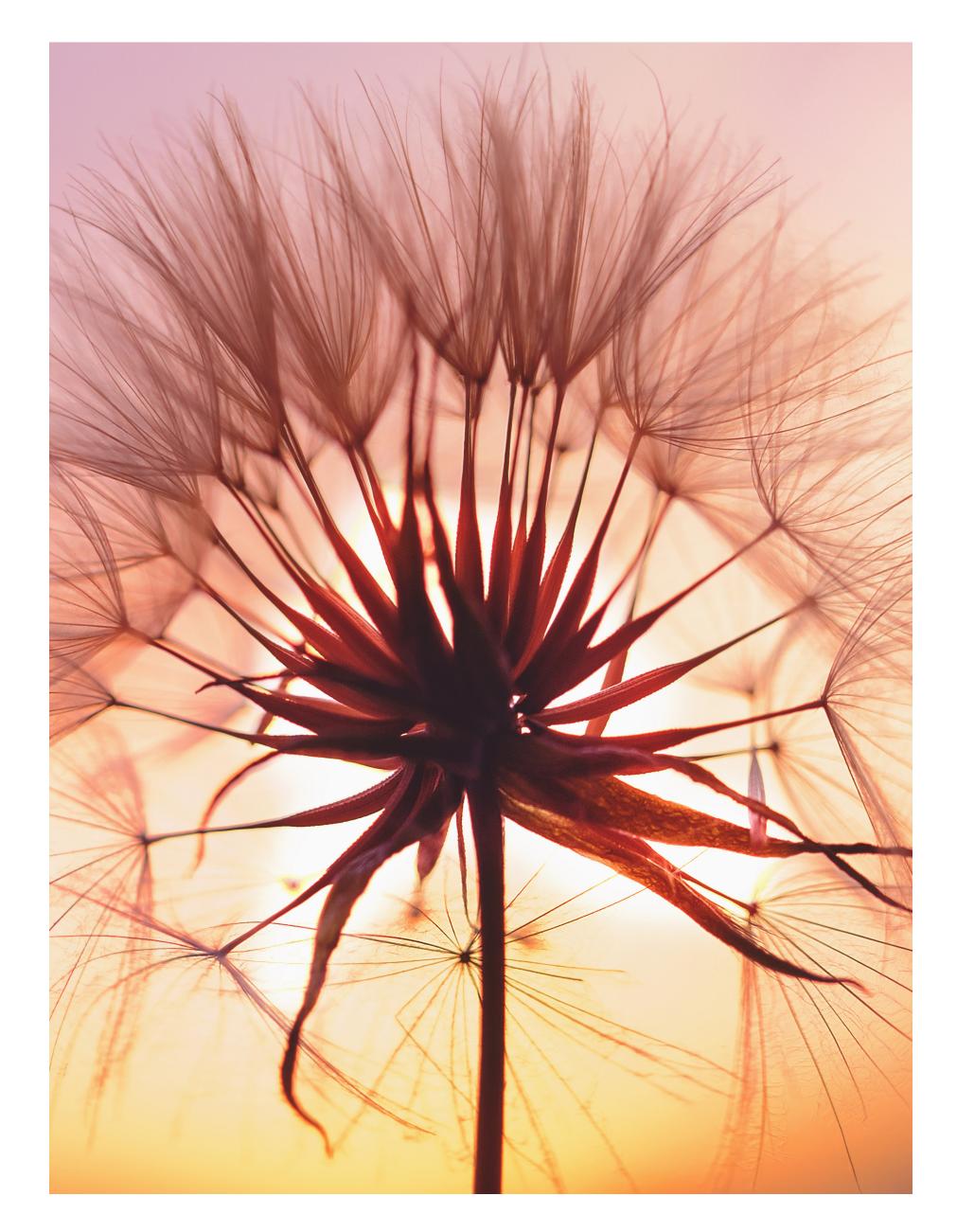
Green Revenues 2.0 data model

Quantifying balance sheet exposure to environmental activities







Taking a mirror to the market, FTSE Russell's enhanced Green Revenues 2.0 data model brings the world a closer look at the green economy; defining what it is and determining the companies and activities that compose it. The data set was designed to ensure broad global coverage, comprehensive classification of green activities, and granularity in the data provided.

