

# infraGreen 2024Q3 Index Release

A market index of the performance of renewable energy projects

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## Executive Summary

- The infraGreen index saw an improvement in performance in Q3, with a 5.03% total return, driven primarily from higher valuations due to interest rates cuts and lower equity risk premium.
- The recent interest rate cuts in the US and Europe, coupled with expectations for a soft landing in the global economy, are driving an increase in infrastructure companies' valuations more broadly, which is also reflected in the infraGreen index performance.
- The cash returns of the index were 10.9% year-on-year basis, reflecting the substantial dividends paid by the renewable sector in the past full year.
- The wind power sector delivered the largest contribution of 3.86% to index returns, while the solar power generation returned the residual of just 1.17%.
- Contracted revenue companies led index returns, highlighting their stable cash flows and strong investor appeal for predictable returns amid economic uncertainty.
- The top five performing companies saw an average valuation increase of 11.1% quarter-over-quarter driven by a reduction in discount rates applied in their valuations.

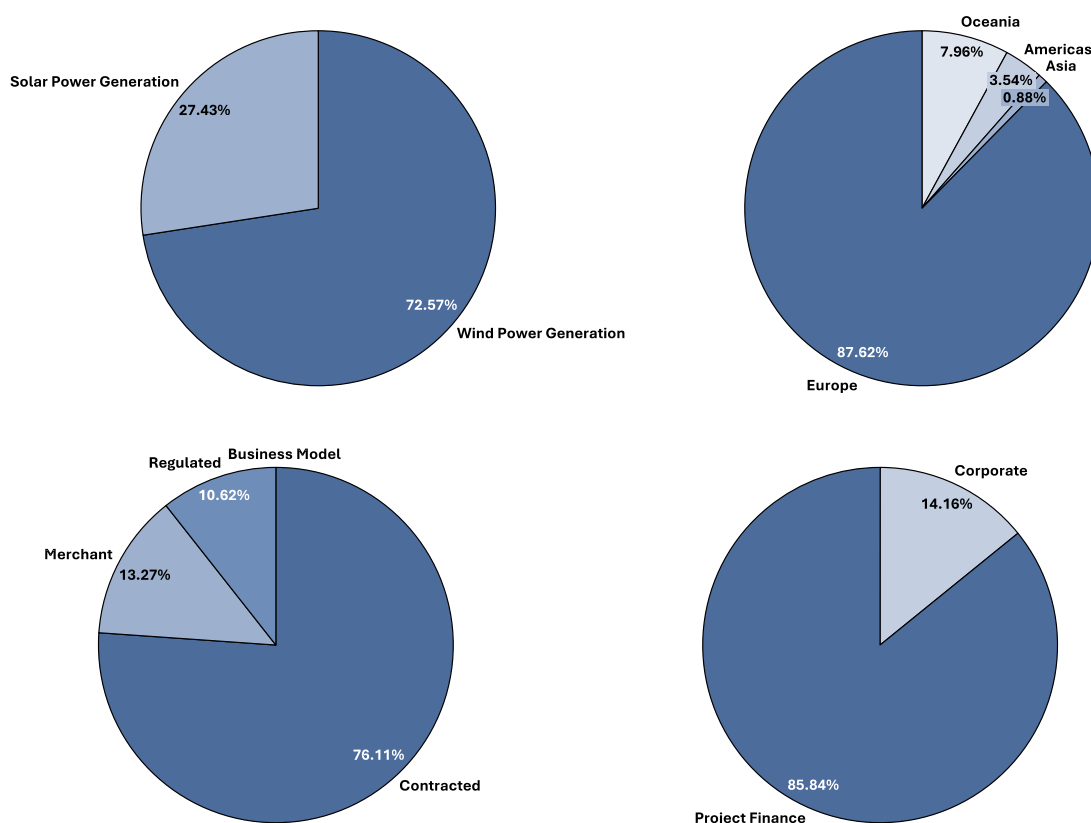
# The infraGreen Index

## Index Description

The infraGreen Equity Index, an ESMA-registered benchmark for private renewable infrastructure investments, accurately reflects unlisted infrastructure performance in the renewable sector. As of 30 September 2024, it reported a market capitalization of USD 20.26 billion, with a quarterly total return of 5.03% (local currency, equal weights), growing by USD 1.8 billion since Q2 and USD 7.1 billion year-over-year.

