

Games Workshop Group

FY19 results

Third consecutive year of record results

Consumer goods

2 August 2019

Price 4,450p
Market cap £1bn

Net cash (£m) at 2 June 2019 29.4
 Shares in issue 32.4m
 Free float 95%
 Code GAW
 Primary exchange LSE
 Secondary exchange N/A

Share price performance



%	1m	3m	12m
Abs	(3.3)	16.0	61.3
Rel (local)	(4.2)	13.8	64.3
52-week high/low	5085p 2800p		

Business description

Games Workshop is a leading international specialist designer, manufacturer and multi-channel retailer of miniatures, scenery, artwork and fiction for tabletop miniature games set in its fantasy Warhammer worlds.

Next events

AGM trading statement September 2019

Analysts

Kate Heseltine +44 (0)20 3077 5700
 Russell Pointon +44 (0)20 3077 5700

consumer@edisongroup.com

[Edison profile page](#)

**Games Workshop Group is a
 research client of Edison
 Investment Research Limited**

Games Workshop (GAW), the global leader for tabletop miniature gaming, has bucked wider consumer trends and delivered a third consecutive year of record sales and earnings growth in FY19. The company is proactively exploring new ways, such as the development of digital content, in which to leverage its rich intellectual property and introduce the Warhammer hobby to new audiences globally. Our modest forecast assumptions, which have not materially changed, drive a DCF valuation of 4,703p.

Year end	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (x)	Yield (%)
05/18	221.3**	74.3	181.6	126	24.1	2.8
05/19***	256.6	81.3	200.8	155	22.4	3.5
05/20e	267.6	85.2	210.3	162	21.2	3.6
05/21e	278.9	89.8	221.7	171	20.1	3.8

Note: *PBT and EPS are normalised, excluding exceptional items. **Restated at H119 to reflect IFRS 15: Revenue from contracts with customers. ***To 2 June 2019. EPS based on diluted no of shares.

FY19 results: Another outstanding year of progress

GAW reported FY19 sales growth of 15.9% (15% constant currency) and a 9.5% increase in pre-tax profit, comfortably ahead of closing guidance (sales of c £254m; pre-tax profit not less than £80m). This represents c 70% earnings CAGR since FY16. Dividends of £50.3m (155p per share) were paid during FY19, leaving net cash of £29.4m at year end (2018: £28.5m). A further 30p dividend has been declared alongside the results announcement, to be paid on 13 September 2019.

Exploring new ways to develop digital content

GAW continues to leverage its rich intellectual property (IP) via relationships with the major digital gaming publishers. Royalty income rose by 18% to £11.4m in FY19, with almost 90% derived from PC and console games. Additionally, GAW has taken early steps to develop its extensive narrative and characters in animation and TV. It announced a development agreement with Big Light Productions earlier this month.

Forecasts: No material change

We maintain our potentially overcautious FY20 assumptions for c 5% growth in both trade and retail sales and a 0.5% increase in online, consistent with our assumed retail like-for-like. We assume 25 net new stores openings, mainly in the US and Germany. We factor in a 50bp increase in gross margin and broadly flat operating costs as a percentage of sales and royalty income. We extend those assumptions to FY21, resulting in a modest c 5% y-o-y increase in PBT.

Valuation: Reflects modest forecast assumptions

The shares have risen by c 40% since we [initiated](#) in April and trade slightly below our DCF valuation of 4,703p, which reflects revised, but still modest, assumptions (see valuation section). The shares merit a premium to the implied peer group-based valuation of 4,270p. Combining the two valuations gives a blended valuation of 4,486p (previously 3,935p). We forecast FY20 net cash of £41m, underpinning a healthy c 4% yield and scope for further distributions.

FY19 results: Robust sales and earnings growth

FY19 results demonstrate the ongoing global success of the Warhammer brand.

