

TCFD Product Disclosure 2023

Janus Henderson European Selected Opportunities Fund

Approach to Climate Change and ESG

Janus Henderson is committed to responsibility – both in our own Corporate Responsibility policies and practices and in Responsible Investing. We believe that ESG considerations, including climate change factors, can have a material impact on the financial outcomes of our investments; these financially material considerations are vital to long-term risk-adjusted returns.

Our firmwide ESG Investment Principles are based on four key beliefs:

- Investment portfolios are built to maximize long-term risk-adjusted returns for our clients.
- Evaluation of financially material sustainability, climate, and ESG factors is a fundamental component of our investment processes.
- Corporate engagement is vital to understanding and promoting business practices that position the companies we invest in for the future.
- Investment teams should have the freedom to interpret and implement sustainability factors in the way best suited to their asset class and strategy objective, as they do for any fundamental investment factor.

At Janus Henderson, we strive to equip our investment teams – analysts and portfolio managers – to manage financially material climate and ESG risks and opportunities within our portfolios. This includes providing training and a combination of third-party data and proprietary insights to enable our investment teams to assess risk at a security and portfolios level and evaluate the impact on the financial outcomes of each portfolio. This process is a journey on which we have made significant strides in recent years, yet we have identified ways in which we can continue to make progress. We have tangible initiatives underway to enhance the data, analytics, and skills of our investment teams.

We believe that active research and engagement, the foundation of Janus Henderson's investment processes, is the optimal way to identify and manage financially material climate and ESG risks and opportunities. The use of ESG and climate data – such as carbon emissions and Climate Value at Risk– is still in its infancy. Much of the data and third-party analytics are estimated and backward-looking, while availability across asset classes and issuers is often incomplete, therefore any conclusion drawn can be misleading and require interpretation and judgment. Our investment teams, who understand their portfolio holdings extremely well, and in partnership with the ESG subject matter experts on our central Responsibility Team, are best positioned to provide the necessary distinctive actionable insight.

Climate Change and ESG data, Metrics and Analytics

Janus Henderson has, and will continue, to improve the range of data, metrics, and analytics available to our investment teams.

ESG Data

Investment teams have access to a range of third-party data from providers such as MSCI, Sustainalytics, RepRisk and others. This data includes ESG ratings, risks and controversies, business-involvement, SDG-alignment and other climate and ESG related data sets such as EU Taxonomy and Principle Adverse Indicators.

Carbon and Climate Data

Our investment teams have access to a wide range of third-party climate data that is available, as appropriate, at both an issuer and portfolio level. We are in the early phases of comprehensive education, training and embedding of climate metrics and scenario analysis in the investment process. This data includes:

- Carbon metrics
- Climate scenario analysis, using a range of scenarios and assessed in detailed with respect to physical and transition risks
- Implied Temperature Rise
- Stranded asset risk, green revenues and low carbon transition opportunities

Proprietary ESG and Climate Dashboard

We are in the process of finalizing a firm-wide proprietary **ESG and Climate Dashboard** that will be available in 2023. Our Dashboard shows portfolio-level analytics for the factors we believe to be most material for all sectors and companies. It also identifies the leader and laggard issuers that contribute to the overall portfolio metrics. The Dashboard can help us uncover underappreciated risks and opportunities for the companies in which we invest - including by alerting us to changes and drawing attention to leaders and laggards across regions, sectors, and issuers. Key metrics included in this dashboard are:

Topic	Field name	Sovereign Factor		
Corporate Factor	Environmental	Carbon Emissions	GHG Intensity GDP	
		Scope 1 & 2	European Union (EU) Sanctions	
		Scope 3 – upstream	Average Income Inequality Score	
		Scope 3 – downstream	Average Freedom of Expression Score	
		Carbon Footprint	Human Rights	Average Human Rights Performance
		Scope 1 & 2	Governance	Average Corruption Score
		Scope 3 – upstream		Non-cooperative Tax Jurisdiction
		Scope 3 – downstream		Average Political Stability Score
		Weighted Average Carbon Intensity (WACI)		Average Rule of Law Score
		Scope 1 & 2		
		Scope 3 – upstream		
		Scope 3 – downstream		
	Energy Consumption Intensity per Revenue			
	Weighted Average High Risk Carbon Emissions			
	Weighted Average High Risk Toxic Emissions			
	Weighted Average High Risk Water Stress			
	Social & Governance	Board Gender Diversity		
		< 1 Female Director		
		< 30% Female Directors (% Weight)		
		Not Independent Chair (% Weight)		
Global Norms	No Independent Board Majority (% Weight)			
	Overboarded Non-Exec Directors (% Weight)			
	UN Global Compact			
Controversies	Pass			
	Watch List			
	Fail			
Controversies	Controversy Score			

