Geneva, November 07, 2019

MSCI GLOBAL MICRO CAP INDEXES

The following are changes in constituents for the MSCI Global Micro Cap Indexes

which will take place as of the close of November 26, 2019.

SUMMARY PER COUNTRY:

| | Nb of Securities | Nb of Securities |
|----------------|---------------------|---------------------|
| Country | Added | Deleted |
| AUSTRALIA | 41 | 18 |
| BELGIUM | 1 | 3 |
| SWITZERLAND | 8 | 5 |
| DENMARK | 2 | 0 |
| SPAIN | 2 | 2 |
| FRANCE | 5 | 7 |
| GERMANY | 11 | 7 |
| NETHERLANDS | 1 | 2 |
| ITALY | 9 | 4 |
| JAPAN | 41 | 26 |
| HONG KONG | 23 | 45 |
| SINGAPORE | 5 | 5 |
| NORWAY | 11 | 3 |
| AUSTRIA | 2 | 0 |
| USA | 111 | 65 |
| CANADA | 18 | 22 |
| SWEDEN | 23 | 8 |
| UNITED KINGDOM | 20 | 21 |
| FINLAND | 3 | 1 |
| NEW ZEALAND | 3 | 7 |
| PORTUGAL | 0 | 1 |
| IRELAND | 2 | 0 |
| ISRAEL | 13 | 10 |

MSCI AUSTRALIA INDEX

ALCIDION GROUP
ALITA RESOURCES
ALPHA HPA
ALTHEA GROUP HOLDINGS
ANIMOCA BRANDS CORP
BEACON MINERALS
BIGTINCAN HOLDINGS
BLACKWALL PROPERTY TRUST
BOSS RESOURCES

DOSS RESOURCES

BOTANIX PHARMACEUTICALS
CAPRICORN METALS

ELIXINOL GLOBAL
ENVIROSUITE
GENETIC SIGNATURES
HELIOS ENERGY
KALIUM LAKES
KEYTONE DAIRY CORP
LIONTOWN RESOURCES
MACH7 TECHNOLOGIES

NEXT SCIENCE
OFX GROUP
OM HOLDINGS
ONEMARKET
OPTICOMM
PAINCHEK
PHYLOGICA

POINTSBET HOLDINGS

PPK GROUP
PROSPA GROUP
READYTECH HOLDINGS
SPECTRUM METALS
SPEEDCAST INTERNATIONAL

Deletions AVENIRA

BENITEC BIOPHARMA CENTURIA CAPITAL

CODAN

EML PAYMENTS

FITZROY RIVER CORP FREEDOM OIL AND GAS

IMF BENTHAM IRONBARK ZINC ISIGNTHIS

KORE POTASH UK CDI LIFESTYLE COMMUNITIES LIVING CELL TECHNOLOGIES

NICKEL MINES

OPTHEA

PERSEUS MINING

POLYNOVO

RAMELIUS RESOURCES

STAVELY MINERALS SYRAH RESOURCES UNITI GROUP US MASTERS RESIDENTIAL VIVA LEISURE WAGNERS HOLDING CO WARREGO ENERGY WHISPIR WISR

MSCI BELGIUM INDEX

Additions ACACIA PHARMA GROUP (BE)

ASCENCIO ATENOR TINC COMM

Deletions

Deletions

MSCI SWITZERLAND INDEX

Additions Deletions

ALUFLEXPACK KUROS BIOSCIENCES LASTMINUTE.COM BY HOLDING CASSIOPEA LUMX GROUP

EDISUN POWER EUROPE THURGAUER KANTONALBANK

FUNDAMENTA REAL ESTATE WARTECK INVEST

PHOENIX MECANO INH SCHMOLZ + BICKENBACH VON ROLL HOLDING INHABER

MSCI DENMARK INDEX

Additions BANG & OLUFSEN B EGNSINVEST EJD TYS

None

MSCI SPAIN INDEX

Additions Deletions

AUDAX RENOVABLES ERCROS

VERTICE TRESCIENTOS INCLAM

MSCI FRANCE INDEX

Additions Deletions BOURBON CORPORATION AMOEBA ARCHOS ESSO GRAINES VOLTZ BIOM UP BIOPHYTIS HAULOTTE GROUP RALLYE KERLINK NEOVACS YMAGIS

