

INDEX GUIDELINE

CORPORATE KNIGHTS GLOBAL 100

Version 1.0

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INTRODUCTION

This document (the “GUIDELINE”) is to be used as a guideline with regard to the composition, calculation and maintenance of the Corporate Knights Global 100 (the “INDEX”). Any amendments to the rules made to the GUIDELINE are approved by the COMMITTEE specified in Section 5.4. The INDEX is owned and administrated by Corporate Knights Inc. (“CK”) (the “INDEX ADMINISTRATOR”).

The INDEX ADMINISTRATOR has engaged Solactive AG (“SOLACTIVE”) as the calculation and publication agent (the “INDEX CALCULATION AGENT”). The INDEX is calculated and published for the INDEX ADMINISTRATOR by SOLACTIVE. The name “Solactive” is trademarked.

The text uses defined terms which are formatted with “SMALL CAPS”. Such Terms shall have the meaning assigned to them as specified in Section 6 (Definitions).

The GUIDELINE and the policies and methodology documents referenced herein contain the underlying principles and rules regarding the structure and operation of the INDEX. Neither the INDEX ADMINISTRATOR nor the INDEX CALCULATION AGENT offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the INDEX nor the level of the INDEX at any certain point in time nor in any other respect. The INDEX CALCULATION AGENT strives to the best of its ability to ensure the correctness of the calculation but accepts no liability from the willful negligence, fraud or default of any person in connection with the calculation and publication of the INDEX. The INDEX CALCULATION AGENT does not make any warranties, express or implied, to the INDEX ADMINISTRATOR, any of its customers, or anyone else regarding the INDEX, including, without limitation, any warranties with respect to the timeliness, sequence, accuracy, completeness, correctness, merchantability, quality or fitness for a particular purpose or any warranties as to the results to be in connection with the use of the INDEX. There is no obligation for the INDEX ADMINISTRATOR or the INDEX CALCULATION AGENT – irrespective of possible obligations to issuers – to advise third parties, including investors and/or financial intermediaries, of any errors in the INDEX. The publication of the INDEX by the INDEX CALCULATION AGENT for the INDEX ADMINISTRATOR does not constitute a recommendation for capital investment and does not contain any assurance or opinion of the INDEX ADMINISTRATOR or the INDEX CALCULATION AGENT regarding a possible investment in a financial instrument based on this INDEX.

1. INDEX SPECIFICATIONS

1.1. SCOPE OF THE INDEX

Category	Description
Asset Class	Equity
Strategy	Representation of 100 most sustainable equities which achieved the highest scores in comparison to same-industry peers according to CK's Sustainable Economy and ESG rating methodology
Regional Allocation	Global
Rebalancing Frequency	Annual

1.2. IDENTIFIERS AND PUBLICATION

The INDEX is published under the following identifiers:

Name	ISIN	Currency	Type	RIC	BBG ticker
Corporate Knights Global 100	DE000SLA6CK5	USD, CAD	NTR *	.CKG100	CKG100 Index

*NTR means that the Index is calculated as net total return Index as described in the Equity Index Methodology, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>

The INDEX is published for the INDEX ADMINISTRATOR on the website of the INDEX CALCULATION AGENT (www.solactive.com) and is, in addition, available via the price marketing services of Boerse Stuttgart GmbH and may be distributed to all of its affiliated vendors. Each vendor decides on an individual basis as to whether it will distribute or display the INDEX via its information systems.

Any publication in relation to the INDEX (e.g. notices, amendments to the GUIDELINE) will be available at the website of the INDEX ADMINISTRATOR: <https://www.corporateknights.com/resources/global-100/>.

1.3. INITIAL LEVEL OF THE INDEX

The initial level of the INDEX on February 01st, 2005, the START DATE, is 100. Historical values from January 13th, 2014, the LIVE DATE, will be recorded in accordance with Article 8 of the BMR. Levels of the INDEX published for a period prior to the LIVE DATE have been back-tested.

1.4. PRICES AND CALCULATION FREQUENCY

The level of the INDEX is calculated on each CALCULATION DAY from 9:00 a.m. to 10:50 p.m. CET based on the TRADING PRICES on the EXCHANGES on which the INDEX COMPONENTS are listed. TRADING PRICES of INDEX COMPONENTS not listed in the INDEX CURRENCY are converted using the current Intercontinental Exchange (ICE) spot foreign exchange rate. Should there be no current

TRADING PRICE for an INDEX COMPONENT, the later of: (i) the most recent CLOSING PRICE; or (ii) the last available TRADING PRICE for the preceding TRADING DAY is used in the calculation.

In addition to the intraday calculation a closing level of the INDEX for each CALCULATION DAY is also calculated. This closing level is based on the CLOSING PRICES for the INDEX COMPONENTS on the respective EXCHANGES on which the INDEX COMPONENTS are listed. The CLOSING PRICES of INDEX COMPONENTS not listed in the INDEX CURRENCY are converted using the 04:00 p.m. London time rates provided by WM/Refinitiv (the “WM/ Refinitiv Rate”). If there is no 04:00 p.m. London time WM/ Refinitiv Rate for the relevant CALCULATION DAY, the last available 04:00 p.m. London time WM/ Refinitiv Rate will be used for the closing level calculation.

1.5. LICENSING

Licenses to use the INDEX as the underlying value for financial instruments, investment funds and financial contracts may be issued to stock exchanges, banks, financial services providers and investment houses by Corporate Knights Inc.