Team-or Asset Class Proprietary Dashboards

Teams can add anything they use that specific to them (e.g., FI scoring system).

Identification, Analysis, Management of Financially Material Climate and ESG Risks and Opportunities

We believe that our investment teams are best positioned to research, analyze, and determine the impact of financially material climate and ESG risks and opportunities on both issuers and portfolios.

Integration of climate and ESG considerations needs to align with existing investment processes. It is our investment teams that are primarily responsible for the research, financial modelling, portfolio construction and stewardship activities. Having Investment teams lead the integration process for climate and ESG risks and opportunities ensures that there is integration at each appropriate stage of the investment process, including portfolio decisions. Our investment teams are supported by our central Responsibility Team, who are subject matter experts in ESG. This team manages ESG data, training, and partners with the investment teams on research and engagement. This partnership leads to enhanced research and decision-making – marrying the sector and industry expertise of the investment teams with the ESG skills of the Responsibility Team.

This process is a combination of bottom-up analysis, starting at the issuer level and is increasingly leveraging portfolio-level data for an incremental lens and layer of oversight. For bottom-up analysis, our investment teams have access to the issuer-level and portfolio-level third-party data described previously. They leverage this data to identify potentially financially material climate and ESG risks and opportunities as they research their issuers. They may consider and utilize third-party financial materiality frameworks (such as SASB, mapping material factors to data from MSCI) in conjunction with their own knowledge, to focus on the issues likely to be most material.

The geographical domicile of the issuer or its assets can also impact materiality. The investment teams potentially conduct engagements to both obtain further insight on the climate or ESG issue and often to encourage the issuer to better manage these issues to best-position the company for future success. As part of the research process, investment teams assess the materiality and the impact on relevant financial metrics for the issuer, which could include cash flows, valuation, cost of capital, or credit ratings. This research and insight flow into the investment decision, similar to how an investment team would consider any financially material factor. Should a material unmanaged risk be identified and quantified, we evaluate the impact on a securities price and risk-adjusted return. Should we believe the risk is not fully priced in, the portfolio impact could include escalation through further engagement, reweighting of position sizes, changing target prices, or divestment for outsized unmanaged risks.

Increasingly, we are marrying portfolio-level analysis with the bottom-up process to identify, analyze and manage financially material climate and ESG risks. The proprietary ESG and Climate Dashboard will enable investment teams to quickly identify any material climate or ESG risks at the portfolio level, then drill down to issuer to better understand the source of those risks.

Engagement vs Exclusion or Divestment

We prefer an engagement-focused approach to a firm-level exclusion or divestment policy, both in sectors with higher environmental risk and for issuers where we have identified financially material climate or ESG risks.

We believe this approach is best for maximizing risk-adjusted returns for our clients and for driving positive change at our portfolio companies. Most products and services offered by an issuer play necessary roles for the global economy – including sectors with higher carbon emissions such as oil and gas, mining, industrials, and utilities. Rather than ignoring issuers in these sectors through automatic exclusion or divestment, engagement leads to two benefits. First, we can engage for information – the knowledge we gain through our engagements with issuers can be leveraged in the investment process to better inform our research, modelling, and investment decisions. Engaging for information helps us assess the magnitude of any potential risk, how well an issuer is managing that risk, and the potential impact on that issuer’s financial outcomes. Second, we can engage for outcomes. Where we believe an issuer is ignoring or not managing a financially material climate or ESG risk, we can engage for an outcome – to encourage that issuer to adopt policies or practices that will address that risk and better position it for the future. This includes asking for issuers to enhance their disclosure of material ESG or climate data, such as carbon emissions. Our discussions with the issuer’s management or board of directors directly link the climate or ESG consideration to why we believe addressing it makes them a better company, leading to improved cash flows, valuations, cost of capital, or credit ratings. Our investment teams often partner with our central Responsibility Team on engagements. The professionals on our Responsibility Team are both engagement and ESG subject matter experts, that can assist in identifying and researching the engagement topics and facilitating the engagements themselves.

