FTSE EPRA Nareit Green Indexes

Integrating climate risk into listed real estate portfolios

Overview

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Climate change poses clear and material risks to real estate assets with the potential to impact return profiles. Real estate investing has historically lacked the appropriate tools to allow investors to assess their exposure to climate risk and to integrate it effectively in their investment strategies.

To help address this gap, the **FTSE EPRA Nareit Green Indexes** have been designed to allow investors to identify real estate companies with strong sustainability performance.

These indexes are a sustainability-focused extension to the FTSE EPRA Nareit Global Real Estate Index Series, a leading series of listed real estate benchmarks with approximately US\$341billion of assets tracking this family¹.

Benefits

- Allows for significant improvements in climate and sustainability characteristics, specifically the increase in floor space under eligible green certified constituents and the reduction in carbon emissions per dollar of revenue
- Takes an alternative approach to addressing the lack of comprehensive sustainability data. The indexes draw on a geolocation dataset from real estate data provider, GeoPhy, containing data on over 15 million buildings to utilize bottom up building data to assess the sustainability characteristics of real estate companies
- Includes an alternative index for investors that are focused on limiting tracking error to the parent benchmark, by minimizing active sector and country weights. This version also provides notable sustainability improvements

Features

• Consists of eligible securities in the underlying FTSE EPRA Nareit Global Real Estate Indexes

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- Constituent weights are adjusted based on two sustainable investment measures:
- Green building certification
- Energy usage
- Managed in partnership with the European Public Real Estate Association (EPRA), and the US-based association for REITs and publicly traded real estate companies, Nareit
- Follows the FTSE Global Factor Index Series methodology to address concerns about liquidity, capacity, diversification and turnover
- Transparent, rules-based process

¹ Data as of December 31, 2017 as reported on April 2, 2018 by eVestment for institutional assets, Morningstar for retail mutual funds, insurance products, and ETFs, and additional passive assets directly collected by FTSE Russell.

Green building measures and definitions

Measure	Objective	Definition
Green building certification	Increase/decrease constituent weights based on percentage of buildings that have eligible green building certification	Share of the total net leasable area in the company's real estate portfolio that is certified as part of an eligible green building certification scheme
Energy usage (kWh)	Increase/decrease constituent weights based on energy usage	Average estimated energy use per square meter in a company's real estate portfolio

Index construction process

Starting universe

Start with market capitalization weighted index:

e.g. FTSE EPRA Nareit Developed Index

Step 1

Adjust constituent weights based on two sustainable investment measures

- Green building certification: Share of the total net leasable area in the company's real estate portfolio that is certified as part of an eligible green building certification scheme
- Energy usage: average estimated energy use per square meter in a company's real estate portfolio



Narrow index and constrain final weights

Remove stocks which do not contribute to the overall factor objective, whilst ensuring that diversification constraints are not breached.

The following constraints are applied during this process:

- Region and Industry neutrality constraints
- Maximum stock level capacity ratio
- Minimum stock weight

Step 1 > Step 2 > Step 3

Publish and Review Index

The index is reviewed annually in September to update for newly eligible stocks, changes in exposure to energy usage and green building certification.

For more information about our indexes, please visit ftserussell.com.

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