



The 2022 Global 100: Overview of Corporate Knights Rating Methodology

Corporate **Knights**

WWW.GLOBAL100.ORG

Global 100 Fast Facts

Overview

- **Annual ranking** of corporate sustainability performance.
- **Released each January** and published in leading media.

Eligibility

- **Size:** publicly-listed companies with gross revenue of a minimum of \$PPP-currency \$1B (FY2020).
- **Corporate Knights Peer Group (CKPG) and geography:** All industries and geographies are automatically considered before screening out companies from certain industries or with identified egregious practices.

Approach

- Ranking is based mostly on **publicly-disclosed data** (e.g., financial filings, sustainability reports, company websites).
- Submissions or payment from companies is **not** required.
- Companies on the Global 100 Universe **are contacted for data verification** prior to project completion.
- Methodology is based on up to **24 key performance indicators** (KPIs) covering resource management, employee management, financial management, clean revenue & clean investment and supplier performance.

Contact info and to learn more

- Email research@corporateknights.com if you would like to confirm the correct contacts for your organization.
- [Sign up for email updates](#) on future rankings and research from Corporate Knights and the Global 100.
- Visit www.global100.org for more details.

Ranking is conducted by Corporate Knights, a specialized media and investment research firm

Corporate Knights is a Toronto-based, employee-owned B Corp that operates in three segments:

Corporate Knights Magazine

- World's largest circulating magazine focused on sustainability and responsible business.
- Reaches 443,250 of the world's most influential business and political decision-makers.

Corporate Knights Research

- Corporate Knights rankings and ratings currently serve as an input to identify potential investment candidates for investors representing \$15 trillion in assets under management.

Council for Clean Capitalism

- CEO-supported group catalyzing smart and efficient public policy.
- Engages with leading public policy-makers.

Principles of the Global 100

- **Relevance:** The ranking is meant to be representative of business sustainability in the current socio-economic context.
- **Transparency:** The precise methodology of the ranking and the results of the process are fully disclosed.
- **Objectivity:** Companies are assessed primarily using quantitative data and performance indicators.
- **Public data:** Ranking relies primarily on data-points that are part of the public domain.*
- **Comparability:** Companies are compared against their *Corporate Knights Peer Group*** (CKPG) peers.***
- **Engagement:** Companies eligible for the ranking are informed prior to the ranking, so as to have an opportunity to ensure the necessary data is made available.
- **Stakeholders:** Stakeholder feedback is actively solicited throughout the project.

**Private data may be used in certain circumstances, provided the company confirms its validity to Corporate Knights.*

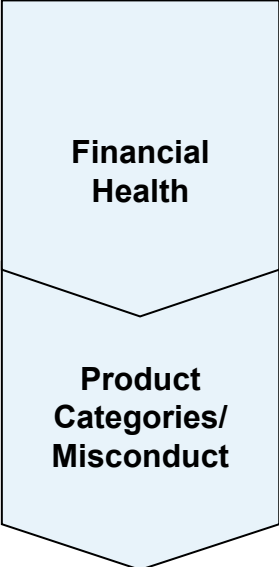
***There are 64 CKPGs.*

**** The four diversity metrics are an exception. These are compared to the whole universe of eligible companies.*

Overview of Global 100 ranking process

	Description	Details
Starting Universe	<ul style="list-style-type: none"> Publicly-listed companies. 	<ul style="list-style-type: none"> All companies that had a gross revenue in excess of \$PPP-currency \$1 billion during the 2020 fiscal year.
Screens	<ul style="list-style-type: none"> Companies screened for : <ul style="list-style-type: none"> Financial health Product categories and misconduct 	<ul style="list-style-type: none"> Screening criteria outlined in the next slide.
Screen Overrides	<ul style="list-style-type: none"> Companies who fail the above screens may be included in the 2022 Global 100 Universe through the screen overrides. 	<ul style="list-style-type: none"> Prior Global 100 companies in each of past two years Companies with more than 25% Clean Revenue
Selection	<ul style="list-style-type: none"> Companies in the 2022 Global 100 Universe are scored on 24 KPIs. 	<ul style="list-style-type: none"> Selection criteria outlined in the Rating Methodology section and detailed in Appendix II.
The Global 100	<ul style="list-style-type: none"> The 2022 Global 100 is populated. Consists of the top performing companies within each peer group. 	<ul style="list-style-type: none"> Each GICS Sector is assigned a fixed number of slots in the final Global 100 list (based on each sector's contribution to the total market capitalization of the Global 100's financial benchmark, the MSCI ACWI).* <p><i>*Energy and Utilities GICS Sector slots are combined to give precedence to the companies contributing to energy transition.</i></p>