Governance and Oversight

We continue to strengthen the governance and oversight of climate and ESG risks.

Our Investment Teams are at the core of our governance process and bear the primary responsibility for identifying, analyzing, and integrating financially material ESG and climate considerations. In addition, we have established oversight mechanisms.

Our ESG Oversight Committee, chaired by our Chief Responsibility Officer, provides oversight of a range of issues at a portfolio and security level, including monitoring of issuer-level positions for investments identified as having climate or ESG risks.

In 2022, our second-line financial risk team started providing portfolio-level oversight of climate and ESG risks, using the ESG and Climate dashboard. Also, in 2023, our Investment Performance & Risk Committee and our Front Office Governance & Risk Committee will provide oversight for their respective areas of governance.

Lastly, starting in 2023, our Board of Directors will provide top-level oversight of Climate and ESG Risks. Our Chief Responsibility Officer will provide quarterly updates to the Governance and Nominations Committee on both operational and investment issues.

Portfolio Climate Metrics

Below are the carbon footprint metrics for this portfolio used to assess climate related risks and opportunities.

The combination of these metrics provides a multi-dimensional view of the portfolio's climate risk exposures and provide useful insights about the portfolio holdings when assessing climate risks and opportunities.

It is important to note that climate risk considerations are part of the wider investment decision making about the attractiveness of an investment and will not explicitly supersede other inputs in security selection unless explicit climate risk management is an objective of the mandate.

Since around 2017 the strategy has screened as having higher-than-benchmark carbon emissions on a scope 1, 2 and 3 basis. This derives from our view of attractive risk/reward opportunities offered by stocks in the materials, chemicals and energy sectors. Carbon intensity – or more specifically, its rate of change in the years ahead - is actively considered in our investment evaluation process. We will look for ambitious, often 'Science Based Targets Initiative' (SBTI) approved targets for a reduction in carbon intensity over the coming years. We will cross-check these targets with the operating and/or capital expenditure that will be committed to fund the required initiatives; for example, the European energy majors plan to spend, on average, in excess of 30% of annual capital expenditure on their renewable energy business expansions. We believe credible, well-considered carbon intensity targets assist us in identifying the best-in-class operational talent that is fundamental to our investment philosophy.

Allocation Base	EVIC	Unit	Portfolio	Coverage	Benchmark	Coverage
Carbon Emissions						
Total Carbon Emissions	Scope 1 & 2	Tons CO2e	471,214.1	97.0%	170,542.0	99.6%
Total Carbon Emissions	Scope 3 – upstream	Tons CO2e	343,221.6	97.0%	258,535.2	99.6%
Total Carbon Emissions	Scope 3 – downstream	Tons CO2e	839,318.6	97.0%	453,654.4	99.6%
Carbon Footprint						
Total Carbon Footprint	Scope 1 & 2	Tons CO2e/\$M invested	210.7	97.0%	76.2	99.6%
Total Carbon Footprint	Scope 3 – upstream	Tons CO2e/\$M invested	153.4	97.0%	115.6	99.6%
Total Carbon Footprint	Scope 3 – downstream	Tons CO2e/\$M invested	375.2	97.0%	202.8	99.6%
Weighted Average Carbon Intensity (WACI)						
WACI Corporate Constituents	Scope 1 & 2	Tons CO2e/\$M revenue	372.9	97.0%	120.8	99.8%
WACI Corporate Constituents	Scope 3 – upstream	Tons CO2e/\$M revenue	347.5	97.0%	296.4	99.7%
WACI Corporate Constituents	Scope 3 – downstream	Tons CO2e/\$M revenue	619.4	97.0%	357.7	99.7%
WACI Sovereign Constituents	GHG Intensity	Tons CO2e/\$M GDP nominal	N/A	N/A	N/A	N/A
Portfolio Temperature Alignment						
Implied Temperature Rise		Degrees Celsius	2.1	97.0%	2.1	99.7%

Source: MSCI

The funds benchmark is:
FTSE World Europe Ex UK
Index

Climate Scenario Analysis

Significant progress has been made in 2022 and more will be made in 2023 on our journey to equipping our investment teams with the data and the capabilities to properly assess the accuracy and impact of the information contained in climate scenario analysis.

