

The S&P Global EU Sustainable Finance Disclosure Regulation (SFDR) Dataset

Methodology

Sustainable 1 – April 2024

- April 2024: Text clarifications and expansions, see 'Updates' section.

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Introduction and Context

The European Union's new Sustainable Finance Disclosure Regulation (SFDR) is part of the broader EU Action Plan on sustainable finance aimed at directing capital towards a more sustainable economy, fostering long-termism and managing the increasing importance of sustainability risks. SFDR contains specific transparency and reporting requirements for Financial Market Participants (FMPs) both at the entity and product level. The SFDR reporting requirements serve to both combat greenwashing and provide more transparency on sustainability risks across capital markets.

The S&P Global EU Sustainable Finance Disclosure Regulation (SFDR) Dataset enables FMPs to start the process of disclosure at the entity-level and eventually at the product-level across a broad range of mandatory and opt-in principal adverse impact indicators (PAIs) outlined by the SFDR. The SFDR characterizes PAIs as impacts of investment decisions and advice that result in negative effects on sustainability factors. The dataset facilitates reporting on PAIs at the portfolio-level by providing underlying constituent-level data. The dataset covers 17 of the 18 proposed mandatory indicators and 33 of the 46 proposed opt-in indicators sourced from a range of S&P Global datasets. Data sources outlined below are primarily comprised of Trucost Environmental Data, S&P Global ESG Scores and Data, and S&P Global Market Intelligence sources.

Principal Adverse Impacts

SFDR disclosures are focused on a set of indicators for both climate and environment-related adverse impacts and adverse impacts in the areas of social and employee matters, respect for human rights, anti-corruption, and anti-bribery matters. Indicators are divided into a core set of universal mandatory indicators for factors that will lead to adverse impacts of investment decisions on sustainability factors, and additional opt-in indicators for environmental and social factors used to identify, assess, and prioritize additional adverse impacts.

SFDR includes provisions on disclosure for certain large FMPs in line with the due diligence policies with respect to the PAIs of investment decisions on sustainability factors. Firms which consider PAIs will also need to disclose how their products consider such impacts by December 30, 2022. FMPs should also include any other indicators they deem relevant to their investment decisions.

A detailed framework of available datapoints included in the S&P Global EU Sustainable Finance Disclosure Regulation (SFDR) Dataset and descriptions of their application to investment portfolios as per the SFDR can be found below.

Table 1: Mandatory SFDR Adverse Impact Indicators

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
CLIMATE AND OTHER ENVIRONMENT-RELATED INDICATORS					
1	GHG Emissions ^{1,2}	Scope 1 GHG emissions	Trucost Environmental	tCO2e	Report aggregated emissions for all companies in portfolio.
		Scope 2 GHG emissions	Trucost Environmental	tCO2e	Report aggregated emissions for all companies in portfolio.
		From 1 January 2023, Scope 3 GHG emissions	Trucost Environmental/Scope 3 Downstream	tCO2e	Report aggregated emissions for all companies in portfolio.
		Total GHG emissions	Trucost Environmental	tCO2e	Report aggregated emissions for all companies in portfolio.
2	Carbon Footprint	Carbon Footprint	Trucost Environmental	tCO2e/EUR M	Reference Appendix II for Carbon Footprint of investee companies formula and apply emissions data accordingly.
3	GHG intensity of investee companies	GHG intensity of investee companies	Trucost Environmental	tCO2e/EUR M	Reference Appendix II for GHG Intensity of investee companies formula and apply emissions data accordingly.

¹ 'Greenhouse gas (GHG) emissions' means greenhouse gas emissions as defined in point (1) of Article 3 of Regulation (EU) 2018/842 of the European Parliament and of the Council (12)

² 'Scope 1, 2 and 3 GHG emissions' means the scope of greenhouse gas emissions referred to in subpoints (i) to (iii) of point (1)(e) of Annex III of Regulation (EU) 2016/1011

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
4	Exposure to companies active in the fossil fuel sector	Share of investments in companies active in the fossil fuel sector	Trucost Sector Revenue	0/1	Companies are identified as Yes (1) or No (0) for involvement in fossil fuel sectors, as per indicator definition. Reference Appendix I, Table 3 for the list of S&P Global Trucost business activities included in the assessment.
5.1	Share of non-renewable energy consumption	Share of non-renewable energy consumption of investee companies from non-renewable energy sources compared to renewable energy sources, expressed as a percentage	S&P Global ESG Scores (Question Data) and in case the datapoint is missing, Trucost Energy Sources	GWh, %	Provides energy consumption data from non-renewable and renewable sources. Using energy consumption data, calculate percentages for renewable and non-renewable energy for all investee companies. In case of missing data, company estimates are calculated using the energy consumption intensity value for the GICS Sector and ISO Subregion relevant to the company after removing outliers. We only consider GICS Sector and ISO Subregion samples with more than 50 data points.
5.2	Share of non-renewable energy production	Share of non-renewable energy production of investee companies from non-renewable energy sources compared to renewable energy sources, expressed as a percentage	Trucost Fossil Fuel & Energy	GWh,%	Provides energy generation data from non-renewable and renewable sources. Using energy generation data, calculate percentages for renewable and non-renewable energy for all investee companies. Please refer to Table 4 for the list of S&P Global Trucost business activities linked to renewables.

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
6	Energy consumption intensity per high impact climate sector	Energy consumption in GWh per million EUR of revenue of investee companies, per high impact climate sector	Trucost Sector Revenue / S&P Global ESG Scores (Question Data) or Trucost Energy Sources	%	Provides energy consumption for companies with revenue from high impact climate sectors ³ and percent of the company's revenue from these sectors. Calculate revenue and aggregate for all companies in the portfolio. For definition of Trucost sectors, see Appendix I, table 2.
7	Activities negatively affecting biodiversity-sensitive areas	Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas	S&P Global ESG Scores (Question Data)	0/1	Based on company engagement, it provides a Yes (1) or No (0) if a company owns sites in critical biodiverse areas regardless of whether their operations have a negative effect on the area. In addition, companies in high impact climate sectors with identified assets in critical biodiverse areas according to S&P Biodiversity dataset are also considered as Yes (1).
8	Emissions to water	Tonnes of emissions to water generated by investee companies per million EUR invested, expressed as a weighted average ⁴	Trucost Land & Water Pollutants	Tonnes	Provides tonnes of (direct) emissions to water. Calculate weighted average and aggregate for all companies in the portfolio.
9	Hazardous waste ratio	Tonnes of hazardous waste generated by investee companies per million EUR invested, expressed as a weighted average	Trucost Hazardous Waste	Tonnes	Provides tonnes of (direct) hazardous waste generated. Calculate weighted average and aggregate for all companies in the portfolio.

³ As defined by Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains (OJ L 393, 30.12.2006, p. 1).

