

# MSCI ACWI Climate Indexes

March 29, 2024

# Climate Indexes - Key Metrics

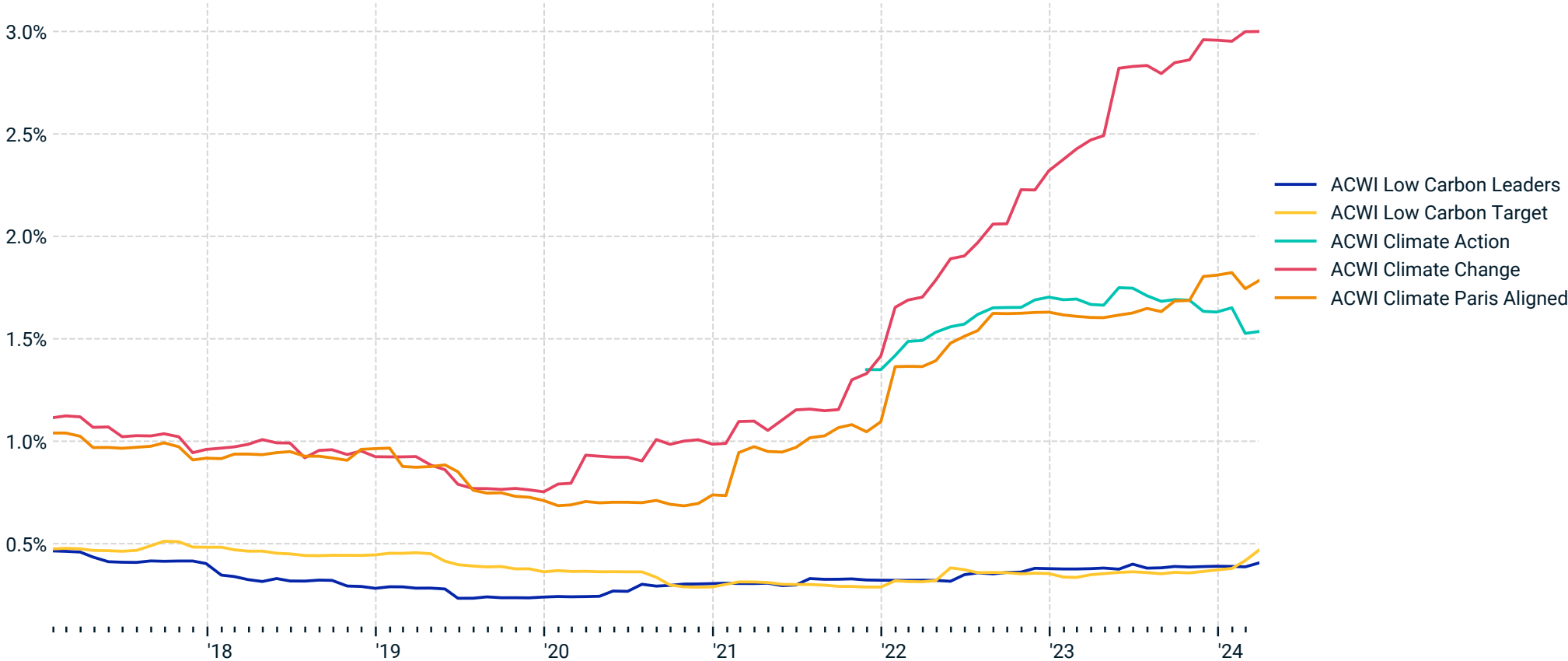
	ACWI	ACWI Low Carbon Leaders	ACWI Low Carbon Target	ACWI Climate Action	ACWI Climate Change	ACWI Climate Paris Aligned
<b>Return Metrics</b>						
1M	3.2	3.0	2.8	3.0	2.9	2.4
3M	8.3	8.1	8.4	8.7	9.4	7.0
YTD	8.3	8.1	8.4	8.7	9.4	7.0
1 Yr	26.1	25.4	26.2	28.3	30.4	24.5
5 Yr	11.4	11.4	11.5	12.4	12.9	11.3
<b>Risk Metrics</b>						
Total risk (%)	14.6	14.5	14.6	17.8	15.0	14.8
Tracking error (%)	0.0	0.4	0.4	1.4	1.8	1.3
<b>ESG and Climate Metrics</b>						
ESG Score	6.8	6.8	6.8	6.9	7.0	6.9
Implied Temperature Rise (°C)	3.0	2.6	2.4	2.7	2.6	2.4
Carbon Intensity to EVIC - Scope 1 + 2 + 3*	382	161	90	220	140	93
<b>Number of Constituents</b>						
Average number of constituents	2663	2038	1761	1454	2541	1266