Screening criteria

	Description	Details
	<ul style="list-style-type: none">Companies with an F score below 3 are eliminated.	<ul style="list-style-type: none">The F-Score (the Piotroski F-score) is a measure of the financial strength of a company.The F-score is the sum of the scores for each of nine tests. See Appendix I for details.
	<ul style="list-style-type: none">Companies involved in certain products or services and behaviours counterproductive to sustainable development.	<ul style="list-style-type: none">Examples include weapons, tobacco, companies that lobby to block climate change policy.See Appendix III for a full list of exclusionary screens.

Quick Resources

2022 Global 100 Ranking

[Corporate Knights Clean Taxonomy](#)

The complete Corporate Knights Clean Taxonomy
Excel spreadsheet via Research Website

[KPI Data Point Definitions](#)

A table detailing each data point collected by Corporate Knights, their codes, categories (Environment/Social/Governance/Economic), subcategories (indicators for which data point is used in e.g. Pension Fund Quality), and detailed definitions
PDF

[Indicator Weights 2022](#)

Weights used for score calculations for each indicator for each CKPG
Excel spreadsheet

[Weight Calculation Methodology](#)

Walk-through of the methodology for calculating the impact and weight for each indicator for each CKPG
PDF

[2022 G100 Universe](#)

Alphabetical list of all companies considered for as a part of the Global 100 ranking universe
Excel spreadsheet

[CKPG List](#)

Alphabetical list of all 64 Corporate Knights Peer Groups (CKPGs)
Excel spreadsheet

[Company Summary Scorecard \(Sample\)](#)

Sample of the Summary Scorecard (available for companies on request)
Excel spreadsheet

Rating Methodology


2022 Global 100 Ranking

Environmental Metrics


KPI	Methodology
Energy Productivity	Revenue (converted to USD using PPP exchange rate) / (Energy use – renewable energy generated by the company or certified RECs)
GHG Productivity	Revenue (converted to USD using PPP exchange rate) / GHG emissions: scope 1 & 2
Water Productivity	Revenue (converted to USD using PPP exchange rate) / Water use
Waste Productivity	Revenue (converted to USD using PPP exchange rate) / Total waste generated
VOC Productivity	Revenue (converted to USD using PPP exchange rate) / VOC emissions
NOx Productivity	Revenue (converted to USD using PPP exchange rate) / NOx emissions
SOx Productivity	Revenue (converted to USD using PPP exchange rate) / SOx emissions
Particulate Matter Productivity	Revenue (converted to USD using PPP exchange rate) / Particulate matter emissions

In most Peer Groups, a small number of KPIs account for the majority of the weight, and many KPIs are weighted at less than 1%, as generated by our impact rating model for each Peer Group.

Environmental Metrics

KPI	Methodology
Clean Revenue <p><i>* This is a multi-year project by Corporate Knights to develop and make publicly-available an open-source definition of clean categories for all peer groups; we welcome comments and suggestions in evolving and refining this clean revenue definition.</i></p>	<p>Percentage of total revenue derived from products and services that are categorized as “clean” according to the Corporate Knights open-source clean economy taxonomy, which is informed by synthesis of, among others, the below sources and best practices:</p> <ul style="list-style-type: none"> - Climate Bonds Taxonomy (Climate Bonds Initiative) - EU Taxonomy for Sustainable Activities - Sustainability Account Standards Board (SASB) reporting standards - Environmental Goods and Services Sector (Eurostat) - China Green Bond Endorsed Project Catalogue - Green Bond Principles - TCFD recommended climate opportunity metrics - Other private sector rating agencies with green or sustainability taxonomy - Industry experts consultation covering all relevant CKPG subsectors with solicited feedback on industry definition of clean from leading industry experts and government agencies <p>Please click on the link below to download the most up-to-date Clean Taxonomy</p> <p style="text-align: center;">  Corporate Knights Clean Taxonomy </p>

Environmental Metrics

KPI	Methodology
Clean Investment	<p>Percentage of a company's total investment (R&D, Capital expenditure, Acquisitions & Other) directed towards projects/research/companies categorized as "clean" according to the Corporate Knights open-source clean taxonomy.</p> <p>Please click on the link below to download the most up-to-date Clean Taxonomy</p> <p style="text-align: center;"></p> <p style="text-align: center;"><u>Corporate Knights Clean Taxonomy</u></p>

