

Lotus Resources Ltd (LOT)

Rating: Buy | Risk: High | Price Target: \$0.53

13 July 2023

Acquisition of A-Cap provides growth beyond Kayelekera

Key Information

Current Price (\$ps)	0.18
12m Target Price (\$ps)	0.53
52 Week Range (\$ps)	0.16 - 0.30
Target Price Upside (%)	197.0%
TSR (%)	197.0%
Reporting Currency	AUD
Market Cap (\$m)	242
Sector	Materials
Avg Daily Volume (m)	0.5
ASX 200 Weight (%)	0%

Fundamentals

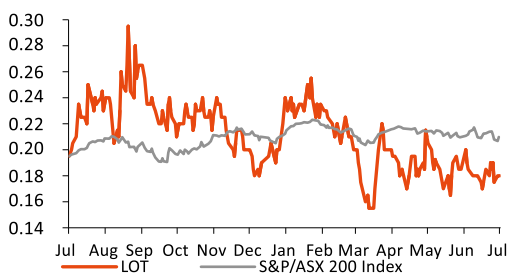
YE 30 Jun (AUD)	FY22A	FY23E	FY24E	FY25E
Sales (\$m)	0	0	0	95
NPAT (\$m)	(12)	(5)	(5)	37
EPS (cps)	(1.1)	(0.4)	(0.3)	1.8
EPS Growth (%)	(89.5%)	64.6%	24.0%	689.0%
DPS (cps) (AUD)	0.0	0.0	0.0	0.0
Franking (%)	0%	0%	0%	0%

Ratios

YE 30 Jun	FY22A	FY23E	FY24E	FY25E
P/E (x)	(19.4)	(45.9)	(60.4)	10.3
EV/EBITDA (x)	(19.2)	(45.1)	(44.1)	4.6
Div Yield (%)	0.0%	0.0%	0.0%	0.0%
Payout Ratio (%)	0.0%	0.0%	0.0%	0.0%

Price Performance

YE 30 Jun	1 Mth	2 Mth	3 Mth	1 Yr
Relative (%)	(2.5%)	(10.2%)	(4.5%)	(15.3%)
Absolute (%)	(2.7%)	(12.2%)	(7.7%)	(7.7%)
Benchmark (%)	(0.2%)	(2.0%)	(3.2%)	7.6%



Price performance indexed to 100

Source: FactSet

Major Shareholders

Davey Holdings & Management	11.2%
Sachem Cove	7.0%
Arnott Capital	6.0%
Terra Capital	6.0%

Andrew Hines | Head of Research

+61 3 9268 1178

andrew.hines@shawandpartners.com.au

Peter Kormendy | Senior Research Analyst

+61 3 9268 1099

Peter.Kormendy@shawandpartners.com.au

Event

Lotus has announced an agreed merger with A-Cap Energy via a scheme of arrangement which is effectively a scrip-based take-over by Lotus. In our view this appears a sensible, strategic acquisition which provides Lotus with a development uranium asset beyond the restart of its Kayelekera Uranium Project in Malawi. A-Cap Energy owns the large low-grade Letlhakane uranium deposit in Botswana.

Highlights

- Lotus Resources is intending to re-start operations of the fully permitted Kayelekera project in Malawi. The Kayelekera project was put on care and maintenance by Paladin in 2014 after five years of operations, 10.9M lb of U₃O₈ production, and ~US\$200m of capex. Peak production occurred in 2013 at ~3.0Mlbs U₃O₈.
- A-Cap Energy (ASX: ACB) has two assets, the Letlhakane uranium project in Botswana and the non-core Wilconi nickel cobalt project in WA. We ascribe no value to Wilconi which is likely to be divested by Lotus.
- Letlhakane is a large (190Mlb) and low grade (321ppm) uranium resource which has a mining licence and A-Cap released a scoping study in 2016 which envisaged a heap-leach operation producing 2.4Mlbpa of uranium over an 18yr mine-life. Lotus is acquiring a large uranium resource at the very low cost of around US\$0.21/lb, compared to the global average EV/lb of around US\$2.60/lb for undeveloped uranium projects.
- Lotus is likely to take a different approach with Letlhakane and focus on a higher-grade operation. The existing 190Mlb @ 321ppm resource is based on a cut-off grade of 200ppm, but this upgrades to 103Mlb @ 450ppm if the cut-off grade is increased to 300ppm. It is possible that this grade can be increased further with ore-sorting technology and Letlhakane may be developed with a tank leaching processing facility (like Kayelekera) rather than a heap leach. Lotus has plenty of time to optimise a development of Letlhakane whilst it ramps up Kayelekera.
- Investors unfamiliar with Botswana may be surprised to hear that the country is ranked No.2 (behind Nevada) in the Fraser Institutes Policy Perception Index (PPI) as a mining jurisdiction – ahead of South Australia and Western Australia. Botswana has the highest GDP/capita in Africa, has been a stable democracy since 1966, mining represents 21% of GDP and it has a skilled and English-speaking mining work force.
- LOT released a Definitive Feasibility Study (DFS) in 2022 which outlined a low-cost development pathway for the re-start of Kayelekera. The DFS included initial capex of US\$88m, production of 2.4Mlb/yr over a 10 year mine-life, cash costs of US\$29.1/lb and all-in sustaining costs of US\$36.2/lb for the first seven years of production.
- Lotus is planning to make significant improvements to Kayelekera including the use of ore sorting, connection to the national grid, a new acid plant with associated co-generation plant and nanofiltration to improve acid recovery. These improvements will result in significantly lower operating costs than the asset's historical performance.
- Lotus is advancing key workstreams ahead of a Final Investment Decision (FID) which we expect in 2H23. Upcoming catalysts include:
 - Finalisation of the Mining Development Agreement (MDA).
 - Finalisation of a power agreement with ESCOM for connection to the national grid.
 - Offtake agreements with US and European utilities.

Recommendation

We maintain our BUY recommendation and upgrade our price target to \$0.53ps (from \$0.47ps) after including Letlhakane in our valuation at US\$160m (A\$0.11ps).

