

GPIF Adopted a ESG Index for Japanese Equities

GPIF has evaluated general ESG indices for Japanese equities based on the information submitted through the Index Posting System, which GPIF uses to collect information on a variety of indices. As a result of the evaluation, GPIF has adopted the following index and has begun passive investment tracking it.

<New adopted index>

Туре	Index Name		
General ESG	FTSE Blossom Japan Sector Relative Index		

<Characteristics of the index>

The evaluation is primarily based on the FTSE Russell's ESG ratings, and evaluation on companies' management attitude toward risks and opportunities of climate change is also considered.

<Primary evaluation criteria>

- [1] ESG ratings play a central role in the constituent selection / weighting process of the index.
- [2] ESG ratings for the index are highly transparent, and the evaluation methods is easy to understand for companies so that the index is expected to boost overall equity market in Japan.
- [3] The index does not include the negative screening which excludes specific industries or businesses from the index constituents.
- [4] The index has a relatively small tracking error relative to a parent index and is a tilt index with a large investment capacity or an index with a large number of constituents.

< Comment from MIYAZONO Masataka, President of GPIF >

GPIF has been expanding its adoption of ESG indices since it first adopted ESG index for Japanese equities in the fiscal year 2017. GPIF commenced passively investing ¥760billion* in assets tracking FTSE Blossom Japan Sector Relative Index, and the number of ESG indices for both Japanese and foreign equities adopted by GPIF has reached eight in total. GPIF will aim to ensure long-term profits from the sustainable growth of portfolio companies and the market as a whole through its ESG investment and stewardship activities, continuing to improve the indexes we have already adopted and adopt new indices.

^{*}Initial investment includes new allocations as well as allocations from passive investments tracking other ESG indices.





New Adoption of ESG Index

 $\sim\!\! {\rm New}$ adoption of FTSE Blossom Japan Sector Relative Index \sim

30 March, 2022 Government Pension Investment Fund



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Key Points for Adoption of ESG Index and Overview of the New Index

GPIF Key Points for Adoption of New ESG Index

GPIF has evaluated general ESG indices for Japanese equities which collected through the Index Posting System in terms of contents of ESG ratings and index construction methods.

□ The following are key consideration points for the evaluation.

[1] ESG ratings play a central role in the constituent selection/weighting process of the index.

[2] ESG ratings for the index are highly transparent, and the evaluation methods is easy to understand for the companies so that the index is expected to boost overall equity market in Japan.

[3] The index does not include the negative screening (Note1) which excludes specific industries or businesses from the index constituents.

[4] The index has a relatively small tracking error relative to a parent index and is a tilt index with a large investment capacity or an index with a large number of constituents.

□ GPIF selected FTSE Blossom Japan Sector Relative Index proposed by FTSE Russell, which was highly evaluated from the above points, and commenced passively investing ¥ 760 billion (Note 2) in assets tacking the index. Through the investment in the index, GPIF expects to improve the risk-adjusted return of the portfolio as well as the sustainability of the market and the economy.

(Note 2) Initial investment includes new allocations as well as allocations from passive investments tracking other ESG indices.

⁽Note 1) Excludes so-called controversies screening, which is evaluated according to the severity of the controversies.

GPIF Primary ESG Index Evaluation Criteria

Organizational Structure	 Global infrastructure/index development capacity Infrastructure within Japan Dialogue with investors Dialogue with issuers/media
ESG Ratings	 Validity Transparency Understandability Data quality
Index Evaluation	 Index construction methodology (validity, transparency, and understandability) Risk/return characteristics (sector/factor bias, turnover) Capacity

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Overview of New General ESG Index for Japanese Equities

