

OPAP H119 results

New products and cost containment drive profits

OPAP's Q219 results showed improving sequential trends across all divisions. Gross gaming revenues (GGR) increased 6.5% to €383.6m, driven by a 54.2% increase in video lottery terminals (VLT) GGR and a better lottery performance. After a temporary suspension, the VLT roll-out is now back on track. Alongside the new products, OPAP is successfully containing costs, which contributed to a c 30% increase in net profit. Net debt/LTM EBITDA is only 0.9x and strong cash generation leads to a consistently high dividend payout. OPAP trades at 7.7x EV/EBITDA and 14.6x P/E with a very attractive 9.4% dividend yield for FY20e. OPAP is currently subject to a tender offer by Sazka Group, at €9.12/share.

Year end	GGR (€m)	EBITDA (€m)	EPS* (€)	DPS (€)	P/E (x)	Yield (%)
12/17	1,455.5	306.5	0.42	1.10	22.8	11.4
12/18	1,547.0	353.6	0.52	0.70	18.7	7.2
12/19e	1,635.0	408.7	0.60	0.71	16.0	7.3
12/20e	1,845.0	465.0	0.66	0.91	14.6	9.4

Note: *EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

Improving trends across all divisions

Q219 GGR grew 6.5% to €383.6m, driven by a 54.2% increase in VLT GGR to €70.9m and steady progress in lottery (up 2.7% to €187.7m). Sports betting declined by 5.1% to €90.1m, although the core Pame Stoiximan product was stable despite difficult comparisons (World Cup in FY18). The VLT roll-out was temporarily suspended in the quarter due to a procedural delay, but has now resumed and management is still targeting a total of 25,000 machines by year end. Cost containment remains a key focus and the Q219 adjusted EBITDA margin was a solid 23.4%. We are nudging up our adjusted FY19 underlying EBITDA by 1%.

Waiting for Stoiximan – now expected in FY20

OPAP has not yet received approval for the Stoiximan acquisition and we now assume that the deal will not be approved within the current year. As a direct consequence, our FY19 revenue estimate goes from €1.70bn to €1.64bn and our EBITDA goes from €414m to €409m. Our FY20 forecasts remain broadly unchanged. We have also adjusted for the scrip dividend policy, which culminated in an additional 2.6m shares. OPAP is currently subject to a voluntary tender offer by Sazka Group for €9.12/share and has delayed the interim dividend payment (which we now assume will be paid after Q319 results). The result of the tender offer is expected by the end of October.

Valuation: 9.4% dividend yield for FY20e

OPAP reported Q219 net debt of €429m (€362m pre-IFRS 16) and the net debt/LTM EBITDA was 0.9x, with a 16.3x interest cover. The stock trades at 7.7x EV/EBITDA and 14.6x P/E with a very attractive dividend of 9.4% for FY20e. With the recovery in the Greek economy, the stock is further underpinned by Sazka Group's tender offer (currently owns 24.7% via Emma Delta Hellenic Holdings).

Travel & leisure

13 September 2019

ASE

N/A

Price €9.68 Market cap €3,113m Net debt (€m) at 30 June 2019 428.8 Shares in issue 321.6m Free float 67% Code **OPAP**

Share price performance

Primary exchange

Secondary exchange



Business description

OPAP was founded in 1958 as the Greek national lottery and it is the exclusive licensed operator of all numerical lotteries (seven games), sports betting (four games) and horse racing. OPAP listed in 2001 and was fully privatized in 2013. Sazka is the major shareholder of OPAP with board representation.

€10.31

€7.60

Next events

52-week high/low

Result of tender offer End October 2019 Q319 results 27 November 2019

Analysts

Victoria Pease +44 (0)20 3077 5740 Richard Williamson +44 (0)20 3077 5700

gaming@edisongroup.com

Edison profile page

OPAP is a research client of Edison Investment Research Limited



Q219 results summary

Q219 GGR increased by 6.5%, driven by 54.2% growth in VLTs

Q219 GGR increased 6.5% to €383.6m, boosted by the contribution of new products. This included a 54.2% increase in VLTs (19% of revenues), as well as momentum from Kino side bets and the online Joker products, which led to an uptick in lottery (2.7% increase to €187.7m). Betting once again declined by 5.1% (to €90.1m), although the core Pame Stoixima product was stable, despite difficult comparisons (FIFA World Cup in 2018). Instants and passives were 4.3% weaker, although this was sequentially better than the Q119 10.8% decline.

