

GLOBAL INDUSTRY CLASSIFICATION STANDARD (GICS®) METHODOLOGY

Guiding Principles and Methodology for GICS

August 2024

Contents

Outline of the GICS® Methodology Book	3
Section 1: Introduction	4
1.1 Overview of GICS	5
1.2 The GICS Structure	6
1.3 Philosophy and objectives of GICS	13
Section 2: Companies Eligible for GICS Classification	14
Section 3: Guidelines for GICS Classification	15
3.1 Classification by revenue and earnings.....	15
3.2 Propagation of GICS from company level to security level.....	16
3.3 Source of information used for GICS classification	16
Section 4: Review of GICS Classification	17
Section 5: GICS Structure Review	18
Section 6: GICS Governance by MSCI And S&P Dow Jones Indices	19
Section 7: GICS Sub-Industry Definitions	20
Section 8: MSCI Fixed Income Sector Classification Guidelines	55
8.1 Fixed income universe eligible for classification	55
8.1.1 Classification of a company that has issued both equity and corporate bonds.....	55
8.1.2 Classification of a company that has issued only corporate bonds	56
8.2 Source of information used for the GICS classification of fixed income.....	57
8.3 Maintenance of GICS for companies that have issued corporate bonds	57
8.3.1 Ongoing review.....	57
8.3.2 Impact of GICS structure review	57
Appendix 1: Changes to the GICS Methodology Book	58

Outline of the GICS® Methodology Book

This Methodology book primarily provides details on the guidelines used by both MSCI and S&P Dow Jones Indices to assign Global Industry Classification Standard (GICS®) to companies that have issued equity securities.

Section 1 introduces GICS and its philosophy and objectives.

Section 2 details the eligibility for GICS classification.

Section 3 explains the guidelines used by MSCI and S&P Dow Jones Indices to classify companies that have issued equity securities under the GICS framework.

Section 4 details the review of GICS at the company level.

Section 5 explains the GICS Structure Review process undertaken by MSCI and S&P Dow Jones Indices to ensure that the GICS Structure remains relevant and up-to-date.

Section 6 highlights GICS governance policy that includes the GICS Operations Committee, with members from both MSCI and S&P Dow Jones Indices.

Section 7 details the GICS Sub-Industry level definitions.

Section 8 details MSCI's guidelines for leveraging GICS for the classification of companies that have issued corporate bonds.

This book was first published on 7 January 2020 and last updated in August 2024.

Section 1: Introduction

In 1999, the Global Industry Classification Standard (GICS) was developed by MSCI in collaboration with S&P Dow Jones Indices to provide an efficient, detailed and flexible tool for use in the investment process. It is designed to respond to the global financial community’s need for a global, accurate, complete and widely accepted approach to defining industries and classifying securities by industry. Its universal approach to industry classification aims to improve transparency and efficiency in the investment process.

The key features of the GICS Structure are that it is:

- Universal: the Structure applies to companies globally.
- Reliable: the Structure correctly reflects the current state of industries in the equity investment universe.
- Flexible: the Structure offers four levels of analysis, ranging from the most general Sector to the most specialized Sub-Industry.
- Evolving: Annual Reviews are conducted by MSCI and S&P Dow Jones Indices to ensure that the Structure remains fully representative of today’s global markets.
- The GICS Structure presented in this document is the latest Structure post our recent major reviews that included the creation of a new Sector for Real Estate that was carved out from the Financials Sector and transformation of the Telecommunication Services Sector as the Communication Services Sector.



1.1 Overview of GICS

To provide the level of precision critical in the investment process, the GICS is designed with four levels of classifications that includes 11 Sectors, 25 Industry Groups, 74 Industries, and 163 Sub-Industries.

The GICS has 11 Sector classifications:

- Energy
- Materials
- Industrials
- Consumer Discretionary
- Consumer Staples
- Health Care
- Financials
- Information Technology
- Communication Services
- Utilities
- Real Estate

GICS classifications can be presented in either text or numeric formats. The complete GICS classification for each company is an 8-digit code with text description. The hierarchical design of the 8-digit coding system allows for easy transition between GICS tiers.

Definitions of GICS Sub-Industries are provided in Section 7.

1.2 The GICS Structure

10 Energy

1010 Energy

- 101010 Energy Equipment & Services**
 - 10101010 Oil & Gas Drilling
 - 10101020 Oil & Gas Equipment & Services
- 101020 Oil, Gas & Consumable Fuels**
 - 10102010 Integrated Oil & Gas
 - 10102020 Oil & Gas Exploration & Production
 - 10102030 Oil & Gas Refining & Marketing
 - 10102040 Oil & Gas Storage & Transportation
 - 10102050 Coal & Consumable Fuels

15 Materials

1510 Materials

- 151010 Chemicals**
 - 15101010 Commodity Chemicals
 - 15101020 Diversified Chemicals
 - 15101030 Fertilizers & Agricultural Chemicals
 - 15101040 Industrial Gases
 - 15101050 Specialty Chemicals
- 151020 Construction Materials**
 - 15102010 Construction Materials
- 151030 Containers & Packaging**
 - 15103010 Metal, Glass & Plastic Containers
 - 15103020 Paper & Plastic Packaging Products & Materials
- 151040 Metals & Mining**
 - 15104010 Aluminum
 - 15104020 Diversified Metals & Mining
 - 15104025 Copper
 - 15104030 Gold
 - 15104040 Precious Metals & Minerals
 - 15104045 Silver
 - 15104050 Steel
- 151050 Paper & Forest Products**
 - 15105010 Forest Products
 - 15105020 Paper Products

20 Industrials

2010 Capital Goods

- 201010 Aerospace & Defense**
20101010 Aerospace & Defense
- 201020 Building Products**
20102010 Building Products
- 201030 Construction & Engineering**
20103010 Construction & Engineering
- 201040 Electrical Equipment**
20104010 Electrical Components & Equipment
20104020 Heavy Electrical Equipment
- 201050 Industrial Conglomerates**
20105010 Industrial Conglomerates
- 201060 Machinery**
20106010 Construction Machinery & Heavy Transportation Equipment
20106015 Agricultural & Farm Machinery
20106020 Industrial Machinery & Supplies & Components
- 201070 Trading Companies & Distributors**
20107010 Trading Companies & Distributors

2020 Commercial & Professional Services

- 202010 Commercial Services & Supplies**
20201010 Commercial Printing
20201050 Environmental & Facilities Services
20201060 Office Services & Supplies
20201070 Diversified Support Services
20201080 Security & Alarm Services
- 202020 Professional Services**
20202010 Human Resource & Employment Services
20202020 Research & Consulting Services
20202030 Data Processing & Outsourced Services

2030 Transportation

- 203010 Air Freight & Logistics**
20301010 Air Freight & Logistics
- 203020 Passenger Airlines**
20302010 Passenger Airlines
- 203030 Marine Transportation**
20303010 Marine Transportation
- 203040 Ground Transportation**
20304010 Rail Transportation
20304030 Cargo Ground Transportation
20304040 Passenger Ground Transportation
- 203050 Transportation Infrastructure**
20305010 Airport Services
20305020 Highways & Railtracks
20305030 Marine Ports & Services

 **25 Consumer Discretionary**

2510 Automobiles & Components

- 251010 Automobile Components**
 - 25101010 Automotive Parts & Equipment
 - 25101020 Tires & Rubber
- 251020 Automobiles**
 - 25102010 Automobile Manufacturers
 - 25102020 Motorcycle Manufacturers

2520 Consumer Durables & Apparel

- 252010 Household Durables**
 - 25201010 Consumer Electronics
 - 25201020 Home Furnishings
 - 25201030 Homebuilding
 - 25201040 Household Appliances
 - 25201050 Housewares & Specialties
- 252020 Leisure Products**
 - 25202010 Leisure Products
- 252030 Textiles, Apparel & Luxury Goods**
 - 25203010 Apparel, Accessories & Luxury Goods
 - 25203020 Footwear
 - 25203030 Textiles

2530 Consumer Services

- 253010 Hotels, Restaurants & Leisure**
 - 25301010 Casinos & Gaming
 - 25301020 Hotels, Resorts & Cruise Lines
 - 25301030 Leisure Facilities
 - 25301040 Restaurants
- 253020 Diversified Consumer Services**
 - 25302010 Education Services
 - 25302020 Specialized Consumer Services

2550 Consumer Discretionary Distribution & Retail

- 255010 Distributors**
 - 25501010 Distributors
- 255030 Broadline Retail**
 - 25503030 Broadline Retail
- 255040 Specialty Retail**
 - 25504010 Apparel Retail
 - 25504020 Computer & Electronics Retail
 - 25504030 Home Improvement Retail
 - 25504040 Other Specialty Retail
 - 25504050 Automotive Retail
 - 25504060 Homefurnishing Retail

 **30 Consumer Staples**

3010 Consumer Staples Distribution & Retail

- 301010 Consumer Staples Distribution & Retail**
 - 30101010 Drug Retail
 - 30101020 Food Distributors
 - 30101030 Food Retail
 - 30101040 Consumer Staples Merchandise Retail

3020 Food, Beverage & Tobacco

- 302010 Beverages**
 - 30201010 Brewers
 - 30201020 Distillers & Vintners
 - 30201030 Soft Drinks & Non-alcoholic Beverages
- 302020 Food Products**
 - 30202010 Agricultural Products & Services
 - 30202030 Packaged Foods & Meats
- 302030 Tobacco**
 - 30203010 Tobacco

