

MSCI ESG KLD STATS: 1991-2018 DATA SETS

Methodology

MSCI ESG RESEARCH

March 2019

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INTRODUCTION

MSCI ESG KLD STATS (STATS) is an annual data set of positive and negative environmental, social, and governance (ESG) performance indicators applied to a universe of publicly traded companies. The MSCI ESG KLD STATS data set was initiated in 1991, and is one of the longest continuous ESG data time series available.

MSCI AND MSCI ESG RESEARCH

MSCI ESG Research is a unit of MSCI, a global independent provider of research-driven insights and tools for institutional investors. MSCI ESG Research provides ESG ratings, research and analysis to institutional investors worldwide.

MSCI ESG Research employs a global team of over 140 experienced research analysts to assess how well companies manage their ESG risks and opportunities.

MSCI ESG RESEARCH PROCESS

To assess a company's exposure to, and management of, ESG risks and opportunities, MSCI ESG Research collects data from the following sources:

- Macro data at segment or geographic level from academic, government, NGO datasets
- Company disclosure (10-K, sustainability report, proxy report, AGM results, etc.)
- Government databases, 1600+ media, NGO, other stakeholder sources

In addition, companies are invited to review all data collected by MSCI ESG Research, and receive complimentary copies of their own MSCI ESG reports.

MSCI ESG KLD STATS

Each annual STATS data set contains the following information:

- Company information (Name, Ticker, unique security identifiers)
- A set of indicators assessing positive and negative ESG performance.

MSCI ESG KLD STATS DATA SETS – COVERAGE UNIVERSE

<u>Data Set Universe</u>	<u>Time Series</u>	<u>Approximate # of Companies</u>
Universe A	1991-2018	650
Universe B	2008-2013	1000
Universe C	2001-2013	1100
Universe D	2003-2018	2400
Universe E	2013-2018	2600

- The “# of Companies” is an approximate average for the time series.
- For the STATS-2018 Data Set, Universes A, D, and E are provided in the standard product offering.
- **Universes B and C have been discontinued as of STATS-2014 Data Set.**
- Please see the Appendix A for a history of the MSCI ESG KLD STATS coverage universe.

MSCI ESG KLD STATS UNIVERSE DEFINITIONS:

- Universe A: MSCI KLD 400 Social Index + MSCI USA Index



- Universe B: Largest 1000 U.S. companies by market capitalization
- Universe C: MSCI KLD 400 Social Index + 1000 Largest US Companies
- Universe D: MSCI USA IMI Index
- Universe E: Non-US Universe
 - MSCI World - EX US
 - MSCI Emerging Markets Index
 - MSCI Europe Investable Market Index (IMI)
 - MSCI Australia IMI
 - MSCI South Africa IMI
 - MSCI Canada IMI
 - MSCI Japan IMI (~top 500 by market capitalization)

ESG PERFORMANCE INDICATORS

POSITIVE ESG PERFORMANCE INDICATORS

MSCI ESG KLD STATS positive performance indicators are designed to capture management best practices concerning ESG risks and opportunities.

STATS positive ESG performance indicators are based on MSCI ESG Research's proprietary ESG Ratings model which includes ESG key issues corresponding to the full range of ESG risks and opportunities.

For each key issue, there are three assessed components of a company's management capabilities: Strategy & Governance, Initiatives and Performance.

- **Strategy & Governance:** Analysis of management strategy evaluates a company's organizational capacity and level of commitment to address key ESG risks and opportunities, including the level and extent of organizational responsibility for the specific risks/opportunities, strength and scope of policy commitments, and strength and scope of commitment to standards.

- Initiatives: This component consists of an evaluation of the strength and scope of company initiatives, programs, and targets to improve performance.
- Performance: The performance component evaluates a company's track record on managing a specific ESG risk or opportunity.

For the MSCI ESG Ratings model, every company is typically scored on only 4-7 of the most material ESG key issues for its primary industry. For some companies, it is necessary to add an additional ESG key issue if a company faces an environmental, social, or governance risk or opportunity that is atypical for the industry.

In addition, for companies that are constituents of the MSCI World Index, the following key issues are applicable to all companies: Carbon Emissions, Toxic Emissions & Waste, Water Stress, Labor Management, and Health & Safety.

Each key issue is scored on a 0-10 scale. The key issue score consists of an exposure score and a management score – both also on a 0-10 scale.

MSCI ESG KLD STATS utilizes the scored management component of the key issue score, without a deduction for relevant ESG controversies. This score is also on a 0-10 scale.

Please note, that the industry-based key issue ratings model was introduced to MSCI ESG KLD STATS in 2010. Therefore, for the STATS-2010 Data Set and after, all companies in the coverage universe are only assessed for a limited set of positive ESG indicators. Each indicator that is not researched for a company will have an "NR" for "Not Researched".

Prior to STATS – 2010 Data Set, all of the positive ESG performance indicators were researched for all of the companies in the coverage universe.

For a more complete description of the key issue selection process and other details of ESG Ratings methodology, please see:

<https://www.msci.com/www/research-paper/esg-ratings-methodology/0175943017>

NEGATIVE ESG PERFORMANCE INDICATORS

Negative ESG performance indicators are based on MSCI ESG Research's proprietary Impact Monitor controversies analysis.

MSCI ESG Controversies is designed to provide timely and consistent assessments of ESG controversies involving publicly traded companies. The evaluation framework used in MSCI ESG Controversies is designed to be consistent with international norms represented in numerous widely accepted global conventions, including the Universal Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and the UN Global Compact.

MSCI ESG Research analysts investigate and assess controversies involving the impact of company operations and/or products and services that allegedly violate national or international laws, regulations, and/or commonly accepted global norms.

For each STATS Data Set, **all** of the negative ESG performance indicators have been researched for all companies in the coverage universe, with the exception of the STATS-2010 and STATS-2011 Data Sets.

SCORING OF ESG PERFORMANCE INDICATORS

ESG performance indicators in STATS are scored by a simple binary scoring model:

- If a company meets the assessment criteria established for an indicator, then this is signified with a "1".
- If a company does NOT meet the assessment criteria established for an indicator, then this is signified with a "0".
- If a company has NOT been researched for a particular ESG indicator, then this is signified with a "NR" (Not Researched).

ESG PERFORMANCE INDICATORS

Please note that all ESG performance indicators are listed in the following order: by E,S, and G categories, and then by the order of the data set column header, to be consistent with past data sets.

All positive indicators are named by the following nomenclature: Category theme – theme indicator. Thus, for example, the positive environmental indicator, Environmental Opportunities - Clean Tech, is part of the set of Environmental indicators, and part of the Environmental Opportunities theme.

For ease of comparison within the time series, we ordered the indicators in the spreadsheet in the following manner:

- ESG Category: Environment, Social, Governance
 - Social has four sub-categories presented in this order.
 - Community
 - Human Rights
 - Employee Relations
 - Diversity
- Positive Indicators, Negative Indicators
- Column Headers

Unfortunately, the use of column headers to order indicators does mean that the category themes are not necessarily grouped together.

Data set column headers have their origins in an older rating framework terminology. Positive indicators were originally referred to as “strengths”. Negative indicators were originally referred to as “concerns”. Thus, for example, Env-str-A originally referred to a unique management strength “A” under the environment category. For consistency we have decided to keep this data terminology.

These indicators are listed A-Z. For descriptions of unique indicators no longer active, please refer to the appendix.

For any questions concerning MSCI ESG KLD STATS, please contact MSCI ESG Client Service: esgclientservice@msci.com

ENVIRONMENTAL INDICATORS

Table of Environmental Indicators:
MSCI ESG KLD STATS – 2018 Data Set

Column Headers	Indicator Labels	Column Headers	Indicator Labels	Column Headers	Indicator Labels
ENV-str-A	Environmental Opportunities - Environmental Opportunities in Clean Tech	ENV-str-K	Climate Change - Financing Environmental Impact	ENV-con-D	Toxic Emissions and Waste
ENV-str-B	Pollution & Waste - Toxic Emissions and Waste	ENV-str-L	Environmental Opportunities - Opportunities in Green Building	ENV-con-F	Energy & Climate Change
ENV-str-C	Pollution & Waste - Packaging Materials & Waste	ENV-str-M	Environmental Opportunities - Opportunities in Renewable Energy	ENV-con-H	Biodiversity & Land Use
ENV-str-D	Climate Change - Carbon Emissions	ENV-str-N	Pollution & Waste - Electronic Waste	ENV-con-I	Operational Waste (non-hazardous)
ENV-str-G	Environmental Management Systems	ENV-str-O	Climate Change - Energy Efficiency	ENV-con-J	Supply Chain Management
ENV-str-H	Natural Capital - Water Stress	ENV-str-P	Climate Change - Product Carbon Footprint	ENV-con-K	Water Stress
ENV-str-I	Natural Capital - Biodiversity & Land Use	ENV-str-Q	Climate Change - Climate Change Vulnerability	ENV-con-X	Environment - Other Concerns
ENV-str-J	Natural Capital - Raw Material Sourcing				

Summary of Changes Effective 2016:

- Indicator: ENV-str-O, Climate Change - Energy Efficiency
 - Discontinued
- Indicator: ENV-str-X, Environmental Other Strength
 - Discontinued

POSITIVE ENVIRONMENT PERFORMANCE INDICATORS

ENV-STR-A: ENVIRONMENTAL OPPORTUNITIES – OPPORTUNITIES IN CLEAN TECH

This indicator is designed to assess how companies are taking advantages of opportunities in the market for environmental technologies. Management performance scoring is based on innovation capacity and strategic development initiatives; and revenue derived from clean technologies.

Clean Tech includes the following categories:

Alternative Energy	<ul style="list-style-type: none"> Wind Solar Geothermal Biomass 	<ul style="list-style-type: none"> Waste Energy Wave Tidal Small Hydro Biodiesel 	<ul style="list-style-type: none"> Biogas Cellulosic Ethanol (ex corn) Fuel Cells/Hydrogen Syst
Energy Efficiency	<ul style="list-style-type: none"> Demand-Side Mgmt Battery Smart Grid 	<ul style="list-style-type: none"> Other Energy Storage Household Products Superconductors 	<ul style="list-style-type: none"> Advanced Materials Hybrid/Electric Vehicles



	<i>Nano-technology</i>	<i>Natural Gas Combined Heat & Power</i>	<i>Industrial Automation Optimization Tech & Syst</i>
<i>Pollution Prevention & Control</i>	<i>Environmental Rem. Waste Treatment</i>	<i>Reuse & Recycling Environmental IT</i>	<i>Conventional Poll. Control Carbon Capture & Storage</i>
<i>Sustainable Water</i>	<i>Water Infrastructure & Distribution Rainwater Harvesting</i>	<i>Smart Metering Devices Drought-Resistant Seed</i>	<i>Desalination Waste Water Treatment</i>
<i>Green Building</i>	<i>Green Certified Property LED Lighting Compact Fluorescent Lighting</i>	<i>Use of Recycled Mat. Blended Cement Specialty Cements / Low-temp Asphalt</i>	<i>Insulation Low Toxicity / VOC Mat. FSC-Certified Lumber</i>

ENV-STR-B: POLLUTION & WASTE – TOXIC EMISSIONS AND WASTE

This indicator is designed to assess how companies manage their risk of incurring liabilities associated with pollution, contamination, and the emission of toxic and carcinogenic substances. Companies that have a well-defined strategy, ambitious programs and targets to reduce toxic emissions, and disclosed performance metrics score higher.

ENV-STR-C: POLLUTION & WASTE – PACKAGING MATERIALS & WASTE

This indicator is designed to assess how companies manage the risks of losing access to markets or of facing added costs to come into compliance with new regulations related to product packaging content and end-of-life recycling or disposal of packaging materials. Companies that proactively reduce the environmental impact of their packaging, including use of recycled content material and establishment of take-back and recycling programs, score higher.

ENV-STR-D: CLIMATE CHANGE - CARBON EMISSIONS

This indicator is designed to assess how companies manage the risks of increased costs linked to carbon pricing or regulatory caps. Scores are based on carbon

reduction targets and mitigation programs; and carbon intensity over time and vs. peers. Management metrics include efforts to reduce exposure through comprehensive carbon policies and implementation mechanisms, including carbon reduction targets, production process improvements, installation emissions capture equipment, and/or switching to cleaner energy sources.

ENV-STR-G: ENVIRONMENTAL MANAGEMENT SYSTEMS

This indicator measures whether a firm has an environmental management system (EMS) in place, and whether it is certified to a third party standard, such as ISO 14001.

ENV-STR-H: NATURAL CAPITAL - WATER STRESS

This indicator is designed to evaluate the extent to which companies may face water shortages affecting their ability to operate, lost access to markets due to stakeholder water conflicts, or higher water costs. Scores are based on water management strategy and targets; water use over time and vs. peers.

ENV-STR-I: NATURAL CAPITAL - BIODIVERSITY & LAND USE

This indicator is designed to evaluate the extent to which companies may face lost market access or litigation, liabilities, or reclamation costs due to operations that damage fragile ecosystems. Scores are based on policies / programs regarding biodiversity, land use, and community impact. Specific metrics include efforts to reduce land or marine disturbances, increase biodiversity protection, engage community stakeholders.

ENV-STR-J: NATURAL CAPITAL - RAW MATERIAL SOURCING

This indicator is designed to assess which companies may face reputational risks by sourcing or utilizing raw materials with high environmental impacts. Scores

are based on reliance on environmentally intensive agricultural raw materials; sustainable sourcing policies, commitments, and certification. Key management metrics include policies, initiatives, and targets related to sourcing the following materials of concern: Seafood and/or Aquaculture, Timber and/or Paper, Palm Oil, Beef and/or Dairy, Leather, Cotton.

ENV-STR-K: CLIMATE CHANGE - FINANCING ENVIRONMENTAL IMPACT

This indicator is designed to assess which companies may face potential credit or reputational risks resulting from indirect exposure to the environmental concerns facing borrowers. Scores are based on estimated environmental risk financing; environmental due diligence process and “green” financing. Management metrics include building ports to mitigate credit risk through integration of ESG risk management policies into company’s overall financing and risk management structures.

ENV-STR-L: ENVIRONMENTAL OPPORTUNITIES – OPPORTUNITIES IN GREEN BUILDING

This indicator is designed to evaluate the extent to which companies take advantage of opportunities to develop / refurbish buildings with lower embodied energy, recycled materials, lower energy / water use, waste reduction, and healthier environments. Scores are based on green property initiatives, tenant engagement, and urban site criteria; certified properties; and environmental performance. Management metrics include efforts to increase green building certifications across portfolios of real estate assets.

ENV-STR-M: ENVIRONMENTAL OPPORTUNITIES – OPPORTUNITIES IN RENEWABLE ENERGY

This indicator is designed to evaluate the extent to which companies take advantages of opportunities linked to the development of renewable power production. Scores are based on exposure to renewable power subsidies and

preferential policies; strategic investments in renewable power generation and related services; and renewable capacity as % of total and trend. Management metrics include efforts to develop renewable power generation capacity and/or proactively complement the development of renewable power through electrical network expansion, equipment commercialization, and 'green power' offerings to its customers.

ENV-STR-N: POLLUTION & WASTE - ELECTRONIC WASTE

This indicator is designed to assess the extent to which companies that produce or sell electronic products may face regulatory risks associated with recycling or disposal of end-of-life electronic products. Scores are based on exposure to evolving e-waste regulations; targets and programs to collect and recycle electronic waste. Management metrics include efforts to implement comprehensive product recovery and recycling programs.

ENV-STR-P: CLIMATE CHANGE – PRODUCT CARBON FOOTPRINT

This issue evaluates the extent to which companies may face higher input or production costs for carbon-intensive products due to volatile energy costs in a carbon-constrained world. Scores are based on companies' reliance on carbon intensive products; and efforts to measure and reduce the carbon footprint of their supply chains. Management metrics include efforts to reduce exposure through measurement and reduction of carbon emissions associated with raw materials production, product manufacturing, distribution, and retail.

ENV-STR-Q: CLIMATE CHANGE - CLIMATE CHANGE VULNERABILITY

This issue evaluates the extent to which insurance companies may face risks to insured assets or individuals associated with the physical effects of climate change. Scores are based on insured exposure to geographies vulnerable to climate change effects; and integration of climate change risks into product strategy and risk management processes. Management metrics include

acknowledgement of climate change as a business risk; integration of climate change into risk modeling, pricing, and reserving; product and incentive offerings to reduce or hedge climate change-related risks.

NEGATIVE ENVIRONMENT PERFORMANCE INDICATORS

ENV-CON-D: TOXIC EMISSIONS AND WASTE

This indicator measures the severity of controversies related to a firm's operational non-GHG emissions or releases to land, air, and/or water. This includes controversies related to accidental spills or releases as well as the environmental impacts of standard operational emissions, whether within or in exceedance of levels allowed by permit. Involvement in hydraulic fracturing operations is also captured in this indicator. When there is a substantial impact on a local community that results from an environmental controversy classified under Toxic Emissions & Waste, an additional controversy case is logged and assessed under the Impact on Communities indicator; the assessment in that case is based on the impact on the community rather than the environmental impact.

