

ENGAGEMENT REPORT

Philadelphia Board of Pensions & Retirement

MSCI ESG Research

November 2015

CONTENTS

ENGAGEMENT LETTER TEMPLATE.....	5
COMPANY NARRATIVES	7
BIG 5 SPORTING GOODS CORPORATION	7
CABELA'S INCORPORATED	7
COLT DEFENSE LLC	7
COMPAGNIE FINANCIERE RICHEMONT SA	8
DAICEL CORPORATION	8
DICK'S SPORTING GOODS, INC.	9
FORJAS TAURUS S.A.	9
HOWA MACHINERY, LTD.....	9
IZHEVSKIY MASHZAVOD OAO	10
MIROKU CORPORATION	10
NOF CORPORATION	10
OLIN CORPORATION	11
ORBITAL ATK, INC.....	11
POONGSAN CORPORATION	12
POONGSAN HOLDINGS CORPORATION	12
S&T HOLDINGS CO LTD	12
S&T MOTIV CO., LTD	13
SMITH & WESSON HOLDING CORPORATION	13
STURM, RUGER & COMPANY, INC.	13
THE KROGER CO.	14

TUL'SKIY ORUZHEYNYI ZAVOD OAO	14
VERNEY CARRON SA.....	14
VISTA OUTDOOR INC.....	15
WAL-MART STORES, INC.	15
XTEK LTD	16
XXL ASA	16
RESPONSE SUMMARY	17
COMPAGNIE FINANCIERE RICHEMONT SA	17
Daicel Corporation	18
DICK'S SPORTING GOODS, INC.....	18
IMI PLC	18
Izhevskiy mashzavod OAO	19
NOF CORPORATION	19
Verney-Carron SA.....	20

On January 2015, MSCI ESG Research once again sent out letters on Behalf of the City of Philadelphia Board of Pensions & Retirement requesting the companies in the covered company list to sign the Sandy Hook Principles. One month after initial engagement, companies will be sent a reminder to review said letter. Results from engagement efforts are detailed later in this document.

This document includes three sections: (i) Letter template sent to companies in the Covered Company List; (ii) Company narratives for companies in the covered company list, detailing their firearms involvement; and (iii) Response summary, for those companies who have replied to the letter. As a reference, a covered company list, a compliant list, and a non-compliant list will be provided in an Excel document for your convenience.

ENGAGEMENT LETTER TEMPLATE

<<Month day, year>>

Dear Investor Relations:

The City of Philadelphia Board of Pensions & Retirement (the “Board”) has retained MSCI ESG Research to assist it in implementing the enclosed resolution (the “Resolution”) establishing the Sandy Hook Principles (the “Principles”), which the Board unanimously adopted on January 24, 2013. The Resolution states that the Principles are in remembrance of those who lost their lives in the shooting massacre on December 14, 2012 at Sandy Hook Elementary School and in remembrance of others who have lost their lives to gun violence. The Resolution further indicates that the Principles are designed to encourage positive corporate behavior by gun and ammunition manufacturers, distributors and retailers by establishing a baseline standard for responsible conduct and business practices to help ensure maximum safety to our citizens.

The Resolution prohibits the Board from being invested in any Covered Company (as defined in the Resolution) which has not adopted the Principles¹. The Resolution sets forth an engagement process with Covered Companies pursuant to which such companies are encouraged to sign and abide by the Principles. Should a Covered Company decline to sign and abide by the Principles, then the Board will be prohibited from investing in, and will commence divesting itself of investments in such company.

In collaboration with the Board, MSCI ESG Research has identified your company as a Covered Company and placed it on a Covered Companies List. The identification is based on publicly available sources and is presented in the information box at the end of this letter. In accordance with the Resolution, the Board offers your company the opportunity to clarify its gun and/or ammunition-related activities and encourages you to take one of the following actions within 90 days of the date of this letter: (1) If you believe your company is not a Covered Company, please provide a written explanation to that effect; or (2) If you are a Covered Company, then the Board encourages a company representative with authority to bind the company to sign and return to MSCI ESG Research the enclosed copy of the Principles.

¹ Unless otherwise defined in this letter, all capitalized terms used herein are defined in the Resolution. “Covered Companies” include companies which manufacture, distribute or sell at retail any guns or ammunition (including certain component parts manufacturers), except to the extent the activities are for a law enforcement or military purpose.