Lotus Resources Ltd

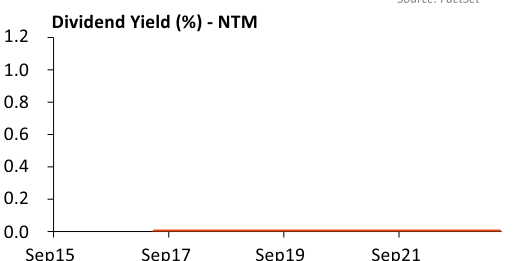
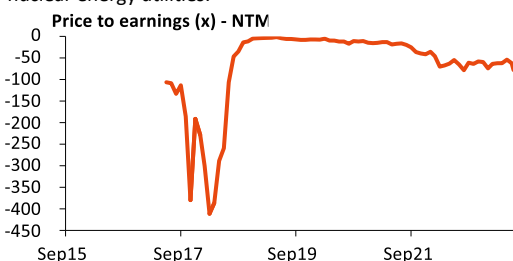
Materials

FactSet: LOT-AU / Bloomberg: LOT AU

Key Items	Data
Recommendation	BUY
Risk	HIGH
Price (\$ps)	0.18
Target Price (\$ps)	0.53
52 Week Range (\$ps)	0.16 - 0.30
Shares on Issue (m)	1,344
Market Cap (\$m)	242
Enterprise Value (\$m)	225
TSR (%)	197.0%

Company Description

Lotus Resources is looking to re-start operations of the fully permitted Kayelekera Uranium Project in Malawi (LOT 85%). The company recently completed a Definitive Feasibility Study (DFS) for the re-start of Kayelekera. The Restart DFS has confirmed Kayelekera as one of the lowest capital cost uranium projects globally whilst also having the ability to quickly recommence production (15 months development) once a Final Investment Decision (FID) has been made. The company believes it is possible for an FID to be made as early as this half, pending offtake negotiations with various nuclear energy utilities.



Financial Year End: 30 June

Investment Summary (AUD)	FY21A	FY22A	FY23E	FY24E	FY25E
EPS (Reported) (cps)	(0.6)	(1.1)	(0.4)	(0.3)	1.8
EPS (Underlying) (cps)	(0.6)	(1.1)	(0.4)	(0.3)	1.8
EPS (Underlying) Growth (%)	27.9%	(89.5%)	64.6%	24.0%	689.0%
PE (Underlying) (x)	(32.5)	(19.4)	(45.9)	(60.4)	10.3
EV / EBIT (x)	(38.2)	(17.4)	(45.1)	(44.1)	5.0
EV / EBITDA (x)	(38.2)	(19.2)	(45.1)	(44.1)	4.6
DPS (cps) (AUD)	0.0	0.0	0.0	0.0	0.0
Dividend Yield (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Franking (%)	0%	0%	0%	0%	0%
Payout Ratio (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Free Cash Flow Yield (%)	(4.2%)	(4.7%)	(2.9%)	(24.3%)	(4.2%)
Profit and Loss (AUD) (m)	FY21A	FY22A	FY23E	FY24E	FY25E
Sales	0	0	0	0	95
Other Operating Income	0	3	0	0	0
EBITDA	(6)	(12)	(5)	(5)	49
EBITDA Margin (%)	nm	nm	nm	nm	52.2%
Depreciation & Amortisation	0	(1)	0	0	(4)
EBIT	(5.9)	(13.0)	(5.0)	(5.1)	45.1
EBIT Margin (%)	nm	nm	nm	nm	47.6%
Net Interest	0	0	0	0	(2)
Pretax Profit	(6)	(13)	(5)	(5)	43
Minorities	(1)	(1)	0	0	6
NPAT Underlying	(5)	(12)	(5)	(5)	37
Significant Items	(1)	0	0	0	0
NPAT Reported	(4)	(12)	(5)	(5)	37
Cashflow (AUD) (m)	FY21A	FY22A	FY23E	FY24E	FY25E
EBIT	(6)	(13)	(5)	(5)	45
Tax Paid	0	0	0	0	0
Net Interest	0	(0)	0	0	(2)
Change in Working Capital	0	0	(2)	0	(6)
Depreciation & Amortisation	0	1	0	0	4
Other	(1)	2	0	0	0
Operating Cashflow	(7)	(10)	(7)	(5)	41
Capex	0	(1)	0	(70)	(57)
Acquisitions and Investments	0	0	0	0	0
Disposal of Fixed Assets/Investments	0	2	0	0	0
Other	(1)	(3)	(10)	(3)	(3)
Investing Cashflow	(1)	(2)	(10)	(73)	(60)
Free Cashflow	(7)	(11)	(7)	(75)	(16)
Equity Raised / Bought Back	21	1	25	71	0
Dividends Paid	0	0	0	0	0
Change in Debt	0	0	0	40	40
Other	0	0	0	0	0
Financing Cashflow	21	1	25	111	40
Exchange Rate Effect	(0)	1	0	0	0
Net Change in Cash	13	(10)	9	34	22
Balance Sheet (AUD) (m)	FY21A	FY22A	FY23E	FY24E	FY25E
Cash	15	5	13	47	69
Accounts Receivable	0	0	0	0	0
Inventory	0	0	0	0	0
Other Current Assets	1	1	1	1	1
PPE	0	0	0	63	110
Total Assets	89	67	78	248	325
Accounts Payable	1	2	0	0	0
Short Term Debt	0	0	0	0	0
Long Term Debt	0	0	0	40	80
Total Liabilities	67	52	43	83	123
Total Shareholder Equity	22	15	35	165	208
Ratios	FY21A	FY22A	FY23E	FY24E	FY25E
ROE (%)	(33.9%)	(63.8%)	(19.6%)	(5.1%)	19.9%
Gearing (%)	(204.7%)	(45.7%)	(60.7%)	(4.5%)	5.3%
Net Debt / EBITDA (x)	2.5	0.4	2.7	1.4	0.2
Price to Book (x)	8.1	17.6	7.0	2.3	1.8



Acquisition of A-Cap Energy

Lotus is acquiring A-Cap Energy via a Scheme of Arrangement whereby Lotus will issue one new Lotus share for every 3.54 A-Cap shares. Lotus shareholders will end up owning 79% of the combined entity. A Scheme Booklet is expected to be lodged with ASIC in August 2023 with an implementation date in October 2023. The management team and board will remain the existing Lotus management team and board.

