



INDEX RULE BOOK

Euronext® BeNeLux ESG Leaders 20

Version 18-01

Effective from 1 July 2018

indices.euronext.com

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Index Summary

Factsheet	Euronext® BeNeLux ESG Leaders 20
Index Name	Euronext® BeNeLux ESG Leaders 20
Index type	Price index; Net return index, Gross return index and Decrement 4,5% on net return.
Index governance structure	Euronext acts as Compiler and Supervisor of the index
Universe	AEX® and BEL 20® as well as companies admitted to listing on the main market of Luxembourg.
Selection	Top 20 companies with the highest ESG score
Number of constituents	20
Weighting	1/(180d volatility) normalized
Capping	10%
Review cut-off date	Quarterly after the close of the last Friday of February, May, August and November.
Review of composition	Quarterly after the close of the third Friday of March, June, September and December.
Base Currency	Euro

Note: the factsheet is a summary of the rule book for information purposes only. The text of the rule book is leading.



Reference Data

Index name	Isincode	Mnemo	Bloomberg Code	Reuters code	Base date	Base value	Publication since
Euronext BeNeLux ESG Leaders 20	NL0013025695	BESGP	BESGP	.BESGP	31-12-05	1000	11/07/2018
Euronext BeNeLux ESG Leaders 20 NR	NL0013025703	BESGN	BESGN	.BESGN	31-12-05	1000	11/07/2018
Euronext BeNeLux ESG Leaders 20 GR	NL0013025711	BESGG	BESGG	.BESGG	31-12-05	1000	11/07/2018
Euronext BeNeLux ESG Leaders 20 Decrement 4.5%	NL0013025729	BESGD	BESGD	.BESGD	31-12-05	1000	11/07/2018

1. GOVERNANCE AND DISCLAIMER

1.1 INDICES

This rule book applies to the following indices (hereinafter “index”) owned by Euronext N.V. or its subsidiaries (hereinafter jointly “Euronext”):

- Euronext® BeNeLux ESG Leaders 20

1.2 SUPERVISOR AND COMPILER

Euronext is the supervisor (“Supervisor”) and compiler of the index (“Compiler”). The Supervisor is responsible for monitoring the selection of constituents for the index and ensuring that the index offers a reliable and representative view of the market. The Compiler is responsible for the day-to-day management of the index and is also responsible for decisions regarding the interpretation of these rules.

1.3 CASES NOT COVERED IN RULES

In cases which are not expressly covered in these rules, operational adjustments will take place along the lines of the aim of the index. Operational adjustments may also take place if, in the opinion of the Compiler, it is desirable to do so to maintain a fair and orderly market in derivatives on this index and/or this is in the best interests of the investors in products based on the index and/or the proper functioning of the markets. The Compiler will report to the Supervisor if it took a decision about a case which is not specifically covered in the rules for comments and review.

1.4 RULE BOOK CHANGES

These rules may be supplemented, amended in whole or in part, revised or withdrawn at any time. Supplements, amendments, revisions and withdrawals may also lead to changes in the way the index is compiled or calculated or affect the index in another way. The Compiler will submit all decisions regarding supplementing, amending, revising or withdrawing these rules to the Supervisor for recommendations or approval.

1.5 LIABILITY

Euronext, the Compiler and the Supervisor are not liable for any losses resulting from supplementing, amending, revising or withdrawing the rules for the index.

The Compiler will do everything within its power to ensure the accuracy of the composition, calculation, publication and adjustment of the index in accordance with relevant rules. However, neither Euronext, nor the Compiler, nor the Supervisor are liable for any inaccuracy in index composition, share prices, calculations and the publication of the index, the information used for making adjustments to the index and the actual adjustments. Furthermore, Euronext, the Compiler and the Supervisor do not guarantee the continuity of the composition of the index, the continuity of the method of calculation of the index, the continuity of the dissemination of the index levels, and the continuity of the calculation of the index.

1.6 OWNERSHIP AND TRADEMARKS

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.

2. PUBLICATION

2.1 DISSEMINATION OF INDEX VALUES

2.1.1 Opening

The official opening level is the first level published after a share price is available for all constituents. Index levels published before the official opening level is published are considered pre-opening index levels.

If, for whatever reason, share prices are not available for all constituents five minutes after Euronext Markets (as defined in the Euronext harmonised rule book) started regular daytime trading, the official opening level will be published as soon as the companies whose share prices are available of the current trading day represent at least 80% of the value of the index at the close of the previous trading day.

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

2.1.2 Calculation and dissemination

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 Euronext Markets stop regular daytime trading on the days when Euronext Markets are open for trading.