3030 Household & Personal Products

- 303010 Household Products**
 - 30301010 Household Products
- 303020 Personal Care Products**
 - 30302010 Personal Care Products

 **35 Health Care**

3510 Health Care Equipment & Services

- 351010 Health Care Equipment & Supplies**
 - 35101010 Health Care Equipment
 - 35101020 Health Care Supplies
- 351020 Health Care Providers & Services**
 - 35102010 Health Care Distributors
 - 35102015 Health Care Services
 - 35102020 Health Care Facilities
 - 35102030 Managed Health Care
- 351030 Health Care Technology**
 - 35103010 Health Care Technology

3520 Pharmaceuticals, Biotechnology & Life Sciences

- 352010 Biotechnology**
 - 35201010 Biotechnology
- 352020 Pharmaceuticals**
 - 35202010 Pharmaceuticals
- 352030 Life Sciences Tools & Services**
 - 35203010 Life Sciences Tools & Services

● **40 Financials**

4010 Banks

- 401010 Banks**
 - 40101010 Diversified Banks
 - 40101015 Regional Banks

4020 Financial Services

- 402010 Financial Services**
 - 40201020 Diversified Financial Services
 - 40201030 Multi-Sector Holdings
 - 40201040 Specialized Finance
 - 40201050 Commercial & Residential Mortgage Finance
 - 40201060 Transaction & Payment Processing Services
- 402020 Consumer Finance**
 - 40202010 Consumer Finance
- 402030 Capital Markets**
 - 40203010 Asset Management & Custody Banks
 - 40203020 Investment Banking & Brokerage
 - 40203030 Diversified Capital Markets
 - 40203040 Financial Exchanges & Data
- 402040 Mortgage Real Estate Investment Trusts (REITs)**
 - 40204010 Mortgage REITs

4030 Insurance

- 403010 Insurance**
 - 40301010 Insurance Brokers
 - 40301020 Life & Health Insurance
 - 40301030 Multi-line Insurance
 - 40301040 Property & Casualty Insurance
 - 40301050 Reinsurance

45 Information Technology

4510 Software & Services

- 451020 IT Services**
 - 45102010 IT Consulting & Other Services
 - 45102030 Internet Services & Infrastructure
- 451030 Software**
 - 45103010 Application Software
 - 45103020 Systems Software

4520 Technology Hardware & Equipment

- 452010 Communications Equipment**
 - 45201020 Communications Equipment
- 452020 Technology Hardware, Storage & Peripherals**
 - 45202030 Technology Hardware, Storage & Peripherals
- 452030 Electronic Equipment, Instruments & Components**
 - 45203010 Electronic Equipment & Instruments
 - 45203015 Electronic Components
 - 45203020 Electronic Manufacturing Services
 - 45203030 Technology Distributors

4530 Semiconductors & Semiconductor Equipment

- 453010 Semiconductors & Semiconductor Equipment**
 - 45301010 Semiconductor Materials & Equipment
 - 45301020 Semiconductors

50 Communication Services

5010 Telecommunication Services

- 501010 Diversified Telecommunication Services**
 - 50101010 Alternative Carriers
 - 50101020 Integrated Telecommunication Services
- 501020 Wireless Telecommunication Services**
 - 50102010 Wireless Telecommunication Services

5020 Media & Entertainment

- 502010 Media**
 - 50201010 Advertising
 - 50201020 Broadcasting
 - 50201030 Cable & Satellite
 - 50201040 Publishing
- 502020 Entertainment**
 - 50202010 Movies & Entertainment
 - 50202020 Interactive Home Entertainment
- 502030 Interactive Media & Services**
 - 50203010 Interactive Media & Services

 **55 Utilities**

5510 Utilities

- 551010 Electric Utilities**
55101010 Electric Utilities
- 551020 Gas Utilities**
55102010 Gas Utilities
- 551030 Multi-Utilities**
55103010 Multi-Utilities
- 551040 Water Utilities**
55104010 Water Utilities
- 551050 Independent Power and Renewable Electricity Producers**
55105010 Independent Power Producers & Energy Traders
55105020 Renewable Electricity

 **60 Real Estate**

6010 Equity Real Estate Investment Trusts (REITs)

- 601010 Diversified REITs**
60101010 Diversified REITs
- 601025 Industrial REITs**
60102510 Industrial REITs
- 601030 Hotel & Resort REITs**
60103010 Hotel & Resort REITs
- 601040 Office REITs**
60104010 Office REITs
- 601050 Health Care REITs**
60105010 Health Care REITs
- 601060 Residential REITs**
60106010 Multi-Family Residential REITs
60106020 Single-Family Residential REITs
- 601070 Retail REITs**
60107010 Retail REITs
- 601080 Specialized REITs**
60108010 Other Specialized REITs
60108020 Self-Storage REITs
60108030 Telecom Tower REITs
60108040 Timber REITs
60108050 Data Center REITs

6020 Real Estate Management & Development

- 602010 Real Estate Management & Development**
60201010 Diversified Real Estate Activities
60201020 Real Estate Operating Companies
60201030 Real Estate Development
60201040 Real Estate Services

1.3 Philosophy and objectives of GICS

The way in which securities are classified into asset classes forms the basis of many important investment decisions. The relative merits of each security are judged primarily within these asset classes, and investment decisions are taken within this framework.

APPROACHES TO INDUSTRY CLASSIFICATION SCHEMES

Grouping companies based on industries is not a relatively straightforward task as multiple factors need to be evaluated in determining the classification that aptly reflects the business model of the company as well as adds value to the investment process. There are many approaches to developing industry classification schemes, some of which are discussed below.

At one extreme is the purely statistical approach, which is solely financial market- based and backward looking, using past returns. Aggregations are formed around correlation, often yielding non-intuitive groupings that are dissimilar across countries and regions. Another approach attempts to define a priori financial market-oriented groups or themes, such as cyclical, interest rate sensitive, etc. The difficulty, however, lies in finding widely accepted and relatively stable definitions for these themes.

Two other approaches begin with an economic perspective on companies. The first focuses on a production orientation while the other adopts a market or demand orientation in company analysis. The production-oriented approach was effective in the past in its analysis of the microstructure of industries from the producers' standpoint. For instance, it segregated goods and services on the premise that it was a different set of companies that provided each to consumers. As the structure of the global economy evolved, limitations of this approach became increasingly obvious. The ever-increasing share of discretionary income brought about by economic development, emergence of the service era, and the availability and accessibility of information with the advent of new communication technology has moved the emphasis from producers to consumers.

THE GICS: MARKET DEMAND-ORIENTED

The Global Industry Classification Standard is designed to be market demand- oriented in its analysis and classification of companies. For example, drawing the line between goods and services is becoming increasingly arbitrary as they are now commonly sold together. This distinction between goods and services is replaced by adopting the more market-oriented Sectors of "Consumer Discretionary" and "Consumer Staples", which group goods and services Sub-Industries.

In addition, the creation of large stand-alone Sectors such as Health Care, Information Technology and Communication Services accurately represents industries that provide significant value to the consumer in today's global and integrated economy. This further contributes to a more uniform distribution of weights among the 11 GICS Sectors.

Section 2: Companies Eligible for GICS Classification

Companies that have issued equity securities are eligible for a GICS classification.

If a company's subsidiary files separate financials to its reporting government agency, that subsidiary is considered a separate entity and classified independently under the GICS Methodology.

GICS is not assigned to supranationals, municipals, sovereigns, shell companies, mutual funds, or exchange traded funds.

Section 3: Guidelines for GICS Classification

The GICS is strictly hierarchical and thus a company can only belong to one grouping at each of the four levels.

3.1 Classification by revenue and earnings

In order to provide an accurate, complete and long-term view of the global investment universe, a company’s revenues often provide a more stable and precise reflection of its activities than earnings. Furthermore, industrial and geographical breakdowns of revenues are more commonly available than earnings broken down the same way for most companies. Nevertheless, company valuations are more closely related to earnings than revenues. Therefore, earnings remain an important secondary consideration in a company’s Industry Classification. In addition to revenue and earnings, market perception is also recognized as relevant for classification purposes.

As a general rule, a company is classified in the Sub-Industry whose definition most closely describes the business activities that generate more than 60% of the company’s revenues.

Example: Amazon.com, Inc.

2022 fiscal year	Sales
Online stores (Broadline Retail)	43%
Physical stores (Broadline Retail)	4%
Third-party seller services (Broadline Retail)	23%
Subscription services	7%
Advertising services	7%
Amazon Web Services (AWS)	16%
Other	1%
Total	100%

GICS level	GICS code	GICS description
Sector	25	Consumer Discretionary
Industry Group	2550	Consumer Discretionary Distribution & Retail
Industry	255030	Broadline Retail
Sub-Industry	25503030	Broadline Retail

However, a company engaged in two or more substantially different business activities, none of which contribute 60% or more of revenues, is classified in the Sub- Industry that provides the majority of both the company’s revenues and earnings.

When no Sub-Industry provides the majority of both the company’s revenues and earnings, the classification will be determined based on further research and analysis.

In addition, a company significantly diversified across three or more Sectors, none of which contributes the majority of revenues or earnings, is classified either in the Industrial Conglomerates Sub-Industry (Industrial Sector) or in the Multi-Sector Holdings Sub-Industry (Financials Sector).