Social Metrics

KPI	Methodology
Injuries	Lost time incidents rate per 200,000 hours
Fatalities	Fatalities / total number of full-time equivalent employees
Employee Turnover	Number of departures / total employees
Paid Sick Leave	Paid sick leave (10+ days, 50%+ of pay) offered to employees in the country where the company is headquartered.
CEO-Average Employee Pay	CEO compensation or highest paid Exec / average employee compensation

In most Peer Groups, a small number of KPIs account for the majority of the weight, and many KPIs are weighted at less than 1%, as generated by our impact rating model for each Peer Group.

Governance Metrics

KPI	Methodology
Sustainability Pay Link	Mechanisms that link senior executive pay to sustainability targets
Non-males in Executive Management	Non-male representation in executive management team (percentile-ranked against all companies in the universe)
Non-males on Boards	Non-male representation on board of directors (percentile ranked against all companies in the universe)
Racial Diversity Among Executives	Number of top tier executives who are members of a visible minority compared to the population of their executive peers in headquarter country (percentile-ranked against all companies in the universe).
Racial Diversity on Board of Directors	Number of board directors who are members of a visible minority compared to the population of their director peers in headquarter country (percentile ranked against all companies in the universe).
Supplier Sustainability Score	The weighted CK Sustainability Score of a company's largest publicly listed supplier

In most Peer Groups, a small number of KPIs account for the majority of the weight, and many KPIs are weighted at less than 1%, as generated by our impact rating model for each Peer Group.

Economic Metrics

KPI	Methodology
Percentage Tax Paid	Cash tax amount paid / EBITDA – five year trailing (2015-2019)
Pension Fund Quality	75%*(total DB and DC employer contributions/ FTE employees percentile-ranked against peers) + 25%*((fair value of DB plan assets/FTE employees percentile-ranked against peers) - (1-(fair value of DB plan assets/liability percentile-ranked against peers)). Note: DC contributions include 401(k), RRSPs and equivalents.
Sanction Deductions (January 1, 2017 to December 31, 2020)	Total fines, penalties and settlements / revenue

In most Peer Groups, a small number of KPIs account for the majority of the weight, and many KPIs are weighted at less than 1%, as generated by our impact rating model for each Peer Group.

Data Point Definitions

To view the specific definitions for all data points that feed into the indicator calculations, please click the link below



[KPI Data Point Definitions 2022](#)

Priority KPIs and Weighting Scheme for Each CK Peer Group

KPIs and Weighting Scheme

Philosophy

The Corporate Knights Global 100 rating gives uses a mix of fixed and variable weight ESG and clean economy key performance indicators to score companies against their peers. We measure the share of revenues and capital investments that are included in the Corporate Knights Clean Taxonomy and percentile rank those ratios against the company's peer group. We then give equal weight to the ratios and the percentile ranks in awarding up to 42.5 points for clean revenue and up to 7.5 points for clean investment, for a total of 50 possible points.

The other 50 points in the Global 100 are allocated to 21 ESG KPI's. Seven of these KPI's are allocated 20 points as follows: Gender Diversity on Board of Directors (2.5), Gender Diversity Among Executives (2.5), Racial Diversity Among Executives (2.5), Racial Diversity on Board of Directors (2.5), Sustainability Pay Link (5), Supplier Score (2.5) and Paid Sick Leave (2.5). Each company is awarded points for these indicators based on its performance in comparison to all other companies, regardless of industry.

The remaining 30 points in the Global 100 rating system are allocated to fourteen KPI's where the weights vary by CKPG. The KPI's weighted this way include productivities for energy, carbon, waste, water, VOC, NOx, SOx, PM; as well as the injury rate, fatality rate, employee turnover, CEO pay ratio, cash taxes to EBITDA ratio, and the pension quality. (See additional description below on the impact ratios and indicator weights methodology.)

In addition, up to five points are deducted for companies that have been levied fines above a threshold of their revenue in comparison to their peers, and finally, companies are deemed ineligible for the Global 100 if they fail to pass our exclusionary screens.



Impact ratios and indicator weights

For each of the 64 CK Peer Groups, impact ratios are computed and used to assign weights to each of the 14 impact-weighted KPI's. For each CKPG-KPI combination, the impact ratio depends on the ratio of the KPI median for the industry to the KPI median for all industry and on the contribution that the CKPG makes to the total impact for the KPI across all industries. For each CKPG, the indicator weights for the 14 impact-weighted KPI's are equal to the share of each KPI's impact ratio to the sum of the impact ratios for that industry. (Note: There are some CKPG-KPI combinations for which there is insufficient data to produce statistically significant impact ratios, and the impact-weighting can therefore not be applied.)

