

Ground Rules Management & Calculation of ATHEX ESG Index

September 2023 Version 1.3



Intellectual Property Rights

It is acknowledged and agreed that all rights to the information shall be the property of the Athens Stock Exchange, and any other rights, including intellectual property rights, trademarks, etc., shall belong to the Athens Stock Exchange. The reproduction, distribution, and transmission of the data and information contained in this document by any means are strictly prohibited.



Table of Contents

1	Int	troduction	4
	1.1	Purpose of the Document	4
	1.2	Purpose of the Index	4
	1.3	Index Characteristics	4
2	Us	se of Indices and Disclaimer	5
	2.1	Use of Indices	5
	2.2	Disclaimer	5
3	Ма	anagement Responsibilities	6
	3.1	Athens Stock Exchange (ATHEX)	6
	3.2	ATHEX Index Oversight Committee	6
	3.3	ATHEX Advisory Committee for the Management of Stock Market Indices	6
	3.4	ATHEX Index Team	7
4	Ca	alculation of Free Float	8
	4.1	Free Float	8
	4.2	Free Float Restrictions	8
	4.3	Free Float Changes	8
5	Eli	gible Securities	10
	5.1	Determination of Eligible Securities	10
	5.2	ESG Criteria	10
6	Pe	eriodic Review of Constituents	11
	6.1	Determination of Index Composition	11
	6.2	Calculation of Weight Factor	11
	6.3	Calculation of Capping Factors	11
	6.4	Index Reserve List	11
7	Ch	nanges to Constituent Companies	13
	7.1	Suspension of Trading	13
	7.2	Company Deletion	13
	7.3	Mergers, Acquisitions and other Complex Corporate Actions	13
	7.4	Changes in Trading Status	13
8	Re	eview Periods	14
	8.1	Review Periods	14
	8.2	Input Data	14
	8.3	Announcement of Results	14
	8.4	Implementation Periods	14
9	Ch	nanges – Exceptions to Ground Rules	15





	9.1	Changes to Ground Rules	15
	9.2	Exceptions to Ground Rules	15
10)	Appeals	16
	10.1	Appeal Against or Non-Inclusion in an Index	16
11	Ар	pendix: Index Calculation	.17
	11.1	Calculation Time & Frequency	.17
	11.2	Index Price Display	.17
	11.3	Index Calculation Formula	17



1 Introduction

1.1 Purpose of the Document

The purpose of this document is to describe the Ground Rules for the Management & Calculation of ATHEX ESG Index (Ground Rules).

1.2 Purpose of the Index

The purpose of the index is to monitor the performance of Athens Stock Exchange (ATHEX) listed companies that stand out in adopting Environmental, Social and Corporate Governance practices (ESG).

The index is designed to:

- provide investors an efficient and transparent tool to integrate ESG practices into their investment strategy,
- mobilize Athens Stock Exchange listed companies to disclosure all relevant information regarding the adoption of ESG practices and to undertake more initiatives in this area.

1.3 Index Characteristics

- 1.3.1 A maximum of sixty (60) securities that meet the eligibility criteria of the Ground Rules may participate in the composition of the index.
- 1.3.2 In the initial composition of the index only the securities that meet the eligibility criteria of the Ground Rules participate in the composition of the index.
- 1.3.3 The starting value of the index is 1,000 points, as at the close of Friday, July 31st 2021.



2 Use of Indices and Disclaimer

2.1 Use of Indices

- 2.1.1 The Indices of the ATHEX Stock Market monitor the performance of shares listed on the ATHEX Stock Exchange, which meet specific eligibility criteria for inclusion in the composition of the indices.
- 2.1.2 The Benchmark Administrator considers the appropriate use of the indices for research purposes, performance benchmarking, or the creation of financial products. This list is indicative, and users of the indices may also use them for other purposes.

2.2 Disclaimer

- 2.2.1 The Benchmark Administrator informs index users that various factors, including external factors beyond the administrator's control, may lead to changes or even the discontinuation of index calculations.
 - Therefore, any financial products or other financial instruments that use the indices as a reference should be able to handle potential changes or even discontinuation of index calculations.
- 2.2.2 Index users who decide to use them as benchmarks or purchase products that claim to track the performance of the indices, should evaluate the index management and calculation methodology and seek independent investment advice before investing their own or their clients' funds.
- 2.2.3 The Benchmark Administrator (or any person engaged in the preparation or publication of the index Ground Rules) shall not be liable, whether due to negligence or any other cause, for any losses, damages, claims, or expenses incurred by any person as a result of:
 - · applying the index Ground Rules or/end
 - any errors or inaccuracies in the index Ground Rules or/end
 - any failure to implement or incorrect application of the policies and procedures described in the index Ground Rules or/end
 - any error or inaccuracies in the composition of the indices or any of their components



3 Management Responsibilities

3.1 Athens Stock Exchange (ATHEX)

- 3.1.1 ATHEX is the Benchmark Administrator and is responsible for the daily management and calculation of the indices.
- 3.1.2 ATHEX monitors all corporate actions and stock price changes and implements all necessary adjustments to the composition of the indices.

