

Handbook

Eurex Clearing AG ESG Portfolio Assessment Manual

Classification unrestricted
SW-Rel. No.
Doc.-Ref. No.

Version 1.0
Date 3 April 2023

© Eurex 2023

Deutsche Börse AG (DBAG), Clearstream Banking AG (Clearstream), Eurex Frankfurt AG, Eurex Clearing AG (Eurex Clearing), Eurex Repo GmbH (Eurex Repo) are corporate entities and are registered under German law. Eurex Global Derivatives AG is a corporate entity and is registered under Swiss law. Clearstream Banking S.A. is a corporate entity and is registered under Luxembourg law. Deutsche Boerse Asia Holding Pte. Ltd., Eurex Clearing Asia Pte. Ltd. and Eurex Exchange Asia Pte. Ltd are corporate entities and are registered under Singapore law. Eurex Frankfurt AG (Eurex) is the administrating and operating institution of Eurex Deutschland. Eurex Deutschland is in the following referred to as the "Eurex Exchange".

All intellectual property, proprietary and other rights and interests in this publication and the subject matter hereof (other than certain trademarks and service marks listed below) are owned by DBAG and its affiliates and subsidiaries including, without limitation, all registered design, copyright, trademark and service mark rights. While reasonable care has been taken in the preparation of this publication to provide details that are accurate and not misleading at the time of publication DBAG, Clearstream, Eurex, Eurex Clearing, Eurex Repo as well as the Eurex Exchange and their respective servants and agents (a) do not make any representations or warranties regarding the information contained herein, whether express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose or any warranty with respect to the accuracy, correctness, quality, completeness, timeliness of such information, and (b) shall not be responsible or liable for any third party's use of any information contained herein under any circumstances, including, without limitation, in connection with actual trading or otherwise or for any errors or omissions contained in this publication.

This publication is published for information purposes only and shall not constitute investment advice respectively does not constitute an offer, solicitation or recommendation to acquire or dispose of any investment or to engage in any other transaction. This publication is intended for solicitation purposes but only for use as general information.

All descriptions, examples and calculations contained in this publication are for illustrative purposes only.

Eurex and Eurex Clearing offer services directly to members of the Eurex Exchange respectively to clearing members of Eurex Clearing. Those who desire to trade any products available on the Eurex market or who desire to offer and sell any such products to others should desire to possess a clearing license of Eurex Clearing in order to participate in the clearing process provided by Eurex Clearing. Participants should consider legal and regulatory requirements of those jurisdictions relevant to them, as well as the risks associated with such products before doing so.

Only Eurex derivatives that are CFTC-approved may be traded via direct access in the United States or by United States persons. A complete, up-to-date list of Eurex derivatives that are CFTC-approved is available at: <http://www.eurexexchange.com/exchange-en/products/eurex-derivatives-us>. In addition, Eurex representatives and participants may familiarise U.S. Qualified Institutional Investors (QIBs) and broker-dealers with certain eligible Eurex equity options and equity index options pursuant to the terms of the SEC's 2013 Class No-Action Relief. A complete, up-to-date list of Eurex options that are eligible under the SEC Class No-Action Relief is available at: <http://www.eurexexchange.com/exchange-en/products/eurex-derivatives-us/eurex-options-in-the-us-for-eligible-customers>. Lastly, U.S. QIBs and broker-dealers trading on behalf of QIBs may trade certain single-security futures and narrow-based security futures subject to terms and conditions of the SEC's Exchange Act Release No. 60,194 (June 30, 2009), 74 Fed. Reg. 32,200 (June 30, 2009).

2009) and the CFTC's Division of Clearing and Intermediary Oversight Advisory Concerning the Offer and Sale of Foreign Security Futures Products to Customers Located in the United States (June 8, 2010).