To see a detailed outline of the weights calculation process, please click the link below

[Corporate Knights Impact-weight Calculation Methodology](#)

Priority indicators and weights per CK Peer Group

To see the weights for each indicator and CKPG, please download the corresponding spreadsheet from the link below.



[Corporate Knights Indicator Weightings](#)

Appendices I - IV

2022 Global 100 Ranking

Appendix I: The F-Score

- The F-Score (the Piotroski F-score) is a measure of the financial strength of a company.
- The F-Score is the sum of the scores for each of nine tests. Each test scores one for a pass and zero for a fail.
- The tests are:
 - i) net profit is positive;
 - ii) operating cash flow is positive;
 - iii) net profit \div total assets at beginning of year;
 - iv) operating cash flow is greater than net profit;
 - v) long term debt \div by average assets has not increased;
 - vi) the current ratio has increased (the change is more than zero, so even a negligible increase passes the test);
 - vii) no raising of ordinary (common) equity over the previous year: this test is passed if the company did not issue any ordinary shares (excluding shares from dividend reinvestment plans and employee share plans);
 - viii) gross margin has improved over the previous year; and
 - ix) asset turnover has increased.

Appendix II: Detailed scoring methodology

Name of KPI	Measurement	UN Sustainable Development Goals
Energy Productivity	In the first step, each company's Energy Productivity is calculated. Energy Productivity is defined as Revenue (\$PPP-converted) / Total Energy Use (GJ) – Certified RECs and purpose built renewable generation (GJ) (does not apply to standard grid issue). It is then percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe, and multiplied by 0.75. In the second step, the change in each company's Energy Productivity over a two-year period is calculated and percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. If the company's ranked fiscal year percent-rank is top quartile, the three-year change percent-rank is multiplied by 1 and then by 0.25. If the company's ranked fiscal year percent-rank is second quartile, the three-year change percent-rank is multiplied by 0.75 and then by 0.25. If the company's ranked fiscal year percent-rank is third quartile, the three-year change percent-rank is multiplied by 0.5 and then by 0.25. If the company's ranked fiscal year percent-rank is bottom quartile, the three-year change percent-rank is multiplied by 0.25 and then by 0.25. In the third step, the value from the first and second steps are totaled.	<ul style="list-style-type: none"> • GOAL 7: Affordable and Clean Energy • GOAL 9: Industry, Innovation and Infrastructure
GHG Productivity	In the first step, each company's Greenhouse Gas (GHG) productivity is calculated. GHG Productivity is defined as Revenue (\$PPP-converted) / Total Greenhouse gas (GHG) Emissions (tCO2e). Only location-based Scope 1 and Scope 2 emissions are included according to the GHG Protocol. It is then percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe, and multiplied by 0.75. In the second step, the change in each company's GHG Productivity over a two-year period is calculated and percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. If the company's ranked fiscal year percent-rank is top quartile, the three-year change percent-rank is multiplied by 1 and then by 0.25. If the company's ranked fiscal year percent-rank is second quartile, the three-year change percent-rank is multiplied by 0.75 and then by 0.25. If the company's ranked fiscal year percent-rank is third quartile, the three-year change percent-rank is multiplied by 0.5 and then by 0.25. If the company's ranked fiscal year percent-rank is bottom quartile, the three-year change percent-rank is multiplied by 0.25 and then by 0.25. In the third step, the value from the first and second steps are totaled.	<ul style="list-style-type: none"> • GOAL 9: Industry, Innovation and Infrastructure • GOAL 13: Climate Action