Gross returns in USD

As of March 29, 2024.\* Wtd Avg t CO2e/\$M EVIC

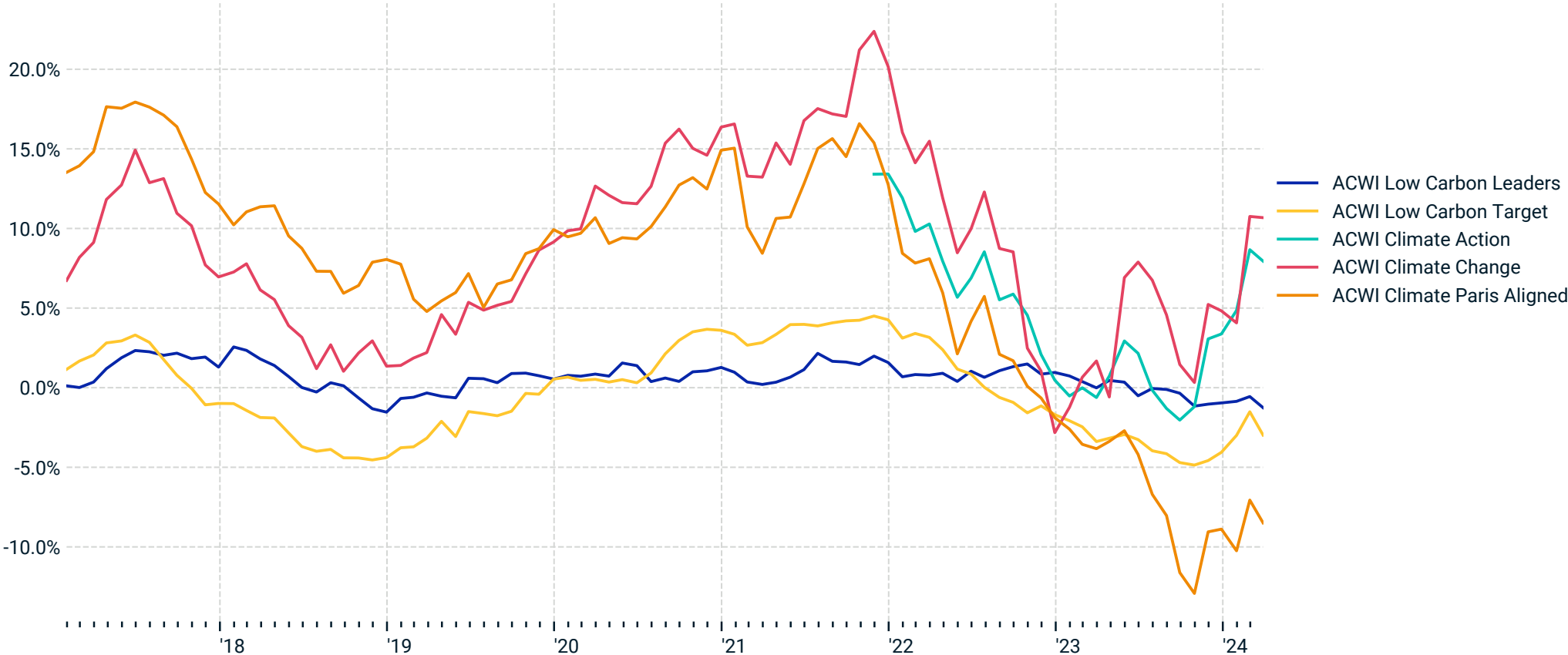
# 3 Year Annualized Rolling Active Risk (%)

## 3 Year Annualized Rolling Active Risk (%)



# 3 Year Annualized Rolling Active Return (%)

## 3 Year Annualized Rolling Active Return (%)



# Climate Metrics

## Climate change

	ACWI	ACWI Low Carbon Leaders	ACWI Low Carbon Target	ACWI Climate Action	ACWI Climate Change	ACWI Climate Paris Aligned
<b>Climate footprint</b>						
Carbon emissions (t CO2e/\$M invested) - Scope 1 + 2	78	35	20	43	25	11
Carbon intensity (t CO2e/\$M sales) - Scope 1 + 2	166	87	59	112	72	38
Wtd avg carbon intensity (t CO2e/\$M sales)	119	86	54	88	57	37
<b>Low carbon transition risks</b>						
Low carbon transition score	6.0	6.1	6.2	6.2	6.5	6.6
Solutions (%)	10.5	10.9	11.7	13.0	21.5	20.0
Product & operational transition (%)	21.4	16.0	9.8	15.8	11.8	9.5
Asset stranding (%)	2.0	2.0	2.8	1.3	0.2	0.0
<b>Exposure to asset stranding risks</b>						
Potential carbon emissions (t CO2e/\$M invested)	1311	347	1	601	38	0
Fossil fuel reserves (%)	6.0	3.8	1.6	3.9	1.2	0.5
Thermal coal mining (%)	0.9	0.1	0.1	0.0	0.1	0.1
Thermal coal-based power generation (%)	2.5	1.9	1.1	1.1	1.5	0.4
Unconventional oil & gas extraction (%)	3.4	2.3	0.6	3.2	0.3	0.0
<b>Exposure to clean technology solutions</b>						
Clean technologies solutions (> 20% revenue)	12.5	12.1	12.7	15.1	22.6	24.0
Clean technologies solutions revenue (wtd avg %)	6.1	5.9	6.3	7.1	11.3	12.2
Green/fossil fuel-based net revenue exposure	3.2	3.8	19.9	4.9	29.1	143.6
<b>Other climate metrics</b>						
Exposure to carbon-related assets (%)	6.7	5.7	4.6	6.0	1.9	1.8
Climate-related controversies (% score ≤ 4)	4.4	2.0	0.8	3.7	0.3	0.1
Low carbon transition management score (% top quartile)	64.6	63.4	62.5	72.3	69.1	66.6

As of March 29, 2024.

