



INDEX RULE BOOK

Euronext® US ESG 20 EW

Version 21-01 Effective from 31th March 2021

indices.euronext.com

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1. GENERAL

1.1 HIGHLIGHTS EURONEXT® US ESG E20 EW

Objective	The Euronext US ESG E20 EW family is designed to reflect the price level trends in the trading of shares listed in US. Changes are made on a quarterly basis.
Administrator	Euronext Paris is the Administrator
Supervisor	Euronext internal supervisor
Index Universe	The index universe consists of the 40 largest stocks in terms of free float market capitalization from the Euronext North America 500 index.
Eligibility screening at reviews	Companies included in the Index Universe are screened on disputable activities as well as on controversies. The remaining companies are screened on their Free Float Market capitalization, the 30 largest companies from the USA are eligible
Selection basis	The eligible companies are ranked on their ESG performance, as evaluated by Vigeo-Eiris. The 20 highest ranking companies from the USA are selected.
Review Cut Off Date	Penultimate Friday of February, May, August and November. Penultimate means the Friday before the last Friday.
Weighting basis	Equal weight
Review frequency	Quarterly, effective after the Third Friday of March, June, September and December.
Index family	Price index; Net return index, Gross return index and Decrement 5% on Net return.
Trademarks	Euronext N.V. or its subsidiaries (hereinafter jointly "Euronext") owns all intellectual and other property rights to the index, including the name, the composition and the calculation of the index. Euronext® is a registered trademark of Euronext.

1.2 VERSION NOTES

Version	Effective date	New or changed parts
19-01	31 March 2021	First version

2. REFERENCE INFORMATION AND PUBLICATION OF INDEX LEVELS

2.1 REFERENCE TABLE

Index name	ISIN Code	MNEMO	Bloomberg Code	Reuters code	Base date	Base value	Publication since	Type of index
Euronext US ESGL 20 EW	NL0015000A61	EUEPR	EUEPR	.EUEPR	30/12/2005	1000	31/03/2021	Price
Euronext US ESGL 20 EW NR	NL0015000A79	EUENR	EUENR	.EUENR	30/12/2005	1000	31/03/2021	Net
Euronext US ESGL 20 EW GR	NL0015000A87	EUEGR		.EUEGR	30/12/2005	1000	31/03/2021	Gross
Euronext US ESGL 20 EW Decrement 5%	NL0015000A95	EUED5		.EUED5	30/12/2005	1000	31/03/2021	Decrement

2.2 BASE CURRENCY

The Price, Gross, Net and Decrement versions of the index Euronext US ESGL 20 EW have USD as their Base Currency.

2.3 PUBLICATION OF INDEX LEVELS

The index is calculated based on the most recent prices of transactions concluded on the main markets in each of the countries that are included in the index. The level of the index is in principle published every 15 seconds. The index is calculated from 09:00 hours until US Markets stop regular daytime trading on the days when Euronext Markets are open for trading.

The opening level is calculated using the last known prices of traded constituents or in the case of constituents that have non-traded, halted or suspended status, the previous day reference prices or estimated prices (for IPOs, buyouts and swap offers).

The opening index level is disseminated at the same time as the first index level.

The closing level is the last level disseminated on the trading day.

3. INDEX REVIEWS

3.1 REVIEW FREQUENCY AND RELEVANT DATES

The Review Cut-Off Date is after the market close of the penultimate Friday of February, May, August and November (for the quarterly reviews).

The Review Composition Announcement Date is at least two days before the Review Effective Date. Review There is no separate announcement for the reviews, so the Review Announcement Date is not applicable.

The Review Effective Date is after the market close of the third Friday of March, June, September and December.

3.2 SELECTION STEPS

3.2.1 Step 1: Index Universe

The Index Universe consists of the Main Listing of companies listed on the main markets of the Euronext North America 500 index.

At reviews this means included in the reference index after the Review Effective Date.

3.2.2 Step 2: Eligibility screening at reviews

At reviews the Companies included in the Index Universe are screened on disputable activities, as determined by Vigeo-Eiris. Companies with a major involvement in the following activities are excluded:

- Tobacco
- Coal
- Tar sands & Sale oil
- Civilian Firearms
- Military

In addition Companies who have a controversy flag of critical severity as determined by Vigeo-Eiris are excluded at the reviews.

