

Analyst

Stuart Howe 613 9235 1856

Authorisation

Bradley Watson 618 9326 7672

Alkem Ltd (AKE)

Lithium price upgrades

Recommendation

Buy (unchanged)

Price

\$15.53

Target (12 months)

\$20.04 (previously \$18.76)

GICS Sector

Materials

Expected Return

Capital growth	29%
Dividend yield	1%
Total expected return	30%

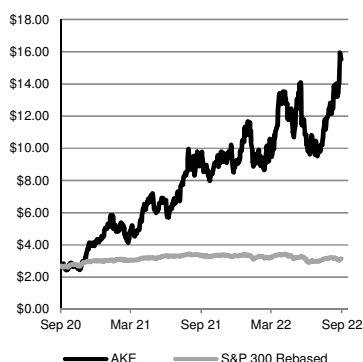
Company Data & Ratios

Enterprise value	\$9,462m
Market cap	\$9,903m
Issued capital	638m
Free float	94%
Avg. daily val. (52wk)	\$48.6m
12 month price range	\$7.78-\$16.00

Price Performance

	(1m)	(3m)	(12m)
Price (A\$)	12.05	11.78	9.68
Absolute (%)	28.9	31.8	60.4
Rel market (%)	29.9	33.6	68.1

Absolute Price



SOURCE: IRESS

Lifting our near-term lithium pricing outlook

We have lifted our near-term lithium price outlook as outlined in the following table.

Table 1 - Lithium commodity price outlook

Fastmarkets price indicies	Spodumene con (6%)	Lithium carbonate	Lithium hydroxide
2021a	US\$1,102/t	US\$16,155/t	US\$17,221/t
1H 2022a	US\$4,706/t	US\$65,841/t	US\$66,210/t
Spot	US\$6,750/t	US\$73,500/t	US\$77,000/t
2H 2022e	US\$6,000/t (+9%)	US\$70,000/t (+17%)	US\$73,000/t (+17%)
2022e	US\$5,353/t (+5%)	US\$67,920/t (+7%)	US\$69,605/t (+9%)
2023e	US\$4,375/t (+30%)	US\$55,000/t (+31%)	US\$57,750/t (+31%)
2024e	US\$1,775/t (+27%)	US\$32,500/t (+18%)	US\$37,000/t (+17%)
LTe	US\$1,300/t (nc)	US\$25,000/t (nc)	US\$29,000/t (nc)

SOURCE: FASTMARKETS, BELL POTTER SECURITIES ESTIMATES

EPS changes as a result of these lithium commodity price upgrades are: FY23 +21%; FY24 +23%; and FY25 +2%.

Lithium: Demand outlook retained; supply constrained

We have updated our EV-led lithium demand model with no change to our bullish outlook; LCE demand to grow from around 0.5Mtpa in 2021 to over 1.1Mtpa in 2025 and around 3.0Mtpa in 2030. Supply analysis shows that over the next five years, Australian hard rock projects will at best meet only one third of this demand growth. We expect alternative sources of supply to remain relatively constrained and high-risk.

Investment view: Buy, TP\$20.04/sh (prev \$18.76/sh)

We expect AKE's cash generation to lift substantially into 2023 with ongoing strength in lithium demand, commodity prices and production growth. AKE is aiming to maintain 10% share of supply in a global lithium market experiencing unprecedented growth; it has a portfolio of growth projects, balance sheet strength and cash flow from existing projects to achieve this. AKE's portfolio is also diversified across lithium commodity, mode of production, asset location and end-user country.

Earnings Forecast

Year ending 30 June	2022a	2023e	2024e	2025e
Sales (US\$m)	770	1,739	2,179	1,833
EBITDA (US\$m)	531	1,286	1,547	1,213
NPAT (reported) (US\$m)	337	904	1,106	847
NPAT (to owners) (US\$m)	306	712	878	696
EPS (to owners) (Acps)	71.1	152.9	188.6	147.5
EPS growth (%)	na	115%	23%	-22%
PER (x)	21.8x	10.2x	8.2x	10.5x
FCF Yield (%)	6%	9%	12%	9%
EV/EBITDA (x)	12.3x	5.1x	4.2x	5.4x
Dividend (Acps)	-	15.0	40.0	40.0
Yield (%)	0%	1%	3%	3%
Franking (%)	-	-	-	-
ROE (%)	19%	26%	25%	16%

