



FBR Limited Quarterly Report | March 2022

Friday, 29 April 2022 – Robotic technology company **FBR Limited (ASX: FBR)** ('FBR' or 'the Company') is pleased to provide its quarterly update for the three months ending March 31, 2022.

Business Activities Update

FBR made further significant progress towards commercialising its revolutionary Hadrian X[®] bricklaying robot. Highlights during the quarter included a Memorandum of Understanding with global manufacturer Liebherr-Mischtechnik GmbH. The Company also continued to deploy Hadrian X[®] on house builds, based on commercial rates, in the Perth metropolitan area.

Memorandum of Understanding with Liebherr-Mischtechnik GmbH

On March 3, FBR announced that it had signed a Memorandum of Understanding (MoU) with Liebherr-Mischtechnik GmbH, a global manufacturer and supplier of high-quality systems for the mixing, batching and pumping of concrete, to industrialise and commercialise Hadrian X[®]. Based in Germany, Liebherr-Mischtechnik is a division of the Liebherr International Group, one of the world's largest, most diverse and highly regarded equipment manufacturers.

The MoU envisages cooperation across two phases. Under Phase 1, FBR and Liebherr-Mischtechnik are working together to ensure the next-generation Hadrian X[®] construction robot is suitable for scalable industrialisation and commercialisation. Liebherr-Mischtechnik is supporting FBR in the further development of the Hadrian X[®] with the primary goal of ensuring that the Hadrian X[®] is designed for reliable, continuous operation in tough job site conditions throughout its economic life, and for manufacturing at the scale and cost necessary for serial production and full commercialisation. Liebherr-Mischtechnik is providing its expertise on, among other things, the selection and integration of major components into the Hadrian X[®] machine architecture, the areas of structural and mechanical design, control systems and automation, design for manufacturing, as well as norms and standards, and is providing practical feedback on the operation of heavy machinery in construction environments in applicable markets. It is expected that Phase 1 will be completed in less than two years.

Phase 2 will commence upon execution by both parties of a long-term Manufacturing and Commercialisation Agreement that will address, among other things, the appointment of Liebherr-Mischtechnik as exclusive manufacturer of Hadrian X[®] robots, the scope and implementation of joint commercialisation activities including supply, service and lease structure, and intellectual property licensing. Pre-requisites for progressing to Phase 2 include reaching mutual agreement on the business plan, go-to-market strategy, customer service strategy and commercial viability of the Hadrian X[®] in key markets and achievement of key performance targets. The MoU continues for a period of two years or until the execution of a Manufacturing and Commercialisation Agreement.

Subsequent to the end of the quarter, a senior representative from Liebherr-Mischtechnik attended FBR's premises and its two concurrent construction projects to see both H01 and H02 in action on separate sites as part of the collaboration between the two companies.





Outdoor testing of H01

For the first time ever, FBR has had two Hadrian X[®] construction robots working on two different suburban building sites at the same time. H01, the upgraded version of the Hadrian X[®], commenced work on its first house structure in the southern Perth suburb of Wellard, with the work to be completed shortly. The upgraded H01 has proven its zero-waste design by producing no waste in the build so far, as it lays from pre-cut, sequenced pallets in accordance with the block sequencing in the Hadrian X[®] build file.

Typically, a manually built brick house will produce 10% brick waste on average, which, applied to the Wellard build, would have equated to approximately three cubic metres of brick waste in landfill, plus the additional cost associated with over-ordering and waste removal.

With no requirement to cut blocks, the saw module has been completely removed along with the pack conveyors (which assisted in the loading of pallets into Hadrian), dehacker robots (which transferred blocks from pallets into storage bays) and rejection chute. The removal of these modules means a higher reliability and faster block delivery within H01.

The overall H01 footprint has been reduced by approximately 2.5 metres, enabling H01 to fit on more construction sites, and onboard power means many deployment requirements have been dematerialized and what does remain can be stored inside H01, reducing deployment time by half.

A new DST enabling laser system has resulted in a reduction of laser trackers on-site from 3 to just 1, and a mobile HMI operating system soon to be online will enable one-man Hadrian operation via a tablet.

H01 is demonstrating good lay speeds for its first ever suburban build and is expected to continue to improve its speed and utilisation as more builds are completed. H01 has also demonstrated for the first time the ability of the Hadrian X[®] to build from the front of the structure in between two existing houses.