The remaining Companies from the Index Universe after the disputable activities and controversy screening, are screened on their Free Float market cap at the Review Cut-Off Date, the 30 largest companies from the USA are eligible.

3.2.3 Step 3: Selection Ranking

All eligible companies are assigned an ESG score as determined by Vigeo-Eiris (See chapter 8 for more information) and are ranked on this score.

3.2.4 Step 4: Selection of constituents at the reviews

The 20 highest ranking stocks from the USA are selected.

4. PERIODICAL UPDATE OF WEIGHTING

4.1 WEIGHTING FACTORS

The index calculation is based on Equal Weight.

4.2 QUARTERLY REVIEW

The new weightings are calculated such that each constituent will have an equal weight. The weightings will be rounded to the nearest whole number. The weightings are determined based on the closing prices observed on the closing day prior to the Review Composition Announcement Date, generally the Tuesday.

5. CORPORATE ACTIONS

5.1 EVENTS THAT CHANGE THE COMPOSITION

Mergers and acquisitions

Acquisitions in cash

In the event of a bid in cash, the target company will be removed from the index. The removal will take place with effect after the close of the first full business day following the acceptance of the bid. If a company is removed from the index, the divisor will be adapted to maintain the index level.

Mergers and takeovers in shares

In the event of a merger, acquisition or similar situation where the bid is made in the form of shares, the constituent will be replaced by the newly formed company, provided that this company is included in the Index Universe defined in the index reviews section. The replacement will take place in line with the schedule of the transaction. The replacement of the shares of the relevant index constituent by the shares of the newly formed company will be executed on the basis of the bid ratio.

Mixed transactions

In case of a mixed bid of cash and shares the Compiler will treat the bid as a share bid if the share part amounts to at least 75% of the offer price, on the day of the publication of the terms of the offer. The replacement of the shares of the relevant index constituent by the shares of the company that continues to be traded will be executed on the basis of the bid ratio. The divisor will be adapted only for the cash part of the offer price.

Continued inclusion or specific treatments

The Compiler reserves the right to apply a specific treatment in non-standard situations including but not limited to:

- Competing bids with differing closing dates or structures;
- Offers made without the intention to gain full control.

In case of a specific treatment a separate announcement detailing the specific treatment will be issued timely to the market.

Inclusion of new companies

As a rule newly listed companies are considered for inclusion in the index at the time of the periodical index review.

Suspensions, Company distress and Delistings

Suspension

If a constituent is suspended, the Compiler will consider whether the constituent should be removed or not within five trading days. If it is decided to maintain the constituent a further reassessment date will be set. The Compiler reserves the right to take action before that date if new developments give reason to do so.

In case a constituent is removed following suspension, it will be removed from the index as soon as possible and on a day announced by the Compiler. The company will be removed from the index after the close of the markets assuming a price of zero unless the Compiler sets a different price, where possible supported by an objective source.

If it has been announced that a constituent will be delisted from the relevant market, it will be removed from the index as soon as possible and on a day announced by the Compiler. The company will be removed from the index based on either the last known price established during regular daytime trading or on a price determined by the Compiler, whereby the company may also be removed at a price of zero.

Removing assuming a price of zero implies no divisor change because of the removal. If another price is set, the divisor will change based on the removal of the value of that company from the index portfolio when applying that price.

In the event that the trading in shares is suspended, the last known price established during regular daytime trading will be used.

SPLIT UP / SPIN-OFF

In the event that a company included in the index is split up, the companies resulting from the split, including the original company where appropriate will continue to be included in the index providing it is included in the Index Universe defined in the index reviews section.

The index may then temporarily consist of fewer than, or more than the standard number of constituents until the next periodical review takes place.

For the purposes of these rules a split up is taken to mean a legal demerger, a spin-off or another situation which the Compiler deems to be similar.

In case the shareholder of the company which was originally included in the index does not automatically receive shares in a company which is created as a result of the split up, this company is considered to be a newly listed company.

The removal of any non-qualifying company resulting from a split up will take place after the close of the first day of trading in the shares of that company. If all companies resulting from the split are to be removed, the removal will take place at the close of the last trading day before the split.

In case a company resulting from the split up will not be admitted to listing on a main market in one of the countries that are included in the index, the Compiler will select an appropriate price source for the calculation of the index and the removal of the spun off company on the first trading day after the spin off.