SOURCE: BELL POTTER SECURITIES ESTIMATES

Lithium price upgrades

Changes to earnings estimates

Table 2 - Changes to earnings estimates

Year ending 30 June	Previous			New			Change		
	2023e	2024e	2025e	2023e	2024e	2025e	2023e	2024e	2025e
Benchmark prices									
Spodumene (6%)	4,750	2,125	1,300	5,500	3,000	1,300	16%	41%	0%
Lithium carbonate (battery grade)	51,875	35,000	25,000	65,000	45,000	25,000	25%	29%	0%
Equity sales LCE kt	33	54	58	33	54	58	0%	0%	0%
Revenue US\$m	1,489	1,857	1,833	1,739	2,179	1,833	17%	17%	0%
EBITDA US\$m	1,071	1,285	1,213	1,286	1,547	1,213	20%	20%	0%
EBIT US\$m	1,029	1,214	1,112	1,244	1,475	1,112	21%	22%	0%
NPAT (underlying) US\$m	748	916	836	904	1,106	847	21%	21%	1%
NPAT (reported) US\$m	748	916	836	904	1,106	847	21%	21%	1%
NPAT to owners US\$m	586	716	685	712	878	696	21%	23%	2%
EPS Acps	125.8	153.7	145.1	152.9	188.6	147.5	21%	23%	2%
DPS Acps	15.0	40.0	40.0	15.0	40.0	40.0	0%	0%	0%
Valuation A\$/sh	17.40	18.76	20.14	20.04	21.58	23.22	15%	15%	15%

SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

FY23 guidance: Weak start for Mt Cattlin; Olaroz ramping-up

Mt Cattlin – weak start to FY23 & low grade sales: Expecting production of 140-150kt at costs of US\$900/t (FY22 194kt at cash costs of US\$401/t), with delays to pre-stripping. AKE are pointing to a weak September quarter with production expected to be split 15%, 20%, 30%, 35% across each respected FY23 quarter. AKE are also expecting to sell 130kt of low grade (~1.3% Li₂O) concentrate/ore in 1H FY23, which has realised prices of US\$500-600/t CIF, somewhat offsetting deferred delivery of SC6 volumes.

Olaroz Stage 2 ramping up (increasing installed capacity from 14-17ktpa to 39-42ktpa lithium carbonate): Expecting first production in December 2022, adding 25ktpa technical grade lithium carbonate capacity to Stage 1 (14-17ktpa). Production will shift to an approximate mix of 75% technical grade 25% battery grade (Stage 1 was roughly half-half), with the additional technical grade product to be processed at the Naraha lithium hydroxide conversion facility in Japan, also expected to be online in late 2022.

Growth projects: Sal de Vida Stage 1 (15ktpa lithium carbonate) first production expected 2H 2023 (unchanged); James Bay construction from early 2023 for first production from 1H 2024; a downstream prefeasibility study is due early 2023.

Price guidance:

- Mt Cattlin realised prices are negotiated quarterly on a cargo basis with reference to spot pricing for spodumene concentrate (adjusted for grade). AKE are guiding to September 2022 quarter Mt Cattlin spodumene concentrate prices being above US\$5,000/t (June 2022 quarter average US\$4,992/t),
- Olaroz lithium carbonate prices are linked approximately one-third to monthly spot indices, one-third under bi-monthly adjustments and one-third quarterly adjusted. AKE are guiding to 1H FY23 Olaroz lithium carbonate prices of US\$47,000/t (June 2022 quarter average US\$41,000/t).

Valuation summary

Table 3 - Valuation summary

US\$m	100% basis	%	Equity basis	% Risk	Equity basis
	Unrisked	equity	Unrisked	discount	Risked
Olaroz (Stage 1 & 2)	5,769	67%	3,837	10%	3,453
Sal de Vida	4,242	100%	4,242	15%	3,606
Mt Cattlin	659	100%	659	0%	659
Naraha	415	75%	311	10%	280
James Bay	1,240	100%	1,240	40%	744
Other	613	100%	613		613
Total projects US\$m					9,355
Corporate overheads US\$m					-138
Enterprise value US\$m					9,217
Net debt (diluted) US\$m					-303
Equity value US\$m					9,521
Diluted shares on issue m					642
Equity value US\$/sh					14.83
Equity value A\$/sh					20.04

