

Record

Potential for further positive surprises

Record faced known headwinds in FY19 from AUME outflows and a change in mix towards mandates with lower management fees but the potential to earn performance fees. In the event the outcome was better than we expected, reflecting slightly higher than anticipated management fees and cost control. Encouragingly, performance fees offset the contraction in management fees. Prospectively, Record continues to focus on client service and product innovation and this, together with the potential for further performance fee earnings, could provide the basis for further positive surprises.

2.98	2.30	11.4	<u> </u>
	2.00	11.4	6.8
3.25	2.30	10.5	6.8
2.19	2.32	15.5	6.8
2.28	2.34	14.9	6.9
	2.19	2.19 2.32	2.19 2.32 15.5

Note: *EPS are diluted. **DPS excludes special dividends.

FY19 result modestly above estimate

Record's FY19 revenues were modestly ahead of our expectation at £25m (+5%) giving PBT of £8.0m (+9%) compared with our £7.5m estimate. Diluted EPS of 3.25p were up 9% and the ordinary dividend of 2.30p was unchanged, while a special dividend of 0.69p gave a total of 2.99p. AUME of \$57.3bn had already been reported and this was down 8% in US dollar or 1% in sterling terms with the main driver being outflows in passive hedging. Performance fees (already reported) offset the lower AUME and adjustment to management fee rates. The balance sheet remains strong with a capital cushion of £13.5m above the regulatory requirement supporting client confidence and providing headroom for working capital and investment.

Product innovation, client service and fostering talent

Global geopolitical uncertainties continue to provide a favourable background for Record's discussions with clients and potential clients and the group reports this is generating good levels of interest across products and geographies. The group's strategy is to counter downward pressure on fee margins by continually enhancing existing products and through innovation, to improve client experience and developing and retaining staff in support of this. Our EPS estimate for the current year has been increased by 5%. Our estimates exclude potential AUME inflows (or outflows) and uncrystallised performance fees.

Valuation

Record shares have seen a strong bounce following release of the full year figures (up more than 15%) but even so, when compared with a group of UK asset managers, the stock still trades on below average P/E and EV/EBITDA ratios (see page 7). The yield based on ordinary dividend is above average at 6.8%.

FY19 results

Financial services

19 June 2019 **Price** 34.00p Market cap £67m Net cash (£m) at 31 March 2019 23.7 Shares in issue 199 1m Free float 32% Code REC LSE Primary exchange Secondary exchange N/A

Share price performance



Business description

Record is a specialist independent currency manager that provides a number of products and services, including passive and dynamic hedging, and a range of currency for return strategies, including funds and customised segregated accounts.

Next events

Q120 trading update	19 July 2019
Analysts	
Andrew Mitchell	+44 (0)20 3681 2500
Martyn King	+44 (0)20 3077 5745

financials@edisongroup.com

Edison profile page

Record is a research client of Edison Investment Research Limited



Specialist currency management services

The company was founded in 1983 by the chairman, Neil Record and listed on the London Stock Exchange Main Market in 2007. With offices in Windsor, UK (head office), New York and Zurich there are 84 employees, including 60 investment professionals. The group's main activity is the provision of currency hedging services acting as an agent for clients, including public and private defined benefit pension schemes and other institutional investors. Record also offers currency for return, multi-product and related services.

In FY19, passive hedging accounted for 52% of management fees. While there were outflows during the year, passive hedging mandates tend to be sticky and we estimate that revenues from these clients will cover over 80% of Record's operating expenditure before variable remuneration in the current year. Record competes with large banks in providing passive hedging but underlines its independence and its ability to tailor a mandate to customer requirements and may include additional services such as collateral and tenor management. Dynamic hedging to allow clients to gain some benefit from weakness in their own currency. Currency for return strategies aim to exploit stable inefficiencies in currency markets. They include: forward rate bias, emerging market currencies, momentum, value and, relatively recently introduced, range trading (together 'multi-strategy'). Multi-product includes mandates where hedging and return-seeking strategies are combined on a bespoke basis.

Exhibit 1 below provides an analysis of Record's AUME, management fees and client profile.