MSCI ESG Research will review the information you provide regarding your compliance with the Resolution and may contact you with additional questions. We ask that you provide a point of contact at your firm for future correspondence.

Based on your company's response, the Board will take one of the following actions:

- If the Board determines based on your response that your company is not a Covered Company, then the Board will remove your company from the Covered Companies List and no further action will be taken.
- If your company is a Covered Company and signs and agrees to abide by the Principles, then your company will be placed on a Compliant Companies List and no further action will be taken, provided it remains in compliance with the Principles.
- If your company is a Covered Company and declines to sign and abide by the Principles, then your company will be placed on a Non-Compliant Companies List. The Board will be prohibited from investing in your company and will commence a process of divesting itself of all current investments in your company. Your company will remain ineligible for investment by the Board unless and until your company signs the Principles.

We look forward to your response within 90 days of the date of this letter. Please do not hesitate to contact me if you have questions.

Sincerely,
Maritzabel Mayoral

Enclosures: Philadelphia Board of Pensions and Retirement Resolution: Sandy Hook Principles

Profile

<<Company's firearms profile>>

COMPANY NARRATIVES

The following companies are included in the City of Philadelphia Board of Pensions & Retirement covered company list:

BIG 5 SPORTING GOODS CORPORATION

Ticker	BGFV
CUSIP	08915P101
ISIN	US08915P1012
SEDOL	2958646
Country of Domicile	US
Profile	Big 5 Sporting Goods retails semi-automatic shotguns, rifles, and ammunition for hunting. Its brands include Beretta, Colt, Mossberg, Ruger, Savage Arms, and Winchester.

CABELA'S INCORPORATED

Ticker	CAB
CUSIP	126804301
ISIN	US1268043015
SEDOL	B00N2Z7
Country of Domicile	US
Profile	Cabela's retails semi-automatic rifles and pistols, revolvers, handguns, shotguns, and ammunition for hunting and sport shooting. Its brands include Beretta, Bushmaster, Remington, Savage Arms, and Sig Sauer.

COLT DEFENSE LLC

Ticker	COESE
CUSIP	
ISIN	
SEDOL	
Country of Domicile	US
Profile	Colt Defense develops and manufactures firearms, such as pistols, revolvers, carbines, and semi-automatic rifles used in sporting and hunting applications. Its products are sold to the commercial market through Colt's Manufacturing Co. LLC.

In July 2013, the company acquired New Colt Holding Corp., the parent company of Colt's Manufacturing, which manufactures firearms for the civilian and sporting markets. The merger resulted to a single company developing, manufacturing, and selling firearms under the brand Colt for all markets and applications.

In June 2013, Colt's Manufacturing entered into a partnership with Black Hills Ammunition, to manufacture and sell ammunition for competition rifles.

COMPAGNIE FINANCIERE RICHEMONT SA

Ticker	CFR
CUSIP	204319107
ISIN	CH0210483332
SEDOL	BCRWZ18
Country of Domicile	CH
Profile	Compagnie Financiere Richemont, through its wholly owned subsidiary James Purdey & Sons Ltd., manufactures game guns, over & under guns, hammer guns, double rifles, bolt action rifles, and cartridges for sport shooting.

DAICEL CORPORATION

Ticker	4202
CUSIP	
ISIN	JP3485800001
SEDOL	6250542
Country of Domicile	JP
Profile	Daicel (formerly Daicel Chemical Industries Ltd.) manufactures shotgun cartridges or shotgun shells for hunting and trapshooting. In June 2013, the company informed MSCI ESG Research that its subsidiary, Japan Shotshell Ltd., is still producing and selling ammunition for hunting and clay shooting. The company also disclosed that its products are only for the Japanese domestic market, which is why ammunition sales represent only less than 0.30 percent of its consolidated net sales.

DICK'S SPORTING GOODS, INC.

Ticker	DKS
CUSIP	253393102
ISIN	US2533931026
SEDOL	2969637
Country of Domicile	US
Profile	Dick's Sporting Goods retails semi-automatic rifles, shotguns, and ammunition for hunting and target shooting. Its brands include Beretta, Browning, Mossberg, Remington, and Savage Arms.

FORJAS TAURUS S.A.