Exhibit 1: Results summary

£m	H118	H218	FY18	H119	H219	FY19	+/- H1	+/- H2	+/- FY
Revenue	109.6	111.7	221.3	125.2	131.3	256.6	14.3%	17.6%	15.9%
Gross margin %	72.1%	69.9%	71.0%	66.9%	68.1%	67.5%	-5.1%	-1.8%	-3.5%
Royalty income	3.6	6.1	9.6	5.5	5.9	11.4	54.1%	-3.0%	18.2%
Operating profit	38.1	36.2	74.3	40.8	40.4	81.2	7.0%	11.7%	9.3%
Operating margin %	34.8%	32.4%	33.6%	32.6%	30.8%	31.6%	-2.2%	-1.6%	-1.9%
Finance income	0.0	(0.1)	(0.0)	0.0	0.1	0.1	N/A	N/A	N/A
PBT	38.1	36.2	74.3	40.8	40.5	81.3	7.1%	12.0%	9.5%

Source: Games Workshop Group

GAW delivered impressive FY19 revenue growth of 15.9% (15% constant currency) to £256.6m, on the back of two years of exceptionally strong comparatives (FY17: 33.9% and FY18: 40.0%). Demand has remained strong across all channels and major geographies, supported by a robust pipeline of new product releases and ongoing focus on customer engagement.

The anticipated gross margin decline of 350bp year-on-year to 67.5% reflects the ongoing channel shift towards trade and the new vs existing product mix (38% vs 62%), in addition to higher costs associated with the use of third-party warehousing. Tight cost control led to a 140bp reduction in operating costs as a percentage of sales to 40.3%, despite £4.1m investment in the store opening programme and £2.6m additional spending in operations, support and marketing teams, alongside an increase in discretionary staff bonuses and variable costs attributable to sales volume growth.

The company continues to leverage its rich IP via relationships with the major digital gaming publishers. Royalty income increased by 18.2% to £11.4m due to the strong performance of two titles, Total War: Warhammer II and Warhammer: Vermintide 2, and the signing of new licensing agreements. In combination, these factors resulted in a 9.5% increase in pre-tax profit to £81.3m. There were no exceptional items.

A strong performance across all channels and key regions

GAW has an integrated multi-channel approach to selling its products internationally via three channels: trade, retail and online.

Exhibit 2: Revenue split by channel

£m	FY16	FY17	FY18	FY19
Revenue				
Trade	44.5	61.3	94.4	121.4
Retail	48.4	64.8	82.0	87.8
Online	25.1	32.0	45.0	47.3
Total	118.1	158.1	221.3	256.6
Growth y-o-y				
Trade	0.1%	37.6%	54.1%	28.7%
Retail	-1.3%	33.9%	26.4%	7.1%
Online	-1.8%	27.4%	40.4%	5.3%
Total	-0.9%	33.9%	40.0%	15.9%

Source: Games Workshop Group

Trade has remained the fastest growing channel y-o-y over the past three years and now represents 47% of the sales mix. In FY19 trade sales grew by 29% (28% CCY), with sales to trade accounts that primarily sell online performing notably well. 600 net new trade accounts were added during the year, taking the total to 4,700 accounts across 69 countries.

Consistent with our expectations, retail sales growth moderated to 7% (7% CCY), largely driven by 28 net new store openings, the majority of which were in North America and Asia. Management has maintained its guidance for c 25 net new openings in FY20, focused on North America and Germany. Online sales rebounded strongly in H2, after a modest decline in H1 to deliver 5.3% growth across the year.

Geographically, all key regions performed well. The company continues to focus on developing its presence in China, where it now has six stores and a Warhammer website on one of China's e-commerce platforms, and the Rest of Asia. Sales grew by 67% and 23% in these two regions, respectively.

Balance sheet strength

Net cash increased by £0.9m y-o-y to £29.4m at year end. This was a result of cash from core operating activities of £69.0m and royalty income of £9.1m offsetting capex of £22.5m, dividends of £50.3m, group profit share and discretionary employee bonuses of £5.5m, and smaller items. Company policy is to distribute surplus cash to shareholders.

Developing the digital content is a key strategy

Games Workshop has taken its first steps towards bringing the Warhammer worlds to TV and animation. During July, it signed a development agreement with Big Light Productions, a script writer, show runner and production company. The collaboration will bring a story based on Eisenhorn, one of the most popular Black Library novels, to TV.

