

TIP Taiwan TPEX ESG Index

Chapter 1 Introduction

TIP Taiwan TPEX ESG Index (hereafter TIP TPEX ESG Index) uses public information, including sustainability reports, annual reports, government information, financial figures and more to be added, to design the evaluation model for producing ESG performance scores, through the collaboration among the Taiwan Index Plus Corporation (TIP), the Taipei Exchange (TPEX), and the Business Council for Sustainable Development of Taiwan (BCSD Taiwan). TIP TPEX ESG Index is designed to represent the investment portfolio performance of the TPEX-listed companies which dedicate themselves to the sustainable development in Taiwan.

Chapter 2 Calculation and Management

- 2.1 TIP TPEX ESG Index is maintained by the TIP. Taiwan Stock Exchange (TWSE) is designated to provide the real-time calculation and dissemination.
- 2.2 TIP conducts periodic reviews of constituents according to the index rules.
- 2.3 TIP retains the closing market capitalization records of all constituents.
- 2.4 With regard to the Ground Rules for the compilation, maintenance and management of the index, please refer to “[General Principles for TIP Securities Indices](#)”.

Chapter 3 Eligibility of Constituents

3.1 Sampling Universe

3.1.1 Index Universe: Common stocks listed on the TPEX mainboard are included in the Index Universe (excluding managed stocks, emerging stocks, altered trading method or suspended trading stocks; however, suspended ones resulting from exchange into new stocks by capital reduction, transformation into holding companies, newly established companies or change of par value may still be included in the Index Universe.)

3.1.2 Sampling Range : Index Universe.

3.2 Criteria of Constituent Selection

3.2.1 Liquidity Test

- a. The medians of the monthly trading value for the most recent trailing 12 months are ranked in descending order. The top 20% will pass the liquidity criteria unconditionally.
- b. The free-float turnover rate is greater than or equal to 3% for at least 8 months out of the most recent trailing 12 months.

3.2.2 Index Screening

- a. Companies had previous year's corporate governance evaluation result as well as completed previous year's sustainability reports uploaded to the designated information reporting system¹ before the data cut-off date for the evaluation.
- b. Companies must be ranked in the top 50% among the TPEX-listed companies in the corporate governance evaluation for the most recent year.
- c. Companies with positive basic earning per share over the last 3 consecutive fiscal years.
- d. The net worth per share of the stock is not less than par value².
- e. The "Sustainable Risk-Adjusted Factor" (SRA Factor), calculated based on "Corporate Sustainable Development Evaluation Model³" and "Credit Points Violation Benchmark", is designed to adjust the original evaluation score⁴ to form the "ESG Performance Score". Non-constituent companies that score no less than 70, or existing constituents that score no less than 60 in ESG Performance Score will be included.
- f. Companies in the tobacco or controversial weapons sector, or those with significant controversies over or violations of ESG issues will be excluded⁵.

¹ According to "Taipei Exchange Rules Governing the Preparation and Filing of Sustainability Reports by TPEX Listed Companies", the designated information reporting system is called Market Observation Post System (MOPS) currently.

² For shares issued by a company with a par value of NT\$10 per share, the net worth per share shall not be less than NT\$10. For shares issued by a company stocks with no par value or a par value not equal to NT\$10 per share, accumulated deficit will replace the above-mentioned criterion as the screening standard..

³ In response to the characteristics of the local market, BSCD Taiwan refers to the relevant international sustainability standards or guidelines, creating a model to evaluate the ESG performance of TPEX-listed companies in order to produce the evaluation result. Companies that did not upload the sustainability reports to MOPS or did not have previous year's corporate governance evaluation result will not be included.

⁴ The full marks of the original evaluation score is 100.

⁵ Including, but not limited to the company list provided by TPEX.

3.2.3 Weighting Method

1. The weight of the individual constituent is determined by the free float adjusted market capitalization.
2. The initial weight of the free float adjusted market capitalization of each constituent will be adjusted based on its SRA Factor.
3. Following 3.2.3.2, the adjusted weight of each constituent is capped with 20%, and the total weight of the top 5 constituents shall not exceed 60%.

Chapter 4 Index Calculation

4.1 Index Calculation Frequency

4.2 From June 29, 2020, the real-time TIP TPEX ESG Index is calculated and disseminated every 5 seconds during the trading hours of the TPEX, based on the latest trading prices of the constituents. The end-of-day (EOD) index is calculated once a day after the market close.