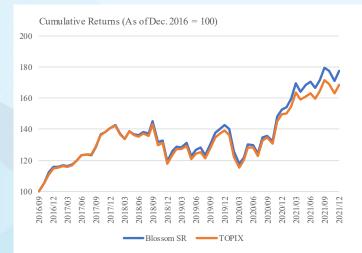
Index Name	FTSE Blossom Japan Sector Relative Index	FTSE Blossom Japan Sector Relative Index ("FTSE Blossom SR")			
Index Concepts/ Characteristics	 The FTSE Blossom SR is a general ESG index that screens stocks based on FTSE Russell's ESG ratings as well as assessment of magnitude of environmental damage by companies, and companies' management attitude toward climate change risks. The assessment is conducted from the following three perspectives. [1] FTSE Russell's ESG ratings, [2] Carbon Intensity (greenhouse gas emissions/sales), and [3] Management attitude toward climate change risks/opportunities. Comparison of [1] is performed within the same industry, and comparison of [2] and [3] are performed within all stocks. The index is expected to mitigate the potential ESG risk of the portfolio while industry weights are neutralized, and it restrains tracking errors relative to a parent index. 				
Index Construction	Selection (best-in-class)				
Constituent Universe (Parent index)	FTSE Japan All Cap Index [1,391 stocks]				
Number of Index Constituents	494				
GPIF Initial Investment	Approx. ¥ 760 billion (Note1)				

(Note 1) Initial investment includes new allocations as well as allocations from passive investments tracking other ESG indices.

(Note 2) Data as of February 15, 2022

(Source) Prepared by GPIF from various materials.

Performance - FTSE Blossom Japan Sector Relative Index

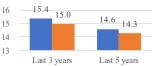


Last 3 years	Blossom SR	TOPIX	
a Total Return	14.12%	12.67%	
b Total risk	15.40%	14.97%	
c Return/Risk (a/b)	0.92	0.85	
d Excess Returns	1.45%		
e Tracking error	1.42%		
f Information Ratio (d/e)	1.02		

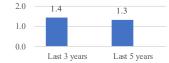
(Note) Data is based on data up to the end of December 2021.



Totalrisk (%)



Tracking error (%)



Last 5 years	Blossom SR	TOPIX
a Total Return	8.89%	7.99%
b Total risk	14.60%	14.26%
c Return/Risk (a/b)	0.61	0.56
d Excess Returns	0.89%	
e Tracking error	1.32%	
f Information Ratio (d/e)	0.68	

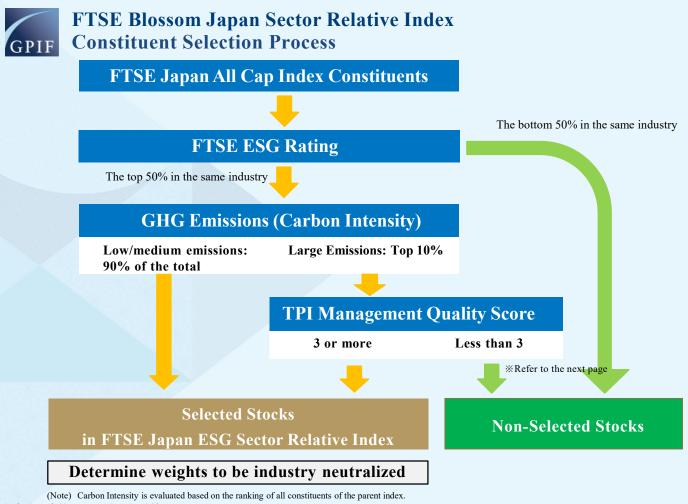


Characteristics of FTSE Blossom Japan Sector Relative Index



Characteristics of FTSE Blossom Japan Sector Relative Index

ESG Rating	(1)FTSE, ESG Rating (2)TPI Management Quality Score			
Parent Index	FTSE Japan All Cap Index [1,391 stocks]			
Issuer Size	Large, Mid, and Small Cap			
Screening (controversy, etc.)	Companies with a less than 2.0 points in ESG rating			
Number of Index Constituents	494 stocks			
Constituent Selection / Weight Calculation Method	 The following stocks are selected from constituents of the parent index. [1] The top 50% stocks in ESG rating within the respective sectors are selected. [2] For the stocks with higher carbon intensity (GHG emissions / sales) (the top 10%) selected in [1], they can be selected only if they score three or more in TPI Management Quality Score. For stocks with lower carbon intensity, only ESG rating is used for screening criteria instead of TPI Management Quality Score. 			
Restrictions	 Industry weights are neutralized The upper limit on the weight of individual stocks is the lower of 10% weight of the index or five times the weight of the parent index. 			
Rebalance	Every six months			
(Note) Data as of February 15, 2022				



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GPIF What are Transition Pathway Initiative (TPI) and Management Quality Score (MQ-score)?



