RAFI™ Multi-Factor Climate Transition Index Series
Attribution Summary: Q1 2025

Developed

Performance Analysis	QTD Return	QTD Excess Return	YTD Return	1-Year Return	Carbon Intensity (CF/EVIC)
RAFI Multi-Factor Climate Transition Developed Index	3.32%	4.96%	3.32%	9.64%	189.8
RAFI Multi-Factor ex Size Developed	5.52%	7.15%	5.52%	9.59%	923.5
Solactive GBS Dev Markets Large/Mid Cap Index	*-1.64%*	*---*	*-1.64%*	*7.54%*	*524.9*
Factor Attribution	**QTD Return**	**QTD Excess Return**	**YTD Return**	**1-Year Return**	**Carbon Intensity (CF/EVIC)**
RAFI Value Factor Developed	7.43%	9.1%	7.4%	8.01%	1960.9
RAFI Low Volatility Factor Developed	8.58%	10.2%	8.6%	12.40%	369.3
RAFI Quality Factor Developed	2.21%	3.8%	2.2%	6.03%	646.3
RA Momentum Factor Developed	3.46%	5.1%	3.5%	11.79%	720.5

The RAFI Multi-Factor Climate Transition Developed Index enjoyed a strong start to 2025, running ahead of its benchmark by 496 bps in the first quarter of 2025. Riffing off the adage, buy the rumor, sell the news, the start of the year tested those prior expectations spurring a furious repricing. The AI singularity has been one major narrative, with massive amounts of capex spent at hyper-scalers seeking a compute advantage in a potentially winner take all market. The success of Chinese AI firm Deep Seek tested those assumptions and the valuations of the American hyper-scaler business model. The other major story playing out in Q1 has been the reversion of a post-election boom in American securities. Exogenous shocks from the White House may upset American markets, which began the quarter at historically elevated CAPE ratios with their performance driven by a few select leaders – much as in 2021. This trade had been punishing to diversified factor strategies over the past few years, setting the stage for strong performance as these top dog trades unwound.

Factor strategies enjoyed a strong Q1 with all sleeves outperforming a cap-weighted index over the course of the quarter. As the market outlook rapidly shifted from soft landing to potential crash, Low Volatility and Value factors harvested a healthy excess return in Q1. Low Volatility crushed its cap-weight reference up 1021 bps, enjoying particularly strong February and March returns amidst trade uncertainty. With markets priced to a premium, the Value factor returned 906 bps in excess performance to market cap on the backs of a repricing of mega-cap AI giants. Momentum and Quality outperformed by 510 bps and 384 bps, respectively.

The strategy trailed a comparable unconstrained Multi-Factor Developed ex Size strategy by 220 bps for the quarter. At nearly 5x the carbon intensity of the carbon constrained strategy, comparable unconstrained strategy would have tilted towards Value which had a strong quarter and was the most carbon intensive strategy by some measure. Relative performance of the constrained strategy was impacted by exposure to Nvidia, Novo Nordisk, Oracle and Broadcom. While this relative lean towards larger cap, technology names with low carbon intensity has been a tailwind to relative performance in the recent past, it was a drag on performance during a quarter of repricing for these recent market leaders. Accordingly, relative overweights to the United States and Technology were drags on performance for the carbon constrained strategy this quarter.