Appendix II: Detailed scoring methodology

Name of KPI	Measurement	UN Sustainable Development Goals
Water Productivity	In the first step, each company's Water Productivity is calculated. Water Productivity is defined as Revenue (\$PPP-converted) / Total water withdrawn (m3). It is then percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe, and multiplied by 0.75. In the second step, the change in each company's Water Productivity over a two-year period is calculated and percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. If the company's ranked fiscal year percent-rank is top quartile, the three-year change percent-rank is multiplied by 1 and then by 0.25. If the company's ranked fiscal year percent-rank is second quartile, the three-year change percent-rank is multiplied by 0.75 and then by 0.25. If the company's ranked fiscal year percent-rank is third quartile, the three-year change percent-rank is multiplied by 0.5 and then by 0.25. If the company's ranked fiscal year percent-rank is bottom quartile, the three-year change percent-rank is multiplied by 0.25 and then by 0.25. In the third step, the value from the first and second steps are totaled.	<ul style="list-style-type: none"> • GOAL 6: Clean Water and Sanitation • GOAL 9: Industry, Innovation and Infrastructure
Waste Productivity	In the first step, each company's Waste Productivity is calculated. Waste includes total amount of solid waste produced in tonnes (includes hazardous and non-hazardous waste generated from owned and leased facilities, including landfill, waste rock, tailings, ash and materials sent for incineration. Total waste also includes recycled, repurposed materials, and compost.) Waste Productivity is defined as Revenue (\$PPP-converted) / [Total waste generated (metric tonnes) – waste recycled (metric tonnes)]. It is then percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe, and multiplied by 0.75. In the second step, the change in each company's Waste Productivity over a two-year period is calculated and percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. If the company's ranked fiscal year percent-rank is top quartile, the three-year change percent-rank is multiplied by 1 and then by 0.25. If the company's ranked fiscal year percent-rank is second quartile, the three-year change percent-rank is multiplied by 0.75 and then by 0.25. If the company's ranked fiscal year percent-rank is third quartile, the three-year change percent-rank is multiplied by 0.5 and then by 0.25. If the company's ranked fiscal year percent-rank is bottom quartile, the three-year change percent-rank is multiplied by 0.25 and then by 0.25. In the third step, the value from the first and second steps are totaled.	<ul style="list-style-type: none"> • GOAL 9: Industry, Innovation and Infrastructure • GOAL 11: Sustainable Cities and Communities • GOAL 12: Responsible Consumption and Production • GOAL 15: Life on Land

Appendix II: Detailed scoring methodology

Name of KPI	Measurement	UN Sustainable Development Goals
VOC Productivity	In the first step, each company's sub-indicator Productivity is calculated by dividing Revenue (\$PPP-converted) by the air pollutant (tonnes). It is then percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe, and multiplied by 0.75. In the second step, the change in each company's sub-indicator Productivity over a two-year period is calculated and percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. If the company's ranked fiscal year percent-rank is top quartile, the three-year change percent-rank is multiplied by 1 and then by 0.25. If the company's ranked fiscal year percent-rank is second quartile, the three-year change percent-rank is multiplied by 0.75 and then by 0.25. If the company's ranked fiscal year percent-rank is third quartile, the three-year change percent-rank is multiplied by 0.5 and then by 0.25. If the company's ranked fiscal year percent-rank is bottom quartile, the three-year change percent-rank is multiplied by 0.25 and then by 0.25. In the third step, the value from the first and second steps are totaled.	<ul style="list-style-type: none"> GOAL 3: Good Health and Well-being GOAL 9: Industry, Innovation and Infrastructure GOAL 11: Sustainable Cities and Communities GOAL 12: Responsible Consumption and Production
NOx Productivity		
SOx Productivity		
Particulate Matter Productivity		
Percentage Tax Paid	In the first step, each company's Percentage Tax Paid is calculated as the amount of taxes paid in cash over a trailing five year period (2015-2019) divided by their total EBITDA (note: not adjusted EBITDA) over the same period. Companies score a 0% in the event that their total EBITDA or taxes paid in cash is zero or lower over the five year period (2015-2019). In the second step, each company's Percentage Tax Paid is percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. Note: "Operating Income" is used in place of EBITDA for financial services companies. Financials include the following CKPGs: Banks and Investment Services; Insurance. For government-owned companies, dividends to the government are not included in this metric.	<ul style="list-style-type: none"> GOAL 10: Reduced Inequality
CEO-Average Employee Pay Ratio	Each company's CEO to Average Employee Pay ratio is calculated as total CEO compensation or highest paid executive divided by average employee compensation. Average employee compensation is calculated by dividing the company's total wage bill (incl. social contributions as stipulated by law, such as state pension, social insurance, health insurance etc.). by the total number of employees. Each company's CEO to Average Employee Pay ratio is percent-ranked against the entire CK coverage universe. The lower the ratio, the higher the rank.	<ul style="list-style-type: none"> GOAL 8: Decent Work and Economic Growth GOAL 10: Reduced Inequality