SOURCE: COMPANY DATA AND BELL POTTER SECURITIES ESTIMATES

Valuation methodology

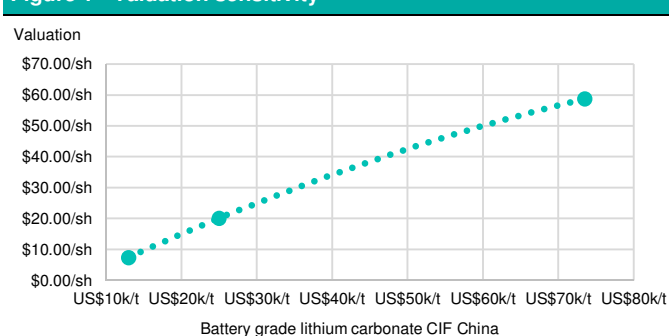
- Discounted cash flow models (discount rate of 8% real) of AKE's key operating asset and near term development projects (Olaroz Stages 1 & 2, Sal de Vida Stages 1 & 2, Mt Cattlin, James Bay and Naraha). We have applied risk discounts where appropriate to account of project stage.
- An allowance for other projects not explicitly modelled (e.g. Olaroz Stage 3) which is less than 10% of the combined value of modelled projects and an allowance for corporate overhead costs.

Value leverage to assumed lithium prices

Table 4 - Valuation sensitivity

	Scenario 1	Scenario 2	Scenario 3
	Low	Bell Potter	"Spot"
Lithium carbonate price CIF	US\$13,000/t	US\$25,000/t	US\$73,500/t
Lithium assets US\$m	3,324	9,354	33,702
Corporate overheads US\$m	-138	-138	-138
EV (risked) US\$m	\$3,186m	\$9,216m	\$33,565m
Diluted net debt/(cash) diluted US\$m	-303	-303	-303
Equity value (diluted) US\$m	\$3,490m	\$9,520m	\$27,869m
Diluted shares on issue m	642		
Equity value (diluted) US\$/sh	\$5.44/sh	\$14.83/sh	\$43.42/sh
Equity value (diluted) A\$/sh	\$7.35/sh	\$20.04/sh	\$58.67/sh

SOURCE: BELL POTTER SECURITIES ESTIMATES

Figure 1 - Valuation sensitivity


SOURCE: BELL POTTER SECURITIES ESTIMATES

Allkem Limited (AKE)

Company description

AKE owns and operates a diversified portfolio of lithium producing assets, including:

- Brine projects:
 1. **Olaroz** (Producing, 66.5% AKE, Jujuy province, Argentina): Producing since April 2015. A Stage 2 expansion at Olaroz will lift lithium carbonate capacity from current levels of 17.5ktpa to 42.5ktpa ramping up from late 2022. Subsequent expansions could further lift capacity at Olaroz.
 2. **Sal de Vida** (Under development, 100% AKE, Catamarca province, Argentina): Being developed in two stages (Stage 1 +15ktpa LCE and Stage 2 +30ktpa). Stage 1 will be commissioned in 2H CY23.
- Hard rock / spodumene concentrate projects:
 1. **Mt Cattlin** (Producing, 100% AKE, Ravensthorpe, Western Australia): Capacity of around 200ktpa of 5.6-5.8% Li₂O spodumene concentrate (28ktpa LCE) and mine life to 2025.
 2. **James Bay** (FID in 2022 for first production from by 2H CY24, 100% AKE, Québec, Canada): Potential production of 321ktpa of 5.6% Li₂O spodumene concentrate (44ktpa LCE) over a 19 year project life.
- Downstream project:
 1. **Naraha** (Under development, 75% AKE, Naraha, Japan): Primary grade lithium carbonate to battery grade lithium hydroxide conversion facility with planned annual production of 10ktpa commissioning from mid-2022.

Investment view: Buy, TP\$20.04/sh (previously \$18.76/sh)

We expect AKE's cash generation to lift substantially into 2023 with ongoing strength in lithium demand, commodity prices and production growth. AKE is aiming to maintain 10% share of supply in a global lithium market experiencing unprecedented growth; it has a portfolio of growth projects, balance sheet strength and cash flow from existing projects to achieve this. AKE's portfolio is also diversified across lithium commodity, mode of production, asset location and end-user country.