⁴ 'Weighted average' means a ratio of the weight of the investment by the financial market participant in an investee company in relation to all investments of the financial market participant. *Final Report on draft Regulatory Technical Standards*, JC 2021 03, 2 Feb 2021; Annex I, point (8)

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
SOCIAL AND EMPLOYEE, RESPECT FOR HUMAN RIGHTS, ANTI-CORRUPTION AND ANTI-BRIBERY MATTERS					
10	Violations of UN Global Compact principles and OECD Guidelines for Multinational Enterprises	Share of investments in investee companies that have been involved in violations of the UNGC principles or OECD Guidelines for Multinational Enterprises	RepRisk	0/1	Provides flags for the involvement of a company in a UNGC-principle related media controversy. This indicator will provide a Yes (1) or No (0) if the company is involved in any media controversy whether related to its operations or its supply chain for the past two years (24 months).
11	Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises	Share of investments in investee companies without policies to monitor compliance with the UNGC principles or OECD Guidelines for Multinational Enterprises or grievance /complaints handling mechanisms to address violations of the UNGC principles or OECD Guidelines for Multinational Enterprises	S&P Global ESG Scores (Question Data and Score)	Score (%)	Provides an assessment based on whether the company is not a signatory of the UNGC (0), its parent company is a signatory of the UNGC (50) or the company itself is a signatory (100)
12	Unadjusted gender pay gap	Average unadjusted gender pay gap of investee companies	S&P Global ESG Scores	Ratio	Provides the gender pay gap in the average gross hourly earnings between women and men presented as men to women pay ratio. See CSA methodology for additional detail. https://www.spglobal.com/esg/csa/methodology/ In case of missing data, company estimates are calculated using the median value for the GICS Sector and ISO Subregion relevant to the company after removing outliers. We only consider GICS Sector and ISO Subregion samples with more than 50 data points.

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
13	Board gender diversity	Average ratio of female to male board members in investee companies	S&P Global ESG Scores (Question Data) or S&P Capital IQ Professionals	%	Provides number of female directors ⁵ and total number of directors. Calculate ratio and aggregate for all companies in the portfolio.
14	Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)	Share of investments in investee companies involved in the manufacture or selling of controversial weapons	S&P Global Ethical Screens	0/1	S&P Global Ethical Screens provide flags for involvement in various products and services. This indicator will provide a Yes (1) or No (0) for manufacture or selling of controversial weapons. Depleted uranium, incendiary, blinding laser, cluster munitions, anti-personnel mines, biological and chemical weapons are considered as controversial.
Indicators applicable to investments in sovereigns and supranationals					
15	GHG intensity	GHG intensity of investee countries	Trucost Sovereign	tCO2e	Reference Appendix II for GHG Intensity of Sovereigns formula. Both territorial and imports emissions are included here. Using sovereign GHG emissions, calculate intensity and aggregate for all sovereigns in the portfolio.
16	Investee countries subject to social violations	Number of investee countries subject to social violations (absolute number and relative number divided by all investee countries), as referred to in international treaties and conventions, United Nations	European Union (EU) and United Nations (UN) sanctions	0/1	Provide a Yes (1) or No (0) indicator for countries that are sanctioned by the EU or the UN in view of the countries' social violations. We only consider sanctions that are justified by systematic violations of human rights by the ruling party.

⁵ For companies with one-tiered boards, this figure includes: female executive directors, non-executive directors and independent directors. For companies with two-tier boards, this figure *only* includes female independent directors and non-executive directors (senior executives and employee representatives are not included).

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
		principles and, where applicable, national law			
Indicators applicable to investments in real estate assets					
17	Exposure to fossil fuels through real estate assets	Share of investments in real estate assets involved in the extraction, storage, transport or manufacture of fossil fuels	Trucost Sector Revenue	0/1	Provides a Yes (1) or No (0) indicator for companies with revenue from fossil fuel extraction, storage, transport or manufacturing – indicating exposure to, rather than direct investment in, fossil fuel related real estate assets. Aggregate for all companies in the portfolio. Please refer to Table 3 for the list of Trucost business activities included in the assessment.
18	Exposure to energy-inefficient real estate assets	Share of investments in energy-inefficient real estate assets			

Table 2: Opt-in SFDR Adverse Impact Indicators

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
CLIMATE AND OTHER ENVIRONMENT-RELATED INDICATORS					
1	Emissions of inorganic pollutants	Tonnes of inorganic pollutants equivalent per million EUR invested, expressed as a weighted average	Trucost Land & Water Pollutants	Tonnes	Provides tonnes of (direct) inorganic pollutant emissions. Calculate weighted average and aggregate for all companies in the portfolio.
2	Emissions of air pollutants	Tonnes of air pollutants equivalent per million EUR invested, expressed as a weighted average	Trucost Air Pollutants	Tonnes	Provides tonnes of (direct) air pollutant emissions. Calculate weighted average and aggregate for all companies in the portfolio.
3	Emissions of ozone depletion substances	Tonnes of ozone depletion substances equivalent per million	Trucost Air Pollutants	Tonnes	Provides tonnes of (direct) ozone depleting substances emissions. Calculate weighted

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
		EUR invested, expressed as a weighted average			average and aggregate for all companies in the portfolio.
4	Investments in companies without carbon emission reduction initiatives	Share of investments in investee companies without carbon emission reduction initiatives aimed at aligning with the Paris Agreement	S&P Global Paris Alignment	0/1	Companies that according to the Paris Alignment methodology are aligned with a temperature increase above 2 degrees Celsius (1) or aligned with a temperature increase below 2 degrees Celsius (0)
5	Breakdown of energy consumption by type of non-renewable sources of energy	Share of energy from non-renewable sources used by investee companies broken down by each non-renewable energy source	Trucost Energy Sources	GWh	Provides breakdown of energy consumption by company by the following sources: Diesel, Petrol, LPG, Fuel Oil, Natural Gas, Coal, EPA Light fuel Oil, EPA Heavy fuel Oil, Jet Kerosene, Liquefied Natural Gas, Average Marine Fuel Oil. Aggregate for all companies in the portfolio.
6.1	Water usage and recycling	Average amount of water consumed and reclaimed by the investee companies (in cubic meters) per million EUR of revenue of investee companies	Trucost Environmental / Water	m ³	Provides volume of direct and purchased water in cubic meters. Calculate intensity and aggregate for all companies in the portfolio.
6.2		Weighted average percentage of water recycled and reused by investee companies			<i>S&P Global does not currently cover water recycling as defined by the indicator.</i>
7	Investments in companies without water management policies	Share of investments in investee companies without water management policies	S&P Global ESG Scores (Question Data and Score Data)	0/1	Based on corporate engagement, provides a Yes (0) or a No (1) if a company manages adequately aspects concerning quality and quantity water-related risk in its production sites. Companies without production sites are not assigned any value. Companies with adequate water management practices but not policies are assigned a 0.

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
8	Exposure to areas of high water stress	Share of investments in investee companies with sites located in areas of high water stress ⁶ without a water management policy	Trucost Physical Risk	0/1	Based on the Physical Risk dataset, it provides a Yes (1) or a No (0) if a company has at least one asset in a high-water stress area.
8	Exposure to areas of high water stress	Share of investments in investee companies with sites located in areas of high water stress ⁷ without a water management policy	Trucost Physical Risk	Score (0-100)	Provides a Water Stress score, which indicates the projected future ratio of water withdrawals to total renewable water supply in areas where the company has physical assets. Scores from 40-99 indicate high water stress (40-80%) and scores of 100 indicate extremely high water stress (>80%).
9	Investments in companies producing chemicals	Share of investments in investee companies the activities of which fall under Division 20.2 of Annex I to Regulation (EC) No 1893/2006	Trucost Sector Revenue	0/1	Provides a Yes (1) or No (0) indicator for companies with revenue from the manufacture of, fertilizers, pesticides, and other agrochemical products. Aggregate for all companies in the portfolio. Refer to Appendix I, Table 5 for the list of the S&P Global Trucost business activities included in assessment.