Appendix II: Detailed scoring methodology

Name of KPI	Measurement	UN Sustainable Development Goals
Pension Fund Quality	<p>In the first step, the sum of the company's contribution to the defined benefit and defined contribution pension plans are added up, then divided by the total number of full-time equivalent employees. Note that DC contributions include 401(k), RRSPs and equivalents. This ratio is then percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. This is labelled as "A"</p> <p>In the second step, the fair value of the defined benefit plan assets is divided by the total number of full-time equivalent employees; this ratio is then percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. This is labelled as "B",</p> <p>In the third step, the fair value of the defined benefit plan assets is divided by the projected defined benefit plan obligations, then percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. This is labelled as "C".</p> <p>The Pension Fund Quality Score is arrived at by the following formula: $(0.75 \times A) + 0.25(B - (1 - C))$</p>	<ul style="list-style-type: none"> • GOAL 1: No Poverty • GOAL 8: Decent Work and Economic Growth
Supplier Sustainability Score	<p>Each company's largest publicly list supplier by total spend. The supplier is then weighted and scored using the Global 100 methodology excluding the Supplier Sustainability Score KPI.</p>	<ul style="list-style-type: none"> • GOAL 1: No Poverty • GOAL 2: Zero Hunger • GOAL 3: Good Health and Well-being • GOAL 5: Gender Equality • GOAL 6: Clean Water and Sanitation • GOAL 7: Affordable and Clean Energy • GOAL 8: Decent Work and Economic Growth • GOAL 9: Industry, Innovation and Infrastructure • GOAL 10: Reduced Inequality • GOAL 11: Sustainable Cities and Communities • GOAL 12: Responsible Consumption and Production • GOAL 13: Climate Action • GOAL 14: Life Below Water • GOAL 15: Life on Land • GOAL 16: Peace and Justice Strong Institutions • GOAL 17: Partnerships to achieve the Goal

Appendix II: Detailed scoring methodology

Name of KPI	Measurement	UN Sustainable Development Goals
Injuries	Each company's Injury Score is determined by calculating the company's lost time injury rate (defined as the number of lost time incidents per 200,000 employee hours) and percent-ranking it against all of the same-CK Peer Group peers within the CK coverage universe. In line with GRI: This metric applies to employees (full time and part time), contracted employees (permanent and temporary), and any other workers where a company has control (shared or sole) of the work or workplace.	<ul style="list-style-type: none"> GOAL 8: Decent Work and Economic Growth
Fatalities	Each company's Fatality Score is determined by calculating the company's fatality rate (defined as the number of fatalities by employees and contractors divided by the total number of full-time equivalent employees) and percent-ranking it against all of the same-CK Peer Group peers within the CK coverage universe. In line with GRI: This metric applies to employees (full time and part time), contracted employees (permanent and temporary), and any other workers where a company has control (shared or sole) of the work or workplace.	<ul style="list-style-type: none"> GOAL 8: Decent Work and Economic Growth
Employee Turnover	Each company's Employee Turnover (Number of departures [voluntary and involuntary] / average total employees) is percent-ranked against all of the same CK Peer Group peers within the CK coverage universe. The lower the ratio, the higher the rank.	<ul style="list-style-type: none"> GOAL 8: Decent Work and Economic Growth
Executive Gender Diversity	Each company's Executive Gender Diversity Score is calculated by determining the percentage of the senior executive team that is comprised of non-male executives and percent-ranking it against all companies within the CK coverage universe. Based on time-of-review assessment of bios, names and photos, located on the current company website.	<ul style="list-style-type: none"> GOAL 5: Gender Equality
Board Gender Diversity	Each company's Board Gender Diversity Score is calculated by determining the percentage of the Board of Directors that is comprised of non-male directors (including employee representatives and excluding non-voting members) and percent-ranking it against that of all companies within the CK coverage universe. Based on time-of-review assessment of bios, names and photos, located on the current company website.	<ul style="list-style-type: none"> GOAL 5: Gender Equality

Appendix II: Detailed scoring methodology

Name of KPI	Measurement	UN Sustainable Development Goals
Racial Diversity Among Executive Management	Each company's Executive Racial Diversity Score is calculated by determining the percentage of top tier executives who are members of a visible minority in relation to the dominant peer group of executives in the headquarter country of the company in question, and percent-ranking it against that of all companies within the CK coverage universe. In Europe, Australia and North America, this means the number of non-Caucasian directors or executives. Based on time-of-review assessment of bios, names and photos, located on the current company website.	<ul style="list-style-type: none"> GOAL 10: Reduced Inequalities
Racial Diversity on Boards	Each company's Board Racial Diversity Score is calculated by determining the percentage of board directors who are who are members of a visible minority in relation to the dominant peer group of board members in the headquarter country of the company in question, and percent-ranking it against that of all companies within the CK coverage universe. In Europe, Australia and North America, this means the number of non-Caucasian directors or executives. Based on time-of-review assessment of bios, names and photos, located on the current company website.	