Progress at Willagee

FBR has deployed the Hadrian X[®] to a residential construction site in the Perth suburb of Willagee and has commenced robotically building the walls of 16 townhouses for prominent Western Australian builder Inspired Homes. FBR is constructing the load bearing walls, the internal partition walls, and the concrete footings and slabs for the 16 townhouses.

The Hadrian X[®] has completed approximately three quarters of the ground floors on the south side of the project, and approximately half of the ground floors on the north side of the project. Each stage of the project is being completed by the Hadrian X[®] once the builder and trades ready the sites. The builder is currently planning to lay the first-floor slabs in two stages, which will enable the Hadrian X[®] to work for longer periods without having to wait for other trades, and the first floors have significantly less trade integration and simpler laying sequences to further accelerate completion of the project.

Progress on next-generation Hadrian X

FBR's progress on the production of its next-generation Hadrian X[®] is accelerating, with the first modules now mechanically assembled. Testing is currently underway on a number of test rigs, including an improved transfer robot and brick shuttle system that is being tested for accuracy, repeatability and endurance.



Fabrication of the side frames and base is underway, and panels for the boom are being manufactured.

Long lead items have been ordered and many have been delivered, including servo motors, linear motion components, gearboxes, slew bearings and servo drives.

Support tooling for the manufacture of the next-generation Hadrian X[®] has also been brought online. An FBR-owned 12m long oven for boom sections has been commissioned and is in use at a subcontract supplier. At FBR's facility, a paint booth large enough for a complete Hadrian X[®] has been installed, and a laser cutter for steel and aluminium plate and tube has been installed, which can cut up to 8m x 2.5m plate. A 5-axis CNC machining centre and mill turning lathe have been added to FBR's existing in-house machine shop capacity of three 3-axis machining centres, and a very large gantry machining centre is currently being installed for in-house machining of the largest components used on the next-generation Hadrian X[®].

St James update

Council approval of the eight townhouse St James project has not yet been granted to the builder due to the requirement to change the site levels to meet Water Corporation requirements, which is unrelated to the Hadrian X[®] but has delayed the commencement of FBR's involvement in the project.

Commercial Update

FBR Presence at Dubai World Expo

In March 2022 FBR joined with the WA State Government to present a showcase of Western Australian technology, innovation and exports at the World Expo in Dubai. A video highlighting how Hadrian X[®] is revolutionising the construction industry was displayed to a room full of VIPs at the Expo site, with FBR's Gulf representative in attendance.

Corporate and Finance

FBR secures construction financing for robotically built housing

On March 1, FBR announced that it had signed an agreement with FC Securities Pty Ltd, a subsidiary of one of Australia's largest alternative asset managers FC Capital, for a \$2 million revolving debt facility to finance up to 67.5% of the land and construction cost of five homes FBR is building in Perth plus any subsequent FBR residential builds within the 30-month term of the facility. The secured debt facility has an interest rate on drawn funds of 9% per annum.

FBR appoints Non-Executive Director Ms Nancy Milne

Subsequent to the end of the quarter, FBR re-appointed Ms Nancy Milne to the position of Non-Executive Director of the Company. Ms Milne previously served as a Non-Executive Director of FBR from August 2018 to January 2020, at which time she resigned to attend to family health issues.

Ms Milne has extensive business experience as a Non-Executive Director and lawyer specialising in insurance, corporate governance, risk management and commercial dispute resolution. She was a partner at Clayton Utz from 1997 to 2003 and a consultant until 2012, and was awarded the Order of Australia

ASX Announcement

FBR Limited



Medal in 2008 for services to the legal sector and to the community. Ms Milne is currently Chair of the Securities Exchange Guarantee Corporation, Chair of the Accountants Professional and Ethics Standards Board, Deputy Chair of the NSW State Insurance Regulatory Authority, and a Director of the Benevolent Society.

FBR's receipts from customers for the quarter totalled \$76,000.

During the quarter, FBR spent \$2.0 million on corporate costs, up slightly from the previous quarter because of an increase in staffing levels. FBR spent \$3.1 million developing the Hadrian technology, which was down from the previous quarter due to a reduction in external spend on parts for the new Hadrian robots. FBR spent approximately \$560,000 developing its house and land properties at Wellard and delivering WaaS and approximately \$151,000 acquiring plant and equipment for manufacturing Hadrian technology components.