ENV-CON-F: ENERGY & CLIMATE CHANGE

This indicator measures the severity of controversies related to a firm's climate change and energy-related impacts. Issues covered include, for example, lawsuits over a company's alleged contribution to climate change, public controversy or criticism of a company's contribution to climate change, or status as an exceptionally large emitter of GHGs, as well as resistance to calls for improvement.

ENV-CON-H: BIODIVERSITY & LAND USE

This indicator measures the severity of controversies related to a company's use or management of natural resources where there is an alleged or anticipated negative impact on the environment, especially in ecologically sensitive areas. Topics covered under this indicator include issues such as species loss, reduction in biodiversity, habitat damage, depletion of or competition for natural resources, loss of economic value (for

example, in fisheries or tourism), as well as post-consumer waste issues. Biodiversity impacts primarily caused by toxic releases are captured under the Toxic Emissions & Waste indicator. Competition of water resources and controversies regarding water usage are captured under the Water Stress indicator. When there is a substantial impact on a local community that results from an environmental controversy classified under Biodiversity & Land Use, an additional controversy case is logged and assessed under the Impact on Communities indicator; the assessment in that case is based on the impact on the community rather than the environmental impact.

ENV-CON-I: OPERATIONAL WASTE (NON-HAZARDOUS)

This indicator measures the severity of controversies related to the impact of a firm's non-hazardous, non-toxic operational waste, meaning waste, emissions, or effluents produced through normal operations and/or as part of the production of a product. Controversies related to toxic and hazardous waste emitted to air, land, or water is captured under the Toxic Emissions & Waste indicator. Controversies related to post-consumer waste are captured under Biodiversity & Land Use.

ENV-CON-J: SUPPLY CHAIN MANAGEMENT

This indicator measures controversies related to the sourcing raw materials or other inputs that have a substantial negative environmental impact. Issues covered include, for example, degradation of natural resources through use of raw materials that are resource intensive and/or waste intensive, such as tropical hardwoods, palm oil, or unsustainable fisheries.

ENV-CON-K: WATER STRESS

This indicator measures the severity of controversies related to a firm's water management practices. Issues covered include, for example, ecological damage resulting from water withdrawals, depletion of water resources for other users, and regulatory action or community disputes regarding the company's water usage. . This indicator does not capture water pollution cases, which are covered under the Toxic Emissions & Waste indicator.



ENV-CON-X: ENVIRONMENT - OTHER CONCERNS

This indicator measures any environmental issues that fall outside of the more targeted indicators listed above, including major exposure to business involvement in nuclear power.

SOCIAL INDICATORS

Table of Social Indicators: MSCI ESG STATS – 2018 Data Set

Column Headers	Indicator Labels	Column Headers	Indicator Labels	Column Headers	Indicator Labels
COM-str-H	Community Engagement	EMP-str-N	Stakeholder Opposition - Controversial Sourcing	PRO-str-D	Social Opportunities- Access to Finance
COM-con-B	Impact on Local Communities	EMP-str-X	Human Capital - Other Strengths	PRO-str-E	Social Opportunities- Access to Communications
HUM-str-D	Indigenous Peoples Relations	EMP-con-A	Collective Bargaining & Unions	PRO-str-F	Social Opportunities- Opportunities in Nutrition & Health
HUM-str-X	Human Rights Policies & Initiatives	EMP-con-B	Health & Safety	PRO-str-G	Product Safety - Chemical Safety
HUM-con-J	Civil Liberties	EMP-con-F	Supply Chain Labor Standards	PRO-str-H	Product Safety - Financial Product Safety
HUM-con-K	Human Rights Concerns	EMP-con-G	Child Labor	PRO-str-I	Product Safety - Privacy & Data Security
HUM-con-X	Human Rights - Other Concerns	EMP-con-H	Labor Management Relations	PRO-str-J	Product Safety - Responsible Investment
EMP-str-A	Union Relations	EMP-con-X	Labor Rights & Supply Chain - Other Concerns	PRO-str-K	Product Safety - Insuring Health & Demographic Risk

EMP-str-C	Cash Profit Sharing	DIV-str-B	Representation	PRO-con-A	Product Safety & Quality
EMP-str-D	Involvement	DIV-str-C	Board Diversity - Gender	PRO-con-D	Marketing & Advertising
EMP-str-G	Health & Safety	DIV-con-A	Discrimination & Workforce Diversity	PRO-con-E	Anticompetitive Practices
EMP-str-H	Supply Chain Labor Standards	DIV-con-C	Board Diversity - Gender	PRO-con-F	Customer Relations
EMP-str-L	Human Capital Development	PRO-str-A	Product Safety & Quality	PRO-con-G	Privacy & Data Security
EMP-str-M	Labor Management	PRO-str-C	Social Opportunities- Access to Healthcare	PRO-con-X	Customers - Other Concerns

POSITIVE SOCIAL PERFORMANCE INDICATORS: COMMUNITY

COM-STR-H: COMMUNITY ENGAGEMENT

This indicator identifies companies that have notable community engagement program concerning local communities in which the firm has major operations. Metrics include community impact assessments and support for local economic and social infrastructure development.

NEGATIVE SOCIAL PERFORMANCE INDICATORS: COMMUNITY

COM-CON-B: IMPACT ON COMMUNITY

This indicator measures the severity of controversies related to a firm's interactions with communities in which it does business. Topics covered include, for example, land use disputes, negative economic impacts resulting from environmental damage or the presence of company operations, disputes over access to economic opportunities or jobs, controversies of facility closures, and disputes over access to clean water, clean air, or other natural resources. Controversies that are primarily about environmental impact are classified under the appropriate Environment indicator (e.g. Biodiversity & Land Use, Toxic Emissions & Waste). A case in which there are substantial environmental impacts in addition to community impacts may be logged and assessed under an environmental indicator as well as under Impact on Communities.

POSITIVE SOCIAL PERFORMANCE INDICATORS: HUMAN RIGHTS

HUM-STR-D: INDIGENOUS PEOPLES RELATIONS STRENGTH

This indicator identifies companies that have established relations with indigenous peoples near its proposed or current operations that respect the sovereignty, land, culture, human rights, and intellectual property.

HUM-STR-X: HUMAN RIGHTS POLICIES & INITIATIVES

This indicator identifies companies that have undertaken exceptional human rights initiatives, including outstanding transparency or disclosure on human rights issues, or has otherwise shown industry leadership on human rights issues not covered by other MSCI human rights ratings.

NEGATIVE SOCIAL PERFORMANCE INDICATORS: HUMAN RIGHTS

HUM-CON-J: CIVIL LIBERTIES

This indicator measures the severity of controversies related to the impact of a firm's operations on civil liberties. Topics covered include, for example, cooperation with repressive governments requiring censorship, conducting surveillance, or limitations on other civil liberties such as freedom of movement and freedom of the press. Violations of customer privacy are captured under the PROD-con-G: Privacy & Data Security indicator. Violations of employee privacy are captured under the EMP-con-H: Labor Management Relations indicator.

HUM-CON-K: HUMAN RIGHTS CONCERNS

This indicator measures the severity of controversies related to the impact of a firm's operations on human rights. Topics covered include, for example, complicity in killings, physical abuse, displacement, or other rights violations, as well as complicity with such actions by governments or other parties. This indicator also includes business involvement in Syria and Sudan.

HUM-CON-X: HUMAN RIGHTS - OTHER CONCERNS

This indicator measures any human rights or community issues that fall outside of the more targeted indicators listed above, including business involvement in conventional weapons, controversial weapons, and firearms

POSITIVE SOCIAL PERFORMANCE INDICATORS: EMPLOYEE RELATIONS

EMP-STR-A: UNION RELATIONS

This indicator identifies companies with high union density.

EMP-STR-C: CASH PROFIT SHARING

This indicator identifies companies that have a cash profit-sharing program through which they have recently made distributions to a significant proportion of their workforce.

EMP-STR-D: EMPLOYEE INVOLVEMENT

This indicator identifies companies that encourage worker involvement via generous employee stock ownership plans (ESOPs) or employee stock purchase plans (ESPPs).

EMP-STR-G: EMPLOYEE HEALTH & SAFETY

This indicator identifies companies that have strong employee health and safety programs. Initiatives include comprehensive H&S policies and implementation mechanisms across the supply chain, identification and elimination of sources of H&S risk, training, performance auditing of both the company's and contractor's operations, certification under OHSAS 18001, setting up improvement targets, and assessment of historical performance tracking and reporting.

EMP-STR-H: SUPPLY CHAIN LABOR STANDARDS

This indicator is designed to assess how well companies manage risks of production disruptions and brand value damage due to sub-standard treatment of workers in the company's supply chain. Companies that establish labor management policies meeting stringent international norms, implement programs to verify compliance with the policies, and introduce incentives for compliance among suppliers score higher.

EMP-STR-L: HUMAN CAPITAL DEVELOPMENT

This indicator is designed to assess companies' ability to attract, retain, and develop human capital based on their provision of benefits, training and development programs, and employee engagement; and avoid labor unrest or reduced productivity due to poor job satisfaction. Companies that proactively manage human capital development by offering competitive benefit packages and performance incentives, implementing formalized training programs, offering employee engagement and professional development programs, and actively measuring employee satisfaction score highest. Companies assessed for this indicator are those that rely on a highly-skilled or highly-trained workforce based on its principal lines of business.

This indicator only covers companies that rely on a highly-skilled or highly-trained workforce. Please see Labor Management (EMP-str-M) for an assessment of companies with large production workforces.

EMP-STR-M: LABOR MANAGEMENT

This indicator is designed to assess how companies manage their workforce to minimize the risk of workflow disruptions due to labor unrest, or reduced productivity due to poor job satisfaction. Companies that provide strong employment benefits and performance incentives and offer employee engagement and professional development programs score higher. Companies assessed for this indicator are those which have a large production workforce.

EMP-STR-N: CONTROVERSIAL SOURCING

This indicator is designed to assess how companies manage their risks of incurring regulatory compliance costs, reputational damage, or supply chain disruptions resulting from reliance on raw materials that originate in areas associated with severe human rights and labor rights abuses. The range of scoring depends on the material, with different materials relevant for different industries. In general, companies able to trace the origin of their raw materials and certify that they were obtained in a way that minimizes social harm (e.g.



slave labor or funding for groups engaged in human rights violations) score higher.

EMP-STR-X: HUMAN CAPITAL – OTHER STRENGTHS

This indicator is designed to capture best-in-class management performance in the area of human capital that is not covered by other MSCI ESG Research human capital indicators. Metrics include recognition by reputable third party sources for excellent workforce management.

NEGATIVE SOCIAL PERFORMANCE INDICATORS: EMPLOYEE RELATIONS

EMP-CON-A: COLLECTIVE BARGAINING & UNIONS

This indicator measures the severity of controversies related to a firm's union relations practices. Topics covered include, for example, anti-union activities, efforts to prevent non-unionized employees from unionizing, strikes, lock-outs, and the use of replacement workers, acrimonious contract negotiations, and controversies regarding alleged breaches of union contracts. Organized strikes by non-unionized employees are also captured here. Union issues in the supply chain are captured under the Supply Chain Labor Standards indicator. Health and safety issues that are raised by a union but are not primarily about the company's relationship with the union are captured under the Health & Safety indicator.

EMP-CON-B: HEALTH & SAFETY

This indicator measures the severity of controversies related to the health and safety of a firm's employees, temps and contractors, and franchisee employees. Topics covered include, for example, on the job accidents, injuries, and fatalities, mental health issues, as well as kidnappings and physical harm experienced by employees in the field. This KPI does not cover health and safety issues in the traditional supply chain, for example in supplier factories; those issues are captured under the Supply Chain Labor Standards indicator.

EMP-CON-F: SUPPLY CHAIN LABOR STANDARDS

This indicator measures the severity of controversies related to workers in a firm’s supply chain. Topics covered include, for example, allegations of unsafe working conditions, inadequate pay, excessive working hours or overtime, union issues at supplier facilities, the use of forced labor or prison labor by suppliers, and discrimination. Underage labor in supplier operations is captured under the Child Labor indicator.

EMP –CON-G: CHILD LABOR

This indicator measures the severity of child labor controversies in a firm’s own operations or its supply chain. Topics covered include allegations that the company has used underage workers or that underage workers are present at supplier facilities.

EMP-CON-H: LABOR MANAGEMENT RELATIONS

This indicator measures the severity of controversies related to a firm’s labor-management relations. Topics covered include, for example, instances of wrongful termination, reductions in benefits, mistreatment of either employees or contractors, controversial workforce reductions, controversies over wages and hours, employee privacy issues, and forced labor.

EMP-CON-X: LABOR RIGHTS & SUPPLY CHAIN – OTHER CONCERNS

This indicator identifies companies that are involved in employee relations controversies that are not covered by other MSCI ESG Research indicators.

POSITIVE SOCIAL PERFORMANCE INDICATORS: DIVERSITY

DIV-STR-B: REPRESENTATION

This indicator identifies companies with at least one woman among the executive management team.

DIV-STR-C: BOARD DIVERSITY - GENDER

This indicator identifies companies with strong gender diversity on their board of directors.

NEGATIVE SOCIAL PERFORMANCE INDICATORS: DIVERSITY

DIV-CON-A: DISCRIMINATION & WORKFORCE DIVERSITY

This indicator measures the severity of controversies related to a firm's workforce diversity, including its own employees as well as temporary employees, contractors, and franchisee employees. Topics covered include, for example, allegations of discrimination on the basis of sex, race, ethnicity, or other characteristic. Discrimination at supplier facilities is captured under the Supply Chain Labor Standards indicator. Discrimination on the basis of unionization or union sympathies is captured under the Collective Bargaining & Unions indicator.

DIV-CON-C: BOARD DIVERSITY - GENDER

This indicator identifies companies with no women on their board of directors.

POSITIVE SOCIAL PERFORMANCE INDICATORS: PRODUCT

PRO-STR-A: PRODUCT SAFETY AND QUALITY

This indicator is designed to assess how companies manage their risk of facing major product recalls or losing customer trust through major product quality concerns. Companies that proactively manage product quality by achieving certification to widely acceptable standards, undertaking extensive product testing and building processes to track raw materials or components score higher.

For the real estate sector, this indicator is designed to evaluate how companies manage their risk of incurring loss from low occupancy rates due to poor tenant engagement programs. Companies that develop properties in urban areas with access to transportation, and offer tenant incentives to reduce maintenance and utility costs score higher.

PRO-STR-C: SOCIAL OPPORTUNITIES – ACCESS TO HEALTHCARE

This indicator is designed to assess the extent to which companies are taking advantage of opportunities for longer term growth and protecting their license to operate through efforts to improve access to healthcare in developing countries and for under-served populations in developed markets. In developing countries, companies that adapt their business models to reflect the specific needs of individuals in these markets through areas such as R&D, pricing, and licensing strategies score higher. In developed markets, companies that take advantage of opportunities driven by regulatory changes to capture the uninsured market score higher.

PRO-STR-D: SOCIAL OPPORTUNITIES - ACCESS TO FINANCE

This indicator is designed to assess the extent to which a company is providing lending, financing, or products to underrepresented or under-banked communities. Top performing companies will offer products and services to communities with limited or no access to financial products.

PRO-STR-E: SOCIAL OPPORTUNITIES - ACCESS TO COMMUNICATIONS

This indicator is designed to assess the extent to which companies are taking advantage of opportunities for growth in historically underserved markets, including developing countries and underserved populations in developed countries (such as rural areas and the elderly). Companies with considerable operations in developing countries score well, as do those with substantial activities focused on expanding access through relevant initiatives and philanthropic efforts.

PRO-STR-F: SOCIAL OPPORTUNITIES - OPPORTUNITIES IN NUTRITION AND HEALTH

This indicator is designed to assess the extent to which companies are taking advantage of the growth opportunities in the market for healthier products. Companies that offer products with improved nutritional profile, and have sought credible verification, score higher.

PRO-STR-G: PRODUCT SAFETY - CHEMICAL SAFETY

This indicator is designed to assess how companies manage the risk of losing access to markets or the costs related to reformulating their products due to the presence of chemicals of concern. Companies that proactively eliminate chemicals of concern from their products ahead of regulatory changes score higher.

PRO-STR-H: PRODUCT SAFETY - FINANCIAL PRODUCT SAFETY

This indicator is designed to assess how companies manage the risk of incurring costs associated with unanticipated credit losses, litigation, and regulatory changes brought by offering financial products that lack transparency or are highly likely to be financially unsustainable to the end-user. Companies that offer transparent financial products based on a borrower's ability to repay score higher.