⁶ 'Areas of high water stress' means regions where the percentage of total water withdrawn is high (40-80%) or extremely high (greater than 80%) in the World Resources Institute's (WRI) Water Risk Atlas tool "Aqueduct"

⁷ See above

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
10	Land degradation, desertification, soil sealing	Share of investments in investee companies the activities of which cause land degradation, desertification or soil sealing			<i>SFDR's definition⁸ does not identify specific industries, but rather activities undertaken by companies in some industries. S&P Global does not currently track these specific activities</i>
11	Investments in companies without sustainable land/agriculture practices	Share of investments in investee companies without sustainable land/agriculture practices or policies	S&P Global ESG Scores	Score (0-100)	A score for Sustainable Agriculture Practices. A score of 25 or above indicates that the issue is partially addressed; 50 and above the issue is satisfactorily addressed; 75 and above the issue is fully and comprehensively addressed.
12	Investments in companies without sustainable oceans/seas practices	Share of investments in investee companies without sustainable oceans/seas practices or policies			
13	Non-recycled waste ratio	Tonnes of non-recycled waste generated by investee companies per million EUR invested, expressed as a weighted average	Trucost Environmental	Tonnes	Provides tonnes of (direct) non-recycled waste generated of investee company. Calculate weighted average and aggregate for all companies in the portfolio.
14	Natural species and protected areas	1.Share of investments in investee companies whose operations affect threatened species 2.Share of investments in investee companies without a biodiversity protection policy covering operational			

⁸ SFDR defines 'soil degradation' as means the diminishing capacity of the soil to provide ecosystem goods and services as desired by its stakeholders, according to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) as referred to in paragraph 100 of Decision No 1386/2013/EU. *Final Report on draft Regulatory Technical Standards*, JC 2021 03, 2 Feb 2021; Annex I, point (26)

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
		sites owned, leased, managed in, or adjacent to, a protected			
15	Deforestation	Share of investments in companies without a policy to address deforestation	S&P Global ESG Scores (Question Data)	0/1	Based on corporate engagement, it provides a Yes (0) or a No (1) if a company has a policy in place to address deforestation.
16	Share of securities not certified as green under a future EU legal act setting up an EU Green Bond Standard	Share of securities in investments not certified as green			
Indicators applicable to investments in sovereigns and supranationals					
17	Share of bonds not certified as green under a future EU act setting up an EU Green Bond Standard	Share of bonds not certified as green			
Indicators applicable to investments in real estate assets					
18	GHG emissions	Scope 1 GHG emissions generated by real estate assets			
19	Energy consumption intensity	Energy consumption in GWh of owned real estate assets per square meter			
20	Waste production in operations	Share of real estate assets not equipped with facilities for waste sorting and not covered by a waste recovery or recycling contract			
21	Raw materials consumption for new construction	Share of raw building materials (excluding recovered, recycled and biosourced) compared to the total weight of building materials used in			

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
	and major renovations	new construction and major renovations			
22	Land artificialisation	Share of non-vegetated surface area (surfaces that have not been vegetated in ground, as well as on roofs, terraces and walls) compared to the total surface area of the plots of all assets			
SOCIAL AND EMPLOYEE, RESPECT FOR HUMAN RIGHTS, ANTI-CORRUPTION AND ANTI-BRIBERY MATTERS					
1	Investments in companies without workplace accident prevention policies	Share of investments in investee companies without a workplace accident prevention policy	S&P Global ESG Scores	Score (0-100)	Provides score for OHS Governance Oversight. A score of 25 or above indicates that the issue is partially addressed; 50 and above the issue is satisfactorily addressed; 75 and above the issue is fully and comprehensively addressed.
2	Rate of accidents	Rate of accidents in investee companies expressed as a weighted average	S&P Global ESG Scores	Score (0-100)	Provides score for Total Recordable Injury Frequency Rate (TRIFR) - Employees + Contractors. A score below 50 is indicates potential risk for this issue, with lower scores indicating greater risk and higher scores indicating decreased risk.
3	Number of days lost to injuries, accidents, fatalities or illness	Number of workdays lost to injuries, accidents, fatalities or illness of investee companies expressed as a weighted average	S&P Global ESG Scores	Score (0-100)	Provides score for Lost-Time Injury Frequency Rate (LTIFR) - Employees + Contractors. A score below 50 is indicates potential risk for this issue, with lower scores indicating greater risk and higher scores indicating decreased risk.
4	Lack of a supplier code of conduct	Share of investments in investee companies without any supplier code of conduct (against unsafe working conditions, precarious work, child labour and forced labour)	S&P Global ESG Scores	Score (0-100)	Provides score for Supplier Code of Conduct. A score of 25 or above indicates that the issue is partially addressed; 50 and above the issue is satisfactorily addressed; 75 and above the issue is fully and comprehensively addressed.

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
5	Lack of grievance/complaints handling mechanism related to employee matters	Share of investments in investee companies without any grievance/complaints handling mechanism related to employee matters	S&P Global ESG Scores	Score (0-100)	Provides score Codes of Conduct: Systems/Procedures. A score of 25 or above indicates that the issue is partially addressed; 50 and above the issue is satisfactorily addressed; 75 and above the issue is fully and comprehensively addressed.
6	Insufficient whistleblower protection	Share of investments in entities without policies on the protection of whistleblowers	S&P Global ESG Scores (Question Data)	0/1	Provides a Yes (1) or No (0) indicator if company has a whistleblower protection policy. Aggregate for all companies in the portfolio.
7	Incidents of discrimination	1. Number of incidents of discrimination reported in investee companies expressed as a weighted average 2. Number of incidents of discrimination leading to sanctions in investee companies expressed as a weighted average	S&P Global ESG Scores (Question Data)	Number of Cases	Provides the number of incidents of discrimination and harassment that occurred during the previous solar year. Companies that have been engaged but have not responded to the request of information receive a missing value.
8	Excessive CEO pay ratio	Average ratio within investee companies of the annual total compensation for the highest compensated individual to the median annual total compensation for all employees (excluding the highest-compensated individual)	S&P Capital IQ Professionals	%	Provides a ratio of CEO Annual Compensation to Median Employee Compensation. Aggregate for all companies in the portfolio.
9	Lack of a human rights policy	Share of investments in entities without a human rights policy	S&P Global ESG Scores (Question Data)	0/1	Provides a Yes (1) or No (0) indicator if company has a publicly available human rights commitment consistent with UN Guiding Principles on Business and Human Rights. Aggregate for all companies in the portfolio.