A-Cap Energy (ASX: ACB) has two assets, the Letlhakane uranium project in Botswana and the non-core Wilconi nickel cobalt project in WA. We ascribe no value to Wilconi which is likely to be divested by Lotus.

Letlhakane is a large (190Mlb) and low grade (321ppm) uranium resource which has a mining licence and A-Cap released a scoping study in 2016 which envisaged a heap-leach operation producing 2.4Mlbpa of uranium over an 18yr mine-life.

Figure 1: Snapshot of the combined entity

			Pro-Forma
30 day VWAP / Offer price ¹	\$0.1838	\$0.052	\$0.1838
No ordinary shares ²	1,344.0m	1,232.4m	1,700.6m
Market Capitalisation (at last share price)	A\$247.1m	A\$63.9m	A\$312.6m
% shareholding in Merged Group ³	79.0%	21.0%	-
Cash position (as at 31 March 2023)	\$17.9m	\$5.9m	\$23.8m
Uranium Reserves ⁴	15.9Mt @ 660ppm U ₃ O ₈ 23.0Mlbs U ₃ O ₈	-	15.9Mt @ 660ppm U ₃ O ₈ 23Mlbs U ₃ O ₈
Uranium Resources ^{4,5}	49.4Mt @ 475ppm U ₃ O ₈ 51.1Mlbs U ₃ O ₈	268.9Mt @ 321ppm U ₃ O ₈ 190.4Mlbs U ₃ O ₈	318.3Mt @ 344ppm U ₃ O ₈ 241.5Mlbs U ₃ O ₈

1 – As at 11 July 2023 – pro-forma entity assumed price equal to LOT 30 day VWAP
2 – A-Cap Shares on issue pre-merger
3 – Assumes vesting of 30 million performance rights, excludes out-the-money listed & unlisted A-Cap options which are subject to separate consideration
4 – Mineral Resources and Ore Reserves are based on a 100% ownership basis. For Kayelekera, Lotus has an 85% interest
5 – At a cut-off grade of 200ppm U₃O₈

Source: Lotus ASX release July 2023

In our view this is a sensible and strategic acquisition for Lotus which is acquiring a large uranium resource at the very low cost of around US\$0.21/lb, compared to the global average EV/lb of around US\$2.60/lb for undeveloped uranium projects.

The strategic rationale includes:

- The acquisition brings together two geographic project locations but retains an African focus which differentiates Lotus from other single asset uranium juniors.
- The opportunity to capture regional synergies including shared inventories and potentially export pathways.
- Adding flexibility and diversification will reduce overall risk. Lotus can commence work on optimising Letlhakane whilst maintaining the work streams required to bring Kayelekera back into production at the appropriate time.
- Sharing of technology share whereby the recent learnings from Kayelekera can be applied to Letlhakane.

Any initial investor push-back is likely to focus on the low grade of the Letlhakane orebody. However, we expect Lotus to take a different approach with Letlhakane and focus on a higher-grade operation. The existing 190Mlb @ 321ppm resource is based on a cut-off grade of 200ppm, but this upgrades to 103Mlb @ 450ppm if the cut-off grade is increased to 300ppm. It is possible that this grade can be increased further with ore-sorting technology and Letlhakane may be developed with a tank leaching processing facility (like Kayelekera) rather than a heap leach. Lotus has plenty of time to optimise a development of Letlhakane whilst it ramps up Kayelekera.

Letlhakane Uranium Project

The Letlhakane Uranium Project, located in Botswana, is one of the world's largest undeveloped Uranium Deposits. A Mining Licence designated ML 2016/16L was granted on 12 September 2016 and is valid for 22 years. The Department of Environmental Affairs formally approved the Letlhakane Uranium Project's Environmental Impact Statement on 13 May 2016. Provisional surface rights were granted on 6 June 2016

Figure 2: Letlhakane Project location



Source: A-Cap Energy website

A mining Licence application for PL 45/2004 (Letlhakane) was submitted to the Botswana Department of Mines, based on the results of a technical study and financial modelling. The technical study was based on shallow open pit mining and heap leach processing to produce an average 2.4Mlb of uranium per annum over a mine life of 18 years.

The Process Design was based on a 2-stage acid heap leach route for all the primary, oxide and secondary mudstone ores with a modified solvent extraction system being the principal uranium recovery method. A detailed programme of acid column leaching, Solvent Extraction (SX) and Ion Exchange (IX) testwork was completed in 2016 to better define recoveries and process operating costs for the Letlhakane heap leach operation. This was carried out at ANSTO in Sydney and SGS in Perth.

A JORC Mineral Resource Upgrade at Letlhakane was completed by Optiro Pty Ltd, an independent expert, in September 2015. Lotus has provided an update to the Resource in an ASX release today. There were no material changes.

We have included the Letlhakane Resource into our Lotus valuation at US\$160m which is based on a 100Mlb resource valued at US\$2/lb, discounted by 20%. We have assumed that the resource is re-cut at a 300ppm cut-off and have applied a 20% discount to allow for resource uncertainty.

Figure 3: Letlhakane Resource

Cut-off (U3O8ppm)	Total Indicated			Total Inferred			Global Total		
	Mt	U3O8(ppm)	Contained U3O8 (Mlbs)	Mt	U3O8(ppm)	Contained U3O8 (Mlbs)	Mt	U3O8(ppm)	Contained U3O8 (Mlbs)
100	197.1	197	85.5	625	203	280.1	822.1	202	365.7
200	59.2	323	42.2	209.7	321	148.2	268.9	321	190.4
300	22.2	463	22.7	81.6	446	80.3	103.8	450	102.9

Source: Lotus ASX release July 2023

Lotus Resources – plans to restart Kayelekera

Lotus Resources is planning to re-start operations of the fully permitted Kayelekera project in Malawi (LOT 85%). A low upfront capital requirement of ~US\$88m is appealing.