Appendix II: Detailed scoring methodology

Name of KPI	Measurement	UN Sustainable Development Goals
Paid Sick Leave	In the country where the company is headquartered, a paid sick-leave policy is considered sufficient if it allows for 10 or more paid sick-leave days per year (for FTEs who have been at the company a minimum of one year), where the employee receives 50% or more of their pay for sick days. A full workday is assumed to be 8 hours and a standard workweek 40 hours. Paid Sick Leave does not use any percent-ranking. The data was sourced from the following sources (in priority sequence): company website, company benefits report/publications, news articles from reputable sources, and employee-sourced Glassdoor/Indeed reviews from the last three years.	<ul style="list-style-type: none"> • GOAL 3: Good Health and Well-Being • GOAL 8: Decent Work and Economic Growth
Sustainability Pay Link	The Sustainability Pay Link indicator is designed to reward companies that have set up mechanisms to link the remuneration of senior executives with the achievement of sustainability goals or targets. A score of 100% is given to companies that describe such a mechanism (e.g. the company specifies the proportion of a particular named executive's compensation that is linked to the achievement of a corporate clean capitalism target, such as reducing emissions, improving energy efficiency, or reducing health & safety accidents). A score of 0% is given to companies that do not report any linking mechanisms. Sustainability Pay Link does not use any percent-ranking.	<ul style="list-style-type: none"> • GOAL 3: Good Health and Well-being • GOAL 5: Gender Equality • GOAL 6: Clean Water and Sanitation • GOAL 7: Affordable and Clean Energy • GOAL 8: Decent Work and Economic Growth • GOAL 9: Industry, Innovation and Infrastructure • GOAL 10: Reduced Inequality • GOAL 11: Sustainable Cities and Communities • GOAL 12: Responsible Consumption and Production • GOAL 13: Climate Action • GOAL 14: Life Below Water • GOAL 15: Life on Land • GOAL 16: Peace and Justice Strong

Appendix II: Detailed scoring methodology

Name of KPI	Measurement	UN Sustainable Development Goals
Sanctions Deduction	<p>Each company's Sanctions' ratio is determined by measuring the ratio of Sanctions (the amount of money that companies paid out in qualifying fines, penalties or settlements over the January 1, 2017 to December 31, 2020 period unless they are being appealed and thus have not been paid) to total revenue for the same or closest match period. Note only entries of at least USD 100,000 are included. Each company's Sanctions ratio is percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. Companies receive deductions on a graded scale up to a maximum of 5% off their overall score. Companies with no Sanctions receive no deductions.</p>	<ul style="list-style-type: none"> • GOAL 1: No Poverty • GOAL 3: Good Health and Well-being • GOAL 5: Gender Equality • GOAL 6: Clean Water and Sanitation • GOAL 7: Affordable and Clean Energy • GOAL 8: Decent Work and Economic Growth • GOAL 9: Industry, Innovation and Infrastructure • GOAL 10: Reduced Inequality • GOAL 11: Sustainable Cities and Communities • GOAL 12: Responsible Consumption and Production • GOAL 13: Climate Action • GOAL 14: Life Below Water • GOAL 15: Life on Land • GOAL 16: Peace and Justice Strong Institutions