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
10	Lack of due diligence	Share of investments in entities without a due diligence process to identify, prevent, mitigate and address adverse human rights impacts	S&P Global ESG Scores	Score (0-100)	Provides a score for Human Rights Assessment. A score of 25 or above indicates that the issue is partially addressed; 50 and above the issue is satisfactorily addressed; 75 and above the issue is fully and comprehensively addressed.
11	Lack of processes and measures for preventing trafficking in human beings	Share of investments in investee companies without policies against trafficking in human beings	S&P Global ESG Scores (Question Data)	0/1	Based on corporate engagement and publicly available information, provides a Yes (0) or a No (1) if a company has policy addressing human trafficking available on the public reporting or on the corporate website.
12	Operations and suppliers at significant risk of incidents of child labour	Share of investments in investee companies exposed to operations and suppliers at significant risk of incidents of child labour exposed to hazardous work in terms of geographic areas or type of operation			
13	Operations and suppliers at significant risk of incidents of forced or compulsory labour	Share of the investments in investee companies exposed to operations and suppliers at significant risk of incidents of forced or compulsory labour in terms in terms of geographic areas and/or the type of operation			
14	Number of identified cases of severe human rights issues and incidents	Number of cases of severe human rights issues and incidents connected to investee companies on a weighted average basis			
15	Lack of anti-corruption and anti-bribery policies	Share of investments in entities without policies on anti-corruption and anti-bribery consistent with the	S&P Global ESG Scores	Score (0-100)	Provides a score for Corruption & Bribery. A score of 25 or above indicates that the issue is partially addressed; 50 and above the issue

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
		United Nations Convention against Corruption			is satisfactorily addressed; 75 and above the issue is fully and comprehensively addressed.
16	Cases of insufficient action taken to address breaches of standards of anti-corruption and anti-bribery	Share of investments in investee companies with identified insufficiencies in actions taken to address breaches in procedures and standards of anti-corruption and anti-bribery	S&P Global ESG Scores (Question Data and Score)	0/1	Based on company engagement, provides a Yes (0) or a No (1) if a company reports publicly about internal corruption/bribery incidents including non-legal cases. Companies that do not report policies/practices related to breaches of standards of anti-corruption and antibribery are assigned a 1. Companies that have not responded to our request of information receive a 1.
17	Number of convictions and amount of fines for violation of anti-corruption and anti-bribery laws	Numbers of convictions and amount of fines for violations of anti-corruption and anti-bribery laws by investee companies	S&P Global ESG Scores (Question Data and Score)	Number of Cases	Provides the number of bribery and corruption cases in the past year based on publicly available information and company engagement.
Indicators applicable to investments in sovereigns and supranationals					
18	Average income inequality score	The distribution of income and economic inequality among the participants in a particular economy including a quantitative indicator explained in the explanation column	Gini Index (World Bank)	0-100	The Gini index measures the extent to which the distribution of income or consumption among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.
19	Average freedom of expression score	Measuring the extent to which political and civil society organizations can operate freely including a quantitative indicator explained in the explanation column	Freedom of Association Index (Our World in Data)	0-100	The freedom of association index from Our World in Data is based on expert assessments and index by V-Dem. It captures the extent to which parties and civil society organizations can form and operate freely. Scores range from 0 to 100 (most free)

No.	Adverse Impact Indicator	Definition	Source	Unit	Data Provided and Application to Portfolio
20	Average human rights performance	Measure of the average human right performance of investee countries using a quantitative indicator explained in the explanation column	Indicator P3: Human Rights and Rule of Law- Fragile State Index (Fund for Peace)	0-100	The Human Rights and Rule of Law Indicator considers the relationship between the state and its population insofar as fundamental human rights are protected and freedoms are observed and respected. Scores range from 0 to 100 (good human rights performance)
21	Average corruption score	Measure of the perceived level of public sector corruption using a quantitative indicator explained in the explanation column	Corruption Perception Index (Transparency International)	0-100	The Corruption Perception Index (CPI) ranks countries "by their perceived levels of public sector corruption, as determined by expert assessments and opinion surveys. Scores range from 0 to 100 (low corruption)
22	Non-cooperative tax jurisdictions	Investments in jurisdictions on the EU list of non-cooperative jurisdictions for tax purposes	European Union (EU) Council Website	0/1	Provides a Yes (0) or a No (1) if a country jurisdiction cooperates with the EU and meets all the criteria including tax transparency, fair taxation and anti-base erosion and profit shifting measures. The list of countries is sourced directly from the EU website https://www.consilium.europa.eu/en/policies/eu-list-of-non-cooperative-jurisdictions/
23	Average political stability score	Measure of the likelihood that the current regime will be overthrown by the use of force using a quantitative indicator explained in the explanation column	Political Stability and Absence of Violence Index (World Bank)	0-100	Political Stability and Absence of Violence / Terrorism index measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism. Scores range from 0 to 100 (high political stability)
24	Average rule of law score	Measure of the level of corruption, lack of fundamental rights, and the deficiencies in civil and criminal justice using a quantitative indicator explained in the explanation column	Rule of Law Index (World Bank)	0-100	Rule of law captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Scores range from 0 to 100 (strong rule of law)

Table 3: Additional Indicators Included in the S&P Global EU Sustainable Finance Disclosure Regulation (SFDR) Dataset – Corporate Level

TCUID	Trucost Unique Identifier
Company	Company Name
ISIN	Financial Ticker
CIQ ID	S&P CiQ Unique identifier
KeyInstn	S&P Market Intelligence Unique identifier
Financial Year	Financial Year as related to the environmental indicators
GICS Sector Name	Primary GICS Sector Name
GICS Industry Group Name	Primary GICS Industry Group Name
Trucost Sector Name	Trucost Primary Sector Name
Country	Company Headquarter Country
Revenue (USD mn)	Revenue for Financial Year in USD mn
Revenue (EUR mn)	Revenue for Financial Year in USD mn multiplied by the financial year average USD/EUR daily exchange rate
EVIC (Enterprise Value Including Cash) (USD mn)	Enterprise value including cash in USD
EVIC (Enterprise Value Including Cash) (EUR mn)	EVIC (Enterprise Value Including Cash) (USD mn) multiplied by the financial year average USD/EUR daily exchange rate
Accounting Year End Date	Financial accounting year for the specific company related to the Financial Year
Date of Extraction	Date of data extraction
Environmental Weighted Disclosure Rate (%)	The proportion of all direct environmental KPIs/impact external costs which are disclosed by the company

For EVIC calculations, we apply the following logic:

- If data on market capitalization is available, the EVIC is calculated as the sum of Market Capitalization, Total Preferred Equity, Total Debt and Total Minority Interest. This approach reflects the regulation’s preferred approach according to Commission Delegated Regulation (EU) 2022/1288.
- If data on the Market Capitalization is not available and total equity is positive, the EVIC is the highest value between Total Equity plus the Total Debt AND the Total Capital.
- If data on the Market Capitalization is not available, total equity is negative, total debt is positive and total capital is missing, the EVIC is calculated as total debt.
- If data on the Market Capitalization is not available and total equity, capital and debt are not available, EVIC is calculated as total asset.

Notes, financials are sourced from whichever is latest from Consolidated or Unconsolidated. If same filing date, Consolidated figures have a priority over Unconsolidated.

Market capitalization is collected as closest trading date (and up to 5 days) to the last day of the company fiscal year for the reporting period or last available year (up to three years back). The other financials are collected using the latest data available from the previous 12 months from the last day of the company fiscal year for the reporting period or last available year (up to three years back).

The disclosure file reports the approach followed for the EVIC calculation for each company.