Example: General Electric (US)

2022 fiscal year	Revenue	Profit/Loss
Aerospace	33%	74%
Renewable Energy	17%	-35%
Power	21%	19%
HealthCare	24%	42%
Corporate	5%	-
Total	100%	100%

GICS level	GICS code	GICS description
Sector	20	Industrials
Industry Group	2010	Capital Goods
Industry	201050	Industrial Conglomerates
Sub-Industry	20105010	Industrial Conglomerates

3.2 Propagation of GICS from company level to security level

GICS is assigned at the company level. Thus, all equity securities including ADRs and GDRs issued by a company have the same classification as the company.

A tracking stock issued by a parent company is classified based on its underlying business.

3.3 Source of information used for GICS classification

The primary source of information used for classification is a company’s annual reports and accounts. Other sources include broker reports and other published research literature. In the case of a new issue, the classification will be based primarily on the description of the company’s activities and pro forma results as given in the prospectus.

Section 4: Review of GICS Classification

A company's Sub-Industry classification will be reviewed either when a significant corporate restructuring occurs or when a new annual report is available. GICS reviews also occur upon client request.

In order to provide a stable Sub-Industry classification, when reviewing a company's classification, changes will be minimized in the Sub-Industry classification to the extent possible by disregarding temporary fluctuations in the results of a company's different activities.

Section 5: GICS Structure Review

MSCI and S&P Dow Jones Indices are committed to ensuring that the GICS Structure remains relevant and up-to-date. This is accomplished through an Annual Review of the Structure. This Review includes a detailed internal analysis to develop a proposal for potential structural changes and public request for comments and in-depth client consultations with various market participants as a means of obtaining feedback on proposed structural changes.

Further information on changes to the GICS Structure can be found on MSCI's website at www.msci.com/gics.

Section 6: GICS Governance by MSCI And S&P Dow Jones Indices

The GICS Methodology and Structure fall under the overall supervision of the GICS Operations Committee, with members from both MSCI and S&P Dow Jones Indices. The Committee will consult with the financial markets community as needed in order to keep the Methodology current and relevant.

MSCI and S&P Dow Jones Indices consider information about changes to the GICS Structure and related matters to be potentially price sensitive. Therefore, all Committee discussions are confidential.

Section 7: GICS Sub-Industry Definitions

Energy

ENERGY



101010

**Energy
Equipment &
Services**



10101010

Oil & Gas Drilling



Drilling contractors or owners of drilling rigs that contract their services for drilling wells.

10101020

Oil & Gas Equipment & Services



Manufacturers of equipment, including drilling rigs and equipment, and providers of supplies such as fractured silica and services to companies involved in the drilling, evaluation and completion of oil and gas wells.

This Sub-Industry includes companies that provide information and data services such as seismic data collection primarily to the oil & gas industry and distributors of oil & gas equipment products.

This Sub-Industry excludes oil spill services companies classified in the Environmental & Facilities Services Sub-Industry.

101020

**Oil, Gas &
Consumable
Fuels**



10102010

Integrated Oil & Gas



Integrated oil companies engaged in the exploration & production of oil and gas, as well as at least one other significant activity in either refining, marketing and transportation, or chemicals.

10102020

Oil & Gas Exploration & Production



Companies engaged in the exploration and production of oil and gas, not classified elsewhere.

10102030

Oil & Gas Refining & Marketing



Companies engaged in the refining and marketing of oil, gas and/or refined products not classified in the Integrated Oil & Gas or Independent Power Producers & Energy Traders Sub-Industries.

This Sub-Industry includes companies that produce ethanol, biodiesel, and eco-diesel fuels.

This Sub-Industry excludes retail automotive stores and convenience stores that primarily sell gasoline (retail gas stations), automotive components,

10102040

Oil & Gas Storage & Transportation

- Companies engaged in the storage and/or transportation of oil, gas and/or refined products, including diversified midstream natural gas companies, oil and refined product pipelines, coal slurry pipelines and oil & gas shipping companies.

This Sub-Industry includes distributors and dealers of petroleum products.

This Sub-Industry excludes natural gas transmission companies that operate gas pipeline systems and associated facilities designed for gas supply to end users that are classified in the Gas Utilities Sub-Industry under the Utilities Sector.

10102050

Coal & Consumable Fuels

- Companies primarily involved in the production and mining of coal, related products and other consumable fuels related to the generation of energy such as bituminous (thermal) coal, uranium, biomass, hydrogen, and petroleum coke.

This Sub-Industry excludes companies primarily producing gases classified in the Industrial Gases Sub-Industry and companies primarily mining for metallurgical (coking) coal used for steel production classified in the Steel Sub-Industry under the Materials Sector.

Materials



MATERIALS

151010
Chemicals


15101010

Commodity Chemicals

- Companies that primarily produce industrial chemicals and basic chemicals.

This Sub-Industry includes plastics, synthetic fibers & filaments, synthetic rubber products, films, commodity-based paints & pigments, carbon black, explosives, petroleum lubricating oils, greases, and petrochemicals.

**151020
Construction
Materials**

 **15102010
Construction
Materials**

- Manufacturers of construction materials, including sand, clay, gypsum, lime, aggregates, cement, concrete, bricks, and refractory materials.

This Sub-Industry excludes other finished or semi-finished building materials classified in the Building Products Sub-Industry.

**15101020
Diversified Chemicals**

- This Sub-Industry excludes chemical companies classified in the Diversified Chemicals, Fertilizers & Agricultural Chemicals, Industrial Gases or Specialty Chemicals Sub-Industries.
- Manufacturers of a diversified range of chemical products not classified in the Industrial Gases, Commodity Chemicals, Specialty Chemicals or Fertilizers & Agricultural Chemicals Sub-Industries.

**15101030
Fertilizers &
Agricultural Chemicals**

- Producers of fertilizers, pesticides, potash (including potash miners) or other agriculture-related chemicals, not classified elsewhere.

**15101040
Industrial Gases**

- Manufacturers of industrial gases such as Oxygen, Nitrogen, Hydrogen, Carbon Dioxide, Dry Ice, Helium, and Acetylene.

This Sub-Industry excludes Hydrogen used for the production of energy classified in the Coal & Consumable Fuels Sub-Industry.

**15101050
Specialty Chemicals**

- Companies that primarily produce high value-added chemicals used in the manufacture of a wide variety of products, including but not limited to fine chemicals, additives, advanced polymers, adhesives, sealants, and specialty paints, pigments & coatings.

This Sub-Industry includes manufacturers of fragrance and flavor chemicals used in the consumer goods industry and industrial enzyme manufacturers.

This Sub-Industry excludes raw materials and chemicals used specifically for battery production classified in the Electrical Components and Equipment Sub-Industry.

151030
Containers & Packaging

● **15103010**
Metal, Glass & Plastic Containers

● Manufacturers of metal, glass or plastic containers, including corks and caps.

This Sub-Industry excludes manufacturers of glassware classified in the Housewares & Specialties Sub-Industry under the Consumer Discretionary Sector.

15103020
Paper & Plastic Packaging Products & Materials

● Manufacturers of paper and cardboard containers & packaging, plastic packaging materials, wood containers, and related packaging products.

151040
Metals & Mining

● **15104010**
Aluminum

● Producers of aluminum and related products, including companies that mine or process bauxite and companies that recycle aluminum to produce finished or semi-finished products.

This Sub-Industry excludes companies that primarily produce aluminum building materials classified in the Building Products Sub-Industry.

15104020
Diversified Metals & Mining

● Companies engaged in the diversified production or extraction of metals and minerals, not classified elsewhere.

This Sub-Industry includes nonferrous metal mining (except bauxite), salt & borate mining, phosphate rock mining, sand & gravel mining, and other diversified mining operations. It also includes providers of on-site mining services to metal miners.

This Sub-Industry excludes iron ore mining classified in the Steel Sub-Industry, bauxite mining classified in the Aluminum Sub-Industry, and coal mining classified in either the Steel or Coal & Consumable Fuels Sub-Industries.

15104025
Copper

● Companies involved primarily in copper ore mining and companies that manufacture primary and basic copper products such as rods, tubes, and wires.

This Sub-Industry excludes manufacturers of copper wires used mainly for electrical purposes classified in the Electrical Components & Equipment Sub-Industry under the Industrials Sector.

**151050
Paper &
Forest
Products**

15104030

Gold

- Producers of gold and related products, including companies that mine or process gold and the South African finance houses which primarily invest in, but do not operate, gold mines.

15104040

Precious Metals & Minerals

- Companies mining precious metals and minerals not classified in the Gold Sub-Industry.

This Sub-Industry includes companies primarily mining platinum group metals, diamonds, and precious stones.

15104045

Silver

- Companies primarily mining silver.

This Sub-Industry excludes companies classified in the Gold or Precious Metals & Minerals Sub-Industries.

15104050

Steel

- Producers of iron and steel and related products, including iron ore mining and metallurgical (coking) coal mining used for steel production.

This Sub-Industry includes ferrous metal, iron and steel foundries.

● **15105010**

Forest Products

- Manufacturers of timber and related wood products.

This Sub-Industry includes timber tract operations, forest nurseries, and manufacturers of lumber and plywood for the building industry such as wood panels.

15105020

Paper Products

- Manufacturers of all grades of paper.

This Sub-Industry includes newsprint mills, converted paper product manufacturing, and pulp, paper & paperboard mills.

This Sub-Industry excludes companies specializing in paper packaging classified in the Paper & Plastic Packaging Products & Materials Sub-Industry.

Industrials



CAPITAL GOODS

201010

Aerospace & Defense



20101010

Aerospace & Defense



Manufacturers of civil or military aerospace and defense equipment, parts or products, such as defense electronics and space equipment.