Stock Analysis

Top Five/Bottom Five Contributors to Excess Return

	Total Weight	Active Weight	Q1 2025 Return	Excess Return Contribution	Initial Factor Sleeve Weights			
					Value	Low Volatility	Quality	Momentum
Top Five Contributors to Return								
Tesla	0.00%	-1.35%	-35.83%	0.58%	—	—	—	0.05%
Alphabet	0.00%	-2.92%	-18.05%	0.52%	—	—	—	—
Nvidia	1.98%	-2.35%	-19.29%	0.44%	—	—	—	0.60%
Microsoft	0.00%	-4.34%	-10.76%	0.42%	—	—	—	—
Apple	2.14%	-2.82%	-11.20%	0.38%	—	—	0.72%	0.06%
Bottom Five Contributors to Return								
Novo Nordisk	1.85%	1.47%	-20.21%	-0.27%	—	0.14%	0.15%	—
Oracle	1.52%	1.14%	-15.88%	-0.21%	—	0.39%	0.49%	0.18%
Berkshire Hathaway	0.00%	-0.93%	17.49%	-0.18%	—	—	—	—
Phillip Morris	0.00%	-0.32%	33.06%	-0.10%	—	0.32%	0.10%	0.15%
Exxon Mobil	0.00%	-0.71%	11.58%	-0.10%	0.60%	—	—	0.29%

Note: RAFI Multi-Factor Climate Transition Index dynamically tilts securities weights as a function of carbon intensity. Sleeve weights may not perfectly map to the final portfolio weight.

Priced to perfection, a mixture of questions surrounding the AI narrative as well as concerns about broader macroeconomic shocks from Trump administration trade policies were the catalyst for a repricing of most Magnificent 7 members. Tesla was the greatest contributor to performance adding 58 bps to excess return on a –1.35% underweight. Tesla enjoyed an incredible post-election boom, driven by speculation regarding the influence of its CEO Elon Musk. We wrote extensively about bubble in EVs and Tesla's unique profile in our recent paper, *The EV Shakeout*. While Tesla has executed on its vision and established itself as a major player in the EV market, it has trod an extremely volatile path since joining the S&P 500, with its value lying chiefly in incredible growth expectations.

Driven by American chip export restrictions, the supposed efficiency in training Chinese AI firm Deep Seek's model raised questions on the necessity of the American hyper-scaler approach. The massive capex of hyper-scalers had driven Nvidia's profit margins and capitalization to the moon over the past two years. Threats to the continued build out of AI datacenters filled with Nvidia's leading edge chips put those high expectations and high valuations at risk. The strategy's contrarian position in Nvidia (–2.35% active weight) was rewarded this quarter, adding 44 bps to excess return.

Alphabet (active weight –2.92%) and Microsoft (active weight –4.34%) added 52 bps and 42 bps, respectively to excess return. Neither top dog were a member of any factor sleeve. Both faced headwinds from concerns over AI hyper-scaling and cloud sales. Apple (active weight –2.82%) added 38 bps to excess return. Apple saw declining iPhone sales in China combined with significant uncertainty on the future impact of tariffs. Additionally, the initial hype about Apple Intelligence seems to have petered out with a mixed reception of Apple's initial implementation. While AI is here, the business model for AI hasn't quite arrived.

Sector Analysis

12/31/2024 to 3/31/2025	RAFI Multi-Factor Climate Transition Developed Index		Solactive GBS Developed Markets Large & Mid Cap Index		Attribution Analysis		
	Port. Average Weight	Port. Total Return	Bench. Average Weight	Bench. Total Return	Allocation Effect	Selection + Interaction	Total Effect
Total	100.00	3.30	100.00	-1.63	2.09	2.84	4.93
Basic Materials	3.65	4.69	3.49	4.25	0.01	0.01	0.02
Communications	9.41	6.14	8.83	-3.98	-0.05	0.97	0.93
Consumer Cyclical	8.74	-1.94	10.63	-10.45	0.18	0.80	0.98
Consumer Non-Cyclical	8.14	4.24	6.47	5.86	0.15	-0.12	0.03
Energy	1.84	7.91	3.76	10.40	-0.23	-0.04	-0.28
Financials	20.46	7.68	16.86	6.12	0.26	0.30	0.56
Healthcare	20.97	6.57	10.62	5.57	0.74	0.20	0.94
Industrial	10.81	3.45	9.99	2.12	0.05	0.11	0.16
Real Estate	0.71	1.69	1.97	3.55	-0.06	-0.01	-0.08
Technology	13.57	-8.07	24.92	-11.69	1.13	0.57	1.70
Utilities	1.69	10.69	2.47	7.25	-0.09	0.05	-0.04