MSCI GERMANY INDEX

Deletions Additions AUMANN DATAGROUP

DEUTSCHE IND GRUNDBESITZ CR CAPITAL REAL ESTATE

DFV DEUTSCHE FAMILIENVER ELUMEO EDAG ENGINEERING GROUP NEXUS FCR IMMOBILIEN STARAMBA H&R WINDELN DE MYHAMMER HOLDING ZEAL NETWORK

NORTHERN BITCOIN

SURTECO

VILLEROY & BOCH VORZUG WALLSTREET ONLINE

MSCI NETHERLANDS INDEX

Additions Deletions PROOR THERAPEUTICS CURETIS KARDAN NV

MSCI ITALY INDEX

Additions ALKEMY BIO ON

BIODUE COMER INDUSTRIES

TNTRED

ITALIAN EXHIBITION GROUP

MAILUP RISANAMENTO SICIT GROUP Deletions BF HOLDING

COSE BELLE D'ITALIA GAMENET GROUP

GAROFALO HEALTH CARE

MSCI JAPAN INDEX

Additions ASAKIIMA

BANK OF INNOVATION

BEING

BENEFIT JAPAN CANDEAL CHIMNEY COPRO HOLDINGS

FEEDFORCE GEECHS HOLON CO INTERTRADE CO

JAPAN HOSPICES HOLDINGS

KAONAVI

KUWAZAWA TRADING

LINICAL CO

MEIHO FACILITY WORKS MINKABU THE INFONOID

MTG

NAKABOHTEC CORROSION PRO NAKANO REFRIGERATORS CO

NATTY SWANKY

NIPPON ICHI SOFTWARE ORCHESTRA HOLDINGS

OSG

PROPERTY AGENT

RAREJOB

SANKEI REAL ESTATE

SEED CO SERVERWORKS SHINNIHONSEIYAKU

TAKEDA PRINTING (JP) TAKI CHEMICAL CO TENSHO ELECTRIC IND TOBILA SYSTEMS

TOKURA CORPORATION

TOUMEI

TSUKURUBA UPR

W SCOPE CORP

WELBE WTT7

Deletions FIXSTARS CORP FTGROUP CO G-7 HOLDINGS INSOURCE

IR JAPAN HOLDINGS JAPAN MED. DYNAMIC MKT KANAGAWA CHUO KOTSU CO KFC HOLDINGS JAPAN

KOZOSUSHI CO

MAXVALU NISHINIHON CO MAXVALU TOKAI CO MEDIA DO HOLDINGS CO MEISEI INDUSTRIAL CO

S POOL

SECOM JOSHINETSU CO SFP HOLDINGS CO SHIN NIPPON AIR TECH SHOWA AIRCRAFT INDUSTRY

SOTSU CO

STARTS PROCEED INV TAKARA LEBEN REIT TAKEDA PRINTING CO

TAMA HOME

TECHMATRIX CORPORATION

TRI CHEMICAL LAB

YOKOWO CO

MSCI HONG KONG INDEX Additions ANALOGUE HOLDINGS ASIA GROCERY DIST C BANNER INTL HLDGS CHIHO ENVIRONMENTAL (HK) CHINA HUARONG ENERGY CO CK LIFE SCIENCES INTL COMMON SPLENDOR INT (HK) DADI INTERNATIONAL (HK) EARTHASIA INTL HLDGS EMPEROR CAPITAL GROUP ETERNITY INVESTMENT (HK) GAIN PLUS HOLDINGS HILONG HOLDING (HK) INNOVAX HOLDINGS KATO (HK) HLDGS

Deletions APTORUM GROUP A AUSTAR LIFESCIENCES AUX INTERNATIONAL HLDGS BAOFENG MODERN INTL BIRMINGHAM SPORTS HLDGS BOILL HEALTHCARE HLDGS CHEVALIER INTL CHINA BAOLI TECH (HK) CHINA DIGITAL CULTURE CHINA ECO FARMING CHINA SMARTPAY GRP HLDGS CHONG KIN GROUP HOLDINGS CLASSIFIED GROUP HLDGS D&G TECHNOLOGY HLDG DAIDO GROUP DAOHE GLOBAL GROUP

LING YUI HOLDINGS

MANPOWERGROUP GREATER
MOBI DEVELOPMENT CO
PANASIALUM HOLDINGS
S.A.I LEISURE GROUP
TAI HING GROUP HOLDINGS
TIME WATCH INVESTMENTS
WANG YANG HOLDINGS