Trademarks and Service Marks

Buxl®, DAX®, DivDAX®, eb.rexx®, Eurex®, Eurex Repo®, Eurex Strategy WizardSM, Euro GC Pooling®, FDAX®, FWB®, GC Pooling®, GCPJ®, MDAX®, ODAX®, SDAX®, TecDAX®, USD GC Pooling®, VDAX®, VDAX-NEW® and Xetra® are registered trademarks of DBAG. All MSCI indexes are service marks and the exclusive property of MSCI Barra. ATX®, ATX® five, CECE® and RDX® are registered trademarks of Vienna Stock Exchange AG. IPD® UK Quarterly Indexes are registered trademarks of Investment Property Databank Ltd. IPD and have been licensed for the use by Eurex for derivatives. SLI®, SMI® and SMIM® are registered trademarks of Swiss Exchange AG. The STOXX® indexes, the data included therein and the trademarks used in the index names are the intellectual property of STOXX Limited and/or its licensors. Eurex derivatives based on the STOXX® indexes are in no way sponsored, endorsed or promoted by STOXX and its licensors and neither STOXX nor its licensors shall have any liability with respect thereto. Bloomberg Commodity IndexSM and any related sub-indexes are service marks of Bloomberg L.P. PCS® and Property Claim Services® are registered trademarks of ISO Services, Inc. Korea Exchange, KRX, KOSPI and KOSPI 200 are registered trademarks of Korea Exchange Inc. BSE and SENSEX are trademarks/service marks of Bombay Stock Exchange (BSE) and all rights accruing from the same, in whole or otherwise, wholly vest with BSE. Any violation of the above would constitute an offence under the laws of India and international treaties governing the same.

The names of other companies and third party products may be trademarks or service marks of their respective owners.

Eurex Deutschland qualifies as manufacturer of packaged retail and insurance-based investment products (PRIIPs) under Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs Regulation) and provides key information documents (KIDs) covering PRIIPs traded on Eurex Deutschland on its website under the following <http://www.eurexchange.com/exchange-en/resources/regulations/eu-regulations/priips-kids>.

In addition, according to Art. 14(1) PRIIPs Regulation the person advising on, or selling, a PRIIP shall provide the KID to retail investors free of charge.

Change History

Change Date	Chang
3 April 2023	Initial Version

Table of Contents

1.	Introduction	5
2.	Corporate Climate Metric Content and Methodology	6
2.1.	Corporate Data Sources and Background Information	6
2.2.	Pre-Selection and Reweighting for Corporates	7
2.3.	Corporate Climate Metric Aggregation	7
2.3.1.	Scope 1&2 and Scope 3 Emissions	7
2.3.2.	Weighted Average Carbon Intensity based on revenue in EUR	7
2.3.3.	Weighted Average Carbon Risk Rating	7
2.3.4.	GHG Reduction Targets	8
3.	Sovereign Climate Content and Methodology	8
3.1.	Sovereign Data Sources and Background Information	8
3.2.	Sovereign Climate Metric Aggregation	9
3.2.1.	Production Emissions (tCO ₂ e)	9
3.2.2.	Emission Intensity based on GDP in EUR	9
4.	Environmental Ratings	9
4.1.	Corporate Ratings	10
4.1.1.	“E” Topics	10
4.1.2.	Rating Scale and Performance Requirements	10
4.1.3.	Weighted Average Corporate Rating	11
4.2.	Country Ratings	11
4.2.1.	“E” Topics	12
4.2.2.	Weighting and Rating Scale	12
4.2.2.	Weighted Average Country Rating	13
5.	Ranking	13
6.	Input Factors as defined by ISS	14
7.	Daily ESG Portfolio Assessment Report - Daily Collateral Climate Metrics (RPTCDESG)	16
8.	Abbreviations	20

1. Introduction

Eurex Clearing offers Clearing Members and their clients support to navigate through their sustainability journey with the ESG Portfolio Assessment. This assessment provides climate metrics on a portfolio level for the non-cash collateral delivered to Eurex Clearing as the central counterparty to assist in the monitoring, reporting and transparency of the transition to a sustainable economy. This document provides details regarding the data and the methodology used to incorporate climate metrics and ratings as well as details regarding the rankings of metrics and fields available in the report.

The data is provided by ISS ESG and the methodology to aggregate climate metrics follows that applied by ISS ESG in their Climate Impact Report and Sovereign Climate Analysis. Additionally, corporate and country ratings on an aggregated level based on environmental factors (E ratings) are included. ISS ESG rating provides highly relevant, material and forward-looking environmental data and performance assessments. The ESG rating methodology was originally developed by Institutional Shareholder Services Germany (formerly oekom research) and has been consistently updated for more than 25 years.