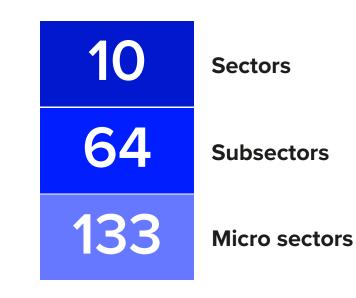
Broad coverage

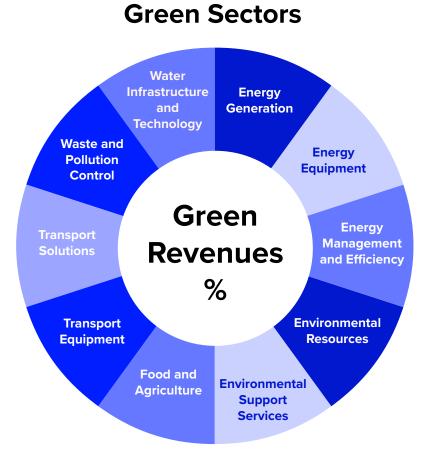
The Green Revenues data model is applied to nearly 99% of total global market capitalisation, capturing over 19,000+ public companies across 48 developed and emerging markets, with 10 sectors, 64 subsectors, and 133 micro sectors. This ensures coverage of FTSE Russell's broadest equity indexes, including the full range of indexes in the FTSE Global Equity Index Series and the Russell US Indexes.

Comprehensive

The Green Revenues Classification System (GRCS) is a taxonomy used to define and measure the industrial transition to a Green Economy. FTSE Russell's Green Revenues methodology comprehensively assesses all companies with revenue exposure to the green business activities defined by the Green Revenues Classification System.

Green revenues classification system





History

FTSE Russell has been researching and developing green industry taxonomies since it launched the FTSE Environmental Markets Index Series and accompanying FTSE Environmental Markets Classification System more than a decade ago. This classification system was developed to identify products and services that generate environmental benefits.

FTSE Russell has since extended the family of green taxonomies with the FTSE Green Revenues Classification System (GRCS), incorporating evolving global standards and best practices. Companies are researched and analysed based on their impact on climate change mitigation and adaptation, water, resource use, pollution, and agricultural efficiency.

In 2020, the Green Revenues 2.0 data model underwent significant transformation to provide greater granularity and precision to meet global demand for investment in the green economy and global climate and regulatory reporting, including the EU Taxonomy for Sustainable Activities.

Green Revenues data is available via flexible delivery through API bulk feed, LSEG Workspace and via Snowflake. Data items including:

- Tier1 Green Revenue Percentage
- Tier2 Green Revenue Percentage
- Tier3 Green Revenue Percentage
- Minimum Green Revenue Percentage Ex Nuclear
- Maximum Green Revenue Percentage Ex Nuclear

Enhanced utility

The Green Revenues 2.0 data model identifies companies providing green products and services and classifies associated revenues based on the Green Revenues Classification System. Using this data, a precise percentage of green revenues is derived at the sector, subsector and micro sector levels for each company.

The Green Revenues data model can be used for portfolio- and company-level analysis to understand climate transition risks and identify investment opportunities in the green economy, and can additionally be aggregated for analysis at a country- or sector-level.

Used for	Delivery
Portfolio analysis	Flexible delivery via API bulk data feed, LSEG Workspace and via Snowflake.
Index construction	
Regulatory and climate reporting (e.g., EU Taxonomy)	
Investment product input	
Research and analytics	

Alignment to the EU Taxonomy

The EU Taxonomy and FTSE Russell's Green Revenues Classification System are highly aligned on core activities to give investors an effective tool to identify companies involved in the green economy and quantify the share of their revenues that is likely to qualify under the EU Taxonomy.

Classification system

The FTSE Green Revenues Classification System captures environmental products and services across the whole equity value chain, covering 10 green sectors, 64 subsectors and 133 micro sectors. It was developed with input and direction from the market through the FTSE Russell Green Industries Advisory Committee— an external advisory board—and influenced by the HLEG proposal for a sustainable taxonomy from the EU High- Level Expert Group on Sustainable Finance, ensuring that the classification system reflects best practices and addresses market needs.



Energy generation EG	Energy equipment EQ	Energy management & efficiency EM	Environmental resources ER	Environmental support services ES	Food & agriculture FA	Transport equipment TE	Transport solutions TS	Waste & pollution control WP	Water infrastructure & technology
Bio Fuels Cogeneration Clean Fossil Fuels Geothermal Hydro Nuclear Ocean & Tidal Solar Waste to Energy Wind	Bio Fuels Cogeneration Equipment Clean Fossil Fuels Fuel Cells Geothermal Hydro Nuclear Ocean & Tidal Solar Waste to Energy Wind	Buildings & Property (Integrated) Controls Energy Management Logistics & Support Industrial Processes IT Processes Lighting Power Storage Smart & Efficient Grids Sustainable Property Operator	Advanced & Light Materials Key Raw Minerals & Metals Recyclable Products & Materials	Environmental Consultancies Finance & Investment Smart City Design & Engineering	Agriculture Aquaculture Land Erosion Logistics Food Safety, Efficient Processing & Sustainable Packaging Sustainable Plantations	Aviation Railways Road Vehicles Shipping	Railways Operator Road Vehicles Video Conferencing	Advanced Irrigation Systems & Devices Desalination Flood Control Meteorological Solutions Natural Disaster Response Water Infrastructure Water Treatment Water Utilities	Cleaner Power Decontamination Services & Devices Environmental Testing & Gas Sensing Particles & Emission Reduction Devices Recycling Equipment Recycling Services Waste Management

Please contact FTSE Russell directly for access to sample data and further information on micro sectors.