3.2 ATHEX Index Oversight Committee

- 3.2.1 The ATHEX Index Oversight Committee consists of three (3) members and is responsible for supervisory oversight of all aspects of index management and calculation.
- 3.2.2 The supervisory responsibilities of the committee include:
 - · Reviewing the definition and methodology of the indices,
 - Overseeing any changes to the index methodology,
 - Supervising the control framework for index management and operation,
 - Reviewing and approving procedures for the discontinuation of index calculation,
 - Overseeing the exercise of discretion and expert judgment in cases where certain rules are not applied,
 - Evaluating internal and external audits and monitoring the implementation of any reformative actions.
 - Reporting to the relevant competent authorities any instances of misconduct by the administrator, as well as any suspicious input data.

3.3 ATHEX Advisory Committee for the Management of Stock Market Indices

- 3.3.1 The ATHEX Advisory Committee for the Management of Stock Market Indices serves as a means for interaction between index users and other market participants.
- 3.3.2 The committee consists of the Chairperson, the Vice-Chairperson, and its members.
 - The Chairperson, or in their absence, the Vice-Chairperson, presides over the committee meetings and represents the committee in all external meetings.
- 3.3.3 The responsibilities of the committee include:
 - Providing feedback on matters related to the proper adherence to the Ground Rules for the Management & Calculation of ATHEX Index Series,
 - Supporting index management operations,
 - Advising on the eligibility of listed companies for inclusion in the indices,
 - Preparing recommendations for changes to the Ground Rules, for the creation of new and cessation of existing indices,
 - Providing advice to the ATHEX Index Oversight Committee on handling appeals.
- 3.3.4 The committee meets regularly every six months and on an ad hoc basis when necessary. Under normal conditions, regular meetings are held during the last week of May and November each year.



3.4 ATHEX Index Team

- 3.4.1 The ATHEX Index Team (A.I.T.) is responsible for:
 - Managing, operating, and maintaining the processes for the management and calculation of the ATHEX Index Series by implementing the Ground Rules,
 - Conducting the periodic reviews of the composition of the ATHEX Index Series in accordance with the Ground Rules,
 - Supporting the administrative functions of the ATHEX Advisory Committee for the Management of Stock Market Indices.
- 3.4.2 The A.I.T. presents the results of the index composition review during the regular meetings of the ATHEX Advisory Committee for the Management of Stock Market Indices, providing all necessary information on which the review is based.
- 3.4.3 The A.I.T. maintains a schedule of corporate actions occurring between the meetings of the ATHEX Advisory Committee for the Management of Stock Market Indices that may affect the calculation of the index base (Divisor).
- 3.4.4 The A.I.T. keeps a record of all changes to the index compositions and their divisors. It is also responsible for ensuring the timely publication of all decisions related to index management using all available ATHEX communication channels.
- 3.4.5 The A.I.T. is responsible for maintaining communication with listed companies regarding any issues related to the participation of their shares in the indices.



4 Calculation of Free Float

4.1 Free Float

The outstanding shares of ATHEX listed companies must be freely available for investment.

During the semi-annual review of the index composition or whenever deemed necessary according to the Ground Rules, the free float of companies will be reviewed, taking into account any restrictions on free float percentages and cross holdings.

4.2 Free Float Restrictions

4.2.1 Restricted free float includes:

- Shares directly owned by State, Regional, Municipal and Local governments. Shares held by independently managed pension schemes for governments are excluded,
- Shares held by directors, senior executives and managers of the company, and by their family and direct relations, and by companies with which they are affiliated,
- Shares held within employee share plans,
- Shares held by public companies or by non-listed subsidiaries of public companies,
- All shares where the holder is subject to a "Lock-in clause" (for the duration of the clause¹),
- Shares held by an investor, investment company or an investment fund for strategic reasons as
 evidenced by specific statements to that effect in publicly available announcements, has an
 employee on the board of directors of a company, has a shareholder agreement, has successfully
 placed a current member to the board of directors or has nominated a current member to the
 board of directors alongside a shareholder agreement with the company,
- Shares that are subject to on-going contractual agreements (such as swaps).
- 4.2.2 Free float restrictions where holding is greater than or equal to (>=) 10%:
 - Shares held by Sovereign Funds,
 - Shares held by founders, promoters, former directors, venture capital and private equity firms, private companies, individuals (including employees) and shares held by several holders acting in concert.