Ticker	FJTA11
CUSIP	
ISIN	BRFJTAACNOR5
SEDOL	B010W80
Country of Domicile	BR
Profile	<p>Forjas Taurus manufactures, exports, and sells revolvers, handguns, rifles, pistols, shotguns, and ammunition for civilian use. The company also distributes semi-automatic rifles and pistols from the Diamondback brand, through its wholly owned subsidiary Taurus Holdings Inc.</p> <p>In January 2013, Taurus Holdings signed an agreement with Diamondback Firearms LLC to sell and market its products in the United States.</p>

HOWA MACHINERY, LTD.

Ticker	6203
CUSIP	
ISIN	JP3840600005
SEDOL	6441283
Country of Domicile	JP
Profile	Howa Machinery manufactures the M1500 bolt action rifle for hunting. The company also exports and sells its products to the United States.

IZHEVSKIY MASHZAVOD OAO

Ticker	igma
CUSIP	
ISIN	RU0006752946
SEDOL	7230510
Country of Domicile	RU
Profile	<p>Kalashnikov Concern (formerly known as Izhevskiy mashzavod, Izhevskiy mashinostroitel'niy zavod, or Izhmash) manufactures semi-automatic rifles and semi-automatic shotguns for hunting and sports shooting.</p> <p>In January 2014, the company signed a contract with the Russian Weapon Company (RWC) to export hunting and sporting rifles from Russia to the U.S. and Canada. However, the U.S. included the company in its Ukraine-related sanctions list in July 2014. Subsequently, the RWC disclosed its plan to manufacture AK-47 in the U.S. under license from Kalashnikov Concern.</p> <p>In April 2012, the company was declared bankrupt after it filed for bankruptcy in September 2009. In September 2013, it was renamed Kalashnikov Concern, which was formed through the merger of Izhmash and other small arms manufacturers: Vyatsko-Polyansky Engineering Plant Molot, Koshkin Automatic Lines Design Bureau (Klimovsk) and NITI Progress (Izhevsk).</p>

MIROKU CORPORATION

Ticker	7983
CUSIP	
ISIN	JP3910800006
SEDOL	6596354
Country of Domicile	JP
Profile	<p>Miroku manufactures shotguns, rifles and ammunition for hunting and sporting applications. Its products include brands such as Browning, B.C. Miroku, and Winchester.</p>

NOF CORPORATION

Ticker	4403
CUSIP	

ISIN	JP3753400005
SEDOL	6640488
Country of Domicile	JP
Profile	<p>NOF, through its subsidiary Nippo Kogyo Co. Ltd., manufactures gun ammunition for hunting and sporting rifles.</p> <p>As of March 2014, the company owned 93.30 percent of Nippo Kogyo.</p>

OLIN CORPORATION

Ticker	OLN
CUSIP	680665205
ISIN	US6806652052
SEDOL	2658526
Country of Domicile	US
Profile	<p>Olin, through its wholly owned subsidiary Winchester Ammunition Inc., produces sporting ammunition for rifles, shotguns, and handguns, as well as industrial cartridges for hunting and recreational applications. It also distributes and retails firearms and ammunition through its wholly owned subsidiary, Winchester Australia Ltd. The company's products include brands such as Winchester, Browning, CZ, Stey-Mannlicher, and Lanber.</p>

ORBITAL ATK, INC.

Ticker	OA
CUSIP	68557N103
ISIN	US68557N1037
SEDOL	BVGC686
Country of Domicile	US
Profile	<p>Orbital ATK (formerly Alliant Techsystems Inc.) develops and manufactures ammunition and cartridges for pistols, rifles, shotguns, and handguns, used in sporting and hunting applications.</p> <p>In February 2015, Alliant Techsystems completed its merger with Orbital Sciences Corp. The combined company was renamed Orbital ATK. Vista Outdoor was formed when Orbital ATK spun</p>

off its firearms manufacturing business. Orbital ATK, however, will supply Vista Outdoor with ammunition products as part of a continuing agreement between the two companies.

POONGSAN CORPORATION

Ticker	103140
CUSIP	
ISIN	KR7103140000
SEDOL	B3BDFS1
Country of Domicile	KR
Profile	Poongsan manufactures ammunition for pistols, revolvers, and rifles used for recreational hunting and shooting. Its products are sold under the Precision Made Cartridges brand.