This Sub-Industry includes military shipbuilding and companies that offer services to the defense industry, including support services, infrastructure services, operational support services, and supply chain & logistics management.

This Sub-Industry excludes companies that offer management & technology consulting services to government & defense organizations classified in the Research & Consulting Services Sub-Industry.

201020

Building Products



20102010

Building Products



Manufacturers of building components and home improvement products and equipment.

This Sub-Industry excludes lumber and plywood classified in the Forest Products Sub-Industry and cement and other materials classified in the Construction Materials Sub-Industry.

201030

Construction & Engineering



20103010

Construction & Engineering



Companies engaged in primarily non-residential construction.

This Sub-Industry includes civil engineering companies and large-scale contractors.

This Sub-Industry excludes companies classified in the Homebuilding Sub-Industry.

201040

Electrical Equipment



20104010

Electrical Components & Equipment



Companies that produce electric cables and wires, electrical components or equipment not classified in the Heavy Electrical Equipment Sub-Industry.

This Sub-Industry includes cables and wires, motors and generators (except automotive), wiring devices, electric lighting equipment, fuel cells, solar power systems, and batteries & light bulbs (except manufacturers of batteries and/or light bulbs who also market and distribute their products to end consumers). This Sub-Industry also includes raw

		<p>materials and chemicals used specifically for battery production.</p>
<p>201050 Industrial Conglomerates</p>	<p>20104020 Heavy Electrical Equipment</p> <p>20105010 Industrial Conglomerates</p>	<p>● Manufacturers of power-generating equipment and other heavy electrical equipment, including power turbines, heavy electrical machinery intended for fixed-use and large electrical systems.</p> <p>This Sub-Industry includes manufacturers of engines, power transmission equipment, and turbines & turbine generator set units.</p> <p>This Sub-Industry excludes cables and wires classified in the Electrical Components & Equipment Sub-Industry.</p> <p>● Industrial companies with diversified business activities in three or more GICS Sectors, none of which contributes a majority of revenues. Stakes held are predominantly of a controlling nature and stake holders maintain an operational interest in the running of the subsidiaries.</p> <p>This Sub-Industry excludes companies with diversified business activities across three or more GICS Sectors, none of which contributes a majority of revenues and where stakes held are predominantly of a non-controlling nature. They are classified in the Multi-Sector Holdings Sub-Industry under the Financials Sector.</p> <p>This Sub-Industry also excludes mono holding companies that invest in only one specific industry and are classified in the respective Sub-Industries.</p>
<p>201060 Machinery</p>	<p>20106010 Construction Machinery & Heavy Transportation Equipment</p>	<p>● Manufacturers of heavy duty trucks, rolling machinery, earth-moving & construction equipment, and related parts.</p> <p>This Sub-Industry includes non-military shipbuilding.</p>

<p>20106015</p> <p>Agricultural & Farm Machinery</p>	<p>●</p>	<p>Companies manufacturing agricultural machinery, farm machinery, and related parts.</p> <p>This Sub-Industry includes machinery used for the production of crops & agricultural livestock, agricultural tractors, planting & fertilizing machinery, fertilizer & chemical application equipment, and grain dryers & blowers.</p>
<p>20106020</p> <p>Industrial Machinery & Supplies & Components</p>	<p>●</p>	<p>Manufacturers of industrial machinery and industrial components.</p> <p>This Sub-Industry includes companies that manufacture presses, 3D printers & related supplies, machine tools, compressors, pollution control equipment, elevators, escalators, insulators, pumps, roller bearings and other metal fabrications.</p>
<p>201070</p> <p>Trading Companies & Distributors</p>	<p>●</p>	<p>20107010</p> <p>Trading Companies & Distributors</p> <p>Trading companies and distributors of industrial equipment and products.</p> <p>This Sub-Industry includes distributors of chemicals, construction materials, containers & packaging products, metals & minerals such as coal & ores, paper & forest products, building products and electrical equipment. It also includes lessors of aircraft, railcars and other transportation equipment as well as companies that engage in industrial machinery rental to other businesses.</p> <p>This Sub-Industry also includes companies distributing or wholesaling industrial equipment and products to other businesses using a proprietary online platform/website.</p>

COMMERCIAL & PROFESSIONAL SERVICES

<p>202010</p>	<p>●</p>	<p>20201010</p> <p>Commercial Printing</p> <p>Companies providing commercial printing services.</p> <p>This Sub-Industry includes printers primarily serving the media industry.</p>
----------------------	----------	---

**Commercial
Services &
Supplies**

20201050
Environmental &
Facilities Services

- Companies providing environmental and facilities maintenance services.
This Sub-Industry includes waste management, facilities management, pollution control services and carbon emission trading.
This Sub-Industry excludes large-scale water treatment systems classified in the Water Utilities Sub-Industry.

20201060
Office Services &
Supplies

- Providers of office services and manufacturers of office supplies and equipment, not classified elsewhere.
This Sub-Industry includes distributors of office equipment, products and supplies.

20201070
Diversified Support
Services

- Companies primarily providing labor oriented support services to businesses and governments.
This Sub-Industry includes companies offering airline & railway catering services, commercial cleaning services, equipment repair services, industrial maintenance services, industrial auction services, storage & warehousing services, uniform rental services, and companies engaged in storage, indexing & retrieval of physical documents. This Sub-Industry also includes debt recovery & collection companies that are hired by companies for collection from defaulters.
This Sub-Industry excludes debt collection companies that purchase debt portfolios at a discount from companies and subsequently recollect the same from the debtors and earn interest on debts, classified in the Consumer Finance Sub-Industry under the Financials Sector.
-

20201080

Security & Alarm
Services

- Companies providing security and protection services to business and governments.
This Sub-Industry includes companies providing services such as correctional facilities, security & alarm services, armored transportation & guarding.
This Sub-Industry excludes companies providing security software classified in the Systems Software Sub-Industry and home security services classified in the Specialized Consumer Services Sub-Industry. It also excludes companies manufacturing security system equipment classified in the Electronic Equipment & Instruments Sub-Industry.

202020
**Professional
Services**



20202010

Human Resource &
Employment Services

- Companies providing business support services relating to human capital management.
This Sub-Industry includes employment agencies, employee training, payroll processing, benefit & retirement support services, corporate & job seeker recruitment services, and online job portals generating revenue from fees or commissions for offering recruitment services to companies or job seekers.
This Sub-Industry excludes job portals that mainly publish job related information and generate revenue from advertising, classified in the Interactive Media & Services Sub-Industry under the Communication Services Sector.

20202020
Research &
Consulting Services

- Companies primarily providing research and consulting services to businesses and governments, not classified elsewhere.
- This Sub-Industry includes credit bureaus & credit agencies and companies involved in management consulting services, architectural design, business information or scientific research, marketing, and testing & certification services. It also includes providers of data, content and tools for diverse industries but excludes those that provide such products primarily to the financials industry classified in the Financial Exchanges & Data Sub-Industry under the Financials Sector.
- This Sub-Industry excludes companies providing information technology consulting services classified in the IT Consulting & Other Services Sub-Industry and marketing consulting services & market research companies classified in the Advertising Sub-Industry under the Communication Services Sector.

20202030
Data Processing &
Outsourced Services

- Providers of commercial data processing and/or business process outsourcing services.
- This Sub-Industry includes companies providing services for customer experience management, back-office automation, call center management, and investor communications.

TRANSPORTATION

203010
**Air Freight &
Logistics**

20301010
Air Freight &
Logistics

- Companies providing air freight transportation, courier & logistics services, including package & mail delivery and customs agents.
- This Sub-Industry excludes companies classified in the Passenger Airlines, Marine Transportation, Cargo Ground Transportation and Passenger Ground Transportation Sub-Industries.

203020
**Passenger
Airlines**

20302010
Passenger Airlines

- Companies providing primarily passenger air transportation.

<p>203030</p> <p>Marine Transportation</p>	<p><input checked="" type="radio"/> 20303010</p> <p>Marine Transportation</p>	<ul style="list-style-type: none"> ● Companies providing goods or passenger maritime transportation. <p>This Sub-Industry excludes cruise-ships classified in the Hotels, Resorts & Cruise Lines Sub-Industry and oil & gas shipping companies classified in the Oil & Gas Storage & Transportation Sub-Industry.</p>
<p>203040</p> <p>Ground Transportation</p>	<p><input checked="" type="radio"/> 20304010</p> <p>Rail Transportation</p> <hr/> <p>20304030</p> <p>Cargo Ground Transportation</p> <hr/> <p>20304040</p> <p>Passenger Ground Transportation</p>	<ul style="list-style-type: none"> ● Companies providing primarily goods and passenger rail transportation. ● Companies providing ground transportation services for goods and freight. ● Companies providing passenger ground transportation and related services, including bus, taxi, vehicle rental, ride sharing and on-demand ride sharing platforms, and other passenger logistics.
<p>203050</p> <p>Transportation Infrastructure</p>	<p><input checked="" type="radio"/> 20305010</p> <p>Airport Services</p> <hr/> <p>20305020</p> <p><input type="radio"/> Highways & Railtracks</p> <hr/> <p>20305030</p> <p><input type="radio"/> Marine Ports & Services</p>	<ul style="list-style-type: none"> ● Operators of airports and companies providing related services such as air traffic control and other support activities for air transportation. ● Owners and operators of roads, tunnels and railtracks, including companies providing support activities for road transportation. ● Owners and operators of marine ports, including companies providing support activities for marine transportation.