The shares will remain restricted until the holding falls below 10%.

- 4.2.3 Free float restrictions where holding is greater than or equal to (>=) 30%:
 - Portfolio holdings (such as pension funds, insurance funds or investment companies) are generally not considered restricted. However, where a single portfolio holding is 30% or greater, it will be regarded as strategic and therefore restricted.

The shares will remain restricted until the holding falls below 30%.

4.3 Free Float Changes

- 4.3.1 If in addition to the above restricted holdings, the company's shareholders are subject to legal restrictions, including foreign ownership restrictions, that are more restrictive, the legal restriction will be applied.
- 4.3.2 Free float restrictions will be calculated using available published information.
- 4.3.3 For shares of companies included in the indices with a free float percentage greater than or equal to (≥) 15%, their free float percentage will be rounded to the next higher whole percentage for the index's calculation.



Companies with a free float of 15% or below are not eligible for inclusion in the Index.

- 4.3.4 In the case of a company that is subject to restructuring under specific provisions such as receiving capital injection by way of an equity issue from the Government and or other agencies or bodies and the company's free float falls below the minimum requirement of 15% then the company should be accepted in the indices with its actual free float.
- 4.3.5 A constituent's free float will also be reviewed and adjusted, if necessary, following a corporate event. If the corporate event includes a corporate action which affects the indices, any change in free float will be implemented at the same time as the corporate action. If there is no corporate action, the change in free float will be applied as soon as practicable after the corporate event.
- 4.3.6 Following the application of an initial free float restriction, a constituent's free float will only be changed if its rounded free float moves to more than 3 percentage points above or below the existing rounded free float. Where a company's actual free float moves to above 99%, it will not be subject to the 3-percentage points threshold and will be rounded to 100%.

4.3.7 Nominee Accounts

Shares disclosed as being held by a Nominee Account are typically regarded as free float. However, if a restricted shareholder as defined in par. 4.2 is identified as holding shares through a Nominee Account then that position of shares will be restricted.



¹ Free Float changes resulting from the expiry of a lock-in will be implemented at the next semi-annual review subject to the lock-in expiry date occurring on or prior to the share and float change information cut-off date.



5 Eligible Securities

5.1 Determination of Eligible Securities

- 5.1.1 Only one line of ordinary shares with voting rights of each listed company is eligible for inclusion in the composition of the index.
- 5.1.2 Where multiple types of securities representing the same underlying economic asset exist resulting from acquisitions, restructuring, or other corporate transformations only one type may be included in the composition of the index.
- 5.1.3 If the entirety of a class of shares or part of a class of shares of a listed company has not been admitted to trading on ATHEX, the specific unlisted shares are not included in the selection process that will determine the composition of the index.
- 5.1.4 Convertible, preferred shares and convertible bonds are ineligible, until they are converted.
- 5.1.5 Eligible for participation in the index are the shares of companies trading in ATHEX Main Market.
- 5.1.6 Eligible for participation in the indices are the shares of companies with actual free float before the application of any rounding greater than or equal to (>=)15%.

5.2 ESG Criteria

- 5.2.1 Listed companies on the Athens Stock Exchange are evaluated based on the level of transparency they exhibit regarding the indicators of the «ESG Information Disclosure Guide» according to the «ESG Transparency Methodology».
- 5.2.2 Each listed company receives a final score «ESG Transparency Score» which is used as input for the participation in the composition of the index.
- 5.2.3 Eligible for participation in the composition of the index are the shares of the companies with «ESG Transparency Score» greater than or equal to (>=) 30%.



6 Periodic Review of Constituents

6.1 Determination of Index Composition

- 6.1.1 A database is created with all the securities listed on ATHEX Regulated Market classified by Market and Trading Category.
- 6.1.2 Securities that do not meet the criteria set out in section 5 are excluded.
- 6.1.3 Eligible securities are ranked in descending order based on their final score «ESG Transparency Score» which serves as the final criterion for participation in the composition of the index.
- 6.1.4 The first sixty (60) securities of the rank comprise the composition of the index. In case of a tie, the security with the highest Free Float Market Capitalization is selected.
- 6.1.5 In the initial composition of the index, and until the maximum number of sixty (60) constituents is filled, only the securities that meet the criteria set out in section 5 will be included in the composition of the index.