5.2 EVENTS THAT CHANGE THE WEIGHTING FACTORS

Dividends

Criteria for determining special dividends

The price index will be adjusted for dividends that are special.

The following criteria will be applied to decide whether a dividend should be considered a special dividend:

- a) The declaration of a company of a dividend additional to those dividends declared as part of the company's normal results and dividend reporting cycle; merely an adjustment to the timing of the declaration of a company's expected dividend would not be considered as a special dividend circumstance; or
- b) The identification of an element of a dividend paid in line with a company's normal results and dividend reporting cycle as an element that is unambiguously additional to the company's normal payment.

For the purpose of clarification, no adjustment will be made for the following situations:

1. Payment of ordinary dividends, irrespective of how they are financed;
2. Issue of redeemable shares or any other entitlement in lieu of an ordinary dividend; or
3. Unexpected increase or decrease, resumption or cessation, or change in frequency to an ordinary dividend.

Adjustment for special dividend

The adjustment of the index takes place by a reduction of the closing price of the share in question. Subsequently the divisor will be adapted in order to maintain the index level. The adjustments will be based on gross amounts.

Ordinary dividends in shares

If a dividend is distributed in the form of shares only and if this is regarded as ordinary dividend, the return index will be reinvesting a cash equivalent of the dividend. If shareholders may choose between cash or shares the amount which is reinvested will be based on the cash option.

Conversion of dividends declared in other currencies

If a dividend for a constituent is declared in another currency than the Base Currency of the index, then the Compiler will in first instance use the Base Currency amount if investors have the option to be paid in that currency. If the dividend amount is available only in currencies that deviate from the Base Currency, the Compiler will convert the dividend amount using the reference rate for the cum-day (the business day prior to the ex-date). In principle the reference rate will be based on the foreign exchange reference rates as published daily by the ECB.

Bonus issues, stock splits and reverse stock splits

For bonus issues, stock splits and reverse stock splits, the number of shares included in the index will be adjusted in accordance with the ratio given in the corporate action. The divisor will not be changed because of this. The Compiler may regard a bonus issue as the issue of an entitlement in lieu of an ordinary dividend and therefore treat this as a dividend.

Rights issues and other rights

In the event of a rights issue an adjusted closing price will be applied as calculated by the Compiler. The index is adjusted based on the value of the rights only. The divisor will be adapted in such a way that the level of the index remains the same.

The index will be adjusted only if the rights represent a positive value.

The index will also be adjusted if a value can be attributed to a subscription right for convertible bonds, bonds with warrants or warrants with preferential rights for shareholders or similar situations. If the value cannot be attributed straightforward, the Compiler may also decide to include the detached instrument for one day and adjust the index at the close based on the closing price for that subscription right on that day.

Partial tender offers on own shares

The Compiler will adjust the divisor of the index if the premium represents more than 5% of the share price of the close on the penultimate day before the ex-date (the day prior to the last day before the ex-day). The premium is calculated as the difference between the offered price and the closing price, multiplied by the percentage of the share capital targeted in the offer. If the divisor is adjusted, the number of shares in the index will be adjusted as well.

6. INDEX CALCULATION FORMULAS

The general formula for the **price index** is:

$$I_t = \frac{\sum_{i=1}^N Q_{i,t} F_{i,t} f_{i,t} C_{i,t} X_{i,t}}{d_t}$$

Where:

- t Time of calculation
- N Number of constituent equities in index
- $Q_{i,t}$ Number of shares of equity i included in the index on day t
- $F_{i,t}$ Free Float Factor of equity i ¹
- $f_{i,t}$ Capping factor of equity i ¹
- $C_{i,t}$ Price of equity i on t
- $X_{i,t}$ Current exchange rate on t ¹
- d_t Divisor of the index on day t

The **total return index** calculation takes two steps: the first step is to transpose the announced dividend payment into index points. This is called the XD adjustment. This uses the following formula:

$$\text{XD adjustment} = \sum_{i=1}^N \frac{g_i * w_i}{d}$$

Where:

- N Number of constituent equities in index
- g_i The announced dividend per share of the i^{th} component stock (for net return index withholding tax is deducted from this dividend);
- w_i The weighting of the i^{th} component stock in the index, based on number of shares included in the index, Free Float Factor, capping factor and exchange rate;
- d Divisor of the index.

