

BIST SUSTAINABILITY INDEX GROUND RULES

1. PURPOSE

The purpose of BIST Sustainability Index (the index hereafter) is to create an index whose constituents are the companies whose corporate sustainability performance is high level among the listed companies in Borsa İstanbul and in extent to increase awareness, knowhow and hand-on practice of the companies about sustainability in Turkey, especially the ones listed in Borsa İstanbul.

The index provides companies to compare their corporate sustainability performance in local and global basis. With the Index, Borsa İstanbul provides companies an instrument for evaluating their performance and consequently adopting new targets or furthering their performance while allowing them to develop their risk management abilities for corporate transparency, accountability and sustainability.

The index also provides a tool which allows investors to select and invest in companies that adopt principles of sustainability and corporate governance.

2. DEFINITIONS AND GENERAL RULES

2.1. Market Value

Market value is calculated by multiplying total number of stocks (including the temporary shares which are created in the Central Registry Agency (CRA) during capital increases under the paid-in capital system until the capital is registered and announced) that represent the capital by the stock price.

2.2. Free Float Ratio

Free Float Ratio has been defined by the Capital Markets Board (CMB) as a concept showing free float rate of the stocks traded on Borsa İstanbul equity markets, and is calculated and announced by CRA.

2.3. Weighted Free Float Market Value

Weighted Free Float Market Value is calculated by multiplying the total market value by the Free Float Ratio and the Weighting Factor.

2.4. Weighting Factor

This is a number greater than 0 and smaller or equal to 1 used to adjust the weight of a stock in the index.

2.5. Capping Ratio

This is the ratio bounding the weight of the stock in the index. Capping ratio is 15% for BIST Sustainability Index.



2.6. Capping Method

Following method is applied in capping.

When there is a change in the scope of the index, the weights of constituent stocks are checked without any capping being applied. If there is a stock whose weight is greater than the capping ratio, the weight is decreased to the capping ratio using the weighting factor.

The weights are checked after changes in the scope of the index –if there are any-have been made at the beginning of the index period. If there is a stock whose weight is greater than the capping ratio, the weight is decreased to the capping ratio.

2.7. Lists A, B, C and D

These are lists created to classify stocks traded on Borsa İstanbul markets according to the criteria determined by CMB and are subject to different trading principles and different measures.

2.8. Foreign Exchange Rate

Refers to the Buying Rates announced by the Central Bank of Republic of Turkey.

2.9. Price and Return Indices

BIST Stock Indices are calculated both in terms of Price and Return. The only difference between the Price Index and Return Index is related to cash dividend payments. In cash dividend payments, the divisor of the Return Index is adjusted assuming that the dividend paid is invested in the constituents in proportion to their weights, whilst the divisor of the Price index is not adjusted assuming that the dividend paid is excluded from the portfolio.

2.10. Excluded Stocks

Stocks traded on the Pre-Market Trade Platform or the Watchlist Market and classified under lists C or D are not included in the scope of the index.

2.11. Index Calculation and Dissemination

Price Indices are calculated during the session once every 10 seconds and disseminated in real-time. Return Indices and foreign currency based indices are calculated and disseminated once at the end of day.



2.12. Data Precision

	DATA PRECISION	
Index Values	Rounded to 2 decimal places	
Index Divisors	Rounded to 8 decimal places	
Free Float Ratio (%)	If Free Float Ratio < 1% Rounded to 2 decimal places If Free Float Ratio >=1% Rounded to integer numbers	
Weighting Factor	Rounded to 12 decimal places	

2.13.Index Period

This is the period in which the periodic changes in the scope of the index are in effect as a result of the periodic review conducted. There is one index period for BIST Sustainability Index, namely November-October.

2.14. Announcement of Periodic Changes

Periodic changes on BIST Sustainability Index are announced at least 5 days prior to the beginning of the relevant index period.

3. CALCULATION METHOD AND ADJUSTMENT

- 3.1. Latest price data are used in the index calculations.
- 3.2. BIST Indices are calculated as free float market capitalization weighted.