Within the framework of OPAP's Retail Excellence programme for upgrading the company's estates, during H119, the number of OPAP stores in Greece declined from 3,910 to 3,853, which includes 316 new stores. Over the past three years, OPAP has opened or upgraded approximately one-third of its network and has stated that the newer stores perform more than 20% better than the previous formats and the average agent's commission increased by 2.0% in H119 vs the prior year.

Adjusted EBITDA margin of 23.4% - successful cost containment

Q219 adjusted EBITDA increased by 28% to €89.8m, representing a 23.4% margin (vs 19.5% in the prior year). The H119 margin was 24.5% at €190.8m. This excludes €7.9m of one-off items, including €10.9m for the reversal of a legal provision. Q219 EBITDA was also negatively affected by a one-off €2.8m voluntary redundancy scheme and therefore we expect the payroll costs to be commensurably lower going forward. Management has also stated that IT costs should remain stable from Q2 levels in absolute terms and FY19 marketing costs will remain at around FY18 levels. We have incorporated these assumptions into our forecasts (see below).

Dividends: 14.6% of shareholders elected for scrip dividend

OPAP's dividend policy is to pay out the 'bulk' of free cash flow (FCF) as dividends and there is also a five-year scrip dividend programme (2019–23), such that shareholders will have the option to receive the total dividend in cash or to reinvest their selected amount into new shares. For the FY18 final dividend, 14.6% of shareholders (21.9% of the free float) elected for the scrip option and the number of shares has increased by 2.6m. We are now assuming a similar take up on future dividends.

Sazka bid: Major shareholder's tender offer of €9.12/share

In July, OPAP received a voluntary tender offer by Sazka Group for the remainder of the shares at a price of €9.12/share. Sazka Group is now the major shareholder of OPAP, with a 24.7% stake through Emma Delta Hellenic Holdings. OPAP will issue its opinion on the matter after the approval of the information memorandum by the Hellenic Capital Market Commission (probably in October).

Stoiximan: Still pending approval

In September 2018, OPAP announced the acquisition of a 36.75% stake in TCB Holdings for €50m, followed by a further €94.9m investment in January 2019. As a result, OPAP will have a 69% controlling stake in TCB's Greek and Cypriot operations and a 36.75% stake in the other markets. However, the second tranche of the deal has yet to be approved by regulatory authorities and we now assume that the deal will not complete until FY20. As a result, we are only fully consolidating Stoiximan from FY20 onwards. For FY19, the 36.75% stake is forecast to contribute €5.6m to profits.



Forecasts: Broadly unchanged

We are raising our underlying FY19 EBITDA by 1% due to better than expected cost containment, but we are stripping Stoiximan from our FY19 estimates (other than the €5.6m contribution to profits). Altogether, our FY19 revenue goes from €1.70bn to €1.64bn and our EBITDA goes from €414m to €409m. Our FY20 revenue and EBITDA forecasts remain broadly unchanged. We have also adjusted for the scrip dividend (an additional 2.6m shares) and assume a similar take up going forward.

OPAP reported Q219 net debt of €429m (€362m pre-IFRS 16) and the net debt/LTM EBITDA was 0.9x, with a 16.3x interest cover. Including IFRS 16 adjustments, we forecast net debt of €494m at FY19 (after the dividend payments) and €458m at FY20 (which includes the €94m investment in Stoiximan).

		GGR (€m)			ITDA (€m)		EPS (€)			
	Old	New	% chg.	Old	New	%chg.	Old	New	%chg.	
2019e	1,701.8	1,635.0	(3.9)	413.6	408.7	(1.1)	0.61	0.60	(1.6)	
2020e	1.865.1	1,845.0	(1.0)	461.2	465.0	0.8	0.68	0.66	(2.9)	
2021e	1,918.0	1,897.1	(1.0)	483.5	489.3	1.1	0.72	0.70	(2.7)	

Divisional analysis

Lottery (49% of GGR): New products drive growth

Q219 lottery GGR increased by 2.7% to €187.7m, leading to a 2.1% increase (€379.3m) for the first half. In a continuation of previous trends, momentum was helped by Kino side bets and increased Joker revenues. Joker online was launched in March 2019 and already accounts for 3% of total Joker turnover. Looking ahead, online Kino and Lotto are expected to provide momentum from FY20, with launches depending on online gaming regulation. We are forecasting a 2% increase in lottery GGR for FY19.