The Kayelekera project was put on care and maintenance by Paladin in 2014 after five years of operations, 10.9M lb of U₃O₈ production, and ~US\$200m of capex. Peak production occurred in 2013 at ~3.0Mlbs U₃O₈.

LOT acquired 65% equity in Kayelekera from Paladin in March 2020 and bought out partner Grant Davey (LOT Director) in August 2021 to increase its stake to 85%. LOT is free carrying its project partner The Government of Malawi (15%).

LOT released a Definitive Feasibility Study in August 2022 which provides a low-cost development pathway for the re-start of Kayelekera. Key features of the DFS include:

- Open cut mine pit requiring low total initial capital expenditure of US\$88m due to Kayelekera's existing infrastructure.
- A quick development period for refurbishment for a re-start; approximately 15 months to production from a Final Investment Decision.
- 10-year life-of-mine production of 19Mlbs U₃O₈ at an average head grade of 790ppm and production rate of 2.4Mlb/yr (av. LoM).
- Cash costs of US\$29.1/lb and all-in sustaining costs of US\$36.2/lb for the first seven years of production.

Operational improvements will drive lower operating costs

Lotus is planning significant improvements to Kayelekera which are probably not yet widely appreciated by the market. Kayelekera historically operated with relatively high operating costs of US\$55-60/lb due to high power costs and the need to truck in sulphuric acid for the leach circuit.

Lotus is planning to make four significant operational improvements when Kayelekera is restarted:

1. Ore sorting has been successfully trialed and is expected to lift the feed grade to around 900ppm which will result in less acid and power consumption.
2. The operation is going to be connected to national grid and utilize relatively cheap and clean hydropower. This should result in power costs dropping from ~US30c/kWh to ~US6-8c/kWh. Power makes up 25-30% of the cost base.
3. Lotus will be installing a new acid plant with an associated co-generation plant. This will eliminate the need to truck in acid and provide the added benefit of reducing external power requirements.
4. Lotus is installing nanofiltration at the back end of the plant to improve acid recovery.

Next catalysts

Lotus is continuing to advance a number of key areas ahead of a Final Investment Decision (FID) which we expect in 2H23. The key workstreams include:

- Finalisation of the Mining Development Agreement (MDA) with the Malawi Government and its advisers.
- Finalisation of a power agreement with ESCOM for connection of the mine to the national grid.
- Offtake agreements with US and European utilities. Lotus has been very clear that it will not advance the project until uranium prices are sustainably higher. In our view Lotus will be looking to sign contracts with utilities above US\$60/lb, with suitable escalation clauses and exposure to strengthening uranium markets.
- Financing discussions with lenders and sources of equity capital. In our modelling we assume a A\$70m equity raise in FY24 and \$80m in debt finance.

Kayelekera overview

The Kayelekera sandstone uranium deposit is located in northern Malawi, southern Africa, 52km west (by road) of the township of Karonga. The resource was discovered by the Central Electricity Generating Board of Great Britain (CEGB) in the early 1980s.

In 1998 Paladin acquired a 90% interest in Kayelekera through a Joint Venture with Balmain Resources, which then held exploration rights over the project area. In July 2005 Paladin acquired the remaining 10% interest held by Balmain.

After completing the Development Agreement with the Malawi Government, the BFS and a full Environmental Impact Assessment, a mining licence was granted in April 2007.

Construction started in 2007 and open pit mining commencing in 2008. In July 2009, Paladin issued 15% equity in the project to the Government of Malawi.

Peak production in 2013 was ~3.0Mlb U₃O₈. In 2014 - after five years of operations, 10.9Mlbs of U₃O₈ production, and ~US\$200m of capex - the mine was put on care and maintenance. Paladin noted difficult uranium market conditions as the primary reason for mine closure.

In March 2020, Lotus Resources (formerly Hylea Metals) and Kayelekera Resources (an entity controlled by Grant Davey) acquired Paladin's 85% stake (65:20) in the project in a vehicle called Lily Resources. The asset was consolidated in August 2021 to be 85% owned by Lotus Resources via the issuance of 226m shares to Grant Davey's vehicle.

Figure 4: Kayelekera – project location & associated exploration licences

The tenement package is large, at 157km², with significant exploration potential, and hosts a high-grade resource with an existing open pit mine.



Source: Company reports

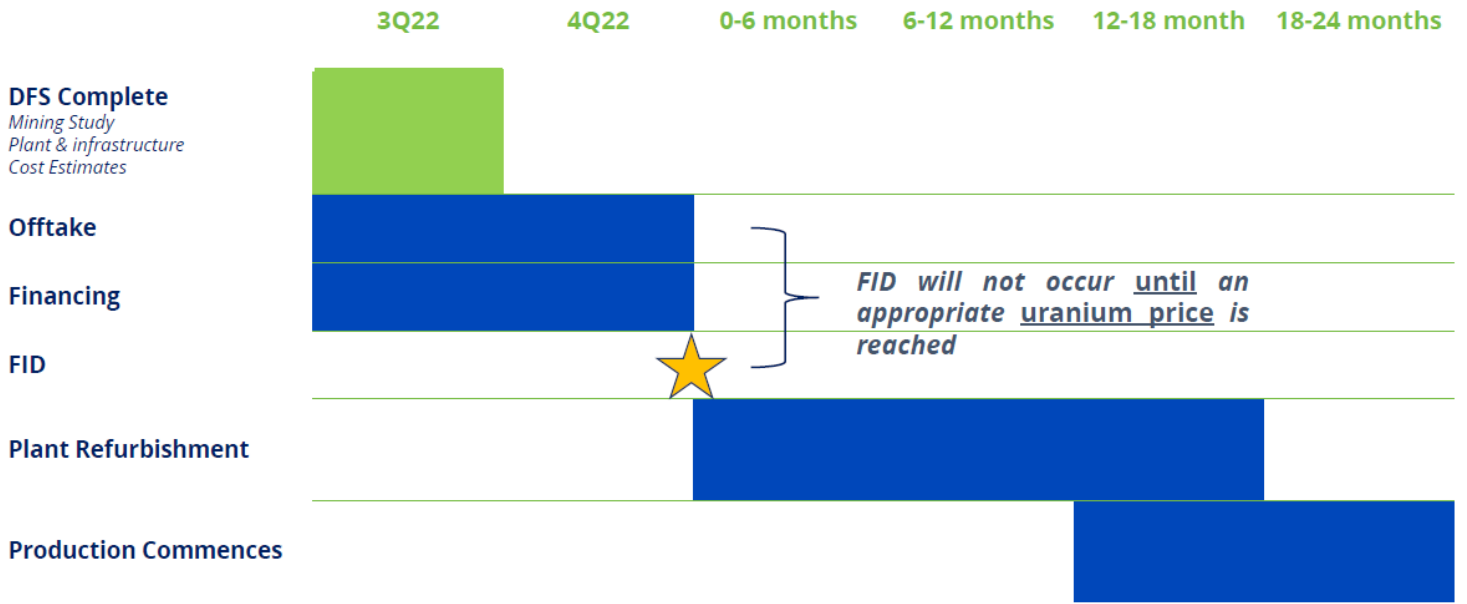
Figure 5: The Kayelekera mine and associated infrastructure