2.1.3 Closing

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

2.2 EXCEPTIONAL MARKET CONDITIONS AND CORRECTIONS

The Compiler retains the right to delay the publication of the opening level of the index. Furthermore, the Compiler retains the right to suspend the publication of the level of the index to mark the level of the index indicative if it believes that circumstances prevent the proper calculation of the index.

If prices are cancelled, the index will not be recalculated unless the Compiler decides otherwise.

2.3 ANNOUNCEMENT POLICY

The announcement policy is described in the Euronext Indices Announcement policy document that is available on indices.euronext.com/index-rules.

3. CALCULATION

3.1 CALCULATION OF THE PRICE INDEX

The index is calculated on a price return index basis. The calculation of the price return index is based on the current capitalization divided by the divisor. The divisor was determined on the initial capitalization base of the index and the base level. The divisor is adapted as a result of corporate actions and composition changes.

3.2 CURRENCY CONVERSION

The base currency of the index is Euro (“Base Currency”).

Share prices that are quoted in other currencies than the Base Currency will be converted to the Base Currency using the last known exchange rate observed on Reuters. Closing prices will be converted based on the most recent WM/Reuters spot rates, which are published each business day around 17:00 CET.

3.3 TOTAL RETURN INDEX CALCULATION

3.3.1 Return index

A net total return index as well as a gross total return index, is calculated and disseminated at the same frequency as the price index. The return indices are obtained by reinvesting the net and gross dividends respectively.

3.4 DECREMENT INDEX CALCULATION

A Decrement Index is calculated and disseminated at the same frequency as the price Index. The Decrement index is obtained by deducting on a daily basis a 4,5% rate per annum from the net return index . The formula for the Decrement index is stated in chapter 6.

4. INDEX REVIEWS

4.1 GENERAL AIM AND FREQUENCY OF REVIEWS

4.1.1 General aim of the periodical review

The general aim of the periodical review of the index is to ensure that the selection and weighting of the constituents continues to reflect the underlying market or market segment it represents.

4.1.2 Review Cut-off Dates and Review Effective Dates

The Review Cut-off Date (see 7. Definitions) is after the market close of the last Friday of February, May, August and November

The Review Effective Date is after the close on the third Friday of March, June, September and December. The new composition is announced 2 trading days before the effective date, generally the Wednesday after close (The Review Composition Announcement Date).

4.2 INDEX UNIVERSE AND SELECTION PRINCIPLE

4.2.1 Index universe: Requirements for inclusion

All the companies that are announced to be included in the AEX and BEL 20 indices (after the close of the business day on the date of the periodical adjustment) as well as the 10 biggest companies of Luxembourg in term of free float market capitalization. The companies should be admitted to listing on the main market of the Netherlands, Belgium and Luxembourg respectively.

4.2.2 Index universe: Exclusion of constituents

- Removal of companies with both: a Vigeo Carbon footprinting score is equal to D and a Vigeo Eiris Energy Transition score lower or equal to 50,
- Removal of companies with a major involvement in alcohol, armaments, gambling, nuclear, sex industry or tobacco. This list is defined by Vigeo Eiris,
- Removal of companies included in the Vigeo Eiris Controversy Warning List, and having a Severity (controversies) score equal to “Critical”.

More detailed information available in [section 8](#) or on [Vigeo Eiris website](#).

4.2.3 Selection of constituents at the reviews

The companies with a 1 year average daily Turnover below 5 million euros are removed from the Universe. The remaining stocks are ranked by descending Vigeo Eiris ESG score. The top 20 companies are selected.

In case the marginally selected stocks (ex: ranked 19, 20 and 21) have the same Vigeo Eiris ESG score, the second ranking is done by descending free float market capitalisation on the review cut-off date.

4.2.4 Selected line

As only one listing – the most active one - is permitted per company, the listing representing the company’s ordinary shares is generally used. Mono-holdings are excluded.

4.3 PERIODICAL UPDATE OF WEIGHTING

4.3.1 Update of number of shares

The new weightings are calculated such that each constituent will have a weight in the index inversely proportional to its 180 days volatility. The weightings will be rounded to the nearest whole number.

4.3.2 **Update of capping and free float factors**

A maximum weighting of 10% is applied to each index constituent at the reviews. The assessment and new capping coefficients are based on the Review Composition Announcement Date.

5. CORPORATE ACTIONS

5.1 EVENTS THAT CHANGE THE COMPOSITION

5.1.1 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 complies with the requirements for inclusion in the index in line with the criteria 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 for periodical reviewed indices

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

5.1.2 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.

5.1.3 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 they meet the requirements for inclusion of the index. This means, in line with section 4.2, that the resulting entity should remain listed on one of the markets on which the index is based.

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

5.2.1 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.

5.2.2 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.

5.2.3 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.