Consumer Discretionary



AUTOMOBILES & COMPONENTS

<p>251010</p> <p>Automobiles & Components</p>	<p>● 25101010</p> <p>Automotive Parts & Equipment</p>	<p>● Manufacturers of parts and accessories for automobiles and motorcycles.</p> <p>This Sub-Industry excludes companies classified in the Tires & Rubber Sub-Industry.</p>
	<p>25101020</p> <p>Tires & Rubber</p>	<p>● Manufacturers of tires and rubber.</p>
<p>251020</p> <p>Automobiles</p>	<p>● 25102010</p> <p>Automobile Manufacturers</p>	<p>● Companies that produce mainly passenger automobiles and light trucks.</p> <p>This Sub-Industry excludes companies producing mainly motorcycles and three-wheelers classified in the Motorcycle Manufacturers Sub-Industry and heavy duty trucks classified in the Construction Machinery & Heavy Transportation Equipment Sub-Industry.</p>
	<p>25102020</p> <p>Motorcycle Manufacturers</p>	<p>● Companies that produce motorcycles, scooters or three-wheelers.</p> <p>This Sub-Industry excludes bicycles classified in the Leisure Products Sub-Industry.</p>

CONSUMER DURABLES & APPAREL

<p>252010</p> <p>Household Durables</p>	<p>● 25201010</p> <p>Consumer Electronics</p>	<p>● Manufacturers of consumer electronics products, including TVs, home audio equipment, game consoles, digital cameras, and related products.</p> <p>This Sub-Industry excludes manufacturers of smartphones, personal computers, laptops and notebooks classified in the Technology Hardware, Storage & Peripherals Sub-Industry and electric household appliances classified in the Household Appliances Sub-Industry.</p>
---	--	--

25201020
Home Furnishings

- Manufacturers of soft home furnishings or furniture, including upholstery, carpets and wall-coverings.

25201030
Homebuilding

- Residential construction companies that mainly build residential units such as homes, apartments, and condominiums for the purpose of selling to homeowners.

This Sub-Industry includes manufacturers of prefabricated houses & semi-fixed manufactured homes and contractors for residential plumbing, heating, air conditioning, painting and related services.

This Sub-Industry excludes companies that develop real estate classified under the Real Estate Sector.

25201040
Household Appliances

- Manufacturers of electric household appliances and related products.

This Sub-Industry includes manufacturers of power and hand tools, including garden improvement tools.

This Sub-Industry excludes TVs and other audio & video products classified in the Consumer Electronics Sub-Industry and personal computers classified in the Technology Hardware, Storage & Peripherals Sub-Industry.

25201050
Housewares & Specialties

- Manufacturers of durable household products, including cutlery, cookware, glassware, crystal, silverware, utensils, kitchenware and consumer specialties, not classified elsewhere.

252020
Leisure Products

● **25202010**
Leisure Products

- Manufacturers of leisure products and equipment, including sports equipment, bicycles, toys, and arcade game equipment.

252030
Textiles, Apparel & Luxury Goods

● **25203010**
Apparel, Accessories & Luxury Goods

- Manufacturers of apparel, accessories & luxury goods.

This Sub-Industry includes companies primarily producing handbags, wallets, luggage, jewelry and watches.

This Sub-Industry excludes shoes classified in the Footwear Sub-Industry.

25203020

Footwear

- Manufacturers of footwear including sport and leather shoes.

25203030

Textiles

- Manufacturers of textile and related products, not classified in the Apparel, Accessories & Luxury Goods, Footwear or Home Furnishings Sub-Industries.

CONSUMER SERVICES

253010

**Hotels,
Restaurants &
Leisure**



25301010

Casinos & Gaming

- Owners and operators of casinos & gaming facilities and resorts.

This Sub-Industry includes companies providing lottery & betting services, operators of online casino gaming & betting websites. It also includes companies that offer software for online casino gaming & betting websites and manufacturers of casino gaming equipment.

This Sub-Industry excludes manufacturers of arcade game equipment classified in the Leisure Products Sub-Industry.

25301020

Hotels, Resorts &
Cruise Lines

- Owners and operators of hotels, resorts and cruise-ships.

This Sub-Industry includes travel agencies, tour operators and companies that offer travel arrangement & reservation services, including online travel agencies that charge commission on each sale for travel tickets or hotel accommodation. It also includes online marketplaces for vacations rentals and travel related data processing & outsourced services.

This Sub-Industry excludes travel information sites that mainly offer information and generate revenue mainly through advertising or subscriptions, classified in the Interactive Media & Services Sub-Industry. It also excludes casino hotels classified in the Casinos & Gaming Sub-Industry.

25301030

Leisure Facilities

- Owners and operators of leisure facilities, including sport and fitness centers, stadiums, golf courses and amusement parks, not classified in the Movies & Entertainment Sub-Industry.

<p>25301040 Restaurants</p>	<p>●</p>	<p>Owners and operators of restaurants, bars, pubs, fast-food or take-out facilities.</p> <p>This Sub-Industry includes food delivery companies and providers of food catering services to end consumers.</p>
<p>253020 Diversified Consumer Services</p>	<p>●</p>	<p>25302010 Education Services</p> <p>Companies providing educational services, either on-line or through conventional teaching methods.</p> <p>This Sub-Industry includes private universities, correspondence teaching, providers of educational seminars, educational materials and technical education.</p> <p>This Sub-Industry excludes companies providing employee education programs classified in the Human Resources & Employment Services Sub-Industry.</p>
<p>25302020 Specialized Consumer Services</p>	<p>●</p>	<p>Companies providing consumer services such as home security services, consumer legal services, personal care services, residential renovation & interior design services, consumer auctions, day care centers and wedding & funeral services.</p>

CONSUMER DISCRETIONARY DISTRIBUTION & RETAIL

<p>255010 Distributors</p>	<p>●</p>	<p>25501010 Distributors</p> <p>Distributors and wholesalers of consumer merchandise, not classified elsewhere, including automobile distributors.</p> <p>This Sub-Industry includes companies distributing or wholesaling consumer merchandise to other businesses using a proprietary online platform/website.</p>
<p>255030 Broadline Retail</p>	<p>●</p>	<p>25503030 Broadline Retail</p> <p>Retailers offering a wide range of consumer discretionary merchandise.</p> <p>This Sub-Industry includes general and discount merchandise retailers, department stores and on-line retailers and marketplaces selling mostly consumer discretionary merchandise.</p>

255040

Specialty Retail



25504010

Apparel Retail



Retailers of apparel, footwear, luggage and other accessories.

This Sub-Industry includes apparel manufactures that primarily sell through their own retail channels.

25504020

Computer & Electronics Retail



Retailers of consumer electronics, computers, smartphones, and related products.

25504030

Home Improvement Retail



Retailers of home & garden improvement products, including building materials and related supplies.

This Sub-Industry includes companies that offer household goods repair & maintenance services.

25504040

Other Specialty Retail



Retailers of other consumer products, not classified elsewhere, such as jewelry, perfumes, cosmetics, toys, office supplies, health & vision care products, books and other entertainment products.

This Sub-Industry includes tobacco retail, art dealers, manufactured (mobile) home dealers, duty free shops and companies that offer rental of miscellaneous consumer goods.

25504050

Automotive Retail



Retailers of automobiles.

This Sub-Industry includes automotive dealers, gas stations, and retailers of auto accessories, motorcycles & parts, automotive glass, and automotive equipment & parts.

25504060

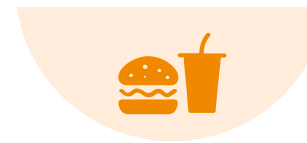
Homefurnishing Retail



Retailers of furniture and home furnishing products, including residential furniture, housewares, and interior design.

This Sub-Industry excludes retailers of home and garden improvement products, classified in the Home Improvement Retail Sub-Industry.

Consumer Staples



CONSUMER STAPLES DISTRIBUTION & RETAIL

301010

**Consumer Staples
Distribution &
Retail**



30101010

Drug Retail

- Retailers of drugs including operators of pharmacies.

30101020

Food Distributors

- Distributors of food products to other companies and not directly to the consumer.

This Sub-Industry includes companies distributing or wholesaling food products to other businesses using a proprietary online platform/website.

30101030

Food Retail

- Retailers of food products.

30101040

Consumer Staples
Merchandise Retail

- Retailers offering a wide range of consumer staples merchandise such as food, household, and personal care products.

This Sub-Industry includes hypermarkets, super centers and other consumer staples retailers such as discount retail spaces and on-line marketplaces selling mostly consumer staples goods.

FOOD, BEVERAGE & TOBACCO

302010

Beverages



30201010

Brewers

- Producers of beer and malt liquors, including breweries not classified in the Restaurants Sub-Industry.

30201020

Distillers & Vintners

- Distillers, vintners and producers of alcoholic beverages not classified in the Brewers Sub-Industry.

30201030

Soft Drinks & Non-
alcoholic Beverages

- Producers of non-alcoholic beverages including mineral waters, sodas and natural bottled water.

302020

**Food
Products**



30202010

Agricultural Products
& Services



Producers of agricultural products.

This Sub-Industry includes crop growers, owners of plantations, producers of animal feed and companies that produce & process food but do not package & market them.

This Sub-Industry excludes companies classified in the Forest Products Sub-Industry and those that package & market the food products classified in the Packaged Foods & Meats Sub-Industry.

30202030

Packaged Foods &
Meats



Producers of packaged foods including dairy products, coffee, tea, fruit juices, meats, poultry, fish, and pet & fish food.

302030

Tobacco



30203010

Tobacco



Manufacturers of cigarettes and other tobacco products such as e-cigarettes.