Peak production at Kayelekera was in 2013 at ~3.0Mlb U₃O₈. In 2014 - after five years of operations, 10.9Mlbs of U₃O₈ production, and ~US\$200m of capex - the mine was put on care and maintenance. The mine and infrastructure remain in good condition.



Source: Company reports

Figure 6: Pathway to recommence production at Kayelekera



Source: Company reports

2022 Definitive Feasibility Study (DFS)

Lotus released a Definitive Feasibility Restart Study in August 2022 which built on the October 2020 Scoping Study and incorporates several years of additional technical work. It provides a low-cost development pathway for the re-start of Kayelekera, an open cut mine pit which requires total initial capital expenditure of US\$88m to refurbish.

The DFS outlines a development scenario for a quick re-start (15 months to production from FID) for a total 10-year Life of Mine (LOM) with production of 19Mlbs U₃O₈ (vs a total Resources of 51Mlbs) at an average annual production rate of 2.0Mlbs.

The first seven years of production are from higher grade ore before production is sourced from stockpiles in the final three years. The first seven years of operation assume All-in Sustaining Costs of US\$36/lb and an average production of 2.4Mlbs U₃O₈ per annum.

Despite the current high inflation environment, operating costs are slightly lower in the DFS compared to the historical operations and 2020 Re-Start Scoping Study due to:

- Increased feed grades from ore sorting,
- Lower power costs from grid power; and
- Improved acid utilisation from nanofiltration.

In our view exploration success at Livingstonia and potential further opportunities at Chilumba and around the current Kayelekera resource demonstrate potential to extend the LOM past the 10 years.

Figure 7: Lotus Mineral Resource Inventory – June 2022

Project	Category	Mt	Grade (U ₃ O ₈ ppm)	U ₃ O ₈ (M kg)	U ₃ O ₈ (M lbs)
Kayelekera	Measured	0.9	830	0.7	1.6
Kayelekera	Measured – RoM Stockpile ⁹	1.6	760	1.2	2.6
Kayelekera	Indicated	29.3	510	15.1	33.2
Kayelekera	Inferred	8.3	410	3.4	7.4
Kayelekera	Total	40.1	510	20.4	44.8
Kayelekera	Inferred – LG Stockpiles ¹⁰	2.4	290	0.7	1.5
Kayelekera	Total - Kayelekera	42.5	500	21.1	46.3
Livingstonia	Inferred	6.9	320	2.2	4.8
Total	All uranium resources	49.4	475	23.3	51.1

Source: Company reports

Figure 8: Ore Reserve, 100% basis (based on a 200ppm cut-off grade for arkose and a 390ppm cut-off grade for mudstone).

Category	Mt	Grade (U ₃ O ₈ ppm)	U ₃ O ₈ (M kg)	U ₃ O ₈ (M lbs)
Open Pit - Proved	0.6	902	0.5	1.2
Open Pit - Probable	13.7	637	8.7	19.2
RoM Stockpile – Proved	1.6	760	1.2	2.6
Total - Kayelekera	15.9	660	10.4	23.0

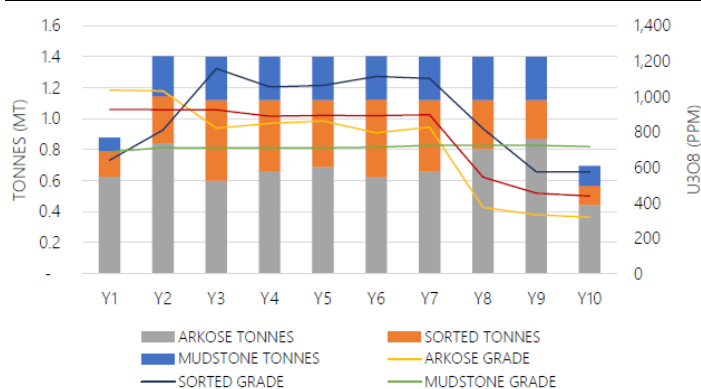
Source: Company reports

Figure 9: Key DFS project outputs

Production	LOM total / Avg.
Mine Life (Years)	9.5
Total Material Mined (Mt)	40.5
Strip Ratio	1.8
Ore Tonnes (Mt)	14.3
Ave Mined Grades (ppm U ₃ O ₈)	648
Total U ₃ O ₈ Mined (Mlbs)	20.5
Existing Stockpiles	
Tonnes (Mt)	4.1
Grade (ppm U ₃ O ₈)	470
Plant	
Crusher Feed (Mt)	18.4
Crusher Feed Grade (ppm U ₃ O ₈)	609
Ave Feed Upgrade factor	1.30
Ave Ore Sorting Recovery (%)	77.8
Mill Feed (Mt)	12.8
Average Mill Feed Grade (ppm U ₃ O ₈)	792
Process Plant Recovery (%)	86.7
Av. Annual Production (Mlbs)	2.03
Steady State Annual Production (MLbs)	2.42
LOM Production (Mlbs)	19.3
Operating costs	
Mining Costs (US\$ / t mined)	3.04
Processing Costs ⁷ (US\$ / t ore)	27.60
G&A Costs (US\$M pa)	11.10
Cash costs (US\$ / lb)	30.10
AISC (US\$ / lb)	37.70
Initial Capital costs	
Initial Capital (US\$M)	78.3
Contingency (US\$M)	9.5
Pre-Production (US\$M)	11.5