4.3 TIP also compiles the TIP TPEX ESG Total Return Index, which adjusts the TIP TPEX ESG Index after considering the cash dividend factor, in order to reflect cash dividend-included returns. The index is calculated and published once a day after the market closes.

4.4 Calculation Formula

4.2.1 TIP TPEX ESG Index is the “Price Return Index” :

$$Index = \frac{\text{index market values}}{\text{index divisor}} \times \text{base value}$$

$$Index_t = \frac{\sum_{i=1}^n cp_{i,t} \times s_{i,t} \times p_{i,t}}{Divisor_t} \times 5000$$

$cp_{i,t} \times s_{i,t} \times p_{i,t}$ = “index market value” of constituent i on day t

n=number of constituents

$p_{i,t}$ = trading price of constituent i on day t

$s_{i,t}$ = number of outstanding shares of constituent i on day t

$cp_{i,t}$ = the weight-adjustment coefficient of constituent i on day t is decided in accordance with the “Market-Value Investment Index category” described in the ["TIP Corporate Actions and](#)

[Events Methodology](#)".

Divisor= index divisor of the “Price Return Index”: After the market closes, the index divisor is adjusted in accordance with the “Market-Value Investment Index category” described in the "[TIP Corporate Actions and Events Methodology](#)" to maintain the index continuity. The adjustment method is as follows:

$$\begin{aligned} & \text{Index divisor} \\ & = \text{index divisor of the previous day} \\ & \times \frac{\text{index market values at the previous day's close} \pm \text{index market values changes}}{\text{index market values at the previous day's close}} \end{aligned}$$

Note 1: The base date is June 19, 2020, and the base value is 5000 points.

Note 2: The index divisor on the base date is the index market values at that time.

$$\sum_{i=1}^n cp_{i,launch} \times S_{i,launch} \times p_{i,launch} , \text{ launch=base date}$$

4.4.1 TIP TPEX ESG Total Return Index is the “ Total Return Index” :

$$\text{Index} = \frac{\text{index market values}}{\text{index divisor}} \times \text{base value}$$

$$\text{Index}_t = \frac{\sum_{i=1}^n cp_{i,t} \times S_{i,t} \times p_{i,t}}{\text{DivisorTR}_t} \times 5000$$

DivisorTR= index divisor of the “Total Return Index” : After the market closes, the index divisor is adjusted in accordance with the “Market-Value Investment Index category” described in the "[TIP Corporate Actions and Events Methodology](#)" to maintain the index continuity. The adjustment method is as follows:

$$\begin{aligned} & \text{Index divisor} \\ & = \text{index divisor of the previous day} \\ & \times \frac{\text{index market values at the previous day's close} \pm \text{index market values changes}}{\text{index market values at the previous day's close}} \end{aligned}$$

Chapter 5 Constituent Adjustment and Index Maintenance

5.1 Periodic Review and Adjustment of Constituents

5.1.1 The constituents are reviewed once a year, and the review date is on the

12th trading day of June, with the market data cut-off date on the last trading day of May. The number of constituents may be variable after each review.

5.1.2 The data cut-off date for the evaluation model is the last trading day of April.

5.1.3 The results of the review will be effective after 5 trading days following the review date.

5.1.4 For the index divisor maintenance, the closing data of the previous trading day before the effective date is adopted to calculate the difference, which is used as the index market value changes, between the index market value of the new portfolio and the original one.

5.1.5 If the review data of holding companies or newly established companies is insufficient, and the representative companies of the converted stocks meet the Sampling Universe qualification, the data of the representative companies or their stocks may be used in the review.

5.2 TIP TPEX ESG Index is a Market-Value Investment Index. The related maintenance such as the non-periodic adjustment of constituents, the weight-adjustment coefficient, the number of issued shares, and the index divisor is handled in accordance with the ["TIP Corporate Actions and Events Methodology"](#).

5.3 Principles for Implementation of the Free Float Coefficient

5.3.1 If the free float coefficient of the stock is lower than 10%, the stock will not be included in the Sampling Universe.

5.3.2 The update of the free float coefficient shall be in conjunction with the effective date of constituents periodic review.

5.3.3 The free float coefficients are updated based on the latest data generated from TIP's ["TIP Free Float Adjustment Methodology"](#).