The following formula is used in the calculation of indices:

 E_t = Value of the index at time t

n = Number of constituent stocks



 F_{it} = Price of the stock "i" at time t

Nit = Total number of shares of stock "i" at time t

Hit = Free float ratio used in index calculation of the stock "i" at time t

K_{it} = Weighting Factor of the stock "i" at time t

 D_t = Foreign exchange rate on day "t"

 B_t = Divisor of the index at time t

3.3. Adjustment

If there occurs any change in the numerator of the index formula due to the events listed in 3.4., the divisor of the index will also be adjusted to ensure continuity in the index value.

The adjusted divisor of the indices is calculated using the following formula:

$$\begin{array}{c} \Delta PD \\ B_{t+1} = \ (\ 1 + \ \begin{array}{c} \\ \end{array}) * B_t \end{array}$$
 PD_t

 B_{t+1} = Adjusted divisor to be used on day t+1

 ΔPD = Change in the total Weighted Free Float market value of the stocks due to the events described in 3.4.

PD_t = Total Weighted Free Float market value of the stocks on day "t"

 B_t = Divisor on day t

If capital increases and/or dividend payments of the traded companies are realized in a currency other than Turkish Lira, Turkish Lira equivalents, calculated by using exchange rates of the last business day before ex-date, are used in index adjustments.

3.4. Events which require adjustment in the divisor of the index and the timing of the adjustments:

Regarding types of activities which require adjustment to the indices based on the public disclosures of the companies, the company should have delivered the statement to the Public Disclosure Platform (PDP) until 16:30 (until 12:00 on half days) on the day that precedes the realization date. Otherwise, the relevant adjustment will be made effective on the second business day that succeeds the delivery of the statement to PDP.



A list of relevant adjustments that will be implemented on the next business day is finalized by 16:30 every day, and announced on the PDP

All adjustments other than cash dividend payment are made both in the price and return indices.

a) Cash dividend payment

The adjustment is made only in return indices taking into account the amount of net dividend to be effective on the ex-dividend date.

- b) Capital increase in cash through rights offering
 - i) If both the last trade price and the adjusted price (in case of dividend and bonus issues) of the stock are equal to or higher than the subscription price:

The adjustment is made to be effective on the rights issue date.

ii) If the last trade price and/or the adjusted price (in case of dividend and bonus issues) of the stock is lower than the subscription price:

The adjustment regarding the amount of rights issue is made to be effective on the business day that succeeds the day when the completion of the capital increase process is notified to PDP, after the exercise of the rights issue and the sale of the remaining shares on the Primary Market.

- c) Capital increase in cash without rights offering
 - Adjustment is made to be effective on the business day that succeeds the ending date of the sales transaction if the shares representing the capital increase are sold via private placement.
 - ii) Adjustment is made to be effective on the fourth business day that succeeds the ending date of the sales transaction if the shares representing the capital increase are sold via public offering.
- c) Inclusion of new stocks in indices

Adjustment is made to be effective on the day the new stock is added to the index.

d) Exclusion of stocks from indices

Adjustment is made to be effective on the day the stock is excluded from the index.

e) Change in free float ratio

The free float ratios that are announced by CRA for the last business day of the week are analyzed and the changes in ratios except those occur during the capital increase process are taken into account.

If the free float ratio;

- is equal or lower than 50% and there is a change at the rate equal to 5 points or higher;



- is higher than 50% and there is a change at the rate equal to 10 points or higher;

adjustment is made to be effective on the third business day of the following week. Free float ratios are not adjusted for the weeks consisting of two or less business days. If the number of shared changes due to cased defined in parts (§) and (h), free float ratios are also adjusted according to latest ratios announced by CRA.

If shares held by current shareholders are offered to the public, free float ratios are adjusted to be effective from the fourth business day succeeding the end date of the transaction.

If deemed necessary, changes on the ratios can be made with the decision of the Borsa İstanbul Management.

f) Company mergers

Adjustment is made to be effective on the date of the distribution of shares issued due to the merger.

g) Company spin-off

Adjustment is made to be effective on the date of the distribution of shares issued due to the spin-off.