PRO-STR-I: PRODUCT SAFETY - PRIVACY & DATA SECURITY

This indicator is designed to assess how companies manage the risk of incurring reputational damage, or legal liability, from a data security breach or controversial use of personal data, or having their business model undermined by evolving regulatory requirements on privacy and data protection. Companies with comprehensive privacy policies and data security management systems and companies whose business models are not reliant on trafficking in personal data score higher.

PRO-STR-J: PRODUCT SAFETY - RESPONSIBLE INVESTMENT

This indicator is designed to assess how companies avoid ESG-related risks in their investment portfolios. Companies that mitigate ESG risks in their investments by integrating ESG risk analysis into their due diligence process across all investment portfolios and asset classes score higher.

PRO-STR-K: PRODUCT SAFETY - INSURING HEALTH AND DEMOGRAPHIC RISK

This indicator is designed to assess how companies manage emerging insurance risks associated with public health trends and demographic change. Companies that have systems in place to identify and model emerging risks associated with health and demographic changes score higher.

NEGATIVE SOCIAL PERFORMANCE INDICATORS: PRODUCT

PRO-CON-A: PRODUCT QUALITY & SAFETY

This indicator measures the severity of controversies related to the quality and/or safety of a firm's products and services. Topics covered include, for example, food safety, controversial media content, product recalls, service disruptions, and the use of

chemicals of concern in company products. This indicator also includes companies with major business involvement in gambling and tobacco.

PRO-CON-D: MARKETING & ADVERTISING

This indicator measures the severity of controversies related to a firm's marketing and advertising practices. Topics covered include, for example, false or deceptive marketing or advertising, marketing of products for off-label uses, and controversies regarding the marketing of products to children or other vulnerable populations, labeling controversies, and spam or ad-ware. Controversies about known product safety issues are covered under the Product Safety & Quality KPI. This indicator also includes business involvement in alcohol.

PRO-CON-E: ANTICOMPETITIVE PRACTICES

This indicator measures the severity of controversies related to a firm's anti-competitive business practices. Topics covered include, for example, price fixing, collusion, bid rigging, and predatory pricing. Business-to-business claims are generally not covered unless a regulator joins the suit. Likewise, standard pre-merger regulatory inquiries are not considered controversial.

PRO-CON-F: CUSTOMER RELATIONS

This indicator measures the severity of controversies related to how a firm treats its customers or potential customers. Topics covered include, for example, fraudulent or improper billing, excessive or hidden fees, predatory financial products, and restricted or discriminatory access to products or services. Customer privacy and data security issues are covered under the Privacy & Data Security KPI.

PRO-CON-G: PRIVACY & DATA SECURITY

This indicator measures the severity of controversies related to a firm's privacy and data security practices. Issues covered include, for example, controversial legal uses of personal data, security breaches, regulatory action against the company, and changes to



a company’s policies or practices that erode customer privacy. Privacy issues affecting employees are captured under the EMP-con-H: Labor Management Relations indicator. Government surveillance and related issues are captured under the HUM-con-J: Civil Liberties indicator.

PRO-CON-X: OTHER CONCERNS

This indicator is designed to assess the severity of customer-related controversies not covered by any other MSCI ESG Research negative social indicator.

GOVERNANCE INDICATORS

Table of Governance Indicators: MSCI ESG STATS – 2018 Data Set

Column Headers	Indicators Labels	Column Headers	Indicator Labels
CGOV-str-G	Corruption & Instability	CGOV-con-K	Governance Structures
CGOV-str-H	Financial System Risk	CGOV-con-L	Controversial Investments
		CGOV-con-M	Bribery & Fraud
		CGOV-con-X	Governance - Other Concerns

POSITIVE GOVERNANCE PERFORMANCE INDICATORS

CGOV-STR-G: CORRUPTION & POLITICAL INSTABILITY

This issue evaluates the extent to which companies may face regulatory risks or lost market access due to corruption scandals or political and social instability. Scores are based on reliance on government contracts and operations in regions facing political instability or high perceived corruption levels; anti-bribery policies, programs, and transparency.

This indicator is designed to assess how companies manage the risk of suffering operational disruptions or loss of market access due to violence, property destruction or sabotage, political instability, demands for bribes, and costly litigation related to corrupt practices. Companies that have programs, guidelines, and clear policies to avoid corrupt business dealings, have strong partnerships with local communities, and have a high level of disclosure and transparency score higher.

CGOV-STR-H: FINANCIAL SYSTEM INSTABILITY

This issue evaluates the extent to which companies may face enhanced regulatory scrutiny as a result of their contributions to systemic risk in financial markets. Scores are based on size, interconnectedness, and complexity; risk oversight, governance, and commitments to ethical standards; "Net Social Value" generated and distributed to stakeholders; and controversies. Metrics include governance structures, integration of long-term performance and risk measures in incentive schemes, reporting transparency, and track record of controversial business practices (insider trading, front-running, fraud, conflicts of interest, etc.).

NEGATIVE GOVERNANCE PERFORMANCE INDICATORS

CGOV-CON-K: GOVERNANCE STRUCTURES

This indicator measures the severity of controversies related to a firm's corporate governance practices. Topics covered include, for example, shareholder or board-level objections to pay practices and governance structures, opposition to shareholder resolutions seeking change to governance practices, and conflicts of interest, unethical behavior, or underqualification on the part of directors or senior executives.

CGOV-CON-L: CONTROVERSIAL INVESTMENTS

This indicator is designed to assess the severity of controversies related to the social and environmental impact of a firm's lending, underwriting, and financing activities. Topics



covered include, for example, financing projects that are controversial because of their actual or anticipated environmental or social impact, as well as criticism of mining companies, REITs, and similar companies that receive royalties or own shares in a particular project that they neither own or operate.

CGOV-CON-M: BRIBERY & FRAUD

This indicator is designed to assess the severity of controversies related to a firm's business ethics practices. Factors affecting this evaluation include, but are not limited to, a history of involvement in widespread or egregious instances of bribery, tax evasion, insider trading, accounting irregularities, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

CGOV-CON-X: GOVERNANCE - OTHER CONCERNS

This indicator measures the severity of controversies related to a firm's governance practices not covered by any other MSCI ESG Research negative governance indicator.

CONTROVERSIAL BUSINESS INVOLVEMENT INDICATORS

ALC-CON-A: ALCOHOL

This indicator identifies companies that meet any of the following criteria:

- **Producer**
 - Companies that derive any revenues from the manufacture of alcoholic products including brewers, distillers, and vintners, and companies that own or operate vineyards.
- **Distributors**
 - Companies that derive any revenues from the wholesale distribution of alcoholic products.
- **Retailers**
 - Companies that derive any revenues from the retail sale of alcoholic products including supermarkets, liquor stores, bars, pubs, or duty free stores.



- **Licensors**
 - Companies that license their company name or brand name to alcoholic products.
- **Suppliers**
 - Companies that derive any revenues from the supply of key raw materials and other products used specifically for the production of alcoholic products, including malt, hops, distilled spirits, alcohol flavoring, chemical additives, "pure alcohol", or "potable alcohol."
- **Ownership of an Alcohol Company**
 - Companies that own 20 to 49.99 percent of a company with involvement. When a company owns 50 percent or more of a subsidiary with involvement, MSCI ESG Research treats it as a consolidated subsidiary.
- **Ownership by an Alcohol Company**
 - Companies that are 50 percent or more owned by a company with involvement.

FIR-CON-A: FIREARMS

This indicator identifies companies that meet any of the following criteria:

- **Producers**
 - Companies that derive any revenues from the manufacture of firearms and small arms ammunitions for civilian markets. The research does not cover companies that cater to the military, government, and law enforcement markets.
- **Retailers and Distributors**
 - Companies that derive any revenues from the distribution (wholesale or retail) of firearms or small arms ammunition intended for civilian use.
- **Ownership Of a Firearms Company**
 - Companies that own 20 to 49.99 percent of another company with involvement. When a company owns 50 percent or more of a subsidiary with involvement, MSCI ESG Research treats it as a consolidated subsidiary.
- **Ownership By a Firearms Company**



- Companies that are 50 percent or more owned by a company with involvement.

GAM-CON-A: GAMBLING

This indicator identifies companies that meet any of the following criteria:

- **Operations**
 - Companies that derive any revenues from the ownership and/or operation of gambling facilities, including casinos, racetracks, bingo parlors, horse, dog, or other racing events that permit wagering, lottery operations, online gambling, pari-mutuel wagering facilities, bingo; pachislot and pachinko parlors, slot machines, Jai-alai, mobile gambling, and sporting events that permit wagering.
- **Support**
 - Companies that derive any revenues from the provision of key products or services fundamental to gambling operations, including:
 - Products manufactured exclusively for gambling, such as slot machines, roulette wheels, or lottery terminals;
 - Gambling technology and support designed for gambling applications such as IT maintenance, software design, security or surveillance systems, and lottery ticket printing;
 - Gambling-related services such as credit lines, and casino management and consultation.
- **Licensors**
 - Companies that license their company name or brand name to gambling products.
- **Ownership of a Gambling Company**
 - Companies that own 20 to 49.99 percent of a company with involvement. When a company owns 50 percent or more of a subsidiary with involvement, MSCI ESG Research treats it as a consolidated subsidiary.
- **Ownership by a Gambling Company**
 - Companies that are 50 percent or more owned by a company with involvement.



MIL-CON-A: MILITARY

This indicator identifies companies that meet any of the following criteria:

- **Conventional Weapons Systems**
 - Companies that derive any revenues from the manufacture of conventional weapons and weapons systems.
- **Conventional Weapons Components**
 - Companies that derive any revenues from the manufacture of critical components for conventional weapons systems.
- **Nuclear Weapons Systems**
 - Companies that derive any revenues from the manufacture of nuclear weapons.
- **Nuclear Weapons Components**
 - Companies that derive any revenues from the manufacture of critical components for nuclear weapons or nuclear weapons delivery systems.
- **Chemical and Biological Weapons Systems**
 - Companies that derive any revenues from the manufacture of biological or chemical weapons, which are defined as weapons that use pathogens such as viruses, bacteria, and disease-causing biological agents, toxins, or chemical substances that have toxic properties that kill, injure, or incapacitate.
- **Chemical and Biological Weapons Components**
 - Companies that manufacture critical components for chemical or biological weapons systems.
- **Support Systems and Services**
 - Companies that derive any revenues from the provision of weapons systems support and services. This category is comprised of companies that provide equipment, systems, and services in direct support of weapons systems, or that provide systems with direct weapons-related applications. Companies are only included if there is evidence that the product or service has a weapons application.
- **Ownership of a Military Weapons Company**
 - Companies that own 20 to 49.99 percent of a company with involvement. When a company owns 50 percent or more of a



subsidiary with involvement, MSCI ESG Research treats it as a consolidated subsidiary.

- **Ownership by a Military Weapons Company**
 - Companies that are 50 percent or more owned by a company with involvement.

NUC-CON-A: NUCLEAR POWER

This indicator identifies companies that meet any of the following criteria:

- **Nuclear Power Generation**
 - Companies that own or operate nuclear power plants.
- **Essential Suppliers**
 - Companies that supply key nuclear-specific products or services to the nuclear power industry, including:
 - Builders or designers of nuclear power plants or nuclear power technology, which also includes producers of nuclear fuel products, nuclear reactors, nuclear rods, and equipment for nuclear power generation;
 - Suppliers of nuclear-specific key components or essential services for the design, construction, or operation of nuclear power plants;
 - Companies that specialize in providing consulting and license renewal services for the nuclear industry;
 - Companies involved in uranium mining, spent fuel processing, and fuel storage;
 - Distributors and handlers of nuclear fuel;
 - Companies involved in the repair and maintenance of core nuclear power generation equipment.
- **Ownership of a Nuclear Power Company**
 - Companies that own 20 to 49.99 percent of a company with involvement. When a company owns 50 percent or more of a subsidiary with involvement, MSCI ESG Research treats it as a consolidated subsidiary.
- **Ownership by a Nuclear Power Company**



- Companies that are 50 percent or more owned by a company with involvement.

TOB-CON-A: TOBACCO

This indicator identifies companies that meet any of the following criteria:

- **Producers**
 - Companies that derive any revenues from growing or processing raw tobacco leaves, or the manufacture of tobacco products, including cigars, blunts, cigarettes, beedis, kreteks, smokeless tobacco, snuff, snus, chewing tobacco.
- **Distributors**
 - Companies that derive any revenues from distribute tobacco products to retailers and other distributors. This data point does not include a manufacturer that distributes its own tobacco products, unless it also provides logistics or distribution services to other tobacco companies.
- **Retailers**
 - Companies that derive any revenues from the retail of tobacco products.
- **Licensors**
 - Companies that license their company or brand name to tobacco products.
- **Supplier**
 - Companies that derive any revenues from the manufacture and supply of key products necessary for the production of tobacco products, such as tobacco flavoring, cigarette filters (acetate tow), tobacco roll paper, cigarette manufacturing machines, and tobacco packaging; specifically cigarette cartons, films, and aluminum foil.
- **Ownership of a Tobacco Company**
 - Companies that own 20 to 49.99 percent of a company with involvement. When a company owns 50 percent or more of a subsidiary with involvement, MSCI ESG Research treats it as a consolidated subsidiary.
- **Ownership by a Tobacco Company**

- Companies that are 50 percent or more owned by a company with involvement.

MSCI ESG KLD STATS – 2018 DATA SET KEY

Please note the following worksheets within the MSCI ESG STATS_KEY spreadsheet:

- **2018 ESG Indicators:**
 - All active ESG indicators for the 2018 research year.
- **2018 CBIs:**
 - All active controversial business involvement (CBI) indicators for the 2018 research year.
- **2018 Additional Information**
 - Company name, ticker, unique security identifier, ESG Indicators – summation data
- **Data Set Universes - 2018**
- **STATS ESG Indicators_History**
 - All active and discontinued ESG indicators for each STATS Data Set, 1991-2018.
- **STATS CBI_History**
 - All active and discontinued CBI indicators for each STATS Data Set, 1991-2018.



APPENDIX A

MSCI ESG KLD STATS DATA SETS: COVERAGE UNIVERSE HISTORY

MSCI ESG KLD STATS Data Sets – coverage universe

<u>Data Set Universe</u>	<u>Time Series</u>	<u># of Companies</u>
Universe A	1991-2018	650
Universe B	2008-2013	1000
Universe C	2001-2013	1100
Universe D	2003-2018	2400
Universe E	2013-2018	2600

- Universe A details:
 - For the STATS-1991 through STATS-2011 Data Sets, Universe A was defined by the constituents of the MSCI KLD 400 Social Index & the S&P 500. For STATS-2002 through STATS-2011 Data Sets, the constituents were as of December of each year. For STATS-1991 through STATS-2001 Data Sets, the constituents were as of August of each year.
 - For the STATS-2012 Data Set, Universe A was defined by the constituents of the MSCI KLD 400 Social Index & the top 500 largest U.S. companies by market capitalization, as of December 2012.
 - Since the STATS-2013 Data Set, Universe A has been defined by the constituents of the MSCI KLD 400 Social Index & the MSCI USA Index as of December of each year.

- The MSCI USA Index is the U.S. component of the MSCI World Index, and consists of large and mid-size market capitalization companies. For a description of the MSCI World Index, please visit MSCI's website: <https://www.msci.com/index-methodology>
 - The MSCI KLD 400 Social Index comprises companies with high Environmental, Social and Governance (ESG) ratings and excludes companies involved in Alcohol, Gambling, Tobacco, Military Weapons, Civilian Firearms, Nuclear Power, Adult Entertainment, and Genetically Modified Organisms (GMO). The Index aims to serve as a benchmark for investors whose objectives include owning companies with very high ESG ratings and avoiding companies that screens excluding companies involved in the production of products and services with high negative social and/or environmental impact. Launched in May 1990 as the Domini 400 Social Index, it is one of the first ESG indexes. Constituent selection is based on data from MSCI ESG Research. For more information on the MSCI KLD 400 Social Index, please visit MSCI's website: <https://www.msci.com/index-methodology>
- Universe B Details:
 - The MSCI ESG KLD STATS time series expanded its coverage in 2001 to include the top 1000 U.S. companies by market capitalization, as of December 31st. Universe B consists only of the top 1000 and has been offered since 2008. MSCI discontinued this universe after the STATS-2013 Data Set.
- Universe C Details:
 - The MSCI ESG KLD STATS time series expanded its coverage in 2001 to include the top 1000 U.S. companies by market capitalization, as of December. Universe B consists of the constituents of the MSCI KLD 400 Social Index and the top 1000 U.S. companies by market capitalization, as of December. MSCI discontinued this universe after the STATS-2013 Data Set.
- Universe D:

- The MSCI ESG KLD STATS time series expanded its coverage in 2003 to include the top 3000 U.S. companies by market capitalization, as of December of each year.
- Since the STATS-2013 Data Set, Universe D includes only the constituents of the MSCI USA IMI Index, as of December of each year. For more information on the MSCI USA IMI Index please visit MSCI's website: <https://www.msci.com/index-methodology>
- Universe E:
 - The MSCI ESG KLD STATS time series expanded its coverage in 2013 to include non-U.S. companies.
 - Universe E includes all companies that are constituents of the following MSCI Indexes, as of December of each year:
 - MSCI World - EX US
 - MSCI Emerging Markets Index
 - MSCI Europe IMI
 - MSCI Australia IMI
 - MSCI South Africa IMI
 - MSCI Canada IMI
 - MSCI Japan IMI (~Top 500 by market capitalization)

APPENDIX B:

MSCI ESG KLD STATS DATA SETS: ESG INDICATOR HISTORY

This section lists all nomenclature and definitional changes for each ESG indicator.

