

Consultation on Potential Enhancements to MSCI ESG Screened Indexes

SEPTEMBER 2022

This consultation may or may not lead to the implementation of any or all of the proposed changes in the highlighted or any other MSCI indexes. Consultation feedback will remain confidential. MSCI may publicly disclose feedback if specifically requested by specific market participants. In that case, the relevant feedback would be published together with the final results of the consultation.

Summary

- MSCI proposes to enhance the MSCI ESG Screened Indexes methodology to incorporate additional screens in the areas of climate, biodiversity & waste, and compliance with international standards.
- These enhancements aim to reflect evolution in the sustainable finance space, such as the Sustainable Finance Disclosure Regulation (SFDR) and the Markets in Financial Instruments Directive II (MiFID II).
- Under the proposal, the MSCI ESG Screened Indexes would continue to apply a pure building block approach (i.e., same companies excluded across country, regional and global indexes). However, MSCI also welcomes feedback on potential alternative approaches, such as the incorporation of a carbon footprint reduction objective and/or the consideration of a minimum proportion of “sustainable investments”, as per the definition in Article 2(17) of SFDR.
- In parallel with the proposal, MSCI is considering the introduction of a “MSCI Core Screened”^{*} index series that would continue the objective of the current MSCI ESG Screened Indexes methodology to manage key, non-region-specific headline risk by excluding companies involved in relevant controversial activities and/or very severe controversies.
- MSCI invites feedback from market participants on or before **October 7, 2022** and will announce the results of the consultation as well as the implementation timeline on or before **October 14, 2022**.

Background – Regulatory Developments

- As part of the EU Financing Sustainable Growth Action Plan,
 - The **EU Sustainable Finance Disclosure Regulation (SFDR)*** was established to lay down harmonized rules for financial market participants and financial advisers on transparency with regard to the integration of sustainability risks, the consideration of adverse sustainability impacts in their processes and the provision of sustainability-related information with respect to financial products. This includes de facto labels Article 8 and 9. The SFDR RTS was published in the Official Journal on July 25, 2022.
 - The **Markets in Financial Instruments Directive II (MiFID II)**** was modified to integrate client's preferences in terms of sustainability to augment the existing suitability assessments centered on return/risk profiles. There are three sustainability preferences categories for financial instruments (see next page).
- In addition, numerous proposals and/or regulations*** were issued related to financial instruments' naming convention, including those from the US SEC, EU Commission SFDR, France AMF, Germany BaFin, Singapore MAS, Australia ASIC, Hong Kong SFC, Taiwan FSC, amongst others.

Sources:

* [EUR-Lex - 32019R2088 - EN - EUR-Lex \(europa.eu\)](https://eur-lex.europa.eu/lexuris/ui/entry.do?entryId=32019R2088) | [https://ec.europa.eu/finance/docs/level-2-measures/C_2022_1931_1_EN_ACT_part1_v6%20\(1\).pdf](https://ec.europa.eu/finance/docs/level-2-measures/C_2022_1931_1_EN_ACT_part1_v6%20(1).pdf)

** [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=PI_COM:C\(2021\)2616&from=LV](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=PI_COM:C(2021)2616&from=LV)

*** Please refer to the Appendix for examples of regulations that incorporate naming convention considerations.

Background – MiFID II Sustainability Preference Categories

To enable investment firms that provide investment advice and portfolio management to recommend suitable products to their clients, those investment firms should introduce in their suitability assessment questions that help identify the client's individual [ESG preferences](#)*.



Taxonomy Alignment

- Financial instruments that pursue a minimum proportion of sustainable investments in economic activities that qualify as environmentally sustainable under the EU [Taxonomy Regulation](#)**
- **Focus:** Impact as defined using revenue, capex, and/or opex
- **Characteristics:** highly concentrated



Sustainable Investment

- Financial instruments that pursue a minimum proportion of sustainable investments as defined in EU [SFDR Regulation](#)*** Art. 2 (17)
- **Focus:** Impact but without prescribed approach for measurement
- **Characteristics:** could be highly concentrated if based on financial indicators, or broad if more loosely measured



Principal Adverse Impact

- Financial instruments that consider principal adverse impacts (PAI) on sustainability factors, as laid out in the EU [SFDR Regulation](#)***
- **Focus:** Removal of downside risks without prescribed measurement
- **Characteristics:** largely broad-based; depends on the level of restriction in terms of number of PAIs considered and the thresholds to assess improvement

The MSCI ESG Screened Indexes, given their focus on excluding key controversial business activities, appear to be more aligned with the "PAI" category, but may require more screens.

"Impact"
~ **SFDR Article 9**

"Values"
~ **Article 8?**

Current MSCI ESG Screened Indexes Methodology vs. PAI

	EU SFDR PAI Indicator	Current Screen	Potential Alignment
CLIMATE / ENVIRONMENT	1-3. GHG Emissions / Carbon Footprint / GHG intensity of investee cos.	Fossil Fuel Extraction*	Limited alignment
	4. Exposure to companies active in the fossil fuel sector	Fossil Fuel Extraction	Partial alignment
	5. Share of non-renewable energy consumption and production	Thermal Coal Power	Limited alignment
	6. Energy consumption intensity per high impact climate sector	-	None
	7. Activities negatively affecting biodiversity-sensitive areas	Controversies	Limited alignment
	8. Emissions to water	Controversies	Limited alignment
	9. Hazardous waste ratio	Controversies	Limited alignment
SOCIAL / EMPLOYEE	10. Violations of UNGC principles and OECD Guidelines (for MNEs)	Controversies UN Global Compact	Strong alignment
	11. Lack of processes and compliance mechanisms to monitor compliance with UNGC principles and OECD Guidelines	Controversies* UN Global Compact*	Limited alignment
	12. Unadjusted gender pay gap	Controversies*	Limited alignment
	13. Board gender diversity	-	None
	14. Exposure to controversial weapons	Controversial Weapons	Strong alignment (stricter than PAI)

Proposed Enhancements



Key Considerations in Evolving the MSCI ESG Screened Indexes Methodology

Aim to enhance the screens to address, on a best-efforts basis, most, if not all, mandatory principal adverse impact (PAI) indicators

Aim to incorporate a stronger ESG conviction, in line with emerging naming regulatory requirements, while balancing the impact (increase) in tracking error

Aim for continuity in index construction by maintaining a building block approach and keep using data as 'factual' as possible

Aim to align the new screens to existing standard exclusion frameworks* and/or screens applied in other MSCI ESG and Climate indexes

Summary of Proposed Enhancements

Existing Exclusion Screens		
Current Methodology (Reference)	<ul style="list-style-type: none"> Controversial Weapons Nuclear Weapons* Civilian Firearms* Tobacco* 	<ul style="list-style-type: none"> Fossil Fuel Extraction Thermal Coal Power MSCI ESG Controversies (“Red Flags”) UN Global Compact (UNGC) violators

Proposed Additional Exclusion Screens		
Proposal 1: Climate	<ul style="list-style-type: none"> Carbon Footprint – Top 5% Fossil Fuel Reserves Ownership 	<ul style="list-style-type: none"> Fossil Fuel Power Energy Management
Proposal 2: Biodiversity / Emissions & Waste	<ul style="list-style-type: none"> Biodiversity Management Toxic Emissions & Waste Controversies 	<ul style="list-style-type: none"> Palm Oil Biocides Arctic Oil & Gas Extraction
Proposal 3: Social and Employee Matters	<ul style="list-style-type: none"> International Standards: <ul style="list-style-type: none"> UN Global Compact (UNGC) Labor Rights (ILO) Human Rights (UNGPHR) 	

Proposed MSCI ESG Screened Indexes Methodology vs. PAI

	EU SFDR PAI Indicator	Current Screen	Additional Screen**
CLIMATE AND OTHER ENVIRONMENT	1-3.GHG Emissions / Carbon Footprint / GHG intensity of investee cos.	Fossil Fuel Extraction*	Carbon Footprint – Top 5%
	4. Exposure to companies active in the fossil fuel sector	Fossil Fuel Extraction	FF Reserves Ownership
	5. Share of non-renewable energy consumption and production	Thermal Coal Power	Fossil Fuel Power
	6. Energy consumption intensity per high impact climate sector	-	Energy Management
	7. Activities negatively affecting biodiversity-sensitive areas	Controversies	Biodiv Mgmt. + Screens
	8. Emissions to water	Controversies	Toxic Emissions & Waste Controversies
	9. Hazardous waste ratio	Controversies	
SOCIAL AND EMPLOYEE MATTERS	10. Violations of UNGC principles and OECD Guidelines (for MNEs)	Controversies UN Global Compact	-
	11. Lack of processes and compliance mechanisms to monitor compliance with UNGC principles and OECD Guidelines	Controversies* UN Global Compact*	International Standards
	12. Unadjusted gender pay gap	Controversies*	
	13. Board gender diversity	-	
	14. Exposure to controversial weapons	Controversial Weapons Nuclear Weapons	-

Proposal 1 – Climate

PAI	Proposed Screen	Details*	Rationale	Top 3 Extra Names Excluded**
1-2-3	Carbon Footprint – Top 5%	Top 5% companies by emission intensity OR potential emissions UNLESS companies have Science Based Targets	<ul style="list-style-type: none"> • Manage headline risk • Building block approach 	BP (GB) RIO TINTO PLC (GB) MARATHON PETROLEUM (US)
4	Fossil Fuel Reserves Ownership	All companies with evidence of ownership of fossil fuel reserves, used for energy application	<ul style="list-style-type: none"> • Mitigate stranded asset risk • Aligned with MSCI SRI / ex-Fossil Fuels Indexes 	BERKSHIRE HATHAWAY (US) SHELL (GB) TOTALENERGIES (FR)
	Fossil Fuel Extraction	Revenues from thermal coal + unconventional oil & gas extraction > 0% (vs. 5% currently)	Aligned with MSCI SRI Indexes	
5	Fossil Fuel Power	Fossil fuel power generation ≥ 50%	<ul style="list-style-type: none"> • Aligned with MSCI Climate Paris Aligned Indexes • Proxy for non-renewable production only 	SAUDI ELECTRICITY CO (SA) GULF ENERGY DVPMT (TH) ACWA POWER COMPANY (SA)
6	Energy Management	Exposure to carbon-intensive business activities >= 50% AND No evidence of energy efficiency management	See page 13	DELTA AIR LINES (US) SAUDI INDL INV GROUP (SA) AIR CANADA (CA)

* Precise proposed rules can be found in Appendix.

** Simulation as of September 1, 2022, based on data from MSCI ESG Research as of August 31, 2022.

Proposal 1 – Climate > Carbon Footprint Top 5%

PAI 1-2-3: GHG Emissions / Carbon Footprint / GHG intensity

Proposed Screen: **Carbon Footprint – Top 5%**
 Scope 1+2+3 emission intensity (based on EVIC) > MSCI ACWI threshold OR
 Potential emissions (ex Metallurgical Coal) > MSCI ACWI threshold

Why define unique thresholds based on MSCI ACWI?

The same thresholds would be applied across all MSCI ESG Screened Indexes, hence preserving the building block approach (i.e., same companies excluded across country, regional and global indexes).

Levels of carbon reduction for World / EM ESG Screened Indexes under the current vs. proposed methodology:

Carbon Metrics	World			EM		
	Parent	Current	Proposal	Parent	Current	Proposal
Carbon Intensity Scope 1+2 (Wtd Avg t CO2e / \$M EVIC)	44	29	19	127	92	46
Carbon Intensity Scope 1+2+3 (Wtd Avg t CO2e / \$M EVIC)	341	256	155	624	426	264
Carbon Intensity Scope 1+2 (Wtd Avg t CO2e / \$M Sales)	147	93	84	367	234	162
Carbon Intensity Scope 1+2+3 (Wtd Avg t CO2e / \$M Sales)	1,025	729	619	1,550	1,114	866

Proposal 1 – Climate > Carbon Footprint Top 5%

DISCUSSION POINTS

- An alternative approach to the “carbon footprint – top 5%” screen could be to ensure that a minimum percentage of reduction in emission intensity is achieved versus the parent index.
- This would involve excluding securities only if this is necessary to reach the target reduction level.

Discussion points:

- Is it appropriate to apply a systematic exclusion of companies based on carbon footprint (top 5%) in order to reduce the index emissions?
- Alternatively, should the methodology target a minimum percentage of reduction of emission intensity for each MSCI ESG Screened index, even if this implies moving away from the building block approach?