# Climate Metrics

## Climate change

	ACWI	ACWI Low Carbon Leaders	ACWI Low Carbon Target	ACWI Climate Action	ACWI Climate Change	ACWI Climate Paris Aligned
<b>Carbon Footprint</b>						
Carbon Intensity to EVIC - Scope 1 + 2 + 3*	382	161	90	220	140	93
Carbon Intensity to EVIC - Scope 1 + 2*	50	23	13	31	17	8
Carbon intensity (t CO2e/\$M sales) - Scope 1 + 2	166	87	59	112	72	38
Carbon Emissions to Sales - Scope 1 + 2 + 3**	812	584	456	579	484	431
Carbon Emissions to Sales - Scope 1 + 2**	119	86	54	88	57	37
Carbon emissions (t CO2e/\$M invested) - Scope 1 + 2	78	35	20	43	25	11
Companies Reporting scope 12 emissions (%)	91.6	90.9	90.5	93.8	92.4	90.6
<b>Fossil Fuel Exposure</b>						
Potential carbon emissions (t CO2e/\$M invested)	1311	347	1	601	38	0
Fossil fuel reserves (%)	6.0	3.8	1.6	3.9	1.2	0.5
Thermal coal mining (%)	0.9	0.1	0.1	0.0	0.1	0.1
Unconventional oil & gas extraction (%)	3.4	2.3	0.6	3.2	0.3	0.0
<b>Low Carbon Transition Risk Assessment</b>						
Low carbon transition score	6.0	6.1	6.2	6.2	6.5	6.6
Solutions (%)	10.5	10.9	11.7	13.0	21.5	20.0
Product & operational transition (%)	21.4	16.0	9.8	15.8	11.8	9.5
Asset stranding (%)	2.0	2.0	2.8	1.3	0.2	0.0

As of March 29, 2024.\* Wtd Avg t CO2e/\$M EVIC\*\* Wtd Avg t CO2e/\$M Sales

# ESG Metrics

## Integration, values and norms

	ACWI	ACWI Low Carbon Leaders	ACWI Low Carbon Target	ACWI Climate Action	ACWI Climate Change	ACWI Climate Paris Aligned
<b>Integration</b>						
ESG score	6.8	6.8	6.8	6.9	7.0	6.9
ESG leaders (AAA-AA) (%)	44.5	46.0	45.5	48.1	49.9	48.0
ESG laggards (B-CCC) (%)	3.4	3.4	3.6	2.6	2.6	3.3
ESG trend positive (%)	13.9	14.6	15.7	12.4	12.3	13.9
ESG trend negative (%)	12.5	12.6	12.5	14.4	14.0	13.7
Index ESG rating	A	A	A	A	A	A
Environmental pillar score	6.0	6.1	6.3	6.4	6.4	6.5
Social pillar score	5.0	5.1	5.1	5.0	5.1	5.1
Governance pillar score	5.7	5.7	5.6	5.7	5.6	5.7
<b>Values and norms</b>						
Tobacco involvement (%)	0.7	0.7	1.1	0.0	0.0	0.0
Civilian firearms producers (%)	0.1	0.1	0.2	0.1	0.1	0.0
Ties to controversial weapons (%)	0.5	0.0	0.0	0.0	0.1	0.1
Global compact compliance violation (%)	0.2	0.0	0.0	0.0	0.0	0.0
Red flag controversies (%)	0.2	0.0	0.0	0.0	0.0	0.0
Orange flag controversies (%)	30.4	27.6	27.2	31.9	27.0	21.5

As of March 29, 2024.

# GICS Sector Exposures

	ACWI	ACWI Low Carbon Leaders	ACWI Low Carbon Target	ACWI Climate Action	ACWI Climate Change	ACWI Climate Paris Aligned
<b>Communication services</b>	7.6	8.0	8.7	8.7	7.2	6.9
<b>Consumer discretionary</b>	10.9	10.2	9.9	11.2	12.1	9.6
<b>Consumer staples</b>	6.4	6.3	6.1	6.5	3.4	2.1
<b>Energy</b>	4.5	3.7	3.2	4.1	0.4	0.0
<b>Financials</b>	16.1	18.2	18.2	15.7	14.8	17.8
<b>Health care</b>	11.1	11.2	11.4	12.2	12.7	12.8
<b>Information technology</b>	23.7	24.2	24.2	25.4	32.4	26.9
<b>Industrials</b>	10.8	10.2	10.3	8.4	9.9	14.4
<b>Materials</b>	4.2	3.5	3.2	3.7	2.3	2.9
<b>Real estate</b>	2.2	2.4	2.7	2.0	3.0	4.3
<b>Utilities</b>	2.5	2.2	2.1	2.1	1.8	2.4

As of Mar 29, 2024



# Regional and Top Country Exposures

## Regional Exposure

	ACWI	ACWI Low Carbon Leaders	ACWI Low Carbon Target	ACWI Climate Action	ACWI Climate Change	ACWI Climate Paris Aligned
<b>EM</b>	10.0	10.8	11.1	6.3	9.2	9.8
<b>Europe and Middle East</b>	15.5	14.5	14.6	16.3	14.6	16.3
<b>North America</b>	66.6	66.9	66.4	70.4	69.2	66.5
<b>Pacific</b>	8.0	7.8	7.9	7.0	7.0	7.4