Analysis by strategy									
			AUME (%	,	Managemen	•	,	Est. average fee ra	
Dynamic hedging			5.4).6		15
Passive hedging			84.			-	2.0		3
Currency for return			4.				3.0		10
Multi-product			5.				9.4		19
Cash			0.:				I/A		N/A
Total			100.	0		100			5
Value			\$57.3b	n		£22.3	3m		
Client analysis									
Number (by financia	l year)	Туре		% AUME	Concent	ration	% fees	Longevity (years)	%
2014	48	Public pens	sion funds	42	Top 10		71	≤1	20
2015	55	Corporate	pension funds	42	Next 10		17	>1 to ≤3	22
2016	58	Foundation	is & trusts	11	Balance		12	>3 to≤ 6	18
2017	59	Other		5				>6 to ≤10	18
2018	60							>10	22
2019	65			100			100		100
Geographical analys	sis							AUME progression	(\$bn)
By country	Mgı	nt fees %			% AU	ME	2014		51.9
Switzerland		46	Europe ex-UK			75	2015		55.4
USA		26	North America	1		11	2016		52.9
UK		9	UK			12	2017		58.2
Other		19	RoW			2	2018		62.2
		100				100	2019		57.3
Underlying asset cla	iss expos	ure of dynan	nic and passive I	hedging AL	JME (%)				
			Dynami	с		Pas	sive	Est. % of hedg	ing fees
Equity			9	5			27		46
Fixed income				0			44		32
Other				5			29		22
			10	0			100		100

Exhibit 1: Record profile in numbers (FY19)

Source: Record, Edison Investment Research. Notes: *Management fee excluding performance fees. **Fee rate is our own calculation and within each strategy there will be a range of mandate types and fee structures/levels. Rounding may mean some columns do not sum.



The first section of the table underlines the predominance of hedging for both AUME and fees (73%), despite the relatively low fee rate applied in passive hedging. The client analysis shows that the number of clients has increased noticeably since 2014. Record counts each legal entity as a separate client but in some cases there will be one commercial relationship covering a number of entities which can mean lumpy increases or reductions in the client count. The institutional nature of the market Record is addressing means there is quite a high concentration of fees from the top 10 clients (71%). Over 20% of clients have been with the firm for over 10 years and 40% for more than six years. The geographical analysis highlights the importance of Switzerland as a market (primarily for hedging services). The progression of AUME in recent years has been dampened by the \$4.6bn outflow from passive hedging mandates seen last year but inflows in 2015 and 2017 together with market, FX and other moves have allowed the total to increase over the period shown. Finally, the analysis of the exposure of the dynamic and passive hedging mandates to different underlying asset classes shows that, on our estimate, around 46% of hedging fees are related to equity assets and 32% to fixed income assets.

FY19 results

Exhibit 2 provides an analysis of AUME movements and the related management fees for FY19. As noted above, the main feature within flows was the \$4.6bn of passive hedging outflow. This included \$2.5bn related to two commercial relationships where specific developments including moving to a unitised structure prompted the terminations. Otherwise, the dynamic hedging outflow included a \$1.1bn reduction arising from discretionary profit-taking undertaken by Record for a client with the potential for the hedging position to be re-established in due course, subject to exchange rate movements. The outflow in dynamic hedging was more than balanced by inflows for currency for return. Positive market moves and negative FX and scaling changes (for mandates with a volatility target) were broadly balanced. The net result was an 8% reduction in period-end AUME and a 1.5% reduction in average AUME.

These moves and the associated mix changes fed through to a 6% reduction in management fees in US\$ terms or 5% in sterling terms, as shown below. Record reports that average management fees were broadly constant for most products during the year, although mix changes between product groups and by clients within groups has influenced the overall average fee rate; on our calculation it has moved from 5.1% to 4.9%. Changes included the addition of a new currency for return client on a management and performance fee structure with another moving to a more bespoke service: both reduced the average fee rate. Within passive hedging, further clients of the enhanced passive hedging service opted for a fee structure including the potential for performance fees.

Year end March	AUME movements (\$bn)		End period AUME (\$bn)			Ave AUME (\$bn)			Management fees (£000)		
	FY18	FY19	FY18	FY19	% change	FY18	FY19	% change	FY18	FY19	% change
Dynamic hedging	(1.7)	(0.7)	4.3	3.1	-27.9	4.8	4.1	-15.5	5,111	4,598	-10.0
Passive hedging	(0.5)	(4.6)	53	48.2	-9.1	51.7	50.7	-2.0	12,569	11,610	-7.6
Currency for return	0.6	0.9	1.6	2.7	68.8	1.5	2.3	55.5	1,803	1,775	-1.6
Multi-product	0.3	0.0	3.0	3.0	0.0	2.9	3.0	1.7	4,014	4,325	7.7
Cash & futures	0.1	(0.1)	0.3	0.3	0.0	0.3	0.3	0.0			
Total	(1.2)	(4.5)	62.2	57.3	-7.9	61.2	60.3	-1.5	23,497	22,308	-5.1
Markets	1.3	2.3									
FX and scaling	3.9	(2.7)									
Total change	4.0	(4.9)									
Opening AUME	58.2	62.2									
Closing AUME	62.2	57.3									