POSITIVE ENVIRONMENT PERFORMANCE INDICATORS

ENV-STR-A: ENVIRONMENTAL OPPORTUNITIES – CLEAN TECH

2015 Data Set

Name change:

- New: Environmental Opportunities – Environmental Opportunities in Clean Tech
- Old: Environmental Opportunities – Clean Tech

2013 Data Set

Name change:

- New: Environmental Opportunities - Clean Tech (ENV-str-A)
- Old: Environmental Opportunities (ENV-str-A)

Change in Definition: Major

- New: Environmental Opportunities - Clean Tech (ENV-str-A)
 - **Environmental Opportunities - Green Buildings** (ENV-str-L) was spun off from Env-str-A as a separate positive indicator.
 - Environmental Opportunities - Clean Tech (ENV-str-A)

This indicator is designed to assess how companies are taking advantages of opportunities in the market for environmental technologies. Companies that proactively invest in product and services that address issues of resource conservation and climate change score higher.

- Old: Environmental Opportunities (ENV-str-A)

This indicator evaluates how companies are taking advantages of opportunities in the market for environmental technologies, and/or to develop or refurbish



buildings with green building characteristics including lower embodied energy, recycled materials, lower energy and water use, waste reduction, and healthier and more productive working environments. Companies that proactively invest in product and services addressing issues of resource conservation and climate change, and/or develop or refurbish buildings to achieve green building certifications score higher. Companies lacking strategies and investments targeting these areas, or that ignore opportunities in green buildings, score lower.

2012 Data Set

Name change:

- New: Environmental Opportunities
- Old: Beneficial Products and Services (1991-2011)

Change in Definition: Minor

- New: Environmental Opportunities (ENV-str-A)

This indicator evaluates how companies are taking advantages of opportunities in the market for environmental technologies, and/or to develop or refurbish buildings with green building characteristics including lower embodied energy, recycled materials, lower energy and water use, waste reduction, and healthier and more productive working environments. Companies that proactively invest in product and services addressing issues of resource conservation and climate change, and/or develop or refurbish buildings to achieve green building certifications score higher. Companies lacking strategies and investments targeting these areas, or that ignore opportunities in green buildings, score lower.

- Old: Beneficial Products and Services (ENV-str-A)

This indicator measures the positive environmental impact of a firm's products and/or services. Factors affecting this evaluation include, but are not limited to, products/services that reduce other firms' and individuals' consumption of energy, production/consumption of hazardous chemicals, and overall patterns of resource consumption.

2006 Data Set



Change in Definition: Minor

- New: Beneficial Products and Services (ENV-str-A).

This indicator measures the positive environmental impact of a firm's products and/or services. Factors affecting this evaluation include, but are not limited to, products/services that reduce other firms' and individuals' consumption of energy, production/consumption of hazardous chemicals, and overall patterns of resource consumption.

- Old: Beneficial Products and Services (ENV-str-A)

The company derives substantial revenues from innovative remediation products, environmental services, or products that promote the efficient use of energy, or it has developed innovative products with environmental benefits. (The term "environmental service" does not include services with questionable environmental effects, such as landfills, incinerators, waste-to-energy plants, and deep injection wells.) Through 1994, "substantial revenues" was specified as more than 4% of total revenues.

1991 Data Set

New Indicator

- Beneficial Products and Services (ENV-str-A)

The company derives substantial revenues from innovative remediation products, environmental services, or products that promote the efficient use of energy, or it has developed innovative products with environmental benefits. (The term "environmental service" does not include services with questionable environmental effects, such as landfills, incinerators, waste-to-energy plants, and deep injection wells.) Through 1994, "substantial revenues" was specified as more than 4% of total revenues.

ENV-STR-B: POLLUTION & WASTE – TOXIC EMISSIONS AND WASTE

2015 Data Set

Name change:



- New: Pollution & Waste - Toxic Emissions and Waste
- Old: Waste Management - Toxic Emissions and Waste

2013 Data Set

Name Change:

- New : Waste Management – Toxic Emissions and Waste
- Old: Waste Management

Change in Definition: Major

- *Waste Management - Electronic Waste* (ENV-str-N) was spun off into an independent indicator from ENV-str-B .

2012 Data Set

Name Change:

- New: Waste Management
- Old: Pollution Prevention

Change in Definition: minor

- New: Waste Management (ENV-str-B)

This indicator evaluates companies that are at risk of incurring liabilities associated with pollution, contamination, and the emission of toxic and carcinogenic substances, and/or companies that produce or sell electronic products face risks associated with recycling and/or disposal of end-of-life electronic products. Companies with strong programs and track records of reducing emissions and waste, and/or that proactively address electronic waste concerns by establishing comprehensive and well-managed product recovery and recycling programs, score higher. Companies that create large volumes of toxic and carcinogenic emissions or waste, yet lack programs or policies to reduce or control these substances and have experienced recent incidents of contamination, or electronic product companies with a strictly compliance-driven approach, score lower.

- Old: Pollution Prevention (ENV-str-B)

This indicator measures a firm's method of mitigating non-carbon air emissions, water discharges, and solid waste from its operations. Factors affecting this

evaluation include, but are not limited to, initiatives to reduce a firm's non-carbon air emissions from its operations; to reduce the release of raw sewage, industrial chemicals, and other regulated substances; to reduce hazardous and non-hazardous waste; and programs to reduce the use of packaging materials, to support recycling; and to recycle old products such as televisions and other consumer electronics.

2010 Data Set

Change in Definition: minor

- New: Pollution Prevention (ENV-str-B)

This indicator measures a firm's method of mitigating non-carbon air emissions, water discharges, and solid waste from its operations. Factors affecting this evaluation include, but are not limited to, initiatives to reduce a firm's non-carbon air emissions from its operations; to reduce the release of raw sewage, industrial chemicals, and other regulated substances; to reduce hazardous and non-hazardous waste; and programs to reduce the use of packaging materials, to support recycling; and to recycle old products such as televisions and other consumer electronics.

- Old: Pollution Prevention (ENV-str-B)

The company has notably strong pollution prevention programs including emissions reductions and toxic-use reduction programs.

1991 Data Set

New Indicator

- Pollution Prevention (ENV-str-B)– 1991 through 2009

The company has notably strong pollution prevention programs including emissions reductions and toxic-use reduction programs.

ENV-STR-C: POLLUTION & WASTE – PACKAGING MATERIALS & WASTE

2015 Data Set

Name change:

- New: Pollution & Waste – Packaging Materials & Waste
- Old: Waste Management - Packaging Materials & Waste

2013 Data Set

Name change:

- New: Waste Management - Packaging Materials & Waste
- Old: Packaging Materials & Waste

2012 Data Set

Name change:

- New: Packaging Materials & Waste
- Old: Recycling

Change in Definition: minor

- New: Packaging Materials & Waste (ENV-str-C)

This indicator evaluates companies are that at risk of losing access to markets or at risk of facing added costs to come into compliance with new regulations related to product packaging content and end-of-life recycling or disposal of packaging materials. Companies that proactively reduce the environmental impact of their packaging, including use of recycled content material and establishment of take-back and recycling programs, score higher. Companies that have done little to address packaging impacts or have implemented a packaging strategy that is strictly compliance-driven score lower.

- Old: Recycling (ENV-str-C)

This indicator measures a firm’s use of recycled materials in its products/services. Factors affecting this evaluation include, but are not limited to: assessment of the volume and recycled content of products made with recycled input materials, including paper, metal, plastic; and any certification of its practices by a third party, such as the Forest Stewardship Council for timber product companies.

2010 Data Set

Change in Definition: minor

- New: Recycling (ENV-str-C)

This indicator measures a firm’s use of recycled materials in its products/services. Factors affecting this evaluation include, but are not limited to: assessment of the volume and recycled content of products made with recycled input materials, including paper, metal, plastic; and any certification of its practices by a third party, such as the Forest Stewardship Council for timber product companies.

- Old: Recycling (ENV-str-C)

The company either is a substantial user of recycled materials as raw materials in its manufacturing processes, or a major factor in the recycling industry.

1991 Data Set

New Indicator

- Recycling (ENV-str-C)

The company either is a substantial user of recycled materials as raw materials in its manufacturing processes, or a major factor in the recycling industry.

ENV-STR-D: CLIMATE CHANGE - CARBON EMISSIONS

2013 Data Set

Name change:

- New: Climate Change - Carbon Emissions (ENV-str-D)
- Old: Climate Change (ENV-str-D)

Change in Definition: Major

- The following indicators were spun off from the 2012 Data Set definition:
 - Environmental Opportunities – Renewable Energy (ENV-str-M),



- Climate Change - Energy Efficiency (ENV-str-O),
- Climate Change - Product Carbon Footprint (ENV-str-P),
- Climate Change - Insuring Climate Change Risk (ENV-str-Q)

- New: Climate Change - Carbon Emissions (ENV-str-D)

This indicator is designed to assess how companies manage the risks of increased costs linked to carbon pricing or regulatory caps. Companies that proactively invest in low-carbon technologies and increase the carbon efficiency of their facilities or products score higher. Management metrics include efforts to reduce exposure through comprehensive carbon policies and implementation mechanisms, including carbon reduction targets, production process improvements, installation emissions capture equipment, and/or switching to cleaner energy sources.

- Old: Climate Change (ENV-str-D)

This indicator measures a firm's policies, programs, and initiatives regarding climate change. Factors affecting this evaluation include, but are not limited to, the following:

- Companies that invest in renewable power generation and related services.
- Companies that invest in efforts to reduce carbon exposure through comprehensive carbon policies and implementation mechanisms, including carbon reduction objectives, production process improvements, installation of emissions capture equipment, and/or switch to cleaner energy sources.
- Companies that take proactive steps to manage and improve the energy efficiency of their operations.
- Companies that measure and reduce the carbon emissions of their products throughout the value chain and implement programs with their suppliers to reduce carbon footprint.
- Insurance companies that have integrated climate change effects into their actuarial models while developing products to help customers manage climate change related risks.

2012 Data Set

Name change:

- New: Climate Change (ENV-str-D)
- Old: Clean Energy (ENV-str-D)

Change in Definition:

- New: Climate Change (ENV-str-D)

This indicator measures a firm’s policies, programs, and initiatives regarding climate change. Factors affecting this evaluation include, but are not limited to, the following:

- Companies that invest in renewable power generation and related services.
- Companies that invest in efforts to reduce carbon exposure through comprehensive carbon policies and implementation mechanisms, including carbon reduction objectives, production process improvements, installation of emissions capture equipment, and/or switch to cleaner energy sources.
- Companies that take proactive steps to manage and improve the energy efficiency of their operations.
- Companies that measure and reduce the carbon emissions of their products throughout the value chain and implement programs with their suppliers to reduce carbon footprint.
- Insurance companies that have integrated climate change effects into their actuarial models while developing products to help customers manage climate change related risks.
- Old: Clean Energy (ENV-str-D)

This indicator measures a firm’s policies regarding climate change. Factors affecting this evaluation include, but are not limited to, acknowledgement of direct and/or indirect impacts on operations due to climate change and formal commitments to: reduce greenhouse gas emissions; and initiatives to reduce energy consumption and to increase the use of renewable energy.

2010 Data Set

Change in Definition:

- New: Clean Energy (ENV-str-D)



This indicator measures a firm's policies regarding climate change. Factors affecting this evaluation include, but are not limited to, acknowledgement of direct and/or indirect impacts on operations due to climate change and formal commitments to: reduce greenhouse gas emissions; and initiatives to reduce energy consumption and to increase the use of renewable energy.

- Old: Clean Energy (ENV-str-D)

The company has taken significant measures to reduce its impact on climate change and air pollution through use of renewable energy and clean fuels or through energy efficiency. The company has demonstrated a commitment to promoting climate-friendly policies and practices outside its own operations.

2006 Data Set

Name change:

- New: Clean Energy (ENV-str-D)
- Old: Alternative Fuels (ENV-str-D).

Change in Definition:

- New: Clean Energy (ENV-str-D)

The company has taken significant measures to reduce its impact on climate change and air pollution through use of renewable energy and clean fuels or through energy efficiency. The company has demonstrated a commitment to promoting climate-friendly policies and practices outside its own operations.

- Old: Alternative Fuels (ENV-str-D).

The company derives substantial revenues from alternative fuels. The term "alternative fuels" includes natural gas, wind power, and solar energy. The company has demonstrated an exceptional commitment to energy efficiency programs or the promotion of energy efficiency.

1991 Data Set

New Indicator:

- Alternative Fuels (ENV-str-D).

The company derives substantial revenues from alternative fuels. The term “alternative fuels” includes natural gas, wind power, and solar energy. The company has demonstrated an exceptional commitment to energy efficiency programs or the promotion of energy efficiency.

ENV-STR-E: COMMUNICATIONS

2005 Data Set

DISCONTINUED

In 2005, this indicator was incorporated into a broader Corporate Governance indicator focusing on overall ESG transparency.

STATS 1996 through 2004 Data Sets were altered to reflect this change.

Change in Definition:

- New: Transparency Strength (CGOV-str-D).

The company is particularly effective in reporting on a wide range of social and environmental performance measures, or is exceptional in reporting on one particular measure.

- Old: Communications (ENV-str-E). STATS-1996 Data Set through STATS-2004 Data Set

The company is a signatory to the CERES Principles, publishes a notably substantive environmental report, or has notably effective internal communications systems in place for environmental best practices.

ENV-STR-F: PROPERTY, PLANT, AND EQUIPMENT

1996 Data Set

- Discontinued. Data no longer collected.

1991 Data Set



New Indicator:

- Property, Plant, and Equipment (ENV-str-F).

The company maintains its property, plant, and equipment with above average environmental performance for its industry.

ENV-STR-G: ENVIRONMENTAL MANAGEMENT SYSTEMS

2012 Data Set

Name change:

- New: Environmental Management Systems (ENV-str-G)
- Old: Management Systems (ENV-str-G)

Change in Definition:

- New: Environmental Management Systems (ENV-str-G)

This indicator measures whether a firm has an environmental management system (EMS) in place, and whether it is certified to a third party standard, such as ISO 14001.

- Old: Management Systems (ENV-str-G)

This indicator measures a firm's monitoring and management of its environmental practices. Factors affecting this evaluation include, but are not limited to, the establishment and monitoring of environmental performance targets, the presence of environmental training and communications programs for employees, and stakeholder engagement.

2011 Data Set

Change in Definition:

- New: Management Systems (ENV-str-G)

This indicator measures a firm's monitoring and management of its environmental practices. Factors affecting this evaluation include, but are not limited to, the establishment and monitoring of environmental



performance targets, the presence of environmental training and communications programs for employees, and stakeholder engagement.

- Old: Management Systems (ENV-str-G)

The company has demonstrated a superior commitment to management systems through ISO 14001 certification and other voluntary programs.

2006 Data Set

New Indicator:

- Management Systems (ENV-str-G)

ENV-STR-H: NATURAL CAPITAL - WATER STRESS

2015 Data Set

Name change:

- New: Natural Capital - Water Stress (ENV-str-H)
- Old: Natural Resource Use – Water Stress (ENV-str-H)

Change in Definition: minor

- New: Natural Capital - Water Stress (ENV-str-H)

This indicator is designed to evaluate the extent to which companies may face water shortages affecting their ability to operate, lost access to markets due to stakeholder water conflicts, or higher water costs. Scores are based on water management strategy and targets; water use over time and vs. peers.

- Old: Natural Resource Use – Water Stress (ENV-str-H)

This indicator is designed to assess how companies manage the risks of water shortages impacting their ability to operate, losing access to markets due to stakeholder opposition over water use, or being subject to higher

water costs. Companies that proactively employ water efficient processes, water recycling and alternative water sources score higher.