The data is currently available to every team and some training has been conducted. In 2023, we hope to deepen our investment teams' knowledge of the insight and the limitations of the data to robustly embed the usage of it in investment management processes. As previously noted, climate scenario analysis is still in its infancy, with issues in data and analytical accuracy that require interpretation. It is imperative that we understand how the data and analysis were developed in order to understand the limitations, contextualize it, and leverage true insights in our investment management process.

Climate scenario analysis helps us analyse at the portfolio and issuer level:

(a) transition risks and opportunities (policy risks resulting in the asset being impacted by societal and economic shifts towards a low-carbon future; and technological opportunities such as innovations in clean technology)

(b) physical risk, which is the impact on the asset of environmental events such as floods or storms.

Based on input from our ESG subject-matter expert in the central Responsibility team, we have selected three NGFS transition risk scenarios and two physical risk scenarios (Average and Aggressive) to provide a forward-looking and return-based valuation assessment. The scenario analysis of this portfolio as of 4Q 2022 is below.

Scenario: REMIND 1.5c Orderly Average	Climate VaR Contribution	Coverage	Benchmark	Coverage
Transition Climate VaR – Policy	-24.0%	97.0%	-12.1%	99.7%
Transition Climate VaR – Technology	8.8%	97.0%	7.2%	99.7%
Physical Climate VaR	-9.8%	94.1%	-12.5%	98.1%
Aggregated Climate VaR	-25.0%	N/A	-17.4%	N/A

Source: MSCI

Scenario: REMIND 1.5c Disorderly Aggressive	Climate VaR Contribution	Coverage	Benchmark	Coverage
Transition Climate VaR – Policy	-51.7%	97.0%	-38.8%	99.7%
Transition Climate VaR – Technology	30.9%	97.0%	19.3%	99.7%
Physical Climate VaR	-12.1%	94.1%	-15.2%	98.1%
Aggregated Climate VaR	-32.9%	N/A	-34.8%	N/A

Source: MSCI

Scenario: REMIND 3.0c Hot House Aggressive	Climate VaR Contribution	Coverage	Benchmark	Coverage
Transition Climate VaR – Policy	-6.2%	97.0%	-2.8%	99.7%
Transition Climate VaR – Technology	0.3%	97.0%	0.3%	99.7%
Physical Climate VaR	-12.1%	94.1%	-15.2%	98.1%
Aggregated Climate VaR	-17.9%	N/A	-17.7%	N/A

Source: MSCI

The strategy screens as having greater-than-benchmark climate 'value at risk' (VaR) in one of the three scenarios enclosed; '1.5c Orderly Average'. The deviation in comparison with the benchmark is primarily due to a perceived greater 'Policy VaR' in this scenario, which in turn is driven by investments held in carbon intensive sectors such as materials, chemicals and energy. However, it is worth noting that 'Policy VaR' is calculated using a number of relatively subjective assumptions, including potential regulatory policy actions towards specific industries within specific territories. Further, this calculation is applied to a company's current asset base composition. The reality is that many companies are constantly undergoing portfolio change and so the geographical (and even industrial) make up of a company – and therefore its policy risk - is likely to be different in the future than calculated today. It is worth noting that the technology opportunities inherent within the strategy tend to exceed the benchmark; this is in fact due to the significant investments being made by the most carbon intensive companies. Finally, 'Physical Climate VaR' is calculated to be lower than the benchmark, which corresponds to the primarily large –market capitalisation and therefore usually geographically diversified – composition of the strategy.

Glossary and Abbreviations

CARBON FOOTPRINTING refers to the calculation of the total greenhouse gas emissions caused by an individual, event, organization, service, or product expressed as a carbon dioxide equivalent.