Transition Pathway Initiative (TPI)

- TPI is an initiative established in 2017 under the leadership of asset owners in the United Kingdom to assess companies' readiness for a transition to a low-carbon economy and to support their efforts to address climate change.
- 120 investors around the world have expressed their support for TPI, and their total assets under management are \$40 trillion (as of February 2022).
- TPI assessment framework is compliant with TCFD, and the data is used by Climate Action 100+ (Note) in which GPIF participates as a supporter.

Management Quality Score (MQ-score)

- TPI Management Quality Score (MQ score) provides the scores based on the assessment on the quality of management of greenhouse gas emissions and responses to risks and opportunities for the transition to a low-carbon economy by reviewing the information publicly disclosed by companies.
- Companies need to meet survey items (refer to the next page) depending on the level from 0 to 4, in order to reach the respective score levels. In order to earn a higher score, companies are required to enhance their efforts. For example, companies need to disclose their greenhouse gas emissions and their reduction targets in order to earn a score of three or more.
- All survey items used for TPI MQ score are also included in the climate-change theme for FTSE Russell ESG rating-model.

(Note) Climate Action 100+ is an investor-led initiative launched in September 2017 to address climate change issues. It has been holding constructive dialogues with companies that are highly influential in resolving climate change issues on the efforts to improve governance on climate change and to reduce greenhouse gas emissions, and to enhance information disclosure.



19 questions to generate the MQ-score

Level 0 Unaware of (or not Acknowledging) Climate Change	Question 1: Does the company acknowledge climate change as a significant issue for the business?
Level 1 Acknowledging Climate Change as a Business Issue	Question 2: Does the company recognise climate change as a relevant risk and/or opportunity for the business? Question 3: Does the company have a policy (or equivalent) commitment to action on climate change?
Level 2 Building Capacity	Question 4: Has the company set greenhouse gas emission reduction targets? Question 5: Has the company published information on its operational (Scope 1 and 2) greenhouse gas emissions?
Level 3 Integrating into Operational Decision-Making	Question 6: Has the company nominated a board member or board committee with explicit responsibility for oversight of the climate change policy? Question 7: Has the company set quantitative targets for reducing its greenhouse gas emissions? Question 8: Does the company report on Scope 3 emissions? Question 9: Has the company had its operational (Scope 1 and/or 2) greenhouse gas emissions data verified? Question 10: Does the company support domestic and international efforts to mitigate climate change? Question 11: Does the company have a process to manage climate-related risks? Question 12: (applicable to some sectors only): Does the company disclose materially important Scope 3 emissions?
Level 4 Strategic Assessment	Question 13: Does the company disclose its membership and involvement in organisations or coalitions dedicated specifically to climate issues? Question 14: Has the company set long-term quantitative targets for reducing its greenhouse gas emissions? Question 15: Does the company's remuneration for senior executives incorporate climate change performance? Question 16: Does the company incorporate climate change risks and opportunities in their strategy? Question 17: Does the company undertake climate scenario planning? Question 18: Does the company disclose an internal price of carbon? Question 19: Does the company ensure consistency between its climate change policy and the positions taken by trade associationsof which it is a member?