2. INDEX SELECTION

On each SELECTION DAY, CK (the “SELECTION PARTY”) will revise the composition of the INDEX.

In a first step, the SELECTION PARTY determines the INDEX UNIVERSE in accordance with Section 2.1. The INDEX UNIVERSE comprises all those financial instruments which fulfill the INDEX UNIVERSE REQUIREMENTS (as specified in Section 2.1) and will constitute a starting pool from which the components of the INDEX will be selected. Based on this INDEX UNIVERSE, the new composition of the INDEX will be determined by applying the rules outlined in Section 2.2.

Each new INDEX COMPONENT will be assigned a weight as described in Section 2.3.

2.1. INDEX UNIVERSE REQUIREMENTS

The INDEX UNIVERSE is comprised of all financial instruments which fulfill the below requirements (the “INDEX UNIVERSE REQUIREMENTS“):

All publicly traded equities with revenue of at least US\$ 1 billion, which have a primary or secondary listing on the below list of exchanges and are not on the Canadian or U.S. government sanctions list for investors. In cases where a primary listing is on an exchange not listed below, the secondary listing or ADR will be used."

Eligible Exchanges

Country	Exchange Name	RIC Suffix
Austria	Vienna Stock Exchange	VI
Bahrain	Bahrain Stock Exchange	BH
Belgium	Euronext Brussels	BR
Brazil	Sao Paulo Stock Exchange (BM&FBovespa)	SA
Brazil	Sociedade Operadora do Mercado de Ativos SA Soma	SO
Canada	Canadian Securities Exchange	CD
Canada	Toronto Stock Exchange	TO
Canada	TSX Venture Exchange	V
Canada	Aequitas Neo Exchange	NLB
Chile	Santiago Stock Exchange (Bolsa Comercio Santiago)	SN
Colombia	Bolsa de Valores de Colombia	CN
Croatia	Zagreb Stock Exchange	ZA
Czech Republic	Prague Stock Exchange	PR
Denmark	Copenhagen Stock Exchange	CO
Denmark, Finland and Sweden	First North	ST
Egypt	Egyptian Stock Exchange	CA
Finland	Helsinki Stock Exchange	HE
France	Euronext Paris	PA
Germany	Xetra	DE
Germany	Frankfurt Stock Exchange	F

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Great Britain	London Stock Exchange	L
Greece	Athens Stock Exchange	AT
Hungary	Budapest Stock Exchange	BU
Iceland	Iceland Stock Exchange	IC
Indonesia	Jakarta Stock Exchange	JK
Ireland	Euronext Irish Stock Exchange	I
Italy	Milan Stock Exchange	MI
Japan	Tokyo Stock Exchange	T
Japan	JASDAQ Securities Exchange	Q
Kuwait	Kuwait Stock Exchange	KW
Malaysia	Bursa Malaysia	KL
Mexico	Mexico Stock Exchange	MX
Morocco	Casablanca Stock Exchange	CS
Netherlands	Euronext Amsterdam	AS
New Zealand	New Zealand Stock Exchange	NZ
Nigeria	Nigerian Stock Exchange	LG
Norway	Euronext Oslo Børs VPS	OL
Pakistan	Karachi Stock Exchange / Pakistan Stock Exchange	PSX
Peru	Lima Stock Exchange	LM
Philippines	Philippine Stock Exchange	PS
Poland	Warsaw Stock Exchange	WA
Portugal	Euronext Lisbon	LS
Romania	Bucharest Stock Exchange	BX
Serbia	Belgrade Stock Exchange	BEL
Slovenia	Ljubljana Stock Exchange	LJ
South Africa	Johannesburg Stock Exchange	J
Spain	Madrid Stock Exchange	MC
Russia	Moscow Exchange MICEX-RTS	MM
Sweden	Stockholm Stock Exchange	ST
Sweden	Nordic Growth Market	NGM
Sweden	Nordic MTF	NGM
Switzerland	SIX	S
Taiwan	The Taiwan Stock Exchange	TW
UAE	NASDAQ Dubai	DI
UAE	Dubai Financial Market	DU
USA	IEX Group	EI
USA	NASDAQ Consolidated	O
USA	NASDAQ Stock Market	OQ
USA	New York Stock Exchange	N
USA	NYSE AMEX	A
USA	NYSE Arca	P
USA	Pink Sheets	PK

Vietnam	Hanoi Securities Market	HN
	Hanoi UPCoM	
Vietnam	(The Unlisted Public Company Market)	HNO
Vietnam	Ho Chi Minh Stock Exchange	HM
Hong Kong	Hong Kong Stock Exchange	.HK
Israel	Tel Aviv Stock Exchange	TA
Singapore	Singapore Stock Exchange	SI
Thailand	Thailand Stock Exchange	BK

The determination of the INDEX UNIVERSE is fully rule-based and the INDEX ADMINISTRATOR cannot make any discretionary decisions.