Investment risks

Risks include, but are not limited to:

- **Commodity price and exchange rate fluctuations.** The future earnings and valuations of exploration, development and operating resources companies are subject to fluctuations in underlying commodity prices and foreign currency exchange rates.
- **Infrastructure access.** Bulk commodity producers are particularly reliant upon access to transport infrastructure. Access to infrastructure is often subject to contractual agreements, permits, and capacity allocations. Agreements are typically long-term in nature (+10 years). Infrastructure can be subject to outages as a result of weather events or the actions of third party providers.
- **Operating and capital cost fluctuations.** Markets for exploration, development and mining inputs can fluctuate widely and cause significant differences between planned and actual operating and capital costs. Key operating costs are linked to energy and labour markets.
- **Resource growth and mine life extensions.** Future earnings forecasts and valuations may rely upon resource and reserve growth to extend mine lives.
- **Sovereign risks.** Mining companies' assets can be located in countries other than Australia and are subject to the sovereign risks of that country.
- **Regulatory changes risks.** Changes to the regulation of infrastructure and taxation (among other things) can impact the earnings and valuation of mining companies.
- **Environmental risks.** Resources companies are exposed to risks associated with environmental degradation as a result of their exploration and mining processes. Fossil fuel producers (coal) may be particularly exposed to the environmental risks of end markets including the electricity generation and steel production industries.
- **Operating and development risks.** Mining companies' assets are subject to risks associated with their operation and development. Risks for each company can be heightened depending on method of operation (e.g. underground versus open pit mining) or whether it is a single operation company. Development assets can be subject to approvals timelines or weather events, causing delays to commissioning and commercial production.
- **Occupational health and safety risks.** Mining companies are particularly exposed to OH&S risks given the physical nature and human resource intensity of operating assets.
- **Funding and capital management risks.** Funding and capital management risks can include access to debt and equity finance, maintaining covenants on debt finance, managing dividend payments, and managing debt repayments.
- **Merger/acquisition risks.** Risks associated with value transferred during merger and acquisition activity.
- **COVID-19 risks:** Mining companies' rely on freedom of movement of workforces, functioning transport routes, reliable logistics services including road, rail, aviation and ports in order to maintain operations and get their products to market. They also rely on liquid, functioning markets to sell their products. Measures being put in place to combat the COVID-19 pandemic are posing risks to these conditions.