Appendix II: Detailed scoring methodology

Name of KPI	Measurement	UN Sustainable Development Goals
Clean Revenue	Each company's Clean Revenue ratio is determined by measuring the ratio of Clean Revenue to total revenue according to the open-source Corporate Knights Clean Economy Taxonomy. Each company's Clean Revenue ratio is percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe.	
Clean Investment	<p>Each company's Clean Investment ratio is determined by measuring the ratio of Clean Investment to total investment by applying the open-source Corporate Knights Clean Economy Taxonomy. Each company's Clean Investment ratio is percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe.</p> <p>Total Clean Investment Includes:</p> <ul style="list-style-type: none"> -Total capital expenditures (investments in plant, property, and equipment or similar) consistent with the Corporate Knights Clean Taxonomy. Found in the cash flow statement. -Total Research and Development (R&D) consistent with the Corporate Knights Clean Taxonomy. Found in the income statement. - Any completed acquisitions (cash amount), joint-ventures, or equity investments in companies or funds (not counted under Clean CapEx or Clean R&D) consistent with the Corporate Knights Clean Taxonomy. Generally found in financial statement notes. <p>For non-financial companies, clean investments refer to any investments that align with the Corporate Knights Clean Taxonomy. For Financial sector companies, "Clean Capex" refers to investments that improve operational sustainability such as greening bank branches or buying EVs; "Green R&D" refers to R&D into sustainable finance solutions such as new wealth management platforms to enable values-aligned investing, and Clean Acquisitions and other investments refer to any acquisitions of sustainable finance companies.</p>	<ul style="list-style-type: none"> • GOAL 1: No Poverty • GOAL 2: Zero Hunger • GOAL 3: Good Health and Well-being • GOAL 4: Quality Education • GOAL 5: Gender Equality • GOAL 6: Clean Water and Sanitation • GOAL 7: Affordable and Clean Energy • GOAL 8: Decent Work and Economic Growth • GOAL 9: Industry, Innovation and Infrastructure • GOAL 10: Reduced Inequality • GOAL 11: Sustainable Cities and Communities • GOAL 12: Responsible Consumption and Production • GOAL 13: Climate Action • GOAL 14: Life Below Water • GOAL 15: Life on Land • GOAL 16: Peace and Justice Strong Institutions • GOAL 17: Partnerships to achieve the Goal

Appendix III: Exclusionary Screens

Metric	Description
Access to medicine laggards	Lagging pharmaceutical companies in the bottom quartile of the Access to Medicine ranking .
Access to nutrition laggards	Lagging food companies in the bottom quartile of the Access to Nutrition index .
Adult entertainment	Companies operating in the adult entertainment industry based on Motley Fool , Wespath , Sin Stocks , and RedLightNetwork report listings.
Blocking climate policy	Companies who have been red flagged by InfluenceMap for engaging in a manner largely opposing Paris-aligned climate policy in an active and often strategic manner.
Blocking climate resolutions	Asset managers that are voting negatively on climate policy resolutions according to InfluenceMap's voting record (bottom quartile).
Cement carbon laggards	Companies in the cement industry that were divested by Norges Bank Investment Management (NBIM) for climate change reasons (internal Corporate Knights analysis).
Civilian firearms	Companies that manufacture civilian automatic and semi-automatic firearms, magazines, or parts prohibited under New Zealand law that were divested from by the NZ SuperFund .
Controversial weapons	Companies involved with cluster munition, anti-personnel mine, and nuclear weapons manufacturing that were divested by NBIM and NZ SuperFund .
Conventional weapons	The Top 25 weapons producers as tracked by Stockholm International Peace Research Institute (SIPRI) for companies that earn more than 50% of revenue from weapons.
Deforestation & palm oil laggards	Companies engaging in deforestation as deemed by Chain Reaction Research or NBIM . List of companies obtained from Deforestation Free Funds , which NBIM has divested from.
Energy	Companies that operate in the fossil fuel industry based on Global Industry Classification System (GICS) with less than 20% of new investments (most recently available) in themes consistent with decarbonization.

Appendix III: Exclusionary Screens

Metric	Metric Description
Farm animal welfare laggards	Laggard companies in farm animal welfare practices in consultation with animal welfare experts.
For-profit prisons	Companies that are recommended for divestment by the Project of the American Friends Service Committee and that demonstrate involvement in the various aspects of the prison industry.
Gambling	Companies that operate in the gambling industry based on Global Industry Classification System (GICS).
Gross corruption violations	Companies that have been divested from by NBIM due to gross corruption violations.
Financial sanctions	Companies whose ratio of fines, penalties, or settlements / revenue for the last 12 months exceeds 1%.
Oil sands laggards	Oil sands companies that were divested by NBIM (internal Corporate Knights analysis).
Severe environmental damage	Companies that have caused severe environmental damage and have been excluded by NBIM .
Severe human rights violations	Companies that have committed severe human rights violations or have violated individuals' rights in situations of war or conflict and have been excluded by NBIM .
Thermal coal	Identifies companies engaging in production of coal or coal-based energy and have been excluded by NBIM .
Tobacco	Identifies companies that earn revenue from tobacco and have been excluded by NBIM .

Appendix IV: Corporate Knights Notice and Disclaimer

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