POONGSAN HOLDINGS CORPORATION

Ticker	005810
CUSIP	
ISIN	KR7005810007
SEDOL	6694474
Country of Domicile	KR
Profile	<p>Poongsan Holdings, through its minority ownership of Poongsan Corp. (Poongsan), manufactures ammunition for pistols, revolvers, and rifles used for recreational hunting and shooting. Poongsan's products are sold under the Precision Made Cartridges brand.</p> <p>As of September 2014, the company owned 33.34 percent of Poongsan.</p>

S&T HOLDINGS CO LTD

Ticker	036530
CUSIP	
ISIN	KR7036530004
SEDOL	6223328
Country of Domicile	KR
Profile	S&T Holdings, through its ownership of S&T Motiv Co. Ltd., manufactures civilian variants of the K5 semi-automatic pistol.

As of December 2013, the company owned 43.84 percent of S&T Motiv.

S&T MOTIV CO., LTD

Ticker	064960
CUSIP	
ISIN	KR7064960008
SEDOL	6515434
Country of Domicile	KR
Profile	<p>S&T Motiv (formerly S&T Daewoo Co. Ltd.) manufactures the DP-51 and DP-51C civilian variants of the K5 pistol.</p> <p>In March 2012, the company changed its name from S&T Daewoo to S&T Motiv.</p>

SMITH & WESSON HOLDING CORPORATION

Ticker	SWHC
CUSIP	831756101
ISIN	US8317561012
SEDOL	2568164
Country of Domicile	US
Profile	<p>Smith & Wesson Holding, through its wholly owned subsidiaries Smith & Wesson Corp. and Thompson/Center Arms Co. Inc., manufactures and exports revolvers, hand guns, modern sporting rifles with semi-automatic models, and hunting firearms for hunting, sports, and personal protection applications.</p> <p>In FY 2014, the company ended its agreement with Carl Walther GmbH to manufacture Walther firearms. In FY 2013, the company also ended its exclusive import and distribution agreement for Walther firearms. Carl Walther continues to manufacture Smith & Wesson's M&P 22 pistols until the end of fiscal 2015.</p>

STURM, RUGER & COMPANY, INC.

Ticker	RGR
CUSIP	864159108
ISIN	US8641591081

SEDOL	2856289
Country of Domicile	US
Profile	Sturm, Ruger & Co. designs and manufactures firearms, such as semi-automatic rifles, shotguns, pistols, and revolvers for personal, hunting, and sports applications. It sells its firearms under the Ruger brand.

THE KROGER CO.

Ticker	KR
CUSIP	501044101
ISIN	US5010441013
SEDOL	2497406
Country of Domicile	US
Profile	Kroger, through its wholly owned subsidiary Fred Meyer, sells and retails semi-automatic rifles, pistols, and cartridge ammunition for hunting. Its brands include Glock and Remington.

TUL'SKIY ORUZHEYNYI ZAVOD OAO

Ticker	tozz
CUSIP	
ISIN	RU0007661203
SEDOL	4878225
Country of Domicile	RU
Profile	<p>Tul'skiy oruzheynyi zavod, also known as the Tula Small Arms Plant, manufactures and sells hunting rifles, shotguns, and carbines for the civilian market.</p> <p>The company is still publicly trading in the Russian Trading System but has not reported/disclosed revenues since FY 2011.</p>

VERNEY CARRON SA

Ticker	MLVER
CUSIP	
ISIN	FR0006174496
SEDOL	5346505
Country of Domicile	FR

Profile	<p>Verney Carron manufactures and sells hunting rifles, shotguns, and other sporting guns. Its products include over-and-under shotguns, over-and-under rifles, bolt-action rifles, and custom-made hunting guns.</p> <p>In June 2013, the company informed MSCI ESG Research that it does not manufacture ammunition. It further clarified that Verney Carron-branded ammunition for hunters is marketed by a company called S.A.P.A. These are non-lethal, flashball and gas-cloud ammunition, and are therefore excluded from MSCI ESG Research's scope.</p>
---------	---

VISTA OUTDOOR INC.

Ticker	VSTO
CUSIP	928377100
ISIN	US9283771007
SEDOL	BVGC697
Country of Domicile	US
Profile	<p>Vista Outdoor produces rifles and shotguns for sporting and hunting applications, and retails ammunition.</p> <p>In February 2015, Vista Outdoor was formed when Orbital ATK Inc. (formerly Alliant Techsystems) spun-off its firearms manufacturing business. Orbital ATK, however, will supply Vista Outdoor with ammunition products as part of a continuing agreement between the two companies.</p>

WAL-MART STORES, INC.