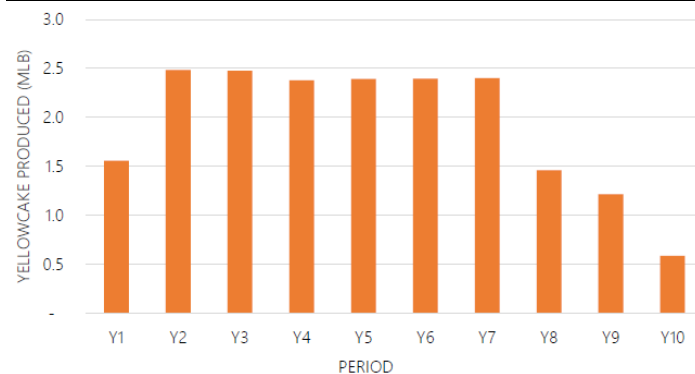
Source: Company reports

Figure 10: Mill Feed – quantity and uranium grade by material type



Source: Company reports

Figure 11: Yellowcake output (MLb)



Source: Company reports

Kayelekera financial modelling assumptions

Our financial model is broadly in line with the operating assumptions in the DFS.

Figure 12: Kayelekera financial model (A\$m)

Kayelekera (A\$m)	2022	2023f	2024f	2025f	2026f	2027f	2028f	2029f	2030f	2031f	2032f
Ore processed (kt)				500	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Grade of mill feed (ppm)				900	900	900	900	900	900	900	900
U3O8 (Mlb) - sold				0.9	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Revenue				95	278	278	278	273	265	270	277
Expenses				36	105	107	109	111	113	116	156
EBITDA				58	173	170	168	161	151	154	120
D&A				4	12	12	12	12	12	12	12
EBIT				54	160	158	156	149	139	142	108
Net Operating Assets	12	12	81	134	131	128	125	137	135	132	127
Capex	0	0	70	57	9	9	9	25	10	10	7
EBITDA Margin (%)				62%	62%	61%	61%	59%	57%	57%	43%
EBIT / Assets (%)				40%	123%	124%	125%	109%	103%	108%	85%
Realised U3O8 (US\$/lb)	46	53	63	81	85	85	85	84	81	83	85
AUD/USD	0.72	0.68	0.72	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Revenue (A\$/lb)				110	115	115	115	113	109	112	114
Expenses (A\$/lb)				42	43	44	45	46	47	48	65
EBITDA (A\$/lb)				68	71	71	70	67	63	64	50
D&A (A\$/lb)				5	5	5	5	5	5	5	5
EBIT (A\$/lb)				63	66	65	65	62	58	59	45
Nominal Tax @ 27.5%	0	0	0	0	0	0	0	0	0	0	0
Non-cash inventory movement	0	0	0	-6	-17	-17	-17	-17	-17	-17	24
Cash Flow	0	0	-70	-5	147	145	142	120	125	128	138

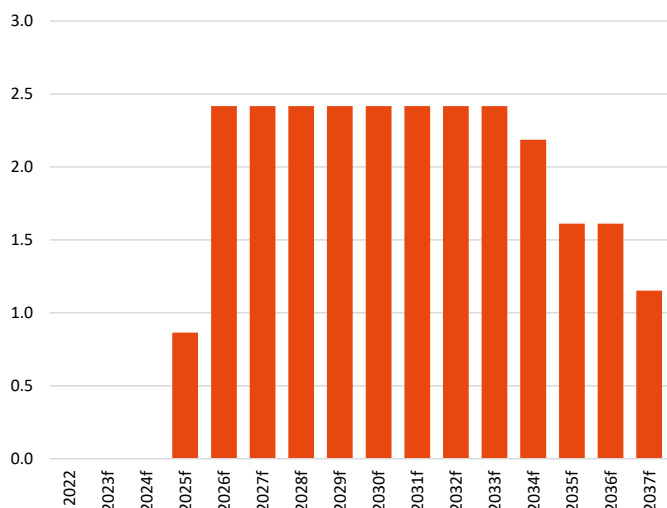
Source: Company reports, Shaw analysis

Figure 13: LOT fully diluted valuation

Lotus Resources Valuation - diluted	US\$m	A\$m	A\$ps
Kayelekera	295	440	0.21
Lethakane	160	239	0.11
Net cash / (debt)	16	24	0.01
Exploration upside	67	100	0.05
Cash from raise	48	71	0.03
Corporate costs	-10	-15	-0.01
Total Valuation	575	859	0.41
Target price (1.3x diluted valuation)			0.53

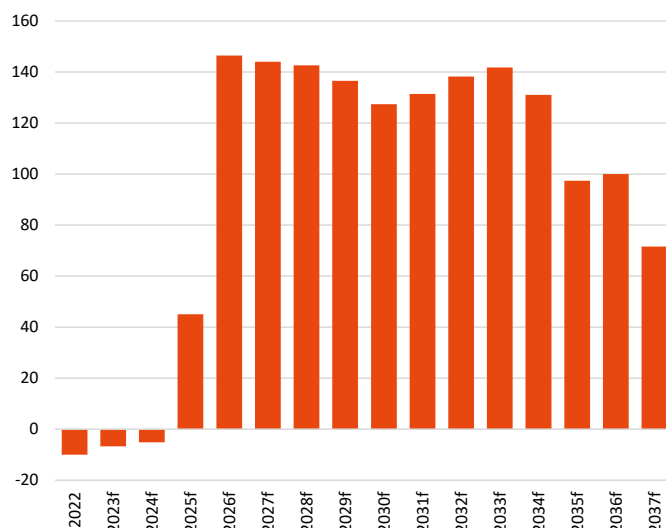
Source: Company reports, Shaw and Partners analysis

Figure 14: Uranium production (Mlbs)