ğ) The sale of shares held ready to sell in public offerings:

Adjustment is made to be effective on the fourth business day of the month succeeding the one when the sale has been made considering the delivery of the statement related to the sale to PDP.

h) Share transformation of companies with multiple groups of stock altering the number of shares in different groups:

Adjustment is made effective on the first business day that succeeds the delivery of the statement concerning the share transformation to PDP.

3.5. Retroactive correction in the calculated index values:

No retroactive correction is made in the index values calculated and announced in real time. Retroactive correction in the index values calculated and announced at the end of day can be permitted only by the decision of the Borsa İstanbul Management.

4. ASSESMENT CRITERIA/PROCESS

- 4.1. EIRIS (Ethical Investment Research Services Limited) assess Borsa İstanbul listed companies in terms of international sustainability criteria and only public information is used in these assessments.
- 4.2. Assessment study done by EIRIS will be in three stages:
 - a) At the first stage, EIRIS creates a profile for each company about their firm policy and activities in areas of environment, biodiversity, climate change, structure of



management, countering bribery, human rights, supply chain, health and safety using information "disclosed publicly" as of June 30.

Publicly available reports produced by third-party sides such as annual fiscal reports, sustainability and corporate governance reports, websites, CDP (Carbon Disclosure Reports) can be the examples of public information taken into account.

- b) At the second stage, companies review the profiles sent by EIRIS and give feedback through comments and corrections about their own profiles subject to providing information about publicly available source and date of its public availability.
- c) In the third and last stage, EIRIS finalize the assessment by integrating the feedbacks of companies into the profiles. Moreover, EIRIS prepares the list of stocks to be included to the index according to the "Index Selection Criteria" which is determined by Borsa İstanbul.
- 4.3. The list of valid indicators for each assessment area stated in 4.2.a, detailed explanation or definitions about what each indicator means, sample of documents which can be used as evidence for relevant indicators are given in the "BIST Sustainability Index Research Methodology" prepared by EIRIS. The document in both English and Turkish is available on "Indices" section of Borsa İstanbul website.

5. SELECTION OF STOCKS/INDEX INCLUSION CRITERIA

- 5.1. "The List of Companies Subject to Assessment", which includes the companies that will be assessed by EIRIS, is revised annually in December and announced by Borsa İstanbul. The list is revised as stated below:
 - a) BIST 50 Index constituents in the first quarter (January-March) of the following year are listed in "The List of Companies Subject to Assessment"
 - b) In addition to that;
 - i. companies which are not a constituent of BIST 50 Index but a constituent of BIST 100 Index in the first quarter (January-March) of the following year and
 - ii. companies which are not a constituent of BIST 100 Index but a constituent of BIST Sustainability Index in the said period
 - are added to "The List of Companies Subject to Assessment" if they are volunteer to be assessed.
- 5.2. In order to be included to the index, companies must satisfy the minimum requirements given in the "Index Selection Criteria". "Index Selection Criteria" is given below.



ENVIRONMENTAL CRITERIA

ENVIRONMENT

	High Impact Companies	Medium Impact Companies	Low impact companies
	The company meets the following:	The company meets one the following:	No requirements
	 Four core indicators (at 2pts or above) Three core indicators (at 2pts or above) and one desirable indicator Three core indicators with one at a higher level of quality (3 pts) Membership of one listed initiatives 	 Four core indicators (at 2pts or above) Three core indicators (at 2pts or above) and one desirable indicator Three core indicators with one at a higher level of quality (3pts) Membership of one listed initiatives 	
	Core Indicators:	Desiral	ble Indicators:
Environmental Policy	 Reference to all key Level of Senior Resp Commitment to use and targets ** Commitment monitoring/auditing Commitment to publ * This indicator is score 0 pt, 1pt and 2pts. **These indicators are scale of 0pt, 1pt, 2pts and 	oonsibility** ope of objectives - Cor invo to - Cor or s ic reporting - Stra sust od on a scale of Initiati - ICC or scored on a	bally applicable corporate rating standards mitment to stakeholder olvement mitment to adress product ervice impact ategic moves toward tainability ves: C (International Chamber of mmerce) membership RES membership