Proposal 1 – Climate > Energy Management

PAI 6: Energy consumption intensity per high impact climate sector

Proposed Proxy: **≥ 50% Threshold**

Assumption: A company with majority exposure to carbon-intensive business activities is likely to have high energy consumption.

Proposed Proxy: **Exposure to carbon-intensive business activity**

ACWI IMI COVERAGE: > 99% by count

Why not use the NACE-based classification for High Impact Climate Sector?

Given that the classification is binary (high/low), this would capture approximately two-thirds of the MSCI ACWI Investable Market Index (IMI) (by count) without taking into consideration company-specific nuances – e.g., a company may have a mix of high, medium, or low carbon-intensive business activities.

Additional Condition Applied:

To account for sector bias in terms of energy consumption intensity, as well as recognize climate transition considerations, a proposed condition is that **companies flagged above are excluded only if**

Energy efficiency management = No evidence

ACWI IMI COVERAGE: ~ 97% by count

Rationale: This helps to account for an actual lack of effort to mitigate companies' energy consumption intensity

Proposal 2 – Biodiversity / Emissions & Waste

PAI	Proposed Screen	Details*	Rationale	Top 3 Extra Names Excluded**
7	Biodiversity Management	(Operates in biodiversity-sensitive areas OR Biodiversity Exposure Score ≥ 7.5) AND (Biodiversity Management Score < 2.5 OR Key biodiversity-related controversy scores*** ≤ 2)	See page 15	SHELL (GB) BP (GB) ARCHER-DANIELS-MIDLAND (US)
	Palm Oil / Biocides / Arctic Oil & Gas Extraction	<ul style="list-style-type: none"> • Palm Oil: Highly Restrictive AND RSPO**** certification $< 50\%$ • Biocides: Highly Restrictive • Arctic Oil & Gas Extraction $> 0\%$ 	Limit exposure to companies involved in activities with harmful biodiversity impact	BERKSHIRE HATHAWAY (US) SHELL (GB) TOTALENERGIES (FR)
8-9	Toxic Emissions & Waste Controversies	Toxic Spills & Releases controversy score ≤ 2 (Very Severe and Ongoing Severe cases)	Proxy to represent harmful impact as evidenced by controversies, given limited disclosure on hazardous waste and water emissions	SHELL (GB) BP (GB) GENERAL ELECTRIC CO (US)

* Precise proposed rules can be found in Appendix.

** Simulation as of September 1, 2022, based on data from MSCI ESG Research as of August 31, 2022.

*** Represents Very Severe and Ongoing Severe cases related to the following categories: Environment - Land Use and Biodiversity Score, Environment - Supply Chain Management Score, Environment - Toxic Spills & Releases Score.

**** Roundtable for Sustainable Palm Oil.

Proposal 2 – Biodiversity / Emissions & Waste > Biodiversity Mgmt

PAI 7: Activities negatively affecting biodiversity-sensitive areas

**Operations in biodiversity-sensitive areas (SFDR Metric) OR
Biodiversity Exposure Score ≥ 7.5**

ACWI IMI COVERAGE: > 99% by count for either factor

Why not use only the SFDR PAI metric?

Given that the SFDR metric is completely reliant on disclosure, a “Not Disclosed” assessment does not necessarily mean that a company does not have activities in biodiversity-sensitive or protected areas. Hence, the proposal is to supplement it with MSCI ESG Research’s exposure data.

Additional Condition Applied:

Considering that operations in biodiversity-sensitive areas may or may not translate into actual negative impact on such areas, we include an additional condition for excluding companies:

Biodiversity Management Score < 2.5 OR Key Controversy scores* ≤ 2

ACWI IMI COVERAGE: ~ 88% by count (management score) | ~97% by count (controversies)

A company’s exposure score (0-10) is based on the combination of the company’s business and geographic risk exposure, pro-rated based on the distribution of its business activities and operational footprint. The highest risk quartile is defined based on an absolute score of 7.5 (rather than relative to the universe distribution).

A company’s management score (0-10) is based on its policies & disclosure, programs & structure, and performance in terms of efforts to manage biodiversity and engage community stakeholders. The lowest management quartile is defined based on an absolute score of 2.5 (rather than relative to the universe distribution).

Proposal 3 – Social and Employee Matters

PAI	Proposed Screen	Details*	Rationale	Top 3 Extra Names Excluded**
11-13	International Standards	<p>No evidence of UNGC compliance mechanism AND included in UNGC Watch List</p> <p>OR</p> <p>No evidence / disclosure of ILO Due Diligence AND included in ILO Watch List</p> <p>OR</p> <p>No disclosure of Human Rights Due Diligence AND included in UNGPBHR Watch List</p>	See page 17	<p>AMAZON.COM (US)</p> <p>ALPHABET (US)</p> <p>JOHNSON & JOHNSON (US)</p>

* Precise proposed rules can be found in Appendix.

** Simulation as of September 1, 2022, based on data from MSCI ESG Research as of August 31, 2022.

Proposal 3 – Social and Employee Matters > Int’l Standards

PAI 11: Lack of processes and compliance mechanisms to monitor compliance with UNGC principles and OECD Guidelines

PAI 12: Unadjusted gender pay gap

PAI 13: Board gender diversity

UNGC: lack of compliance mechanism + Watch List

ACWI IMI COVERAGE: ~86% by count (mechanism) | ~ 98% by count (controversies)

(1) ILO: lack of due diligence + Watch List,

(2) UN GPBHR: lack of due diligence + Watch List

ACWI IMI COVERAGE: > 99% (due diligence) | ~ 98% (controversies)

Why use International Norms screening in addition to the SFDR PAI metrics?

SFDR metrics related to PAIs 11 (UNGC compliance mechanism) and 12 (ILO due diligence) are disclosure driven. Hence, “Not disclosed” does not necessarily mean non-compliance and/or concerns around gender pay or board representation.

- Only ~40% of MSCI ACWI IMI disclose a Labor Due Diligence Policy, while only 17% have a mechanism to monitor UNGC compliance
- Only ~6% disclose gender pay gap ratios, and it is unclear whether the ratios are representative of the entire organization

Also, investors have highlighted concerns around stability and reliability of underlying metric related to PAI 13 (women on board).

Note: The international norms data from MSCI ESG Research leverages the MSCI ESG Controversies framework. As such, the current screen for companies with MSCI ESG Controversies Score of 0 (“Red Flags”) already excludes companies in violation of UN Global Compact, ILO, and the UN Guiding Principles on Business and Human Rights.

Proposal 3 – Social and Employee Matters > Int’l Standards

DISCUSSION POINTS

- Following the recent methodology enhancement to the MSCI ESG Controversies framework, only 9 “red flag” companies were excluded from the MSCI ACWI ESG Screened Index as of the August 2022 QIR.
- There is growing scrutiny on companies that violate international norms. Moreover, compliance to international standards was the emphasis of the Platform on Sustainable Finance’s Draft Report on the Application of Minimum Safeguards set out in Article 18 of the EU Taxonomy Regulation*.

Discussion Points

- Does it makes sense to apply a more stringent screen based on international standards?
- Is it appropriate to include norms on labor and human rights, in addition to the UN Global Compact?
- Should Red flags / International norms violators be screened on a monthly rather than quarterly basis?
- As an alternative to the proposed screen based on international standards, would it be appropriate to exclude CCC-rated securities?

Simulated Impact of Proposals

Simulated Impact – ACWI, World, EM ESG Screened (Exclusions/Turnover)

	ACWI		World		EM	
	# Stocks	Weight	# Stocks	Weight	# Stocks	Weight
Parent Index	2,903	100%	1,515	100%	1,388	100%
ESG Screened Index – Current	2,745	93.05%	1,429	92.66%	1,316	96.08%
Additional Screens { Carbon Footprint – Top 5%	95	1.49%	34	1.19%	61	3.81%
Fossil Fuel Reserves Ownership	72	3.06%	35	2.81%	37	5.05%
Fossil Fuel Extraction	34	1.79%	18	1.63%	16	3.03%
Fossil Fuel Power	4	0.03%	0	0.00%	4	0.22%
Energy Management	13	0.03%	2	0.01%	11	0.12%
Biodiversity Management	32	1.02%	13	1.05%	19	0.82%
Palm Oil / Biocides / Arctic Oil & Gas Extraction	47	2.29%	30	2.47%	17	0.93%
Toxic Emissions & Waste Controversies	19	1.21%	18	1.36%	1	0.04%
International Standards	53	7.91%	36	8.76%	17	1.30%
Total – Proposed screens*	261	13.14%	131	13.72%	130	8.63%
ESG Screened Index – Proposal	2,484	79.90%	1,298	78.93%	1,186	87.45%
Transition turnover**		13.68%		14.43%		7.98%

* The sum of companies excluded under each additional screen does not equal to the total number of additional exclusions as companies can be excluded by more than one of the additional screens.

** One-way index turnover assuming implementation of the changes at the August 2022 Quarterly Index Review.

Simulation as of September 1, 2022, based on data from MSCI ESG Research as of August 31, 2022.

Simulated Impact – ACWI ESG Screened (SFDR Metrics)

		ACWI	Current*	Proposal
Key Metrics**				
	Total return (%)	12.7	11.9	12.2
	Total risk (%)	16.4	16.6	16.6
	Tracking error (%)	0.0	0.9	1.4
	Turnover (%)	3.0	3.9	7.0
PAI ref.	SFDR Metrics***			
1-2	Carbon Intensity Scope 1+2 (Wtd Avg t CO2e / €M EVIC)	65	43	27
1-2	Carbon Intensity Scope 1+2+3 (Wtd Avg t CO2e / €M EVIC)	457	331	200
3	Carbon Intensity Scope 1+2+3 (Wtd Avg t CO2e / €M Sales)	1,015	757	639
4	Exposure to companies active in fossil fuel sector (%)	11.7	7.9	4.4
5	Share of non-renewable energy consumption and production (%)	74.1	72.6	74.7
6	Energy consumption intensity per high impact climate sector (GWh / €M Sales)	1.8	1.5	1.1
7	Activities Negatively Affecting Biodiversity-sensitive Areas (%)	0.1	0.0	0.0
8	Emissions to water (t / €M EVIC)	352	277	284
9	Hazardous Waste Ratio (t / €M EVIC)	9.7	10.2	0.3
10	Very Severe Controversies (%)	0.6	0.1	0.0
11	No Policies to Monitor Compliance with UNGC Principles (%)	60.99	59.9	57.8
12	Gender Pay Gap (%)	11.2	9.7	9.3
13	Female : Male Board Diversity Ratio (%)	49.8	49.7	49.1
14	Exposure to Controversial Weapons (%)	0.4	0.0	0.0

* Simulated MSCI ACWI ESG Screened Index using the current index methodology (as of September 1, 2022) across the simulated history.

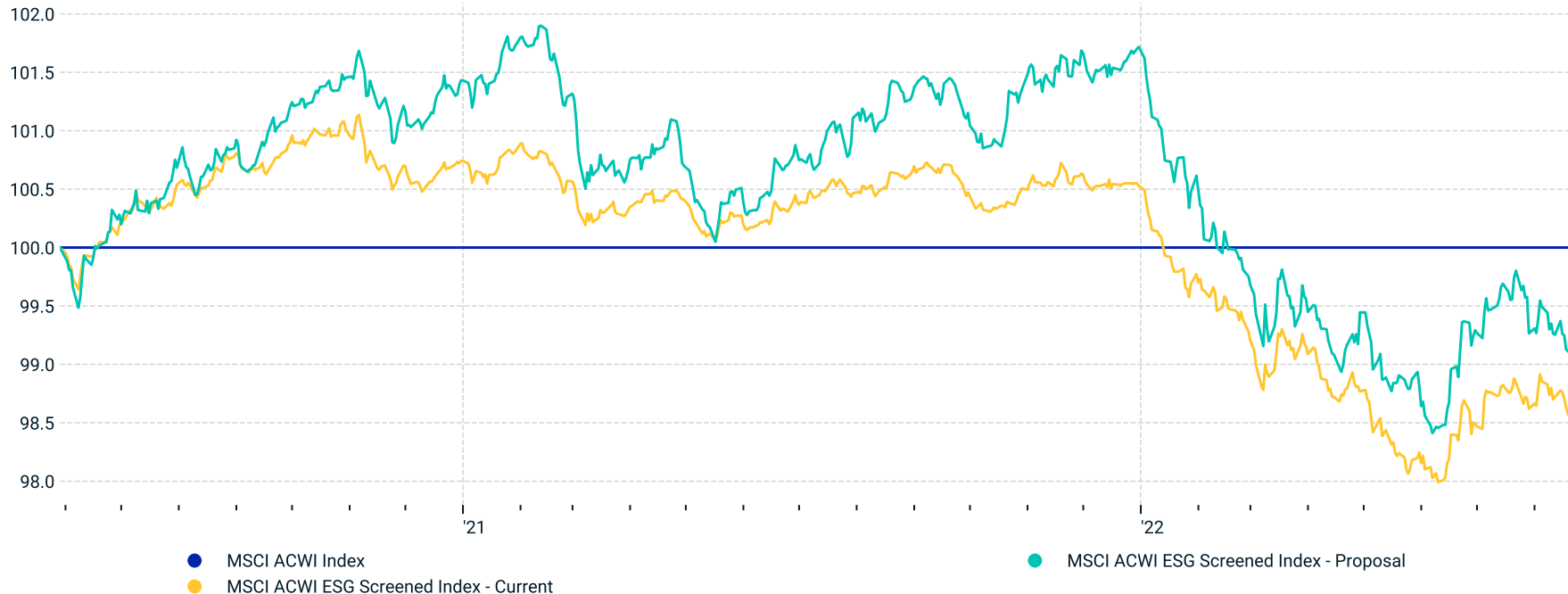
**Period: May 29, 2020 to Aug 22, 2022. "Total return" based on the gross returns annualized in USD, "Turnover" is the annualized one-way index turnover over index reviews

*** Data as of July 29, 2022.

For more information on index-level SFDR metrics – including the methodology – please refer to <https://www.msci.com/our-solutions/esg-investing/sustainable-finance-solutions>

Simulated Impact – Relative Performance*

Relative Performance



*"MSCI ACWI ESG Screened Index – Current" is a simulated index that uses the current index methodology (as of September 1, 2022) across the simulated history. Data on Human Rights due diligence, ILO due diligence and Operations in biodiversity-sensitive areas was backfilled prior to March 2021. Data on UNGC compliance mechanism was backfilled prior to July 2021.

