

## SOLUTION OVERVIEW

# FTSE JPX Net Zero Japan Index Series

The next generation of climate transition indices for Japan's net zero future

### Overview

Japanese investors are increasingly seeking to mitigate climate risks, capture climate opportunities from the nascent green economy and ensure alignment with Net Zero by 2050 in their portfolios. The market has taken evolutionary steps as it has developed from relatively simple risk-based implementation options—such as creating “ex fossil fuel” or “low carbon” portfolios—to approaches that also capture the potential upside from the transition to a low carbon economy and a net zero pathway.

The FTSE JPX Net Zero Japan Index Series is based on JPX's well-tracked TOPIX 500, which provides diversified exposure across the Japanese stock market. The series aligns to net zero by 2050 by applying index tilts to the market capitalisation weighted FTSE JPX Japan 500 Reference Index and FTSE JPX Japan 200 Reference Index, to achieve a 30% reduction in carbon emissions and fossil fuel reserves against reference indices and an average 7% annual reduction in carbon emissions and fossil fuel reserves. It also achieves a significant uplift in exposure to the green economy and overweights companies with better climate governance for the transition to a low carbon economy and support climate change efforts.

### FTSE JPX Net Zero Japan Index Series

The Index Series consists of two indices based off the well-tracked TOPIX 500, which provides diversified exposure across the Japanese stock market:

- FTSE JPX Net Zero Japan 500 Index
- FTSE JPX Net Zero Japan 200 Index

### Benefits

- Provides a clear picture of company alignment with the climate transition based on multiple climate parameters
- Combines market-leading climate data from FTSE Russell and the Transition Pathway Initiative into a single index design, allowing investors to align with net zero commitments
- Uses FTSE Russell's tilt-based multi-factor methodology for transparent index construction and support investor stewardship and corporate engagement activities



**FTSE  
RUSSELL**  
An LSEG Business



## Features

### Diversified exposure across the Japanese stock market

The base index of FTSE JPX Net Zero Japan 500 Index is a reference index that contains TOPIX 500 constituents and the base index of FTSE JPX Net Zero Japan 200 Index is the largest 200 stocks in terms of market value in the reference index.

### Adheres to international frameworks

These jointly-developed indices, are the first TOPIX 500 based Japanese climate integrated indices intended to align with the EU Climate Transition Benchmark (CTB) criteria and the recommendations of the Taskforce on Climate-Related Financial Disclosures (TCFD).

### Aligns with “Net Zero” pathways

FTSE Russell’s Target Exposure methodology drives decarbonisation of the index at a rate in line with climate scenarios set out by the IPCC.

### Supports the climate transition to a low carbon economy

Incorporates data assessments from the Transition Pathway Initiative (TPI) to evaluate companies’ climate governance for the transition to a low carbon economy and support climate change efforts via the TPI Management Quality (MQ) and TPI Carbon Performance (CP).

### Target outcomes by tilting constituent weights for risks, opportunity and transition alignment

The constituent weights are tilted with Fossil Fuel Reserves, Carbon Emissions, Green Revenues, TPI MQ and CP for potentially signalling the 2DC transition progress/performance of the companies.

## Climate change parameters

Climate Risks & Opportunities /Disclosed		<b>Fossil fuel reserves</b>	Underweight or exclude companies with fossil fuel reserves
		<b>Carbon emissions</b>	Over or underweight companies according to their GHG emissions (see also “Net zero pathways”)
		<b>Green revenues</b>	Overweight companies engaged in the transition to a green economy
		<b>TPI Management Quality</b>	Over or underweight companies according to their management quality (“climate governance”)
Transition Alignment		<b>TPI Carbon Performance</b>	Over or underweight companies according to their carbon performance (“2°C/Below 2°C pathways”)
		<b>Net zero pathways</b>	Apply annual decarbonisation (carbon emissions reduction) target to reach “net zero” over c.10 years

## Index construction process

### Starting universe

Start with the market capitalisation weighted index (e.g. FTSE JPX Japan 500 Reference Index or FTSE JPX Japan 200 Reference Index).



Step 1

### Exclude companies

Apply the baseline exclusions: controversial weapons (anti-personnel mines, cluster munitions, chemical and biological weapons), tobacco activities and companies identified as being non-compliant with UN Global Compact (UNGC) principles.



Step 1



Step 2

### Calculation of climate scores

Constituents' Fossil Fuel Reserve Intensity is calculated as the estimated CO2 equivalent GHG emissions in metric tons generated by the combustion of a company's fossil fuel reserves, divided by its full company market capitalisation (in USD).

Constituents' Operational Carbon Emissions Intensity is calculated as the latest annual CO2 equivalent GHG emissions in metric tons scaled by enterprise value including cash (in USD).

Constituents are assigned a FTSE Green Revenues ratio value, TPI MQ score and TPI CP score.