2.2. SELECTION OF THE INDEX COMPONENTS

Based on the INDEX UNIVERSE, the initial composition of the INDEX as well as any selection for an ordinary rebalance is determined on the SELECTION DAY in accordance with the following rules (the “INDEX COMPONENT REQUIREMENTS”) as determined, reviewed and revised periodically by the SELECTION PARTY:

Corporate Knights Global 100 Index Selection Methodology

a) Screening criteria:

- Financial health: Companies with an F-score (Piotroski F-score) below 3 are eliminated (see Appendix I in Corporate Knights Global 100 Index Selection Methodology for full list of all nine tests comprised in the F-score)
- Companies involved in certain products or services and behaviours counterproductive to sustainable development such as controversial weapons, or severe environmental damage (see Appendix III in Corporate Knights Global 100 Index Selection Methodology for full list)

b) Key Performance Indicators: Companies are scored on up to 24 key performance indicators (KPIs) covering resource management, employee management, financial management, sustainable revenue & sustainable investment, supplier performance and sanctions deduction. Applicable KPIs and respective weights depend on the company’s Corporate Knights Peer Group classification (CKPG). See Appendix II in Corporate Knights Global 100 Index Selection Methodology for full calculation details

- Energy Productivity
- GHG Productivity
- Water Productivity

- Waste Productivity
- VOC Productivity
- NOx Productivity
- SOx Productivity
- Particulate Matter Productivity
- Sustainable Revenue
- Sustainable Investment
- Injuries
- Fatalities
- Employee Turnover
- Paid Sick Leave
- CEO-Average Employee Pay
- Sustainability Pay Link
- Non-males in Executive Management
- Non-males on Boards
- Racial Diversity Among Executives
- Racial Diversity on Board of Directors
- Supplier Sustainability Score
- Percentage Tax Paid
- Pension Fund Quality
- Deduction for sanctions
- Political Influence (Bonus of up to 3% of final score)

c) KPI Weight: The rating methodology uses a mix of fixed and variable weight ESG and clean economy key performance indicators to score companies against their peers.

- Sustainable Economy: 42.5% for clean revenue and 7.5% for Sustainable investment
- Fixed Weight KPIs: 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%).

- Variable Weight KPIs: Remaining 14 KPIs based on the impact ratios for each CKPG (see page 16 of Corporate Knights Global 100 Index Selection Methodology for detailed approach)
 - Deduction for sanctions: Up to 5% based on percentile ranking of sanctions/revenue ratio.
- d) Scoring: With the exception of the KPI below (which is binary, yes=100%, no=0%), a company is scored on each KPI by percent ranking the KPI value against that of other same CKPG peers and then multiplying by the KPI's weight for that CKPG. This is repeated for all applicable KPIs for that CKPG, then summed up, minus any deduction for sanctions.
- Paid Sick Leave (yes=full marks, no=0)
- e) Index population: Consists of the top scoring companies within each CKPG. Each Sector¹ 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 as of the last day of October. Note that the Energy and Utilities Sector slots are combined to give precedence to the companies contributing to the energy transition.

The selection of the INDEX COMPONENTS is fully rules-based and the INDEX ADMINISTRATOR cannot make any discretionary decisions.

2.3. WEIGHTING OF THE INDEX COMPONENTS

On each SELECTION DAY each INDEX COMPONENT is assigned an equal weight by the INDEX ADMINISTRATOR.

¹ <https://www.spglobal.com/spdji/en/landing/topic/gics/>

3. REBALANCE

3.1. ORDINARY REBALANCE

In order to reflect the new selection of the INDEX COMPONENTS determined on the SELECTION DAY (in accordance with Section 2.1 and 2.2) the INDEX is adjusted by the INDEX CALCULATION AGENT on the REBALANCE DAY after CLOSE OF BUSINESS.

This is carried out by implementing the weights as determined on the SELECTION DAY.

For more information on the rebalance procedure please refer to the Equity Index Methodology, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>.

The INDEX is rebalanced over the REBALANCE PERIOD to downsize rebalance transactions in accordance with the Equity Index Methodology, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>.

CK will publish any changes made to the INDEX COMPONENTS with sufficient notice before the REBALANCE DAY on the CK webpage, which is available at <https://www.corporateknights.com/resources/global-100/>.

3.2. EXTRAORDINARY REBALANCE

The INDEX is not rebalanced extraordinarily unless required by legal sanctions applicable to Canadian or U.S. investors.

4. CALCULATION OF THE INDEX

4.1. INDEX FORMULA

The INDEX is calculated as a net total return Index.

The calculation is performed according to the Equity Index Methodology, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>. The standard index formula stipulates that the level of the INDEX changes based on the change of the prices of its INDEX COMPONENTS taking into account their weight in the INDEX and any currency conversion in case the price of an INDEX COMPONENT is quoted in a currency other than the INDEX CURRENCY.

Any dividends or other distributions are reinvested back into the INDEX COMPONENT paying the dividend or other distribution at the opening of the effective date (the so called ex-date) of the payment of such dividend or other distribution.]

A more detailed description of the mechanics of the index calculation formula can be found in the Solactive Equity Index Methodology under Section 1.2.

4.2. ACCURACY

The level of the INDEX will be rounded to two decimal places. TRADING PRICES and foreign exchange rates will be rounded to six decimal places.

4.3. ADJUSTMENTS

Under certain circumstances, an adjustment of the INDEX may be necessary between two regular REBALANCE DAYS. Such adjustment has to be made if a corporate action (as specified in Section 4.4 below) in relation of an INDEX COMPONENT occurs. Such adjustment may have to be done in relation to an INDEX COMPONENT and/or may also affect the number of INDEX COMPONENTS and/or the weighting of certain INDEX COMPONENTS and will be made in compliance with Section[s] 2.1 of the Equity Index Methodology, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>.

In the case an extraordinary event is not outlined the Equity Index Methodology, the INDEX ADMINISTRATOR will instruct the INDEX CALCULATION AGENT on the INDEX adjustments.