Exhibit 2: AUME movements and management fees

Source: Record, Edison Investment Research



Exhibit 3 shows the profit and loss progression between FY18 and FY19. Reflecting the AUME changes described, total management fees were 5% lower but performance fees of £2.3m were earned allowing revenue growth of nearly 5%. Record had previously indicated that management fees would be reduced by c £1.2m by the introduction of fee structures capable of earning performance fees so the fees earned in the year more than compensated for the lower management fee rate involved in these mandates.

The group continues to apply cost discipline with operating costs before variable remuneration flat at £13.3m or up 3% excluding the cost of the tender offer in FY18. Overall staff costs were up 4.6% mainly reflecting the increase in the average headcount from 81 to 85. The staff additions have been made to support client service and innovation. Total administrative costs as shown in the table below were up less than 2% allowing pre-tax profit and diluted earnings per share to increase by 9%.

The ordinary full year dividend of 2.30p was unchanged while a special dividend of 0.69p gave a total of 2.99p. The special dividend was set to distribute all earnings after allowing for capital retention of 0.28p per share to maintain a level of capital in line with the group policy (see comments on the financial position in the next section).

Year end March (£000)	FY18	FY19	% change
Dynamic hedging	5,111	4,598	-10.0%
Passive hedging	12,569	11,610	-7.6%
Currency for return	1,803	1,775	-1.6%
Multi-product	4,014	4,325	7.7%
Management fees	23,497	22,308	-5.1%
Performance fees	0	2,333	N/A
Other income	337	332	-1.5%
Total revenue	23,834	24,973	4.8%
Cost of sales	(311)	(385)	23.8%
Gross profit	23,523	24,588	4.5%
Administrative expenses	(16,424)	(16,704)	1.7%
Other income/expense	173	(8)	N/A
Operating profit	7,272	7,876	8.3%
Net finance income	56	113	101.8%
Profit before tax	7,328	7,989	9.0%
Taxation	(1,182)	(1,559)	31.9%
Profit after tax	6,146	6,430	4.6%
Diluted EPS (p)	2.98	3.25	9.0%
DPS (p)	2.80	2.99	6.8%
Tax rate (%)	16%	20%	

Exhibit 3: FY19 P&L analysis

Source: Record, Edison Investment Research

Record provides product investment performance information with its results. Since H119 this has included figures showing the performance of its enhanced passive hedging strategy measured relative to a fixed-tenor benchmark (the strategy seeks to add value through tenor selection and timing). The strategy added 3bp in the first half and 5bp for the 12-month period. Since inception the outperformance was 12bp.



	Scaling*	12 month	Return SI	Volatility SI	Inception
	· ·	return	ра	ра	·
Fund					
Record FTSE FRB10 Index Fund	1.8	4.20%	1.77%	6.88%	Dec-10
Record Emerging Market Currency Fund	1	-0.31%	1.29%	6.34%	Dec-10
Record Currency Multi-Strategy Fund	4.5-5.0	-3.90%	-3.20%	9.30%	Feb-18
Index/Composite returns					
FTSE Currency FRB10 GBP excess return		2.10%	2.22%	4.53%	Dec-87
Record Multi-Strategy Composite (4% target volatility)		-1.20%	1.28%	2.73%	Jul-12

Exhibit 4: Currency for return investment performance to 31March 2019

Source: Record. Note: All GBP base apart from Record Multi-Strategy Composite, which is on a US\$ base and shows excess returns gross of fees. *Scaling refers to the multiple of the maximum size of the aggregate forward contracts to the segregated fund size or the pooled fund's net assets.

Exhibit 4 shows performance figures for the FTSE FRB 10 Index, emerging market and multistrategy funds. While the emerging market and multi-strategy funds show negative returns over the 12-month period, a recovery in emerging markets currencies means that the returns were significantly less negative than was the case at the half-year stage.