**Index Representation:** Wind Power Generation dominates at 72.57%, with Solar Power Generation comprising 27.43%. Geographically, Europe leads with 87.62% allocation, followed by Oceania (7.96%), the Americas (3.54%), and Asia (0.88%). Project finance (TICCS CS1) forms 85.8% of the index. By business model, 76.1% are Contracted (TICCS BR1), 10.62% Regulated (TICCS BR2), and 13.27% Merchant (TICCS BR3).

Figure 1: infraGreen TICCS representation



## Index Performance

The InfraGreen Index EW LCU delivered a three-month cumulative return of 5.03%. Year-to-date, the index has achieved a return of 6.95%. Over a longer horizon, the index has delivered an annualized return of 5.41% over five years and 10.02% over ten years. The long-term returns and volatility of the infraGreen indices in local currency remain lower than those of their USD counterparts. This difference is

largely attributed to the strong performance and appreciation of the USD throughout 2024, driven by the resilience of the U.S. economy and delayed interest rate cuts.

Table 1: Total Return Performance and Volatility for infraGreen in Q3 2024

Index	Three-month Cumulative Return	YTD Return	Five-year Ann. Return	10-year Ann. Return	Five-year Ann. Volatility	10-year Ann. Volatility
InfraGreen EW LCU	5.03%	6.95%	5.41%	10.02%	10.62%	10.85%
InfraGreen VW LCU	5.48%	6.32%	4.53%	9.80%	12.95%	12.80%
InfraGreen EW USD	9.38%	8.50%	5.96%	8.03%	16.18%	13.35%
InfraGreen VW USD	9.76%	7.81%	4.93%	7.79%	18.16%	14.82%

## Economic Fundamentals Analysis

**Electricity prices and market dynamics:** In the third quarter, electricity prices picked up slightly in most European countries. Overall, 2024 has seen a moderation from the record highs of previous years; that said, prices remain volatile, driven by the high penetration of renewables, gas market dynamics, and broader geopolitical factors which all have been reflected in revenues. However, the effect of merchant prices is relatively benign for companies in the infraGreen index as 83% of the firms included have contracted (or partially contracted) revenues.

**Challenges in European power markets:** European power markets have faced several challenges in recent months, particularly production curtailment and price cannibalization, both of which have pressured production outputs and revenues. Wind (IC7010) and solar (IC7020) generation have increased, but demand has remained relatively stable, leading to a rise in negative price hours due to oversupply. In the UK, Spain, and Germany, negative price hours have increased significantly over the past year as renewable generation outpaces grid capacity, occasionally requiring generators to reduce production without compensation.

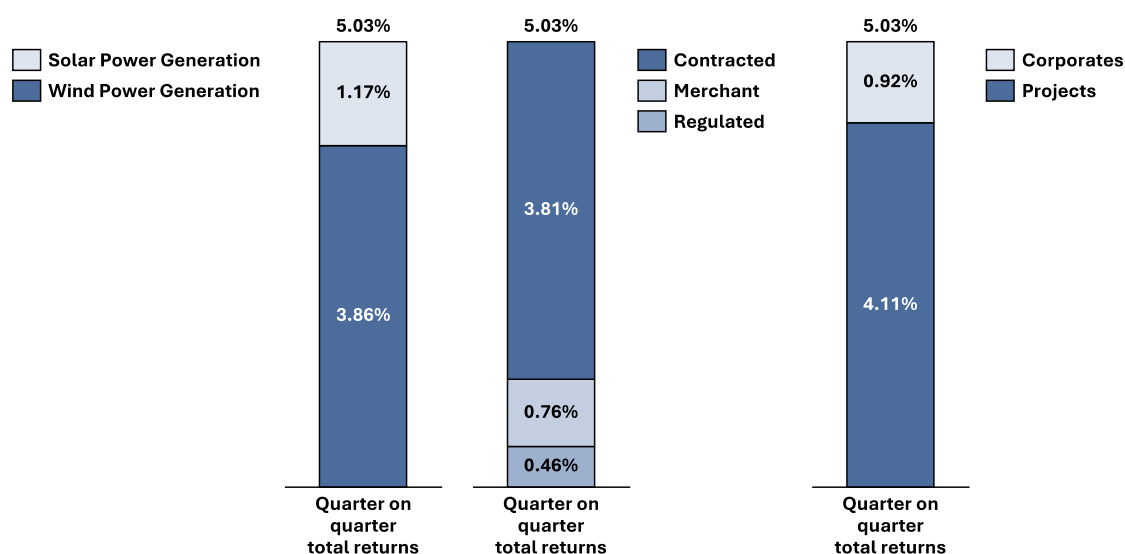
**Constraints on portfolio expansion:** Portfolio expansions are being hampered by a range of challenges overhanging the industry; these include cancellations and delays in development of new projects due to long permitting process, a lack of grid availability, increases in capital expenditure driven by material and labour cost inflation in recent years, and the higher cost of debt. Looking ahead, however, plans for grid expansions in most European countries are expected to gradually resolve this issue in the medium term. Importantly, though, there are signs of relief in some markets. In the UK, the latest allocation round announced support of more than GBP1 billion pounds for investment in new projects; more than two thirds of this will be channelled to offshore wind projects, (IC701020) which is projected to significantly boost the sector. The achieved Contracts for Differences (CfD) strike prices are likely to guarantee favourable returns for these new projects. Additionally, the contracted and inflation-linked nature of the revenue flow of most companies in the index guarantees stable cash flows.