Additionally, the company is poised to start production of an animated series, Angels of Death, which showcases the popular Space Marine characters. Management has indicated that it may distribute the animated series via Warhammer TV, although it is exploring other avenues.

While it is too early to determine potential profitability, these new ventures present a significant opportunity to showcase the brand and introduce Warhammer to new audiences globally.

Financials: No material change to forecasts

Against tough prior year comparatives and in light of macroeconomic uncertainties, we continue to factor in potentially overcautious sales growth assumptions. We expect FY20 and FY21 trade and retail sales to both grow at c 5% pa and online at 0.5%, consistent with our like-for-like store sales growth assumption in each year. We factor in 25 net new store openings in each year.

We assume 50bp gross margin expansion in each of the two forecast years. Although channel and product mix are likely to continue putting pressure on the margin, we expect some improvement as a result of production efficiencies from the new manufacturing facility. Key infrastructure projects to upgrade IT systems and logistics capacity are not expected to complete before the end of 2020.

Following the adoption of IFRS 15 in FY19, GAW now recognises minimum royalty guarantee income when a new contract is signed, as opposed to previously being recognised as deferred income, which was released in line with licensee sales. This serves to reduce visibility and we therefore cautiously assume the same level of royalty income over the next two years as in FY19, noting that it is one of management's priorities for FY20 to sign new licensing deals.

Exhibit 3: Change in forecasts

	EPS* (p)			PBT (£m)			EBITDA (£m)		
	Old	New	% chg.	Old	New	% chg.	Old	New	% chg.
2020e	206.4	210.3	1.9	84.4	85.2	0.9	99.7	103.4	3.7
2021e	N/A	221.7	N/A	N/A	89.8	N/A	N/A	108.6	N/A

Source: Edison Investment Research. Note: *EPS are shown on fully diluted basis.

Our FY20 capex forecast increases by £5m to £21.5m (broadly in line with the previous two years) to reflect investment in fixtures, fittings and technology for the Memphis warehouse, which is being extended by its landlord from 100k sq ft to 150k sq ft. The project commenced in May 2019 and is expected to complete in 2020.

In FY21, we forecast total capex of £16.5m including c £5m investment in the fit-out of a new pre-let UK logistics facility, which is to be developed on a site approximately 10 miles from GAW's Nottingham head office campus. Building work is scheduled to commence in autumn 2019 and complete in the second half of 2020. The new facility will reduce third-party warehousing costs.

We forecast end-FY20 net cash of £40.8m.

IFRS 16: Change in lease accounting

GAW will adopt the modified approach in FY20, meaning that it will not restate prior years. The company estimates that the adoption of IFRS 16 at the end of FY19 would have resulted in an opening right of use asset of c £34.9m and a corresponding lease liability of c £34m. It expects the overall net P&L impact of IFRS 16 to be broadly neutral. However, the current operating lease charge will be replaced with a depreciation charge on the right of use asset (therefore increasing EBITDA), and there will be an interest charge on the lease liability. These are non-cash changes. We will incorporate IFRS 16 adjustments into our forecasts when the company reports interim results in January 2020.

Valuation

Our 4,486p valuation for GAW is a blended average of the DCF and peer group comparison.

DCF valuation

We have rolled our DCF forward a year and adjusted the sales growth assumptions in our 10-year DCF forecast so that the modest and, we believe, achievable (based on recent performance and strategic initiatives for global expansion) growth rate of c 4% is maintained for four years beyond our two-year forecast horizon, then gradually fades to our terminal growth rate of 2% (previously faded towards 2% from the third year). Our EBITDA margin improves slightly from 37.8% (FY19) to 40.0% over the forecast period. The 100bp uplift in the terminal margin to 40.0% compared with our previous DCF reflects the FY19 result (90bp higher vs our forecast), and factors in gross margin recovery and tight cost control. We make no change to our assumption that capex returns to a lower rate of 5% of sales and factor in a 7.7% equity-only cost of capital (risk premium 6%, company beta 1.1).