Outlook, estimates and financial position

While currency volatility between the euro, US dollar and Swiss franc has subsided compared with earlier years (Exhibit 5) geopolitical uncertainties, including trade negotiations between the US and China and tensions within the EU, are among factors that are likely to be contributing to the broad interest Record reports spread across its product range and geographically. The strengthening of the US dollar (Exhibit 6) does not appear so far to have generated the cyclical increase in interest in hedging services that might have been seen previously. However, Record's own work on improving client service (more staff are being added in the New York office) and product innovation is contributing to the retention of clients and interest on the part of potential clients.



Source: Bloomberg. Note: For one year at the money options.

Source: Bloomberg

Record has consistently cited the need to be innovative in enhancing existing and developing new products in order to counter competitive pressures and client expectations of a downward trend in fees (reinforced by the prevailing pressure on asset manager fees). Developments in the currency markets linked to capital constraints for bank participants, emergence of non-bank liquidity providers and algo trading create both challenges and opportunities for a specialist such as Record. Newer products include enhanced passive hedging, a range trading strategy within currency for return and an ESG (environmental, social and governance) overlay. Additional services offered could become more significant although at this stage the scope for development is not clear. They include collateral and cash management, spot execution, equitisation and audit of FX execution.



Headline figures from our revised estimates with a newly introduced FY21 forecast are shown in Exhibit 7. The small increase in our FY20 revenue estimate reflects a combination of a more favourable sterling US dollar rate and factoring in a slightly higher management fee rate than we assumed previously, based on the H219 run rate. The decline in revenue between FY19 and FY20e reflects a lower level of average AUME as we do not assume any inflows and the fact that we do not include any performance fees in our estimates until reported. Performance fees or positive flows could therefore provide upside to our numbers. With our cost assumption little changed the increase in our revenue estimate feeds through to 4% and 5% increases in our pre-tax profit and earnings per share estimates, respectively. Record indicates that it will in future apply its group profit share scheme with closer linkage to individual performance. The overall level has historically been set at 30% of pre-profit share operating profit within a formal range of 25% to 35%. In future the revised operation of the scheme may result in variation within this range but our modelling assumption has been kept at 30%.

Exhibit 7: Changes to estimates

	-											
	Re	venue (£	m)	PBT (£m)		EPS (p)			DPS (p)			
	Old	New	% chg.	Old	New	% chg.	Old	New	% chg.	Old	New	% chg.
03/19	24.7	25.0	1%	7.5	8.0	6%	3.02	3.25	7%	2.30	2.30	0%
03/20e	21.4	21.6	1%	5.1	5.3	4%	2.08	2.19	5%	2.32	2.32	0%
03/21e	N/A	22.3		N/A	5.5		N/A	2.28		N/A	2.28	

Source: Record, Edison Investment Research. Note: Dividend excludes any special payment. FY19 new is actual reported.

It remains the board's policy to retain sufficient capital (effectively equivalent to shareholders' funds) to at least meet the regulatory requirement plus 12 months of operating expenses (less variable compensation), working capital requirements and capital required to finance new business opportunities. Shareholders' funds were £27.3m at end FY19 and deducting proposed dividends of £3.6m, intangible assets of £0.3m, and the £9.3m regulatory requirement, would leave a balance sheet cushion of £14.1m of which £4.3m is currently allocated to seed funds. This cushion provides confidence to Record's clients and potential clients.

Liquidity also remains strong with no debt and cash and cash equivalents at the year-end of £23.7m, or £17.9m excluding cash held in seed funds (£17.2m end FY18).

Valuation

We start with a table showing Record's recent price performance in the context of the UK asset managers that we use as a basis for valuation comparison. This highlights two things: the recent, post-results strength that has meant that Record shares have outperformed the peer average over one and three months and, secondly, the shares have still underperformed the average over one year, year to date and from the 12-month high.

Exhibit 8: Recent share price performance (%)										
	One month	Three months	One year	YTD	From 12-month high					
Ashmore	5.0	15.4	30.3	34.0	-0.4					
City of London Investment Group	-2.5	3.3	-3.7	6.3	-7.0					
Impax Asset Management	16.3	19.2	32.9	35.1	-5.5					
Jupiter	11.9	14.8	-9.0	42.5	-9.4					
Liontrust	2.8	16.2	20.9	25.4	-2.7					
Man Group	-4.7	4.2	-20.7	9.2	-22.5					
Polar Capital	-1.4	9.5	-7.7	22.0	-22.0					
Schroders	-1.8	10.8	-4.5	24.3	-7.7					
Average	3.2	11.7	4.8	24.8	-9.7					
Record	11.9	17.6	-25.9	7.5	-30.4					

Source: Refinitiv, Edison Investment Research. Note: Priced as at 19 June 2019.