Simulated Impact – Active Sector Exposures*

MSCI ACWI ESG Screened Index - Current (%)

	Min	Max	Average	Current
Energy	-2.8	-1.0	-1.6	-2.7
Materials	-0.6	-0.3	-0.5	-0.3
Industrials	-0.8	-0.6	-0.7	-0.7
Cons. Disc.	0.6	0.8	0.7	0.8
Cons. Stap.	-0.7	-0.3	-0.6	-0.3
Health Care	0.4	1.0	0.7	0.9
Financials	0.5	0.9	0.7	0.8
IT	1.3	1.9	1.6	1.8
Comm. Serv.	0.5	0.8	0.6	0.6
Utilities	-1.4	-0.9	-1.1	-1.2
Real Estate	0.2	0.2	0.2	0.2

Period: May 29, 2020 to Jul 29, 2022, monthly data.

MSCI ACWI ESG Screened Index - Proposal (%)

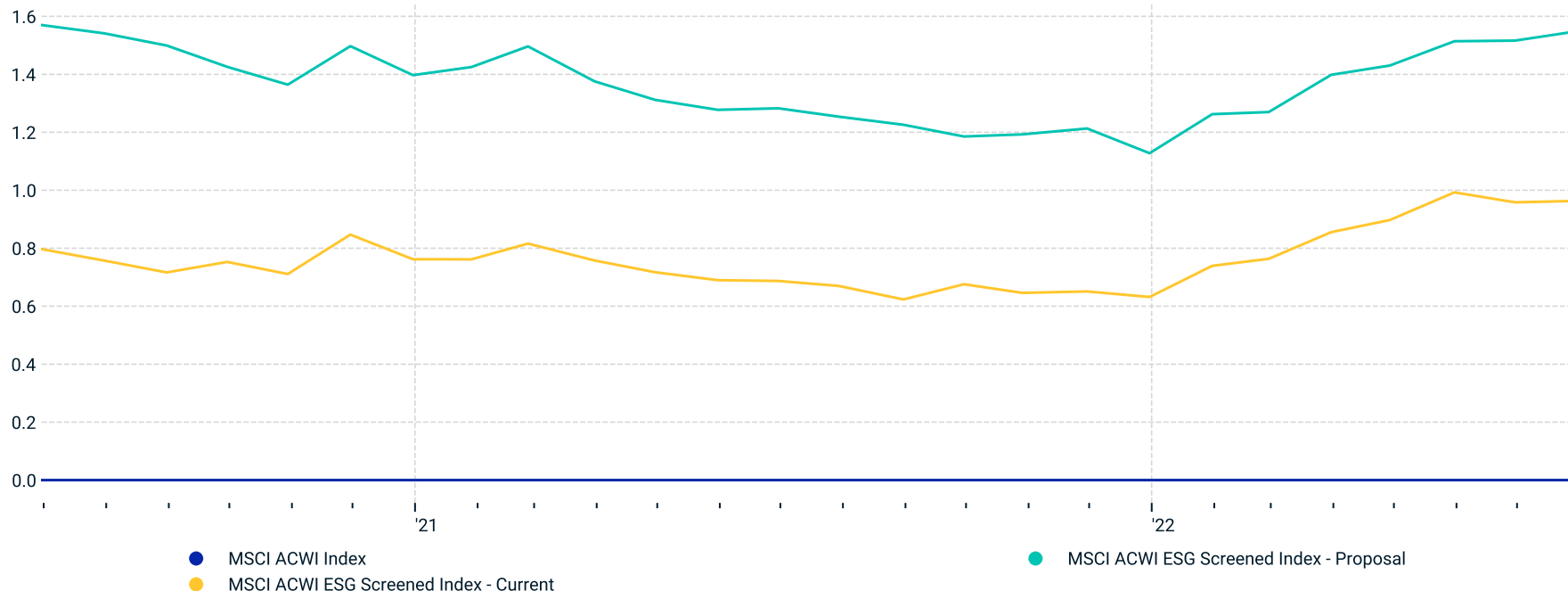
	Min	Max	Average	Current
Energy	-4.5	-2.3	-3.1	-4.1
Materials	-1.4	-0.9	-1.1	-1.3
Industrials	-0.8	-0.3	-0.5	-0.4
Cons. Disc.	-1.3	-0.6	-1.0	-0.8
Cons. Stap.	-2.1	-0.8	-1.5	-1.0
Health Care	2.4	3.0	2.7	3.0
Financials	0.5	2.0	1.2	1.8
IT	3.6	5.2	4.3	4.9
Comm. Serv.	-2.7	0.8	-0.4	-1.3
Utilities	-1.6	-1.0	-1.3	-1.4
Real Estate	0.6	0.8	0.7	0.7

Period: May 29, 2020 to Jul 29, 2022, monthly data.

*"MSCI ACWI ESG Screened Index – Current" is a simulated index that uses the current index methodology (as of September 1, 2022) across the simulated history. Data on Human Rights due diligence, ILO due diligence and Operations in biodiversity-sensitive areas was backfilled prior to March 2021. Data on UNGC compliance mechanism was backfilled prior to July 2021.

Simulated Impact – Active Risk Forecast (Ex-Ante Tracking Error)*

Active GEMLTESGL Risk Forecast (%)



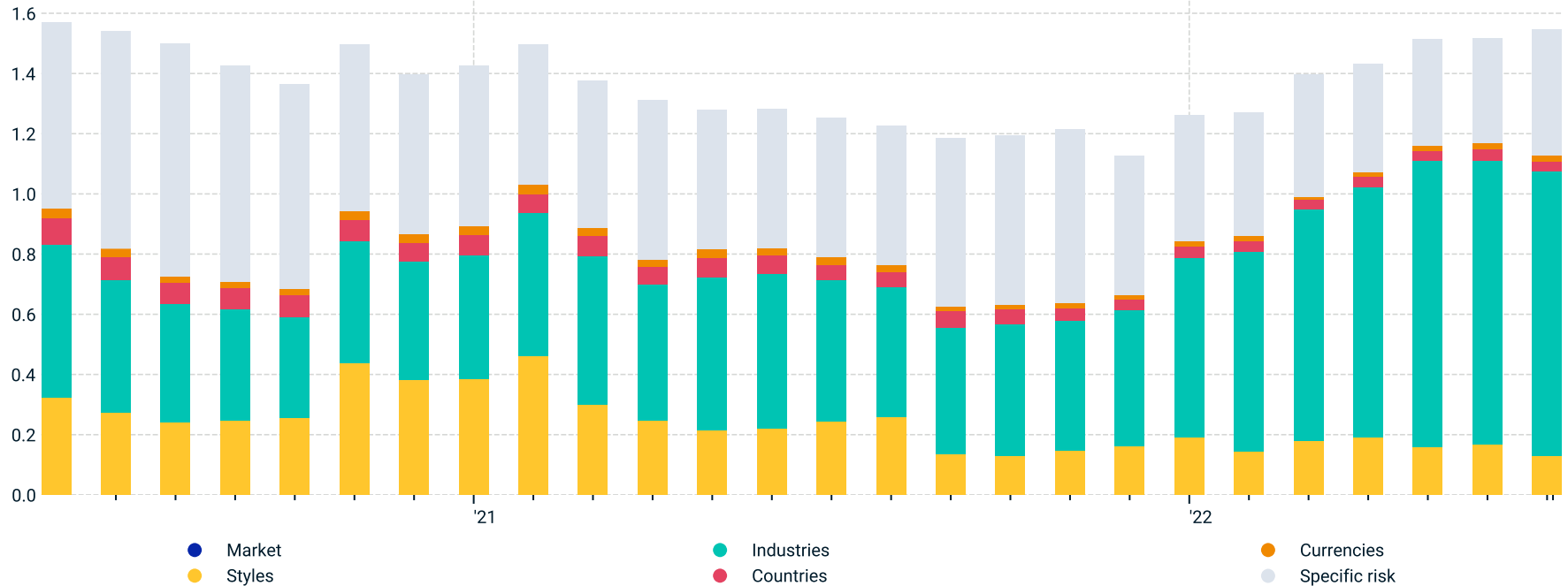
*"MSCI ACWI ESG Screened Index – Current" is a simulated index that uses the current index methodology (as of September 1, 2022) across the simulated history. Data on Human Rights due diligence, ILO due diligence and Operations in biodiversity-sensitive areas was backfilled prior to March 2021. Data on UNGC compliance mechanism was backfilled prior to July 2021.

Base currency: USD.

Information Classification: GENERAL

Simulated Impact – Active Risk Attribution (Ex-Ante Tracking Error)

MSCI ACWI ESG Screened Index - Proposal vs MSCI ACWI Index (%)



Discussion Points – MSCI ESG Screened Indexes (1/2)

- **Methodology Evolution**

- Do you agree that MSCI ESG Screened Indexes need to evolve to incorporate a higher conviction ESG strategy?
- Do you agree that incorporating PAI is an appropriate approach for the MSCI ESG Screened Indexes to take into consideration the relevant regulatory developments, especially the EU SFDR and MiFID II regulations?
- Do you agree with the proposed screens as an evolution to the MSCI ESG Screened Indexes?

- **Screening Criteria**

- Do you agree with using the ESG Ratings-based exposure and/or management scores for certain screens (energy management/ biodiversity management)?
- Do you agree with using ESG Controversies for certain screens (biodiversity management / emissions and waste / international standards) to provide signal on compliance and/or impact?

Discussion Points – MSCI ESG Screened Indexes (2/2)

- **Other Methodology considerations**

- Should there be a minimum ESG Ratings screen (e.g., screening out CCC-rated stocks*)?
- Should there be a screen removing companies that are assessed as Strongly Misaligned on any SDGs as per the MSCI SDG Alignment framework*?
- Should MSCI ESG Screened Indexes exclude additional controversial businesses, such as conventional weapons*, in line with some national/country regulations?
- Should the indexes incorporate a minimum percentage of Sustainable Investments?

Discussion Points – “MSCI Core Screened”* Indexes

- **Need for a potential new index series**

- Given the proposed evolution of MSCI ESG Screened Indexes and the shift of the focus/ strategy, but considering other use cases, should there be another index series retaining a methodology close to the current one without “ESG” in the name?

- **Methodology considerations for the potential new index series**

- Should there be a minimum ESG Ratings screen (e.g., screening out CCC-rated stocks) in consideration of CCC as a headline risk?
- Should this index series exclude additional controversial businesses, such as conventional weapons, in line with some national/country regulations?
- Should this index series consider business involvement screens that exclude companies based on other environmental (e.g., biodiversity/deforestation) and/or social impact, such as Palm Oil, Biocides, or Arctic Oil & Gas Extraction?

