# **Greencoat Renewables PLC product-level disclosure**

This report is published by the Manager, Schroders Greencoat, in compliance with the requirements set out in chapter 2 of the Environmental, Social and Governance sourcebook ("ESG Sourcebook") of the FCA Handbook that require certain UK asset managers and insurers to publish product level disclosures consistent with the Task Force on Climate-Related Financial Disclosures ("TCFD"). Unless otherwise disclosed at the end of this report, as the Greencoat Renewables plc's ("the Company's) approach to the consideration of climate-related risks and opportunities is consistent with that of Schroders Greencoat across Governance, Strategy, Risk management and Targets, please refer to the <u>Schroders Greencoat TCFD Entity Report</u> for information in this regard. The following report contains the information otherwise required under ESG Sourcebook 2.3, with the metrics following the calculations as contained in the TCFD annex.

**Report publication date:** 30/06/2024 **Reporting period:** 01/01/2023 – 31/12/2023

Calculation date: 31/12/23

#### **Fund information**

Fund information	Value
Link to entity-level report	Schroders Greencoat TCFD Entity Report
Fund identifier	GRP.IR & GRP.L
Fund name	Greencoat Renewables PLC
Currency	EUR
Net Asset Value (NAV)	€1,279,361
Gross Asset Value (GAV)	€2,621,509
Total investment in assets other than cash and cash equivalents, as a percentage of GAV	94%

## Data gaps and assumptions

All Schroders Greencoat carbon emissions were calculated by an independent expert, ITPEnergised, in line with the GHG Protocol. An equity share approach to the emission calculations has been followed meaning that GHG emissions are accounted for only from investee asset operations according to the Company's share of equity in the operations. Additionally, the emissions only account for assets in operation during the reporting period and do not account for those under acquisition or construction.

Carbon emissions data is sourced primarily from Operations & Maintenance teams that manage the Company's assets on a day-to-day basis. Proxy data is only used where primary emissions or activity data cannot be sourced and usually involves estimating emissions based on similar sites managed by Schroders Greencoat. Conversion factors are applied to activity data from publicly available emissions data sources including the UK Department for Business, Energy and Industrial Strategy, the International Energy Agency (IEA), and the US Environmental Protection Agency (EPA).

Scope 1 emissions includes Stationary Combustion and Fugitive and Process Emissions. Unless otherwise stated emissions are provided based on Scope 2 (market-based) for electricity imported. The Manager reports on material Scope 3 emissions for all assets. This currently covers Capital Goods, Purchased Goods and Services, Fuel and Energy Related Activities, Waste and Business Travel, to the extent available. Capital Goods includes embodied emissions associated with the assets that entered the Company during the year and became operational during the reporting period. Embodied emissions are estimated based on a high-level life cycle analysis (LCA) undertaken by ITPEnergised using Environmental Product Declarations outlining the quantities of materials used in the asset construction and associated components, including the construction and installation phase.

Carbon Footprint is calculated as total emissions, reflective of the Company's investment as a percentage of each asset's equity value, divided by the current value of all investments (i.e. the normalised value of the Company excluding any uncommitted capital or cash). Weighted Average Carbon Intensity (WACI) reflects the sum of the Company's outstanding investment in each asset, as a percentage of its equity value, multiplied by asset emissions per million of asset revenue generated.

"Data Reported" represents primary asset data converted into carbon emissions equivalent by a third party expert on behalf of the Manager for reporting purposes. "Data Reported Externally" covers assets for which there was no data, whereby data was extrapolated by the third party expert from similar assets managed by the Manager.

# Fund emissions metrics<sup>1</sup>

#	Metric	Definition	Scope	ope 2024			023	2022	
				Value	Coverage	Value	Coverage	Value	Coverage
1	Total carbon emissions  The absolute greenhouse gas emissions of a portfolio, expressed in tonnes CO <sub>2</sub> e. <sup>2</sup>	Scope 1 & 2			702	100%	532	100%	
		<u> </u>	Scope 3			238,760	100%	214,260	100%
		Total (1,2 & 3)			239,462	100%	214,792	100%	
2	Carbon Total carbon emissions for a	Scope 1 & 2			0.3	100%	0.3	100%	
	footprint	portfolio normalised by the value	Scope 3			96.9	100%	105.2	100%
	of the portfolio, expressed in tonnes CO₂e/€M invested.	Total (1,2 & 3)			97.2	100%	105.4	100%	
3	Weighted	Fund's exposure to carbon- intensive assets, expressed in tonnes CO₂e/€M revenue	Scope 1 & 2			1.95	100%	2.45	100%
	Average Carbon		Scope 3			8,146	100%	3,050	100%
	Intensity (WACI)		Total (1,2 & 3)			8,148	100%	3,053	100%