As of Mar 29, 2024

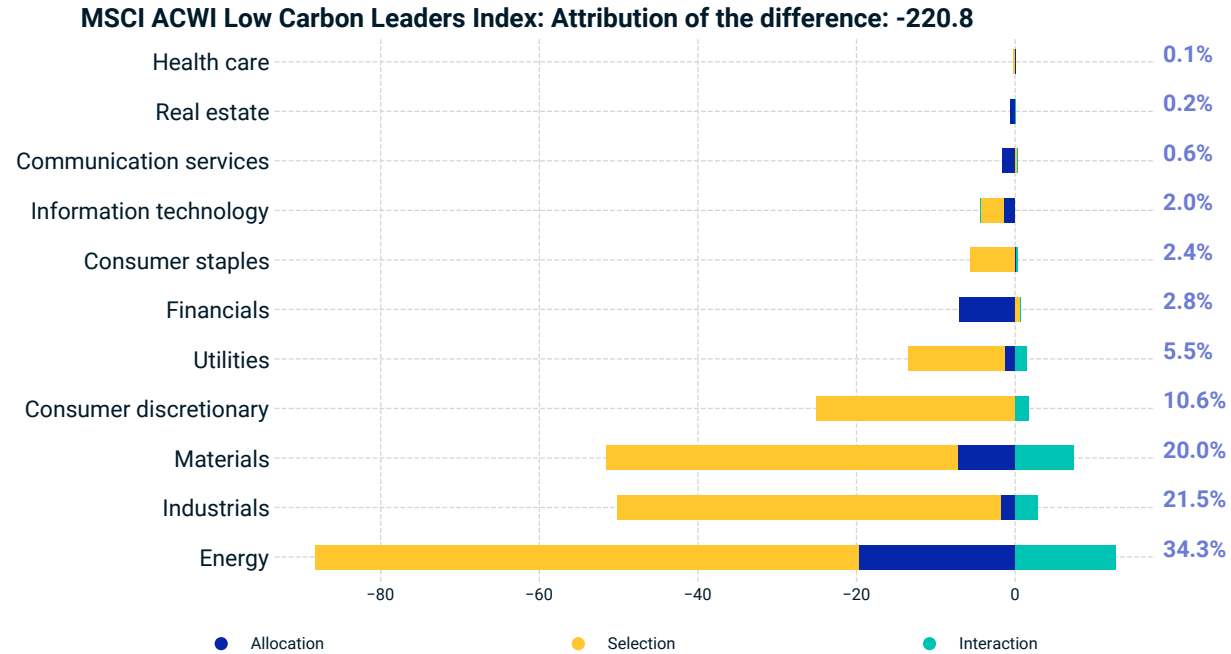
## Top Country Exposure

	ACWI	ACWI Low Carbon Leaders	ACWI Low Carbon Target	ACWI Climate Action	ACWI Climate Change	ACWI Climate Paris Aligned
<b>USA</b>	63.8	63.7	62.9	67.9	67.3	62.8
<b>Japan</b>	5.5	5.4	5.6	4.8	5.0	5.2
<b>United Kingdom</b>	3.4	2.9	3.2	3.2	2.3	2.4
<b>France</b>	2.8	2.3	2.4	2.9	2.9	3.1
<b>Canada</b>	2.8	3.2	3.6	2.5	1.9	3.7

Country exposures of ACWI Climate Indexes for the top 5 country exposures of MSCI ACWI Index.