Source: Company reports, Shaw forecasts

Figure 15: Operating cash flow (A\$m)



Source: Company reports, Shaw forecasts

Key risks

As a small mining company broadly exposed to a single commodity and a single asset, we consider an investment in Lotus Resources to be high risk. The key risks include:

- The U₃O₈ market is relatively opaque and difficult to forecast. The actual uranium price may differ substantially from our forecasts.
- Operations for LOT have not yet started and there is a risk that they may be unable to bring Kayelekera to production in line with expectations. Costs may be higher and operations may not be as expected.
- LOT will need to recapitalise to fund the commencement of operations. There is a risk that capital markets are not willing to fund the project.
- LOT is operating in Malawi. According to the World Bank, Malawi is one of the poorest third world countries. Political conditions can change unfavourably for a range of reasons. The economy is heavily dependent on agriculture and it is vulnerable to external shocks, particularly climatic shocks.
- Forecasting future operating costs has considerable uncertainty. Our forecasts may prove to be too optimistic. If each company's costs are higher than we expect then our cash flow forecasts will be too high.
- Smaller companies carry more significant 'key personnel' risk than larger organisations. If senior management depart it could delay projects or exacerbate operational risks.
- Safe and reliable production from operations once projects are operational. The inability to maintain safe and reliable operations may result in a sustained, unplanned interruption to production and impact the company's licence to operate and financial performance. Production facilities are subject to operating hazards associated with major accident events, cyber-attack, inclement weather and disruption to supply chain, that may result in a loss of uranium (radioactive material) containment, harm to personnel, environmental damage, diminished production, additional costs, and impacts to reputation or brand.

Core drivers and catalyst

- Lotus Resources is looking to re-start operations of the fully permitted Kayelekera project in Malawi (LOT 85%). A low upfront capital requirement of ~US\$88m is appealing.
- The Kayelekera project was put on care and maintenance by Paladin in 2014 after five years of operations, 10.9M lb of U₃O₈ production, and ~US\$200m of capex. Peak production occurred in 2013 at ~3.0Mlbs U₃O₈.
- LOT acquired 65% equity in Kayelekera from Paladin in March 2020 and bought out partner Grant Davey (LOT Director) in August 2021 to increase its stake to 85%. LOT is free carrying its project partner The Government of Malawi (15%).
- LOT released a Definitive Feasibility Study in 2022 which provides low-cost development pathway for the re-start of Kayelekera. Key features of the DFS include:
 - Open cut mine pit requiring low total initial capital expenditure of US\$88m due to Kayelekera's existing infrastructure.
 - A quick development period for refurbishment for a re-start; approximately 15 months to production from a Final Investment Decision.
 - 10-year life-of-mine production of 19Mlbs U₃O₈ at an average head grade of 790ppm and production rate of 2.4Mlb/yr (av. LoM).
 - Cash costs of US\$29.1/lb and all-in sustaining costs of US\$36.2/lb for the first seven years of production.
- Lotus is planning significant improvements to Kayelekera including the use of ore sorting, connection to the national grid, a new acid plant with associated co-generation plant and nanofiltration to improve acid recovery.

Rating Classification

Buy	Expected to outperform the overall market
Hold	Expected to perform in line with the overall market
Sell	Expected to underperform the overall market
Not Rated	Shaw has issued a factual note on the company but does not have a recommendation

Risk Rating

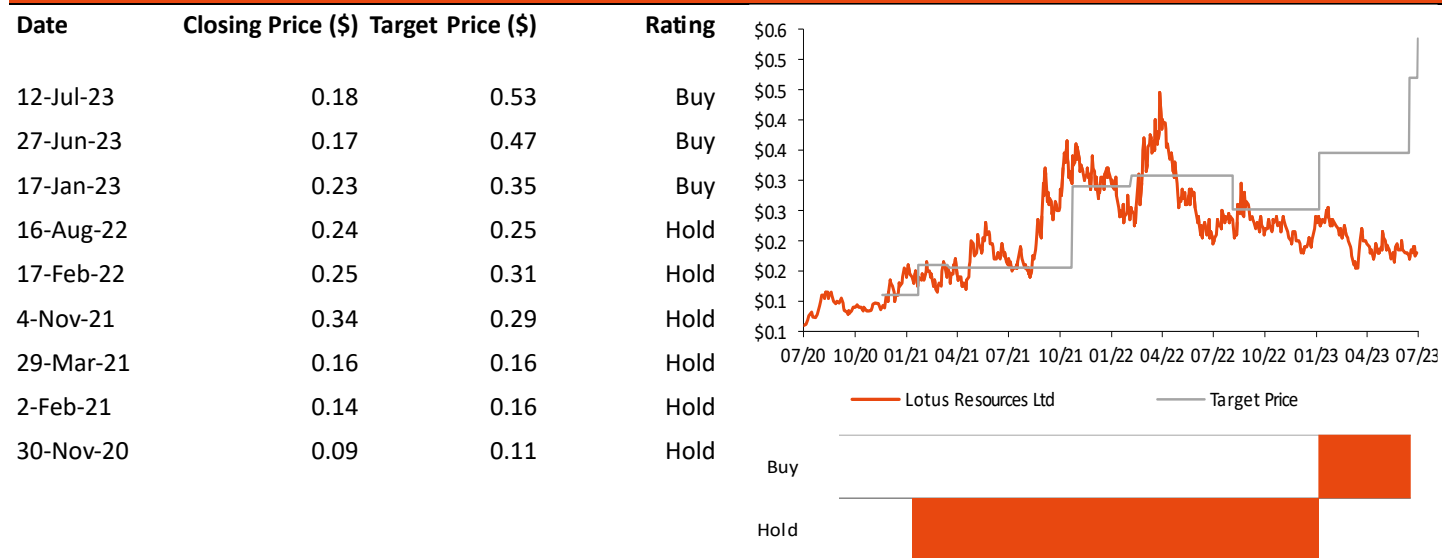
High	Higher risk than the overall market – investors should be aware this stock may be speculative
Medium	Risk broadly in line with the overall market
Low	Lower risk than the overall market

RISK STATEMENT: Where a company is designated as ‘High’ risk, this means that the analyst has determined that the risk profile for this company is significantly higher than for the market as a whole, and so may not suit all investors. Clients should make an assessment as to whether this stock and its potential price volatility is compatible with their financial objectives. Clients should discuss this stock with their Shaw adviser before making any investment decision.