As shown in Exhibit 9 (the table shows 2019 multiples on a calendarised basis), even after the recent share price strength Record trades below the peer group averages on P/E and EV/EBITDA multiples. The dividend based on the ordinary dividend alone is above average at 6.8%. It should be remembered here that our EPS estimates exclude any potential performance fee earnings while, if earned, performance fees could also contribute to the total dividend payout (our estimates currently assume only ordinary payments).

Exhibit 9: Comparing valuation with UK fund managers

		-			
	Price (p)	Market cap (£m)	P/E 2019e (x)	EV/EBITDA 2019e (x)	Dividend yield (%)
Ashmore	490	3,491	19.2	12.9	3.4
City of London Investment Group	405	107	11.6	8.7	6.7
Impax Asset Management	279	364	23.7	18.6	1.5
Jupiter	407	1,861	15.1	9.8	4.2
Liontrust	730	370	14.6	10.4	2.9
Man Group	145	2,807	11.6	7.7	6.3
Polar Capital	576	556	13.8	9.0	4.9
Schroders	3,036	8,225	15.1	11.3	3.8
Average			15.6	11.0	4.2
Record	34	67	13.8	8.6	6.8

Source: Refinitiv, Edison Investment Research. Note: P/Es and EV/EBITDA on a calendar year basis. REC dividend yield excludes special dividend (0.69p) and including this the FY19 dividend was 2.99p. Priced as at 19 June 2019.



Exhibit 10: Financial summary

Year end March	£'000s 2017	2018	2019	2020e	2021e
PROFIT & LOSS					
Revenue	22,952	23,834	24,973	21,566	22,313
Operating expenses	(15,365)	(16,735)	(17,089)	(16,347)	(16,872)
Other income/(expense)	157	173	(8)	0	0
Operating Profit (before amort. and except.)	7,744	7,272	7,876	5,219	5,441
Finance income	112	56	113	114	108
Profit Before Tax	7,856	7,328	7,989	5,332	5,548
Taxation	(1,540)	(1,182)	(1,559)	(1,013)	(1,054)
Minority interests	0	0	0	0	Ó
Attributable profit	6,316	6,146	6,430	4,319	4,494
Revenue/AuME (excl. perf fees) bps	5.2	5.1	4.9	4.7	4.8
Operating margin (%)	33.7	30.5	31.5	24.2	24.4
Average Number of Shares Outstanding (m)	218.0	206.5	198.1	197.5	197.5
Basic EPS (p)	2.91	3.03	3.27	2.20	2.29
EPS - diluted (p)	2.90	2.98	3.25	2.19	2.28
Dividend per share (p)	2.00	2.30	2.30	2.32	2.20
Special dividend per share (p)	0.91	0.50	0.69	0.00	0.00
Total dividend (p)	2.91	2.80	2.99	2.32	2.34
BALANCE SHEET Fixed Assets	1,228	2,339	2,161	2,156	2,151
Intangible Assets	245	228	288	363	438
Tangible Assets	881	910	761	681	601
Investments	0	1,115	1,112	1,112	1,112
Deferred tax assets	102	86	0	0	.,
Current Assets	44,247	29,737	31,427	29,458	29,402
Debtors	6,972	6,775	7,562	6,673	6,903
Cash	19.120	12,498	12,966	11,886	11,600
	18,120	10,198	10,735	10,735	10,735
Money market instruments Other	53	266	164	164	164
Current Liabilities	(8,644)		(6,187)	(5,865)	
		(5,525)			(5,949)
Creditors	(3,013)	(2,630)	(2,736)	(2,414)	(2,498)
Financial liabilities	(4,779)	(2,467)	(2,621)	(2,621)	(2,621)
Other	(852)	(428)	(830)	(830)	(830)
Net Assets	36,831	26,551	27,401	25,748	25,605
Minority interests	0	0	60	60	60
Net assets attributable to ordinary shareholders	36,831	26,551	27,341	25,688	25,545
No of shares at year end	221.4	199.1	199.1	199.1	199.1
NAV per share p	16.6	13.3	13.7	12.9	12.8
CASH FLOW					
Operating Cash Flow	7,107	2,746	7,026	5,068	4,535
Capex	(899)	(236)	(72)	(140)	(140)
Cash flow from investing activities	(189)	(82)	(134)	(150)	(150)
Dividends	(3,592)	(6,810)	(5,517)	(5,972)	(4,638)
Other financing activities	(5,163)	(2,386)	(1,040)	114	108
Other	136	146	205	0	C
Net Cash Flow	(2,600)	(6,622)	468	(1,080)	(286)
Opening cash/(net debt)	21,720	19,120	12,498	12,966	11,886
Dther	0	0	0	0	11,000
Closing net (debt)/cash	19,120	12,498	12,966	11,886	11,600
Closing net debt/(cash) inc money market instruments	37,222	22,696	23,701	22,621	22,335
AUME					
Opening (\$'bn)	52.9	58.2	62.2	57.3	58.6
Net new money flows	32.9	(1.2)	(4.5)	0.3	0.3
Market/other	2.2	5.2		1.0	1.1
Mainevouiel	2.2		(0.4)		1.1
Closing (\$'bn)	58.2	62.2	57.3	58.6	60.0