This Sub-Industry excludes companies primarily engaged in producing cannabis related products, classified in Sub-Industries based on end use.

HOUSEHOLD & PERSONAL PRODUCTS

303010

**Household
Products**



30301010

Household Products



Producers of non-durable household products, including detergents, household cleaners & disinfectants and other tissue & household paper products, not classified in the Paper Products Sub-Industry.

303020

**Personal Care
Products**



30302010

Personal Care
Products



Manufacturers of personal and beauty care products, including cosmetics, perfumes, toiletries, diapers, hygiene products, vitamins, dietary supplements and other herbal & holistic medicines.

This Sub-Industry excludes products of curative medical nature classified in the Pharmaceuticals Sub-Industry under the Health Care Sector.

Health Care



HEALTH CARE EQUIPMENT & SERVICES

<p>351010</p> <p>Health Care Equipment & Supplies</p>	<p>● 35101010</p> <p>Health Care Equipment</p> <hr/> <p>35101020</p> <p>Health Care Supplies</p>	<p>● Manufacturers of health care equipment and devices.</p> <p>This Sub-Industry includes medical instruments, drug delivery systems, cardiovascular & orthopedic devices, and diagnostic equipment that are generally long lasting and/or reusable.</p> <p>● Manufacturers of health care supplies and medical products that tend to be disposable.</p> <p>This Sub-Industry includes eye care products, hospital supplies, and safety needle & syringe devices.</p>
<p>351020</p> <p>Health Care Providers & Services</p>	<p>● 35102010</p> <p>Health Care Distributors</p> <hr/> <p>35102015</p> <p>Health Care Services</p> <hr/> <p>35102020</p> <p>Health Care Facilities</p> <hr/> <p>35102030</p> <p>Managed Health Care</p>	<p>● Distributors and wholesalers of health care products, not classified elsewhere.</p> <p>This Sub-Industry includes companies distributing or wholesaling health care products to other businesses using a proprietary online platform/website.</p> <p>● Providers of patient health care services, not classified elsewhere.</p> <p>This Sub-Industry includes dialysis centers, lab testing services, and pharmacy management services. It also includes companies providing business support services to health care providers, such as clerical support services, collection agency services, staffing services and outsourced sales & marketing services.</p> <p>● Owners and operators of health care facilities, including hospitals, nursing homes, rehabilitation centers and animal hospitals.</p> <p>This Sub-Industry includes residential care facilities and assisted living facilities.</p> <p>● Owners and operators of Health Maintenance Organizations (HMOs) and other managed plans.</p>

These companies derive premium revenues from risk-based health insurance arrangements and include Preferred Provider Organizations (PPOs), Consumer Driven Health Plans (CDHPs), Health Maintenance Organizations (HMOs) and Point-of-Service (POS) plans. It also includes health and dental benefit plans.

351030

**Health Care
Technology**



35103010

**Health Care
Technology**



Companies providing information technology services primarily to health care providers.

This Sub-Industry includes companies providing application, systems and/or data processing software, internet-based tools, and IT consulting services to doctors, hospitals or businesses operating primarily in the Health Care Sector.

PHARMACEUTICALS, BIOTECHNOLOGY & LIFE SCIENCES

352010

Biotechnology



35201010

Biotechnology



Companies primarily engaged in the research, development, manufacturing and/or marketing of products based on genetic analysis and genetic engineering.

This Sub-Industry includes companies specializing in protein-based therapeutics to treat human diseases.

This Sub-Industry excludes companies manufacturing products using biotechnology but without a health care application.

352020

Pharmaceuticals



35202010

Pharmaceuticals



Companies engaged in the research, development or production of pharmaceuticals, including active pharmaceutical ingredients (APIs) and veterinary drugs.

352030

**Life Sciences
Tools & Services**



35203010

**Life Sciences Tools
& Services**

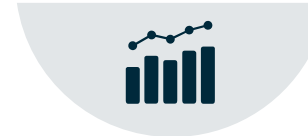


Companies enabling the drug discovery, development and production continuum by providing analytical tools, instruments, consumables & supplies, clinical trial services and contract research services.

This Sub-Industry includes companies primarily servicing the pharmaceutical and biotechnology industries.

Financials

BANKS



401010
Banks

40101010
Diversified Banks

- Large, geographically diverse banks with a national footprint whose revenues are derived primarily from conventional banking operations, have significant business activity in retail banking and small and medium corporate lending, and provide a diverse range of financial services.

This Sub-Industry excludes companies classified in the Regional Banks, Commercial & Residential Mortgage Finance and Investment Banking & Brokerage Sub-Industries.

40101015
Regional Banks

- Commercial banks, savings banks and thrifts whose business are derived primarily from conventional banking operations such as retail banking, corporate lending and originating various residential and commercial mortgage loans funded mainly through deposits. Regional banks tend to operate in limited geographic regions.

This Sub-Industry excludes companies classified in the Diversified Banks, Commercial & Residential Mortgage Finance and Investment Banking & Brokerage Sub-Industries.

FINANCIAL SERVICES

402010
Financial Services

40201020
Diversified Financial Services

- Providers of a diverse range of financial services and/or with some interest in a wide range of financial services including banking, annuity, insurance, investment management and capital markets, but with no dominant business line.

40201030

Multi-Sector Holdings

- Companies with significantly diversified holdings across three or more GICS Sectors, none of which contributes a majority of profit and/or sales. Stakes held are predominantly of a non-controlling nature.

This Sub-Industry includes diversified financial companies where stakes held are of a controlling nature.

This Sub-Industry excludes other diversified companies classified in the Industrials Conglomerates Sub-Industry. It also excludes mono holding companies that invest in only one specific industry and are classified in the respective Sub-Industries.

40201040

Specialized Finance

- Providers of specialized financial services, not classified elsewhere. Companies in this Sub-Industry derive a majority of revenue from one specialized line of business.

This Sub-Industry includes commercial financing companies, central banks, leasing institutions, factoring services, and specialty boutiques.

This Sub-Industry excludes companies classified in the Financial Exchanges & Data Sub-Industry.

40201050

Commercial & Residential Mortgage Finance

- Financial companies providing commercial and residential mortgage financing and related mortgage services.

This Sub-Industry includes non-deposit funded mortgage lending institutions, building societies, companies providing real estate financing products, loan servicing, mortgage broker services, and mortgage insurance.

40201060

Transaction & Payment Processing Services

- Providers of transaction & payment processing services and related payment services, including digital/mobile payment processors, payment service providers & gateways, and digital wallet providers.

402020

**Consumer
Finance**



40202010

Consumer Finance



Providers of consumer finance services, including personal credit, credit cards, lease financing, travel-related money services and pawn shops.

This Sub-Industry includes companies that purchase debt portfolios at a discount from other companies and engage in collection from debtors and earn interest on the debts. It also includes lending facilitation companies operating peer to peer (P2P) Internet communities where users borrow and lend money online.

This Sub-Industry excludes mortgage lenders classified in the Commercial & Residential Mortgage Finance Sub-Industry.

402030

**Capital
Markets**



40203010

Asset Management &
Custody Banks



Financial institutions primarily engaged in investment management and/or related custody and securities fee-based services.

This Sub-Industry includes companies operating mutual funds, closed-end funds and unit investment trusts.

This Sub-Industry excludes banks and other financial institutions primarily involved in commercial lending, investment banking, brokerage and other specialized financial activities.

40203020

Investment Banking
& Brokerage



Financial institutions primarily engaged in investment banking & brokerage services, including equity & debt underwriting, mergers & acquisitions, securities lending and advisory services.

This Sub-Industry excludes banks and other financial institutions primarily involved in commercial lending, asset management and specialized financial activities.

40203030

Diversified Capital
Markets



Financial institutions primarily engaged in diversified capital markets activities, including a significant presence in at least two of the following areas: large/major corporate lending, investment banking, brokerage and asset management.

This Sub-Industry excludes less diversified companies classified in the Asset Management & Custody Banks or Investment Banking & Brokerage Sub-Industries. It also excludes companies

classified in the Banks or Insurance Industry Groups and in the Consumer Finance Sub-Industry.

40203040
Financial Exchanges & Data

- Financial exchanges for securities, commodities, derivatives, cryptocurrencies and other financial instruments, and providers of financial decision support tools and products including ratings agencies.

This Sub-Industry excludes providers of financial magazines, journals, and websites classified in the Publishing Sub-Industry.

402040
Mortgage Real Estate Investment

40204010
Mortgage REITs*

- Companies or Trusts that service, originate, purchase and/or securitize residential and/or commercial mortgage loans.

This Sub-Industry includes trusts that invest in mortgage-backed securities and other mortgage related assets.

INSURANCE

403010
Insurance

40301010
Insurance Brokers

- Insurance and reinsurance brokerage firms.

40301020
Life & Health Insurance

- Companies providing primarily life, disability, indemnity or supplemental health insurance.

This Sub-Industry excludes managed care companies classified in the Managed Health Care Sub-Industry.

40301030
Multi-line Insurance

- Insurance companies with diversified interests in life, health and property and casualty insurance.

40301040
Property & Casualty Insurance

- Companies providing primarily property and casualty insurance, including financial & title insurance.

40301050
Reinsurance

- Companies providing primarily reinsurance.