DESON DEV INTL HOLDINGS DREAMEAST GROUP DTXS SILK ROAD INV HLDGS GLOBAL STRATEGIC GROUP GRAND MING GROUP HLDGS GT GROUP HOLDINGS GURU ONLINE HLDGS HAO WEN HOLDINGS HONG KONG FINANCE INVEST IDT INTERNATIONAL JETE POWER HOLDINGS LARRY JEWELRY INTL CO MAXNERVA TECHNOLOGY SVCS MILAN STATION HLDGS MILLENNIUM PACIFIC GROUP MULTIFIELD INTERNATIONAL NEWAY GROUP HOLDINGS O NET TECHNOLOGIES (HK) PIZU GROUP HOLDINGS ROMA GROUP S CULTURE INTL HOLDINGS SAMSON PAPER HOLDINGS SANAI HEALTH IND GRP CO SINO-LIFE GROUP SINOPHARM TECH HLDGS(HK) TITAN PETROCHEMICALS GRP UNITY INVESTMENTS HLDGS VONGROUP YUNNAN ENERGY INTL CO

MSCI SINGAPORE INDEX
Additions
ARA US HOSPITALITY TRUST
GALLANT VENTURE
HONG FOK CORP
HOUR GLASS (THE)
HRNETGROUP

Deletions
ADVANCED HOLDINGS
HIAP SENG ENGINEERING
LEADER ENVIRONMENTAL
SAKAE HOLDINGS
UNION STEEL HOLDINGS

MSCI NORWAY INDEX
Additions
2020 BULKERS
AKASTOR
FJORD1
KLAVENESS COMBINATION
KONGSBERG AUTOMOTIVE
NORBIT
NORDIC NANOVECTOR
OKEA
SCANSHIP HOLDING
SEADRILL LTD
ULTIMOVACS

Deletions BELSHIPS NORWEGIAN ENERGY CO AS SCOTTISH SALMON CO

MSCI AUSTRIA INDEX Additions ADDIKO BANK FREQUENTIS

Deletions None

MSCI USA INDEX
Additions
ABEONA THERAPEUTICS
ACCURAY
ACORDA THERAPEUTICS
ADURO BIOTECH
APPLIED OPTOELECTRONICS
APPLIED THERAPEUTICS
ARCTURUS THERAPEUTIC(US)
ARLINGTON ASSET INV A
ARMSTRONG FLOORING
ASSERTIO THERAPEUTICS
ATRECA A
AVENUE THERAPEUTICS

Deletions
ADVAXIS
ADVERUM BIOTECHNOLOG
AEVI GENOMIC MEDICINE
AMERICAN SOFTWARE A
ATLAS FINANCIAL HOLDINGS
BANK FIRST CORPORATION
BARNWELL INDUSTRIES
BIODELIVERY SCIENCE INTL
BORQS TECHNOLOGIES
CANCER GENETICS
CAPITAL CITY BANK GROUP