Betting (24% of GGR): Pame Stoixima is stable

Betting GGR declined by 5.1% to €90.1m vs Q218, leading to a first half decline of 5.2% (€191.9m). As expected, the decline was driven by a maturing Virtuals business and management has stated that the core Pame Stoixima product was stable in the quarter (-0.2%), despite difficult comparables due to the previous year (World Cup). Key drivers for this section include the increased number of self-service betting terminals (SSBTs) and more live betting. In terms of wagers, SSBTs comprised 18.5% of total wagers (vs 10.8% in the prior year) and 32.5% of total live betting wagers. Live betting grew 33.4% y-o-y and comprised 40.8% of total wagers. Online comprised c 2% of sports GGR.

Given the lack of major competitions in FY19, we forecast a revenue decline of 4% this year, returning to 4% growth in FY20, as the modernised offering continues to gain traction.

Instant and Passives (9% of GGR): 4.3% decline

GGR in the Instant and Passives division declined by 4.3% to €34.8m vs Q218, although this was better than the double-digit decline in Q119. We are forecasting a 5% decline for the full year with a flat performance thereafter.



VLTs (19% of GGR): Roll-out back on track

The VLT roll-out was temporarily suspended during Q219, due to a procedural situation from the Council of State and at Q219, OPAP operated 20k VLTs (the same as Q119). The roll-out was resumed in August and OPAP is targeting 22–23k VLTs by the end of October and 25k by year end. Note that this is the maximum number of VLTs permitted and OPAP will not be able to roll out any further VLTs after this point.

VLT GGR increased by 54.2% to €70.9m (and €139.9m for H119, a 56.5% increase) and GGR/VLT/day was stable at €40. We forecast broadly stable GGR per machine and we estimate VLT GGR of €303m for FY19 and €340m in FY20.

Please see Exhibit 2 below for the divisional estimates.

Exhibit 2: Divisional summar	у							
€m	2014	2015	2016	2017	2018	2019e	2020e	2021e
Lotteries	817.3	829.9	841.3	818.0	779.9	798.0	806.0	814.0
Sports Betting	456.3	411.9	397.2	421.1	406.2	389.6	405.2	417.3
Instant and Passives	104.1	157.9	159.1	158.9	152.2	144.2	144.2	144.1
VLTs	0.0	0.0	0.0	57.6	208.7	303.3	339.7	356.6
Stoiximan	0.0	0.0	0.0	0.0	0.0	0.0	150.0	165.0
Gross gaming revenues	1,377.7	1,399.7	1,397.6	1,455.5	1,547.0	1,635.0	1,845.0	1,897.1
GGR Contribution and other levies	(404.5)	(412.0)	(466.7)	(482.6)	(507.1)	(532.2)	(603.7)	(620.1)
% GGR	-29%	-29%	-33%	-33%	-33%	-33%	-33%	-33%
NGR	973.1	987.7	930.8	972.9	1,039.9	1,102.8	1,241.3	1,277.0
Agents Commission	(359.7)	(362.4)	(358.4)	(369.9)	(381.1)	(390.1)	(404.3)	(412.8)
% of NGR	-37%	-37%	-39%	-38%	-37%	-35%	-33%	-32%
Other NGR related commission	0.0	0.0	(26.3)	(38.3)	(53.0)	(63.8)	(68.7)	(71.3)
% of NGR	0%	0%	-3%	-4%	-5%	-6%	-6%	-6%
Lottery	375.3	380.7	345.7	337.7	330.3	346.3	350.5	354.5
Sports Betting	193.3	176.5	147.1	155.2	159.2	157.6	164.0	169.4
Instant and Passives	46.7	69.5	54.7	54.8	51.5	49.5	50.0	49.9
VLTs	0.0	0.0	0.0	18.4	66.2	96.8	109.4	114.8
Other	(1.8)	(1.4)	(1.4)	(1.4)	(1.4)	(1.4)	(1.4)	(1.4)
Stoiximan	0.0	0.0	0.0	0.0	0.0	39.0	96.0	105.6
Gross profit from gaming operations	613.5	625.3	546.2	564.7	605.9	648.9	768.4	792.9
Total gross profit	613.5	625.3	570.1	592.6	642.7	692.5	812.5	841.1
Payroll	(58.6)	(46.1)	(56.2)	(63.8)	(76.1)	(82.4)	(98.9)	(99.9)
% NGR	-6%	-5%	-6%	-7%	-7%	-7%	-8%	-8%
Marketing	(78.9)	(69.5)	(65.9)	(67.4)	(65.8)	(68.9)	(89.6)	(91.4)
% of NGR	-8%	-7%	-7%	-7%	-6%	-6%	-7%	-7%
Other operating expenses	(129.5)	(132.7)	(140.4)	(155.0)	(147.2)	(132.5)	(159.0)	(160.6)
% NGR	-13%	-13%	-15%	-16%	-14%	-12%	-13%	-13%
Adjusted EBITDA	346.5	377.1	307.5	306.5	353.6	408.7	465.0	489.3
EBITDA margin	25%	27%	22%	21%	23%	25%	25%	26%
Source: OPAP, Edison Investment	Research (estimates						

