

Fastbrick Robotics Ltd (FBR)

A key milestone...Hadrian X assembly complete

Robotic technology company FBR announced on 7 June that mechanical assembly of the Hadrian X – the world’s most advanced construction robot, is complete. With more than three weeks left to go in the month, FBR has delivered on a key milestone: completing, before the end of June 2018, the commercial prototype of the group’s patented 3D robotic bricklaying system. FBR is now commissioning the vehicle and testing the core Dynamic Stabilisation Technology (DST).



Factory Acceptance Testing is targeted to be completed in the September quarter, with construction of the first 180m² demonstration house targeted for the December 2018 quarter. *Note: with 116.7m Class A Performance Shares worth some A\$21.6m (at current share price levels) dependent on successfully completing this trial house by end-November 2018, we imagine that the Hadrian X Project Gantt chart is “front and centre” at management meetings.*

A recently completed global market analysis for FBR indicated that the addressable market for the Hadrian X construction robot is up to 150,000 machines. FBR intends to initially target 2% of this market over the next five years. *Note: management’s target of 2% of the addressable market implies a sales target of 3,000 machines in a five-year period. State One’s forecast sales profile is significantly more conservative; we assume sales of 25 units in FY21E, 100 in FY22E, 200 in FY23E, 300 in FY24E and 300 in FY25E, for a combined five-year total of 925 units. See initiation report “[Building on technology for exciting growth, 19 January 2018](#)”.*

Risked SOTP target price: A\$0.50 (unchanged)

We maintain our Speculative Buy (Higher Risk) recommendation and A\$0.50ps target price. A near-term share price catalyst would include FBR advancing one or both of the separate MOUs with CAT and with the Kingdom of Saudi Arabia’s Ministry of Housing to legally binding agreements. Risks to our earnings profile and target price include, but are not limited to: delays to or the failure to timeously secure a legally-binding technology transfer/manufacturing heads of agreement (HoA) with an OEM, the timing of sales (maiden sales and subsequent ramp up profile), unit selling price, royalty rates, AUD:USD exchange rate, competition from new / alternative building technologies (i.e., prefabricated units) and/or alternative robotic bricklaying technologies, regulatory / sovereign risks, intellectual property risks (security), and dependence upon key personnel.

12 June 2018

Share Price: A\$0.185

Target Price: A\$0.50

Recommendation
Speculative Buy

Risk Assessment
Higher

Construction Machinery/Technology

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Fastbrick Robotics Ltd

ASX Code	FBR
52-week range (A\$cps)	A\$0.10-A\$0.30
Fully diluted Market Cap (ASm)	291
Fully diluted no. of shares (m)	1,573
Av Daily Turnover (shares)	7.3 million
ASX All Ordinaries	6,170
FY18E BV per share (A\$c)	A\$2.8c
FY18E EPS (A\$c)	-A\$0.3c
FY18E Net (Debt)/Cash (A\$m)	37.3

Relative price performance



Source: Iress

Financial Statements

Fastbrick Robotics Ltd

Year ending June

Profit & Loss Statement (A\$m)	FY17A	FY18E	FY19E	FY20E	FY21E
Revenue	1.4	0.0	0.0	0.0	0.0
Raw materials / rental / lease	0.0	0.0	0.0	0.0	0.0
Employee	(1.4)	(3.0)	(5.0)	(5.0)	(5.0)
Other	(0.6)	(1.2)	(1.5)	(2.0)	(2.0)
EBITDA	(0.6)	(4.2)	(6.5)	(7.0)	(7.0)
Depreciation & Amortisation	(0.0)	(0.5)	(0.5)	(0.5)	(0.5)
Operating profit	(0.6)	(4.7)	(7.0)	(7.5)	(7.5)
Royalties & Other	(0.8)	(0.6)	0.0	0.0	34
EBIT	(1.4)	(5.3)	(7.0)	(7.5)	27
Interest income	0.0	0.2	1.0	0.7	0
Interest expense	0.0	0.0	0.0	0.0	0
Tax expense	0.0	0.0	0.0	2.0	(8)
Reported NPAT	(1.4)	(5.1)	(6.0)	(4.8)	19
Normalised NPAT	(1.4)	(5.1)	(6.0)	(4.8)	19