The following metrics from ISS ESG are covered in the ESG Portfolio Assessment (Daily Collateral Climate Metrics (RPTCDESG)):

- Corporate Climate Metrics
 - Emission exposure (tCO₂e¹) Scope 1&2
 - Emission exposure (tCO₂e) Scope 3
 - Weighted Average Carbon Intensity (based on revenues in EUR)
 - Weighted Average Carbon Risk Rating
 - GHG Reduction Targets
 - E rating
- Sovereign Climate Metrics
 - Production Emissions (tCO₂e)
 - Emission Intensity (based on GDP in EUR)
 - E rating

The ESG Portfolio Assessment will be provided for the non-cash collateral delivered for margin collateral and default fund collateral pools. Please note that intraday, overnight and LSOC sub-pools are not considered.

The ISS data covers the vast majority of Eurex Clearing's accepted collateral universe, but not 100%. Thus, the report will also provide information about the ISS data coverage of the portfolio.

The ESG Portfolio Assessment aims to contribute to more transparency which lays the foundation for further decisions or actions. The provided information is neither to be understood as advice nor recommendation for action. It is envisaged to add further ESG metrics and include cleared transactions in the ESG Portfolio Assessment upon client demand.

¹ CO₂e is the standard unit for measuring carbon footprint and stands for carbon dioxide equivalents. It includes other greenhouse gases such as methane and nitrous oxide.

2. Corporate Climate Metric Content and Methodology

2.1. Corporate Data Sources and Background Information

ISS ESG data and methodology are used to provide the corporate climate metrics on portfolio level to Clearing Member and their clients.

The carbon metrics draw on data from ISS ESG's database of emission numbers for over 37,000+ corporates and issuers of corporate debt.

Data with regards to emissions are sourced from the ISS ESG company carbon footprint database. This database is updated at the end of each year. This process ensures that all emissions data used in the report are from the same fiscal year. Currently data from the financial year 2021 is available.

Key financial indicators used in the report are sourced by ISS ESG from third party providers for the provision of, notably, Adjusted Enterprise Value (AEV) and total yearly revenue. The date of the AEV sourced defaults to the last day of the previous quarter, i.e. a report provided on 10 January 2023 used data from 30 December 2022. Adjusted Enterprise Value (AEV), or Enterprise Value Including Cash (EVIC), is calculated as total debt + market capitalization.

The Carbon Risk Rating is a metric designed by ISS ESG and provides a qualitative assessment of companies' preparedness for the transition to a low-carbon economy. By combining the Carbon Risk Classification and the Carbon Performance Score, the Carbon Risk Rating assesses, on a scale from 0 (very poor performance) to 100 (excellent performance), how a company deals with industry-specific climate risks. The scale can be translated into four broader performance categories: Climate Laggard (0-24), Medium Performer (25- 49), Outperformer (50-74), and Leader (75-100).

The Carbon Risk Classification assesses a company's exposure to carbon-related transition risks by estimating the emission intensity in the company's value chain, based on its industry and business activities. The Carbon Risk Classification considers two elements:

1. the emission-based sector classification, which assesses the average sector emission intensity along the entire value chain (direct and indirect, i.e., scope 1, 2 and 3 emissions); and
2. whether a company's product and service portfolio contributes to climate change mitigation, thus creating a positive impact, or rather obstructs climate change mitigation, thus constituting an adverse impact.

The Carbon Performance Score evaluates the current carbon-related performance of a company as well as a company's risk management and measures to reduce its carbon intensity in the future, thus addressing both material risk as well as adverse impact. The Carbon Performance Score is based on a combination of quantitative indicators (e.g., current intensity and trend of greenhouse gas emissions), and qualitative indicators (e.g., corporate policies, emission reduction targets and action plans, etc.).

2.2. Pre-Selection and Reweighting for Corporates

In order to harmonize results and eliminate the distortions that can be caused by cash and other non-applicable securities in a portfolio, the ISS ESG methodology applies the following preassessment adjustments to portfolios. Securities must fulfill the following criteria to be included in the analysis for corporates:

- Adjusted Enterprise Value (AEV)
- Scope 1&2 emissions
- Scope 1&2 emissions intensity (Scope 1 & 2 tCO₂e / revenue millions in EUR)

Eurex Clearing does not exclude securities from the assessment even if AEV and/or scope 1&2 emissions are not available. Securities are included in all calculations for which metrics are available and can be calculated.

As data is available on an issuer level, the value of multiple securities that map to the same issuer are merged and aggregated.

The portfolio is then re-weighted based on the included and merged securities. The Total Analysis Value displayed in the report represents the market value in EUR of all securities assessed with at least one metric in the ESG Portfolio Assessment. It is important to note that a security included in the Total Analysis Value may be assessed for the purposes of one metric, for example carbon risk rating, and not for a second metric, for example scope 1&2 emissions.

