019a	2020e	2021e	2022e	2023e	2024e
Cash	3.3	1.7	7.8	4.7	4.2	5.8	9.1	13.0
Total Assets	6.3	5.3	14.6	13.1	14.7	17.5	22.1	27.4
Total Debt	0.5	0.5	1.4	0.7	0.7	0.7	0.7	0.7
Total Liabilities	3.1	3.4	5.1	5.0	5.7	5.5	5.5	5.5
Shareholders' Funds	3.2	1.9	9.5	8.0	9.1	12.0	16.6	21.9

Ratios	2017a	2018a	2019a	2020e	2021e	2022e	2023e	2024e
Net Debt/Equity (%)	-87.3%	-63.0%	-66.3%	-50.0%	-39.3%	-42.6%	-50.3%	-56.1%
Return on Equity (%)	nm	nm	nm	nm	9.3%	22.7%	26.6%	22.8%

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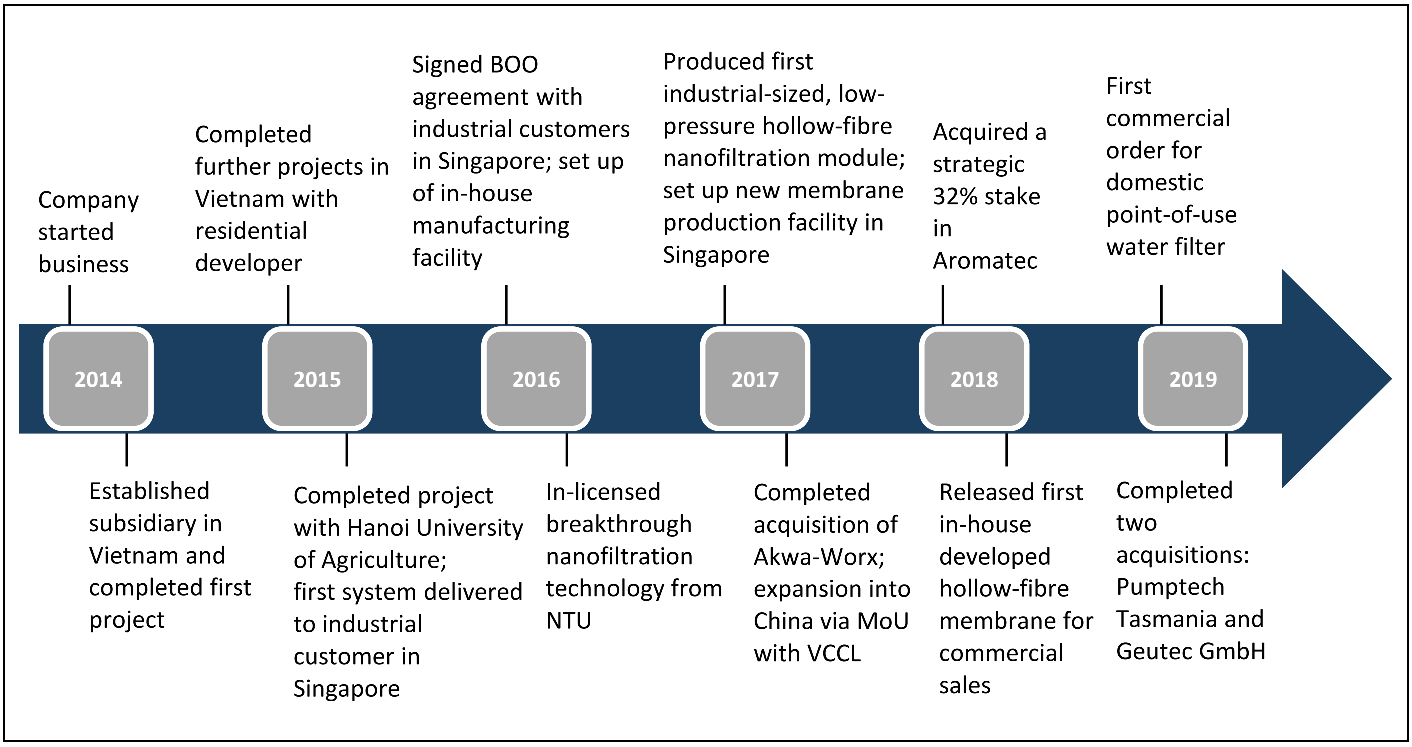
Introducing De.mem