The second step of the calculation uses the figures calculated in step one (XD adjustment). The dividend is assumed to be reinvested at the close of the ex-date.

$$\text{TR}_t = \text{TR}_{t-1} \left(\frac{\text{IV}_t + \text{XD}}{\text{IV}_{t-1}} \right)$$

Where:

- TR_{t-1} : Total return index value yesterday;
- TR_t : Total return index value on t;
- IV_{t-1} : Underlying price index yesterday;
- IV_t : Underlying price index on t;

The **Decrement return index** uses the following formula:

¹ Factor is equal to 1 if not applied for the index

$$DI_t = DI_{t-1} \left(\frac{NR_t}{NR_{t-1}} - Dcr \times \frac{day}{365} \right)$$

Where:

- DI_{t-1} Decrement Return Index value on day t-1
- DI_t Decrement Return Index value on day t
- NR_{t-1} Net Return Index value on day t-1
- NR_t Net Return Index value on day t
- Dcr 5%
- day Number of calendar days between day t and day t-1

7. DEFINITIONS

7.1 REVIEW DATES

The **Review Cut-Off Date** is the date on which, after the market close, relevant data are gathered that will serve as basis for the periodical review of the index.

The **Review Composition Announcement Date** is the date on which, after the close, the full details are announced regarding the index composition that will come into effect after the review effective date. This includes numbers of shares, free float factors and capping factors of all companies included in the new index portfolio.

The **Review Effective Date** is the date on which, after the market close, the changes relating to the periodical review are being effectuated in the index portfolio.

7.2 MAIN LISTING

If a company is admitted to listing in more than one market or if it is admitted in various forms of listings, a main listing is determined based on the 12 months turnover, turnover since a corporate action, the country of incorporation and the listing perceived or presented as primary (not an order of priority).

As a rule only the main listing of the company is eligible for index inclusion. Mono-holdings, companies having as unique activity a direct or indirect participation in another company within the universe, are regarded as a form of listing of that company.

7.3 FREE FLOAT FACTOR

The Free Float Factor is the percentage representing all listed securities of the selected line of the relevant company eligible for index inclusion (as described in section 5.2), minus any shareholdings that are considered non-free float. The Free Float Factor is based on public information available on the Review Cut-Off Date. The Free Float Factor will be rounded to the nearest 5%.

The following shareholdings are considered non-free float (based on public information available on the Review Cut-Off Date):

- Any single shareholder who holds 5% or more of the listed securities in the selected line eligible for index inclusion, with the exception of collective entities or pension funds.

Collective entities are those entities that fulfill all the following criteria:

- i. are open for investment to investors or tradable on the market; and
- ii. have a diversified portfolio; and
- iii. have an open ended structure.

Collective entities include mutual funds and other open end-funds.

- Collective entities or pension funds that hold 5% or more of the listed securities in the selected line eligible for index inclusion and are represented in any governing body of the company in question.
- Parties acting in concert that collectively hold 5% or more of the listed securities in the selected line eligible for index inclusion.

- Employee shareholding plans, employee pension plans, individual employees, management or members of the board of directors of the relevant company when their cumulative shareholding is 5% or more of the listed securities in the selected line eligible for index inclusion.
- Shares held by the relevant company that represent 5% or more of the listed securities in the selected line eligible for index inclusion (e.g. treasury shares).

7.4 TURNOVER

The Turnover is based on the trading volume on the specific listing used.

If a company's value of Turnover is not available for the entire relevant period, the available value of Turnover will be extrapolated to the entire relevant period. In such cases, the value of Regulated Turnover during the first twenty trading days that the company listed will be ignored.

In the event of a spin-off, a split-up or a similar corporate event, the value of Turnover before the corporate event will be assigned to the companies resulting from the corporate event based on the ratio of the corporate event. The ratio is determined based on the market capitalisation of the resulting entities after the first day of trading. The value of Turnover will be assigned if a spin-off division is listed as an independent company.