2.3. Corporate Climate Metric Aggregation

2.3.1. Scope 1&2 and Scope 3 Emissions

The same approach is used for scope 3 emissions

$$\sum_i^n \text{Position Ownership Ratio} \times \text{Position Scope 1\&2 Emissions}_i$$

2.3.2. Weighted Average Carbon Intensity based on revenue in EUR

$$\sum_i^n \text{Position Weight}_i \times \frac{\text{Position Scope 1 \& 2 Emissions}_i}{\text{Position Revenue}_i}$$

2.3.3. Weighted Average Carbon Risk Rating

$$\sum_i^n \text{Position Weight}_i \times \text{Position Carbon Risk Rating}_i$$

2.3.4. GHG Reduction Targets

A climate reduction target assessment of the portfolio is presented based on % weights. Company's reduction targets are classified with the categories

- No Target,
- Non-Ambitious Target,
- Ambitious Target,
- Committed SBT, and
- Approved SBT.

Please note that the percentage may not sum to 100% if for certain companies in the portfolio reduction targets have not been collected.

3. Sovereign Climate Content and Methodology

3.1. Sovereign Data Sources and Background Information

The carbon metrics draw on data from ISS ESG's database of emission numbers for over 800 sovereigns (approx. 100% coverage of global sovereign debt issues).

ISS ESG data and methodology are used to provide the sovereign climate metrics on portfolio level to Clearing Member and their clients. It is important to note that sovereign greenhouse gas (GHG) emissions are not accounted for in the same way as for corporates. Direct emissions generated within sovereign borders are referred to as production emissions and are not divided into Scope 1, Scope 2 and Scope 3 emissions.

The United Nations Framework Convention on Climate Change (UNFCCC) has internationally accepted guidelines on carbon accounting for sovereigns. However, the question arises as to how much of those emissions can be attributed to a sovereign bondholder. Is it a share of the total production emissions of a sovereign or rather a share of the sphere of influence of the government? If the latter, how is the sphere of influence from governments defined?

Bucketing a sovereign's emissions into scope 1, scope 2 and scope 3 emissions as known from corporate carbon footprinting would underestimate government emissions and downplay responsibilities. For example, within the narrowest definition, a sovereign's emissions are those generated by the public sector itself, including emissions generated from energy used in public buildings (scope 1 and scope 2). As such, only the emissions of the state government are within the direct sphere of responsibility. However, governments have arguably a much broader influence than just the operation of their buildings. For example, the state has a significant influence on climate policy and the development of energy infrastructure and thus directly influences the emission intensity of the entire country.

To account for the different calculation possibilities as well as to offer various perspectives, ISS ESG provides data for the following two different sovereign emission categories:

- **Production Emissions:** Emission footprint of a country's production according to International Sovereign accounting guidelines.

- **Government Emissions:** following the Platform Carbon Accounting Financials (PCAF) standard: This approach states that a government bond co-finances both direct emissions from the public sector and investments made by the government.

In a first step, Eurex Clearing provides clients with production emissions. Production emissions are calculated based on production of goods and services in each country, i. e. they include the direct emissions of tCO_{2e} emitted within the country's borders.

Most countries report their production emissions in accordance with Articles 4 and 12 of the Climate Change Convention², made available via UNFCCC. Annex 1³ countries report annually. The latest available reporting year is 2020. ISS ESG covers all emissions from the sectors: Energy, Industrial processes, Agriculture, Waste, and Other. ISS ESG has chosen to exclude the sector Land-use, Land-use Change and Forestry (LULUCF). LULUCF includes both emissions and carbon sinks from, for example, forests, wetlands and peats. These sources can have a substantial impact on the country's emissions profile. However, the accounting methods differ between countries and contain major insecurities. In addition, accounting for large carbon sinks can skew the overall emissions profile of a country. For example, a country's limited mitigation strategy and increase in fossil emissions can be difficult to discern if combined with emissions from LULUCF.

The emission intensity metric normalizes the absolute production emissions by a sovereign's GDP in EUR, providing sovereign production emissions per EUR GDP. The data is sourced from the International Monetary Fund (IMF)⁴.