Appendix



Examples of Regulations Incorporating Naming Conventions

- **US SEC***: The proposed amendments to the names rule would address fund names with ESG and similar terminology (such as “sustainable,” “green,” or “socially responsible”) by providing that funds whose names include these terms are subject to the rule’s 80% investment policy requirement, and by defining certain uses of ESG terminology in fund names as materially deceptive and misleading. (*US SEC Code of Federal Regulations (CFR) Parts 232, 270 and 274 Proposed Rule, page 14*)
- **EU SFDR****: “Financial products can promote environmental or social characteristics in a myriad of ways, including in a pre-contractual or periodic document, in their product name or in any marketing communication about their investment strategy, financial product standards, labels they adhere to, or applicable conditions for automatic enrolment. To ensure comparability and comprehensibility of the promoted environmental or social characteristics, financial market participants that make available financial products that promote environmental or social characteristics should confirm the information about the promotion of environmental or social characteristics in annexes to the documents or information referred to in Article 6(3) and Article 11(2) of Regulation (EU) 2019/2088 on pre-contractual and periodic disclosures.” (*EU SFDR Final Regulatory Technical Standards, Recital 13*)

Reference > **Mandatory** Principal Adverse Impact Indicators

EU SFDR PASI		Metric Description
CLIMATE AND OTHER ENVIRONMENT-RELATED INDICATORS		
Greenhouse gas emissions	1. GHG Emissions	Scope 1 GHG emissions Scope 2 GHG emissions Scope 3 GHG emissions Total GHG emissions
	2. Carbon Footprint	Carbon footprint
	3. GHG Intensity of investee companies	GHG Intensity of investee companies
	4. Exposure to companies active in the fossil fuel sector	Share of investments in companies active in the fossil fuel sector
	5. Share of non-renewable energy consumption and production	Share of non-renewable energy consumption and non-renewable energy production of investee companies from non-renewable energy sources, expressed as a percentage
	6. Energy consumption intensity per high impact climate sector	Energy consumption in GWh per million EUR of revenue of investee companies, per high impact climate sector
Biodiversity	7. Activities negatively affecting biodiversity-sensitive areas	Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas
Water	8. Emissions to water	Tonnes of emissions to water generated by investee companies per million EUR invested, expressed as a weighted average
Waste	9. Hazardous waste ratio	Tonnes of hazardous waste generated by investee companies per million EUR invested, expressed as a weighted average
SOCIAL AND EMPLOYEE, RESPECT FOR HUMAN RIGHTS, ANTI-CORRUPTION AND ANTI-BRIBERY MATTERS		
Social and employee matters	10. Violations of UN Global Compact principles and Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises	Share of Investments in investee companies that have been involved in violations of the UNGC principles for OECD Guidelines for Multinational Enterprises
	11. Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises	Share of investments in investee companies without policies to monitor compliance with the UNGC principles or OECD Guidelines for Multinational Enterprises or grievance /complaints handling mechanisms to address violations of the UNGC principles or OECD Guidelines for Multinational Enterprises
	12. Unadjusted gender pay gap	Average unadjusted gender pay gap of investee companies
	13. Board gender diversity	Average ratio of female to male board members in investee board members in investee companies, expressed as a percentage of all board members
	14. Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)	Share of investments in investee companies involved in the manufacture or selling of controversial weapons

Current vs. Proposed Screens (Climate)

Screen	Current Methodology	Proposed Methodology
Carbon Footprint – Top 5%	N/A	<p>All companies that meet the below conditional exclusions rule:</p> <ul style="list-style-type: none"> Step 1: Identify all companies either belonging to the top 5th percentile with the highest Scope 1-3 carbon intensity relative to EVIC among MSCI ACWI Index constituents or the top 5th percentile with the highest potential emissions from fossil fuel (excluding metallurgical coal) reserves for energy application. Step 2: Exclude all companies flagged in Step 1 if they do not have approved science-based targets.
Thermal Coal Power	All companies deriving 5% or more revenue from thermal coal power generation	Add: All companies deriving 50% or more revenue from thermal coal-, oil-/liquid fuel-, and/or natural gas-based power generation.
Fossil Fuel Extraction	All companies deriving 5% or more aggregate revenue (either reported or estimated) from thermal coal mining or unconventional oil and gas extraction.	Modification: All companies deriving any revenue (either reported or estimated) from thermal coal mining or unconventional oil and gas extraction.
Fossil Fuel Reserves	N/A	All companies with evidence of owning proven & probable coal reserves and/or proven oil and natural gas reserves used for energy purposes, as defined by the methodology of the MSCI ex Fossil Fuels Indexes.

Current vs. Proposed Screens (Other Environment 1/2)

Screen	Current Methodology	Proposed Methodology
Biodiversity Management	N/A	All companies that meet the below conditional exclusions rule: <ul style="list-style-type: none"> • Step 1: Identify all companies either with operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas or have an exposure score of 7.5 or above (top quartile). The exposure score is a combination of companies' extent of business activities impacting ecosystems and causing biodiversity degradation, as well as operations in regions with fragile ecosystems. • Step 2: Exclude all companies flagged in Step 1 that either have Biodiversity & Land Use management scores below 2.5 (bottom quartile) or have controversies that are assessed as Very Severe or ongoing Severe (score of 2 or below) in any of the ff. categories: <ul style="list-style-type: none"> ○ Land Use and Biodiversity Score: controversies related to a firm's use or management of natural resources ○ Supply Chain Management Score: controversies related to the environmental impact of a company's supply chain and the sourcing of natural resource ○ Toxic Spills & Releases Score: controversies related to a firm's non-GHG emissions
Toxic Emissions & Waste controversies	N/A	All companies that have controversies assessed as Very Severe or ongoing Severe (score of 2 or below) related to a firm's non-GHG emissions or releases to land, air, and/or water. This covers ESG controversies related to accidental spills or releases as well as the environmental impacts of standard operational emissions, whether within or in exceedance of levels allowed by permit.

Current vs. Proposed Screens (Other Environment 2/2)

Screen	Current Methodology	Proposed Methodology
Palm Oil	N/A	<p>All companies that meet the below conditional exclusions rule:</p> <ul style="list-style-type: none"> • Step 1: Identify all companies that are flagged by the “Highly Restrictive” screen: <ul style="list-style-type: none"> ○ All companies that cultivate oil palm trees and harvest fresh fruit bunches (FFBs) used to produce palm oil products. Includes millers that extract the oil from FFBs and process it into crude palm oil (CPO), crude palm kernel oil (PLO) and palm kernel meal. ○ All companies deriving 5% or more aggregate revenue from the production or distribution of palm oil. • Step 2: Exclude all companies flagged in Step 1 that have less than 50% of their palm holdings / estates certified by the Roundtable on Sustainable Palm Oil (RSPO).
Biocides	N/A	<p>“Highly Restrictive” screen</p> <ul style="list-style-type: none"> • All companies that produce biocides including antifouling products and pesticides such as rodenticides, avicides, molluscicides, vermicides, piscicides, and insecticides. • All companies deriving 5% or more aggregate revenue from production and supply of chemicals or other raw materials that are specifically formulated for use in biocides.
Arctic Oil and Gas Extraction	N/A	<p>All companies deriving any revenue from oil and gas offshore or onshore production in the Arctic. The definition of Arctic is geographical and includes production activities north of the 66.5 latitude.</p>

Current vs. Proposed Screens (Social & Employee Matters)

Screen	Current Methodology	Proposed Methodology
UN Global Compact	All companies that fail to comply with the UN Global Compact principles	Add: All companies without evidence of mechanism to monitor compliance with the UN Global Compact and are assessed as “Watch List”. Evidence for mechanism is defined as being a signatory to the UN Global Compact and is required to monitor and report compliance with the UN Global Compact principles.
International Labor Organisation	All companies that fail to comply with the International Labor Organisation (ILO)*	Add: All companies without evidence of or disclosure on their due diligence policy on labor issues addressed by the fundamental International Labor Organisation (ILO) Conventions 1 to 8 and are assessed as “Watch List”.
UN Guiding Principles on Business and Human Rights	All companies that fail to comply with the UN Guiding Principles on Business and Human Rights (UNGPHR)*	Add: All companies without disclosure on having defined processes, setting targets or reporting achievements for monitoring of the effectiveness of their human rights policies and are assessed as “Watch List”.

Current vs. Proposed Screens (Existing Criteria)

Screen	Current / Proposed Methodology
Controversial Weapons	“Most Restrictive” screen All companies with any tie to Controversial Weapons (cluster munitions, landmines, depleted uranium weapons, biological/chemical weapons, blinding lasers, non-detectable fragments and incendiary weapons), as defined by the methodology of the MSCI ex Controversial Weapons Indexes.
Nuclear Weapons	“Highly Restrictive” screen All companies that manufacture nuclear warheads, missiles, missile components, delivery platforms, essential components, and support systems & services, as defined in Appendix I of the MSCI ESG Screened Indexes methodology.
Civilian Firearms	“Highly Restrictive” screen All companies classified as “Producer” or companies deriving 5% or more aggregate revenue from the production and distribution (wholesale or retail) of civilian firearms and ammunition.
Tobacco	“Highly Restrictive” screen All companies classified as “Producer” or companies deriving 5% or more aggregate revenue from the production, distribution, retail, supply and licensing of tobacco-related products.
ESG Controversies	All companies that have an MSCI ESG Controversies Score of 0 (Red Flags).

Simulated Impact – World ESG Screened (SFDR Metrics)

		World	Current*	Proposal
Key Metrics**				
	Total return (%)	13.6	12.9	13.3
	Total risk (%)	17.2	17.5	17.5
	Tracking error (%)	0.0	1.0	1.5
	Turnover (%)	2.5	3.4	6.8
PAI ref.	SFDR Metrics***			
1-2	Carbon Intensity Scope 1+2 (Wtd Avg t CO2e / €M EVIC)	53	34	23
1-2	Carbon Intensity Scope 1+2+3 (Wtd Avg t CO2e / €M EVIC)	416	306	182
3	Carbon Intensity Scope 1+2+3 (Wtd Avg t CO2e / €M Sales)	954	717	617
4	Exposure to companies active in fossil fuel sector (%)	11.8	7.9	4.7
5	Share of non-renewable energy consumption and production (%)	72.3	70.6	72.8
6	Energy consumption intensity per high impact climate sector (GWh / €M Sales)	1.2	0.8	0.9
7	Activities Negatively Affecting Biodiversity-sensitive Areas (%)	0.0	0.0	0.0
8	Emissions to water (t / €M EVIC)	372	302	311
9	Hazardous Waste Ratio (t / €M EVIC)	10.9	11.6	0.2
10	Very Severe Controversies (%)	0.6	0.1	0.0
11	No Policies to Monitor Compliance with UNGC Principles (%)	59.6	58.2	55.5
12	Gender Pay Gap (%)	10.9	9.3	8.8
13	Female : Male Board Diversity Ratio (%)	53.6	53.5	53.2
14	Exposure to Controversial Weapons (%)	0.4	0.0	0.0

* Simulated MSCI World ESG Screened Index using the current index methodology (as of September 1, 2022) across the simulated history.