4.4. CORPORATE ACTIONS

As part of the INDEX maintenance the INDEX CALCULATION AGENT will consider various events – also referred to as corporate actions – which result in an adjustment to the INDEX between two regular REBALANCE DAYS. Such events have a material impact on the price, weighting or overall integrity of INDEX COMPONENTS. Therefore, they need to be accounted for in the calculation of the INDEX.

Corporate actions will be implemented from the cum-day to the ex-day of the corporate action, so that the adjustment to the INDEX coincides with the occurrence of the price effect of the respective corporate action.

Adjustments to the INDEX to account for corporate actions will be made by the INDEX CALCULATION AGENT in compliance with Section[s] 2.1 of the Equity Index Methodology, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>. This document contains for each corporate action a brief definition and specifies the relevant adjustment to the INDEX variables.

While the INDEX CALCULATION AGENT aims at creating and maintaining the methodology for treatment of corporate actions as generic and transparent as possible and in line with regulatory requirements, the INDEX ADMINISTRATOR retains the right to deviate from these standard procedures specified in the Equity Index Methodology in case of any unusual or complex corporate action or if such a deviation is made to preserve the comparability and representativeness of the INDEX over time. The INDEX ADMINISTRATOR will instruct the INDEX CALCULATION AGENT on the INDEX adjustments.

The INDEX CALCULATION AGENT considers following, but not conclusive, list of corporate actions as relevant for INDEX maintenance:

- > Cash Distributions (e.g. payment of a dividend)
- > Stock distributions (e.g. payment of a dividend in form of additional shares)
- > Stock distributions of another company (e.g. payment of a dividend in form of additional shares of another company (e.g. of a subsidiary))
- > Share splits (company's present shares are divided and therefore multiplied by a given factor)
- > Reverse splits (company's present shares are effectively merged)
- > Capital increases (such as issuing additional shares)
- > Share repurchases (a company offer its shareholders the option to sell their shares to a fixed price)
- > Spin-offs (the company splits its business activities into two or more entities and distributes new equity shares in the created entities to the shareholders of the former entity)
- > Mergers & Acquisitions (transaction in which the ownership of a company (or other business organizations) are transferred or consolidated with other entities, e.g. fusion of two or more separate companies into one entity). If a non-member company purchases a constituent company, then the constituent company is no longer part of the index. If a constituent company splits, then its weight is split between the two entities.
- > Delistings (company's shares are no longer publicly traded at a stock exchange)
- > Nationalization of a company (effective control of a legal entity is taken over by a state)
- > Insolvency

4.5. RECALCULATION

The INDEX CALCULATION AGENT makes the greatest possible efforts to accurately calculate and maintain the indices for the INDEX ADMINISTRATOR. However, errors in the determination process

may occur from time to time for variety reasons (internal or external) and therefore, cannot be completely ruled out. The INDEX CALCULATION AGENT endeavors to correct all errors that have been identified within a reasonable period of time. The understanding of “a reasonable period of time” as well as the general measures to be taken are generally depending on the underlying and is specified in the Solactive Correction Policy, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/correction-policy/>.

4.6. MARKET DISRUPTION

In periods of market stress the INDEX CALCULATION AGENT calculates indices following predefined and exhaustive arrangements as described in the Solactive Disruption Policy, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/disruption-policy/>. Such market stress can arise due to a variety of reasons, but generally results in inaccurate or delayed prices for one or more INDEX COMPONENTS. The determination of the INDEX may be limited or impaired at times of illiquid or fragmented markets and market stress.

5. MISCELLANEOUS

5.1. METHODOLOGY REVIEW

The methodology of the INDEX is subject to regular review, at least annually. In case a need of a change of the methodology has been identified within such review (e.g. if the underlying market or economic reality has changed since the launch of the INDEX, i.e. if the present methodology is based on obsolete assumptions and factors and no longer reflects the reality as accurately, reliably and appropriately as before), such change will be made in accordance with the *Policy for Changes to the Global 100 Index Methodology* which is incorporated in the [Corporate Knights Global 100 Index Methodology](#)

Such change in the methodology will be announced and published by the INDEX ADMINISTRATOR on the following website: <https://www.corporateknights.com/rankings/global-100-rankings/>

5.2. CHANGES IN CALCULATION METHOD

The application by the INDEX ADMINISTRATOR and the INDEX CALCULATION AGENT of the method described in this document is final and binding. The INDEX ADMINISTRATOR and the Index Calculation Agent shall apply the method described above for the tasks assigned to them with regard to the composition, determination, calculation, maintenance and publication of the INDEX. However, it cannot be excluded that the market environment, supervisory, legal and financial or tax reasons may require changes to be made to this method. The INDEX ADMINISTRATOR may also make changes to the terms and conditions of the INDEX and the method applied to calculate the INDEX, and instruct the INDEX CALCULATION AGENT accordingly, that it deems to be necessary and desirable in order to prevent obvious or demonstrable error or to remedy, correct or supplement incorrect terms and conditions. Neither the INDEX ADMINISTRATOR nor the INDEX CALCULATION AGENT obliged to provide information on any such modifications or changes. Despite the modifications and changes, the INDEX ADMINISTRATOR and the INDEX CALCULATION AGENT will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.