EBITDA Margin (%)	-39%	na	na	na	na
Operating profit margin (%)	-43%	na	na	na	na
EPS Reported - Diluted (A\$c)	(0.1)	(0.3)	(0.4)	(0.3)	1.2
EPS Normalised - Diluted (A\$c)	(0.1)	(0.3)	(0.4)	(0.3)	1.2
EPS growth (%)	nm	nm	nm	nm	n/a
DPS - Declared (A\$c)	0.0	0.0	0.0	0.0	0.6
Avg. no. of shares (m)	719	912	1,113	1,301	1,488
YE no. of fully-diluted shares (m)	1,389	1,573	1,573	1,573	1,573

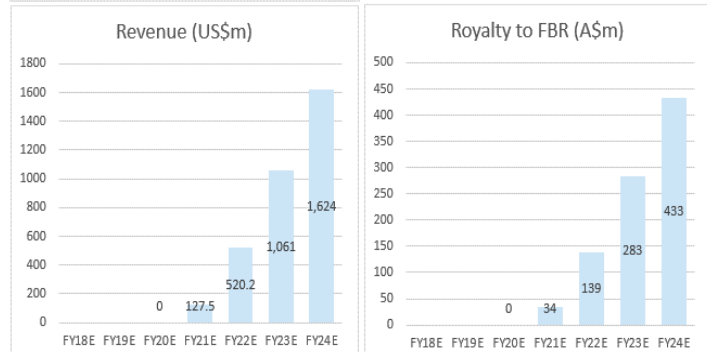
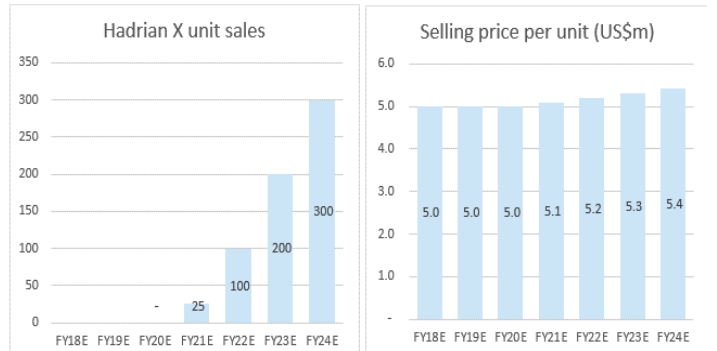
Cash Flow Statement (A\$m)	FY17A	FY18E	FY19E	FY20E	FY21E
EBITDA	(0.6)	(4.2)	(6.5)	(7.0)	(7.0)
Investment in working capital	(0.4)	0.3	0.0	0.0	0.0
Tax expense	0.0	0.0	0.0	2.0	(8.1)
Operating Cash Flow	(0.9)	(3.9)	(6.5)	(5.0)	(15.1)
Capex	(2.0)	(5.0)	(5.0)	(5.0)	(2.0)
Other investments	0.0	0.0	0.0	0.0	0.0
Investing Cash Flow	(2.0)	(5.0)	(5.0)	(5.0)	(2.0)
Net interest received / (paid)	0.0	0.2	1.0	0.7	0.5
Debt draw down / (repayment)	0.0	0.0	0.0	0.0	0.0
Dividends paid	0.0	0.0	0.0	0.0	(9.4)
Equity raised / (repaid)	9.2	38.0	0.1	0.7	0.0
Financing Cash Flow	9.2	38.3	1.1	1.4	(9.0)
Royalties & Other	(1.5)	(0.6)	0.0	0.0	34.0
Inc/(Dec) in Cash	4.8	28.7	(10.4)	(8.6)	7.9