Tiering assessment

Green, greener, greenest

In order to assess net environmental impact of individual companies, FTSE Russell evaluates each business activity defined by the Green Revenues Classification System through the lens of seven environmental themes (including all six EU Taxonomy objectives and one addition). An overall score is derived for each micro sector based on impact—both positive and negative—of each environmental objective. This work is then turned into an overall strength of greenness in three tiers. The micro sector tiering assessment allows users to assess exposure to various levels of green products and services and provides the flexibility to focus on activities with higher net environmental impact.

Environmental impact

Tier 1	Tier 2	Tier 3
Clear and significant	Net positive	Limited

Company activities are assessed against seven environmental objectives and allocated to micro sector tiers based on overall impact

- . Climate change mitigation
- 2. Climate change adaptation
- 3. Pollution prevention and control
- 4. Protection of healthy ecosystems
- 5. Sustainable use and protection of water and marine resources
- 6. Transition to a circular economy, waste prevention and recycling
- 7. Sustainable and efficient agriculture*

^{*} Additional to EU Taxonomy objectives, included to capture products and services with significant environmental benefit.



Point data insight

Enhanced estimation modelling

The leading challenge with capturing green revenues data is the gap in company disclosure on green activities. The Green Revenues data model relies on reporting that many times simply wasn't created to accommodate tracking these categories. In response, FTSE Russell has developed a proprietary estimation model to calculate best estimates of Green Revenues data. Using a structured, transparent, repeatable process, the FTSE Green Revenues estimation model builds on data hierarchy based on availability of reported data.

- This estimation model has allowed the Green Revenues 2.0 data model to provide point estimate data for all companies that have been identified to generate green revenues.
- Data on the use of estimates is included to offer transparent insight into the conviction underlying green revenues data points.
- The tiered estimation approach provides disclosed data or company specific estimates depending on the level of information available.

Estimation types

Disclosed	Company specific	Sector specific
Green Revenues percentage is calculated from detailed company disclosure. Sufficient revenues data is provided.	When partial disclosure data is available, an estimate is based on other available non-revenue company, peer or sector/country data.	For companies with known green revenues but no available disclosures, a quantitative model is used to make an estimate based on sector performance.

Quantifying green

Quantifying company level exposure to the green economy has been a journey in discovery—solidifying perceptions and industry standards in a rapidly evolving space. Reflecting the market as it changes, we have recorded substantial growth in green ecconomic activity. We expect the pace to accelerate and look forward to continuing to expand Green Revenues and our environmental data capability.

Contact us at info@ftserussell.com for a data trial or to learn more about how it can be used to support EU Taxonomy reporting, investing and research needs.

Disclaimer

© [2024] London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG 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"), (6) FTSE (Beijing) Consulting Limited ("WOFE") (7) Refinitiv Benchmark Services (UK) Limited ("RBSL"), (8) Refinitiv Limited ("RL") and (9) 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, WOFE, RBSL, RL, and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "Refinitiv", "Beyond Ratings®", "WMR™", "FR™" 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 LSEG or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator. Refinitiv Benchmark Services (UK) 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 LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical inaccuracy as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG 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 LSEG Products, or of results to be obtained from the use of LSEG products, including but not limited to indices, rates, data and analytics, or the fitness or suitability of the LSEG products for any particular purpose to which they might be put. The user of the information assumes the entire risk of any use it may make or permit to be made of the information.

No responsibility or liability can be accepted by any member of LSEG 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 inaccuracy (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 LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of LSEG 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 LSEG 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. Indices and rates cannot be invested in directly. Inclusion of an asset in an index or rate 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 or rate 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.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index and/or rate 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 or rate 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 or rate was officially launched. However, back-tested data may reflect the application of the index or rate methodology with the benefit of hindsight, and the historic calculations of an index or rate may change from month to month based on revisions to the underlying economic data us.

Visit seg.com/ftse-russell



FTSE Russell is a leading global provider of benchmarks, analytics and data solutions with multi-asset capabilities, offering a precise view of the markets relevant to any investment process. For over 30 years, leading asset owners, asset managers, ETF providers and investment banks have chosen FTSE Russell indexes to benchmark their investment performance and create investment funds, ETFs, structured products and index-based derivatives. FTSE Russell indexes also provide clients with tools for performance benchmarking, asset allocation, investment strategy analysis and risk management.

To learn more, email <u>info@ftserussell.com</u>; or call your regional Client Service Team office:

EMEA

+44 (0) 20 7866 1810

North America

+1 877 503 6437

Asia-Pacific
HONG KONG +852 2164 3333
TOKYO +81 3 6441 1430
SYDNEY +61 (0)2 7228 5659