Overview of EVIC calculation approaches based on available data.

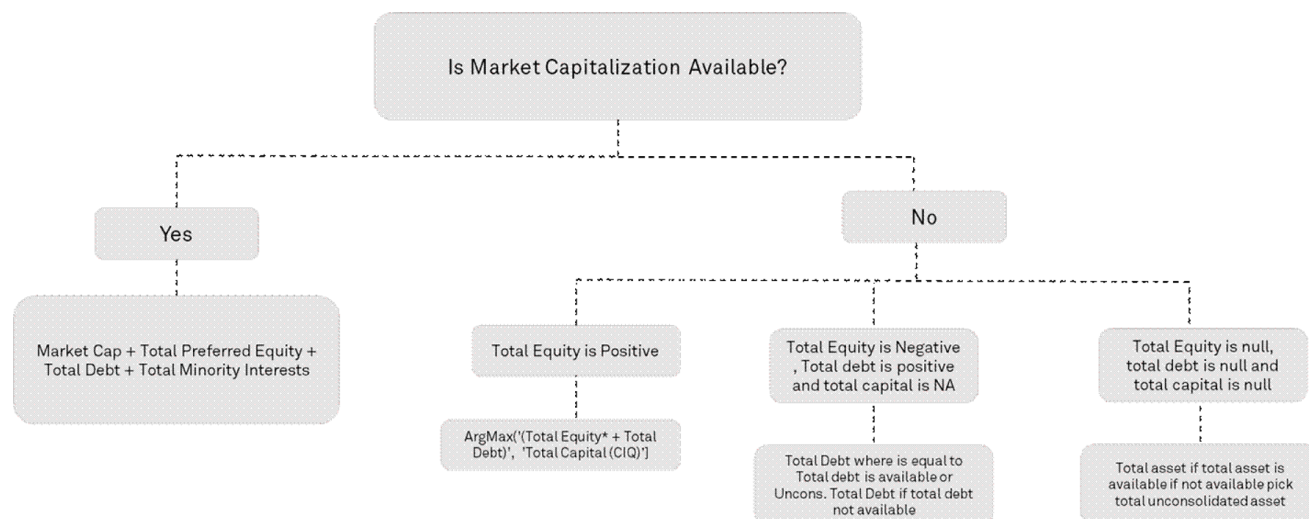


Table 4: Additional Indicators Included in the S&P Global EU Sustainable Finance Disclosure Regulation (SFDR) Dataset – Sovereign Level

Issuer MIID	Country Market Intelligence unique identifier
Issuer CIQ ID	Country CIQ unique identifier
Country ISO	Country ISO unique identifier
Country_Name	Country Name
Region	ISO Region Name
Subregion	ISO Sub-region Name
Date of Extraction	Date of Data Extraction
GDP USD mn	GDP figures sourced from multiple sources (World Bank, IMF, etc.) in USD mn
GDP EUR mn	GDP in USD mn multiplied by the financial year USD/EUR average daily exchange rate

Data sources

S&P Global Trucost Environmental Data

Trucost Environmental Data measures environmental impact across key dimensions for over 15,000 listed companies and approximately 5,000 private companies. This data can be used to assess environmental costs, identify and manage environmental and climate risk as well as conduct peer and portfolio analysis from a climate and environmental perspective. Metrics are standardized and presented through a financial lens using proprietary modelling.

The S&P Global EU Sustainable Finance Disclosure Regulation (SFDR) Dataset uses the following metrics:

- Carbon: Greenhouse gas (GHG) emissions including Scope 1, Scope 2, Scope 3 upstream, and Scope 3 Downstream calculated in line with the GHG Protocol
- Energy sources
- Land and water pollutants
- Air pollutants
- Water use and intensity
- Waste disposal and intensity
- Sector revenue
- Fossil fuel and power generation

For all the above-mentioned metrics (with the exception of energy sources and recycled waste), an environmentally extended input-output LCA (EEI-O) model has been used to systematically estimate impacts in the absence of disclosure. The EEI-O model estimates data for each environmental indicator across the entire operations of the company; from the raw materials they depend on in their supply chains to the electricity they purchase to power their operations.

Physical Risk data assesses company exposure to physical risk at the asset-level based on a database of over 2.7 million assets mapped to over 110,000 listed and private companies in the S&P Global Market Intelligence database. However, the coverage of this dataset within the S&P Global EU Sustainable Finance Disclosure Regulation (SFDR) Dataset has been set to match the Trucost Environmental Data (over 15,000 listed and approximately 5,000 private companies). The assessment covers seven climate change physical risk indicators including water stress.

The S&P EU Sustainable Finance Disclosure Regulation (SFDR) Dataset uses the following metrics:

- Areas of High and Extremely High water stress, as identified by World Resources Institute's Water Risk Atlas tool "Aqueduct"

Trucost Sovereign Carbon Exposure data covers the territorial and import-export greenhouse gas (GHG) emissions of 170 countries across all GHG Protocol gases. For country coverage, see Appendix I, Table 1.

The S&P Global EU Sustainable Finance Disclosure Regulation (SFDR) Dataset uses the following metrics:

- Country-level total GHG emissions

Trucost Paris Alignment assesses company-level alignment with the Paris Agreement goal to limit global warming to well below 2°C from pre-industrial levels. The approach taken is a transition pathway assessment, which examines the adequacy of emissions reductions over time required in order to meet either a 1.5°C or 2°C carbon budget.

The S&P Global EU Sustainable Finance Disclosure Regulation (SFDR) Dataset leverages the estimates of the Trucost Paris Alignment to produce the following metrics:

- Investments in companies without carbon emission reduction initiatives Share of investments in investee companies without carbon emission reduction initiatives aimed at aligning with the Paris Agreement

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S&P Global Market Intelligence is a leading provider of financial and industry data along with research and news tools that help track performance, identify investment ideas, understand industry dynamics, perform valuations and assess risk. Investment professionals, government agencies, corporations and universities globally can gain the intelligence essential to making business and financial decisions with conviction.

S&P Capital IQ Pro provides data to profile professionals with current and prior board/company and research affiliations biographies, and explore standardized job functions, titles, education, compensation, options holdings, and full committee memberships.

The S&P Global EU Sustainable Finance Disclosure Regulation (SFDR) Dataset uses the following metrics:

- CEO to employee pay ratio
- Board Member Gender

S&P Global ESG Scores

The S&P Global ESG Scores measure a company's performance on and management of material ESG risks, opportunities, and impacts informed by a combination of company disclosures, media and stakeholder analysis, modeling approaches, and in-depth company engagement via the S&P Global Corporate Sustainability Assessment (CSA).

The S&P Global ESG Score is a relative score measuring a company's performance on and management of ESG risks, opportunities, and impacts compared to their peers within the same industry classification.

The S&P Global ESG Score uses a double materiality approach whereby a sustainability issue is considered to be material if it presents a significant impact on society or the environment and a significant impact on a company's value drivers, competitive position, and long-term shareholder value creation.

The EU Sustainable Finance Disclosure Regulation Dataset uses both S&P Global ESG Scores and Question-Level data. Detailed methodology and other materials, including materiality matrix, available on request.