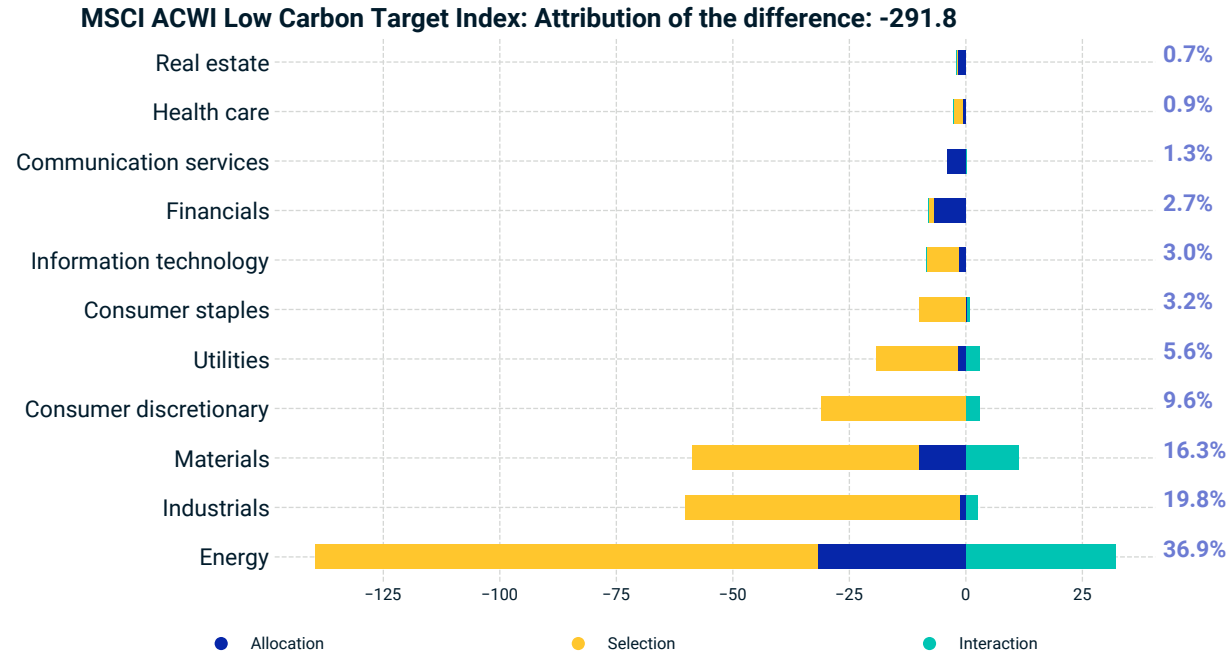
As of Mar 29, 2024

# Brinson Attribution: Enterprise Carbon Intensity Reduction



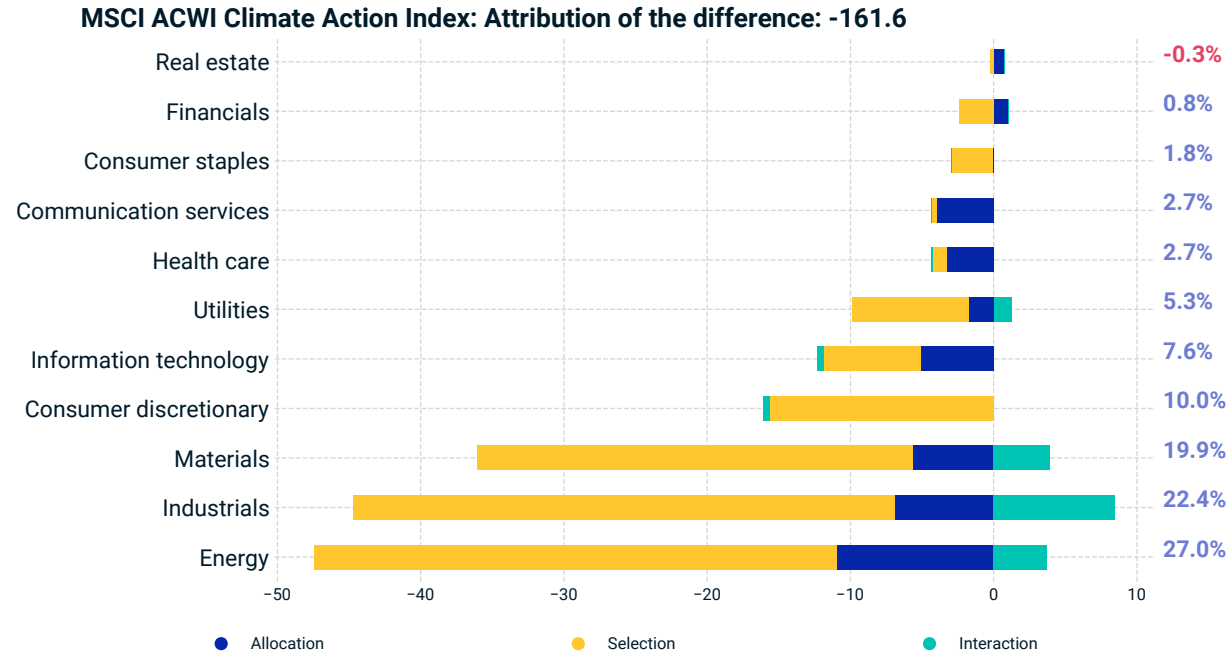
Brinson Attribution based on difference between Enterprise Carbon Intensity (Scope 1+2+3) of ACWI Climate Indexes relative to MSCI ACWI Index. The exhibit demonstrates the role of sector allocation and security selection within the sector in the emission intensity reduction of the respective ACWI Climate Index relative to MSCI ACWI Index