Ticker	WMT
CUSIP	931142103
ISIN	US9311421039
SEDOL	2936921
Country of Domicile	US
Profile	<p>Wal-Mart Stores retails semi-automatic rifles, shotguns, pistols, and ammunition for hunting and sports shooting. Some of the brands it sells include CCI, Federal Ammunition, Mossberg, Remington, Savage Arms, and Winchester.</p> <p>In April 2012, the company told MSCI ESG Research that it does</p>

not disclose specific revenues from the sale of guns or ammunition. However, the company confirmed that it generates less than one percent of its total revenue from firearms retailing.

XTEK LTD

Ticker	XTE
CUSIP	
ISIN	AU000000XTE7
SEDOL	B0GYR26
Country of Domicile	AU
Profile	XTEK retails semi-automatic pistols, rifles, and ammunition for hunting and sport shooting. Its brands include BOGgear, Schultz & Larsen, and Sig Sauer.

XXL ASA

Ticker	XXL
CUSIP	
ISIN	NO0010716863
SEDOL	BQZHXB9
Country of Domicile	NO
Profile	XXL retails rifles and ammunition for hunting. Its brands include Heym, Tikka, and Weatherby.

RESPONSE SUMMARY

MSCI ESG Research has received seven definitive replies to the engagement letters since the survey began. Izhevskiy mashzavod OAO, Compagnie Financiere Richemont SA, Verney-Carron SA, and Dicks Sporting Goods, Inc. have refused to sign the Sandy Hook Principles. NOF Corporation has requested to be removed from the Covered Company list. Daicel Corporation has signed the Sandy Hook Principles and is therefore compliant.

In July 2015, the Airbus Group (formerly European Aeronautic Defence and Space Company EADS N.V.) was removed from the covered company list. The company sold its stake in Patria Oyj, which owns 50 percent of Nammo AS, a manufacturer of ammunition for rifles and handguns for hunting and sport shooting.

In February 2015, IMI plc was removed from the Covered Company list after it clarified that it had sold its Eley business, which manufactures sporting ammunition.

In August 2015, Vista Outdoor Inc. has been added to the Covered Company list when Orbital ATK Inc. (formerly Alliant Techsystems) spun-off its firearms manufacturing business. In addition, Metalico Inc. was removed from the covered company list after it sold its lead fabricating segment, which manufactures lead shots for recreational shooting.

Summaries of company responses are detailed below.

COMPAGNIE FINANCIERE RICHEMONT SA

Compliant: No
Contact: Sophie Cagnard

On January 26, 2015 and January 10, 2014 Ms. Isabelle Janin replied to the annual engagement request on behalf of Ms. Sophie Cagnard. As per their response, their position remains the same as it was on August 2013.

On August 27, 2013 Compagnie Financiere Richemont SA declined to sign the Sandy Hook Principles.

Ms. Cagnard explained that the sale of their rifles account for less than 0.05% of the company's sales and represent less than 150 units a year. All of these sales are generated by a single store located in London, Maison Purdey. Maison Purdey does not wholesale its rifles. Due to this situation the company is not able to sign the Sandy Hook Principles.

The company highlighted that Mr. Gary Saage, Richemont’s CEO, supports the efforts of the Philadelphia Board of Pensions & Retirement. Both Mr. Saage and his children attended the Sandy Hook Elementary School.

DAICEL CORPORATION

Compliant: Yes
 Contact: Masahiro Hirokawa

On February 26, 2014 Mr. Masahiko Hirokawa, on behalf of the company, signed the Sandy Hook principles. The signed document was sent along with a previous report. The company is currently preparing to respond to the annual compliance survey sent on January 2015.

In his 2014 reply, Mr. Hirokawa described the procedures implemented by the company in relation to the sale and manufacture of their products. These measures involve restricting sales to include only to those distributors located in Japan and checking whether individual buyers possess valid certificates of receipt for explosives issued by the National Police Agency.

While Mr. Hirokawa clarified that they cannot take part in efforts to strengthen firearms restrictions in the United States on account of their operations being limited only to the Japanese domestic market, he affirmed the company’s commitment to promote background checks, firearms safety awareness, and transparency in disclosing firearms sales data to relevant authorities.