See also: [Full S&P Global ESG Scores Methodology](#)
[Measuring Sustainability Performance: CSA Methodology](#)

External Sources

RepRisk provides the underlying data for the derivation of PAI I 10. RepRisk is a global data science firm, founded in 1998 and headquartered in Switzerland, specialized in ESG due diligence and business conduct risk research solutions. www.reprisk.com. For more information on the PAI 10 methodology visit: https://www.reprisk.com/lab/reprisk_ungc_violator_flag.html

World Bank databank (<https://www.worldbank.org/en/home>) provides the information related to the GINI Index.

Council of the European Union website (<https://www.consilium.europa.eu/en/policies/eu-list-of-non-cooperative-jurisdictions/>) provides the list EU list of non-cooperative jurisdictions for tax purposes

European Commission sanctions website (<https://sanctionsmap.eu/#/main>) provides the list of countries sanctioned by the EU and the UN. Countries imposed with full restrictive measures are treated as sanctioned countries.

World Bank: World Governance Indicators (<https://info.worldbank.org/governance/wgi/>) provides the information related to the Political Stability and Rule of Law Indices

Fund for Peace: Fragile States Index (<https://fragilestatesindex.org/indicators/p3/>) provides information related to human rights performance in countries

Transparency International (<https://www.transparency.org/en/cpi/2021>) provides information related to corruption performance in countries

Our World in Data (<https://ourworldindata.org/grapher/freedom-of-association?country=ARG~AUS~BWA~CHN>) provides information related to the freedom of expression in countries

Limitations

Historical data and company coverage universes vary by data source. To simplify delivery and ensure consistency across data, only most recent year data will be included in the delivery and data will be reported on an annual basis, updated quarterly. As SFDR only requires historical reporting from 2022 forward, this dataset can serve both current and future historical reporting needs.

Additionally, while many of the datapoints underlying S&P Global ESG Scores are public, the CSA also relies on confidential, company-reported data that cannot be published at this time. For this delivery, in some instances where question level data is not available, a score is provided along with an explanation of how to apply the score to a portfolio company. A score threshold, typically 0 or 50, indicating poor performance or lack of policies and commitments is used in these instances. As the CSA questionnaire is based on a materiality matrix, some questions are only material to specific industries. A copy of the CSA materiality matrix is available upon request.

For specific datapoint guidance, see Tables 1, 2 above.

Updates

Clarification updates made to this document April 2024:

- Expansion of information in controversial weapons definition ("Depleted uranium, incendiary, blinding laser, cluster munitions, anti-personnel mines, biological and chemical weapons are considered as controversial.")
- Updated market cap data is taken from the latest FISCAL year end up to the reporting year (previously CALENDAR year end)

Appendix I

Table 1: Country coverage for Trucost Sovereign Carbon Exposure data

Afghanistan	Chad	Guinea	Luxembourg	Papua New Guinea	Switzerland
Albania	Chile	Guinea-Bissau	Macao SAR	Paraguay	Syria
Algeria	China	Guyana	Madagascar	Peru	Taiwan Province of China
Angola	Colombia	Haiti	Malawi	Philippines	Tajikistan
Antigua and Barbuda	Comoros	Honduras	Malaysia	Poland	Tanzania
Argentina	Costa Rica	Hong Kong SAR	Maldives	Portugal	Thailand
Armenia	Croatia	Hungary	Mali	Qatar	The Bahamas
Australia	Cyprus	Iceland	Malta	Republic of Congo	The Gambia
Austria	Czech Republic	India	Marshall Islands	Romania	Timor-Leste
Azerbaijan	Democratic Republic of the Congo	Indonesia	Mauritania	Russia	Togo
Bahrain	Denmark	Iraq	Mauritius	Rwanda	Tonga
Bangladesh	Djibouti	Ireland	Mexico	São Tomé and Príncipe	Trinidad and Tobago
Barbados	Dominica	Islamic Republic of Iran	Moldova	Saint Lucia	Tunisia
Belarus	Dominican Republic	Israel	Mongolia	Samoa	Turkey
Belgium	Ecuador	Italy	Montenegro	San Marino	Turkmenistan
Belize	Egypt	Ivory Coast	Morocco	Saudi Arabia	Uganda
Benin	El Salvador	Jamaica	Mozambique	Senegal	Ukraine
Bermuda	Equatorial Guinea	Japan	Myanmar	Serbia	United Arab Emirates
Bhutan	Eritrea	Jordan	Namibia	Seychelles	United Kingdom
Bolivia	Estonia	Kazakhstan	Nauru	Sierra Leone	United States
Bosnia and Herzegovina	Eswatini	Kenya	Nepal	Singapore	Uruguay
Botswana	Ethiopia	Kiribati	Netherlands	Slovak Republic	Uzbekistan
Brazil	Fiji	Korea	New Zealand	Slovenia	Vanuatu
Brunei Darussalam	Finland	Kuwait	Nicaragua	Solomon Islands	Venezuela
Bulgaria	France	Kyrgyz Republic	Niger	South Africa	Vietnam
Burkina Faso	Gabon	Lao P.D.R.	Nigeria	South Sudan	Yemen
Burundi	Georgia	Latvia	North Macedonia	Spain	Zambia
Cabo Verde	Germany	Lebanon	Norway	Sri Lanka	Zimbabwe
Cambodia	Ghana	Lesotho	Oman	St. Vincent and the Grenadines	

Cameroon	Greece	Liberia	Pakistan	Sudan	
Canada	Grenada	Libya	Palau	Suriname	
Central African Republic	Guatemala	Lithuania	Panama	Sweden	

Table 2: Trucost business activities mapped to SFDR ‘high impact climate sectors’