3.2. Sovereign Climate Metric Aggregation

3.2.1. Production Emissions (tCO_{2e})

$\sum PositionOwnershipRatio_i \times totalProductionEmissions_i$

3.2.2. Emission Intensity based on GDP in EUR

$\sum PositionWeight_i \times SovEmissionIntensity_i$

4. Environmental Ratings

Eurex Clearing's ESG Portfolio Assessment provides initially ratings on an aggregated level, based on an elaborate process. In a first step, purely the environmental dimension is covered. Social and governance metrics can be easily added at a later point in time. With regards to the covered non-cash collateral two different rating methodologies need to be distinguished:

- **corporate rating methodology** and
- **country rating methodology**.

² <https://unfccc.int/topics/mitigation/resources/registry-and-data/ghg-data-from-unfccc>

³ The list of Annex 1 countries can be found here: <https://unfccc.int/process/parties-non-party-stakeholders/parties-convention-and-observer-states>

⁴ <https://www.imf.org/en/Home>

4.1. Corporate Ratings

The Corporate Rating universe covers approximately 12,000 issuers, including some 7,300 rated companies and an additional 4,100 assigned issuers:

- full coverage of major stock indices of developed and emerging markets,
- coverage of small and mid-cap indices in developed markets,
- important non-listed bond issuers.

A company's E(SG) performance is assessed with a standard set of cross-industry indicators complemented by industry-specific ones in order to address its material E(SG) challenges. An Analyst Opinion complements each Corporate Rating, providing a qualitative summary and analysis of central rating results in three dimensions:

- Sustainability Opportunities,
- Sustainability Risks and
- Governance.

To ensure high quality analyses, indicators, rating structures, and results are regularly reviewed by an internal Methodology Board. In addition, methodology and results are regularly discussed with an external Rating Committee, which consists of highly recognized ESG experts.

4.1.1. "E" Topics

The above-mentioned rating dimension "Environment" covers a wide range of topics, for example:

- climate change strategy,
- eco-efficiency,
- energy management,
- environmental impact of product portfolio,
- environmental management or
- water risk and impact

4.1.2. Rating Scale and Performance Requirements

Alphabetical and Numeric Rating Scale

The E Corporate Rating applies a twelve-point grading system from A+/4.00 (excellent performance) to D-/1.00 (poor performance). All indicators are individually assessed based on clearly defined absolute performance expectations. Based on individual scores and weightings at the indicator level, results are aggregated to yield data on the topic level as well as an overall score (rating).

Industry-specific Performance Thresholds and Weightings

The environmental risks and impact of industries differ. Their industry-specific materiality determines the position of an industry within the Industry Classification Matrix. The extent of

industry-specific E risks and impacts defines the respective performance requirements and the distribution of weights between these rating dimensions per industry.

Industry-Specific Key Issues

For every industry four to five key issues are identified. To ensure that performance with regards to these most material issues is adequately reflected in the rating results, their weighting accounts for at least 50% of the overall rating. As of March 2023, every industry had at least one key issue with an environmental dimension. Key issues are industry-specific and can be either quite focused (e. g. climate change and related risks) or rather broad and encompass several environmental topics (e. g. environmental impacts of production).

Impact of Product Portfolio and Operations

Aligned with the United Nations Sustainable Development Goals (UN SDGs), the E Corporate Rating integrates a detailed assessment of

- sustainability impact of operations based on risk exposure and an assessment of management approaches regarding material sustainability risks along the entire value chain (“do no harm”)
- sustainability impact of product portfolios, assessed based on the share of net sales generated with products/services contributing to or obstructing the achievement of global sustainability objectives (“find opportunity”).

Dialogue-oriented Rating Process

In order to build up a comprehensive picture of each company, information relevant to the rating is collected both from the companies being analyzed and from independent sources and experts. During the rating process, considerable importance is attached to the dialogue with the company under evaluation. The rating process provides companies with ample opportunity to comment on and add information to the provisional findings. After finalization of the rating, the full rating report is delivered to the company free of charge.

4.1.3. Weighted Average Corporate Rating

$$\sum PositionWeight_i \times ESGRating_i$$

4.2. Country Ratings

The rating comprises numerous quantitative and qualitative criteria and follows a profound methodology, reflecting global best practices as well as normative considerations.

The rating covers 800+ sovereign issuers:

- Approximately 100% coverage of global sovereign debt issued,
- 179 states and sovereign-bond issuers, including Hong Kong and the European Union,
- All member countries of the European Union and the Organization for Economic Co-operation and Development (OECD).

The selection of criteria is derived from ISS ESG's understanding of sustainability and is influenced by several factors such as international norms and conventions, social debate, and

global developments. An Analyst Opinion complements each E(SG) Country Rating, providing a qualitative summary and analysis of central rating results in three dimensions: governance, social and environment.