5.2.4 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.

$$TR_t = TR_{t-1} \left(\frac{IV_t + XD}{IV_{t-1}} \right)$$

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;

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

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

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

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	4,5%
<i>day</i>	Number of calendar days between day t and day t-1

7. DEFINITIONS

7.1 COMPILER

Committee of Euronext officials appointed by Euronext.

7.2 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.

7.3 FREE FLOAT

Free Float is defined as the outstanding capital less shareholdings exceeding 5%, except where such interests are held by

- a. collective investment schemes/mutual funds or
- b. pension funds.

In addition, certain insider holdings (e.g. shares held by directors, employees, founders and family), government holdings and holdings of the company itself (including subsidiaries) are not considered Free Float, irrespective of the size.

The Free Float percentages are rounded up to 5% bands.

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 spun-off division is listed as an independent company.

8. VIGEO-EIRIS

8.1 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:

- o Environment: Protection, safeguard, prevention of attacks on the environment, implementation of an adequate managerial strategy, eco-design, protection of biodiversity and reasonable control of environmental impacts on the overall life cycle of products and services .

- o 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.

- o Human Resources: Constant improvement of industrial relations, career development, as well as quality of working conditions.

- o 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 .

- o 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.

- o 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.

Step 2: Overall score Each issuer is assigned an overall score out of 100 (the higher the better) which is a weighted and consolidated score of all sustainability factors in a given sector.

8.2 VIGEO EIRIS ENERGY TRANSITION SCORE

The energy transition performance assessment is based on a 3-step approach:

Stage 1: Sector Contextualisation

Different sectors face different energy transition challenges. Vigeo Eiris identifies criteria specific to each sector so that companies can be assessed not only on transversal climate-related issues, but also on sectorspecific risk and opportunity areas.

For example, an electricity producer would be assessed on development of renewable energy, efficiency of fossil-fuel-based power generation, efficiency of transmission and distribution networks, energy demandside management and access to energy. Insurance companies would be assessed on the integration of climate change risks and impacts in their insurance business, integration of carbon risks in the management of assets, and the management of emissions from its operations, business travel and commuting.

Stage 2: Assessment Grid

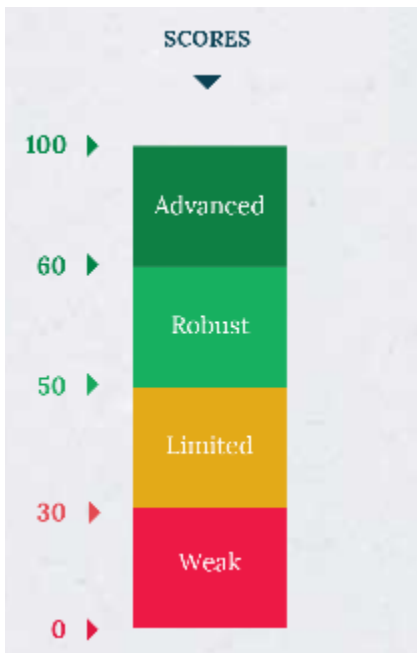
Each company is evaluated using Vigeo Eiris' Equitics methodology. Each criteria identified in the Sector Contextualisation stage is sub-divided into Managerial Principles for Action (MPA) i.e. what the company should be doing to address each criteria. Each MPA is assessed across three pillars and nine angles of analysis using precise, specific questions:

- Leadership - How the company intends to address each criterion. Assessment of strategic commitment, policies and targets.
- Implementation - How the company does address each criterion. Assessment of concrete measures implemented.
- Results - How well the company addresses each criterion. Assessment of past and present performance and response to controversies.

Stage 3: Energy Transition Score

The scoring process is on a scale of 0 – 100 categorised according to the four levels of performance shown on the left. The score reflects the quality of a company's management and strategy to address risk and opportunities associated with the transition to a low carbon economy. The process is as follows:

- Score per angle of analysis
- Score per pillar
- Score per criteria
- Corporate Global Energy Transition score: This is a weighted average of criteria scores



8.3 VIGEO EIRIS CARBON FOOTPRINT SCORE

A company's carbon footprint is based on three key factors:

- The nature of activities
- The size of the company
- The carbon footprint of its peers

EMISSIONS	SCORES
< 100 000*	A MODERATE
≥ 100 000 < 1 000 000*	B SIGNIFICANT
≥ 1 000 000 < 10 000 000*	C HIGH
≥ 10 000 000*	D INTENSE

8.4 VIGEO EIRIS CONSTROVERSY SCREENING PROCESS

- Continuous analysis of controversies through three factors: severity, frequency and company response
- Analysis is based on publicly available information: Vigeo Eiris only analyses information from legitimate, identifiable stakeholders, and the information must be documented and traceable