De.mem (ASX: DEM) is an Australian–Singaporean company that offers decentralised industrial water treatment solutions based on proprietary membrane technologies. It commenced operations in 2014 (Figure 1) and currently provides a bouquet of solutions, wherein it designs, builds, owns and operates wastewater treatment systems for industrial clients. DEM serves a broad range of end markets including mining, infrastructure, oil and gas, electronics, food and beverages (F&B) and chemicals industries. It also serves other entities, such as municipalities, hotels/resorts and residential complexes. The company's products are mostly installed at factory sites, in mining fields and industrial parks.

DEM's decentralised systems are sustainable alternatives to large treatment plants that require miles of supply and delivery infrastructure. In contrast, decentralised treatment systems are installed at the site of water supply and/or demand. DEM's solutions can be easily integrated into recycling and reclamation processes. Through the use of decentralised solutions, the company supports its clients in retaining complete operational and quality management control across different production sites. These systems drive efficiency and help minimise operating expenses for clients.

Figure 1: Key milestones since inception



Source: Company

Ten reasons to look at DEM

1. **One-stop shop:** DEM is a unique proposition for customised wastewater treatment solutions as it offers a comprehensive portfolio of integrated products and services, thus providing it a distinct competitive edge.
2. **R&D partnership:** It has a long-standing technical collaboration with Nanyang Technological University (NTU), Singapore, one of the pioneers in water research globally. DEM has an exclusive licence to commercially operate NTU-developed patented and proprietary technologies in water treatment.
3. **Recurring revenue base:** DEM's business model is based on generating revenue through: (a) sale of equipment and consumables, and (b) long-term service contracts. Both these arrangements have extensive scope for recurring revenue generation.
4. **Reputed clients in diverse industries:** The company has made systematic changes to its underlying industry exposure. DEM now caters to a wide variety of blue-chip clients across industries, including in mining, infrastructure, F&B, utilities and municipalities. Its association with large clients results in a stable order book, repeat business and opportunities to work with global operations.
5. **Successful inorganic growth strategies:** DEM has embarked on an inorganic growth journey, seeking entities with an established client base that can be upgraded because of DEM's technologically superior products. The company has enough cash balance for further bolt-on acquisitions to curb any technological gaps.
6. **Sector tailwinds:** Growing concern about climate change and the ensuing environmental legislations are constantly pressurising firms to incorporate wastewater management systems. This is expected to continue to drive demand for DEM's products and services.
7. **Resilient sector growth:** With global water scarcity becoming more evident, the importance of water-treatment solutions is growing exponentially. Consequently, industrial wastewater treatment has become a key focus area and its market is likely to grow at a steady 5–6% CAGR till 2024.
8. **Strong management:** DEM has an experienced team that has been at the forefront of executing well-structured and well-priced acquisitions. The management has extensive experience in managing portfolio companies across industries. This is expected to significantly benefit DEM as it continues with its inorganic growth strategy.
9. **Product/service margins:** The group enjoys relatively high product/service-level margins: Up to 40% in Build-Own-Operate (BOO) projects, 30−40% in the sale of chemicals, 20−30% in service operations and 20−25% in the sale of pumps. Further margin expansion is possible through upselling services, emphasis on high-margin projects and growth of recurring revenue base.
10. **Attractive valuation:** We believe DEM should be valued higher than its current market value. Our valuation range remains largely intact at A$0.62 – A$0.72 following DEM's robust performance during the first 9 months of 2020 and an optimistic outlook for 2021. We believe a potential re-rating will be driven by continued growth in the company's recurring revenue base, success with new acquisitions and attainment of cash breakeven.

Strong order inflows predict a promising 2021

DEM has landed several key orders during August–October of the current calendar year, worth ~A$6m, which not only ensure strong revenue visibility, but also aid in diversifying its product and customer base.