OPAP | 13 September 2019



	€m	2014	2015	2016	2017	2018	2019e	2020e	202
Year end 31 December		ISA	ISA	ISA	ISA	ISA	ISA	ISA	18
NCOME STATEMENT GGR		1,377.7	1.399.7	1.397.6	1,455.5	1,547.0	1,635.0	1,845.0	1,897
NGR		973.1	987.7	930.8	972.9	1.039.9	1,102.8	1,241.3	1,277
Cost of Sales		(764.2)	(774.3)	(827.5)	(862.9)	(904.3)	(942.5)	(1,032.5)	(1,056
Gross Profit		613.5	625.3	570.1	592.6	642.7	692.5	812.5	84
EBITDA		346.5	377.1	307.5	306.5	353.6	408.7	465.0	489
Normalised operating profit		289.6	318.1	252.4	218.8	258.4	290.9	335.7	35
mpairments		7.5	(14.1)	0.0	(2.7)	(17.5)	0.0	0.0	(
Exceptionals		0.0	0.0	0.0	0.0	0.0	7.9	0.0	(4
Share-based payments		(0.9)	(1.2)	(3.1)	(1.5)	(1.6)	(1.7)	(1.7)	(1
Reported operating profit Net Interest		296.2 1.6	302.8 (4.7)	249.3 (13.3)	214.6 (21.1)	239.3 (23.5)	297.1 (24.7)	334.0 (24.6)	35 (24
Joint ventures & associates (post tax)		0.0	0.0	0.0	0.0	0.0	5.6	0.0	(24
Other		7.8	1.5	1.0	(0.3)	0.0	0.0	0.0	
Profit Before Tax (norm)		299.0	314.9	240.0	197.5	234.9	271.7	311.1	33
Profit Before Tax (reported)		305.6	299.6	236.9	193.2	215.9	277.9	309.4	33
Reported tax		(106.4)	(89.7)	(64.1)	(61.6)	(70.6)	(83.2)	(90.2)	(96
Profit After Tax (norm)		212.3	223.6	170.4	140.2	166.8	193.8	220.9	23
Profit After Tax (reported)		199.2	209.9	172.9	131.6	145.3	194.7	219.2	23
Minority interests		(4.2)	0.8	(2.6)	(5.4)	(2.0)	0.9	(6.3)	(6
Discontinued operations		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Net income (normalised)		208.1	224.4	167.8	134.8	164.8	194.7	214.6	22
Net income (reported)		195.0	210.7	170.2	126.2	143.3	195.7	212.9	22
Basic average number of shares outstanding (m)		319	319	319	318	318	322	323	;
EPS - basic normalised (€)		0.65	0.70	0.53	0.42	0.52	0.60	0.66	0
EPS - diluted normalised (€)		0.65	0.70	0.53	0.42	0.52	0.60	0.66	
EPS - basic reported (€)		0.61	0.66	0.53	0.40	0.45	0.61	0.66	0
Dividend (€)		0.70	0.40	1.29	1.10	0.70	0.71	0.91	0
Revenue growth (%)			1.6	(-0.2)	4.1	6.3	5.7	12.8	
Gross Margin (%)		44.5	44.7	40.8	40.7	41.5	42.4	44.0	4
EBITDA Margin (%)		25.2	26.9	22.0	21.1	22.9	25.0	25.2	2
Normalised Operating Margin		21.0	22.7	18.1	15.0	16.7	17.8	18.2	1
BALANCE SHEET									
Fixed Assets		1,343.4	1,318.9	1,330.3	1,356.5	1,384.2	1,392.7	1,376.6	1,26
ntangible Assets		1,284.2	1,237.2	1,231.0	1,218.5	1,157.2	1,100.1	1,066.5	98
Fangible Assets		44.2	56.2	67.6	109.3	111.5	167.1	184.6	15
nvestments & other		15.0	25.5	31.7	28.7	115.5	125.5	125.5	12
Current Assets Stocks		409.4 3.0	389.9 4.2	437.4 12.5	440.4 7.9	385.5 10.7	427.8 15.7	563.9 20.7	68
Debtors		92.3	55.2	80.6	127.8	138.3	133.3	128.3	12
Cash & cash equivalents		297.4	301.7	273.5	246.1	182.6	223.8	359.9	47
Other		16.7	28.8	70.8	58.5	54.0	55.0	55.0	5
Current Liabilities		(457.9)	(325.0)	(390.2)	(482.0)	(299.3)	(353.5)	(338.5)	(32