2013 Data Set

Name change:

- New: Natural Resource Use – Water Stress (ENV-str-H)
- Old: Water Stress (ENV-str-H)

2012 Data Set

New Indicator:

- Water Stress (ENV-str-H)

ENV-STR-I: NATURAL CAPITAL - BIODIVERSITY & LAND USE

2015 Data Set

Name change:

- New: Natural Capital – Biodiversity & Land Use (ENV-str-I)
- Old: Natural Resource Use – Biodiversity & Land Use (ENV-str-I)

Change in Definition: minor

- New: Natural Capital – Biodiversity & Land Use (ENV-str-I)

This indicator is designed to evaluate the extent to which companies may face lost market access or litigation, liabilities, or reclamation costs due to operations that damage fragile ecosystems. Scores are based on policies/ programs regarding biodiversity, land use, and community impact. Specific metrics include efforts to reduce land or marine disturbances, increase biodiversity protection, engage community stakeholders.

- Old: Natural Resource Use – Biodiversity & Land Use (ENV-str-I)

This indicator is designed to assess how companies manage the risks of losing access to markets, or incurring litigation, liability, or reclamation

costs due to operations that damage fragile ecosystems. Companies that have policies and programs designed to protect biodiversity and address community concerns on land use score higher.

2013 Data Set

Name change:

- New: Natural Resource Use – Biodiversity & Land Use (ENV-str-I)
- Old: Biodiversity & Land Use (ENV-str-I)

2012 Data Set

New Indicator:

- Biodiversity & Land Use (ENV-str-I)

ENV-STR-J: NATURAL CAPITAL - RAW MATERIAL SOURCING

2015 Data Set

Name change:

- New: Natural Capital – Raw Material Sourcing (ENV-str-J)
- Old: Natural Resource Use – Raw Material Sourcing (ENV-str-J)

Change in Definition: minor

- New: Natural Capital – Raw Material Sourcing (ENV-str-J)

This indicator is designed to assess which companies may face reputational risks by sourcing or utilizing raw materials with high environmental impacts. Scores are based on reliance on environmentally intensive agricultural raw materials; sustainable sourcing policies, commitments, and certification. Key management metrics include policies, initiatives, and targets related to sourcing the following materials of concern: Seafood and/or Aquaculture, Timber and/or Paper, Palm Oil, Beef and/or Dairy, Leather, Cotton.

- Old: Natural Resource Use – Raw Material Sourcing (ENV-str-J)



This indicator is designed to assess how companies manage the risks of damaging their brand value by sourcing raw materials with high environmental impact. Companies that have policies and procedures to source materials with lower environmental impact and participate in initiatives to reduce environmental impact of raw materials production score higher.

Management metrics include policies, initiatives, and targets related to sourcing the following materials of concern: seafood and/or aquaculture, timber and/or paper, palm oil, beef and/or dairy, leather, and cotton.

2013 Data Set

Name change:

- New: Natural Resource Use – Raw Material Sourcing (ENV-str-J)
- Old: Raw Material Sourcing (ENV-str-J)

2012 Data Set

New Indicator:

- Raw Material Sourcing (ENV-str-J)

ENV-STR-K: CLIMATE CHANGE - FINANCING ENVIRONMENTAL IMPACT

2015 Data Set

Name change:

- New: Climate Change – Financing Environmental Impact (ENV-str-K)
- Old: Natural Resource Use – Financing Environmental Impact (ENV-str-K)

Change in Definition: Minor

- New: Climate Change – Financing Environmental Impact (ENV-str-K)

This indicator is designed to assess which companies may face potential credit or reputational risks resulting from indirect exposure to the environmental concerns facing borrowers. Scores are based on estimated environmental risk financing; environmental due diligence process and “green” financing.



Management metrics include efforts to mitigate credit risk through integration of ESG risk management policies into company's overall financing and risk management structures.

- Old: Natural Resource Use – Financing Environmental Impact (ENV-str-K)

This indicator is designed to assess how companies manage the risks of credit defaults resulting from poor due diligence processes related to environmental concerns. Companies that proactively address the environmental risks embedded in their financing decisions score higher.

2013 Data Set

New Indicator:

- Natural Resource Use – Financing Environmental Impact (ENV-str-K)

This indicator is designed to assess how companies manage the risks of credit defaults resulting from poor due diligence processes related to environmental concerns. Companies that proactively address the environmental risks embedded in their financing decisions score higher.

- This issue was covered in Other Strength (ENV-str-X) prior to STATS-2013.

ENV-STR-L: ENVIRONMENTAL OPPORTUNITIES – OPPORTUNITIES IN GREEN BUILDING

2015 Data Set

Name change:

- New: Environmental Opportunities - Opportunities in Green Building (ENV-str-L)
- Old: Environmental Opportunities - Green Buildings (ENV-str-L)

Change in Definition: Minor

- New: Environmental Opportunities - Opportunities in Green Building



This indicator is designed to evaluate the extent to which companies take advantage of opportunities to develop / refurbish buildings with lower embodied energy, recycled materials, lower energy / water use, waste reduction, and healthier environments. Scores are based on green property initiatives, tenant engagement, and urban site criteria; certified properties; and environmental performance. Management metrics include efforts to increase green building certifications across portfolios of real estate assets.

- Old: Environmental Opportunities - Green Buildings

This indicator is designed to evaluate the extent to which companies are taking advantage of opportunities to develop or refurbish buildings with leading environmental design features, including lower embodied energy, recycled materials, lower energy and water use, waste reduction, and healthier and more productive working environments. Companies that proactively develop or refurbish buildings to achieve green building certifications score higher.

2013 Data Set

New Indicator:

- Environmental Opportunities - Green Buildings

This indicator is designed to evaluate the extent to which companies are taking advantage of opportunities to develop or refurbish buildings with leading environmental design features, including lower embodied energy, recycled materials, lower energy and water use, waste reduction, and healthier and more productive working environments. Companies that proactively develop or refurbish buildings to achieve green building certifications score higher.

- This issue was covered in Environmental Opportunities (ENV-str-A) prior to STATS-2013.

ENV-STR-M: ENVIRONMENTAL OPPORTUNITIES – OPPORTUNITIES IN RENEWABLE ENERGY

2015 Data Set

Name change:

- New: Environmental Opportunities - Opportunities in Renewable Energy (ENV-str-M)



- Old: Environmental Opportunities - Renewable Energy (ENV-str-M)

Change in Definition: Minor

- New: Environmental Opportunities - Opportunities in Renewable Energy (ENV-str-M)

This indicator is designed to evaluate the extent to which companies take advantages of opportunities linked to the development of renewable power production. Scores are based on exposure to renewable power subsidies and preferential policies; strategic investments in renewable power generation and related services; and renewable capacity as % of total and trend. Management metrics include efforts to develop renewable power generation capacity and/or proactively complement the development of renewable power through electrical network expansion, equipment commercialization, and 'green power' offerings to its customers.

- Old: Environmental Opportunities - Renewable Energy (ENV-str-M)

This indicator is designed to evaluate the extent to which companies are taking advantage of opportunities linked to the development of renewable power production. Companies that proactively invest in renewable power generation and related services score higher. Key management metrics include, efforts to develop renewable power generation capacity and/or proactively complement the development of renewable power through electrical network expansion, equipment commercialization, and 'green power' offerings to its customers.

2013 Data Set

New Indicator:

- Environmental Opportunities - Renewable Energy (ENV-str-M)
- This issue was covered in Climate Change (ENV-str-D) prior to STATS-2013.

ENV-STR-N: POLLUTION & WASTE - ELECTRONIC WASTE

2015 Data Set



Name change:

- New: Pollution & Waste - Electronic Waste (ENV-str-N)
- Old: Waste Management - Electronic Waste (ENV-str-N)

Change in Definition: Minor

- New: Pollution & Waste - Electronic Waste (ENV-str-N)

This indicator is designed to assess the extent to which companies that produce or sell electronic products may face regulatory risks associated with recycling or disposal of end-of-life electronic products. Scores are based on exposure to evolving e-waste regulations; targets and programs to collect and recycle electronic waste. Management metrics include efforts to implement comprehensive product recovery and recycling programs.

- Old: Waste Management - Electronic Waste (ENV-str-N)

This indicator is designed to assess how electronic product producers and retailers manage the risks associated with recycling and/or disposal of end-of-life electronic products. Companies that proactively address electronic waste concerns by establishing comprehensive and well-managed product recovery and recycling programs score higher.

2013 Data Set

New Indicator:

- Waste Management - Electronic Waste (ENV-str-N)

This indicator is designed to assess how electronic product producers and retailers manage the risks associated with recycling and/or disposal of end-of-life electronic products. Companies that proactively address electronic waste concerns by establishing comprehensive and well-managed product recovery and recycling programs score higher.

- This issue was covered in Waste Management (ENV-str-B) prior to STATS-2013.

ENV-STR-O: CLIMATE CHANGE – ENERGY EFFICIENCY

2016 Data Set

- Discontinued. Data no longer collected.

2015 Data Set

Change in Definition: Minor

- New: Climate Change – Energy Efficiency (ENV-str-O)

This indicator is designed to assess the extent to which companies may face increased or volatile energy costs across their operations. Scores are based on exposure to energy intensive businesses; efforts to reduce energy consumption; and energy consumption over time and vs. peers. Management metrics include efforts to reduce exposure through identification and implementation of energy efficient production processes.

- Old: Climate Change – Energy Efficiency (ENV-str-O)

This indicator is designed to assess how companies manage the risks of increased or volatile energy costs across their operations. Companies that take proactive steps to manage and improve the energy efficiency of their operations score higher.

2013 Data Set

New Indicator:

- Climate Change – Energy Efficiency (ENV-str-O)

This indicator is designed to assess how companies manage the risks of increased or volatile energy costs across their operations. Companies that take proactive steps to manage and improve the energy efficiency of their operations score higher.

- This issue was covered in Climate Change (ENV-str-D) prior to STATS-2013.

ENV-STR-P: CLIMATE CHANGE – PRODUCT CARBON FOOTPRINT

2015 Data Set

Change in Definition: Minor



- New: Climate Change – Product Carbon Footprint (Env-str-P)

This issue evaluates the extent to which companies may face higher input or production costs for carbon-intensive products due to volatile energy costs in a carbon-constrained world. Scores are based on companies' reliance on carbon intensive products; and efforts to measure and reduce the carbon footprint of their supply chains. Management metrics include efforts to reduce exposure through measurement and reduction of carbon emissions associated with raw materials production, product manufacturing, distribution, and retail.

- Old: Climate Change – Product Carbon Footprint (Env-str-P)

This indicator is designed to assess how companies manage the risks of higher input or production costs for their carbon-intense products due to increased energy costs. Companies that measure and reduce the carbon emissions associated with their products, and implement programs with their suppliers to reduce carbon footprint, score higher. Key management metrics include, efforts to reduce exposure through measurement and reduction of carbon emissions associated with raw materials production, product manufacturing, distribution, and retail.

2013 Data Set

New Indicator:

- Climate Change – Product Carbon Footprint (Env-str-P)

This indicator is designed to assess how companies manage the risks of higher input or production costs for their carbon-intense products due to increased energy costs. Companies that measure and reduce the carbon emissions associated with their products, and implement programs with their suppliers to reduce carbon footprint, score higher. Key management metrics include, efforts to reduce exposure through measurement and reduction of carbon emissions associated with raw materials production, product manufacturing, distribution, and retail.

- This issue was covered in Climate Change (ENV-str-D) prior to STATS-2013.



ENV-STR-Q: CLIMATE CHANGE – CLIMATE CHANGE VULNERABILITY

2015 Data Set

Change in Definition: Minor

- New: Climate Change – Climate Change Vulnerability

This indicator is designed to assess the extent to which insurance companies may face risks to insured assets or individuals associated with the physical effects of climate change. Scores are based on insured exposure to geographies vulnerable to climate change effects; and integration of climate change risks into product strategy and risk management processes. Management metrics include acknowledgement of climate change as a business risk; integration of climate change into risk modeling, pricing, and reserving; product and incentive offerings to reduce or hedge climate change-related risks.

- Old: Climate Change – Climate Change Vulnerability

This indicator is designed to assess how companies manage the risks to insured assets or individuals associated with the effects of climate change. Companies that have integrated climate change effects into their actuarial models while developing products to help customers manage climate change related risks score higher. Key management metrics include, acknowledgement of climate change as a business risk; integration of climate change into risk modeling, pricing, and reserving; product and incentive offerings to reduce or hedge climate change-related risks.

- This issue was covered in Climate Change (ENV-str-D) prior to STATS-2013.

ENV-STR-X: ENVIRONMENT - OTHER STRENGTHS

This indicator assesses a firm's environmental management policies, programs and initiatives that are not covered by any other MSCI ESG Research positive environmental indicators.

2016 Data Set

- Discontinued. Data no longer collected.

NEGATIVE ENVIRONMENT PERFORMANCE INDICATORS

ENV-CON-A: HAZARDOUS WASTE

2010 Data Set

- Discontinued after STATS-2009 Data Set.
- Since STATS-2010 Data Set, fines and civil penalties captured by this indicator have been covered by ENV-con-D.

2009 Data Set

Definition:

Hazardous Waste (ENV-con-A)

The company's liabilities for hazardous waste sites exceed \$50 million, or the company has recently paid substantial fines or civil penalties for waste management violations. Before 1996 the threshold for liabilities was \$30 million.

1996 Data Set

Change in Definition: Minor

- New: ***Hazardous Waste (ENV-con-A)***

The company's liabilities for hazardous waste sites exceed \$50 million, or the company has recently paid substantial fines or civil penalties for waste management violations. Before 1996 the threshold for liabilities was \$30 million.

- Old: ***Hazardous Waste (ENV-con-A)***

The company's liabilities for hazardous waste sites exceed \$30 million, or the company has recently paid substantial fines or civil penalties for waste management violations.

1991 Data Set

Hazardous Waste (ENV-con-A)

The company's liabilities for hazardous waste sites exceed \$30 million, or the company has recently paid substantial fines or civil penalties for waste management violations.

ENV-CON-B: REGULATORY COMPLIANCE

2015 Data Set

- Discontinued. Data no longer collected.

2014 Data Set

Definition:

ENV-con-B: Regulatory Compliance

This indicator identifies companies that have paid a settlement, fine or penalty due to non-compliance with U.S. environmental regulations.

For each company, MSCI ESG Research calculates a three-year average of settlements, fines, and/or penalties (US\$) for alleged violations of any of the following nine major U.S. federal environmental health and safety laws:

- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)
- Toxic Substances Control Act (TSCA)
- Endangered Species Act (ESA)
- Clean Water Act (CWA)
- Safe Water Drinking Act (SWDA)
- Resource Conservation and Recovery Act (RCRA)



- Clean Air Act (CAA)
- Atomic Energy Act (AEA) Source: Nuclear Regulatory Commission
- Mine Act (MA) Source: Mine Safety and Health Administration

For STATS-2014, the data covers the 2011-2013 period. Companies that averaged \$40,000 or more in settlements, fines, and/or penalties during this period received a score = 1.

For all STATS data sets, this indicator only covers companies in a U.S. universe.

2013 Data Set

Change in Definition: Major

- New: ENV-con-B: Regulatory Compliance

This indicator identifies companies that have paid a settlement, fine or penalty due to non-compliance with U.S. environmental regulations.

For each company, MSCI ESG Research calculates a three-year average of settlements, fines, and/or penalties (US\$) for alleged violations of any of the following nine major U.S. federal environmental health and safety laws:

- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)
- Toxic Substances Control Act (TSCA)
- Endangered Species Act (ESA)
- Clean Water Act (CWA)
- Safe Water Drinking Act (SWDA)
- Resource Conservation and Recovery Act (RCRA)
- Clean Air Act (CAA)
- Atomic Energy Act (AEA) Source: Nuclear Regulatory Commission
- Mine Act (MA) Source: Mine Safety and Health Administration

For STATS-2013, the data covers the 2010-2012 period. Companies that averaged \$40,000 or more in settlements, fines, and/or penalties during this period received a score = 1.



For all STATS data sets, this indicator only covers companies in a U.S. universe.

- Old: ENV-con-B: Regulatory Compliance

This indicator measures a firm's record of compliance with environmental regulations. Factors affecting this evaluation include, but are not limited to, fines/sanctions for causing environmental damage, and/or violations of operating permits.

2011 Data Set

Name change:

- New: Regulatory Compliance (ENV-con-B)
- Old: Regulatory Problems (ENV-con-B)

Change in Definition: Minor

- New: Regulatory Compliance (ENV-con-B)

This indicator measures a firm's record of compliance with environmental regulations. Factors affecting this evaluation include, but are not limited to, fines/sanctions for causing environmental damage, and/or violations of operating permits.

- Old: Regulatory Problems (ENV-con-B)

The company has recently paid substantial fines or civil penalties for violations of air, water, or other environmental regulations, or it has a pattern of regulatory controversies under the Clean Air Act, Clean Water Act or other major environmental regulations.