DEM inked a key seawater desalination contract worth A$2.6m with leading vegetable producer in October 2020

In October 2020, DEM inked a seawater desalination contract worth A$2.6m with a leading Australian corporation form the food & beverage segment. Under the contract, DEM will design, manufacture and commission a membrane-based water treatment plant to convert seawater into high-quality treated water. The contract follows a similar project for the supply of an A$2.8 million seawater desalination plant to a resort in the Great Barrier Reef region, as announced by DEM in April 2019. The plant will utilise ultrafiltration and reverse osmosis membranes and will be manufactured at DEM's Brisbane site. While the project execution has commenced, the majority of the project revenues will be realised in 2021.

This order win establishes DEM's credentials with customers that have strict quality requirements and allows it to expand in a key growth segment of the water treatment sector. As per estimates of Grand View Research, the global water desalination equipment market stood at US$12.8bn in 2019 and is expected to see a 9% CAGR over 2020-2027. Furthermore, we believe this order will bolster the company's position as a supplier to Australia's F&B and agricultural industries.

Breaking into new markets

The A$400,000 order is crucial in expanding into a new end market

In September 2020, DEM received an order worth ~A$400,000 to deliver membrane-based water treatment equipment to an Australian power station. Notably, the ultra-pure, de-ionised water made from the treatment system will be utilised for a power generation process. This order is significant in terms of product and customer diversification, as it creates a new product offering for the newly added industry, i.e. the traditional energy and power generation sector. DEM highlighted that most of the revenues from this contract will be realised in 2021. Given the rising demand for this type of water treatment system from industrial customers, the company is considering including this product as a standard offering to customers in various industries including energy, electronics and semiconductors.

In addition, in August 2020, DEM bagged new orders worth ~A$500,000 for the delivery of water treatment equipment including hollow fibre membrane elements, pumps, control panel and software to the Australian mining and resources sector. The order execution is in progress and will aid the company in realising revenues in 2020.

The repeat BOO orders augur well for the rising share of recurring revenues

Importantly, DEM has been registering positive results in growing its recurring revenues through Build-Own-Operate (BOO) contract wins. In early September 2020, DEM signed a third BOO contract worth A$800,000 with Givaudan, one of the world's leading flavour and fragrance creators. Under the BOO contract, DEM will supply a wastewater treatment system to be deployed at Givaudan's Singapore-based factory. The repeat BOO orders are testimony to management's successful strategy of growing the share of its recurring business.

Similarly, in August 2020, DEM entered into a two-year service agreement worth A$200,000 per annum with an Australian real estate and infrastructure company. While the deal size is not material to the company's top-line forecasts, it adds to its recurring revenues through operations and maintenance as well as potential sales of consumables. Furthermore, DEM has extended a key service agreement worth ~A$500,000, to be realised in 2021, with a mining firm.

Backed by record order inflows and rising recurring revenues, DEM upgraded its 2020 revenue guidance

Given the robust pipeline and the record quarterly cash influx witnessed in Q3 2020, management has narrowed its 2020 cash receipts guidance to A$15–18m vs. its previous guidance of A$14–18m. During the first 9 months of 2020, DEM has already generated cash receipts worth A$10.4m and it is expecting to receive at least A$4.5m more in Q4 2020. We believe DEM remains on track to achieve the revised annual guidance and has set the stage for strong growth levels in 2021.

Recurring revenue witnesses strong momentum in a record quarter

Expanding the recurring revenue base remains a key strategic focus for DEM's management, which is evidenced by the ~66% (Figure 2) of recurring sales within the total revenue base. The rising share of recurring revenues will not only increase the scalability of the business, but also contribute to margin expansion.

Recurring revenue is on the rise and currently contributes ~66% to the total revenue

DEM continues to benefit from recurring revenues through its BOO projects as well as its operations and maintenance services. Its recurring revenue has been on an upward trajectory (Figure 3) with sales for the first 9 months of 2020 having already eclipsed the full-year totals seen in 2018 and 2019. Besides the BOO projects, repeat sales of consumables support recurring revenue streams for DEM. Consumables sales stood at ~26% of total revenue in 2019.