5.3. TERMINATION

The INDEX ADMINISTRATOR makes the greatest possible efforts to ensure the resilience and continued integrity of its indices over time. Where necessary, the INDEX ADMINISTRATOR follows a clearly defined and transparent procedure to adapt Index methodologies to changing underlying markets (see Section 5.2 “Methodology Review”) in order to maintain continued reliability and comparability of the indices. Nevertheless, if no other options are available the orderly cessation of the INDEX may be indicated. This is usually the case when the underlying market or economic reality, which an index is set to measure or to reflect, changes substantially and in a way not foreseeable at the time of inception of the index, the index rules, and particularly the selection criteria, can no longer be applied coherently or the index is no longer used as the underlying value for financial instruments, investment funds and financial contracts.

The INDEX ADMINISTRATOR has established and maintains clear guidelines on how to identify situations in which the cessation of an index is unavoidable, how stakeholders are to be informed and consulted and the procedures to be followed for a termination or the transition to an alternative index. Details are specified in the *Policy for Termination of the Global 100 Index* which is incorporated in the [Corporate Knights Global 100 Index Methodology](#)

5.4. OVERSIGHT

An oversight committee composed of staff from CK and its subsidiaries (the “COMMITTEE”) is responsible for decisions regarding any amendments to the rules of the INDEX. Any such amendment, which may result in an amendment of the GUIDELINE, must be submitted to the COMMITTEE for prior approval and will be made in compliance with the Methodology, which is available on the CK website: <https://www.corporateknights.com/resources/global-100/>.

6. DEFINITIONS

“AVERAGE DAILY VALUE TRADED” means, in respect of an INDEX COMPONENT, the sum of DAILY VALUE TRADED over the specified period divided by the number of TRADING DAYS that fall in the specified period.

“BUSINESS DAY” is with respect to the INDEX each day from Monday to Friday.

“CALCULATION DAY” is every weekday from Monday to Friday.

“CLOSE OF BUSINESS” is the calculation time of the closing level of the INDEX as outlined in Section 1.4.

The “CLOSING PRICE” in respect of an INDEX COMPONENT and a TRADING DAY is a security's final regular-hours TRADING PRICE published by the EXCHANGE and determined in accordance with the EXCHANGE regulations. If the EXCHANGE has no or has not published a CLOSING PRICE in accordance with the EXCHANGE rules for an INDEX COMPONENT, the last TRADING PRICE will be used.

“EXCHANGE” is with respect to the INDEX and every INDEX COMPONENT, the respective exchange where the INDEX COMPONENT has its listing as determined in accordance with the rules in Section 2.

“GUIDELINE” shall have the meaning as defined in Section “Introduction”.

“INDEX” shall have the meaning as defined in Section “Introduction”.

“INDEX ADMINISTRATOR” shall have the meaning as defined in Section “Introduction”.

“INDEX CALCULATION AGENT” shall have the meaning as defined in Section “Introduction”.

“INDEX COMPONENT” is each security reflected in the INDEX.

“INDEX COMPONENT REQUIREMENTS” shall have the meaning as defined in Section 2.2.

“INDEX CURRENCY” is the currency specified in the column “Currency” in the table in Section 1.2.

“INDEX UNIVERSE REQUIREMENTS” shall have the meaning as defined in Section 2.1.

“INDEX UNIVERSE” is the sum of all financial instruments which fulfill the INDEX UNIVERSE REQUIREMENTS.

“LIVE DATE” shall have the meaning as defined in Section 1.3.

“OVERSIGHT COMMITTEE” shall have the meaning as defined in Section 5.5.

“REBALANCE DAY” is the third Wednesday in January. If that day is not a TRADING DAY the REBALANCE DAY will be the immediately following TRADING DAY.

“REBALANCE PERIOD” is the period starting from (and including) the REBALANCE DAY until and (including) the immediately following zero (0) TRADING DAYS. For clarification: the entire REBALANCE PERIOD is one (1) TRADING DAY[S].

“SELECTION DAY” is five (5) BUSINESS DAYS before the scheduled REBALANCE DAY.

“SELECTION PARTY” is Corporate Knights Inc.

“SOLACTIVE” shall have the meaning as defined in Section “Introduction”.

“START DATE” shall have the meaning as defined in Section 1.3.

“TRADING DAY” is with respect to an INDEX COMPONENT included in the INDEX at the REBALANCE DAY and every INDEX COMPONENT included in the INDEX at the CALCULATION DAY immediately following the REBALANCE DAY (for clarification: this provision is intended to capture the TRADING DAYS for the securities to be included in the INDEX as new INDEX COMPONENTS with close of trading on the relevant EXCHANGE on the REBALANCE DAY) a day on which the relevant EXCHANGE is open for trading (or a day that would have been such a day if a market disruption had not occurred), excluding days on which trading may be ceased prior to the scheduled EXCHANGE closing time and days on which the EXCHANGE is open for a scheduled shortened period. The INDEX ADMINISTRATOR is ultimately responsible as to whether a certain day is a TRADING DAY.

The “TRADING PRICE” in respect of an INDEX COMPONENT and a TRADING DAY is the most recent published price at which the INDEX COMPONENT was traded on the respective EXCHANGE.

"WM / REFINITIV RATE" shall have the meaning as defined in Section 1.4.

7. HISTORY OF INDEX CHANGES

Version	Date	Description
1.1		Index Guideline creation (<i>updated version</i>)



The 2023 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 covered by leading media outlets.

Eligibility

- **Size:** publicly-listed companies with gross revenue of a minimum of \$PPP-currency \$1B (RY 2021*).
- **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.

* RY 2021: Any fiscal year end between July 1st, 2021 and June 30th, 2022.