In order to build up a comprehensive picture of each country, ISS ESG's analysts collect the information relevant to the rating from international institutions, well-respected non-governmental organizations and from independent experts.

Exemplary sources for environmental information are

- OECD
- World Bank
- Eurostat
- European Environment Agency
- US State Department and
- Germanwatch

To ensure the high quality of the analysis, updated indicators and rating structures are developed by a team of senior analysts with long-standing ESG experience. In addition, the inclusion of upcoming issues in the rating methodology is regularly discussed with ISS ESG's external Rating Committee, which consists of highly recognized ESG experts.

4.2.1. "E" Topics

The above-mentioned rating dimension "Environment" covers a wide range of topics, for example:

- land use,
- biodiversity,
- water,
- climate change,
- energy,
- agriculture,
- industry, and
- transport

The specifically defined topics are in turn further split into several criteria and sub-criteria. This allows to individually assess a country's performance in a very detailed way and to take into account the various individual interdependencies and multidimensional nature of the criteria. For example, one of the most heavily weighted components is the country's energy mix which assesses the proportion of fossil fuels, nuclear energy and energy from renewables in a country's energy mix.

4.2.2 Weighting and Rating Scale

The overall evaluation is based on a twelve-point grading system from A+ (excellent performance) to D- (poor performance). Prime status is attributed to those countries that achieve

or exceed the ESG Country Rating Prime threshold: B-, which means that they fulfil ambitious absolute performance requirements.

4.2.2. Weighted Average Country Rating

$$\sum PositionWeight_i \times ESGRating_i$$

5. Ranking

The ESG Portfolio Assessment provides a ranking for the following metrics:

- Emission exposure (tCO₂e) Scope 1&2
- Emission exposure (tCO₂e) Scope 3
- Weighted Average Carbon Intensity (based on revenue in EUR)
- Weighted Average Carbon Risk Rating
- Production Emissions (tCO₂e)
- Emission Intensity (based on GDP in EUR)
- E rating (corporate and country)

The ranking of the metric and the total number of collateral pools (portfolios of delivered securities) considered for the specific metric are displayed. Each metric may have a different number of total collateral pools. For example, a ranking of 74/207 for weighted average carbon risk rating means that for carbon risk rating the collateral pool is ranked 74th amongst a total of 207 collateral pools with an assessment for carbon risk rating. A ranking of 67/194 for E rating means that this collateral pool is ranked 67th amongst a total of 194 collateral pools with an assessment for E rating. The total number of collateral pools is calculated separately for corporates and sovereigns.

The rankings for emission exposure (tCO₂e) scope 1&2 and scope 3 are scaled to take into account the market value of the securities in the collateral pool included in the aggregation. Each collateral pool is standardized to the market value of EUR 100 million in order to scale the emission values and determine the ranking based on the same market value. With this approach, collateral pools with the same composition of delivered securities but different market values will receive the same ranking.

E ratings are displayed using a letter. For each letter, there is a range for the numeric values assigned to the specific letter.

D-	D	D+	C-	C	C+	B-	B	B+	A-	A	A+
1.00 - <1.25	1.25 - <1.50	1.50 - <1.75	1.75 - <2.00	2.00 - <2.25	2.25 - <2.50	2.50 - <2.75	2.75 - <3.00	3.00 - <3.25	3.25 - <3.50	3.50 - <3.75	3.75 - 4.00

For the purposes of ranking the E rating, the aggregated numeric value is taken into consideration. For example, a collateral pool with an aggregated numeric value of 2.07 and a collateral pool with an aggregated numeric value of 2.10 would both display the value C. However, in the rankings, the numeric value 2.10 will be ranked higher than 2.07.