**Impact of discount rate reductions on NAVs:** The recent decline in discount rates is expected to boost the Net Asset Values (NAVs) of renewables portfolios and spur new investments that have been discouraged during the last couple of years. Specifically, the discount rate for InfraGreen stands at 9.83% as of Q3 2024, 81bp down on last year, while over Q3 the rate fell by 41bp on a quarterly basis. We expect this declining trend to continue in the coming quarters, primarily as further reductions in risk-free rates continue to strengthen renewables NAVs.

## Index Performance Drivers

Wind power generation and contracted project finance companies led the returns this quarter: Over the past quarter, the infraGreen index performance was substantially boosted by contributions from Wind and the Solar Power Generation, which returned 3.86% and 1.17% respectively. Companies with contracted revenue streams contributed 3.81% to the index, reflecting their strong performance and substantial index weighting. Project finance business structure firms also boosted returns, contributing 4.11% return to the index.

Figure 2: InfraGreen EW LCU return contribution by TICCS pillars

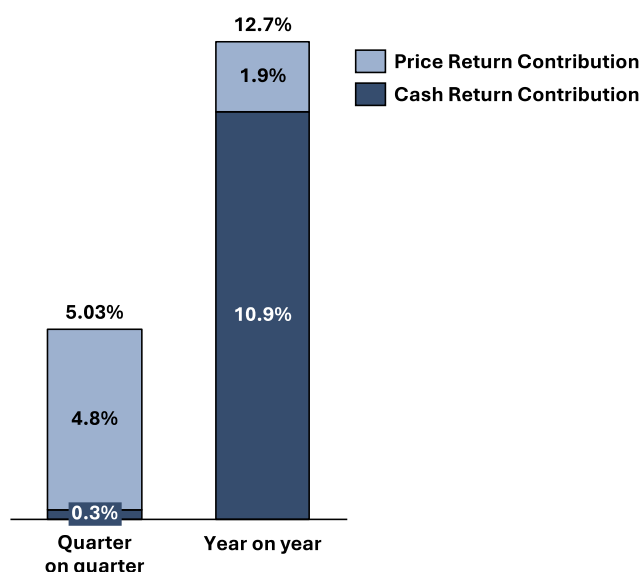


Price returns are the main drivers of returns this quarter:

Improved economic activity, fuelled by interest rate cuts, led to an increase in asset valuations. Throughout Q3, the infraGreen index achieved a price return of 4.8%. This substantial gain suggests that, on average, valuations were higher than in both the previous quarter and year, reflecting stable economic conditions during the period.

The cash return, meanwhile, amounted to just 0.3%. This is low on average for a quarterly return; however, it is important to note that it reflects distributions from only three constituents (since distributions follow annual cycle for each company) at an average cash yield of 9.03%. On a year-on-year basis, cash returns reached 10.9%, driven by substantial dividend payouts in this year, reflecting an overall increase in dividend cash flow. Figure 3 provides a detailed breakdown of the index returns for both the quarter and year-over-year.

Figure 3: Cash and Price Returns for infraGreen EW LCU



Interest rate cuts drove companies' total returns higher:

Tables 2 and 3 highlight the top and bottom five performers in terms of price returns. All top five companies are within the Wind Power Generation sub-sector and experienced valuation increases. The long duration and the reduced discount rates for these companies contributed to their higher valuation. Notably, Slievacallan Wind Farm and Evalair Wind Farm also benefited from higher dividend distributions.