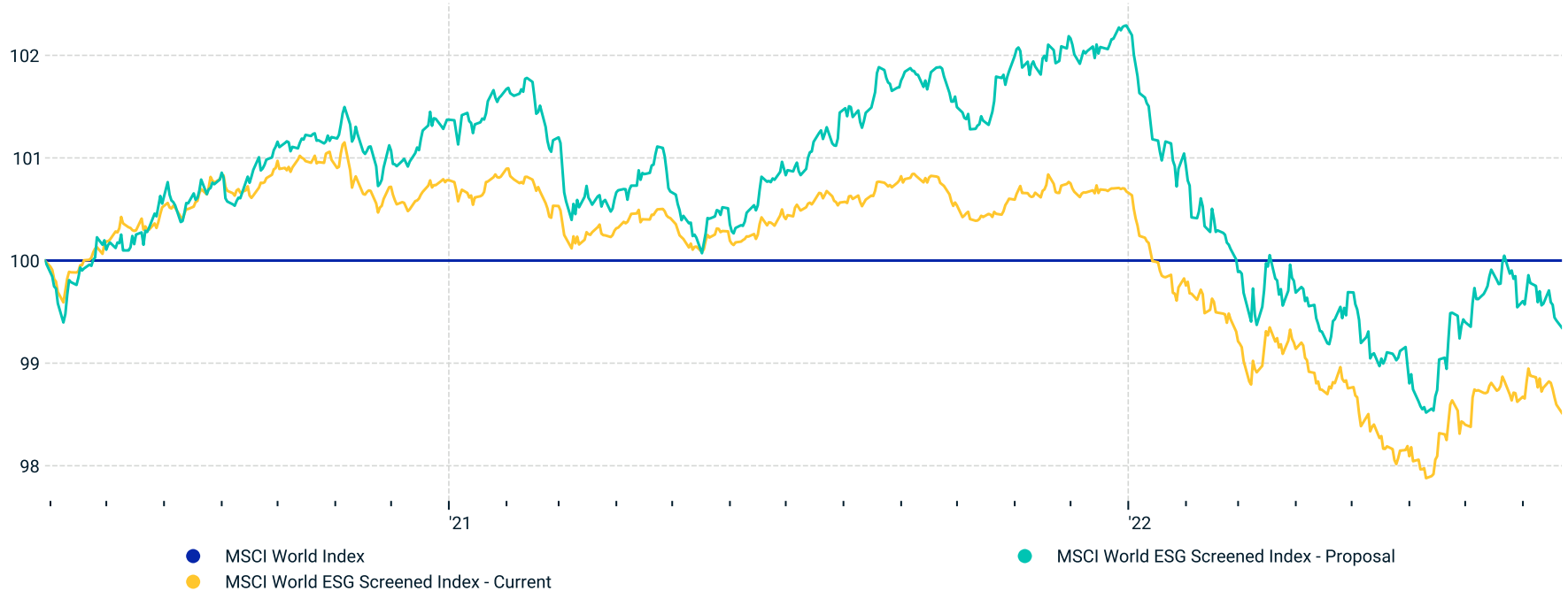
**Period: May 29, 2020 to Aug 22, 2022. "Total return" based on the gross returns annualized in USD, "Turnover" is the annualized one-way index turnover over index reviews

*** Data as of July 29, 2022.

For more information on index-level SFDR metrics – including the methodology – please refer to <https://www.msci.com/our-solutions/esg-investing/sustainable-finance-solutions>

Simulated Impact – World – Relative Performance*

Relative Performance



*"MSCI World ESG Screened Index – Current" is a simulated index that uses the current index methodology (as of September 1, 2022) across the simulated history. Data on Human Rights due diligence, ILO due diligence and Operations in biodiversity-sensitive areas was backfilled prior to March 2021. Data on UNGC compliance mechanism was backfilled prior to July 2021.

Simulated Impact – World – Active Sector Exposures*

MSCI World ESG Screened Index - Current (%)

	Min	Max	Average	Current
Energy	-3.0	-1.0	-1.8	-2.8
Materials	-0.5	-0.2	-0.4	-0.2
Industrials	-0.9	-0.7	-0.8	-0.8
Cons. Disc.	0.6	0.9	0.7	0.9
Cons. Stap.	-0.8	-0.3	-0.6	-0.3
Health Care	0.4	1.1	0.8	1.0
Financials	0.4	0.8	0.6	0.7
IT	1.4	2.0	1.7	1.9
Comm. Serv.	0.5	0.8	0.7	0.6
Utilities	-1.5	-0.9	-1.1	-1.2
Real Estate	0.2	0.3	0.2	0.2

Period: May 29, 2020 to Jul 29, 2022, monthly data.

MSCI World ESG Screened Index - Proposal (%)

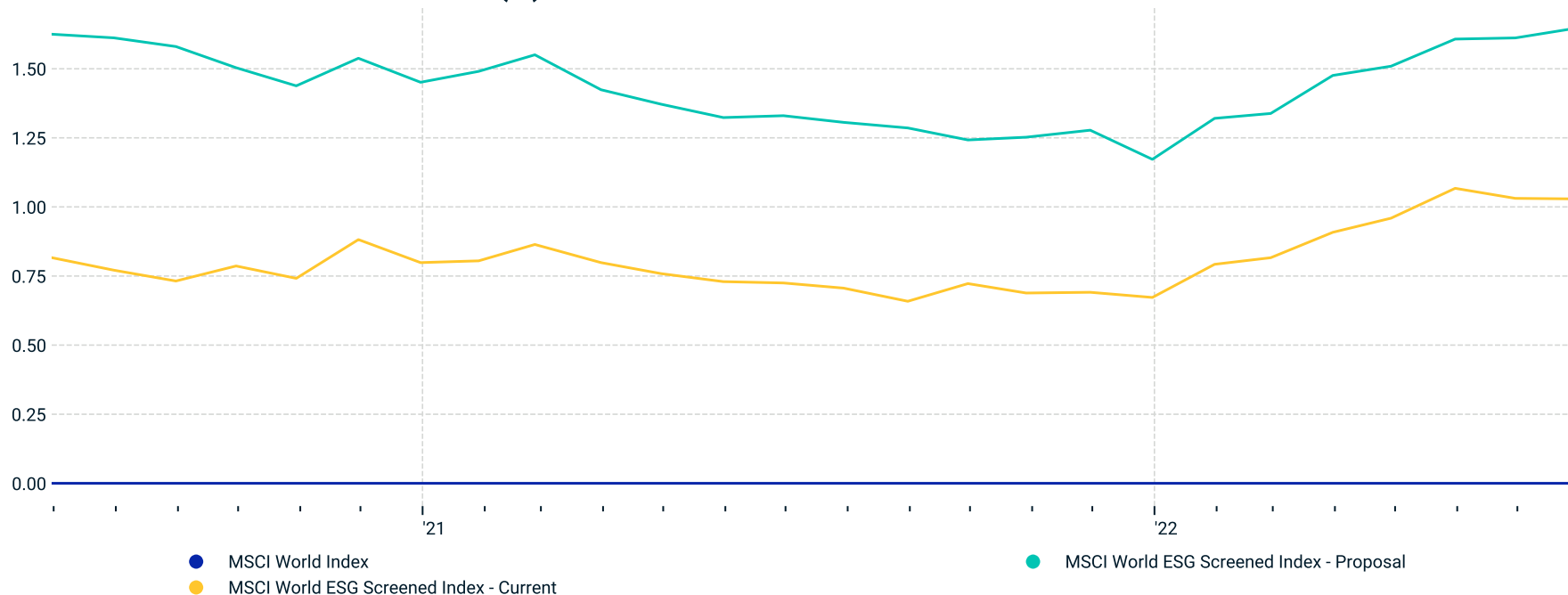
	Min	Max	Average	Current
Energy	-4.4	-1.9	-2.8	-4.1
Materials	-1.2	-0.7	-0.9	-1.2
Industrials	-0.9	-0.2	-0.5	-0.4
Cons. Disc.	-1.8	-0.9	-1.4	-1.1
Cons. Stap.	-2.4	-0.9	-1.7	-1.1
Health Care	2.7	3.5	3.1	3.4
Financials	0.1	1.8	0.9	1.5
IT	3.9	5.5	4.6	5.2
Comm. Serv.	-3.4	0.6	-0.7	-1.7
Utilities	-1.6	-1.0	-1.3	-1.3
Real Estate	0.6	0.9	0.7	0.7

Period: May 29, 2020 to Jul 29, 2022, monthly data.

*"MSCI World ESG Screened Index – Current" is a simulated index that uses the current index methodology (as of September 1, 2022) across the simulated history. Data on Human Rights due diligence, ILO due diligence and Operations in biodiversity-sensitive areas was backfilled prior to March 2021. Data on UNGC compliance mechanism was backfilled prior to July 2021.

Simulated Impact – World – Active Risk Forecast (Ex-Ante Tracking Error)*

Active GEMLTESGL Risk Forecast (%)



*"MSCI World ESG Screened Index – Current" is a simulated index that uses the current index methodology (as of September 1, 2022) across the simulated history. Data on Human Rights due diligence, ILO due diligence and Operations in biodiversity-sensitive areas was backfilled prior to March 2021. Data on UNGC compliance mechanism was backfilled prior to July 2021.

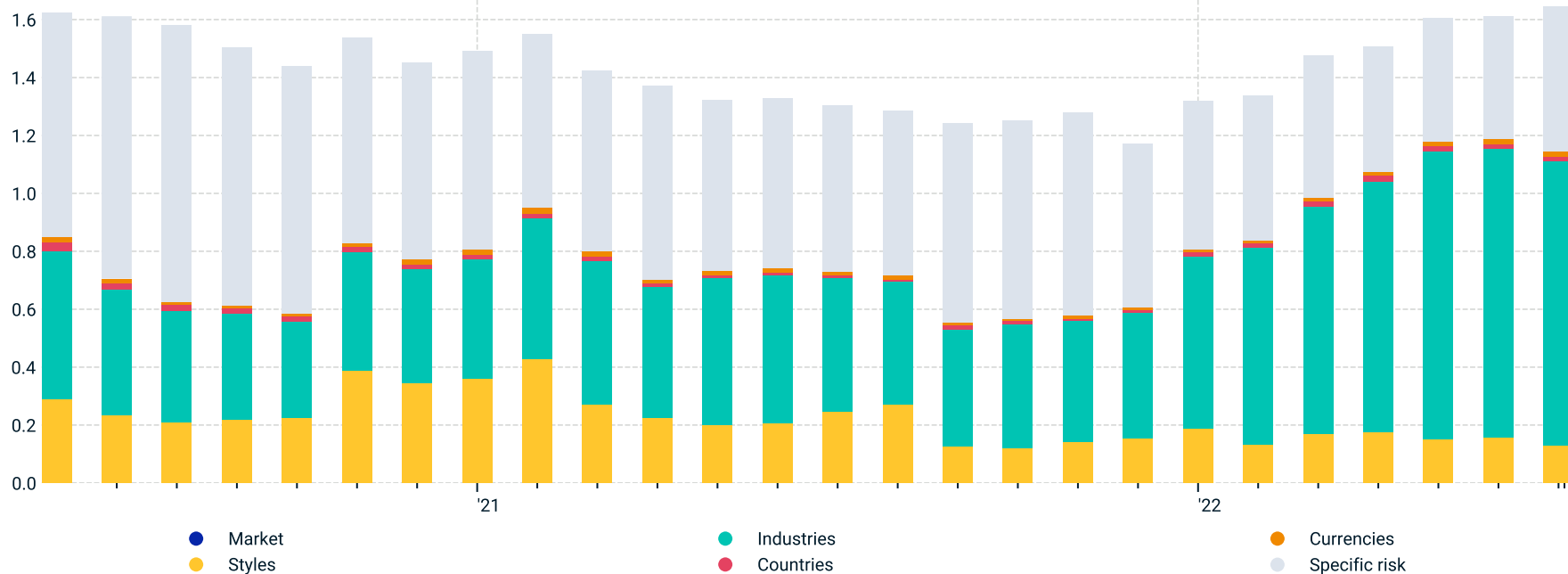
Base currency: USD.

Information Classification: GENERAL



Simulated Impact – World – Active Risk Attribution (Ex-Ante Tracking Error)

MSCI World ESG Screened Index - Proposal vs MSCI World Index (%)



Simulated Impact – EM ESG Screened (SFDR Metrics)

		EM	Current*	Proposal
Key Metrics**				
	Total return (%)	6.0	5.4	5.3
	Total risk (%)	15.2	15.2	15.3
	Tracking error (%)	0.0	0.7	1.5
	Turnover (%)	7.1	7.4	9.1
PAI ref.	SFDR Metrics***			
1-2	Carbon Intensity Scope 1+2 (Wtd Avg t CO2e / €M EVIC)	165	115	58
1-2	Carbon Intensity Scope 1+2+3 (Wtd Avg t CO2e / €M EVIC)	793	529	332
3	Carbon Intensity Scope 1+2+3 (Wtd Avg t CO2e / €M Sales)	1,511	1,079	805
4	Exposure to companies active in fossil fuel sector (%)	11.0	8.0	2.6
5	Share of non-renewable energy consumption and production (%)	91.4	91.7	91.5
6	Energy consumption intensity per high impact climate sector (GWh / €M Sales)	8.1	7.6	3.1
7	Activities Negatively Affecting Biodiversity-sensitive Areas (%)	1.1	0.3	0.0
8	Emissions to water (t / €M EVIC)	213	124	120
9	Hazardous Waste Ratio (t / €M EVIC)	1.1	1.1	0.8
10	Very Severe Controversies (%)	1.0	0.0	0.0
11	No Policies to Monitor Compliance with UNGC Principles (%)	72.5	73.0	74.4
12	Gender Pay Gap (%)	18.3	18.3	18.5
13	Female : Male Board Diversity Ratio (%)	19.2	19.4	19.2
14	Exposure to Controversial Weapons (%)	0.4	0.0	0.0

* Simulated MSCI EM ESG Screened Index using the current index methodology (as of September 1, 2022) across the simulated history.