6.2 Calculation of Weight Factor

- 6.2.1 An alternative methodology is adopted to determine the weight of each security in the composition of the index. This is achieved by calculating a Weight Factor for each security in the composition of the index.
- 6.2.2 Weight Factor is calculated as the product of the free float, with which each security participates in the composition of the index, by the final score «ESG Transparency Score» rounded to two (2) decimals.

6.3 Calculation of Capping Factors

- 6.3.1 The capping of securities in the composition of the index will be implemented semi-annually after the close of business on the 3rd Friday of June and December.
- 6.3.2 The calculation of Capping Factors will be carried out using security closing prices at the close of business on the 2nd Friday of June and December.
- 6.3.3 The capping process of the securities in the composition of the index is performed as follows:
 - 1. Securities with weight in the Index Market Capitalization greater than (>) 10% will be capped at 10%.
 - 2. If the application of step (1) causes the weights of individual uncapped securities to be greater than (>) 10% then the securities will be capped at 10%.

6.4 Index Reserve List

- 6.4.1 With the announcement of the results of the index semi-annual review a new index reserve list is announced.
- 6.4.2 The reserve list consists of ten (10) securities with the highest ranking according to the final score «ESG Transparency Score» that do not participate in the composition of the index.
- 6.4.3 The reserve list will be used if one or more securities must be removed from the composition of the index during the period up to the date of announcement of the results of the next semi-annual review.



6.4.4 In case of removal of one security from the composition of the index it will be replaced by the security with the highest ranking from the reserve list according to the final score «ESG Transparency Score» if the security continues to be eligible for participation in the index.



7 Changes to Constituent Companies

7.1 Suspension of Trading

- 7.1.1 When ATHEX decides that a constituent must be suspended from trading, it may remain in the composition of the index, at the price at which it is suspended, for up to ten (10) business days.
 During this time the constituent may be removed immediately from the composition of the index at zero price in case it is expected that the constituent will not recommence trading.
- 7.1.2 In the event that, during the period of ten (10) business days the suspension has not been lifted (and the possibility of removal from the composition of the index has not been exercised) then, under normal conditions, the constituent will be removed from the composition of the index before the start of business on the 21st day at zero price.
- 7.1.3 The vacancy in the composition of the index will be filled according to the provisions of section 6.4 on the date of removal.
- 7.1.4 If, within three (3) months from the removal of the share from the composition of the index, the trading suspension is lifted, and its market capitalization is greater (>) than the market capitalization of the lowest-valued stock in the index, then the stock will be reinstated in the composition of the index.
 - The total number of shares in the composition of the index will be increased by one (1) until the next semi-annual review of the index.

7.2 Company Deletion

- 7.2.1 When ATHEX decides to delete a company from the ATHEX Regulated Market and the securities of the company participate in the composition of the index, then the securities of the company are removed from the index.
- 7.2.2 The vacancy in the composition of the index will be filled according to the provisions of section 6.4 on the date of removal.

7.3 Mergers, Acquisitions and other Complex Corporate Actions

- 7.3.1 If due to a merger by absorption, a company participating in the composition of the index is absorbed by another company also participating in composition of the same index, then the resulting company remains in the composition of the index.
- 7.3.2 The vacancy in the composition of the index will be filled according to the provisions of section 6.4 on the date of removal.
- 7.3.3 If a company participating in the composition of an index is absorbed through a merger by another company that does not participate in the composition of the index, then the first is removed from the index and replaced by the second.
- 7.3.4 If a company that participates in the composition of an index splits to form two or more companies, the company with the highest Market Capitalization will remain in the composition of the index.

7.4 Changes in Trading Status

- 7.4.1 When ATHEX decides to transfer the trading of a security participating in the composition of the index to non-continuous trading status, then the company's securities are removed from the composition of the index.
- 7.4.2 The vacancy in the composition of the index will be filled according to the provisions of section 6.4 on the date of removal.



8 Review Periods

8.1 Review Periods

- 8.1.1 The review of the composition of ATHEX ESG Index takes place semi-annually and includes the following evaluation periods:
 - A' Semi-Annal Review, with the final date for submission and evaluation of data being April 30th
 - B' Semi-Annual Review, with the final date for submission and evaluation of data being October 31st.

8.2 Input Data

- 8.2.1 The input data for the review of the index includes the following:
 - the composition of ATHEX Markets and Trading Categories,
 - the shareholders structure of ATHEX listed companies (free float),
 - · the Market Capitalization of each security,
 - the final score «ESG Transparency Score» of each company according to the «ESG Transparency Methodology».