1991 Data Set – Introduction of Indicator

New Indicator: Regulatory Problems (ENV-con-B)

The company has recently paid substantial fines or civil penalties for violations of air, water, or other environmental regulations, or it has a pattern of regulatory controversies under the Clean Air Act, Clean Water Act or other major environmental regulations.

ENV-CON-C: OZONE DEPLETING CHEMICALS

2010 Data Set

- Discontinued after STATS-2009 Data Set.
- Since STATS-2010 Data Set, indicator covered by ENV-con-G.

2009 Data Set

Definition:

Ozone Depleting Chemicals (ENV-con-C). The company is among the top manufacturers of ozone depleting chemicals such as HCFCs, methyl chloroform, methylene chloride, or bromines.

1991 Data Set– Introduction of Indicator

Ozone Depleting Chemicals (ENV-con-C). The company is among the top manufacturers of ozone depleting chemicals such as HCFCs, methyl chloroform, methylene chloride, or bromines.

ENV-CON-D: TOXIC EMISSIONS AND WASTE

2015 Data Set

All “toxic emissions and waste” settlements, fines or penalties related to the following retired indicator are now covered under ENV-con-D indicator.

- ENV-con-B: Regulatory Compliance (discontinued in 2015)

This indicator identifies companies that have paid a settlement, fine or penalty due to non-compliance with U.S. environmental regulations.

Change in Definition: Minor

- New:



This indicator measures the severity of controversies related to a firm's operational non-GHG emissions or releases to land, air, and/or water. This includes controversies related to accidental spills or releases as well as the environmental impacts of standard operational emissions, whether within or in exceedance of levels allowed by permit. Involvement in hydraulic fracturing operations is also captured in this indicator. When there is a substantial impact on a local community that results from an environmental controversy classified under Toxic Emissions & Waste, an additional controversy case is logged and assessed under the Impact on Communities indicator; the assessment in that case is based on the impact on the community rather than the environmental impact.

- Old:

This indicator is designed to assess the severity of controversies related to a firm's non-GHG emissions. Factors affecting this evaluation include, but are not limited to, a history of involvement in land or air emissions-related legal cases, widespread or egregious impacts due to hazardous emissions, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

2013 Data Set

Name change:

- New: ENV-con-D: Toxic Emissions and Waste
- Old: ENV-con-D: Toxic Spills & Releases

2012 Data Set

Change in Name and Definition: Minor

- New: ENV-con-D: Toxic Spills & Releases

This indicator measures the severity of controversies related to a firm's hazardous waste spills and releases. Factors affecting this evaluation include, but are not limited to, a history of involvement in land or air emissions-related legal cases, widespread or egregious impacts due to hazardous emissions, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

- Old: Substantial Emissions (ENV-con-D)

This indicator measures a firm's emission of toxic chemicals according to data from the Toxics Release Inventory (TRI), a U.S. Environmental Protection Agency (EPA) database of information on toxic chemical releases and waste management activities. Factors affecting this evaluation include, but are not limited to, how the firm compares to its industry peers.

2011 Data Set

Change in Definition: Minor

- New: Substantial Emissions (ENV-con-D)

This indicator measures a firm's emission of toxic chemicals according to data from the Toxics Release Inventory (TRI), a U.S. Environmental Protection Agency (EPA) database of information on toxic chemical releases and waste management activities. Factors affecting this evaluation include, but are not limited to, how the firm compares to its industry peers.

- Old: Substantial Emissions (ENV-con-D)

The company's legal emissions of toxic chemicals (as defined by and reported to the EPA) from individual plants into the air and water are among the highest of the companies followed by KLD.

2010 Data Set

Change in Definition: Minor

- Since STATS-2010 Data Set, fines and civil penalties captured by the retired indicator ENV-con-A: Hazardous Waste have been covered by ENV-con-D.

1991 Data Set-Introduction of Indicator

New Indicator:

- Substantial Emissions (ENV-con-D)

The company's legal emissions of toxic chemicals (as defined by and reported to the EPA) from individual plants into the air and water are among the highest of the companies followed by KLD.

ENV-CON-E: AGRICULTURAL CHEMICALS

2010 Data Set

- Discontinued after STATS-2009 Data Set.
- Since STATS-2010 Data Set, indicator covered by ENV-con-G.

1991 Data Set-Introduction of Indicator

New Indicator:

- ***Agricultural Chemicals (ENV-con-E).***

The company is a substantial producer of agricultural chemicals, *i.e.*, pesticides or chemical fertilizers.

ENV-CON-F: ENERGY AND CLIMATE CHANGE

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to a firm's climate change and energy-related impacts. Issues covered include, for example, lawsuits over a company's alleged contribution to climate change, public controversy or criticism of a company's contribution to climate change, or status as an exceptionally large emitter of GHGs, as well as resistance to calls for improvement.

- Old:



This indicator is designed to assess the severity of controversies related to a firm's climate change and energy-related policies and initiatives. Factors affecting this evaluation include, but are not limited to, a history of involvement in GHG-related legal cases, widespread or egregious impacts due to corporate GHG emissions, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

2013 Data Set

Name change:

- New: ENV-con-F: Energy and Climate Change
- Old: ENV-con-F: Climate Change

2012 Data Set

Change in Definition: Major

- New: ENV-con-F: Climate Change

This indicator is designed to assess the severity of controversies related to a firm's climate change and energy-related policies and initiatives. Factors affecting this evaluation include, but are not limited to, a history of involvement in GHG-related legal cases, widespread or egregious impacts due to corporate GHG emissions, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

- Old: ENV-con-F: Climate Change

This indicator measures the severity of controversies related to a firm's climate change related policies and initiatives. Factors affecting this evaluation include, but are not limited to, a history of involvement in greenhouse gas (GHG)-related legal cases, widespread or egregious impacts due to corporate GHG emissions, resistance to improved practices, and criticism by non-governmental organizations (NGOs) and/or other third-party observers. In addition, factors cover whether a company derives substantial revenues from the sale of coal or oil and its derivative fuel products, or whether the company derives substantial revenues indirectly from the combustion of coal or oil and its derivative fuel products.



2011 Data Set

Change in Definition: Minor

- New: ENV-con-F: Climate Change

This indicator measures the severity of controversies related to a firm's climate change related policies and initiatives. Factors affecting this evaluation include, but are not limited to, a history of involvement in greenhouse gas (GHG)-related legal cases, widespread or egregious impacts due to corporate GHG emissions, resistance to improved practices, and criticism by non-governmental organizations (NGOs) and/or other third-party observers. In addition, factors cover whether a company derives substantial revenues from the sale of coal or oil and its derivative fuel products, or whether the company derives substantial revenues indirectly from the combustion of coal or oil and its derivative fuel products.

- Old: ENV-con-F: Climate Change

The company derives substantial revenues from the sale of coal or oil and its derivative fuel products, or the company derives substantial revenues indirectly from the combustion of coal or oil and its derivative fuel products. Such companies include electric utilities, transportation companies with fleets of vehicles, auto and truck manufacturers, and other transportation equipment companies.

1999 Data Set-Introduction of Indicator

New Indicator:

- ***Climate Change (ENV-con-F)***

The company derives substantial revenues from the sale of coal or oil and its derivative fuel products, or the company derives substantial revenues indirectly from the combustion of coal or oil and its derivative fuel products. Such companies include electric utilities, transportation companies with fleets of vehicles, auto and truck manufacturers, and other transportation equipment companies.

ENV-CON-G: IMPACT OF PRODUCTS & SERVICES

2015 Data Set

- Discontinued.
- Since 2015 Data Set, “Impact of Products and Services” covered in other negative environmental indicators.

2012 Data Set

Change in Name and Definition: Minor

- New: ENV-con-G: Impact of Products & Services

This indicator is designed to assess the severity of controversies related to the environmental impact of a firm’s products and services. Factors affecting this evaluation include, but are not limited to, a history of involvement in environmental impact-related legal cases, widespread or egregious impacts due to direct or indirect use of the firm’s products or services, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

- Old: Negative Impact of Products & Services (ENV-con-G)

This indicator measures the negative environmental impact of a firm’s products and/or services. Factors affecting this evaluation include, but are not limited to, products/services that involve regulated substances, the production/consumption of hazardous chemicals, and controversial products such as those that use genetically modified organisms or nanotechnology.

2010 Data Set-Introduction of Indicator

New Indicator:

- Negative Impact of Products & Services (ENV-con-G)

This indicator measures the negative environmental impact of a firm’s products and/or services. Factors affecting this evaluation include, but are not limited to, products/services that involve regulated substances, the production/consumption of hazardous chemicals, and controversial products such as those that use genetically modified organisms or nanotechnology.

ENV-CON-H: BIODIVERSITY & LAND USE

2015 Data Set

Change in Definition: Minor

- **New:**

This indicator measures the severity of controversies related to a company's use or management of natural resources where there is an alleged or anticipated negative impact on the environment, especially in ecologically sensitive areas. Topics covered under this indicator include issues such as species loss, reduction in biodiversity, habitat damage, depletion of or competition for natural resources, loss of economic value (for example, in fisheries or tourism), as well as post-consumer waste issues. Biodiversity impacts primarily caused by toxic releases are captured under the Toxic Emissions & Waste indicator. Competition of water resources and controversies regarding water usage are captured under the Water Stress indicator. When there is a substantial impact on a local community that results from an environmental controversy classified under Biodiversity & Land Use, an additional controversy case is logged and assessed under the Impact on Communities indicator; the assessment in that case is based on the impact on the community rather than the environmental impact.

- **Old:**

This indicator is designed to assess the severity of controversies related to a firm's use or management of natural resources. Factors affecting this evaluation include, but are not limited to, a history of involvement in natural resource-related legal cases, widespread or egregious impacts due to the firm's use of natural resources, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

ENV-CON-I: OPERATIONAL WASTE (NON-HAZARDOUS)

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to the impact of a firm's non-hazardous, non-toxic operational waste, meaning waste, emissions, or effluents produced through normal operations and/or as part of the production of a product. Controversies related to toxic and hazardous waste emitted to air, land, or water is captured under the Toxic Emissions & Waste indicator. Controversies related to post-consumer waste are captured under Biodiversity & Land Use.

- Old:

This indicator is designed to assess the severity of controversies related to the impact of a firm's non-hazardous operational waste. Factors affecting this evaluation include, but are not limited to, a history of involvement in environmental impact-related legal cases, widespread or egregious impacts of the firm's non-hazardous waste streams, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

ENV-CON-J: SUPPLY CHAIN MANAGEMENT**2015 Data Set***Change in Definition: Minor*

- New:

This indicator measures controversies related to the sourcing raw materials or other inputs that have a substantial negative environmental impact. Issues covered include, for example, degradation of natural resources through use of raw materials that are resource intensive and/or waste intensive, such as tropical hardwoods, palm oil, or unsustainable fisheries.

- Old:

This indicator is designed to assess the severity of controversies related to the environmental impact of a company's supply chain and the sourcing of natural resources. Factors affecting this evaluation include, but are not limited to, a history of widespread or egregious environmental impacts in a firm's supply chain, legal cases, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

ENV-CON-K: WATER STRESS

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to a firm's water management practices. Issues covered include, for example, ecological damage resulting from water withdrawals, depletion of water resources for other users, and regulatory action or community disputes regarding the company's water usage. . This indicator does not capture water pollution cases, which are covered under the Toxic Emissions & Waste indicator.

- Old:

This indicator is designed to assess the severity of controversies related to a firm's water management practices. Factors affecting this evaluation include, but are not limited to, a history of involvement in water use-related legal cases, widespread or egregious impacts due to effluents, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

ENV-CON-X: ENVIRONMENT - OTHER CONCERNS

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures any environmental issues that fall outside of the more targeted indicators listed above, including major exposure to business involvement in nuclear power.

- Old:

This indicator is designed to assess the severity of controversies related to a firm’s environmental impact not covered by other MSCI ESG Research’s environmental indicators. Factors affecting this evaluation include, but are not limited to widespread or egregious environmental impacts, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

SOCIAL INDICATORS

POSITIVE SOCIAL PERFORMANCE INDICATORS: COMMUNITY

COM-STR-A: GENEROUS GIVING

2012 Data Set

- *Discontinued after STATS-2011 Data Set.*

STATS-1991 through STATS-2011 Definition:

Generous Giving (COM-str-A).

The company has consistently given over 1.5% of trailing three-year net earnings before taxes (NEBT) to charity, or has otherwise been notably generous in its giving.

COM-STR-B: INNOVATIVE GIVING

2014 Data Set



- ***Discontinued after STATS-2013 Data Set.***

For STATS-2010 through STATS-2013 Data Set, indicator included COM-str-D.

STATS-2010 through STATS-2013 Definition:

This indicator evaluates companies' charitable giving programs. Companies whose programs support affordable housing, access to healthcare, K-12 public education, initiatives to relieve hunger, or in-kind giving and other programs targeted at disadvantaged communities, score higher.

STATS-1991 through STATS-2009 Definition:

- ***Innovative Giving (COM-str-B).***

The company has a notably innovative giving program that supports nonprofit organizations, particularly those promoting self-sufficiency among the economically disadvantaged. Companies that permit nontraditional federated charitable giving drives in the workplace are often noted in this section as well.

COM-STR-C: SUPPORT FOR HOUSING

2010 Data Set

- Discontinued after STATS-2009 Data Set.
- Since STATS-2010 Data Set, indicator covered by PROD-str-D.

STATS-1991 through STATS-2009 Definition:

- ***Support for Housing (COM-str-C)***

The company is a prominent participant in public/private partnerships that support housing initiatives for the economically disadvantaged, *e.g.*, the National Equity Fund or the Enterprise Foundation.

COM-STR-D: SUPPORT FOR EDUCATION

2010 Data Set



- Discontinued after STATS-2009 Data Set.
- Since STATS-2010 Data Set, indicator covered by COM-str-B.

STATS-1994 through STATS-2009 Definition:

- ***Support for Education (COM-str-D).***

The company has either been notably innovative in its support for primary or secondary school education, particularly for those programs that benefit the economically disadvantaged, or the company has prominently supported job-training programs for youth.

COM-STR-F: NON-US CHARITABLE GIVING

2010 Data Set

- Discontinued after STATS-2009 Data Set.
- Since STATS-2010 Data Set, indicator covered by COM-str-A.

STATS-1994 through STATS-2009 Definition:

- ***Non-US Charitable Giving (COM-str-F)***

The company has made a substantial effort to make charitable contributions abroad, as well as in the U.S. To qualify, a company must make at least 20% of its giving, or have taken notably innovative initiatives in its giving program, outside the U.S.

COM-STR-G: VOLUNTEER PROGRAMS

2010 Data Set

- Discontinued after STATS-2009 Data Set.

STATS-2005 through STATS-2009 Definition:

- *Volunteer Programs (COM-str-G)*

The company has an exceptionally strong volunteer program.

COM-STR-X: OTHER STRENGTH

2012 Data Set

- Discontinued after STATS-2011 Data Set.

STATS-1991 through STATS-2011 Definition:

- Other Strength (COM-str-X).

The company has either an exceptionally strong in-kind giving program or engages in other notably positive community activities.

NEGATIVE SOCIAL PERFORMANCE INDICATORS: COMMUNITY

COM-CON-A: INVESTMENT CONTROVERSIES

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by PROD-con-X.

STATS-1991 through STATS-2009 Definition:

Investment Controversies (COM-con-A). The company is a financial institution whose lending or investment practices have led to controversies, particularly ones related to the Community Reinvestment Act.

COM-CON-B: IMPACT ON COMMUNITY

2015 Data Set



Change in Definition: Minor

- New

This indicator measures the severity of controversies related to a firm's interactions with communities in which it does business. Topics covered include, for example, land use disputes, negative economic impacts resulting from environmental damage or the presence of company operations, disputes over access to economic opportunities or jobs, controversies of facility closures, and disputes over access to clean water, clean air, or other natural resources. Controversies that are primarily about environmental impact are classified under the appropriate Environment indicator (e.g. Biodiversity & Land Use, Toxic Emissions & Waste). A case in which there are substantial environmental impacts in addition to community impacts may be logged and assessed under and environmental indicator as well as under Impact on Communities.

- Old:

This indicator is designed to assess the severity of controversies related to a firm's interactions with communities in which it does business. Factors affecting this evaluation include, but are not limited to, a history of involvement in land use and/or development-related legal cases, widespread or egregious community impacts due to the company's operations, and criticism by NGOs and/or other third-party observers.

Since STATS-2010 Data Set, indicator COM-con-X covered by this indicator.

COM-CON-D: TAX DISPUTES

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by CGOV-con-X.

Indicator covered by CGOV-con-E for STATS-1991 through STATS-2004 Data Sets; these data sets were adjusted to have COM-con-D replace CGOV-con-E. Since STATS - 2010 Data Set, indicator covered by CGOV-con-X.