(Source) FTSE Russell, THE TRANSITION PATHWAY INITIATIVE

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(Reference) List of ESG indices adopted by GPIF [1]

	FTSE Blossom Japan Index	FTSE Blossom Japan Sector Relative Index	MSCI Japan ESG Select Leaders Index MSCI () MSCI Japan ESG Select Leaders Index	MSCI ACWI ESG Universal Index MSCI I ACWI ESG Universal Index
Classification	General ESG	General ESG	General ESG	General ESG
Investment Target	Japanese equities	Japanese equities	Japanese equities	Foreign Equities
Index Concepts/ Characteristics	 The index is FTSE Russell's ESG-Index series, which has one of the longest track records globally. The index is evaluated using FTSE4Good Japan Index's ESG rating scheme. The index is a general ESG index that selects stocks with high absolute ESG ratings and adjusts industry weights to neutral. 	 Assessments are performed based on FTSE Russell's ESG rating which FTSE Blossom Japan Index also uses. For the companies with high carbon intensity (greenhouse gas emissions/sales), management attitude toward climate-change risks/opportunities is also assessed. The index selects stocks with relatively high ESG ratings within each industry and adjusts industry weights to neutral. 	 The MSCI Japan ESG Select Leaders Index is a broad ESG index that integrates various ESG risks into today's portfolio. The index is based on MSCI ESG Research used globally by more than 1,000 clients. The index is comprised of stocks with relatively high ESG scores in each industry. 	 One of MSCI's flagship ESG indexes, this index adjusts the weight of constituents based on each issuer's current ESG rating and rating trend to elevate the ESG metrics of the index overall. The index was developed for large investors seeking to enhance ESG integration while achieving the same level of investment opportunity and risk exposure as the parent index.
Index Construction	Selection (best-in-class)	Selection (best-in-class)	Selection (best-in-class)	Tilted
Constituent Universe (Parent index)			MSCI JAPAN IMI TOP 700 [699 stocks]	MSCI ACWI ex Japan ex China A ESG Universal with Special Taxes Index [2,209 stocks]
Number of Index Constituents	230	494	222	2,150

(Note) Data as of February 15, 2022 (Source) Prepared by GPIF from various materials.

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(Reference) List of ESG indices adopted by GPIF [2]

	Efficient	PX Carbon ent Index	S&P Global Carbon Efficient Index	S&P Global LargeMidCap Carbon Efficient Index	MSCI Japan Empowering Women Index ("WIN") MSCI Japan Empowering Women Index (WIN)	Morningstar® Developed Markets Ex-Japan Gender Diversity IndexSM (GenDi) MORNINGSTAR GenDi
Classification	E (climate change)		E (climate change)		S (women's empowerment)	S (women's empowerment)
Investment Target	Japanese equities		Forei	gn Equities	Japanese equities	Foreign Equities
Index Concepts/ Characteristics	 Constructed by S&P Dow Jones Indices based on carbon data provided by Trucost, a pioneer in environmental assessment. This index is designed to overweight companies that have lower carbon footprints (annual greenhouse gas emissions divided by annual revenues) and that actively disclose their carbon emission information. 		 bon a Jones Indices based on carbon data provided by Trucost, a pioneer in environmental assessment. • This index is designed to overweight companies that have lower carbon footprints (annual greenhouse gas emissions divided by annual revenues) and that actively disclose their 		 MSCI calculates the gender- diversity scores based on information disclosed under "the Act on Promotion of Women's Participation and Advancement in the Workplace" and selects companies with higher gender diversity scores from each sector. The first index designed to cover a broad range of factors related to gender diversity. 	 Determines investment weighting based on assessment of companies' commitment to gender equality, using the Equileap Gender Equality Scorecard. Ratings are conducted in four categories: (1) Gender balance in leadership and workforce; (2) equal compensation and work- life balance; (3) policies promoting gender equality; and (4) commitment, transparency, and accountability.
Index Construction Tilted			Tilted	Selection (best-in-class)	Tilted	
Constituent Universe (Parent index)	TOPIX [2,178 stock:	s]		Large Mid Index [3095 stocks]	MSCI JAPAN IMI TOP 700 [699 stocks]	Morningstar Developed Markets (ex JP) Large-Mid[2,175 stocks]
Number of Index 1,825 Constituents			2,163	352	2,158	

年金積立金管理運用独立行政法人 Government Pension Investment Fund (Note) Data as of February 15, 2022 (Source) Prepared by GPIF from various materials.