6. Input Factors as defined by ISS

Factor	Factor Name	Description
Adjusted Enterprise Value	AdjustedEnterpriseValue	Enterprise Value as defined by Total Debt plus Market Capitalization updated quarterly.
GHG Emissions - Preferred Scope 1 - Direct Emissions	ClimateScope1Emissions	GHG Emissions - Preferred Scope 1 - Direct Emissions: This factor provides the issuer's Scope 1 Direct emissions (tCO ₂ e). The Direct emissions data represents the final, ISS ESG reviewed and approved value based on the ISS ESG methodology, which selects the most accurate value from available sources.
GHG Emissions - Preferred Scope 2 - Energy Indirect Emissions	ClimateScope2Emissions	GHG Emissions - Preferred Scope 2 - Energy Indirect Emissions: This factor provides the issuer's Scope 2 Energy Indirect emissions (tCO ₂ e). The Energy Indirect Emissions data represents the final, ISS ESG reviewed and approved value based on the ISS ESG methodology, which selects the most accurate value from available sources.
GHG Emissions - Preferred Total Emissions - Scope 1 + 2 (tCO₂e)	ClimateTotalEmissions	GHG Emissions - Preferred Total Emissions - Scope 1 + Scope 2 (tCO ₂ e): This factor provides the issuer's combined Scope 1 and Scope 2 emissions (tCO ₂ e). The Total Emissions data represents the final, ISS ESG reviewed and approved value based on the ISS ESG methodology, which selects the most accurate value from available sources.

Factor	Factor Name	Description
GHG Emissions - Scope 3 - Other Indirect Emissions (tCO₂e)	ClimateScope3Emissions	GHG Emissions - Scope 3 - Other Indirect Emissions (tCO ₂ e): This factor provides the issuer's Scope 3 "Other Indirect" emissions (tCO ₂ e). For Scope 3 emissions, all provided data has been estimated. Reported Scope 3 emissions are generally unreliable and thus reported Scope 3 emissions are not included in this data point.
GHG Emissions - Emissions Intensity - Total Emissions (EUR)	ClimateTotalEmissionsInt EUR	GHG Emissions - Emissions Intensity - Total Emissions: This factor identifies the issuer's total (Scope 1 + Scope 2) carbon emissions intensity. Carbon intensity is expressed as the issuer's total carbon emissions per million EUR of revenue as a proxy of the carbon efficiency per unit of output.
ISS-oekom Carbon Risk Rating	ISSoekomCarbonRiskRating	ISS-oekom Carbon Risk Rating: This factor provides a numeric score from 0 to 100 for the rated entity's overall carbon risk based on an assessment of over 100 industry-specific indicators and a carbon risk classification at the industry and sub-industry levels.
Issuer GHG Reduction Targets	ClimateGHGReductionTargets	Issuer GHG Reduction Targets: This factor differentiates an entity's targets as "No Target", "Non-Ambitious Target", "Ambitious Target", "Committed SBT", "Approved SBT" based on the existence and quality of greenhouse gas emissions reduction targets. It takes into account

Factor	Factor Name	Description
		both science-based targets and other targets set by the company.
Sovereign Emissions - Total Production Emissions (tCO₂e)	ClimateSovProductionEmissions	Sovereign Emissions - Total Production Emissions (tCO ₂ e): This factor provides the issuer's production emissions of greenhouse gases as reported.
Sovereign Emissions - Production Intensity (tCO₂e/Mio EUR GDP)	ClimateSovProdEmissionsGDPEUR	Sovereign Emissions - Production Intensity (tCO ₂ e/Mio EUR GDP): This factor provides the emission intensity from production emissions per Mio EUR of GDP.

7. Daily ESG Portfolio Assessment Report - Daily Collateral Climate Metrics (RPTCDESG)

The ESG Portfolio Assessment Report will provide the mentioned ESG performance figures in a comprehensive manner. This chapter describes the layout of the report in detail:

Name: RPTCDESG – Daily Collateral Climate Metrics

Availability: This report is available for Clearing members and individually segregated Non Clearing members

Frequency: Daily

Format: The report will be available in CSV format only

CSV Report Structure:

Name	Description	Format	Valid Value	Ref.
#rptPrntEffDat	Effective Date			
Pool_Sponsor	This field contains the name of the member who is the sponsor of a particular collateral pool	alphanumeric 5		
Pool_Owner	This field contains the name of the member that is the owner of a particular collateral pool.	alphanumeric 5		
Pool_Name	This field contains the unique identification of a collateral pool.	alphanumeric 15		
Pool_Usage	This field contains the type of coverage, which the deposited collateral is used for.	alphanumeric 1	F (Clearing Fund) M (Margin)	
Pool_Type	This field contains the type of collateral pool. Types can be Default, Omnibus or Segregated.	alphanumeric 1	D (Default) O (Omnibus) F (Segregated) M (LSOC Master)	
Collateral_Type	This field contains the type of provided collateral in a collateral position.	alphanumeric 1	C (Cash) S (Security) X (Claim)	
Collateral_Category	This field contains the type of provided security collateral in a collateral position	alphanumeric 15	Corporates Not considered Sovereigns	
Issuer	Issuer of the security instrument	alphanumeric 60		
Issuer_LEI	Legal identifier of issuer	alphanumeric 20		
ISIN	This field contains the International Security Identification Number (ISIN) of the security.	alphanumeric 12		
Position_Currency	This field indicates the currency in which the security collateral is denominated. In case of equities the code XXX is used. The currency code is based on the ISO standard 4217.	alphanumeric 3		
Position	This field contains the bulk collateral deposit of the member as per end of previous business day. It can be a quantity in case of equity collateral or a cash amount, if cash collateral is deposited	numeric 15,2		
Evaluation_Price_Currency	Identical with Position Currency. In case of equities currency of the used evaluation price is displayed.	alphanumeric 3		