# Brinson Attribution: Enterprise Carbon Intensity Reduction



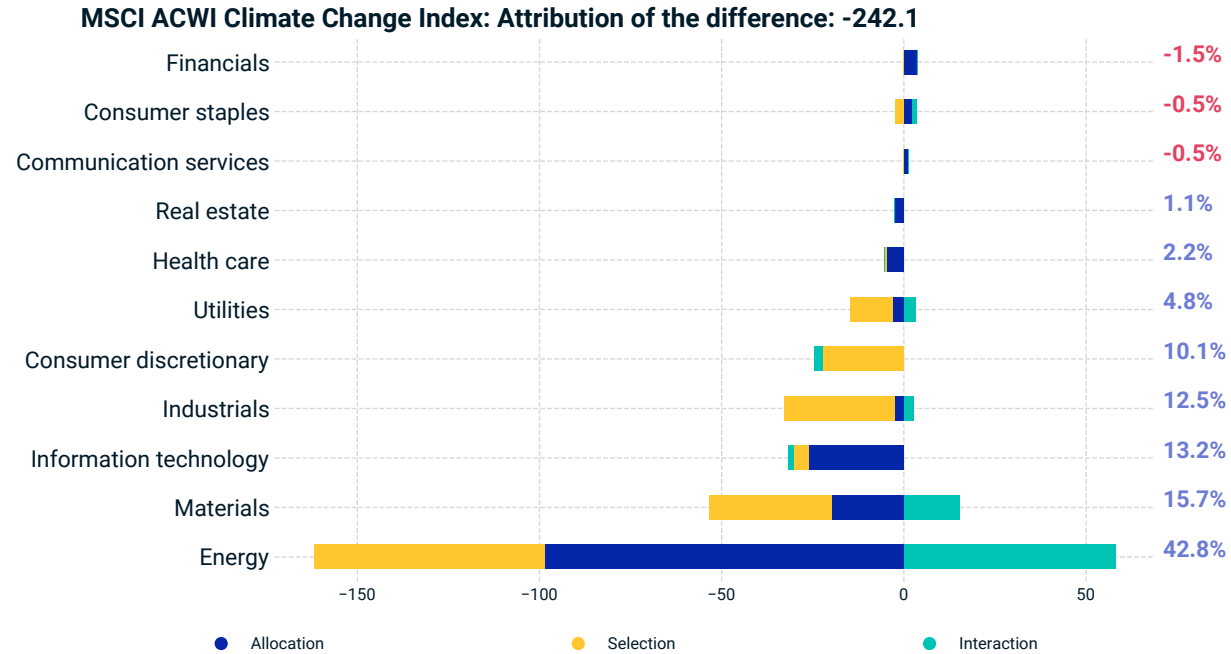
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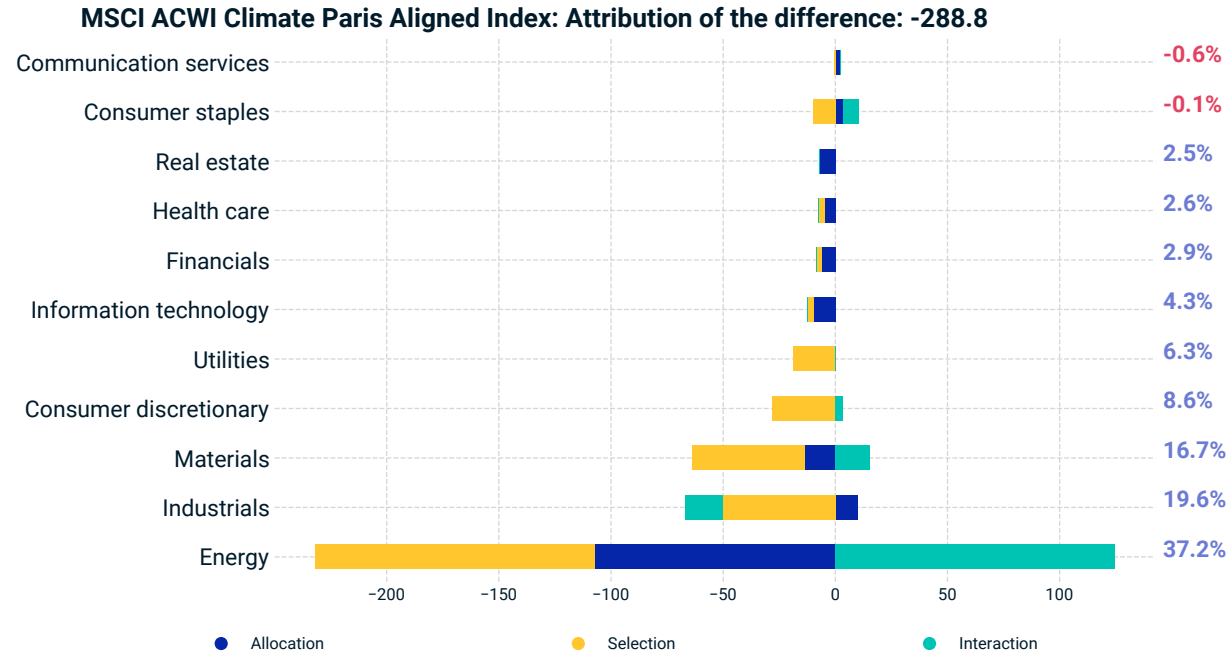
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# EFMGEMLT Performance Attribution

## Performance Attribution

	ACWI Low Carbon Leaders	ACWI Low Carbon Target	ACWI Climate Action	ACWI Climate Change	ACWI Climate Paris Aligned
<b>Total</b>	11.6	11.7	12.5	13.0	11.6
<b>Benchmark</b>	11.6	11.6	11.6	11.6	11.6
<b>Active</b>	-0.0	0.1	0.8	1.3	-0.0
<b>Specific</b>	0.2	0.3	0.8	1.3	0.4
<b>Currencies</b>	-0.0	-0.0	0.1	0.1	-0.0
<b>Common factor</b>	-0.2	-0.2	-0.0	-0.0	-0.4
<b>Countries</b>	-0.0	0.0	0.0	0.0	0.0
<b>Industries</b>	-0.1	-0.0	-0.1	0.2	0.1
<b>Styles</b>	-0.1	-0.2	-0.0	-0.2	-0.5

Nov. 30, 2018, to Mar29, 2024 with monthly data.