Abrasive product manufacturing	Dental laboratories	Metal cutting and forming machine tool manufacturing	Primary smelting and refining of nonferrous metal (except copper and aluminum)
Adhesive manufacturing	Distilleries	Metal tank (heavy gauge) manufacturing	Printed circuit assembly (electronic assembly) manufacturing
Air and gas compressor manufacturing	Dog and cat food manufacturing	Military armored vehicle, tank, and tank component manufacturing	Printing
Air conditioning, refrigeration, and warm air heating equipment manufacturing	Doll, toy, and game manufacturing	Mineral wool manufacturing	Printing ink manufacturing
Air purification and ventilation equipment manufacturing	Drilling oil and gas wells	Mining and oil and gas field machinery manufacturing	Propulsion units and parts for space vehicles and guided missiles
Air transportation	Dry, condensed, and evaporated dairy product manufacturing	Miscellaneous Durable Goods Wholesalers	Pulp mills
Aircraft engine and engine parts manufacturing	Electric Bulk Power Transmission and Control	Miscellaneous Nondurable Goods Wholesalers	Pump and pumping equipment manufacturing
Aircraft manufacturing	Electric lamp bulb and part manufacturing	Miscellaneous nonmetallic mineral products	Rail transportation (Diesel)
Alkalies and chlorine manufacturing	Electric Power Distribution	Miscellaneous Store Retailers	Rail transportation (Electric)
All other basic inorganic chemical manufacturing	Electric Power Distribution	Motor and generator manufacturing	Railroad rolling stock manufacturing
All other chemical product and preparation manufacturing	Electrical and Electronic Goods Wholesalers	Motor home manufacturing	Ready-mix concrete manufacturing
All other converted paper product manufacturing	Electricity and signal testing instruments manufacturing	Motor Vehicle and Machinery, Equipment, and Supplies Wholesalers	Real estate
All other crop farming	Electromedical and electrotherapeutic apparatus manufacturing	Motor Vehicle and Parts Dealers	Reconstituted wood product manufacturing
All other food manufacturing	Electron tube manufacturing	Motor vehicle body manufacturing	Relay and industrial control manufacturing
All other forging, stamping, and sintering	Electronic and precision equipment repair and maintenance	Motor vehicle parts manufacturing	Residential maintenance and repair
All other miscellaneous electrical equipment and component manufacturing	Electronic capacitor, resistor, coil, transformer, and other inductor manufacturing	Motorcycle, bicycle, and parts manufacturing	Residential permanent site single- and multi-family structures
All other miscellaneous manufacturing	Electronic computer manufacturing	Musical instrument manufacturing	Rolling mill and other metalworking machinery manufacturing
All other miscellaneous wood product manufacturing	Electronic connector manufacturing	Narrow fabric mills and schiffli machine embroidery	Rubber and plastics hoses and belting manufacturing
All other paper bag and coated and treated paper manufacturing	Electronics and Appliance Stores	Natural gas distribution	Sand, gravel, clay, and ceramic and refractory minerals mining and quarrying
All other petroleum and coal products manufacturing	Engineered wood member and truss manufacturing	Natural Gas Liquid Extraction	Sanitary paper product manufacturing
All other textile product mills	Fabric coating mills	Natural Gas Power Generation	Sawmills and wood preservation
All other transportation equipment manufacturing	Fabricated pipe and pipe fitting manufacturing	Natural Gas Power Generation	Seafood product preparation and packaging
Alumina refining and primary aluminum production	Farm machinery and equipment manufacturing	Nickel Mining	Search, detection, and navigation instruments manufacturing
Aluminum product manufacturing from purchased aluminum	Fats and oils refining and blending	Nonchocolate confectionery manufacturing	Seasoning and dressing manufacturing
Ammunition manufacturing	Federal electric utilities	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding and alloying	Secondary smelting and alloying of aluminum
Analytical laboratory instrument manufacturing	Ferrous metal foundries	Nonferrous metal foundries	Semiconductor and related device manufacturing
Animal (except poultry) slaughtering, rendering, and processing	Fertilizer manufacturing	Nonresidential commercial and health care structures	Semiconductor machinery manufacturing
Animal production, except cattle and poultry and eggs	Fiber, yarn, and thread mills	Nonresidential maintenance and repair	Ship building and repairing

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	Fishing	Nonresidential manufacturing structures	Showcase, partition, shelving, and locker manufacturing
Apparel accessories and other apparel manufacturing	Flat glass manufacturing	Nonstore Retailers	Sign manufacturing
Apparel knitting mills	Flavoring syrup and concentrate manufacturing	Nonupholstered wood household furniture manufacturing	Small electrical appliance manufacturing
Apparel, Piece Goods, and Notions Wholesalers	Flour milling and malt manufacturing	Nonwoven fabric mills	Snack food manufacturing
Arms, ordnance, and accessories manufacturing	Fluid milk and butter manufacturing	Nuclear Electric Power Generation	Soap and cleaning compound manufacturing
Artificial and synthetic fibers and filaments manufacturing	Fluid power process machinery	Office furniture manufacturing	Soft drink and ice manufacturing
Asphalt paving mixture and block manufacturing	Food, Beverage, Health, and Personal Care Stores	Office supplies (except paper) manufacturing	Solar Power Generation
Asphalt shingle and coating materials manufacturing	Footwear manufacturing	Oilseed farming	Soybean and other oilseed processing
Audio and video equipment manufacturing	Forest nurseries, forest products, and timber tracts	Ophthalmic goods manufacturing	Special tool, die, jig, and fixture manufacturing
Automatic environmental control manufacturing	Frozen food manufacturing	Optical instrument and lens manufacturing	Speed changer, industrial high-speed drive, and gear manufacturing
Automobile manufacturing	Fruit and vegetable canning, pickling, and drying	Ornamental and architectural metal products manufacturing	Sporting and athletic goods manufacturing
Automotive repair and maintenance, except car washes	Fruit farming	Other aircraft parts and auxiliary equipment manufacturing	Spring and wire product manufacturing
Ball and roller bearing manufacturing	Furniture and Home Furnishings Stores	Other animal food manufacturing	Stationery product manufacturing
Bare printed circuit board manufacturing	Gasket, packing, and sealing device manufacturing	Other basic organic chemical manufacturing	Steel product manufacturing from purchased steel
Bauxite Mining	Gasoline Stations	Other commercial and service industry machinery manufacturing	Stone mining and quarrying
Beet sugar manufacturing	General Merchandise Stores	Other communications equipment manufacturing	Storage battery manufacturing
Biological product (except diagnostic) manufacturing	Geothermal Power Generation	Other concrete product manufacturing	Sugar cane mills and refining
Biomass Power Generation	Glass container manufacturing	Other cut and sew apparel manufacturing	Sugarcane and sugar beet farming
Bituminous Coal and Lignite Surface Mining	Glass product manufacturing made of purchased glass	Other Electric Power Generation	Support activities for agriculture and forestry
Bituminous Coal Underground Mining	Gold Ore Mining	Other electronic component manufacturing	Support activities for oil and gas operations
Blind and shade manufacturing	Grain farming	Other engine equipment manufacturing	Support activities for other mining
Boat building	Greenhouse, nursery, and floriculture production	Other fabricated metal manufacturing	Support activities for printing
Bread and bakery product manufacturing	Grocery and Related Product Wholesalers	Other general purpose machinery manufacturing	Support activities for transportation
Breakfast cereal manufacturing	Ground or treated mineral and earth manufacturing	Other industrial machinery manufacturing	Surgical and medical instrument manufacturing
Breweries	Guided missile and space vehicle manufacturing	Other leather and allied product manufacturing	Surgical appliance and supplies manufacturing
Brick, tile, and other structural clay product manufacturing	Handtool manufacturing	Other major household appliance manufacturing	Switchgear and switchboard apparatus manufacturing
Broadcast and wireless communications equipment	Hardware manufacturing	Other Metal Ore Mining	Synthetic dye and pigment manufacturing
Broadwoven fabric mills	Heating equipment (except warm air furnaces) manufacturing	Other nonmetallic mineral mining and quarrying	Synthetic rubber manufacturing
Broom, brush, and mop manufacturing	Heavy duty truck manufacturing	Other nonresidential structures	Tar Sands Extraction
Building Material and Garden Equipment and Supplies Dealers	Household cooking appliance manufacturing	Other plastics product manufacturing	Telephone apparatus manufacturing
Car washes	Household laundry equipment manufacturing	Other pressed and blown glass and glassware manufacturing	Textile and fabric finishing mills
Carbon and graphite product manufacturing	Household refrigerator and home freezer manufacturing	Other residential structures	Textile bag and canvas mills
Carbon black manufacturing	Hunting and trapping	Other rubber product manufacturing	Tire manufacturing
Carpet and rug mills	Hydroelectric Power Generation	Owner-occupied dwellings	Tobacco farming
Cattle ranching and farming	Ice cream and frozen dessert manufacturing	Packaging machinery manufacturing	Tobacco product manufacturing
Cement manufacturing	Industrial gas manufacturing	Paint and coating manufacturing	Toilet preparation manufacturing
Cheese manufacturing	Industrial mold manufacturing	Paper mills	Tortilla manufacturing
Chocolate and confectionery manufacturing from cacao beans	Industrial process furnace and oven manufacturing	Paperboard container manufacturing	Totalizing fluid meters and counting devices manufacturing