Table 5 - Financial summary

Date	12/09/22					Bell Potter Securities
Price	A\$/sh	15.53				Stuart Howe (showe@bellpotter.com.au, +61 3 9235 1856)
Target price	A\$/sh	20.04				
PROFIT AND LOSS						
Year ending 30 June	Unit	2021a	2022a	2023e	2024e	2025e
Revenue	\$USm	85	770	1,739	2,179	1,833
Expenses	\$USm	(66)	(238)	(453)	(633)	(620)
EBITDA	\$USm	19	531	1,286	1,547	1,213
Depreciation, amortisation & impairments	\$USm	(20)	(63)	(42)	(71)	(101)
EBIT	\$USm	(0)	468	1,244	1,475	1,112
Net interest expense	\$USm	(21)	(14)	2	38	59
Profit before tax	\$USm	(22)	454	1,246	1,513	1,170
Tax expense	\$USm	(68)	(100)	(342)	(407)	(323)
NPAT (underlying)	\$USm	(89)	354	904	1,106	847
Adjustments	\$USm	-	(17)	-	-	-
NPAT (reported)	\$USm	(89)	337	904	1,106	847
Non-controlling interests	\$USm	(30)	32	193	228	151
NPAT to owners	\$USm	(60)	306	712	878	696
FINANCIAL RATIOS						
Year ending 30 June	Unit	2021a	2022a	2023e	2024e	2025e
VALUATION						
EPS	Ac/sh	(24)	71	153	189	148
EPS growth (Acps)	%	-183%	na	115%	23%	-22%
PER	x	-64.4x	21.8x	10.2x	8.2x	10.5x
DPS	Ac/sh	-	-	15	40	40
Franking	%	0.0%	0.0%	0.0%	0.0%	0.0%
Yield	%	0.0%	0.0%	1.0%	2.6%	2.6%
FCF/share	Ac/sh	(45)	94	147	181	135
FCF yield	%	-2.9%	6.1%	9.5%	11.6%	8.7%
EV/EBITDA	x	338.1x	12.3x	5.1x	4.2x	5.4x
LIQUIDITY & LEVERAGE						
Net debt / (cash)	\$m	78	(303)	(918)	(1,572)	(2,020)
Net debt / Equity	%	12%	-11%	-34%	-59%	-75%
Net debt / Net debt + Equity	%	10%	-13%	-52%	-141%	-303%
Net debt / EBITDA	x	4.1x	-0.6x	-0.7x	-1.0x	-1.7x
EBITDA / net int expense	x	-0.9x	-38.6x	667.2x	41.0x	20.7x
PROFITABILITY RATIOS						
EBITDA margin	%	23%	69%	74%	71%	66%
EBIT margin	%	0%	61%	72%	68%	61%
Return on assets	%	-7%	12%	18%	19%	13%
Return on equity	%	-13%	19%	26%	25%	16%
ASSUMPTIONS - Prices (nominal)						
Year ending 30 June	Unit	2021a	2022a	2023e	2024e	2025e
Spodumene (min. 5-6% Li ₂ O)	US\$/t	478	3,170	5,500	3,000	1,300
Lithium carbonate price - Battery grade	US\$/t	8,641	43,916	65,000	45,000	25,000
Lithium hydroxide price - Battery grade	US\$/t	10,510	44,408	68,000	48,750	29,000
FX	US\$/A\$	0.75	0.73	0.73	0.73	0.74
ASSUMPTIONS - Equity sales						
Year ending 30 June	Unit	2021a	2022a	2023e	2024e	2025e
Mt Cattlin	kt	171	232	145	178	122
James Bay	kt	-	-	-	0	0
Total spodumene	kt	171	232	145	179	123
Total spodumene sales LCE (equity)	kt	24	32	19	25	17
Olaroz	kt	9	8	14	24	27
Sal de Vida	kt	-	-	-	5	13
Total brine sales LCE (equity)	kt	9	8	14	29	40
Total sales LCE (equity)	kt	33	41	33	54	58
Naraha lithium hydroxide	kt	-	-	2	6	8
Naraha LiOH sales LCE (equity)	kt	-	-	2	5	7
VALUATION						
Shares on issue	m	638 Used for valuation purposes				
Options & rights	m	4 Options and performance rights				
Diluted shares	m	642				
NPV (Discount rate 8%)						
	Current	+12 mths		+24 mths		
	US\$m	US\$/sh	US\$m	US\$/sh	US\$m	US\$/sh
Olaroz (Stage 1 & 2) (ORE 66.5%)	3,453	5.38	3,411	5.31	3,248	5.06
Sal de Vida (ORE 100.0%)	3,606	5.62	3,968	6.17	4,311	6.72
Mt Cattlin (ORE 100.0%)	659	1.03	343	0.53	99	0.15
Naraha (ORE 75.0%)	280	0.44	307	0.48	301	0.47
James Bay (ORE 100.0%)	744	1.16	843	1.31	1,030	1.60
Other	612	0.95	620	0.97	629	0.98
Corporate costs	(138)	(0.21)	(149)	(0.23)	(160)	(0.25)
Total enterprise value	9,216	14.36	9,333	14.54	9,457	14.73
Net debt	(303)	(0.47)	(918)	(1.43)	(1,572)	(2.45)
Equity value	9,520	14.83	10,251	15.97	11,030	17.18
	A\$m	A\$/sh	A\$m	A\$/sh	A\$m	A\$/sh
Equity value	12,864	20.04	13,852	21.58	14,905	23.22
CASH FLOW STATEMENT						
Year ending 30 June	Unit	2021a	2022a	2023e	2024e	2025e
OPERATING CASH FLOW						
Receipts from customers	\$USm	89	730	1,557	2,192	1,864
Payments to suppliers and employees	\$USm	(94)	(284)	(224)	(560)	(633)
Tax paid	\$USm	-	-	(342)	(407)	(323)
Net interest	\$USm	(10)	(5)	2	38	59
Other	\$USm	-	-	(22)	(22)	(22)
Operating cash flow	\$USm	(16)	442	972	1,240	944
INVESTING CASH FLOW						
Capex	\$USm	(97)	(239)	(288)	(399)	(307)
Disposal of assets	\$USm	2	1	-	-	-
Other	\$USm	(0)	200	-	-	-
Investing cash flow	\$USm	(94)	(37)	(288)	(399)	(307)
FINANCING CASH FLOW						
Debt proceeds/(repayments)	\$USm	114	45	-	-	-
Dividends paid	\$USm	-	-	(70)	(186)	(189)
Proceeds/(repayment) of borrowings	\$USm	(31)	(34)	-	(274)	-
Proceeds from share issues (net)	\$USm	119	(1)	-	-	-
Other	\$USm	(3)	(8)	-	-	-
Financing cash flow	\$USm	199	3	(70)	(460)	(189)
Change in cash	\$USm	89	408	614	381	448
Free cash flow	\$USm	(110)	405	684	841	637
BALANCE SHEET						
Year ending 30 June	Unit	2021a	2022a	2023e	2024e	2025e
ASSETS						
Cash	\$USm	258	664	1,278	1,658	2,106
Receivables	\$USm	23	82	263	251	220
Inventories	\$USm	94	130	130	130	130
Capital assets	\$USm	897	2,983	3,229	3,557	3,764
Right of use	\$USm	28	-	-	-	-
Other assets	\$USm	48	635	635	635	635
Total assets	\$USm	1,349	4,493	5,534	6,231	6,855
LIABILITIES						
Creditors	\$USm	36	96	303	354	319
Borrowings	\$USm	301	312	312	38	38
Lease liabilities	\$USm	36	48	48	48	48
Provisions	\$USm	36	74	74	74	74
Tax related liabilities	\$USm	188	831	831	831	831
Other liabilities	\$USm	28	51	51	51	51
Total liabilities	\$USm	624	1,411	1,618	1,395	1,360
NET ASSETS						
Share capital	\$USm	669	2,686	2,686	2,686	2,686
Retained earnings	\$USm	11	317	1,151	2,071	2,730
Reserves	\$USm	(13)	(14)	(14)	(14)	(14)
Non-controlling interest	\$USm	58	93	93	93	93
SHAREHOLDER EQUITY	\$USm	725	3,081	3,916	4,836	5,495
Weighted average shares	m	331	593	638	638	638