	High Impact Companies	Medium Impact	Low Impact
		Companies	companies
tems	The company meets one the following: - Coverage is less than 33% and the company meets four (or more) indicators - Coverage is 33% or greater and the company meets three (or more) core indicators - Any evidence of ISO14001 / EMAScertified systems	The company meets one the following: - Coverage is less than 33% and the company meets four (or more) core indicators - Coverage is 33% or greater and the company meets three (or more) core indicators - Any evidence of ISO14001 / EMAScertified systems	No requirements
Sys	- Any 'other' indicator Core Indicators:	Any 'other' indicatorOther Indicators	•
Environmental Management Systems	 Evidence of environment policy Identification of signifi	ental - Commitme or EMAS icant - EIA under - Supplier a targets nd Certified Systems als, action - ISO14001 - EMAS (Ed	ent to obtain ISO14001 taken for all projects udits

Biodiversity

	High impact companies	Medium impact companies	Low impact
			companies
Biodiversity Policy	The company meets at least one indicator.	No requirements	Not assessed



Climate Change

	Very high impact companies	High impact companies	Medium impact companies	Low impact companies
Climate Change Management Response	The Company meets at least one indicator.	No requirements	No requirements	Not assessed

GOVERNANCE CRITERIA

Board Practice

	All companies
Board Practice	The company meets at least two indicators.

Countering Bribery

	All companies
Countering Bribery Policy	The company meets at least one indicator.
Countering Bribery Systems	The company meets at least one indicator.



SOCIAL CRITERIA

Human Rights

	Companies involved in oil & gas or mining activities with large presence in high risk countries	Companies involved in oil & gas or mining activities with smaller presence in high risk countries	Companies in other sectors with large presence in high risk countries	Companies in other sectors with smaller presence in high risk countries
Human Rights Policy	 The Company include explicit national Enterposition the ILO core lates a proxy for head of the SA8000 for its 	The company has policy which explicitly mention 2 ILO core labor or has a statement on fundamental human rights. pany meets one of the fol has published human t support for the OECD rises (This is a proxy for bor areas) is a signatory to the UN aving a policy on all the lowned operations (This is a ILO core labor areas)	rights policies which Guidelines for Multi- having a policy on all Global Compact (This ILO core labor areas)	No requirements

	Companies involved in oil & gas or mining activities with large presence in high risk countries	Companies involved in oil & gas or mining activities with smaller presence in high risk countries	Companies in other sectors with large presence in high risk countries	Companies in other sectors with smaller presence in high risk countries
Human Rights Systems	The company meets at least one indicator.	No requirements	No requirements	No requirements



Health & Safety

	All companies
Health & Safety Systems	The Company meets at least one indicator (Except senior responsibility).

6. PERIODIC AND NON-PERIODIC CHANGES ON CONSTUTUENT STOCKS

- 6.1. At the periodic review, companies which do not meet the requirements of "Index Selection Criteria" are excluded from the index.
- 6.2. Stocks whose trading are halted permanently, stocks whose trading are suspended for more than 5 consecutive trading days except those that are suspended due to additional public offering, stocks transferred to the Watchlist market from their current markets and stocks transferred from lists A or B to List C are excluded from the index to be effective on the date of halt, suspension or transfer.
- 6.3. Stocks excluded from the indices because of the reasons mentioned in 6.2. are not included to the index until the end of the index period in which the stocks are excluded.
- 6.4. In case two or more companies included in the index merge or acquire one another, the stocks of the resulting or surviving company, as the case may be, remain within the index
- 6.5. If a company included in the index acquires a company out of the index, then the resulting company will remain in the index.
- 6.6. If a company included in the index is acquired by a company out of the index, then the acquired company is excluded from the index effective from the date of the distribution of stocks to the shareholders.
- 6.7. If a company included in the index spins-off into two or more companies, then the resulting companies remain within the index until the end of the index period.

7. MONITORING AND ADMINISTRATION OF INDICES

- 7.1. Index and Data Department is responsible for monitoring and administration of indices.
- 7.2. At periodic reviews, the stocks to be included in the index are determined by Borsa İstanbul after the assessment done by EIRIS and announced following the approval of Borsa İstanbul Management.
- 7.3. Borsa İstanbul Management is authorized with regard to issues that are not stipulated by BIST Sustainability Index Ground Rules.