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Clay and nonclay refractory manufacturing	Industrial process variable instruments manufacturing	Paperboard Mills	Transit and ground passenger transportation
Clothing and Clothing Accessories Stores	Institutional furniture manufacturing	Pesticide and other agricultural chemical manufacturing	Travel trailer and camper manufacturing
Coal Power Generation	In-vitro diagnostic substance manufacturing	Petrochemical manufacturing	Tree nut farming
Coated and laminated paper, packaging paper and plastics film manufacturing	Iron and steel mills and ferroalloy manufacturing	Petroleum lubricating oil and grease manufacturing	Truck trailer manufacturing
Coating, engraving, heat treating and allied activities	Iron ore mining	Petroleum Power Generation	Truck transportation
Coffee and tea manufacturing	Irradiation apparatus manufacturing	Petroleum Power Generation	Turbine and turbine generator set units manufacturing
Commercial and industrial machinery and equipment repair and maintenance	Jewelry and silverware manufacturing	Petroleum refineries	Turned product and screw, nut, and bolt manufacturing
Communication and energy wire and cable manufacturing	Knit fabric mills	Petroleum, Chemical, and Allied Products Wholesalers	Unlaminated plastics profile shape manufacturing
Computer storage device manufacturing	Laboratory apparatus and furniture manufacturing	Pharmaceutical preparation manufacturing	Upholstered household furniture manufacturing
Computer terminals and other computer peripheral equipment manufacturing	Laminated plastics plate, sheet (except packaging), and shape manufacturing	Photographic and photocopying equipment manufacturing	Uranium-Radium-Vanadium Ore Mining
Concrete pipe, brick, and block manufacturing	Landfill Gas Power Generation	Pipeline transportation	Urethane and other foam product (except polystyrene) manufacturing
Confectionery manufacturing from purchased chocolate	Lawn and garden equipment manufacturing	Plastics and rubber industry machinery manufacturing	Valve and fittings other than plumbing
Construction machinery manufacturing	Lead Ore and Zinc Ore Mining	Plastics bottle manufacturing	Vegetable and melon farming
Cookie, cracker, and pasta manufacturing	Leather and hide tanning and finishing	Plastics material and resin manufacturing	Vending, commercial, industrial, and office machinery manufacturing
Copper Mining	Light truck and utility vehicle manufacturing	Plastics packaging materials and unlaminated film and sheet manufacturing	Veneer and plywood manufacturing
Copper rolling, drawing, extruding and alloying	Lighting fixture manufacturing	Plastics pipe and pipe fitting manufacturing	Warehousing and storage
Cotton farming	Lime and gypsum product manufacturing	Plate work and fabricated structural product manufacturing	Waste management and remediation services
Couriers and messengers	Logging	Plumbing fixture fitting and trim manufacturing	Watch, clock, and other measuring and controlling device manufacturing
Crown and closure manufacturing and metal stamping	Lumber and Other Construction Materials Wholesalers	Polystyrene foam product manufacturing	Water transportation
Crude Petroleum and Natural Gas Extraction	Machine shops	Postal service	Water, sewage and other systems
Curtain and linen mills	Magnetic and optical recording media manufacturing	Pottery, ceramics, and plumbing fixture manufacturing	Wave & Tidal Power Generation
Custom architectural woodwork and millwork manufacturing	Manufactured home (mobile home) manufacturing	Poultry and egg production	Wet corn milling
Custom roll forming	Material handling equipment manufacturing	Poultry processing	Wind Power Generation
Cut and sew apparel contractors	Mattress manufacturing	Power boiler and heat exchanger manufacturing	Wineries
Cut stone and stone product manufacturing	Mechanical power transmission equipment manufacturing	Power, distribution, and specialty transformer manufacturing	Wiring device manufacturing
Cutlery, utensil, pot, and pan manufacturing	Medicinal and botanical manufacturing	Power-driven handtool manufacturing	Women's and girls' cut and sew apparel manufacturing
Cutting tool and machine tool accessory manufacturing	Men's and boys' cut and sew apparel manufacturing	Prefabricated wood building manufacturing	Wood container and pallet manufacturing
Dairy cattle and milk production	Metal and other household furniture manufacturing	Primary battery manufacturing	Wood kitchen cabinet and countertop manufacturing
Dental equipment and supplies manufacturing	Metal can, box, and other metal container (light gauge) manufacturing	Primary smelting and refining of copper	Wood windows and doors and millwork

Table 3 – Trucost business activities mapped to activities in the fossil fuel sector, as defined by SFDR

Bituminous Coal and Lignite Surface Mining
Bituminous Coal Underground Mining
Crude Petroleum and Natural Gas Extraction
Tar Sands Extraction
Natural Gas Liquid Extraction
Support activities for oil and gas operations
Drilling oil and gas wells
Pipeline transportation
Petroleum refineries
Natural gas distribution
Coal Power Generation
Natural Gas Power Generation
Petroleum Power Generation
Gasoline Stations

Table 4 – Trucost business activities linked to renewable activities

Wind Power Generation
Solar Power Generation
Wave & Tidal Power Generation
Geothermal Power Generation
Hydroelectric Power Generation
Biomass Power Generation
Landfill Gas Power Generation

Table 5 – Trucost business activities linked to chemical production

Fertilizer manufacturing
Pesticide and other agricultural chemical manufacturing

Appendix II

Figure 1. Carbon Footprint formula, as per SFDR⁹

$$\frac{\sum_n^i \left(\frac{\text{current value of investment}_i}{\text{investee company's enterprise value}_i} \times \text{investee company's Scope 1, 2 and 3 GHG emissions}_i \right)}{\text{current value of all investments (€M)}}$$

Figure 2. GHG Intensity of investee companies formula, as per SFDR¹⁰

$$\sum_n^i \left(\frac{\text{current value of investment}_i}{\text{current value of all investments (€M)}} \times \frac{\text{investee company's Scope 1, 2 and 3 GHG emissions}_i}{\text{investee company's €M revenue}_i} \right)$$

Figure 3. GHG Intensity of Sovereigns, as per SFDR¹¹

$$\sum_n^i \left(\frac{\text{current value of investment}_i}{\text{current value of all investments (€M)}} \times \frac{\text{The country's Scope 1, 2 and 3 GHG emissions}_i}{\text{Gross Domestic Product}_i(\text{€M})} \right)$$

⁹ Final Report on draft Regulatory Technical Standards, JC 2021 03, 2 Feb 2021; Annex I, point (7)

¹⁰ Final Report on draft Regulatory Technical Standards, JC 2021 03, 2 Feb 2021; Annex I, point (9)

¹¹ Final Report on draft Regulatory Technical Standards, JC 2021 03, 2 Feb 2021; Annex I, point (10)

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