Approach

- Ranking is based primarily on **publicly-disclosed data** (e.g., financial filings, sustainability reports, company websites).
- Submissions or payment from companies is **not** required.
- Companies included in the Global 100 Universe **are contacted for data verification** prior to project completion.
- Methodology is based on up to **25 key performance indicators** (KPIs) covering resource management, employee management, financial management, sustainable revenue & sustainable 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.
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- 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 B Corp that operates in three segments:

Corporate Knights Magazine

- World's largest circulating magazine focused on advancing a sustainable economy.
- 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.*

Global 100 Methodology Updates

1. KPI weights: KPIs from the following list whose weight are less than 2.5%* for any given CKPG are eliminated and their weights are redistributed proportionally to the remaining variable weight KPIs:

- Water Productivity
- Waste Productivity
- VOC Productivity, NOX Productivity, SOX Productivity and Particulate Matter Productivity
- Injuries, fatalities
- Employee Turnover

** Exceptions were made for KPIs in a number of CKPGs whose weights are under 2.5% due to the impact being relevant according to CK Research. In such cases, the KPI remains applicable despite a weight of less than 2.5%.*

2. Sustainability Pay Link: Companies will now be scored as follows:

- 0% - No pay link
- 1% - Indicates existence of a CEO pay link but does not state the % of total variable pay
- Up to an additional 4%, where a company indicates the existence of a CEO pay link **AND** discloses:
 - A. The monetary amount earned by the CEO that is tied to the pay link, and;
 - B. The CEO's total variable compensation (short-term and long-term)
- The resulting percentage (A/B) is percent-ranked** against that of all the other companies in the starting universe, then multiplied by 4%.

*See KPIs and Weighting Scheme on slide 21

** Using SQL's CUME_DIST function

Global 100 Methodology Updates

3. New KPI: Political Influence (bonus of up to 3%). This KPI tracks whether or not, directly or through its agent(s):

- The company's climate policy and lobbying activities with policymakers are aligned with the Paris Agreement (Yes = 1%)
- The company has a system in place to monitor, report and take corrective action on any misalignment between the goals of the Paris Agreement and the climate change lobbying activities of trade/industry associations, coalitions and alliances of which the company is a member, its major suppliers and/or thinktanks funded by the company on at least a biennial basis (Yes = 1%)
- The company discloses all trade/industry association memberships, including Board leadership positions and climate-related committee memberships, with a commitment to make that list public by end of 2023 (Yes = 1%)

Global 100 Methodology Updates

4. Terminology change: “CK Clean Economy Taxonomy” terminology has been updated to “Sustainable Economy Taxonomy.”

5. CK Sustainable Taxonomy: Introduction of the Corporate Knights Revenue Adjustment Factor
The "Corporate Knights Revenue Adjustment Factor" seeks to scale the company's total revenue by factoring in the extent to which its cash flow from operations are appropriated by shareholders and senior executives (through dividends, share buybacks and compensation to senior executives) as opposed to being ploughed back into company. This adjustment is applied to industries operating in strong oligopolistic structures or where the use of patent protection is predominant which may encourage aggressive product/service market pricing strategies. The higher the level of appropriations relative to operating cash flow, the higher is the extent to which revenue is scaled down.
The CKPGs whose Sustainable Revenue calculation are impacted by the adjustment factor are:

- Telecom providers
- Pharmaceutical and biotech manufacturing

**See KPIs and Weighting Scheme on slide 20*

Global 100 Methodology Updates

6. Sustainable Revenue and Sustainable Investments: Starting with the 2023 Global 100, the following CKPGs will no longer be measured on Sustainable Investments; the 7.5% previously allocated to this KPI will now be added to the Sustainable Revenue KPI for a sum of 50% weight.

- Banks
- Insurance companies
- Asset management

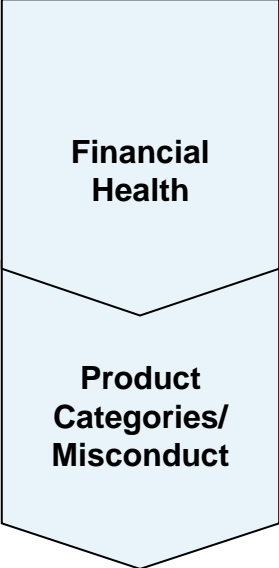
7. Supplier Score: Companies will now be asked to provide the names and ISIN codes of their **five** largest publicly-traded suppliers. The supplier with the highest Overall Score out the five will be used towards the company's Supplier Score KPI.

8. CK Sustainable Taxonomy: For all other updates, please review the Revisions Log sheet in the Corporate Knights Sustainable Economy Taxonomy V6.0.

Overview of Global 100 ranking process

Starting Universe	Description	Details
Screens	<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 2021 rating year (RY)*. <p><i>* RY 2021: Any fiscal year end between July 1st, 2021 and June 30th, 2022.</i></p>
	<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.
Selection	<ul style="list-style-type: none"> Companies in the 2023 Global 100 Universe are scored on 25 KPIs. 	<ul style="list-style-type: none"> Selection criteria outlined in the Rating Methodology section and detailed in Appendix II.
	<ul style="list-style-type: none"> The 2023 Global 100 is populated. Consists of the top performing (by Overall Score) 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).*
The Global 100	<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.