STATS-1991 through STATS-2009 Definition:

Tax Disputes (COM-con-D). The company has recently been involved in major tax disputes involving Federal, state, local or non-U.S. government authorities, or is involved in controversies over its tax obligations to the community.

COM-CON-X: OTHER CONCERN

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by COM-con-B.

STATS-1991 through STATS-2009 Definition:

Other Concern (COM-con-X). The company is involved with a controversy that has mobilized community opposition, or is engaged in other noteworthy community controversies.

POSITIVE SOCIAL PERFORMANCE INDICATORS: HUMAN RIGHTS

HUM-STR-A: POSITIVE RECORD IN SOUTH AFRICA

Discontinued after STATS-1995 Data Set.

STATS-1994 through STATS-1995 Definition:

Positive Record in South Africa (HUM-str-A). The company's social record in South Africa is noteworthy.

HUM-STR-G: LABOR RIGHTS STRENGTH

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by EMP-str-H.

STATS-2002 through STATS-2009 Definition:

Labor Rights Strength (HUM-str-G). The company has outstanding transparency on overseas sourcing disclosure and monitoring, or has particularly good union relations outside the U.S., or has undertaken labor rights-related initiatives that KLD considers outstanding or innovative.

NEGATIVE SOCIAL PERFORMANCE INDICATORS: HUMAN RIGHTS

HUM-CON-A: SOUTH AFRICA

Discontinued after STATS-1994 Data Set.

STATS-1991 through STATS-1994 Definition:

South Africa (HUM-con-A). The company faced controversies over its operations in South Africa.

HUM-CON-B: NORTHERN IRELAND

Discontinued after STATS-1994 Data Set.

STATS-1991 through STATS-1994 Definition:

Northern Ireland (HUM-con-B). The company has operations in Northern Ireland.

HUM-CON-C: SUPPORT FOR CONTROVERSIAL REGIMES

2015 Data Set

- Discontinued.
- Data collected but assessed through indicator HUM-con-X: Human Rights - Other Concerns.

2012 Data Set

Change in Name and Definition: Major

- New: HUM-con-C: Support for Controversial Regimes

This indicator is designed to assess the severity of controversies related to a firm's operations in countries with poor human rights records. Factors affecting this evaluation include, but are not limited to, links to the controversial regime, a history of controversial operations in the countries, allegations of complicity in violence towards the citizenry as a result of the company's operations, and criticism by NGOs and/or other third-party observers.

- Old: *Burma (HUM-con-C)*

The company has operations or direct investment in, or sourcing from, Burma.

1994 Data Set-Introduction of Indicator

New Indicator:

- ***Burma (HUM-con-C)***

The company has operations in Burma.

HUM-CON-D: MEXICO

Discontinued after STATS-2002 Data Set.

***STATS-1994 through STATS-2002 Definition:
Mexico (HUM-con-D).***

The company's operations in Mexico have had major recent controversies, especially those related to the treatment of employees or degradation of the environment.

HUM-CON-F: LABOR RIGHTS CONCERN

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by EMP-con-F

STATS-2002 through STATS-2009 Definition:

Labor Rights Concern (HUM-con-F). The company's operations have had major recent controversies primarily related to labor standards in its supply chain.

HUM-CON-G: INDIGENOUS PEOPLES RELATIONS CONCERN

Discontinued after STATS-2009 Data Set.

For STATS-2010 and STATS-2011 Data Sets, indicator covered by HUM-con-X.
Since STATS-2012 Data Set, indicator covered by HUM-con-K.

STATS-2000 through STATS-2009 Definition:

Indigenous Peoples Relations Concern (HUM-con-G).

The company has been involved in serious controversies with indigenous peoples (either in or outside the U.S.) that indicate the company has not respected the sovereignty, land, culture, human rights, and intellectual property of indigenous peoples.

HUM-CON-H: OPERATIONS IN SUDAN

Discontinued after STATS-2011 Data Set.

Since STATS-2012 Data Set, indicator covered by Hum-con-C

STATS-2010 through STATS-2011 Definition:

Operations in Sudan (HUM-con-H).

The company has operations or direct investment in, or sourcing from, Sudan.

HUM-CON-J: CIVIL LIBERTIES

2015 Data Set

Name and Definition change: Major

- New: HUM-con-J: Civil Liberties

This indicator measures the severity of controversies related to the impact of a firm's operations on civil liberties. Topics covered include, for example, cooperation with repressive governments requiring censorship, conducting surveillance, or limitations on other civil liberties such as freedom of movement and freedom of the press. Violations of customer privacy are captured under the PROD-con-G: Privacy & Data Security indicator. Violations of employee privacy are captured under the EMP-con-H: Labor Management Relations indicator.

- Old: Freedom of Expression & Censorship (HUM-con-J)

This indicator measures the severity of controversies related to the impact of a firm's operations on freedom of expression and free speech. Factors affecting this evaluation include, but are not limited to, cooperating with repressive governments seeking internet user data or requiring censorship, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

HUM-CON-K: HUMAN RIGHTS CONCERNS

2015 Data Set

Name change:

- New: HUM-con-K: Human Rights Concerns
- Old: HUM-con-K: Human Rights Violations

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to the impact of a firm's operations on human rights. Topics covered include, for example, complicity in killings, physical abuse, displacement, or other rights violations, as well as complicity with such actions by governments or other parties. This indicator also includes business involvement in Syria and Sudan.

- Old:

This indicator measures the severity of controversies related to the impact of a firm's operations on human rights. Factors affecting this evaluation include, but are not limited to, a history of involvement in human rights-related legal cases, widespread or egregious complicity in killings, physical abuse, or violation of other rights, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

HUM-CON-X: HUMAN RIGHTS - OTHER CONCERNS

2015 Data Set



Change in Definition: Minor

- New:

This indicator measures any human rights or community issues that fall outside of the more targeted indicators listed above, including business involvement in conventional weapons, controversial weapons, and firearms.

- Old:

This indicator measures the severity of controversies related to human rights controversies that are not covered by other MSCI ESG Research human rights ratings.

2013 Data Set

Name change:

- New: HUM-con-K: Human Rights – Other Concerns
- Old: HUM-con-K: Other Concerns

POSITIVE SOCIAL PERFORMANCE INDICATORS: EMPLOYEE RELATIONS

EMP-STR-B: NO-LAYOFF POLICY

Discontinued after STATS-1994 Data Set.

Since STATS-1995 Data Set, indicator covered by EMP-str-X.

STATS-1991 through STATS-1994 Definition:

No-Layoff Policy (EMP-str-B). The company has maintained a consistent no-layoff policy.

EMP-STR-F: RETIREMENT BENEFITS STRENGTH

Discontinued after STATS-2009 Data Set.

STATS-1991 through STATS-2009 Definition:

Retirement Benefits Strength (EMP-str-F). The company has a notably strong retirement benefits program.

EMP-STR-I: COMPENSATION & BENEFITS

Discontinued after STATS-2013 Data Set.

STATS-2012 through STATS-2013 Definition:

This indicator identifies companies that provide noteworthy employee compensation and benefit programs. Management metrics include cash profit sharing, ESOPs, pension plans and other benefit programs.

EMP-STR-J: EMPLOYEE RELATIONS

Discontinued after STATS-2013 Data Set.

STATS-2012 through STATS-2013 Definition:

This indicator is designed to identify companies that have practices in place to develop strong employee relations. Metrics include strong collective bargaining agreements and robust employee satisfaction programs.

EMP-STR-K: PROFESSIONAL DEVELOPMENT

Discontinued after STATS-2013 Data Set.

STATS-2012 through STATS-2013 Definition:

This indicator identifies companies that provide excellent employee training and development programs.

EMP-STR-L: HUMAN CAPITAL DEVELOPMENT

Name change for STATS-2014 Data Set, from "Human Capital Management" to "Human Capital Development".

EMP-STR-M: LABOR MANAGEMENT

Name change for STATS-2014 Data Set, from "Human Capital - Labor Management" to "Labor Management".

For the STATS-2013 Data Set, this is a new separate indicator. This issue was covered in Human Capital Management (EMP-str-L) in STATS-2012.

EMP-STR-N: CONTROVERSIAL SOURCING

For the STATS-2013 Data Set, this is a new separate indicator. This issue was covered in Human Rights Policies & Initiatives (HUM-str-X) in STATS-2012.

EMP-STR-X: HUMAN CAPITAL – OTHER STRENGTHS

For the STATS-2013 Data Set, this indicator has been reactivated. It was previously active for STATS – 1991 through 2011 Data Sets.

NEGATIVE SOCIAL PERFORMANCE INDICATORS: EMPLOYEE RELATIONS

EMP-CON-A: COLLECTIVE BARGAINING & UNIONS

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to a firm’s union relations practices. Topics covered include, for example, anti-union activities, efforts to prevent non-unionized employees from unionizing, strikes, lock-outs,



and the use of replacement workers, acrimonious contract negotiations, and controversies regarding alleged breaches of union contracts. Organized strikes by non-unionized employees are also captured here. Union issues in the supply chain are captured under the Supply Chain Labor Standards indicator. Health and safety issues that are raised by a union but are not primarily about the company's relationship with the union are captured under the Health & Safety indicator.

- Old:

This indicator is designed to assess the severity of controversies related to a firm's union relations practices. Factors affecting this evaluation include, but are not limited to, the firm's response to union organizing efforts and its bargaining practices with existing unionized workers, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

EMP-CON-B: HEALTH & SAFETY

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to the health and safety of a firm's employees, temps and contractors, and franchisee employees. Topics covered include, for example, on the job accidents, injuries, and fatalities, mental health issues, as well as kidnappings and physical harm experienced by employees in the field. This KPI does not cover health and safety issues in the traditional supply chain, for example in supplier factories; those issues are captured under the Supply Chain Labor Standards indicator.

- Old:

This indicator is designed to assess the severity of controversies related to the safety of a firm's employees. Factors affecting this evaluation include, but are not limited to, a history of involvement in workplace safety-related legal cases, widespread or egregious fines for unsafe workplace practices, resistance to improved practices, and criticism by NGOs and/or other third-party observers.



EMP-CON-C: WORKFORCE REDUCTIONS

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by EMP-con-X

STATS-1991 through STATS-2009 Definition:

Workforce Reductions (EMP-con-C).

The company has made significant reductions in its workforce in recent years.

EMP-CON-D: RETIREMENT BENEFITS CONCERN

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by EMP-con-X

STATS-1991 through STATS-2009 Definition:

Retirement Benefits Concern (EMP-con-D).

The company has either a substantially underfunded defined benefit pension plan, or an inadequate retirement benefits program. In 2004, KLD renamed this concern from Pension/Benefits Concern.

EMP-CON-F: SUPPLY CHAIN LABOR STANDARDS

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to workers in a firm's supply chain. Topics covered include, for example, allegations of unsafe working conditions, inadequate pay, excessive working hours or overtime, union issues at supplier facilities, the use of forced labor or prison labor by suppliers,



and discrimination. Underage labor in supplier operations is captured under the Child Labor indicator.

- Old:

This indicator is designed to assess the severity of controversies related to a firm's supply chain. Factors affecting this evaluation include, but are not limited to, a history of involvement in supply chain-related legal cases, widespread or egregious instances of abuses of the labor rights or safety of employees in their supply chain, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

EMP-CON-G: CHILD LABOR

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of child labor controversies in a firm's own operations or its supply chain. Topics covered include allegations that the company has used underage workers or that underage workers are present at supplier facilities.

- Old:

This indicator is designed to assess the severity of child labor controversies in a firm's supply chain. Factors affecting this evaluation include, but are not limited to, a history of involvement in child labor-related legal cases, widespread or egregious instances of child labor in the firm's supply chain, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

EMP-CON-H: LABOR-MANAGEMENT RELATIONS

2015 Data Set

Change in Definition: Minor

- New:



This indicator measures the severity of controversies related to a firm's labor-management relations. Topics covered include, for example, instances of wrongful termination, reductions in benefits, mistreatment of either employees or contractors, controversial workforce reductions, controversies over wages and hours, employee privacy issues, and forced labor.

- **Old:**

This indicator is designed to assess the severity of controversies related to a firm's labor-management relations. Factors affecting this evaluation include, but are not limited to, a history of involvement in employee-related legal cases, widespread or egregious instances of wrongful termination, reductions in benefits, or mistreatment of either employees and contractors, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

For the STATS-2013 Data Set, this is a new indicator that was part of Labor-Management Relations (EMP-con-X) in STATS-2012.

EMP-CON-X: LABOR RIGHTS& SUPPLY CHAIN – OTHER CONCERNS

For the STATS-2014 Data Set, this indicator has been renamed from Labor Rights – Other Concerns (EMP-con-X) in STATS-2012.

For the STATS-2013 Data Set, this indicator has been renamed from Labor-Management Relations (EMP-con-X) in STATS-2012.

POSITIVE SOCIAL PERFORMANCE INDICATORS: DIVERSITY

DIV-STR-A: CEO

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by Div-str-B.

STATS-1991 through STATS-2009 Definition:

CEO (DIV-str-A). The company's chief executive officer is a woman or a member of a minority group.

DIV-STR-B: REPRESENTATION

2015 Data Set

- **Indicator re-introduced.**

Change in Definition: Minor

- **New:**

This indicator identifies companies with at least one woman among the executive management team.

- **Old:**

The company has made notable progress in the promotion of women and minorities, particularly to line positions with profit-and-loss responsibilities in the corporation.

2012 Data Set

- Discontinued after STATS-2011 Data Set.

STATS-1991 through STATS-2011 Definition:

Representation (DIV-str-B)

The company has made notable progress in the promotion of women and minorities, particularly to line positions with profit-and-loss responsibilities in the corporation.

DIV-STR-C: BOARD OF DIRECTORS - GENDER

Since the STATS-2013 Data Set, this indicator only covers U.S. companies.



DIV-STR-D: WORK/LIFE BENEFITS

Discontinued after STATS-2011 Data Set.

Since STATS-2012 Data Set, indicator covered by DIV-str-H

STATS-1991 through STATS-2011 Definition:

Work/Life Benefits (DIV-str-D). The company has outstanding employee benefits or other programs addressing work/life concerns, e.g., childcare, elder care, or flextime.

DIV-STR-E: WOMEN & MINORITY CONTRACTING

Discontinued after STATS-2013 Data Set.

STATS-2012 through STATS-2013 Definition:

This indicator identifies companies with a demonstrably strong record on purchasing from or contracting with women- and/or minority-owned businesses. For the STATS-2013 Data Set, this indicator only covers U.S. companies.

STATS-1991 through STATS-2011 Definition:

Women/Minority Contracting (DIV-str-E). The company does at least 5% of its subcontracting, or otherwise has a demonstrably strong record on purchasing or contracting, with women- and/or minority-owned businesses.

DIV-STR-F: EMPLOYMENT OF THE DISABLED

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by DIV-str-H

STATS-1991 through STATS-2009 Definition:

Employment of the Disabled (DIV-str-F). The company has implemented innovative hiring programs; other innovative human resource programs for the disabled, or otherwise has a superior reputation as an employer of the disabled.

DIV-STR-G: GAY & LESBIAN POLICIES

Discontinued after STATS-2011 Data Set.

Since STATS-2012 Data Set, indicator covered by DIV-str-H

STATS-1995 through STATS-2011 Definition:

Gay & Lesbian Policies (DIV-str-G). The company has implemented notably progressive policies toward its gay and lesbian employees. In particular, it provides benefits to the domestic partners of its employees.

DIV-STR-H: EMPLOYMENT OF UNDERREPRESENTED GROUPS

Discontinued after STATS-2013 Data Set.

STATS-2010 through STATS-2013 Definition:

This indicator is designed to assess a firm’s efforts to promote diversity in its workforce. Factors affecting this evaluation include, but are not limited to, its effort to recruit women and minorities, and its participation in multi-stakeholder diversity initiatives.

For the STATS-2013 Data Set, this indicator only covers U.S. companies.

DIV-STR-X: OTHER STRENGTH

Discontinued after STATS-2011 Data Set.

STATS-1991 through STATS-2011 Definition:

Other Strength (DIV-str-X). The company has made a notable commitment to diversity that is not covered by other MSCI ratings.

NEGATIVE SOCIAL PERFORMANCE INDICATORS: DIVERSITY

DIV-CON-A: DISCRIMINATION & WORKFORCE DIVERSITY

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to a firm’s workforce diversity, including its own employees as well as temporary employees, contractors, and franchisee employees. Topics covered include, for example, allegations of discrimination on the basis of sex, race, ethnicity, or other characteristic. Discrimination at supplier facilities is captured under the Supply Chain Labor Standards indicator. Discrimination on the basis of unionization or union sympathies is captured under the Collective Bargaining & Unions indicator.

- Old:

This indicator is designed to assess the severity of controversies related to a firm’s workforce diversity. Factors affecting this evaluation include, but are not limited to, a history of involvement in discrimination-related legal cases, widespread or egregious instances of discrimination on the basis of sex, race, or ethnicity, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

DIV-CON-B: REPRESENTATION

Discontinued after STATS-2011 Data Set.