Figure 2: Share of recurring revenues (%)

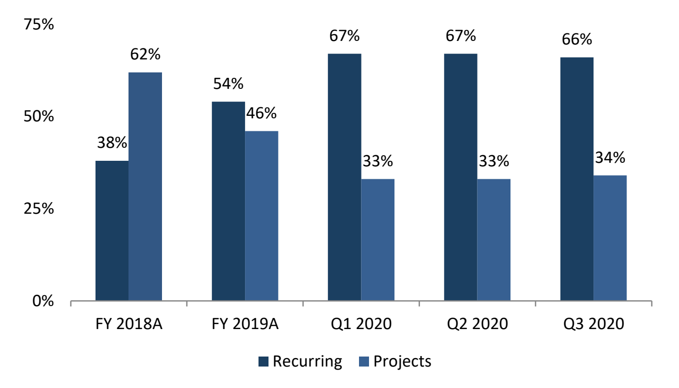


Figure 3: DEM's recurring revenues (A$m)

	FY 2018	FY 2019	Q1 2020	Q2 2020	Q3 2020
Recurring	3.9	6.3	2.2	2.3	2.4
Projects	6.3	5.4	1.1	1.1	1.3
Total Cash Receipts	**10.2**	**11.7**	**3.3**	**3.4**	**3.7**

Source: Company, Pitt Street Research

Strong performance of recently acquired entities

Pumptech's revenue for the first 9 months of 2020 has already surpassed 2019 revenue and was up ~27%

The company has witnessed strong growth in its recently acquired businesses, Pumptech and Geutec. During Q3 2020, the cash receipts of De.mem-Pumptech Pty Ltd rose ~22% q/q to ~A$1.13m. The outperformance exhibited by Pumptech was driven by successful integration, access to a broad range of DEM's products, increased cross and upselling initiatives, coupled with strong demand from F&B clients. Particularly, during the first 9 months of 2020, the cash receipts of this entity were A$2.8m, up ~27% vs. A$2.2m in 2019.

Likewise, the cash receipts of De.mem-Geutech GmbH climbed 38% q/q to ~A$0.76m, primarily driven by stable recurring revenue streams from the sale of water treatment chemicals to repeat clients coupled with the orders from new customers within the heavy industrials, plating and automotive segments, situated in Western Germany. Despite the negative impact of COVID-19 on European industrial activity, this entity is on track to exceed the full year 2019 revenues of A$2.2m.

Healthy balance sheet to bolster BOO offerings

On the operational front, the capital expenditure required for a BOO project is typically about one-third of the guaranteed revenues under the contract. At the current stage, DEM typically funds BOO projects using existing cash resources. With a healthy balance sheet (cash balance of ~A$5.4m as of 30 September 2020), DEM is well-positioned to grow its recurring revenues through its BOO offerings. Besides supporting BOO projects, the strong balance sheet will help in funding future acquisitions without the need for raising heavy debt or equity.

Positive operating cashflows on the horizon

During Q3 2020, the operating cash outflows narrowed to A$0.62m (Figure 4) vs. A$0.67m in Q2 2020. Taking into consideration the adjustments for the late single cash payment worth A$0.3m received on 1 October and ~A$0.16m operating cash outflow related to a Build, Operate, Transfer (BOT) project, the adjusted Q3 2020 operating cash outflow stood at a mere ~A$0.13m.

We expect DEM to generate positive operating cashflows in 2021

With DEM's growing revenue base gradually approaching ~A$20m on an annual basis, we expect the company to achieve sustainable positive operating cashflows on an annualised quarterly basis. While management has not provided any specific timeline to breakeven at the operating cashflow level, we expect DEM to generate positive operating cashflows (Figure 5) in 2021 and thereby self-fund its operations on a sustainable basis.

Figure 4: Operating cash outflows (Q4 2019-Q3 2020, A$m)