* The following CKPGs are exempted from the F-score test due to their capital intensive nature and critical relevance to the transition to the sustainable economy: Semiconductor and electronic components manufacturing, Machinery Manufacturing, and Real estate and leasing

Quick Resources

2023 Global 100 Ranking

Corporate Knights Sustainable Taxonomy

The complete Corporate Knights Sustainable 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

Excel spreadsheet

Indicator Weights 2023

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

2023 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


2023 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 withdrawn
Waste Productivity	Revenue (converted to USD using PPP exchange rate) / Total non-recycled 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.

Environmental Metrics

KPI	Methodology
Sustainable Revenue <p><i>* This is a multi-year project by Corporate Knights to develop and make publicly-available an open-source definition of sustainable categories for all peer groups; we welcome comments and suggestions in evolving and refining this sustainable revenue definition.</i></p>	<p>Percentage of total revenue derived from products and services that are categorized as “sustainable” according to the Corporate Knights open-source Sustainable 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 Accounting 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 expert consultation covering all relevant CKPG subsectors with solicited feedback on industry definition of sustainable from leading industry experts and government agencies <p>Please click on the link below to download the most up-to-date Sustainable Taxonomy</p> <p style="text-align: center;">  </p> <p style="text-align: center;"><u>Corporate Knights Sustainable Taxonomy</u></p>

Environmental Metrics

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

Social Metrics

KPI	Methodology
Injuries	Lost time incidents rate per 200,000 hours for both employees and contractors
Fatalities	Fatalities / total number of full-time equivalent employees
Employee Turnover	Number of departures (voluntary and involuntary) / total average employees
Paid Sick Leave	Paid sick leave (10+ days, 50%+ of pay) offered to employees in the country where the company is headquartered.

In most Peer Groups, a small number of KPIs account for the majority of the weight.

Governance Metrics

KPI	Methodology
Sustainability Pay Link	Mechanisms that link senior executive pay to sustainability targets
Non-males in Executive Management	Non-male representation on executive management team (percent-ranked* against all companies in the universe)
Non-males on Boards	Non-male representation on board of directors (percent 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 (percent-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 (percent-ranked* against all companies in the universe).
Supplier Sustainability Score	The supplier with the highest CK Sustainability Score
Political Influence	<p>Corporate engagement, monitoring and reporting systems in regard to its own lobbying activities and that of the trade/industry associations, coalitions and alliances of which the company is a member, its suppliers and/or funded thinktanks to advance the goals of the Paris Agreement.</p> <p>Disclosure of all trade/industry association memberships, including Board leadership positions and climate-related committee memberships</p>

In most Peer Groups, a small number of KPIs account for the majority of the weight.

Economic Metrics

KPI	Methodology
CEO-Average Employee Pay	CEO compensation or highest paid Exec / average employee compensation
Percentage Tax Paid	Cash tax amount paid / EBITDA – five-year trailing (2017-2021)
Pension Fund Quality	<p>75% x (total DB and DC employer contributions/ FTE employees percent-ranked* against peers)</p> <p>+ 25% x ((fair value of DB plan assets/FTE employees percent-ranked* against peers) - (1-(fair value of DB plan assets/liability percent-ranked* against peers)).</p> <p>Note: DC contributions include 401(k), RRSPs and equivalents.</p>
Sanction Deductions (January 1, 2021 to December 31, 2021)	Total fines, penalties and settlements / revenue

In most Peer Groups, a small number of KPIs account for the majority of the weight.

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 2023](#)

Priority KPIs and Weighting Scheme for Each CK Peer Group

KPIs and Weighting Scheme

Philosophy

The Corporate Knights Global 100 rating places equal emphasis on a company's operations and its products and service from a revenue and investment perspective. The Global 100 methodology uses a mix of fixed and variable weight ESG and sustainable 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 Sustainable Taxonomy and percent-rank* those ratios against the company's peer group. We then give equal weight to the ratios and the percent ranks* in awarding up to 42.5 points for sustainable revenue and up to 7.5 points for sustainable investment, for a total of 50 possible points.

The other 50 points in the Global 100 are allocated to 22 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 percentage 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. Lastly, the Political Influence KPI may earn a company up to 3 bonus points.



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. To maximize the focus on KPIs which have more impact, any KPI (except Energy Productivity, GHG Productivity, CEO pay ratio, cash taxes to EBITDA ratio and pension quality) whose weight is less than 2.5%* are eliminated (weighted at 0%) and redistributed proportionately to the remaining impact-weighted KPIs. (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.)

** Exceptions were made for KPIs in a number of CKPGs whose weights are under 2.5% due to the impact being relevant according to CK Research. In such cases, the KPI remains applicable despite a weight of less than 2.5%.*

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

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

* Using SQL's CUME_DIST function

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](#)

Policy for Changes to the Global 100 Index Methodology

The methodology to the Global 100 Index is reviewed at least annually by Corporate Knights Research staff.

An oversight committee composed of staff from Corporate Knights and its subsidiaries (the “Committee”) is responsible for decisions regarding any amendments to the rules of the Index. Any such amendment must be submitted to the Committee for prior approval.

Any changes or updates to any part of the Global 100 methodology are published prior to the beginning of a rating cycle or issuance of an index reconstitution.

Any such methodological updates are communicated through the *Global 100 Methodology Updates* section in the *Overview of Corporate Knights Rating Methodology* document which is published on www.corporateknights.com.

Link to the aforementioned document is included in any communication from Corporate Knights to users of the Index as well as companies eligible for the Global 100 ranking.