# Appendix: ESG: Integration, values and norms

	Definition
<b>ESG score</b>	Weighted average ESG Score. The ESG Score indicates how well the index companies manage their most material ESG risks relative to sector peers. Scores range from 10 (best) to 0 (worst).
<b>ESG leaders (AAA-AA) (%)</b>	Exposure to companies with an ESG rating of AAA or AA (best in class relative to peers).
<b>ESG laggards (B-CCC) (%)</b>	Exposure to companies with an ESG rating of B or CCC (worst in class relative to peers).
<b>ESG trend positive (%)</b>	Exposure to companies with a rating upgrade in the year prior to the most recent ESG rating.
<b>ESG trend negative (%)</b>	Exposure to companies with a rating downgrade in the year prior to the most recent ESG rating.
<b>Index ESG rating</b>	The letter rating equates the ESG Score.
<b>Environmental pillar score</b>	The Environmental Pillar Score indicates how well the index companies manage their most material environment risks. Scores range from 10 (best) to 0 (worst).
<b>Social pillar score</b>	The Social Pillar Score indicates how well the index companies manage their most material social risks. Scores range from 10 (best) to 0 (worst).
<b>Governance pillar score</b>	The Governance Pillar Score indicates how well the index companies manage their most material governance risks. Scores range from 10 (best) to 0 (worst).
<b>Tobacco involvement (%)</b>	Exposure to companies flagged for involvement in tobacco. Specifically, tobacco producers and companies that derive 5% or more aggregate revenue from the manufacture, distribution, retailing, licensing, and supply of tobacco products, as defined by the methodology of the MSCI Global ex Tobacco Involvement Indexes.
<b>Civilian firearms producers (%)</b>	Exposure to civilian firearms producers.
<b>Ties to controversial weapons (%)</b>	Exposure to companies with ties to controversial weapons. MSCI ESG Research's Controversial Weapons definition covers 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 Global Ex-Controversial Weapons Indexes.
<b>Global compact compliance violation (%)</b>	Exposure to companies in violation of the UN Global Compact principles.
<b>Red flag controversies (%)</b>	Exposure to companies with environment-, governance-, customer-, human rights-, or labor rights-related controversies that are assessed as "Very Severe".
<b>Orange flag controversies (%)</b>	Exposure to companies with ongoing environment-, governance-, customer-, human rights-, or labor rights-related controversies that are assessed as "Severe" and indicate structural problems at the company.



# Appendix: ESG: Climate change

	Definition
<b>Carbon emissions (t CO2e/\$M invested) - Scope 1 + 2</b>	Scope 1 + Scope 2 Carbon emissions normalized for the index.
<b>Carbon intensity (t CO2e/\$M sales) - Scope 1 + 2</b>	Efficiency of the index in terms of total Scope 1 and Scope 2 carbon emissions divided by total sales.
<b>Wtd avg carbon intensity (t CO2e/\$M sales)</b>	Exposure to carbon intensive companies based on Scope 1 and Scope 2 emissions.
<b>Low carbon transition score</b>	Weighted average low Carbon Transition (LCT) score measuring companies' level of alignment to the LCT. Companies with higher LCT score are more aligned with the LCT compared to the companies with lower scores. Scores range from 0 to 10.
<b>Solutions (%)</b>	Exposure to companies involved in low/zero carbon solutions that would have negative total carbon intensity and are likely to benefit in a low carbon scenario.
<b>Product &amp; operational transition (%)</b>	Exposure to companies with moderately to highly carbon intensive products or operations. Such companies' products or operations could go under transition in a low carbon scenario.
<b>Asset stranding (%)</b>	Exposure to companies with very high risk exposure to transition risk and may face asset stranding risk in the short to medium term.
<b>Potential carbon emissions (t CO2e/\$M invested)</b>	Carbon potential emissions normalized for the index.
<b>Fossil fuel reserves (%)</b>	Exposure to companies that own proved & probable coal and/or oil and natural gas reserves used for energy purposes. The definition is based on the MSCI Global Ex-Fossil Fuel Indexes Methodology.
<b>Thermal coal mining (%)</b>	Exposure to companies that derive some of their revenue from thermal coal mining.
<b>Thermal coal-based power generation (%)</b>	Exposure to companies that derive some of their revenue from thermal coal-based power generation.
<b>Unconventional oil &amp; gas extraction (%)</b>	Exposure to companies that derive revenues from unconventional oil and gas including oil sands, oil shale, shale gas, shale oil, coal seam gas, and coal bed methane. It excludes all types of conventional oil and gas production.
<b>Clean technologies solutions (&gt; 20% revenue)</b>	Exposure to companies that derive 20% or more revenue from any of the five clean tech themes: alternative energy, energy efficiency, green building, pollution prevention, or sustainable water.
<b>Clean technologies solutions revenue (wtd avg %)</b>	Weighted average % revenue derived from any of the five clean tech themes including alternative energy, energy efficiency, green building, pollution prevention, or sustainable water.
<b>Green/fossil fuel-based net revenue exposure</b>	The ratio of the weighted average clean technologies solutions revenue (%) or "Green Revenue" to the weighted average fossil fuel revenue (%) defined as the weighted average % revenue derived from any of the fossil fuel-related activities including thermal coal mining, oil and gas extraction, thermal coal-based power generation, and oil and gas-based power generation.
<b>Exposure to carbon-related assets (%)</b>	Exposure to companies that belong to the following GICS industries: Energy Equipment & Services (101010), Oil, Gas & Consumable Fuels (101020), Electric Utilities (551010), Gas Utilities (551020), Multi-Utilities (551030).
<b>Climate-related controversies (% score ≤ 4)</b>	Exposure to companies with climate change and energy-related controversies that are flagged as Red, Orange and Yellow, covering scores 0 to 4. Factors affecting this evaluation include a history of involvement in GHG-related legal cases, widespread or egregious impacts due to corporate GHG emissions, resistance to improved practices, and criticism by NGOs and/or other third-party observers.
<b>Low carbon transition management score (% top quartile)</b>	Exposure to companies that belong to the top quartile in terms of their Low Carbon Transition Management Score relative to companies in the relevant GICS Sub-Industry that are constituents of the MSCI ACWI IMI.