From STATS-1993 Data Set to STATS-2009 Data Set, indicator tracked line executives and board members.



For STATS-2010 and 2011 Data Sets, line executives only.

Since STATS-2010 Data Set, board diversity - gender covered by Div-con-C.

STATS-2010 through STATS-2011 Definition:
Representation (DIV-con-B).

This indicator measures the diversity of a firm's workforce. Factors affecting this evaluation include, but are not limited to, the percentage of women and minorities in senior management.

STATS-1993 through STATS-2009 Definition:
Non-Representation (DIV-con-B).

The company has no women on its board of directors or among its senior line managers.

DIV-CON-C: BOARD DIVERSITY - GENDER

New indicator for STATS-2010 Data Set when Board Diversity - Gender split off from Div-Con-B.

For the STATS-2013 Data Set, this indicator only covers U.S. companies.

For MSCI ESG STATS – 2013 Data Set, the data for DIV-con-C: Board Diversity – Gender; and DIV-con-D: Board Diversity – Minorities was provided by Institutional Shareholder Services Inc.

DIV-CON-D: BOARD DIVERSITY - MINORITIES

Discontinued after STATS-2013 Data Set.

STATS-2012 and STATS-2013 Definition:

This indicator identifies companies with no minorities on their board of directors. For the STATS-2012 and 2013 Data Sets, this indicator only covered U.S. companies.

For MSCI ESG STATS – 2013 Data Set, the data for DIV-con-C, Board Diversity – Women; and DIV-con-D, Board Diversity – Minorities was provided by Institutional Shareholder Services Inc.

DIV-CON-X: OTHER CONCERN

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by DIV-con-A

***STATS-1991 through STATS-2009 Definition:
Other Concern (DIV-con-X).***

The company is involved in diversity controversies not covered by other KLD ratings.

POSITIVE SOCIAL PERFORMANCE INDICATORS: PRODUCT

PRO-STR-A: PRODUCT SAFETY AND QUALITY

For the STATS-2013 Data Set, this indicator was renamed from “Quality” in STATS-2012. In STATS-2012, this indicator also covered the following product safety issues:

- Chemical Safety,
- Financial Product Safety,
- Privacy and Data Security,
- Responsible Investment,
- Insuring Health and Demographic Risk.

For STATS-2013, please see the following for the assessment of these issues: Product Safety - Chemical Safety(PRO-str-G), Product Safety -Financial Product Safety(PRO-str-H), Product Safety - Privacy and Data Security(PRO-str-I), Product



Safety - Responsible Investment(PRO-str-J), Product Safety - Insuring Health and Demographic Risk(PRO-str-K).

PRO-STR-B: R&D/INNOVATION

Discontinued after STATS-2009 Data Set.

STATS-1991 through STATS-2009 Definition:

R&D/Innovation (PRO-str-B). The company is a leader in its industry for research and development (R&D), particularly by bringing notably innovative products to market.

PRO-STR-C: SOCIAL OPPORTUNITIES – ACCESS TO HEALTHCARE

For the STATS-2013 Data Set, this indicator has been renamed from “Social Opportunities” in STATS-2012. In STATS-2012, this indicator also covered access to communications, and nutrition and health. For the STATS-2013 Data Set, please see Social Opportunities-Access to Communications (PRO-str-E) and Social Opportunities-Opportunities in Nutrition and Health (PRO-str-F)

PRO-STR-D: SOCIAL OPPORTUNITIES - ACCESS TO FINANCE

For the STATS-2013 Data Set, this indicator has been renamed from “Access to Finance” in STATS-2012.

PRO-STR-E: SOCIAL OPPORTUNITIES - ACCESS TO COMMUNICATIONS

For the STATS-2013 Data Set, this is a new, separate indicator. This issue was covered in Social Opportunities (PRO-str-C) in STATS-2012.

PRO-STR-F: SOCIAL OPPORTUNITIES - OPPORTUNITIES IN NUTRITION AND HEALTH

For the STATS-2013 Data Set, this is a new, separate indicator. This issue was covered in Social Opportunities (PRO-str-C) in STATS-2012.



PRO-STR-G: PRODUCT SAFETY - CHEMICAL SAFETY

For the STATS-2013 Data Set, this is a new, separate indicator. This issue was covered in Quality (PRO-str-A) in STATS-2012.

PRO-STR-H: PRODUCT SAFETY - FINANCIAL PRODUCT SAFETY

For the STATS-2013 Data Set, this is a new, separate indicator. This issue was covered in Quality (PRO-str-A) in STATS-2012.

PRO-STR-I: PRODUCT SAFETY - PRIVACY AND DATA SECURITY

For the STATS-2013 Data Set, this is a new, separate indicator. This issue was covered in Quality (PRO-str-A) in STATS-2012.

PRO-STR-J: PRODUCT SAFETY - RESPONSIBLE INVESTMENT

For the STATS-2013 Data Set, this is a new, separate indicator. This issue was covered in Quality (PRO-str-A) in STATS-2012.

PRO-STR-K: PRODUCT SAFETY - INSURING HEALTH AND DEMOGRAPHIC RISK

For the STATS-2013 Data Set, this is a new, separate indicator. This issue was covered in Quality (PRO-str-A) in STATS-2012.

PRO-STR-X: OTHER STRENGTH

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Sets, indicator covered by PRO-str-C.

STATS-1991 through STATS-2009 Definition:

Other Strength (PRO-str-X). The company's products have notable social benefits that are highly unusual or unique for its industry.

NEGATIVE SOCIAL PERFORMANCE INDICATORS: PRODUCT

PRO-CON-A: PRODUCT QUALITY & SAFETY

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to the quality and/or safety of a firm’s products and services. Topics covered include, for example, food safety, controversial media content, product recalls, service disruptions, and the use of chemicals of concern in company products. This indicator also includes companies with major business involvement in gambling and tobacco.

- Old:

- This indicator is designed to assess the severity of controversies related to the quality and safety of a firm’s products and services. Factors affecting this evaluation include, but are not limited to, a history of involvement in product safety-related legal cases, widespread or egregious instances of recalls or fines due to defective or unsafe products and services, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

PRO-CON-D: MARKETING & ADVERTISING

2015 Data Set

Change in Definition: Minor

- New:

- This indicator measures the severity of controversies related to a firm’s marketing and advertising practices. Topics covered include, for example, false or deceptive marketing or advertising, marketing of products for off-label uses, and controversies regarding the marketing of products to children or other

vulnerable populations, labeling controversies, and spam or ad-ware. Controversies about known product safety issues are covered under the Product Safety & Quality. This indicator also includes companies with major exposure to the production of alcohol.

- Old:
- This indicator is designed to assess the severity of controversies related to a firm's marketing and advertising practices. Factors affecting this evaluation include, but are not limited to, widespread or egregious instances of false, discriminatory, or improper marketing/advertising, marketing targeted at disadvantaged groups, resistance to improved practices, and criticism by NGOs and/or other third party observers.

PRO-CON-E: ANTICOMPETITIVE PRACTICES

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to a firm's anti-competitive business practices. Topics covered include, for example, price fixing, collusion, bid rigging, and predatory pricing. Business-to-business claims are generally not covered unless a regulator joins the suit. Likewise, standard pre-merger regulatory inquiries are not considered controversial.

- Old:

This indicator is designed to assess the severity of controversies related to a firm's anti-competitive business practices. Factors affecting this evaluation include, but are not limited to, a history of involvement in anti-trust legal cases, widespread or egregious instances of price-fixing, collusion, or bid-rigging, resistance to improved practices, and evidence-based criticism by NGOs and/or other third-party observers.



PRO-CON-F: CUSTOMER RELATIONS

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to how a firm treats its customers or potential customers. Topics covered include, for example, fraudulent or improper billing, excessive or hidden fees, predatory financial products, and restricted or discriminatory access to products or services. Customer privacy and data security issues are covered under the Privacy & Data Security KPI.

- Old:

This indicator is designed to assess the severity of controversies related to a firm's customer relations. Factors affecting this evaluation include, but are not limited to, a history of involvement in customer-related legal cases, predatory lending, widespread or egregious instances of discrimination, fraud or unfair treatment, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

GOVERNANCE INDICATORS

POSITIVE GOVERNANCE PERFORMANCE INDICATORS

CGOV-STR-A: LIMITED COMPENSATION

Discontinued after STATS-2009 Data Set.

STATS-1991 through STATS-2009 Definition:

Limited Compensation (CGOV-str-A). The company has recently awarded notably low levels of compensation to its top management or its board members. The limit for a



rating is total compensation of less than \$500,000 per year for a CEO or \$30,000 per year for outside directors.

CGOV-STR-C: OWNERSHIP STRENGTH

Discontinued after STATS-2009 Data Set.

STATS-1991 through STATS-2009 Definition:

Ownership Strength (CGOV-str-C). The company owns between 20% and 50% of another company KLD has cited as having an area of social strength, or is more than 20% owned by a firm that KLD has rated as having social strengths. When a company owns more than 50% of another firm, it has a controlling interest, and KLD treats the second firm as if it is a division of the first.

CGOV-STR-D: REPORTING QUALITY

Discontinued after STATS-2012 Data Set.

Originally in STATS-1996 Data Sets through STATS-2004 Data Sets as ENV-str-E; in 2005 ENV-str-E mapped to CGOV-str-D. STATS-1996 Data Set through STATS-2004 Data-Set were adjusted to replace ENV-str-E with CGOV-str-D.

STATS-1996 through STATS-2012 Definition:

Reporting Quality (CGOV-str-D). This indicator measures the quality of a firm's reporting on its corporate social responsibility (CSR)/sustainability efforts. Factors affecting this evaluation include, but are not limited to, the completeness and specificity of a firm's reporting, its setting of specific goals for its CSR efforts, and quantitative measurement of progress towards these goals.

CGOV-STR-E: POLITICAL ACCOUNTABILITY STRENGTH

Discontinued after STATS-2009 Data Set.

STATS-2005 through STATS-2009 Definition:

Political Accountability Strength (CGOV-str-E). The company has shown markedly responsible leadership on public policy issues and/or has an exceptional record of

transparency and accountability concerning its political involvement in state or federal-level U.S. politics, or in non-U.S. politics.

CGOV-STR-F: PUBLIC POLICY

Discontinued after STATS-2011 Data Set.

STATS-2007 through STATS-2011 Definition:

Public Policy (CGOV-str-F). This indicator measures a firm's support for public policies that have noteworthy benefits for the environment, communities, employees, or consumers. Factors affecting this evaluation include, but are not limited to, support/lack of support for regulations addressing climate change, improved labor rights, enhancement of shareholder rights, and protections for consumers.

CGOV-STR-G: CORRUPTION & POLITICAL INSTABILITY

2015 Data Set

Change in Definition: Minor

- New:

This issue evaluates the extent to which companies may face regulatory risks or lost market access due to corruption scandals or political and social instability. Scores are based on reliance on government contracts and operations in regions facing political instability or high perceived corruption levels; anti-bribery policies, programs, and transparency. Metrics include anti-corruption policies and compliance programs, transparency around government spending, and commitments to external standards; policies for ethical business practices especially in foreign markets, support from stakeholders to avoid being embroiled in local conflicts and to lower the chances of public opposition, the security of company assets, and the respect for human rights.

- Old:

This indicator is designed to assess how companies manage the risk of suffering operational disruptions or loss of market access due to violence, property

destruction or sabotage, political instability, demands for bribes, and costly litigation related to corrupt practices. Companies that have programs, guidelines, and clear policies to avoid corrupt business dealings, have strong partnerships with local communities, and have a high level of disclosure and transparency score higher.

CGOV-STR-H: FINANCIAL SYSTEM INSTABILITY

2015 Data Set

Change in Definition: Minor

- New:

This issue evaluates the extent to which companies may face enhanced regulatory scrutiny as a result of their contributions to systemic risk in financial markets. Scores are based on size, interconnectedness, and complexity; risk oversight, governance, and commitments to ethical standards; "Net Social Value" generated and distributed to stakeholders; and controversies. Metrics include governance structures, integration of long-term performance and risk measures in incentive schemes, reporting transparency, and track record of controversial business practices (insider trading, front-running, fraud, conflicts of interest, etc.).

- Old:
- This indicator is designed to assess how a company manages its systemic risk in financial markets. Companies that institute strong governance structures and demonstrate a high level of transparency score well.

CGOV-STR-X: OTHER STRENGTH

Discontinued after STATS-2009 Data Set.

STATS-1991 through STATS-2009 Definition:

Other Strength (CGOV-str-X). The company has a unique and positive corporate culture, or has undertaken a noteworthy initiative not covered by KLD's other corporate governance ratings.

NEGATIVE GOVERNANCE PERFORMANCE INDICATORS

CGOV-CON-B: HIGH COMPENSATION

Discontinued after STATS-2009 Data Set.

Since STATS-2010 Data Set, indicator covered by CGOV-con-K

STATS-1991 through STATS-2009 Definition:

High Compensation (CGOV-con-B). The company has recently awarded notably high levels of compensation to its top management or its board members. The limit for a rating is total compensation of more than \$10 million per year for a CEO or \$100,000 per year for outside directors.

CGOV-CON-F: TAX DISPUTES

Deleted from all data sets.

STATS-1991 through STATS-2004 Data Sets:

- these data sets were adjusted to have COM-con-D replace CGOV-con-E. Since STATS - 2010 Data Set, indicator covered by CGOV-con-X.

STATS-1991 through STATS-2004 Definition:

The company has recently been involved in major tax disputes involving Federal, state, local or non-U.S. government authorities, or is involved in controversies over its tax obligations to the community.

CGOV-CON-F: OWNERSHIP CONCERN

Discontinued after STATS-2009 Data Set.

STATS-1991 through STATS-2009 Definition:

Ownership Concern (CGOV-con-F). The company owns between 20% and 50% of a company KLD has cited as having an area of social concern, or is more than 20% owned by a firm KLD has rated as having areas of concern. When a



company owns more than 50% of another firm, it has a controlling interest, and KLD treats the second firm as if it is a division of the first.

CGOV-CON-G: ACCOUNTING CONCERN

Discontinued after STATS-2009 Data Set.

Since STATS - 2010 Data Set, indicator covered by CGOV-con-X

STATS-1991 through STATS-2009 Definition:

Accounting Concern (CGOV-con-G). The company is involved in significant accounting-related controversies. In 2006, KLD added the Accounting Concern.

CGOV-CON-H: REPORTING QUALITY

Discontinued after STATS-2012 Data Set.

STATS-2010 through STATS-2012 Definition:

Reporting Quality (CGOV-con-H). This indicator measures the quality of a firm's reporting on its CSR/sustainability efforts. Factors affecting this evaluation include, but are not limited to, the completeness and specificity of a firm's reporting, its setting of specific goals for its CSR efforts, and quantitative measurement of progress towards these goals.

STATS-2005 through STATS-2009 Definition:

Transparency Concern (CGOV-con-H). The company is distinctly weak in reporting on a wide range of social and environmental performance measures.

CGOV-CON-I: POLITICAL ACCOUNTABILITY CONCERN

Discontinued after STATS-2007 Data Set.

STATS-2005 through STATS-2007 Definition:

Political Accountability Concern (CGOV-con-I). The company has been involved in noteworthy controversies on public policy issues and/or has a very poor record of transparency and accountability concerning its political involvement in state or federal-level U.S. politics, or in non-U.S. politics.



CGOV-CON-J: PUBLIC POLICY

Discontinued after STATS-2011 Data Set.

STATS-2007 through STATS-2011 Definition:

Public Policy (CGOV-con-J). This indicator measures a firm's lack of support for public policies that have noteworthy benefits for the environment, communities, employees, or consumers. Factors affecting this evaluation include, but are not limited to, support/lack of support for regulations addressing climate change, improved labor rights, enhancement of shareholder rights, and protections for consumers.

CGOV-CON-K: GOVERNANCE STRUCTURES

2015 Data Set

Change in Definition: Minor

- New:

This indicator measures the severity of controversies related to a firm's corporate governance practices. Topics covered include, for example, shareholder or board-level objections to pay practices and governance structures, opposition to shareholder resolutions seeking change to governance practices, and conflicts of interest, unethical behavior, or underqualification on the part of directors or senior executives.

- Old:

This indicator is designed to assess the severity of controversies related to a firm's executive compensation and governance practices. Factors affecting this evaluation include, but are not limited to, a history of involvement in compensation-related legal cases, widespread or egregious instances of shareholder or board-level objections to pay practices and governance structures, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

CGOV-CON-M: BRIBERY & FRAUD

Name change for 2013-Data Set from Business Ethics.

CGOV-CON-X: GOVERNANCE - OTHER CONCERNS

Name change for 2013-Data Set from Other Concern.



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