Distribution of Investment Ratings

Rating	Count	Recommendation Universe
Buy	102	91%
Hold	10	9%
Sell	0	0%

History of Investment Rating and Target Price - Lotus Resources Ltd



Disclaimer

Shaw and Partners Limited ABN 24 003 221 583 (“Shaw”) is a Participant of ASX Limited, Cboe Australia Pty Limited and holder of Australian Financial Services Licence number 236048.

ANALYST CERTIFICATION: The Research Analyst who prepared this report hereby certifies that the views expressed in this document accurately reflect the analyst's personal views about the Company and its financial products. Neither Shaw nor its Research Analysts received any direct financial or non-financial benefits from the company for the production of this document. However, Shaw Research Analysts may receive assistance from the company in preparing their research which can include attending site visits and/or meetings hosted by the company. In some instances the costs of such site visits or meetings may be met in part or in whole by the company if Shaw considers it is reasonable given the specific circumstances relating to the site visit or meeting. As at the date of this report, the Research Analyst does not hold, either directly or through a controlled entity, securities in the Company that is the subject of this report, or where they do hold securities those interests are not material. Shaw restricts Research Analysts from trading in securities outside of the ASX/S&P100 for which they write research. Other Shaw employees may hold interests in the company, but none of those interests are material.

DISCLAIMER: This report is published by Shaw to its clients by way of general, as opposed to personal, advice. This means it has been prepared for multiple distribution without consideration of your investment objectives, financial situation and needs (“Personal Circumstances”). Accordingly, the advice given is not a recommendation that a particular course of action is suitable for you and the advice is therefore not to be acted on as investment advice. You must assess whether or not the advice is appropriate for your Personal Circumstances before making any investment decisions. You can either make this assessment yourself, or if you require a personal recommendation, you can seek the assistance of your Shaw client adviser. This report is provided to you on the condition that it not be copied, either in whole or in part, distributed to or disclosed to any other person. If you are not the intended recipient, you should destroy the report and advise Shaw that you have done so. This report is published by Shaw in good faith based on the facts known to it at the time of its preparation and does not purport to contain all relevant information with respect to the financial products to which it relates. The research report is current as at the date of publication until it is replaced, updated or withdrawn. Although the report is based on information obtained from sources believed to be reliable, Shaw does not make any representation or warranty that it is accurate, complete or up to date and Shaw accepts no obligation to correct or update the information or opinions in it. If you rely on this report, you do so at your own risk. Any projections are indicative estimates only and may not be realised in the future. Such projections are contingent on matters outside the control of Shaw (including but not limited to market volatility, economic conditions and company-specific fundamentals) and therefore may not be realised in the future. Past performance is not a reliable indicator of future performance. Except to the extent that liability under any law cannot be excluded, Shaw disclaims liability for all loss or damage arising as a result of any opinion, advice, recommendation, representation or information expressly or impliedly published in or in relation to this report notwithstanding any error or omission including negligence.

Depending on the timing and size of your investment, your portfolio composition may differ to the model. Performance figures are derived from the inception date of the model and its investment transactions from that date, therefore the performance for your portfolio may be different. If you have any questions in connection with differences between your portfolio and the model, you should speak with your adviser.

IMPORTANT INFORMATION TO CONSIDER: It is important that before making a decision to invest in a Shaw Managed Accounts, a managed fund, an exchange traded fund, an individual hybrid security or listed debt instrument that you read the relevant Product Disclosure Statement (“PDS”). The PDS will contain information relevant to the specific product, including the returns, features, benefits and risks. The PDS can be found at: www.shawandpartners.com.au/media/1348/shawmanagedaccounts_pds.pdf.

RISKS ASSOCIATED WITH HYBRID SECURITIES: Hybrid securities and listed debt instruments differ from investments in equities and cash products in a number of important respects. The liquidity risk associated with an investment in hybrid securities and listed debt instruments will generally be greater than that associated with equities. The credit risk associated with hybrid securities and listed debt instruments is higher than that of a cash product or term deposit. Some hybrid securities may be perpetual in nature, meaning that they can only be redeemed or exchanged for cash or equity at the issuer's option. Hybrids may also contain terms which automatically trigger the deferral of an interest payment or cause the issuer to repay the hybrid earlier or later than anticipated. ASIC has published information to assist consumers in understanding the risks and benefits associated with an investment in hybrid securities or listed debt instruments. This information can be found under the heading ‘Complex Investments’ at www.moneysmart.gov.au/investing.

DISCLOSURE: Shaw will charge commission in relation to client transactions in financial products and Shaw client advisers will receive a share of that commission. Shaw, its authorised representatives, its associates and their respective officers and employees may have earned previously or may in the future earn fees and commission from dealing in the Company's financial products.

Sydney Head Office	Melbourne	Brisbane	Adelaide	Canberra	Perth	Noosa
Level 7, Chifley Tower	Level 36	Level 28	Level 25	Level 7	Level 20	Suite 11a Q Place
2 Chifley Square	120 Collins Street	111 Eagle Street	91 King William Street	54 Marcus Clarke Street	108 St Georges Terrace	2 Quamby Place
Sydney NSW 2000	Melbourne VIC 3000	Brisbane QLD 4000	Adelaide SA 5000	Canberra ACT 2600	Perth WA 6000	Noosa Heads QLD 4567
Telephone: +61 2 9238 1238	Telephone: +61 3 9268 1000	Telephone: +61 7 3036 2500	Telephone: +61 8 7109 6000	Telephone: +61 2 6113 5300	Telephone: +61 8 9263 5200	Telephone: +61 7 3036 2570
Toll Free: 1800 636 625	Toll Free: 1800 150 009	Toll Free: 1800 463 972	Toll Free: 1800 636 625	Toll Free: 1800 636 625	Toll Free: 1800 198 003	Toll Free: 1800 271 201