# Appendix: ESG: Climate change

	Definition
<b>Carbon Intensity to EVIC - Scope 1 + 2 + 3</b>	Weighted average Scope 1, Scope 2 and Scope 3 carbon emissions intensity normalized by enterprise value including cash. (Unit: tons of CO2/ \$ million enterprise value including cash)
<b>Carbon Intensity to EVIC - Scope 1 + 2</b>	Weighted average Scope 1 and Scope 2 carbon emissions intensity normalized by enterprise value including cash. (Unit: tons of CO2/ \$ million enterprise value including cash)
<b>Carbon intensity (t CO2e/\$M sales) - Scope 1 + 2</b>	Efficiency of the index in terms of total Scope 1 and Scope 2 carbon emissions divided by total sales.
<b>Carbon Emissions to Sales - Scope 1 + 2 + 3</b>	Weighted average Scope 1, Scope 2 and Scope 3 carbon emissions intensity normalized by sales. (Unit: tons of CO2/ \$ million sales)
<b>Carbon Emissions to Sales - Scope 1 + 2</b>	Weighted average Scope 1 and Scope 2 carbon emissions intensity normalized by sales. (Unit: tons of CO2/ \$ million sales)
<b>Carbon emissions (t CO2e/\$M invested) - Scope 1 + 2</b>	Scope 1 + Scope 2 Carbon emissions normalized for the index.
<b>Companies Reporting scope 12 emissions (%)</b>	Exposure to companies with Scope 1 and Scope 2 carbon intensities.
<b>Potential carbon emissions (t CO2e/\$M invested)</b>	Carbon potential emissions normalized for the index.
<b>Fossil fuel reserves (%)</b>	Exposure to companies that own proved & probable coal and/or oil and natural gas reserves used for energy purposes. The definition is based on the MSCI Global Ex-Fossil Fuel Indexes Methodology.
<b>Thermal coal mining (%)</b>	Exposure to companies that derive some of their revenue from thermal coal mining.
<b>Unconventional oil &amp; gas extraction (%)</b>	Exposure to companies that derive revenues from unconventional oil and gas including oil sands, oil shale, shale gas, shale oil, coal seam gas, and coal bed methane. It excludes all types of conventional oil and gas production.
<b>Low carbon transition score</b>	Weighted average low Carbon Transition (LCT) score measuring companies' level of alignment to the LCT. Companies with higher LCT score are more aligned with the LCT compared to the companies with lower scores. Scores range from 0 to 10.
<b>Solutions (%)</b>	Exposure to companies involved in low/zero carbon solutions that would have negative total carbon intensity and are likely to benefit in a low carbon scenario.
<b>Product &amp; operational transition (%)</b>	Exposure to companies with moderately to highly carbon intensive products or operations. Such companies' products or operations could go under transition in a low carbon scenario.
<b>Asset stranding (%)</b>	Exposure to companies with very high risk exposure to transition risk and may face asset stranding risk in the short to medium term.

# Appendix: ESG: Climate change

	Definition
<b>Clean technologies solutions (&gt; 20% revenue)</b>	Exposure to companies that derive 20% or more revenue from any of the five clean tech themes: alternative energy, energy efficiency, green building, pollution prevention, or sustainable water.
<b>Green Revenues (wtd avg %)</b>	Weighted average of index constituents' percentage of revenue derived from alternative energy, energy efficiency, green building, pollution prevention, sustainable water, or sustainable agriculture.
<b>Count of Companies with Green Business &gt;= 20%</b>	Number of companies that derive 20% or more revenue from any of the five clean tech themes: alternative energy, energy efficiency, green building, pollution prevention, or sustainable water.
<b>Green/fossil fuel-based net revenue ratio</b>	The ratio of the weighted average clean technologies solutions revenue (%) or "Green Revenue" to the weighted average fossil fuel revenue (%) defined as the weighted average % revenue derived from any of the fossil fuel related activities including thermal coal mining, extraction, production and mining of conventional and unconventional oil and gas, thermal coal based power generation, liquid fuel based power generation and natural gas based power generation.
<b>Companies with GHG emissions reduction targets (%)</b>	Exposure to companies with carbon emissions reduction target/s.
<b>Companies with SBTi-approved targets (%)</b>	Exposure to companies with one or more active carbon emissions reduction target/s approved by the Science Based Targets initiative (SBTi).
<b>Count of Companies with approved SBTi</b>	Number of companies with one or more active carbon emissions reduction target/s approved by the Science Based Targets initiative (SBTi).
<b>Thermal Coal (%)</b>	Exposure to companies with that derive any revenues from thermal coal power generation.
<b>Renewables (%)</b>	Exposure to companies with that derive any revenues from renewable power generation.
<b>Liquid Fuel (%)</b>	Exposure to companies with that derive any revenues from liquid fuel power generation.
<b>Thermal Coal (GWh)</b>	Weighted average power generation output (in GWh) from thermal coal.
<b>Renewables (GWh)</b>	Weighted average power generation output (in GWh) from renewables.
<b>Liquid Fuel (GWh)</b>	Weighted average power generation output (in GWh) from liquid fuels.

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