7.5 VIGEO-EIRIS ESG SCORE

The ESG score is based on a 2-step approach:

Step 1:

Vigeo-Eiris assesses and rates the performances of companies according the Equitics® methodology based on 38 criteria, divided in to six key areas of corporate environmental, social and governance responsibility, namely:

- Environment: Protection, safeguard, prevention of attacks on the environment, implementation of an adequate managerial strategy, ecodesign, protection of biodiversity and reasonable control of environmental impacts on the overall life cycle of products and services .
- Human Rights: Respect of trade unions' freedom and promotion of collective negotiation, non-discrimination and promotion of equality, eradication of banned working practices, and prevention of inhumane or humiliating treatments.
- Human Resources: Constant improvement of industrial relations, career development, as well as quality of working conditions.
- Community Involvement : Contribution to economic and social development of the territories of establishment and their human communities, concrete commitment in favor of the control of societal impacts of products and services, transparent and participative contribution to causes of general interest .
- Business Behaviour: Taking into account clients' rights and interests, integration of social and environmental standards both in the process of selection of suppliers and in the overall supplying chain, efficient prevention of corruption, and respect of competition laws.
- Corporate Governance : Efficiency and integrity, insurance of both independence and effectiveness of the Board of Directors, effectiveness and efficiency of audit and control systems, and in particular inclusion of social responsibility risks, respect of shareholders' rights and most of all of the minorities, transparency and moderation in executive remuneration.

Step2 – Overall score



Each issuer is assigned an overall score out of 100 (the higher the better)

8. ESG DISCLOSURE

EXPLANATION OF HOW ESG FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY	
Item 1. Name of the benchmark administrator.	Euronext Paris
Item 2. Type of benchmark	Equity Benchmark
Item 3. Name of the benchmark or family of benchmarks.	Euronext US ESG 20 EW
Item 4. Does the benchmark methodology for the benchmark or family of benchmarks take into account ESG factors?	Yes
Item 5. If the response to Item 4 is positive, please find below the ESG factors that are taken into account in the benchmark methodology and how they are used for selection, weighting and exclusion	
a) List of environmental factors considered:	ESG score Selection : the 20 highest ESG scores ranking from the USA are selected.
b) List of social factors considered:	Plases refer to a)
c) List of governance factors considered:	Please refer to a)
Item 6. Data and standards used.	
a) Data input. <i>(i) Describe whether the data are reported, modelled or, sourced internally or externally.</i> <i>(ii) Where the data are reported, modelled or sourced externally, please name the third party data provider.</i>	Vigeo-Eiris provides : • ESG score The ESG score is based on a 2-step approach: Step 1: Vigeo-Eiris assesses and rates the performances of companies according the Equitics® methodology based on 38 criteria, divided in to six key areas of corporate environmental, social and governance responsibility Step2 – Overall score Each issuer is assigned an overall score out of 100 (the higher the better)

	<ul style="list-style-type: none"> • United Nations Global Compact (UNGC) screening <p>Vigeo Eiris provides a level of integration of the Global Compact principles into the companies' strategy and operations.</p> <p>Assessment over 4 pillars with a score from 0 to 100: Human rights, Labours, Environment and Corruption</p> <p>Exclusion of controversial companies and exclusion of non-communicative</p>
<p>b) Verification of data and guaranteeing the quality of those data.</p> <p><i>Describe how data are verified and how the quality of those data is ensured.</i></p>	<p>Vigeo-Eiris represents and warrants that to the best of its knowledge the Methodology is robust and reliable, rigorous and capable of validating and verifying including, but not limited to, the following:</p> <ul style="list-style-type: none"> • shall promptly correct any errors made in its computations of the Data and inform Euronext thereof, immediately. • periodically review the Methodology • has clear written rules identifying how and when discretion may be exercised when deviating from the methodology • will inform Euronext prior to making any material change to the Methodology and will provide Euronext with the rationale for such change.
<p>c) Reference standards</p> <p><i>Describe the international standards used in the benchmark methodology.</i></p>	<p>Vigeo-Eiris: the methodology behind ESG performance indicators and the assessment of controversies severity is based on the following international standards :</p> <ul style="list-style-type: none"> • Global Reporting Initiative (GRI) • OECD Guidelines for Multinational Enterprises, and sectorial guidance • G20/OECD recommendations on Corporate governance • UN Conventions and recommendations, • UN Global Compact Principles • UN Sustainable Development Goals • ILO Conventions , including the core ones, and recommendations • TFCF recommendations • Paris Agreement (UNFCCC)
<p>Information updated on:</p>	<p>26th March 2021</p>