BIGLARI HOLDINGS A BIGLARI HOLDINGS B

CALVXT

CAMBIUM NETWORKS

CAROLINA TRUST BANCSHARE

CASTLE BIOSCIENCES CASTLIGHT HEALTH B

CRDMD

CINCINNATI BELL CITI TRENDS CIVEO CORPORATION CLOVIS ONCOLOGY

COMSCORE

CONCRETE PUMPING HLDGS CONTAINER STORE GROUP COVIA HOLDINGS CORP CYREN US

DASEKE

DYADIC INTERNATIONAL ENTRAVISION COMMU A ESTABLISHMENT LABS HLDGS EXELA TECHNOLOGIES

EXICURE EXPRESS

FIESTA RESTAURANT GRP

FIRST NATIONAL

FIVE PRIME THERAPEUTICS

FLUENT

FORUM ENERGY TECH INC FRANKLIN FINL SVCS FRONTIER COMMUNICATIONS FTS INTERNATIONAL FULCRUM THERAPEUTICS

GLYCOMIMETICS

GTY TECHNOLOGY HOLDINGS

HT CRUSH

HIGHPOINT RESOURCES CORP

HIREOUEST HOOKIPA PHARMA IDEANOMICS INOVIO PHARMACEUTICALS

INTELLICHECK MOBILISA KALVISTA PHARMACEUTICALS KARUNA THERAPEUTICS KIMBELL ROYALTY PARTNERS KINIKSA PHARMA A

KLX ENERGY SERVICES KURA SUSHI USA A LIVEXLIVE MEDIA MAGENTA THERAPEUTICS MAINSTREET BANK MALLINCKRODT

MAMMOTH ENERGY SERVICES MAYVILLE ENGINEERING CO MINERVA NEUROSCIENCES MOHAWK GROUP HOLDINGS MONTAGE RESOURCES CORP

MORPHIC HOLDING NESCO HOLDINGS

NEPHROS

NEUBASE THERAPEUTICS

NINE ENERGY SERVICE

NOODLES & CO A

NOVAVAX

PARKER DRILLING

PERSONALIS

PIONEER BANCORP

POSTAL REALTY TRUST A PRECISION BIOSCIENCES

PREVAIL THERAPEUTICS

PROTECTIVE INS CORP B

PURPLE INNOVATION A RANPAK HOLDINGS A

RICHMOND MUTUAL BANCORP

RING ENERGY

CITY OFFICE REIT CLEVELAND BIOLABS CNB FINANCIAL CORP CORINDUS VASCULAR

CRYOPORT CUTERA

CYCLACEL PHARMACEUTICALS DESTINATION MATERNITY

DIGIMARC CORP DIGIRAD CORP DIGITAL TURBINE DOVA PHARMA ENSERVCO CORP FORTERRA (US) FRANKLIN COVEY CO

GEE GROUP

GEMPHIRE THERAPEUTICS GLOBAL MEDICAL REIT GOOSEHEAD INSURANCE A GREENPRO CAPITAL

IES HOLDINGS

TMDTN.T

INTL MONEY EXPRESS

INVIVO THERAPEUTICS HLDG

JASON INDUSTRIES JERNIGAN CAPITAL KODIAK SCIENCES LANNETT CO

MAXAR TECHNOLOGIES(US) MIDWESTONE FIN GRP (NEW) NACCO INDUSTRIES A (NEW)

NANOVIRICIDES

NAPCO SECURITY TECH

NEONODE

NRC GROUP HOLDINGS OPTION CARE HEALTH

OWENS & MINOR

PAYSIGN

REPLIMUNE GROUP

REXAHN PHARMACEUTICALS

RUBICON PROJECT

SAEXPLORATION HOLDINGS SAFETY INCOME & GROWTH SIGA TECHNOLOGIES SIMULATIONS PLUS

STERLING CONSTRUCTION CO

SUMMER INFANT

TRANS WORLD ENTMT CORP

TROVAGENE VECTRUS

VIVEVE MEDICAL WESTWATER RESOURCES YIELD10 BIOSCIENCE

ROAN RESOURCES A ROCKWELL MEDICAL SACHEM CAPITAL SANDRIDGE ENERGY SCIPLAY A SENSEONICS HOLDINGS INC SHOTSPOTTER SOLITON SORRENTO THERAPEUTICS SOUTH PLAINS FINANCIAL SPOK HOLDINGS SYNTHORX TAILORED BRANDS TETRA TECHNOLOGIES TILE SHOP HLDGS TITAN INTERNATIONAL TRANSENTERIX TRANSMEDICS GROUP TREVI THERAPEUTICS UNIT CORP VACCINEX VERTTTV XPEL YRC WORLDWIDE

MSCI CANADA INDEX Additions ALEAFIA HEALTH ATHABASCA OIL BSR REIT CALFRAC WELL SERVICES CANNTRUST HOLDINGS CARDINAL ENERGY LTD DOREL INDUSTRIES B FIRE & FLOWER HOLDINGS GREEN ORGANIC DUTCH HLDG MEDICAL FACILITIES PATRIOT ONE TECHNOLOGIES PRO REIT PROFOUND MEDICAL RESOLUTE FOREST (CA) RESVERLOGIX TREVALI MINING TRICAN WELL SERVICE ZENABIS GLOBAL

Additions 24SEVENOFFICE AZELIO BRAVIKEN LOGISTIK CATENA MEDIA FASTATOR FM MATTSSON MORA GROUP B GREATER THAN HALDEX HAMLET PHARMA INTERVACC K2A KNAUST & ANDERSSON B KALLEBACK PPTY INVEST MENTICE PAXMAN PHASE HOLOGRAPHIC IMAG PROBI AB Q-LINEA QUICKBIT EU SENZIME SURGICAL SCIENCE SWEDEN TORSLANDA PROPERTY INV