General disclaimer and copyright

This report has been commissioned by Record and prepared and issued by Edison, in consideration of a fee payable by Record. Edison Investment Research standard fees are £49,500 pa for the production and broad dissemination of a detailed note (Outlook) following by regular (typically quarterly) update notes. Fees are paid upfront in cash without recourse. Edison may seek additional fees for the provision of roadshows and related IR services for the client but does not get remunerated for any investment banking services. We never take payment in stock, options or warrants for any of our services.

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently verified. Opinions contained in this report represent those of the research department of Edison at the time of publication. Forward-looking information or statements in this report represent those of any term of the estimates of a mounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations.

Exclusion of Liability: To the fullest extent allowed by law, Edison shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out or in connection with the access to, use of or reliance on any information contained on this note.

No personalised advice: The information that we provide should not be construed in any manner whatsoever as, personalised advice. Also, the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The securities described in the report may not be eligible for sale in all jurisdictions or to certain categories of investors.

Investment in securities mentioned: Edison has a restrictive policy relating to personal dealing and conflicts of interest. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report, subject to Edison's policies on personal dealing and conflicts of interest.

Copyright: Copyright 2019 Edison Investment Research Limited (Edison). All rights reserved FTSE International Limited ("FTSE") © FTSE 2019. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings vest in FTSE systems written consent.

Australia

Edison Investment Research Pty Ltd (Edison AU) is the Australian subsidiary of Edison. Edison AU is a Corporate Authorised Representative (1252501) of Myonlineadvisers Pty Ltd who holds an Australian Financial Services Licence (Number: 427484). This research is issued in Australia by Edison AU and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by Edison AU is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

New Zealand

The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (i.e. without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision.

United Kingdom

This document is prepared and provided by Edison for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This Communication is being distributed in the United Kingdom and is directed only at (i) persons having professional experience in matters relating to investments, i.e. investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "FPO") (ii) high net-worth companies, unincorporated associations or other bodies within the meaning of Article 49 of the FPO and (iii) persons to whom it is otherwise lawful to distribute it. The investment or investment or investment tactivity to which this document relates is available only to such persons. It is not intended that this document be distributed or passed on, directly or indirectly, to any other class of persons and in any event and under no circumstances should persons of any other description rely on or act upon the contents of this document.

This Communication is being supplied to you solely for your information and may not be reproduced by, further distributed to or published in whole or in part by, any other person.

United States

The Investment Research is a publication distributed in the United States by Edison Investment Research, Inc. Edison Investment Research, Inc. is registered as an investment adviser with the Securities and Exchange Commission. Edison relies upon the "publishers' exclusion" from the definition of investment Research, Inc. Edison Investment Advisers Act of 1940 and corresponding state securities laws. This report is a bona fide publication of general and regular circulation offering impersonal investment-related advice, not tailored to a specific investment profibio or the needs of current and/or prospective subscribers. As such, Edison does not offer or provide personal advice and the research provided is for informational purposes only. No mention of a particular security in this report constitutes a recommendation to buy, sell or hold that or any security, or that any particular security, portfolio of securities, transaction or investment strategy is suitable for any specific person.

Frankfurt +49 (0)69 78 8076 960 Schumannstrasse 34b 60325 Frankfurt Germany London +44 (0)20 3077 5700 280 High Holborn London, WC1V 7EE United Kingdom New York +1 646 653 7026 1,185 Avenue of the Americas 3rd Floor, New York, NY 10036 United States of America Sydney +61 (0)2 8249 8342 Level 4, Office 1205 95 Pitt Street, Sydney NSW 2000, Australia

9