Creditors		(170.4)	(127.1)	(149.3)	(173.9)	(176.7)	(146.7)	(131.7)	(110
Fax and social security		(178.2)	(129.9)	(55.5)	(89.8)	(8.6)	(13.6)	(13.6)	(1;
Short term borrowings		(0.0)	(32.1)	(118.7)	(169.2)	(0.2)	(7.2)	(7.2)	(
Other		(109.3)	(35.9)	(66.7)	(49.2)	(113.8)	(186.0)	(186.0)	(18
ong Term Liabilities		(59.8)	(181.0)	(305.3)	(556.7)	(710.8)	(777.1)	(877.1)	(87
ong term borrowings		0.0	(115.0)	(263.0)	(513.1)	(650.3)	(710.3)	(810.3)	(81
Other long term liabilities		(59.8)	(66.0)	(42.3)	(43.6)	(60.6)	(66.8)	(66.8)	(6)
Net Assets		1,235.1	1,202.8	1,072.2	758.2	759.5	689.8	724.9	74
Minority interests		(67.4)	(41.0)	(37.0)	(43.4)	(36.8)	(38.0)	(42.0)	(4-
Shareholders' equity		1,167.7	1,161.8	1,035.3	714.8	722.8	651.8	682.9	70
CASH FLOW									
Op Cash Flow before WC and tax		347.4	378.3	310.7	308.0	355.2	410.4	466.7	49
Vorking capital		7.0	(41.0)	(71.9)	(9.2)	(25.0)	(25.0)	(10.0)	(1
Exceptional & other		1.0	9.1 (142.5)	(12.4)	(0.4)	(51.7)	(4.3)	(80.2)	(8)
ax let operating cash flow		(68.8) 286.6	203.9	109.4	(31.4) 266.9	(51.7) 279.6	(73.2) 307.8	(80.2) 376.4	39
Recoperating cash now Capex		(18.6)	(39.6)	(42.9)	(96.3)	(51.9)	(30.0)	(20.0)	(20
Acquisitions/disposals		(18.6)	(0.8)	(0.0)	(31.5)	(47.9)	(22.0)	(94.9)	(2)
let interest		1.6	(4.2)	(11.9)	(19.6)	(24.6)	(24.7)	(24.6)	(24
Equity financing		(8.3)	(24.2)	(11.9)	(1.8)	(5.5)	0.0	0.0	(2
Dividends		(79.8)	(277.3)	(292.8)	(446.1)	(154.0)	(189.9)	(194.5)	(22
Other		48.1	(0.7)	(12.7)	0.3	(18.6)	0.0	(6.3)	((
Net Cash Flow		211.0	(142.9)	(262.8)	(328.0)	(22.8)	41.2	36.1	12
Opening net debt/(cash)		(86.4)	(297.4)	(154.5)	108.3	436.2	467.9	493.6	45
X		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other non-cash movements		0.0	0.0	0.0	0.0	(8.9)	(67.0)	0.0	
Closing net debt/(cash)		(297.4)	(154.5)	108.3	436.2	467.9	493.6	457.5	33



General disclaimer and copyright

This report has been commissioned by OPAP and prepared and issued by Edison, in consideration of a fee payable by OPAP. 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 contain information that is based on assumptions, forecasts of future results, estimates of amounts 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

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 or underlying data. No further distribution of FTSE Data is permitted without FTSE's express 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 Crown Wealth Group Pty Ltd who holds an Australian Financial Services Licence (Number: 494274). 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 anature, 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 activity 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 adviser under Section 202(a)(11) of the 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, so take investment portfolio 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.