8.3 Announcement of Results

- 8.3.1 As soon as possible after the completion of the meeting of the ATHEX Advisory Committee for the Management of Stock Market Indices the review results will be publicly announced.
- 8.3.2 In the interim period (from the meeting of the ATHEX Advisory Committee for the Management of Stock Market Indices and the implementation date of the review results), a listed company may request an evaluation of its inclusion or exclusion from the composition of the index.

8.4 Implementation Periods

- 8.4.1 The changes in the composition of the index, following the results of their semi-annual review, are implemented after the close of business on
 - 3rd Friday, of June for the A' Semi-Annual Review
 - 3rd Friday, of December for the B' Semi-Annual Review



9 Changes - Exceptions to Ground Rules

The Ground Rules for the Management & Calculation of the ATHEX ESG Index are subject to regular review (at least once a year) by the Benchmark Administrator to ensure they continue to best reflect the objectives of the index.

9.1 Changes to Ground Rules

- 9.1.1 Changes to the structure of the Ground Rules for the Management & Calculation of ATHEX ESG Index should be implemented gradually rather than through radical modifications.
- 9.1.2 Proposed changes are prepared by ATHEX Index Team, reviewed by ATHEX Advisory Committee for the Management of Stock Market Indices and submitted for approval to the ATHEX Index Oversight Committee.
- 9.1.3 Changes approved by ATHEX Index Oversight Committee will be effective at the meeting of the ATHEX Advisory Committee for the Management of Stock Market Indices held at the next index review.

9.2 Exceptions to Ground Rules

- 9.2.1 Exceptions to the Ground Rules for the Management & Calculation of ATHEX ESG Index can only be granted by the ATHEX Index Oversight Committee following a recommendation from the ATHEX Index Team, reviewed by ATHEX Advisory Committee for the Management of Stock Market Indices.
- 9.2.2 If the ATHEX Index Oversight Committee deems that an exception should be granted, it must not contradict the intent of the rules and must be sufficiently justified.
- 9.2.3 Any granted exception should not be considered as a precedent for future decisions by the ATHEX Index Oversight Committee.



10 Appeals

10.1 Appeal Against or Non-Inclusion in an Index

- 10.1.1 A company may appeal against its inclusion or non-inclusion in the composition of the index only if the ATHEX Index Team has acted in violation of the Ground Rules for the Management & Calculation of ATHEX ESG Index.
- 10.1.2 Appeals must be submitted in writing to the ATHEX Advisory Committee for the Management of Stock Market Indices and copied to ATHEX Index Team.
- 10.1.3 The ATHEX Index Team must provide to ATHEX Advisory Committee for the Management of Stock Market Indices with the relevant reasoning and justification for the company's inclusion or exclusion.
- 10.1.4 After reviewing the company's appeal and the justification provided by ATHEX Index Team the ATHEX Advisory Committee for the Management of Stock Market Indices will prepare a recommendation on how to handle the appeal and submit it to the ATHEX Index Oversight Committee.
- 10.1.5 ATHEX Index Oversight Committee will review the recommendations and make a final decision.





11 Appendix: Index Calculation

11.1 Calculation Time & Frequency

11.1.1 ATHEX ESG Index is calculated every 30 seconds during the ATHEX trading hours, using the current prices of the stocks included in each index.

11.2 Index Price Display

11.2.1 Index Values are displayed with an accuracy of two decimal places.

11.3 Index Calculation Formula

11.3.1 The indices are calculated based on the following formula:

$$P_{t} = \sum_{i=1}^{n} \frac{X_{i,t} * S_{i} * W_{i} * C_{i}}{D}$$

where:

 \bullet P_t Current price of the index

• $X_{i,t}$ The last transaction price of each stock included in the index, as reported by the Electronic Trading System, or the closing price of the stock after the end of the trading session at ATHEX

 $oldsymbol{\circ}$ The number of Outstanding Shares of each stock included in the index

• Weight Factor for each constituent. Weight factor is calculated as $\mathbf{F}_i * \mathbf{E}_i$ rounded in two (2) decimals

Where:

- F_i Free Float factor for each constituent. The free float factor is the free float of the company rounded to the highest integer
- ullet E_i The final score, «ESG Transparency Methodology», of each constituent
- C_i Capping Factor for each stock
- D Index Divisor, which represents the market capitalization of the index at the base date (Friday July $31^{\rm st}$ 2021).

The index divisor is adjusted to incorporate changes in the share capital of companies included in the index, ensuring that the index value remains unaffected by these changes.



110 Athinon Avenue, 104 42 Athens www.Athexgroup.gr