CLIMATE-RELATED OPPORTUNITY refers to the potential positive impacts related to climate change on an organization. Efforts to mitigate and adapt to climate change can produce opportunities for organizations, such as through resource efficiency and cost savings, the adoption and utilization of low-emission energy sources, the development of new products and services, and building resilience along the supply chain. Climate-related opportunities will vary depending on the region, market, and industry in which an organization operates.

CLIMATE-RELATED RISK refers to the potential negative impacts of climate change on an organization. Physical risks emanating from climate change can be event-driven (acute) such as increased severity of extreme weather events (e.g., cyclones, droughts, floods, and fires). They can also relate to longer-term shifts (chronic) in precipitation and temperature and increased variability in weather patterns (e.g., sea level rise). Climate-related risks can also be associated with the transition to a lower-carbon global economy, the most common of which relate to policy and legal actions, technology changes, market responses, and reputational considerations.

GOVERNANCE refers to “the system by which an organization is directed and controlled in the interests of shareholders and other stakeholders.”

GREENHOUSE GAS (GHG) EMISSIONS SCOPE LEVELS

- Scope 1 refers to all direct GHG emissions.
- Scope 2 refers to indirect GHG emissions from consumption of purchased electricity, heat, or steam.
- Scope 3 refers to other indirect emissions not covered in Scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. Scope 3 emissions could include the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g., transmission and distribution losses), outsourced activities, and waste disposal.

NGFS The Network for Greening the Financial System is a group of 91 central banks and supervisors and 14 observers committed to sharing best practices, contributing to the development of climate –and environment– related risk management in the financial sector and mobilising mainstream finance to support the transition toward a sustainable economy. NGFS have developed climate scenarios to provide a common starting point for analysing climate risks to the economy and financial system.

RISK MANAGEMENT refers to a set of processes that are carried out by an organization’s board and management to support the achievement of the organization’s objectives by addressing its risks and managing the combined potential impact of those risks.

SCENARIO ANALYSIS refers to a process for identifying and assessing a potential range of outcomes of future events under conditions of uncertainty. In the case of climate change, for example, scenarios allow an organization to explore and develop an understanding of how the physical and transition risks of climate change may impact its businesses, strategies, and financial performance over time. Each NGFS scenario used in this disclosure explores a different set of assumptions for how climate policy, emissions and temperatures evolve.

- i. **NGFS SCENARIO 1.5°C ORDERLY: Net Zero 2050** limits global warming to 1.5°C through stringent climate policies and innovation, reaching global net zero CO2 emissions around 2050. Some jurisdictions such as the US, EU and Japan reach net zero for all GHGs.
- ii. **NGFS SCENARIO 1.5°C DISORDERLY: Divergent Net Zero** reaches net zero around 2050 but with higher costs due to divergent policies introduced across sectors leading to a quicker phase out of oil use
- iii. **NGFS SCENARIO 3°C HOT HOUSE: Current Policies** assumes that only currently implemented policies are preserved, leading to high physical risks.

Science Based Targets initiative (SBTi) is a partnership between CDP (formerly the Carbon Disclosure Project), the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). Their goal is to drive ambitious climate action in the private sector by enabling organizations to set science-based emissions reduction targets. Science-based targets provide a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions, helping prevent the worst impacts of climate change and future-proof business growth. Targets are considered ‘science-based’ if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels.

STRATEGY refers to an organization’s desired future state. An organization’s strategy establishes a foundation against which it can monitor and measure its progress in reaching that desired state. Strategy formulation generally involves establishing the purpose and scope of the organization’s activities and the nature of its businesses, taking into account the risks and opportunities it faces and the environment in which it operates.

TRANSITION PLAN refers to an aspect of an organization’s overall business strategy that lays out a set of targets and actions supporting its transition toward a low-carbon economy, including actions such as reducing its GHG emissions.

Abbreviations

CO2	Carbon dioxide	PCAF	Partnership for Carbon Accounting Financials
CO2e	Carbon dioxide equivalent	EVIC	Enterprise Value Including Cash
SBTi	Science Based Targets Initiative	GHG	Greenhouse gas
WACI	Weighted Average Carbon Intensity	PAI	Principle Adverse Impacts
SASB	Sustainability Accounting Standards Board		

TCFD Task Force on Climate-related Financial Disclosures