Appendices I - IV

2023 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 three-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 three-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 three-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 and materials sent for incineration. Total waste also includes waste recycled (recycled waste, 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 three-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 three-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 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. 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, Insurance companies and Asset management. 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. minus total compensation to senior executives) 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-rank*ed 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-rank*ed 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-rank*ed 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 up to five largest publicly listed supplier by total spend. The supplier with the highest score using the Global 100 methodology (excluding the Supplier Sustainability Score KPI) is weighted by 2.5% and the resulting figure is the company's Supplier Sustainability Score.</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.	<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.	<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	<p>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 all companies within the CK coverage universe. In Europe, Australia and North America for instance, 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.</p> <p>Exception: In the case of South Africa, due to the legacy of the Apartheid System, despite Caucasians account for a minority of the population, only non-Caucasian executives are counted towards racial diversity.</p>	<ul style="list-style-type: none"> GOAL 10: Reduced Inequalities
Racial Diversity on Boards	<p>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 all companies within the CK coverage universe. In Europe, Australia and North America for instance, 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.</p> <p>Exception: In the case of South Africa, due to the legacy of the Apartheid System, despite Caucasians account for a minority of the population, only non-Caucasian directors are counted towards racial diversity.</p>	

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	<p>The Sustainability Pay Link indicator is designed to reward companies that have set up mechanisms to link the remuneration of the CEO with the achievement of sustainability goals or targets. Companies are scored as follows:</p> <ul style="list-style-type: none"> 0% - No pay link 1% - Indicates existence of a CEO pay link but does not state the % of total variable pay that is tied to the pay link Up to an additional 4%, where a company indicates the existence of a CEO pay link AND discloses: <ul style="list-style-type: none"> A. The monetary amount earned by the CEO that is tied to the pay link, and; B. The CEO's total variable (short-term and long-term) The resulting percentage (A/B) is percent-rank*ed against that of all companies in the CK coverage universe, then multiplied by 4%. 	<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 period January 1, 2021 to December 31, 2021 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
Political Influence	<p>As a bonus of up to 3%, this indicator tracks whether or not, directly or through its agent(s):</p> <ul style="list-style-type: none"> • The company's climate policy and lobbying activities with policy makers are aligned with the Paris Agreement (Yes = 1%) • The company has a system in place to monitor, report and take corrective action on any misalignment between the goals of the Paris Agreement and the climate change lobbying activities of trade/industry associations, coalitions and alliances of which the company is a member, its suppliers and/or thinktanks funded by the company on at least a biennial basis (Yes = 1%) • The company discloses all trade/industry association memberships, including Board leadership positions and climate-related committee memberships, with a commitment to make that list public by end of 2023 (Yes = 1%) 	GOAL 13: Climate Action

Appendix II: Detailed scoring methodology

Name of KPI	Measurement	UN Sustainable Development Goals
Sustainable Revenue	Each company's Sustainable Revenue ratio is determined by measuring the ratio of Sustainable Revenue to total revenue according to the open-source Corporate Knights Sustainable Economy Taxonomy. Each company's Sustainable Revenue ratio is percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. The Sustainable Revenue ratio and Sustainable Revenue percent rank are equally weighted in the calculation of the contribution towards the overall score (known as the 50/50 rule).	
Sustainable Investment	<p>Each company's Sustainable Investment ratio is determined by measuring the ratio of Sustainable Investment to total investment by applying the open-source Corporate Knights Sustainable Economy Taxonomy. Each company's Sustainable Investment ratio is percent-ranked against all of the same-CK Peer Group peers within the CK coverage universe. The sustainable investment ratio and sustainable investment percent rank are equally weighted in the calculation of the contribution towards the overall score (known as the 50/50 rule).</p> <p>Total Sustainable 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 Sustainable Taxonomy. Found in the cash flow statement. -Total Research and Development (R&D) consistent with the Corporate Knights Sustainable Taxonomy. Found in the income statement. - Any completed acquisitions (cash amount), joint-ventures, or equity investments in companies or funds (not counted under Sustainable CapEx or Sustainable R&D) consistent with the Corporate Knights Sustainable Taxonomy. Generally found in financial statement notes. <p>For non-financial companies, sustainable investments refer to any investments that align with the Corporate Knights Sustainable Taxonomy. The Sustainable Investment KPI is not applicable to companies in the finance and insurance sectors.</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 II: Detailed scoring methodology

Letter Grade	Overall Score
A+	Awarded to the top company
A	Above 75%
A-	70-75%
B+	65-70%
B	60-65%
B-	55-60%
C+	50-55%
C	45-50%
C-	40-45%
D+	35-40%
D	30-35%
D-	25-30%

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 50% 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 according to CK Red Flag list (made 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.
Sanctions	Companies on the Canadian or U.S. government sanctions list for investors. Additionally, companies whose ratio of fines, penalties, or settlements / revenue for the last 12 months exceeds 1% are also excluded.
Oil sands laggards	Oil sands companies that were divested by NBIM
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 with more than 10% of generation or revenue is from thermal coal. Exception: If the company has less than 20% of generation or revenue that is from thermal coal AND - has no plans for expansion of coal AND - at least 50% of its investments are sustainable (according to the CK Sustainable Taxonomy) then the company is not excluded Source: Global Coal Exit List (GCEL)
Tobacco	Identifies companies that earn revenue from tobacco (GICS = Tobacco), and those excluded by NBIM and NZ SuperFund

Appendix IV: Corporate Knights Notice and Disclaimer

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