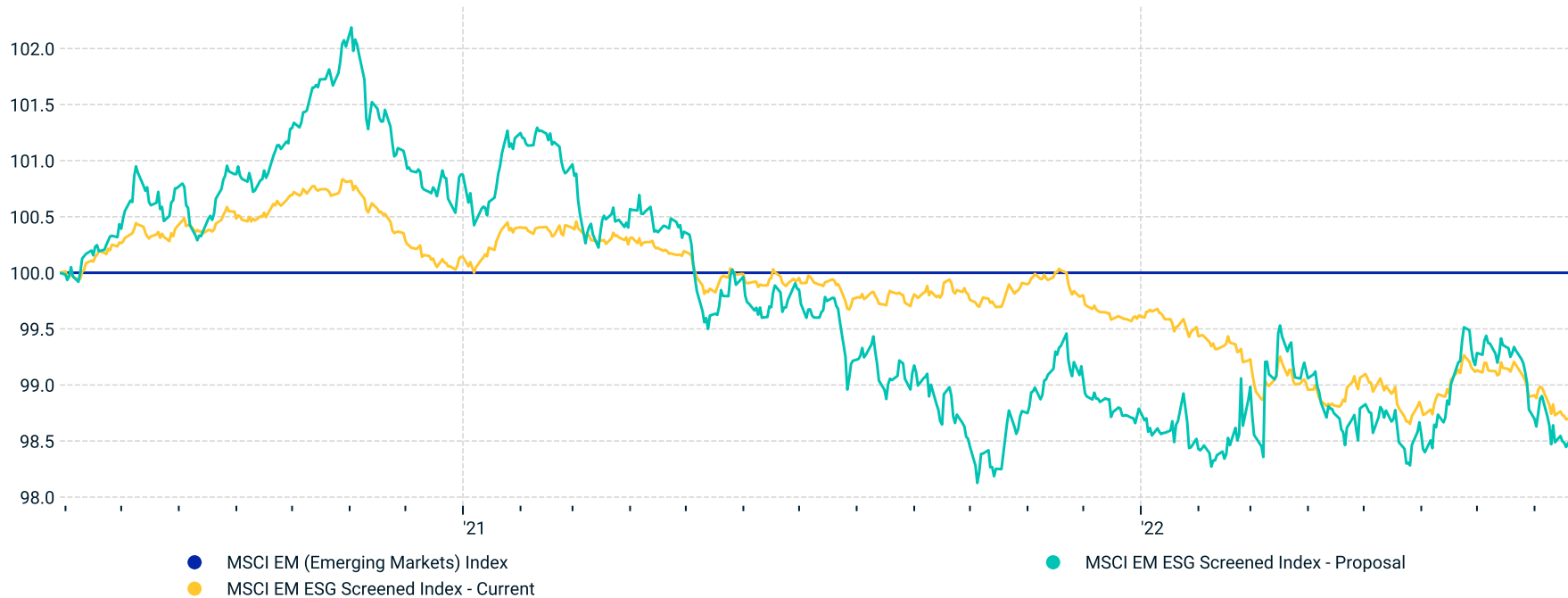
**Period: May 29, 2020 to Aug 22, 2022. "Total return" based on the gross returns annualized in USD, "Turnover" is the annualized one-way index turnover over index reviews

*** Data as of July 29, 2022.

For more information on index-level SFDR metrics – including the methodology – please refer to <https://www.msci.com/our-solutions/esg-investing/sustainable-finance-solutions>

Simulated Impact – EM – Relative Performance*

Relative Performance



*"MSCI EM ESG Screened Index – Current" is a simulated index that uses the current index methodology (as of September 1, 2022) across the simulated history. Data on Human Rights due diligence, ILO due diligence and Operations in biodiversity-sensitive areas was backfilled prior to March 2021. Data on UNGC compliance mechanism was backfilled prior to July 2021.

Simulated Impact – EM – Active Sector Exposures*

MSCI EM ESG Screened Index - Current (%)

	Min	Max	Average	Current
Energy	-1.3	-0.6	-0.9	-1.3
Materials	-1.6	-1.0	-1.3	-1.0
Industrials	-0.2	0.0	-0.1	-0.2
Cons. Disc.	0.5	0.7	0.6	0.6
Cons. Stap.	-0.3	-0.1	-0.2	-0.1
Health Care	0.1	0.2	0.2	0.2
Financials	0.6	1.2	0.9	1.2
IT	0.7	1.1	0.9	1.0
Comm. Serv.	0.4	0.6	0.5	0.6
Utilities	-1.1	-0.5	-0.7	-1.1
Real Estate	-0.0	0.1	0.1	0.1

Period: May 29, 2020 to Jul 29, 2022, monthly data.

MSCI EM ESG Screened Index - Proposal (%)

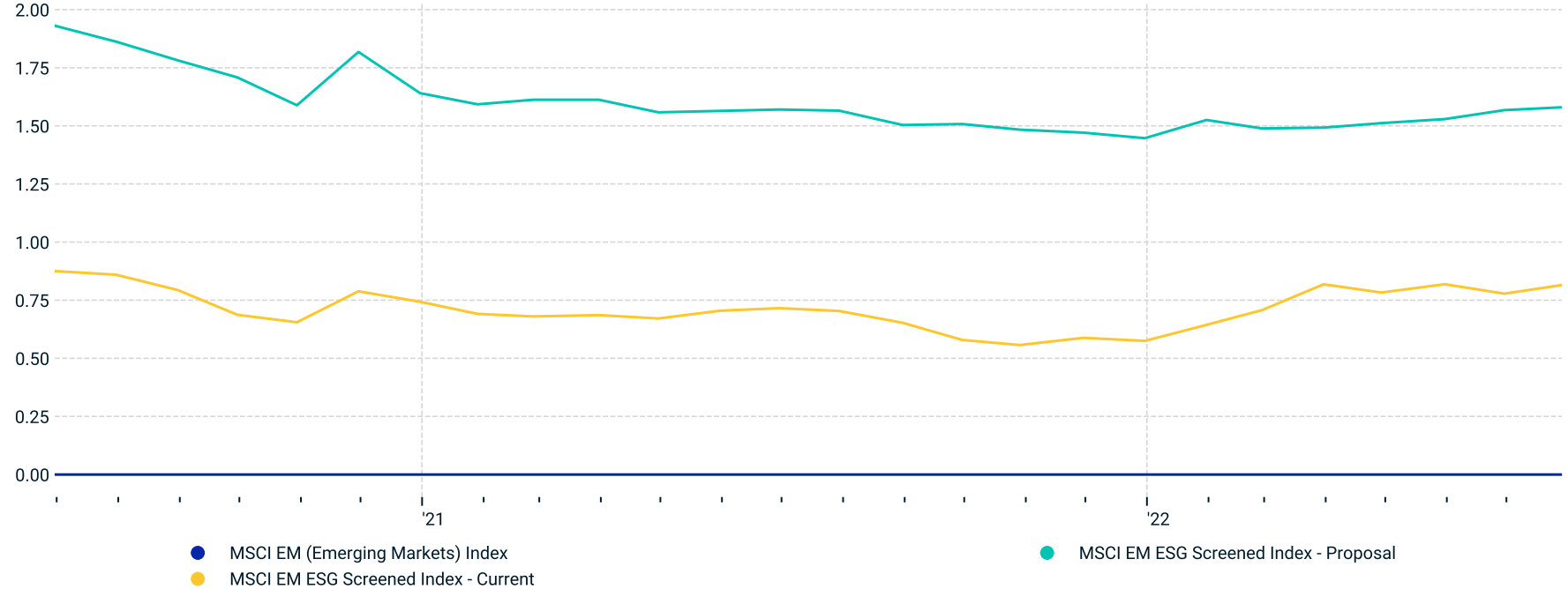
	Min	Max	Average	Current
Energy	-5.7	-4.3	-5.0	-4.7
Materials	-3.6	-2.3	-2.9	-2.6
Industrials	-0.6	0.0	-0.2	-0.6
Cons. Disc.	0.7	1.7	1.2	1.2
Cons. Stap.	0.0	0.2	0.1	0.1
Health Care	0.4	0.6	0.5	0.6
Financials	2.3	3.4	2.9	3.1
IT	1.8	3.4	2.5	2.8
Comm. Serv.	1.4	2.0	1.7	1.5
Utilities	-1.6	-0.8	-1.1	-1.6
Real Estate	0.2	0.4	0.3	0.3

Period: May 29, 2020 to Jul 29, 2022, monthly data.

*"MSCI EM ESG Screened Index – Current" is a simulated index that uses the current index methodology (as of September 1, 2022) across the simulated history. Data on Human Rights due diligence, ILO due diligence and Operations in biodiversity-sensitive areas was backfilled prior to March 2021. Data on UNGC compliance mechanism was backfilled prior to July 2021.

Simulated Impact – EM – Active Risk Forecast (Ex-Ante Tracking Error)*

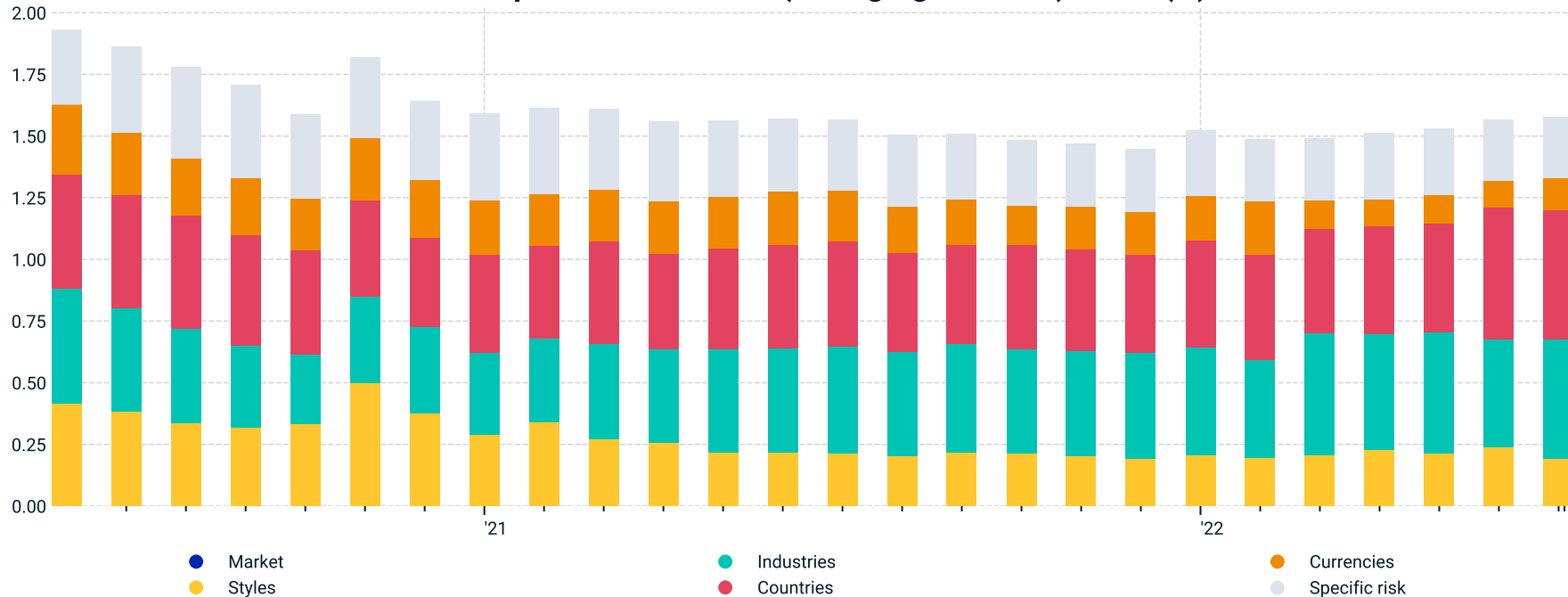
Active GEMLTESGL Risk Forecast (%)



*"MSCI EM ESG Screened Index – Current" is a simulated index that uses the current index methodology (as of September 1, 2022) across the simulated history. Data on Human Rights due diligence, ILO due diligence and Operations in biodiversity-sensitive areas was backfilled prior to March 2021. Data on UNGC compliance mechanism was backfilled prior to July 2021.