Information Technology

SOFTWARE & SERVICES



<p>451020 IT Services</p>	<p><input checked="" type="radio"/> 45102010 IT Consulting & Other Services</p>	<ul style="list-style-type: none"> ● Providers of information technology and systems integration services. This Sub-Industry includes information technology consulting and information management services. This Sub-Industry excludes companies that offer management & technology consulting services to government and defense organizations classified in the Research & Consulting Services Sub-Industry.
	<p>45102030 Internet Services & Infrastructure</p>	<ul style="list-style-type: none"> ● Companies providing services and infrastructure for the internet industry including data centers and cloud networking & storage infrastructure. This Sub-Industry includes companies providing web hosting services, web-based tools for constructing & managing websites, providers of internet security for websites & companies and domain name providers & registry services. This Sub-Industry excludes companies classified in the Software Industry.
<p>451030 Software</p>	<p><input checked="" type="radio"/> 45103010 Application Software</p>	<ul style="list-style-type: none"> ● Companies engaged in developing and producing software designed for specialized applications for the business or consumer market. This Sub-Industry includes enterprise & technical software, cloud-based software and companies engaged in bitcoin mining. This Sub-Industry excludes companies classified in the Interactive Home Entertainment Sub-Industry and companies producing systems or database management software classified in the Systems Software Sub-Industry.
	<p>45103020 Systems Software</p>	<ul style="list-style-type: none"> ● Companies engaged in developing and producing software for operating systems & platforms, database management software and firewalls.

TECHNOLOGY HARDWARE & EQUIPMENT

452010



**Communications
Equipment**

45201020



Communications
Equipment

Manufacturers of communication equipment and products, including LANs (Local Area Networks), WANs (Wide Area Networks), routers, telephone apparatus & modems, switchboards & exchanges and fiber optic cables & coaxial cables used by the telecommunications industry.

This Sub-Industry includes radio & television broadcasting equipment.

This Sub-Industry excludes smartphone manufacturers classified in the Technology Hardware, Storage & Peripherals Sub-Industry.

452020



**Technology
Hardware,
Storage &
Peripherals**

45202030



Technology
Hardware, Storage
& Peripherals

Manufacturers of smartphones, personal computers, laptops, notebooks, servers, electronic computer printers, and related components and peripherals.

This Sub-Industry includes manufacturers of data storage components, motherboards, audio and video cards, monitors and keyboards. It also includes manufacturers of automatic teller machines (ATMs) and hardware used for cryptocurrency mining and validating.

This Sub-Industry excludes semiconductors classified in the Semiconductors Sub-Industry.

452030



**Electronic
Equipment,
Instruments
&
Components**

45203010



Electronic
Equipment &
Instruments

Manufacturers of electronic equipment and instruments, including analytical, electronic test & measurement instruments, scanner/barcode products, lasers, display screens, point-of-sales machines, and security system equipment.

45203015



Electronic
Components

Manufacturers of electronic components generally used to create end products.

This Sub-Industry includes electronic components, connection devices, electron tubes, electronic capacitors & resistors, electronic coils, printed

45203020

Electronic Manufacturing Services

- Producers of electronic equipment mainly for the OEM (Original Equipment Manufacturers) markets. These companies manufacture products that are largely customized as per the specifications outlined by their clients.

45203030

Technology Distributors

- Distributors of software, technology hardware and equipment, communications equipment, computers & peripherals, semiconductors, and electronic equipment & components.

This Sub-Industry includes companies distributing or wholesaling technology products to other businesses using a proprietary online platform/website.

SEMICONDUCTORS & SEMICONDUCTOR EQUIPMENT

453010

Semiconductors & Semiconductor Equipment

45301010

Semiconductor Materials & Equipment

- Manufacturers of semiconductor equipment, including manufacturers of the raw material and equipment used in the solar power industry such as raw wafers, gases, liquids and related packaging & material delivery systems.

This Sub-Industry includes companies that provide semiconductor test, assembly, and packaging systems.

This Sub-Industry excludes printed circuit board manufacturers classified in the Electronic Components Sub-Industry.

45301020

Semiconductors

- Manufacturers of semiconductors and related products, including solar modules, solar cells, integrated circuit devices, diodes and light-emitting diodes (LEDs), microprocessors and chips.

This Sub-Industry also includes providers of semiconductor packaging and test services.

Communication Services

TELECOMMUNICATION SERVICES



501010

Diversified Telecommunication Services

● **50101010**
Alternative Carriers

● Providers of communications and high-density data transmission services primarily through a high bandwidth/fiber-optic cable network.

This Sub-Industry includes satellite companies that mainly offer services to the telecommunication industry.

50101020
Integrated Telecommunication Services

● Operators of primarily fixed-line telecommunications networks and companies providing both wireless and fixed-line telecommunications services, not classified elsewhere.

This Sub-Industry includes internet service providers offering internet access to end users and companies that construct as well as operate telecommunication towers.

This Sub-Industry excludes companies that mainly construct telecom towers and do not operate them, classified in the Construction & Engineering Sub-Industry.

501020

Wireless Telecommunication Services

● **50102010**
Wireless Telecommunication Services

● Providers of primarily cellular or wireless telecommunication services including in-flight internet providers.

MEDIA & ENTERTAINMENT

502010

Media

● **50201010**
Advertising

● Companies providing advertising, marketing or public relations services.

This Sub-Industry includes companies offering digital advertising services, marketing consulting services, market research and reward program management services.

		50201020	●	Owners and operators of television or radio broadcasting systems, including programming.
		Broadcasting		This Sub-Industry includes radio and television broadcasting, radio networks, and radio stations.
		50201030	●	Providers of cable or satellite television services.
		Cable & Satellite		This Sub-Industry includes cable networks and program distribution.
		50201040	●	Publishers of newspapers, magazines and books in print or electronic formats.
		Publishing		This Sub-Industry includes publishers of financial journals, magazines, and websites, which do not provide financial data, pricing or ratings information to financial service companies.
502020	●	50202010	●	Companies that engage in producing and selling entertainment products and services, including companies engaged in the production, distribution and screening of movies and television shows, producers and distributors of music, entertainment theaters and sports teams.
Entertainment		Movies & Entertainment		This Sub-Industry also includes companies offering and/or producing entertainment and music content streamed online.
		50202020	●	Producers of interactive gaming products, including mobile gaming applications.
		Interactive Home Entertainment		This Sub-Industry includes educational software used primarily in the home, video game developers, and streaming platforms focused on gaming.
				This Sub-Industry excludes online gambling companies classified in the Casinos & Gaming Sub-Industry.
502030	●	50203010	●	Companies engaging in content and information creation or distribution through proprietary platforms, where revenues are
Interactive Media & Services		Interactive Media & Services		

derived primarily through pay-per-click advertisements.

This Sub-Industry includes search engines, social media & networking platforms, online classifieds, online review companies and Internet TV companies. It also includes online video and content sharing companies.

This Sub-Industry excludes companies that derive a commission upon a consumer's purchase or subscription to another company's product or service, classified in respective Sub-Industries, such as online travel related sites selling a service or product directly to end consumers, which are classified in the Hotels Resorts & Cruise Lines Sub-Industry.

Utilities UTILITIES



551010
Electric Utilities

● **55101010**
Electric Utilities

● Companies that produce or distribute electricity, including both nuclear and non-nuclear facilities.

This Sub-Industry includes companies that are vertically integrated across electricity generation and distribution chain, but whose primary business focus is on the distribution of electricity to the end users. It also includes electricity transmission & distribution companies.

551020
Gas Utilities

● **55102010**
Gas Utilities

● Companies whose main charter is to distribute and transmit natural & manufactured gas, including propane distributors.

This Sub-Industry excludes companies primarily involved in gas exploration or production classified in the Oil & Gas Exploration & Production Sub-Industry. It also excludes companies engaged in the storage and/or transportation of oil, gas, and/or refined products classified in the Oil & Gas Storage & Transportation Sub-Industry.

<p>551030 Multi-Utilities</p>	<p>● 55103010 Multi-Utilities</p>	<p>● Utility companies with significantly diversified activities in addition to core electric utility, gas utility and/or water utility operations.</p>
<p>551040 Water Utilities</p>	<p>● 55104010 Water Utilities</p>	<p>● Companies that purchase and redistribute water to end consumers.</p> <p>This Sub-Industry includes large-scale water treatment systems, water supply & irrigation systems, and steam heating.</p>
<p>551050 Independent Power and Renewable Electricity Producers</p>	<p>● 55105010 Independent Power Producers & Energy Traders</p> <hr/> <p>55105020 Renewable Electricity</p>	<p>● Companies that operate as Independent Power Producers (IPPs), Gas & Power Marketing & Trading Specialists and/or Integrated Energy Merchants.</p> <p>This Sub-Industry excludes producers of electricity using renewable sources, such as solar power, hydropower, and wind power. It also excludes electricity transmission & distribution companies classified in the Electric Utilities Sub-Industry.</p> <p>● Companies that engage in the generation and distribution of electricity using renewable sources, including, but not limited to, companies that produce electricity using biomass, geothermal energy, solar energy, hydropower, and wind power.</p> <p>This Sub-Industry excludes companies manufacturing capital equipment used to generate electricity using renewable sources, such as manufacturers of solar power systems, installers of photovoltaic cells, and companies involved in the provision of technology, components, and services mainly to this market.</p>

Real Estate

EQUITY REAL ESTATE INVESTMENT TRUSTS (REITs)



<p>601010 Diversified REITs</p>	<p>● 60101010 Diversified REITs*</p>	<p>● A company or Trust with significantly diversified operations across two or more property types.</p>
<p>601025 Industrial REITs</p>	<p>● 60102510 Industrial REITs*</p>	<p>● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of industrial properties, such as industrial warehouses and distribution properties.</p>
<p>601030 Hotel & Resort REITs</p>	<p>● 60103010 Hotel & Resort REITs*</p>	<p>● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of hotel and resort properties.</p>
<p>601040 Office REITs</p>	<p>● 60104010 Office REITs*</p>	<p>● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of office properties.</p>
<p>601050 Health Care REITs</p>	<p>● 60105010 Health Care REITs*</p>	<p>● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of properties serving the health care industry, including hospitals, nursing homes, and assisted living properties.</p>
<p>601060 Residential REITs</p>	<p>● 60106010 Multi-Family Residential REITs*</p>	<p>● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of apartments and other multi-family housing, including student housing.</p>
	<p>60106020 Single-Family Residential REITs*</p>	<p>● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of single-family residential housing, including manufactured homes.</p>

601070

Retail REITs

● **60107010**
Retail REITs*

● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of shopping malls, outlet malls, neighborhood and community shopping centers.