Our DCF returns a value of 4,703p per share. Below we set out implications for the share price of differing terminal growth rate and cost of capital assumptions.

Exhibit 4: DCF scenarios

		Cost of capital				
Terminal growth		5.7%	6.7%	7.7%	8.7%	9.7%
	0%	5,408	4,556	3,929	3,449	3,070
	1%	6,161	5,040	4,258	3,682	3,240
	2%	7,326	5,732	4,703	3,985	3,455
	3%	9,367	6,802	5,339	4,394	3,733
	4%	13,867	8,677	6,323	4,980	4,111

Source: Edison Investment Research

Peer comparison

GAW does not have a direct quoted peer. In terms of products and market, the closest comparators are mainly small unquoted companies. We therefore compare it with a range of companies that broadly fall into two categories: 1) multinational 'mainstream' toy and game designers, manufacturers and distributors; and 2) specialist interest companies. Although far from an exact comparison, it does provide some context to the valuation compared with adjacent sectors.

Exhibit 5: Peer group comparison table

Company	Market cap (£m)	Year end	CCY	Last reported EBITDA margin (%)	Dividend yield (%) CY19	P/E (x) CY19	P/E (x) CY20	EV/EBITDA (x) CY19	EV/EBITDA (x) CY20
Hasbro	10,902	31/12/2018	US\$	10.9	2.2	26.9	24.1	16.4	15.2
Mattel	4,674	31/12/2018	US\$	3.2	0.0			18.8	13.3
Tomy	110,349	31/03/2018	JPY	12.9	1.9	14.6	13.5		
Character Group	114	31/08/2018	GBP	12.7	5.0	11.7	11.2	6.4	6.0
Focusrite	278	31/08/2018	GBP	20.2	0.7	27.6	26.9	16.8	15.6
Future	651	30/09/2018	GBP	14.1	0.1	26.5	24.2	19.0	17.2
Portmeirion Group	127	31/12/2018	GBP	12.7	3.8	14.1	12.2	8.9	8.0
Average				12.4	1.9	20.2	18.7	14.4	12.5
Games Workshop	1,443	31/05/2018	GBP	37.8	3.6	21.3	20.3	14.0	13.3
Premium/(discount) to peers						5.5%	8.7%	(2.5%)	6.0%

Source: Refinitiv; Edison Investment Research. Note: Prices as at 29 July 2019.

We note that GAW and the peer group have performed strongly since our last valuation. GAW's strong share price performance (up c 40%) following the earnings upgrade in April has modestly extended its premium to peers on a P/E basis in both years and EV/EBITDA in CY20. We believe the current premium is merited based on our expectation of continued growth and possible future earnings upgrades (based on the core business performance and potential for additional licensing deals), and a sustained generous dividend yield of c 4%, which is underpinned by a strong balance sheet. Absent any premium to the group, the implied valuation would be 4,270p based on average peer group P/E and EV/EBITDA multiples for CY19 and CY20.