Table 2: infraGreen top performers

Company Name	Sector Code	Sector Name	Country	Price Return
Överturingen 241MW Wind Farm	IC7010	Wind Power Generation	Sweden	11.1%
Cloosh Valley Wind Farm	IC7010	Wind Power Generation	Ireland	11%
Vasberget Wind Farm	IC7010	Wind Power Generation	Sweden	10.4%
Rete Rinnovabile PV Plants	IC7020	Solar Power Generation	Italy	9.54%
TRE Solar	IC7010	Wind Power Generation	Italy	9.45%

Table 3 shows the five worst-performing companies in the index, which also saw, on average, a decrease in their valuations over the last quarter. Of these, the lowest performer, Lingbo Wind Park—a Swedish renewable company—saw its valuation drop due to an ex-post price adjustment following a significant dividend distribution earlier in the year.

Table 3: infraGreen bottom performers

Company Name	Sector Code	Sector Name	Country	Price Returns
Lingbo Wind Park	IC7010	Wind Power Generation	Sweden	-10.61%
Nordfriesland Windpark	IC7010	Wind Power Generation	Germany	1.37%
Les Tilleuls Wind Farm	IC7010	Wind Power Generation	France	2%
Espiga & Arga Wind Farm	IC7010	Wind Power Generation	Portugal	2.08%
Scout Moor Wind Farm	IC7010	Wind Power Generation	UK	2.2%

## Valuation Analysis

This content is available in the client version only.

## Index Constituent Changes

During this quarter, no companies were removed from the index. We are focused on increasing the coverage of renewable power companies in infraMetrics to make it a rich and representative universe for the industry. Over the course of 2024 Q3, we added 9 Wind Power Generation and Solar Power Generation companies to the index. <sup>1</sup>

Table 4: Constituent Changes in the infraGreen index

Replaced Company	Sector Code	Sector Name	Country
Wild Cattle Hill Pty Ltd	IC7010	Wind Power Generation	Australia
Bürgerwindpark Neuenkirchen UG & Co. KG	IC7010	Wind Power Generation	Germany
The EWE Group	IC7010	Wind Power Generation	Germany
UK GREEN INVESTMENT GYM PARTICIPANT LIMITED	IC7010	Wind Power Generation	UK
Rhyl Flats Wind Farm Limited	IC7010	Wind Power Generation	UK
UK Green Investment Lytle Limited	IC7010	Wind Power Generation	UK
WMR JV Investco Limited	IC7020	Solar Power Generation	UK
Galloper Wind Farm Holding Company Limited	IC7020	Solar Power Generation	UK
SPOWER OPCO A, LLC	IC7020	Solar Power Generation	US

### One constituent is on the watchlist

We are monitoring the development of one company in the Solar Power Generation sector and have added it to the watchlist. This company is in potential financial difficulties and could be facing significant valuation write-downs. Table 5 shows the names of this company along with its sector and country.

Table 5: infraGreen watchlist as of 2024 Q3.

Company Name	Sector Code	Sector Name	Country
AndaSol Solar Power	IC7020	Solar Power Generation	Spain

## Index Methodology Changes

Index construction and calculation methodology remained unchanged this quarter.

Full index methodology is available [here](#).

## Index Governance

The infraGreen index is registered with ESMA. The Regulation (EU) 2016/1011, entered into force on 30 June 2016 and since 1 January 2018, its provisions apply and affect both EU and non-EU entities that administer indices that are used in the EU as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds. This Regulation aims to “ensure the accuracy and integrity of indices used as benchmarks in financial instruments and financial contracts, or to measure the performance of investment funds in the Union”. In compliance with EU Benchmark Regulation, Scientific Infra and Private Assets Pte Ltd has established governance and processes to control the calculation and reporting of its benchmarks. It is achieved through the following index committees:

### Index Oversight Committee

Chairman: Xavier Gendre

Voting members: Edward Grossi,

<sup>1</sup> For more information about infraGreen® indices, please visit <https://scientificinfra.com/>

Non-voting members: Moataz Farid

The Index Oversight Committee ensures oversight and to review integrity of all aspects of the provision of the benchmarks administered by the Company.

#### **Index Review Committee**

Chairman: Abhishek Gupta

Voting members: Jack Lee, Srinivasan Selvam

Non-voting members: Tim Whittaker

The Index Review Committee is responsible for interpreting index methodologies in exceptional cases when discretion is required in the application of the Index determination and calculation rules in the Company.

#### **Research and Index Offering Committee**

Chairman: Tim Whittaker

Voting members: Fabrice Lee Choon, Jianyong Shen

Non-voting members: Abhishek Gupta

The Research and Index Offering Committee is the decision-making authority in matters of methodologies for new offering and changes to existing methodologies and cessation of existing benchmarks in the Company.



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