The following data quality metrics are relevant to the 'Total carbon emissions' metric above. Please note that these are reported as a percentage of total emissions reported for that category.

#	Metric	Definition	Scope	Measure			
				2024	2023	2022	
1	Data reported	Amount of data collected from investee company	Scope 1 and 2		100%	100%	
		reports, either directly or indirectly via third-party vendors.	Scope 3		100%	99.9%	
2	Data estimated	The amount of data that is estimated by Schroders	Scope 1 and 2		0%	0%	
	internally	using an internal methodology.	Scope 3		0%	0%	
3	Data estimated	The amount of data that is estimated by the third-	Scope 1 and 2		0%	0%	
	externally	party vendor.	Scope 3		0%	0.1%	

<sup>&</sup>lt;sup>1</sup> It is not required that 2022 data be reported under the ESG Sourcebook rules. The Manager has selected to disclose this data voluntarily to enhance the data made available to clients. <sup>2</sup> Scope 2 emissions are market based.

## **Fund Implied Temperature Rise and Climate Value at Risk**

Implied Temperature Rise (ITR) and Climate Value at Risk (Climate VAR) metrics are not currently available for the Company due to challenges associated with the availability of appropriate tools and methodologies for these metrics for real assets. We believe that the solutions which are currently available in the market do not correctly reflect the specific risks and profile of our assets and, therefore, using this data could potentially be misleading to investors. The Manager is investigating solutions for the determination of these metrics in the future and will, to the extent possible, seek to report against these in the next reporting period for the Company.

**Fund implied temperature rise** 

#	Metric	Definition	2024		20	23	2022		
			Value	Coverage	Value	Coverage	Value	Coverage	
1	Implied	ITR of the global economy by 2100 if it adhered	N/A	N/A	N/A	N/A	N/A	N/A	
	Temperature Rise	to the same ratio of undershoot/overshoot of the							
	(ITR)	portfolios aggregated carbon budget. <sup>3</sup>							

## **Fund scenario analysis**

For the purposes of this report, the Manager has qualitatively assessed the following three scenarios as set out under the Network for Greening the Financial System (NGFS) climate scenarios: an Orderly scenario (Net Zero 2050); a Disorderly scenario (Delayed Transition); and a Hot House World scenario (Current Policies). Data underlying the qualitative assessment of how such scenarios impact the Company and assets invested in by the Company is taken from the Phase IV NGFS IIASA Scenario Explora for transition pathways and economic data, and NGFS CA Climate Impact Explorer for physical risk data. Where country specific data was not available, data associated with the most applicable region was applied instead. The Manager has also drawn on the NGFS Climate Scenarios Technical Documentation and Scenarios Presentation.

#	Scenario	Definition	Climate Value at Risk (VaR)						Impact to the fund
				2024		2023	2022		
			Value	Coverage	Value	Coverage	Value	Coverage	
1	Orderly scenario	Aggregated physical and transition risk under a scenario where global warming is limited to 1.5°C by 2100.	N/A	N/A	N/A	N/A	N/A	N/A	Under the NGFS' Net Zero 2050 scenario (an Orderly scenario) assumptions, the net asset value of underlying assets, and therefore the Company, would benefit materially by 2050 due to the considerable increase in carbon prices required to support the climate policies and

<sup>&</sup>lt;sup>3</sup> 'Carbon budget' refers to the budget of GHG emissions allocated to the global economy in order to limit global warming to below 2.0°C by 2100 versus pre-industrial levels. This budget is then allocated to each individual company and aggregated to the portfolio. 'Undershoot/overshoot' refers to the aggregated amount that the portfolio is projected to either undershoot or overshoots its allocated 'carbon budget.'