Balance Sheet (A\$m)	FY17A	FY18E	FY19E	FY20E	FY21E
Cash & Equivalents	8.7	37.3	26.9	18.4	26.3
Receivables	0.8	0.0	0.0	0.0	0.0
Inventories	0.0	0.0	0.0	0.0	0.0
Other Current Assets	0.1	0.1	0.1	0.1	0.1
PPE	2.7	7.2	11.7	16.2	17.7
Deferred tax asset	0.0	0.0	0.0	0.0	0.0
Other Non Current Assets	0.0	0.0	0.0	0.0	0.0
Total Assets	12.3	44.7	38.8	34.7	44.2
Payables and other current Liabilities	0.6	0.1	0.1	0.1	0.1
Short Term Debt	0.0	0.0	0.0	0.0	0.0
Long Term Debt	0.0	0.0	0.0	0.0	0.0
Other Non Current Liabilities	0.0	0.0	0.0	0.0	0.0
Total Liabilities	0.7	0.2	0.2	0.2	0.2
Total Equity	11.6	44.5	38.6	34.6	44.0
Net Cash/(Debt)	8.7	37.3	26.9	18.4	26.3

Substantial Shareholders	%	Date
Fidelity International	9.8	
Mark Joseph Pivac	9.4	Dec-17
Regal Funds Management	7.4	

Source: Company, IRESS, State One Stockbroking forecasts

Hadrian X royalty f'cast (A\$m)	FY17A	FY18E	FY19E	FY20E	FY21E
No. of units sold	na	-	-	-	25
Selling price per unit (US\$m)	na	-	-	5.0	5.1
Revenue (US\$m)	na	-	-	-	127.5
Royalty rate to FBR	na	-	-	-	20%
Royalty to FBR (US\$m)	na	-	-	-	25.5
AUD:USD exchange rate	na	-	-	-	0.75
Royalty to FBR (A\$m)	na	-	-	-	34.0



Leverage	FY17A	FY18E	FY19E	FY20E	FY21E
Net Debt/Equity	cash	cash	cash	cash	cash
Gearing (ND/ND+E)	cash	cash	cash	cash	cash
Interest Cover (x)	na	na	na	na	na

Valuation Ratios (x)	FY17A	FY18E	FY19E	FY20E	FY21E
Normalised P/E	na	na	na	na	15.6
Price/OP Cash Flow	na	na	na	na	na
Book value per share (A\$c)	0.8	2.8	2.5	2.2	2.8
EV/EBITDA	na	na	na	na	na
ROE (%)	-12%	-11%	-16%	-14%	43%

SOTP valuation	A\$m	A\$ps
Hadrian X NPV (unrisked)	1,043	0.66
<i>Risk weighting (timing, volumes, pricing, etc)</i>	30%	
Hadrian X NPV (risked)	730	0.46
Technology upside / new opportunities	73	0.05
Corporate/Admin costs	-49	-0.03
Enterprise value	754	0.48
Net cash / (debt) (FY 18E)	37	0.02
Equity value	791	0.50

Current share price	0.188
% upside / (downside)	168%

FBR Board of Directors (Source: Company)



Michael Pivac
Executive Director & Chief Executive Officer

Michael Pivac is a former airborne mission systems specialist with broad experience in night vision, infrared and radar detection systems and has been key to developing the technology and developing the Business Plan and Machine Development Strategy.



Mark Pivac
Executive Director & Chief Technology Officer

Mark Pivac is the primary inventor of Fastbrick's Dynamic Stabilisation technology. He is an aeronautical and mechanical engineer with over 25 years' experience working on the development of high technology equipment and 20 years' experience of pro/engineer 3D computer-aided design (CAD)



Marcus Gracey
Chief Operating Officer

Marcus is an experienced ASX company executive and director, a corporate and technology lawyer and a Chartered Company Secretary. Marcus has extensive international experience with specific expertise in the commercialisation of new technologies, technology transfer and licensing, the global protection and enforcement of intellectual property rights, the development and execution of international business strategy along with significant public company governance and compliance experience.



Gabriel Chiappini
Director

Gabriel is an experienced ASX director and has been active in the capital markets for 17 years. Gabriel has assisted in raising in excess of AUD\$450m in funding and has provided investment and divestment guidance to a number of companies. Gabriel specializes in Start-Up companies and assists companies with their growth and strategic direction and has been involved with 10 ASX IPO's in the last 12 years. Gabriel is a member of the Australian Institute of Company Directors and Chartered Accountants Australia & New Zealand.

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