Simulated Impact – EM – Active Risk Attribution (Ex-Ante Tracking Error)

MSCI EM ESG Screened Index - Proposal vs MSCI EM (Emerging Markets) Index (%)



Simulated Deletions ACWI ESG Screened – Carbon Footprint Top 5% – Top 30 (1/2)

Security Name	Country	Sector	ACWI ESG Screened Weight
BP	UNITED KINGDOM	Energy	0.187%
RIO TINTO PLC (GB)	UNITED KINGDOM	Materials	0.118%
MARATHON PETROLEUM	USA	Energy	0.103%
VALERO ENERGY CORP	USA	Energy	0.090%
PHILLIPS 66	USA	Energy	0.081%
PETROBRAS PN	BRAZIL	Energy	0.058%
ENI	ITALY	Energy	0.056%
PETROBRAS ON	BRAZIL	Energy	0.050%
SAUDI ARAMCO	SAUDI ARABIA	Energy	0.045%
RIO TINTO LTD (AU)	AUSTRALIA	Materials	0.045%
FORTESCUE METALS GROUP	AUSTRALIA	Materials	0.040%
REPSOL	SPAIN	Energy	0.036%
MAGNA INTERNATIONAL	CANADA	Consumer Discr.	0.031%
BUNGE	USA	Consumer Staples	0.028%
SOUTH 32 (AU)	AUSTRALIA	Materials	0.025%

Simulated Deletions ACWI ESG Screened – Carbon Footprint Top 5% – Top 30 (1/2)

Security Name	Country	Sector	ACWI ESG Screened Weight
SUZUKI MOTOR CORP	JAPAN	Consumer Discr.	0.024%
ARCELORMITTAL A	FRANCE	Materials	0.024%
MITSUBISHI HEAVY IND	JAPAN	Industrials	0.023%
CHINA PETRO & CHEM H	CHINA	Energy	0.023%
INPEX CORP	JAPAN	Energy	0.023%
SASOL	SOUTH AFRICA	Materials	0.021%
TATA STEEL	INDIA	Materials	0.019%
PETROCHINA CO H	CHINA	Energy	0.019%
HYUNDAI MOBIS	KOREA	Consumer Discr.	0.019%
TATA MOTORS	INDIA	Consumer Discr.	0.019%
NORSK HYDRO	NORWAY	Materials	0.017%
ALCOA (NEW)	USA	Materials	0.017%
TOKYO GAS CO	JAPAN	Utilities	0.014%
HINDALCO INDUSTRIES	INDIA	Materials	0.014%
ISUZU MOTORS	JAPAN	Consumer Discr.	0.014%

Simulated Deletions ACWI ESG Screened – Fossil Fuels Reserves / Extraction Top 30 (1/2)

Security Name	Country	Sector	ACWI ESG Screened Weight	Exclusion Reason
BERKSHIRE HATHAWAY B	USA	Financials	0.680%	Fossil Fuel Reserves
SHELL	UNITED KINGDOM	Energy	0.373%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
TOTALENERGIES	FRANCE	Energy	0.238%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
RELIANCE INDUSTRIES	INDIA	Energy	0.190%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
BP	UNITED KINGDOM	Energy	0.187%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
BROOKFIELD ASSET MAN A	CANADA	Financials	0.128%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
SCHLUMBERGER	USA	Energy	0.102%	Fossil Fuel Reserves
WOODSIDE ENERGY GROUP	AUSTRALIA	Energy	0.084%	Fossil Fuel Reserves
MITSUBISHI CORP	JAPAN	Industrials	0.078%	Fossil Fuel Reserves, Thermal Coal Mining
EQUINOR	NORWAY	Energy	0.071%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
KINDER MORGAN P	USA	Energy	0.070%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
NUCOR CORP	USA	Materials	0.067%	Unconv. Oil & Gas Extraction
ITOCHU CORP	JAPAN	Industrials	0.062%	Fossil Fuel Reserves, Thermal Coal Mining
mitsui & co	JAPAN	Industrials	0.062%	Fossil Fuel Reserves, Thermal Coal Mining
PETROBRAS PN	BRAZIL	Energy	0.058%	Fossil Fuel Reserves

Simulated Deletions ACWI ESG Screened – Fossil Fuels Reserves / Extraction Top 30 (2/2)

Security Name	Country	Sector	ACWI ESG Screened Weight	Exclusion Reason
ENI	ITALY	Energy	0.056%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
KKR & CO A	USA	Financials	0.054%	Fossil Fuel Reserves
PETROBRAS ON	BRAZIL	Energy	0.050%	Fossil Fuel Reserves
SAUDI ARAMCO	SAUDI ARABIA	Energy	0.045%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
ENGIE	FRANCE	Utilities	0.041%	Fossil Fuel Reserves
REPSOL	SPAIN	Energy	0.036%	Fossil Fuel Reserves
SANTOS	AUSTRALIA	Energy	0.033%	Fossil Fuel Reserves
CK HUTCHISON HOLDINGS	HONG KONG	Industrials	0.033%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
MARUBENI CORP	JAPAN	Industrials	0.030%	Fossil Fuel Reserves
SUMITOMO CORP	JAPAN	Industrials	0.030%	Fossil Fuel Reserves, Thermal Coal Mining
SOUTH 32 (AU)	AUSTRALIA	Materials	0.025%	Fossil Fuel Reserves, Thermal Coal Mining
CHINA PETRO & CHEM H	CHINA	Energy	0.023%	Fossil Fuel Reserves
INPEX CORP	JAPAN	Energy	0.023%	Fossil Fuel Reserves, Unconv. Oil & Gas Extraction
GRUPO MEXICO B	MEXICO	Materials	0.022%	Fossil Fuel Reserves
ENEOS HOLDINGS	JAPAN	Energy	0.022%	Fossil Fuel Reserves, Thermal Coal Mining

Simulated Deletions ACWI ESG Screened – Fossil Fuel Power

Security Name	Country	Sector	ACWI ESG Screened Weight
SAUDI ELECTRICITY CO	SAUDI ARABIA	Utilities	0.011%
GULF ENERGY DEVELOPMENT	THAILAND	Utilities	0.008%
ACWA POWER COMPANY	SAUDI ARABIA	Utilities	0.007%
BGRIMM POWER	THAILAND	Utilities	0.002%

Simulated Deletions ACWI ESG Screened – Energy Management

Security Name	Country	Sector	ACWI ESG Screened Weight
DELTA AIR LINES	USA	Industrials	0.009%
SAUDI INDL INV GROUP	SAUDI ARABIA	Materials	0.005%
AIR CANADA VV	CANADA	Industrials	0.004%
ADVANCED PETROCHEMICALS	SAUDI ARABIA	Materials	0.003%
ADARO MINERALS INDONESIA	INDONESIA	Materials	0.002%
SHANDONG HUALU A (HK-C)	CHINA	Materials	0.001%
YUNNAN YUNTIANH A (HK-C)	CHINA	Materials	0.001%
SHANXI MEIJIN A (HK-C)	CHINA	Materials	0.001%
WESTERN SUPERCON A(HK-C)	CHINA	Materials	0.001%
INNER MONGOL YUA A(HK-C)	CHINA	Materials	0.001%
JIANGSU YOKE A (HK-C)	CHINA	Materials	0.000%
TIANSHAN ALUM A (HK-C)	CHINA	Materials	0.000%
SHENZHEN SENIOR A(HK-C)	CHINA	Materials	0.000%

Simulated Deletions ACWI ESG Screened – Biodiversity Management Top 30 (1/2)

Security Name	Country	Sector	ACWI ESG Screened Weight
SHELL	UNITED KINGDOM	Energy	0.373%
BP	UNITED KINGDOM	Energy	0.187%
ARCHER-DANIELS-MIDLAND	USA	Consumer Staples	0.093%
CORTEVA	USA	Materials	0.084%
FREPORT MCMORAN B	USA	Materials	0.081%
REPSOL	SPAIN	Energy	0.036%
P G & E CORP	USA	Utilities	0.035%
BUNGE	USA	Consumer Staples	0.028%
POSCO HOLDINGS	KOREA	Materials	0.028%
GRUPO MEXICO B	MEXICO	Materials	0.022%
TEXAS PACIFIC LAND	USA	Energy	0.021%
NORSK HYDRO	NORWAY	Materials	0.017%
ALCOA (NEW)	USA	Materials	0.017%
ICL GROUP	ISRAEL	Materials	0.013%
SUZANO ON	BRAZIL	Materials	0.012%

Simulated Deletions ACWI ESG Screened – Biodiversity Management Top 30 (2/2)

Security Name	Country	Sector	ACWI ESG Screened Weight
ADANI PORTS AND SEZ	INDIA	Industrials	0.011%
WILMAR INTERNATIONAL	SINGAPORE	Consumer Staples	0.010%
JBS ON	BRAZIL	Consumer Staples	0.008%
ECOPETROL	COLOMBIA	Energy	0.005%
IOI CORP	MALAYSIA	Consumer Staples	0.004%
JIANGXI COPPER CO H	CHINA	Materials	0.003%
SHANDONG GOLD-MINING H	CHINA	Materials	0.002%
SHANDONG GOLD A (HK-C)	CHINA	Materials	0.001%
SHANXI MEIJIN A (HK-C)	CHINA	Materials	0.001%
HENAN SHENHUO A (HK-C)	CHINA	Materials	0.001%
JIANGXI COPPER A (HK-C)	CHINA	Materials	0.001%
YINTAI GOLD CO A (HK-C)	CHINA	Materials	0.001%
SHENGHE RES A (HK-C)	CHINA	Materials	0.000%
CHINA MINMETALS A (HK-C)	CHINA	Materials	0.000%
TIBET SUMMIT A (HK-C)	CHINA	Materials	0.000%

Simulated Deletions ACWI ESG Screened – Biodiversity Activities Top 30 (1/2)

Security Name	Country	Sector	ACWI ESG Screened Weight	Exclusion Reason
BERKSHIRE HATHAWAY B	USA	Financials	0.680%	Biocides
SHELL	UNITED KINGDOM	Energy	0.373%	Arctic Oil & Gas Extraction
TOTALENERGIES	FRANCE	Energy	0.238%	Arctic Oil & Gas Extraction
SHERWIN-WILLIAMS CO	USA	Materials	0.108%	Biocides
RECKITT BENCKISER GROUP	UNITED KINGDOM	Consumer Staples	0.104%	Biocides
BAYER	GERMANY	Health Care	0.098%	Biocides
NUTRIEN	CANADA	Materials	0.096%	Biocides
CORTEVA	USA	Materials	0.084%	Biocides
BASF	GERMANY	Materials	0.073%	Biocides
EQUINOR	NORWAY	Energy	0.071%	Arctic Oil & Gas Extraction
MITSUI & CO	JAPAN	Industrials	0.062%	Biocides
ENI	ITALY	Energy	0.056%	Arctic Oil & Gas Extraction
LG CHEM	KOREA	Materials	0.044%	Biocides
KONINKLIJKE DSM	NETHERLANDS	Materials	0.042%	Biocides
BUNGE	USA	Consumer Staples	0.028%	Palm Oil

Simulated Deletions ACWI ESG Screened – Biodiversity Activities Top 30 (2/2)

Security Name	Country	Sector	ACWI ESG Screened Weight	Exclusion Reason
POSCO HOLDINGS	KOREA	Materials	0.028%	Palm Oil
FMC CORP	USA	Materials	0.026%	Biocides
NOVOZYMES B	DENMARK	Materials	0.022%	Biocides
AKZO NOBEL	NETHERLANDS	Materials	0.022%	Biocides
HENKEL VORZUG	GERMANY	Consumer Staples	0.022%	Biocides
RENTOKIL INITIAL	UNITED KINGDOM	Industrials	0.021%	Biocides
ICL GROUP	ISRAEL	Materials	0.013%	Biocides
NISSAN CHEMICAL	JAPAN	Materials	0.012%	Biocides
HENKEL STAMM	GERMANY	Consumer Staples	0.012%	Biocides
NIPPON PAINT HOLDINGS CO	JAPAN	Materials	0.012%	Biocides
ELANCO ANIMAL HEALTH	USA	Health Care	0.012%	Biocides
CHRISTIAN HANSEN HOLDING	DENMARK	Materials	0.012%	Biocides
SOLVAY	BELGIUM	Materials	0.011%	Biocides
SUMITOMO CHEMICAL CO	JAPAN	Materials	0.011%	Biocides
IDEMITSU KOSAN CO	JAPAN	Energy	0.010%	Biocides