									system wide change required to achieve Net Zero by 2050. From a physical risk perspective, it is forecast that by 2050 annual average wind speeds across Europe would be very marginally lower (0.4%) than a reference period of 1986-2006. The Manager believes that the impact on power prices is much more material than any potential negative impacts from physical risks based on this NGFS data and scenario.
2	Disorderly scenario	Aggregated physical and transition risk under a scenario where global warming is limited to 2.0°C by 2100.	N/A	N/A	N/A	N/A	N/A	N/A	Under the NGFS' Delayed Transition scenario (a Disorderly scenario) assumptions, the net asset value of underlying assets, and therefore the Company, would benefit considerably by 2050 due to the increase in carbon prices from 2030 required to support delayed climate policies and system wide change required to achieve Net Zero by 2050. From a physical risk perspective, it is forecast that by 2050 the annual average wind speeds across Europe would be marginally lower (0.6%) than a reference period of 1986-2006. The Manager believes that the impact on power prices is much more material than any potential negative impacts from physical risks based on this NGFS data and scenario.
3	Hot house world scenario	Aggregated physical and transition risk under a scenario where global warming is limited to 3.0°C by 2100.	N/A	N/A	N/A	N/A	N/A	N/A	Under the NGFS' Current Policies scenario assumptions, the net asset value of underlying assets is largely aligned to current forecasts by the Manager. From a physical risk perspective, it is forecast that by 2050 annual average wind speed across Europe would be marginally lower (1.4%) than a reference period of 1986-2006. The balance between moderately lower average wind speeds, and moderately increased power prices based on the NGFS data and scenarios, leads to a near overall alignment of the scenario forecasts with the Company's current NAV.

The findings of the high level assessment of the NGFS scenarios on the Company differ from those shown in the Net Zero scenario of the Manager's chosen power price consultant (see below). This is primarily because the outputs of the NGFS Net Zero 2050 and Delayed Transition scenarios project substantial increases in carbon prices which lead to significantly higher power prices. The resulting power prices are not adjusted for demand destruction or the other second order effects of elevated power prices. In the NGFS scenarios, carbon prices are set such that emissions constraints applied to each scenario are satisfied. The carbon prices are effectively shadow prices that reflect the policy ambition specified by the scenario (e.g., Net Zero by 2050). Policy intensity is sensitive to factors such as the strength of ambition to mitigate climate change, the timing of policy implementation, the distribution of policy measures across sectors and regions, and assumptions regarding technology (e.g., the availability and feasibility of carbon dioxide removal). The Manager believes that in practice there is a limit to carbon prices, and therefore power

prices, driven by the consumer affordability. This is not incorporated in the NGFS outputs that drive the above assumptions. It is however reflected in the Net Zero model outputs of the power price consultant set out below.

The Manager has assessed the potential impact of a high transition risk scenario using a third party Net Zero model built by leading power market consultants, as set out in the Company's Annual Report. The model sets out how electricity prices and the market may develop in line with meeting the legislated target of Net Zero emissions by 2050, including current and future policy implementation to achieve carbon neutrality, technological developments and commodity price forecasts for a global outlook.

In this high transition risk scenario, in which global temperature increases are limited to only 1.5°C to 2°C (most typically associated with Net Zero), it is assumed that the European governments are successful in implementing Net Zero plans albeit energy systems decarbonise later than targeted. In this scenario, the long term power price is lower than the base case used to calculate the Company's NAV. The lower long term power price, provided by the power market expert applying the Net Zero scenario, reflects the wider deployment of low marginal cost renewable generation capacity, partially offset by the expected increase in demand for renewable energy consumption linked to the deployment of electrolysers as part of a growing hydrogen economy, increased electrification of transport and heat and the build-out of data centres. Modelling the lower long term power price under this scenario would equate to approximately a 15.5 cent reduction in NAV per share compared to the base case long term power price currently used to forecast power prices. The base case long term power price assumes significant renewable generation deployment and other measures to reduce carbon emissions, it represents the independent consultant's best estimate of likely outturn.

The precise long term effect on power price of any measures (in all scenarios) is highly uncertain and is highly dependent on multiple factors, including but not limited to, future government policy, electricity market design, deployment of renewables and a reduction in demand.

# Material deviations from Group level approach

N/A	