601080

Specialized REITs

● **60108010**
Other Specialized REITs*

● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of properties not classified elsewhere.

This Sub-Industry includes REITs that manage and own properties such as natural gas and crude oil pipelines, gas stations, fiber optic cables, prisons, automobile parking, and automobile dealerships.

● **60108020**
Self-Storage REITs*

● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of self storage properties.

● **60108030**
Telecom Tower REITs

● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of telecom towers and related structures that support wireless telecommunications.

● **60108040**
Timber REITs*

● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of timberland and timber-related properties.

● **60108050**
Data Center REITs*

● Companies or Trusts engaged in the acquisition, development, ownership, leasing, management and operation of data center properties.

REAL ESTATE MANAGEMENT & DEVELOPMENT

602010

Real Estate Management & Development

● **60201010**
Diversified Real Estate Activities

● Companies engaged in a diverse spectrum of real estate activities including real estate development & sales, real estate management, or real estate services, but with no dominant business line.

60201020

● Companies engaged in operating real estate properties for the purpose of leasing &

<p>Real Estate Operating Companies</p>	<p>management, including real estate property managers.</p>
<p>60201030</p>	<p>● Companies that develop real estate and sell the properties after development, including developers of active senior communities.</p>
<p>Real Estate Development</p>	<p>This Sub-Industry excludes companies classified in the Homebuilding Sub-Industry.</p>
<p>60201040</p>	<p>● Real estate service providers such as real estate agents, brokers, real estate appraisers and other real estate related services.</p>
<p>Real Estate Services</p>	<p>This Sub-Industry includes providers of real estate information, analytics, data and tools.</p>
	<p>This Sub-Industry excludes online real estate platforms that offer mainly information and earn revenue from pay-per-click advertising classified in the Interactive Media & Services Sub-Industry.</p>

*A company will be classified as a REIT, if it mentions in an official document that it operates as a REIT (as per the country's effective legal REIT structure). In general, to be classified as a REIT, a company must have a Property Trust Structure (either as a stand-alone trust or stapled), with primary investments in real estate or mortgage loans and where majority of the company's taxable Income is paid out as a dividend. If stapled, it should derive at least 60% of revenue from the trust arm. Asset holdings break down and net earnings are also considered while determining the GICS classification, in general.

Section 8: MSCI Fixed Income Sector Classification Guidelines

MSCI also leverages the Global Industry Classification Standard (GICS) to classify companies that have issued Fixed Income securities such as corporate bonds.

8.1 Fixed income universe eligible for classification

Corporates that have issued bonds are eligible for a classification.

Supranationals, Municipals and Sovereigns that have issued fixed income securities are currently not covered under this Methodology.

8.1.1 Classification of a company that has issued both equity and corporate bonds

Propagation of GICS from company level to security level

GICS is assigned at the company level and thus all securities, equities or corporate bonds, issued by the company will have the same GICS classification as the company.

MSCI leverages GICS assigned to a company that has issued equity securities and assigns the same GICS classification to the corporate bonds issued by the company.

Example: GICS of a corporate bond issued by General Electric

The corporate bond issued by General Electric will have the same GICS as assigned to General Electric.

GICS level	GICS code	GICS description
Sector	20	Industrials
Industry Group	2010	Capital Goods
Industry	201050	Industrial Conglomerates
Sub-Industry	20105010	Industrial Conglomerates

8.1.2 Classification of a company that has issued only corporate bonds

Each corporate bond issuer is assigned to a GICS Sub-Industry based on the GICS of its related listed entity, i.e., its parent company or ultimate parent company, as available in GICS Direct.

Example: GICS of corporate bond issued by Coca-Cola Refreshments USA Inc.

Coca-Cola Refreshments USA Inc.’s parent is Coca-Cola Co which is classified as “30201030 - Soft Drinks”.

GICS of the corporate bond issued by Coca-Cola Refreshments USA Inc. will be:

GICS level	GICS code	GICS description
Sector	30	Consumer Staples
Industry Group	3020	Food, Beverage and Tobacco
Industry	302010	Beverages
Sub-Industry	30201030	Soft Drinks & Non-alcoholic Beverages

In cases where the related entities, i.e., its parent and ultimate parent company don’t have GICS in GICS Direct, the corporate bond issuer will be classified based on its own or its related entities’ underlying business using the GICS framework.

In addition, if the corporate bond issuer is a special purpose vehicle or a captive finance vehicle, it will be classified based on the business of its related entities as described in Section 3.

8.2 Source of information used for the GICS classification of fixed income

The primary source of information used to classify fixed income securities is the company's annual reports and accounts. Other sources include broker reports and other published research literature. In the case of a new issue, the classification will be determined based primarily on the description of the company's activities and pro forma results as given in the prospectus.

8.3 Maintenance of GICS for companies that have issued corporate bonds

8.3.1 Ongoing review

A company's Sub-Industry classification will be reviewed at least annually. It will also be reviewed when a significant corporate restructuring occurs. GICS reviews could also occur upon client request.

In order to provide a stable Sub-Industry classification, when reviewing a company's classification, changes will be minimized in the Sub-Industry classification to the extent possible by disregarding temporary fluctuations in the results of a company's different activities.

8.3.2 Impact of GICS structure review

All changes in the GICS Structure and definitions resulting from a Structure Review will be applicable to the classification of companies that have issued fixed income securities as well.

Appendix 1: Changes to the GICS Methodology book

The following sections were modified as of March 2023:

- Section 1: GICS Hierarchy
- 1.2: The GICS Structure
- Section 7: GICS Sub-Industry Definitions

The following sections were modified as of August 2024:

- Section 7: GICS Sub-Industry Definitions

Contact us

msci.com/contact-us

AMERICAS

United States + 1 888 588 4567 *

Canada + 1 416 687 6270

Brazil + 55 11 4040 7830

Mexico + 52 81 1253 4020

EUROPE, MIDDLE EAST & AFRICA

South Africa + 27 21 673 0103

Germany + 49 69 133 859 00

Switzerland + 41 22 817 9777

United Kingdom + 44 20 7618 2222

Italy + 39 02 5849 0415

France + 33 17 6769 810

ASIA PACIFIC

China + 86 21 61326611

Hong Kong + 852 2844 9333

India + 91 22 6784 9160

Malaysia 1800818185 *

South Korea + 82 70 4769 4231

Singapore + 65 67011177

Australia + 612 9033 9333

Taiwan 008 0112 7513 *

Thailand 0018 0015 6207 7181 *

Japan + 81 3 4579 0333

* toll-free

About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit 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. All rights in the Information are reserved by MSCI and/or its Information Providers.
- 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 may include "Signals," defined as quantitative attributes or the product of methods or formulas that describe or are derived from calculations using historical data. Neither these Signals nor any description of historical data are intended to provide investment advice or a recommendation to make (or refrain from making) any investment decision or asset allocation and should not be relied upon as such. Signals are inherently backward-looking because of their use of historical data, and they are not intended to predict the future. The relevance, correlations and accuracy of Signals frequently will change materially.
- 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 investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. The calculation of indexes and index returns may deviate from the stated methodology. 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 LLC 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 msci.com.
- MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. 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 a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such, provided that applicable products or services from MSCI ESG Research may constitute investment advice. 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. MSCI ESG and climate ratings, research and data are produced by MSCI ESG Research LLC, a subsidiary of MSCI Inc. MSCI ESG Indexes, Analytics and Real Estate are products of MSCI Inc. that utilize information from MSCI ESG Research LLC. MSCI Indexes are administered by MSCI Limited (UK) and MSCI Deutschland GmbH.
- Please note that the issuers mentioned in MSCI ESG Research materials sometimes have commercial relationships with MSCI ESG Research and/or MSCI Inc. (collectively, "MSCI") and that these relationships create potential conflicts of interest. In some cases, the issuers or their affiliates purchase research or other products or services from one or more MSCI affiliates. In other cases, MSCI ESG Research rates financial products such as mutual funds or ETFs that are managed by MSCI's clients or their affiliates, or are based on MSCI Inc. Indexes. In addition, constituents in MSCI Inc. equity indexes include companies that subscribe to MSCI products or services. In some cases, MSCI clients pay fees based in whole or

part on the assets they manage. MSCI ESG Research has taken a number of steps to mitigate potential conflicts of interest and safeguard the integrity and independence of its research and ratings. More information about these conflict mitigation measures is available in our Form ADV, available at <https://adviserinfo.sec.gov/firm/summary/169222>.

- Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD 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 S&P Global Market Intelligence. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and S&P Global Market Intelligence.
- MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data.
- Privacy notice: For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at <https://www.msci.com/privacy-pledge>.