SOURCE: BELL POTTER SECURITIES ESTIMATES

Recommendation structure

Buy: Expect >15% total return on a 12 month view. For stocks regarded as 'Speculative' a return of >30% is expected.

Hold: Expect total return between -5% and 15% on a 12 month view

Sell: Expect <-5% total return on a 12 month view

Speculative Investments are either start-up enterprises with nil or only prospective operations or recently commenced operations with only forecast cash flows, or companies that have commenced operations or have been in operation for some time but have only forecast cash flows and/or a stressed balance sheet.

Such investments may carry an exceptionally high level of capital risk and volatility of returns.

Research Team

Staff Member	Title/Sector	Phone	@bellpotter.com.au
Chris Savage	Head of Research/Industrials	612 8224 2835	csavage
Analysts			
John Hester	Healthcare	612 8224 2871	jhester
Anubhav Saxena	Healthcare	612 8224 2846	asaxena
Tara Speranza	Healthcare	612 8224 2815	tsperanza
Michael Ardrey	Industrials	613 9256 8782	mardrey
Marcus Barnard	Industrials	618 9326 7673	mbarnard
Sam Brandwood	Industrials	612 8224 2850	sbrandwood
Olivia Hagglund	Industrials	612 8224 2813	ohagglund
Chami Ratnapala	Industrials	612 8224 2845	cratnapala
Jonathan Snape	Industrials	613 9235 1601	jsnape
David Coates	Resources	612 8224 2887	dcoates
Stuart Howe	Resources	613 9235 1856	showe
Brad Watson	Resources	618 9326 7672	bwatson
Regan Burrows	Resources	618 9326 7677	rburrows
Joseph House	Resources	613 9235 1624	jhouse
Associates			
Daniel Laing	Associate Analyst	613 9256 2886	dlaing
Thomas Sima	Associate Analyst	612 8224 2843	tsima

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Bell Potter Securities Limited

ABN 25 006 390 772
Level 29, 101 Collins Street
Melbourne, Victoria, 3000
Telephone +61 3 9256 8700
www.bellpotter.com.au

Bell Potter Securities (HK) Limited

Room 1701, 17/F
Prosperity Tower, 39 Queens
Road Central, Hong Kong, 0000
Telephone +852 3750 8400

Bell Potter Securities (US) LLC

Floor 39
444 Madison Avenue, New York
NY 10022, U.S.A
Telephone +1 917 819 1410

Bell Potter Securities (UK) Limited

16 Berkeley Street London, England
W1J 8DZ, United Kingdom
Telephone +44 7734 2929