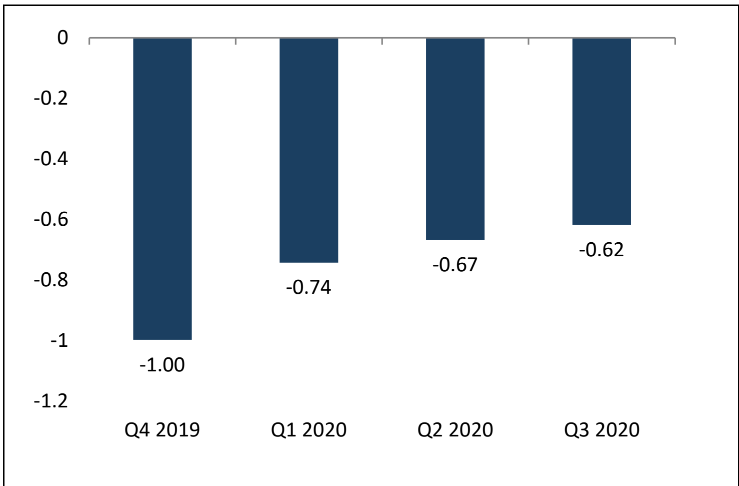
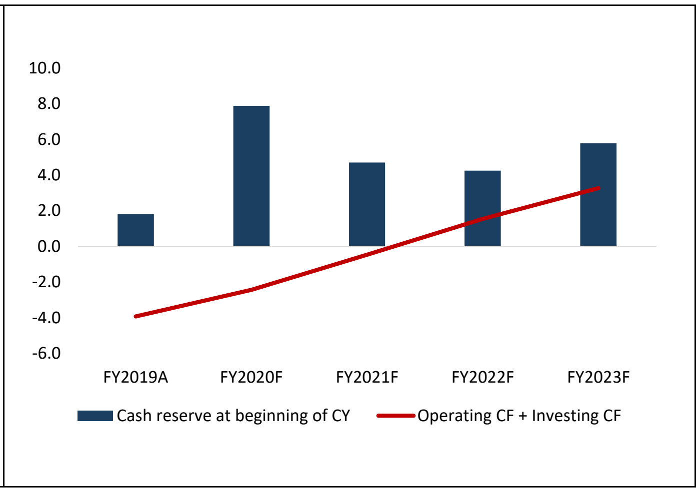


Figure 5: Cashflow movements (2019A-2023F, A$m)



Source: Company, Pitt Street Research

Valuation

We remain convinced about management's ability to convert its pipeline and we have a bullish view of 2021, underpinned by the company's strong order book, contribution from acquisitions, efforts of the newly set up Australian sales team and recovery in the industrial end markets.

Consequently, we have marginally increased our sales forecasts (CY20: A$17.1m vs. previously A$16.6m; CY21: A$26.2m vs. previously A$25.7m). Our blended valuation range remains largely intact (Figure 6).

Figure 6: Blended valuation summary

Base Case	Weights (%)	Share price (AUD)
DCF	50.0%	0.56
Relative valuation	50.0%	0.68
Composite Value (AUD)		**0.62**
Current Price (AUD)		0.29
Upside/Downside (%)		**116.0%**

Bull Case	Weights (%)	Share price (AUD)
DCF	50.0%	0.69
Relative valuation	50.0%	0.74
Composite Value (AUD)		**0.72**
Current Price (AUD)		0.29
Upside/Downside (%)		**151.3%**

Source: Pitt Street Research

In our view, a re-rating of the stock will be driven by growth in its recurring revenue base, success with new acquisitions and attainment of cashflow breakeven. Please refer to www.pittstreetresearch.com for our initiating coverage report on DEM.

Appendix – Analyst Qualifications

Marc Kennis has been covering a range of sectors as an analyst since 1997.

- Marc obtained an MSc in Economics from Tilburg University, Netherlands, in 1996 and a post graduate degree in investment analysis in 2001.
- Since 1996, he has worked for a variety of brokers and banks in the Netherlands, including ING and Rabobank, where his main focus has been on the Technology and Industrials sectors, including the Semiconductor sector.
- After moving to Sydney in 2014, he worked for several Sydney-based brokers before setting up TMT Analytics Pty Ltd, an issuer-sponsored equities research firm.
- In July 2016, with Stuart Roberts, Marc co-founded Pitt Street Research Pty Ltd, which provides issuer-sponsored research on ASX-listed companies across the entire market, including Technology companies.
- In 2020 Pitt Street Research launched Stocks Down Under, a subscription-based investment publication.

Cheng Ge is an equities research analyst at Pitt Street Research.

- Cheng obtained a B.Com in Finance and LL.B from University of New South Wales, in 2013, and has passed all three levels of the CFA Program.
- Prior to joining Pitt Street Research, he has worked for several financial services firms in Sydney, where his focus was on financial advice.
- He joined Pitt Street Research in January 2020.

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