Simulated Deletions ACWI ESG Screened – Toxic Emissions & Waste Controversies

Security Name	Country	Sector	ACWI ESG Screened Weight
SHELL	UNITED KINGDOM	Energy	0.373%
BP	UNITED KINGDOM	Energy	0.187%
GENERAL ELECTRIC CO	USA	Industrials	0.152%
MERCEDES BENZ GROUP	GERMANY	Consumer Discr.	0.085%
CORTEVA	USA	Materials	0.084%
FREEMPORT MCMORAN B	USA	Materials	0.081%
STELLANTIS	ITALY	Consumer Discr.	0.056%
DUPONT DE NEMOURS	USA	Materials	0.053%
VOLKSWAGEN VORZUG	GERMANY	Consumer Discr.	0.050%
REPSOL	SPAIN	Energy	0.036%
P G & E CORP	USA	Utilities	0.035%
PORSCHE AUTOMOBIL VZG	GERMANY	Consumer Discr.	0.020%
CARNIVAL CORP (US)	USA	Consumer Discr.	0.018%
NORSK HYDRO	NORWAY	Materials	0.017%
NETSCHE OSK LINES	JAPAN	Industrials	0.017%
ICL GROUP	ISRAEL	Materials	0.013%
RENAULT	FRANCE	Consumer Discr.	0.010%
VOLKSWAGEN STAMM	GERMANY	Consumer Discr.	0.010%
ECOPETROL	COLOMBIA	Energy	0.005%

Simulated Deletions ACWI ESG Screened – International Standards Top 30 (1/2)

Security Name	Country	Sector	ACWI ESG Screened Weight	Exclusion Reason
AMAZON.COM	USA	Consumer Discr.	2.186%	UN Global Compact
ALPHABET A	USA	Comm. Services	1.226%	UN Global Compact, UNGPBHR
ALPHABET C	USA	Comm. Services	1.160%	UN Global Compact, UNGPBHR
PROCTER & GAMBLE CO	USA	Consumer Staples	0.623%	UN Global Compact
WALMART	USA	Consumer Staples	0.378%	UN Global Compact
MCDONALD'S CORP	USA	Consumer Discr.	0.351%	UN Global Compact, ILO
WELLS FARGO & CO	USA	Financials	0.312%	ILO
ORACLE CORP	USA	IT	0.224%	UN Global Compact, ILO
IBM CORP	USA	IT	0.218%	UN Global Compact
GOLDMAN SACHS GROUP	USA	Financials	0.215%	UN Global Compact
MONDELEZ INTERNATIONAL A	USA	Consumer Staples	0.161%	UN Global Compact
3M CO	USA	Industrials	0.133%	UNGPBHR
IBERDROLA	SPAIN	Utilities	0.117%	UNGPBHR
ACTIVISION BLIZZARD	USA	Comm. Services	0.116%	UN Global Compact, ILO, UNGPBHR
MARATHON PETROLEUM	USA	Energy	0.103%	UN Global Compact, UNGPBHR

Simulated Deletions ACWI ESG Screened – International Standards Top 30 (2/2)

Security Name	Country	Sector	ACWI ESG Screened Weight	Exclusion Reason
FEDEX CORP	USA	Industrials	0.098%	ILO, UNGPBHR
CHARTER COMM A (NEW)	USA	Comm. Services	0.091%	ILO, UNGPBHR
CHIPOTLE MEXICAN GRILL A	USA	Consumer Discr.	0.084%	UNGPBHR
CORTEVA	USA	Materials	0.084%	UNGPBHR
EXELON CORP	USA	Utilities	0.081%	UN Global Compact
PHILLIPS 66	USA	Energy	0.081%	UN Global Compact
SYSCO CORP	USA	Consumer Staples	0.079%	UN Global Compact, UNGPBHR
LG CHEM	KOREA	Materials	0.044%	UNGPBHR
P G & E CORP	USA	Utilities	0.035%	UN Global Compact, UNGPBHR
KONINKLIJKE PHILIPS	NETHERLANDS	Health Care	0.028%	UN Global Compact
GRUPO MEXICO B	MEXICO	Materials	0.022%	UN Global Compact
ADANI ENTERPRISES	INDIA	Industrials	0.022%	UN Global Compact, UNGPBHR
PORSCHE AUTOMOBIL VZG	GERMANY	Consumer Discr.	0.020%	UN Global Compact
NEW FOX A	USA	Comm. Services	0.020%	UN Global Compact
FRESENIUS	GERMANY	Health Care	0.020%	UN Global Compact

Simulated Deletions vs. ACWI ESG Screened Proposed Index – Conventional Weapons (1/2)

Security Name	Country	Sector	ACWI ESG Screened Weight – Proposal*
L3HARRIS TECHNOLOGIES	USA	Industrials	0.097%
DAIKIN INDUSTRIES	JAPAN	Industrials	0.097%
VOLVO B	SWEDEN	Industrials	0.053%
MITSUBISHI ELECTRIC CORP	JAPAN	Industrials	0.043%
KOMATSU	JAPAN	Industrials	0.043%
TELEDYNE TECHNOLOGIES	USA	IT	0.038%
KIA CORP	KOREA	Consumer Discr.	0.035%
MAHINDRA & MAHINDRA	INDIA	Consumer Discr.	0.031%
BOOZ ALLEN HAMILTON A	USA	Industrials	0.028%
DAIMLER TRUCK HOLDING	GERMANY	Industrials	0.025%
SUBARU CORPORATION	JAPAN	Consumer Discr.	0.025%
MTU AERO ENGINES	GERMANY	Industrials	0.021%
ROLLS-ROYCE GROUP	UNITED KINGDOM	Industrials	0.016%
RHEINMETALL	GERMANY	Industrials	0.015%

- A conventional weapons “highly restrictive” screen would result in 28 securities deleted vs. ACWI ESG Screened Proposed Index (aggregate weight of 0.64%)

Simulated Deletions vs. ACWI ESG Screened Proposed Index – Conventional Weapons (2/2)

Security Name	Country	Sector	ACWI ESG Screened Weight – Proposal*
CAE	CANADA	Industrials	0.013%
BHARAT ELECTRONICS	INDIA	Industrials	0.010%
SINGAPORE TECH ENGR	SINGAPORE	Industrials	0.009%
VOLVO A	SWEDEN	Industrials	0.007%
KOREA SHIPBUILDING	KOREA	Industrials	0.007%
KONGSBERG GRUPPEN	NORWAY	Industrials	0.007%
QATAR GAS TRAN (NAKILAT)	QATAR	Energy	0.006%
BHARAT FORGE	INDIA	Consumer Discr.	0.005%
AVICHINA IND & TECH H	CHINA	Industrials	0.003%
AECC AVIATION A (HK-C)	CHINA	Industrials	0.002%
ASELSAN ELEKTRONIK	TURKEY	Industrials	0.002%
AVIC ELECMECH A (HK-C)	CHINA	Industrials	0.001%
NORTH IND GRP A (HK-C)	CHINA	Industrials	0.001%
AVIC HELICOPTER A (HK-C)	CHINA	Industrials	0.000%

- A conventional weapons “highly restrictive” screen would result in 28 securities deleted vs. ACWI ESG Screened Proposed Index (aggregate weight of 0.64%)

Simulated Deletions vs. ACWI ESG Screened Proposed Index – SDG Alignment Top 30 (1/2)

Security Name	Country	Sector	ACWI ESG Screened Weight – Proposal*
ENBRIDGE	CANADA	Energy	0.184%
SEMPRA ENERGY	USA	Utilities	0.114%
TC ENERGY CORPORATION	CANADA	Energy	0.104%
WILLIAMS COS	USA	Energy	0.091%
CHENIERE ENERGY	USA	Energy	0.080%
ONEOK	USA	Energy	0.060%
HALLIBURTON CO	USA	Energy	0.060%
BAKER HUGHES CO	USA	Energy	0.055%
FORTIS	CANADA	Utilities	0.046%
NESTE CORPORATION	FINLAND	Energy	0.046%
PEMBINA PIPELINE	CANADA	Energy	0.043%
ATMOS ENERGY CORP	USA	Utilities	0.035%
TARGA RESOURCES CORP	USA	Energy	0.032%
CHINA RESOURCES LAND	CHINA	Real Estate	0.029%
ADANI TOTAL GAS	INDIA	Utilities	0.028%

- A screen on SDG Strongly Misaligned securities would result in 47 securities deleted vs. ACWI ESG Screened Proposed Index (aggregate weight of 1.27%)

Simulated Deletions vs. ACWI ESG Screened Proposed Index – SDG Alignment Top 30 (2/2)

Security Name	Country	Sector	ACWI ESG Screened Weight – Proposal*
ENN ENERGY HOLDINGS	CHINA	Utilities	0.025%
ATLANTIA	ITALY	Industrials	0.025%
SNAM	ITALY	Utilities	0.021%
APA GROUP	AUSTRALIA	Utilities	0.020%
UGI CORP	USA	Utilities	0.018%
SK INNOVATION CO	KOREA	Energy	0.017%
TENARIS (IT)	ITALY	Energy	0.014%
COSAN ON	BRAZIL	Energy	0.010%
ENAGAS	SPAIN	Utilities	0.010%
CK INFRASTRUCTURE HLDGS	HONG KONG	Utilities	0.008%
ABU DHABI NATL OIL CO	U.A.E.	Consumer Discr.	0.008%
CHINA RESOURCES GAS GRP	CHINA	Utilities	0.008%
EMPRESAS COPEC	CHILE	Energy	0.007%
YANBU NATL PETROCHEMICAL	SAUDI ARABIA	Materials	0.007%
CHINA RESOURCES MIXC	CHINA	Real Estate	0.007%

- A screen on SDG Strongly Misaligned securities would result in 47 securities deleted vs. ACWI ESG Screened Proposed Index (aggregate weight of 1.27%)

Simulated Deletions vs. ACWI ESG Screened Proposed Index – “CCC” Top 30 (1/2)

Security Name	Country	Sector	ACWI ESG Screened Weight – Proposal*
CELLTRION	KOREA	Health Care	0.031%
FORMOSA PLASTIC CORP	TAIWAN	Materials	0.027%
SUN PHARMACEUTICAL IND	INDIA	Health Care	0.024%
LASERTEC CORP	JAPAN	IT	0.023%
NISSAN MOTOR CO	JAPAN	Consumer Discr.	0.020%
FORMOSA CHEMICALS FIBRE	TAIWAN	Materials	0.017%
IAC	USA	Comm. Services	0.011%
DISH NETWORK A	USA	Comm. Services	0.009%
ECOPROBM	KOREA	Industrials	0.009%
ASIA CEMENT CORP	TAIWAN	Materials	0.007%
MESAIEED PETROCHEMICAL	QATAR	Materials	0.007%
SAUDI KAYAN PETROCHEM	SAUDI ARABIA	Materials	0.006%
SAMSUNG HEAVY INDUSTRIES	KOREA	Industrials	0.006%
ZHUZHOU CRRC TIMES H	CHINA	Industrials	0.006%
TAL EDUCATION GROUP ADR	CHINA	Consumer Discr.	0.006%

- A screen on CCC-rated securities would result in 140 securities deleted vs. ACWI ESG Screened Proposed Index (aggregate weight of 0.41%)

Simulated Deletions vs. ACWI ESG Screened Proposed Index – “CCC” Top 30 (2/2)

Security Name	Country	Sector	ACWI ESG Screened Weight – Proposal*
WEICHAI POWER CO H	CHINA	Industrials	0.006%
BHARAT FORGE	INDIA	Consumer Discr.	0.005%
CHINA STATE CONSTRUCTION	CHINA	Industrials	0.005%
QATAR ELECT & WATER CO	QATAR	Utilities	0.005%
SAUDI TADAWUL GROUP HLDG	SAUDI ARABIA	Financials	0.005%
INDIAN RAIL CATER & TOUR	INDIA	Industrials	0.005%
HYUNDAI STEEL CO	KOREA	Materials	0.005%
TONGWEI CO A (HK-C)	CHINA	Consumer Staples	0.005%
SAUDI RSCH AND MEDIA GRP	SAUDI ARABIA	Comm. Services	0.004%
CHINA MERCHANTS PORT	CHINA	Industrials	0.004%
RABIGH REFINING & PETRO	SAUDI ARABIA	Energy	0.004%
JOLLIBEE FOODS CORP	PHILIPPINES	Consumer Discr.	0.004%
F&F (NEW)	KOREA	Consumer Discr.	0.004%
MABANEE CO SAKC	KUWAIT	Real Estate	0.004%
BEIJING SHANGHAI A(HK-C)	CHINA	Industrials	0.004%

- A screen on CCC-rated securities would result in 140 securities deleted vs. ACWI ESG Screened Proposed Index (aggregate weight of 0.41%)

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