Step 1



Step 2



Step 3

### Translate scores into tilts

Apply FTSE Target Exposure for targeted climate outcomes:

- Underweight companies with fossil fuel reserves
- Over/underweight companies according to their greenhouse gas emissions whilst applying sector neutrality
- Overweight companies generating revenues from the global green economy
- Over/underweight companies according to the quality of their climate governance
- Over/underweight companies according to their carbon performance
- Target a minimum 30% (CTB) reduction in carbon emissions and fossil fuel reserves intensity relative to the reference benchmark
- Apply 7% average annual reduction in carbon emissions and fossil fuel reserves intensity relative to the base year
- Target an uplift in Green Revenues exposure



Step 1



Step 2



Step 3



Step 4

### Adjust index and constrain final weights

The following constraints are applied during this process:

- Industry weight constraints
- Minimum stock level weight
- Maximum stock level capacity ratio
- Maximum turnover ratio



Step 1



Step 2



Step 3



Step 4



Step 5

### Publish and review indices

The FTSE JPX Net Zero Japan Index Series are reviewed annually in December.

---

## Disclaimer

© 2023 London Stock Exchange Group plc and its applicable group undertakings (the "LSE Group"). The LSE Group includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) The Yield Book Inc ("YB") and (7) Beyond Ratings S.A.S. ("BR"). All rights reserved.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB and BR. "FTSE", "Russell", "FTSE Russell", "FTSE4Good", "ICB", "The Yield Book", "Beyond Ratings" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of the LSE Group or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator.

All information is provided for information purposes only. All information and data contained in this publication is obtained by the LSE Group, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical error as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of the LSE Group nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or of results to be obtained from the use of FTSE Russell products, including but not limited to indexes, data and analytics, or the fitness or suitability of the FTSE Russell products for any particular purpose to which they might be put. Any representation of historical data accessible through FTSE Russell products is provided for information purposes only and is not a reliable indicator of future performance.

No responsibility or liability can be accepted by any member of the LSE Group nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any error (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of the LSE Group is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of the LSE Group nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of the LSE Group nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indexes cannot be invested in directly. Inclusion of an asset in an index is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

The information contained in this report should not be considered "research" as defined in recital 28 of the Commission Delegated Directive (EU) 2017/593 of 7 April 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council ("MiFID II") and is provided for no fee.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index was officially launched. However, back-tested data may reflect the application of the index methodology with the benefit of hindsight, and the historic calculations of an index may change from month to month based on revisions to the underlying economic data used in the calculation of the index.

This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of the LSE Group nor their licensors assume any duty to and do not undertake to update forward-looking assessments.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of the LSE Group. Use and distribution of the LSE Group data requires a licence from FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB, BR and/or their respective licensors.

## About JPX Market Innovation & Research



JPX Group has established JPX Market Innovation & Research, Inc. (JPXI) as a new subsidiary parallel to the exchanges, the self-regulatory organisation, and the clearing house. It commenced business on April 1, 2022. JPXI, as a leading index administrator for the Japanese market, covers a number of equity indices including its flagship index, TOPIX.

As well as taking on JPX Group's index, data, and digital-related services, thereby enabling JPX Group to provide all market-related services from under one roof, JPXI will play a key role in creating the global, comprehensive financial and information platform "G-HUB" as set out under the long-term vision to be achieved by 2030 "Target 2030".

Furthermore, JPXI will contribute to bolstering the competitiveness and status of Japanese financial and capital markets by enriching services on ESG, listed company, and others considered necessary to enhance the attractiveness of the market, as well as envisioning how financial and capital markets should look with the use of new technologies.

## About the Transition Pathway Initiative



The Transition Pathway Initiative (TPI) is a global initiative led by asset owners and supported by asset managers. It assesses companies' preparedness for the transition to a low carbon economy, supporting efforts to address climate change. Launched in 2017, it is rapidly becoming the "go-to" corporate climate action benchmark. The TPI is backed by 120 investors globally with over \$40 trillion in combined assets under management and advice (February 2022).

---

## About FTSE Russell

FTSE Russell is a leading global provider of index and benchmark solutions, spanning diverse asset classes and investment objectives. As a trusted investment partner we help investors make better-informed investment decisions, manage risk, and seize opportunities.

Market participants look to us for our expertise in developing and managing global index solutions across asset classes. Asset owners, asset managers, ETF providers and investment banks choose FTSE Russell solutions to benchmark their investment performance and create investment funds, ETFs, structured products, and index-based derivatives. Our clients use our solutions for asset allocation, investment strategy analysis and risk management, and value us for our robust governance process and operational integrity.

For over 35 years we have been at the forefront of driving change for the investor, always innovating to shape the next generation of benchmarks and investment solutions that open up new opportunities for the global investment community.

To learn more, visit [lseg.com/ftse-russell](https://lseg.com/ftse-russell); email [info@ftserussell.com](mailto:info@ftserussell.com); or call your regional Client Service team office:

**EMEA** +44 (0) 20 7866 1810

**Asia-Pacific**

**North America** +1 877 503 6437

**Hong Kong** +852 2164 3333

**Tokyo** +81 (3) 6441 1430

**Sydney** +61 (0)2 7228 5659



**FTSE  
RUSSELL**  
An LSEG Business