DICK’S SPORTING GOODS, INC.

Compliant: No
 Contact: John Hayes III

On January 26, 2015 Mr. John Hayes III responded to the engagement letter sent in January 2015. He stated that at this time, the company is not prepared to adopt the Sandy Hook Principles, but they will continue to monitor federal, state and local regulations regarding the sale and transfer of firearms and ammunition.

IMI PLC

Compliant: Not applicable
 Contact: Will Shaw

IMI PLC has been removed from the Covered Company list. Mr. Shaw disclosed that in October 2014, IMI sold its Eley business, which included all of the companies involved in the manufacture of ammunition. Mr. Shaw further stated the [Philadelphia Board of Pensions & Retirement] can now invest in IMI if desired.

IZHEVSKIY MASHZAVOD OAO

Compliant: No
 Contact: Jay Portz

Mr. Jay Portz from RWC Group LLC contacted MSCI ESG Research on behalf of Izhevskiy mashzavod OAO, also known as Izhmash and declined to sign the Sandy Hook Principles.

Izhevskiy mashzavod OAO is fully owned by a single shareholder and therefore considers it will remain unaffected by any action the City of Philadelphia Board of Pensions & Retirement will take if it does not sign the Sandy Hook Principles. The company states, “Izhmash is in compliance with all firearm laws and regulations. Safe and responsible firearm use is always Izhmash’s and our goal.”

The company has not yet responded to the engagement letter sent in January 2015.

NOF CORPORATION

Compliant: No
 Contact: Not provided

NOF Corporation has requested to be removed from the covered company list.

Nippo Kogyo Co. Ltd., a subsidiary of NOF Corporation, manufactures ammunition for hunting and sporting rifles and sells hunting rifles. Nippo Kogyo Co. Ltd. is compliant with the Swords and Firearms Control law in Japan. Nippo Kogyo Co. Ltd. does not export to other countries and limits its sales to Japan. For this reason NOF Corporation believes they should be removed from the Covered Company list.

The company has not yet responded to the engagement letter sent in January 2015.

VERNEY-CARRON SA

Compliant: No
 Contact: Jean Verney-Carron

On January 24, 2015 and January 8, 2014 Verney-Carron responded to the annual engagement request. In both occasions, Mr. Verney-Carron stated that there are no changes in their reply since July 2013. Mr. Verney-Carron requested to stop receiving these requests.

In June 2013, Verney-Carron SA declined to sign the Sandy Hook Principles followed by a confirmation of this decision on July 2013. The company considers the principles are not applicable to them as a non-US company. On July 2013, MSCI ESG Research had clarified to the company that these principles are not exclusive to US based companies.

Verney-Carron SA explained it is a small family owned company that does not seek investment. They also expressed to be “shocked” whenever a shooting rampage occurs in the United States, but do not believe their company is in any way responsible for them, nor that it will be in the future. Verney-Carron SA states “gun laws” in France are more restrictive than in the US, and that they believe the US importer abides by local laws. The company makes special emphasis in two remarks:

1. Verney-Carron SA does not seek any investment from external entities.
2. They believe the principles are written for US based companies.

CONTACT US

esgclientservice@msci.com

AMERICAS

+ 1 212 804 5299

EUROPE, MIDDLE EAST & AFRICA

+ 44 20 7618 2510

ASIA PACIFIC

+ 612 9033 9339

ABOUT MSCI ESG RESEARCH PRODUCTS AND SERVICES

MSCI ESG Research products and services are provided by MSCI ESG Research Inc., and are designed to provide in-depth research, ratings and analysis of environmental, social and governance-related business practices to companies worldwide. ESG ratings, data and analysis from MSCI ESG Research Inc. are also used in the construction of the MSCI ESG Indexes. MSCI ESG Research Inc. is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc.

ABOUT MSCI

For more than 40 years, MSCI's research-based indexes and analytics have helped the world's leading investors build and manage better portfolios. Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research.

Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research.

MSCI serves 98 of the top 100 largest money managers, according to the most recent P&I ranking.

For more information, visit us at www.msci.com.

NOTICE AND DISCLAIMER

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or disseminated in whole or in part without prior written permission from MSCI.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investable assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research Inc. and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of www.msci.com.

MSCI ESG Research Inc. is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD, FEA, InvestorForce, and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.