MSCI SWEDEN INDEX

Deletions ALTAGAS CANADA ANDREW PELLER A CHINOOK ENERGY CONIFEX TIMBER DELPHI ENERGY ENTREC CORP GDI INTEGRATED FACILITY LEAGOLD MINING MAINSTREET EQUITY CORP MINTO APARTMENT REIT NUVO PHARMACEUTICALS PARK LAWN PERPETUAL ENERGY PETRUS RESOURCES PRAIRIE PROVIDENT RES REAL MATTERS ST AUGUSTINE GOLD&COPPER STORNOWAY DIAMOND TERANGA GOLD CORP TRANSAT A.T. TRILLIUM THERAPEUTICS WESDOME GOLD MINES

Deletions
BINERO GROUP
CIBUS NORDIC REAL ESTATE
CREADES
MYFC HOLDING
NP3 FASTIGHETER
POWERCELL SWEDEN
RNB RETAIL AND BRANDS
VITEC SOFTWARE GROUP

TRE KRONOR PROPERTY VOLATI

MSCI UNITED KINGDOM INDEX

Additions

ACCESSO TECHNOLOGY GROUP
ARGENTEX GROUP

BIDSTACK GROUP BRICKABILITY GROUP

COSTAIN GROUP

EDDIE STOBART LOGISTICS

ESSENSYS

EVR HOLDINGS GAN GOOCH & HOUSEGO

IMPACT HEALTHCARE REIT

INDEPENDENT OIL & GAS

KIER GROUP LOUNGERS

M&C SAATCHI PENDRAGON SHANTA GOLD

TEN LIFESTYLE GROUP

URBAN EXPOSURE

MSCI FINLAND INDEX

Additions INCAP LEHTO GROUP

VMP

MSCI NEW ZEALAND INDEX

Additions

NAPIER PORT HOLDINGS PLEXURE GROUP VISTA GROUP INTL

MSCI PORTUGAL INDEX

Additions None

MSCI IRELAND INDEX

Additions DATALEX UNIPHAR

MSCI ISRAEL INDEX

Additions

ALTSHULER SHAHAM
AUTOMATIC BANK SERVICES
ENLIVEX THERAPEUTICS
FRESHMARKET

GAMIDA CELL GOLDEN HOUSE

HANAN MOR GROUP HOLDINGS RANI ZIM SHOPPING CTRS SEACH MEDICAL GROUP

TEL AVIV STOCK EXCHANGE
TUFIN SOFTWARE TECH

ZMH HAMMERMAN

ZVI SARFATI & SONS INV

Deletions ALPHA FX GROUP ANGUS ENERGY

APTITUDE SOFTWARE GROUP BORDERS & SOUTHERN PETRO

DISCOVERIE GROUP
ELAND OIL & GAS

EVE SLEEP

FIRESTONE DIAMONDS

GLI FINANCE GYM GROUP HUNTSWORTH

IMPAX ASSET MANAGEMENT

JAYWING

LIONTRUST ASSET MGMT

MOTIF BIO MPORIUM GROUP NETSCIENTIFIC OCEAN OUTDOOR

RANDALL & QUILTER INV REAL ESTATE CREDIT INV

TANFIELD GROUP

Deletions EQ OYJ

Deletions ARVIDA GROUP BRISCOE GROUP KATHMANDU HOLDINGS

SANFORD

SCALES CORPORATION STRIDE STAPLED GROUP WAREHOUSE GROUP

Deletions INAPA

Deletions None

Deletions

ARCTURUS THERAPEUTICS ASHTROM PROPERTIES BRILL SHOE INDUSTRIES CAN FITE BIOPHARMA

CYREN

ENLIGHT RENEWABLE ENERGY INTERNET GOLD-GOLDEN LNS

MEGA OR HOLDINGS REWALK ROBOTICS SUPERCOM (USD)

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 redisseminated 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 strateov.
- 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 investible 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.

© 2019 MSCI. All rights reserved.

About MSCI

For more than four decades, MSCI (NYSE: MSCI) has helped global investors build and manage better portfolios. Our research-based tools and services provide our clients with deeper insights into drivers of risk and performance, broad asset class coverage and innovative ways to bring investment strategies to market. Our offerings include indexes, data, analytical models, regulatory reporting and ESG research. MSCI's clients include 95 of the world's 100 largest money managers, as ranked by P&I. For more information, visit us at www.msci.com.