Name	Description	Format	Valid Value	Ref.
	The currency is based on the ISO standard 4217.			
ESG_Value_In_Evaluation_Price_Currency	This field contains the security market value per collateral in Evaluation Price Currency.	numeric 13		
ESG_Value_In_EUR	This field contains the ESG security market value per collateral considered in the ESG assessment	numeric 13		
Market_Value_Amount_Total	Market value on issuer level	numeric 13		
ESG_Measure		alphanumeric 60		
	Total Evaluation Amount (SUM Market_Value Amount): available for Corporates and Sovereigns		Total Analysis Value	2.2.
			This field contains the ESG performance indicator related to the Total Evaluation Amount:	
	Emission exposure (tCO ₂ e) Scope 1 & 2: available for corporates only.		Emission exposure (tCO ₂ e) Scope 1 & 2	2.3.1.
	Emission exposure (tCO ₂ e) Scope 3: available for corporates only.		Emission exposure (tCO ₂ e) Scope 3	2.3.1.
	Weighted Average Carbon Intensity based on revenues in EUR: available for corporates only		Weighted Average Carbon Intensity based on revenues in EUR	2.3.2.
	Weighted Average Carbon Risk Rating; available for corporates only. Scale for rating is between 0 and 100		Weighted Average Carbon Risk Rating	2.3.3.
	Reduction Target: Possible valid values are available for corporates only.			2.3.4.
			Reduction Target-Ambitious Target	
			Reduction Target-Approved SBT	
			Reduction Target-Committed SBT	

Name	Description	Format	Valid Value	Ref.
			Reduction Target- No Target	
			Reduction Target- Non Ambitious	
	E Rating Corporates: available for corporates only. Scale for rating is between A+ and D-		E Rating Corporates	4.1.
	Production Emissions: available for sovereigns only		Production Emissions (tCO _{2e})	3.2.1.
	Emission Intensity based on GDP in EUR: available for sovereigns only		Emission Intensity based on GDP in EUR	3.2.2.
	E Rating Sovereigns: available for sovereign only. Scale for rating is between A+ and D-		E Rating Sovereigns	4.2.
ESG_Evaluation	ESG performance indicator value. Marked as "Not collected" in case not available.	alphanumeric 36		
Ranking	Ranking, expressed in ranking/totally ranked.	alphanumeric 36		5.

The report will be available via the Common Report Engine. The Common Report Engine is the exclusive source for report files and theoretical price files for Eurex Clearing's participants. It is an FTP solution based on an SFTP report server that allows participants to easily retrieve all their reports from a single source. The Daily ESG Portfolio Assessment Report is available in the participant-specific directory structure with the naming convention

00RPTCDESGXXXXXXYYYYMMDDXXXXX.CSV.ZIP

Detailed information to the Common Report Engine is provided in the Common Report Engine User Guide on the Eurex Homepage: www.eurex.com/ec-en/ > Support > Technology > Common Report Engine.

8. Abbreviations

tCO ₂ e	Tons of carbon dioxide equivalents
AEV	Adjusted Enterprise Value
GDP	Gross Domestic Product
GHG	Greenhouse Gas
ESG	Environmental, Social and Governance
IMF	International Monetary Fund
ISS	Institutional Shareholder Services
LULUCF	Land-use, Land-use Change and Forestry
LSOC	Legally Segregated, Operational Commingled
OECD	Organization of Economic Co-operation and Development
PCAF	Platform Carbon Accounting Financials
SBT	Science-based Targets
UNFCCC	United Nations Framework Convention on Climate Change
UN SDG	United Nations Sustainable Development Goals