Exhibit 6: Financial summary table

Accounts: IFRS, year-end: May, £000s	2016	2017	2018	2019*	2020e**	2021e
INCOME STATEMENT						
Total revenues	118,069	158,114	221,304***	256,574	267,568	278,910
Cost of sales	(37,438)	(43,691)	(64,219)	(83,306)	(85,538)	(87,769)
Gross profit	80,631	114,423	157,085	173,268	182,030	191,141
Gross profit margin	68.3%	72.4%	71.0%	67.5%	68.0%	68.5%
SG&A (expenses)	(69,710)	(83,591)	(92,383)	(103,434)	(108,365)	(112,958)
Other income/(expense)	5,939	7,491	9,617	11,365	11,365	11,365
Exceptionals and adjustments	0	0	0	0	0	0
Reported EBIT	16,860	38,323	74,319	81,199	85,030	89,547
Report EBIT margin	14.3%	24.2%	33.6%	31.6%	31.8%	32.1%
Finance income/(expense)	88	80	(49)	97	139	234
Reported PBT	16,948	38,403	74,270	81,296	85,169	89,782
Income tax expense (includes exceptionals)	(3,452)	(7,856)	(14,815)	(15,475)	(16,212)	(17,090)
Reported net income	13,496	30,547	59,455	65,821	68,957	72,691
Basic average number of shares, m	32,093	32,126	32,258	32,438	32,438	32,438
Basic EPS	42.1	95.1	184.3	202.9	212.6	224.1
Adjusted EBITDA	27,250	48,547	86,482	97,089	103,361	108,564
Adjusted EBIT	16,860	38,323	74,319	81,199	85,030	89,547
Adjusted PBT	16,948	38,403	74,270	81,296	85,169	89,782
Adjusted EPS	42	95	184	203	213	224
Adjusted diluted EPS	42	94	182	201	210	222
BALANCE SHEET						
Property, plant and equipment	22,621	22,132	30,072	35,303	39,807	37,971
Goodwill	1,433	1,433	1,433	1,433	1,433	1,433
Intangible assets	10,501	12,917	14,195	16,004	14,669	13,988
Other non-current assets	4,148	6,480	7,780	11,667	11,667	11,667
Total non-current assets	38,703	42,962	53,480	64,407	67,576	65,060
Cash and equivalents	11,775	17,910	28,545	29,371	40,806	59,835
Inventories	8,540	12,421	20,159	24,192	25,921	26,597
Trade and other receivables	10,120	12,976	15,502	18,796	19,601	20,432
Other current assets	725	596	457	814	814	814
Total current assets	31,160	43,903	64,663	73,173	87,142	107,678
Other non-current liabilities	1,109	989	1,204	1,854	1,854	1,854
Total non-current liabilities	1,109	989	1,204	1,854	1,854	1,854
Trade and other payables	12,844	16,515	20,298	19,199	19,713	20,228
Other current liabilities	2,747	6,529	8,519	10,054	10,054	10,054
Total current liabilities	15,591	23,044	28,817	29,253	29,767	30,282
Equity attributable to company	53,163	62,832	88,122	106,473	123,097	140,602
CASH FLOW STATEMENT						
EBIT	16,860	38,323	74,319	81,199	85,030	89,547
Depreciation and amortisation	10,457	11,016	12,155	16,086	18,331	19,017
Share based payments	193	160	204	339	339	339
Other adjustments	28	111	40	144	0	0
Movements in working capital	(756)	(240)	(4,386)	(8,992)	(2,020)	(993)
Interest paid / received	83	83	(39)	97	139	234
Income taxes paid	(2,552)	(5,482)	(12,227)	(16,296)	(16,212)	(17,090)
Cash from operations (CFO)	24,313	43,971	70,066	72,577	85,607	91,054
Capex	(12,663)	(12,844)	(21,580)	(22,488)	(21,500)	(16,500)
FCF	11,650	31,127	48,486	50,089	64,107	74,554
Cash used in investing activities (CFIA)	(12,663)	(12,844)	(21,580)	(22,488)	(21,500)	(16,500)
Net proceeds from issue of shares	304	81	982	718	0	0
Dividends paid	(12,837)	(23,801)	(38,701)	(50,277)	(52,672)	(55,525)
Other financing activities	0	(1,901)	0	0	0	0
Cash from financing activities (CFF)	(12,533)	(25,621)	(37,719)	(49,559)	(52,672)	(55,525)
Increase/(decrease) in cash and equivalents	(883)	5,506	10,767	540	11,435	19,029
Cash and equivalents at end of period	11,775	17,910	28,545	29,371	40,806	59,835
Net (debt)/cash	11,775	17,910	28,545	29,371	40,806	59,835
Movement in net (debt)/cash over period	(786)	6,135	10,635	826	11,435	19,029

Source: Company accounts, Edison Investment Research. Note: * To 2 June 2019. **Forecasts exclude IFRS 16, to be incorporated from FY20. ***Restated at H119 to reflect IFRS 15: Revenue from contracts with customers.

General disclaimer and copyright

This report has been commissioned by Games Workshop Group and prepared and issued by Edison, in consideration of a fee payable by Games Workshop Group. 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 of 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 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 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 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 to a specific 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.

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