Note to item 6 in Appendix 4C: Payments to related parties and their associates were made in the quarter. Approximately \$262,000 was paid to related parties as Executive and Non-Executive Director fees, salary and superannuation.

This announcement has been authorised for release to the ASX by FBR's Board of Directors.

Ends

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About FBR Limited

FBR Limited (ASX: FBR) designs, develops and builds dynamically stabilised robots to address global needs. These robots are designed to work outdoors using the company's core Dynamic Stabilisation Technology® (DST®).

The first application of DST® is the Hadrian X®, a bricklaying robot that builds structural walls faster, safer, more accurately and with less wastage than traditional manual methods. The Hadrian X® provides Wall as a Service®, FBR's unique commercial offering, to builders on demand.

To learn more please visit www.fbr.com.au



Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

FBR Limited

ABN

58 090 000 276

Quarter ended ("current quarter")

31 March 2022

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	76	736
1.2 Payments for		
(a) Hadrian Development costs	(1,098)	(2,862)
(b) Staff costs – Hadrian Development	(1,644)	(2,569)
(c) product manufacturing and operating costs	(560)	(1,135)
(d) advertising and marketing and business development	(99)	(299)
(e) leased assets	-	-
(f) staff costs - administration	(1,031)	(2,888)
(g) administration and corporate costs	(851)	(2,486)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	3	3
1.5 Interest and other costs of finance paid	(56)	(215)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(5,260)	(11,715)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	(151)	(268)
(d) investments	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)		
	- Hadrian Development costs	-	(1,198)
	- Staff costs – Hadrian Development	-	(2,027)
	- R & D rebate	-	3,987
	- Intellectual Property, Patents and Trademarks	(317)	(556)
2.6	Net cash from / (used in) investing activities	(468)	(62)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	10,000
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(575)
3.5	Proceeds from borrowings	964	1,867
3.6	Repayment of borrowings	(53)	(2,522)
3.7	Transaction costs related to loans and borrowings	(50)	(50)
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	861	8,720

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	12,938	11,128
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(5,260)	(11,715)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(468)	(62)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	861	8,720
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	8,071	8,071

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	900	1,367
5.2	Call deposits	6,339	4,739
5.3	Bank overdrafts	-	-
5.4	Other (provide details)		
	- Guarantee facilities	832	832
	- Term deposits	-	6,000
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	8,071	12,938

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(262)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>		

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i> <i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	2,850	1,814
7.2	Credit standby arrangements	-	-
7.3	Other (corporate credit cards)	200	-
7.4	Total financing facilities	3,050	1,814
7.5	Unused financing facilities available at quarter end		1,236
7.6	<p>Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.</p> <p>A secured chattel mortgage equipment loan facility with HP Financial Services (Australia) Pty Ltd at an interest rate of 5.50% p.a., maturing on 30 November 2026.</p> <p>A secured revolving corporate credit card facility with the Commonwealth Bank of Australia at an interest rate of 17.99% p.a.</p> <p>A senior secured revolving construction finance facility with FC Securities Pty Ltd at an interest rate of 9.00% p.a.</p>		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(5,260)
8.1b	Net cash from / (used in) other investing activities (Item 2.5)	(317)
8.2	Cash and cash equivalents at quarter end (item 4.6)	8,070
8.3	Unused finance facilities available at quarter end (item 7.5)	1,236
8.4	Total available funding (item 8.2 + item 8.3)	9,306
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	1.67
	<i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i>	
8.6	If item 8.5 is less than 2 quarters, please provide answers to the following questions:	
8.6.1	Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
	Answer: Yes	
8.6.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: The company has forecasted to receive an R&D tax cash refund for the year ended 30 June 2022 of at least \$4 million. The company has 5 residential house and land developments in Perth which it plans to sell for cash. The Company is currently earning money from robotic bricklaying in Perth.	

8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: The company expects to be able to continue its operations and to meet its business objectives on the basis of the cash on hand, the expected R&D tax refund, the sale of 5 residential house and land developments and funds from robotic bricklaying. On this basis the Company has more than 2 quarters of funding available.

Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 29 April 2022.....

Authorised by: Aidan Flynn, CFO and Company Secretary.....
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.