Sell-offs in American mega-cap technology and AI hyper-scalers drove performance this quarter. Technology, Consumer Cyclicals, Healthcare and Communications were the largest contributors to performance, adding 170 bps, 98 bps, 94 bps and 93 bps, respectively. The strategy took a –11.4% underweight to Technology with top dogs such as Nvidia, Apple and Microsoft the largest contributors to excess returns. Economic uncertainty and concerns regarding AI capex impacted these names. Performance in Consumer Cyclicals and Communications was driven by selection effects from relative positioning in Magnificent 7 names. The strategy benefitted from a 10.35% overweight to Healthcare with allocation effects driving 74 bps of the total 94 bps in excess returns from the segment. Roche (active weight 1.41%) and Eli Lilly (active weight 2.06%) were the largest contributors to performance adding 29 bps and 18 bps, respectively.

Geographic Analysis

12/31/2024 to 3/31/2025	RAFI Multi-Factor Climate Transition Developed Index		Solactive GBS Developed Markets Large & Mid Cap Index		Attribution Analysis		
	Port. Average Weight	Port. Total Return	Bench. Average Weight	Bench. Total Return	Allocation Effect	Selection + Interaction	Total Effect
Total	100.00	3.30	100.00	-1.63	1.41	3.52	4.93
Developed Asia Pacific x JP	2.81	6.55	2.88	0.38	-0.01	0.17	0.16
Europe - Non-EU	9.24	6.71	4.07	8.37	0.52	-0.15	0.37
European Union	11.42	12.98	8.34	11.70	0.42	0.13	0.55
Japan	8.04	-1.69	6.19	0.80	0.04	-0.21	-0.16
United Kingdom	5.12	6.04	3.63	9.53	0.15	-0.18	-0.02
United States	60.06	1.42	71.04	-4.61	0.34	3.73	4.08
Other Developed	3.30	1.30	3.49	0.65	-0.01	0.02	0.01
Other	--	--	0.16	20.76	-0.03	--	-0.03

At the regional level, relative positioning to the US and Europe during this period of dislocation drove performance. As the American capital market has grown increasingly concentrated and expensive, the strategy has tended to lean out of the few Magnificent 7 names, which accounted for the majority of cap-weight market performance over the past two years but look unattractive by factor loading. The consequent underperformance of these names drove strong performance for the strategy, drawing a reminder to the 2022 sell-offs. Even with a notable –10.98% underweight to the US, security selection drove 373 bps of the total 408 bps in excess performance from the region. The strategy was rewarded for its 3.08% overweight of European Union securities, adding 55 bps. European banks performed strongly with Banco Santander adding 27 bps to performance on a 0.67% overweight. Societe Generale, up 59% for the quarter added 19 bps to excess return (active weight 0.37%.)

Rebalance Analysis

The following table lists the top five largest stocks by cap-weight that failed to make it into the index at the rebalance period due to their factor scores. While Berkshire Hathaway qualifies for our standard RAFI Multi-Factor strategy, it's excluded in this portfolio due to its carbon intensity. Cumulative-weight rank represents a stock's position by weight within each factor sleeve prior to selection; value, low volatility, and quality select the top 25% of stocks by RAFI weight, and momentum selects the top 50% of stocks by market capitalization.

			Cumulative Weight Rank			
Company	Region	Cap-Weight (3/31/2025)	Value	Low Volatility	Quality	Momentum
Microsoft	US	4.14%	95.3%	60.9%	37.6%	91.5%
Amazon	US	2.69%	92.2%	66.6%	93.4%	65.2%
Alphabet	US	2.57%	73.8%	71.0%	32.4%	59.3%
Tesla, Inc.	US	1.09%	99.5%	98.2%	90.0%	41.2%
Berkshire Hathaway	US	1.06%	54.4%	22.8%	84.5%	37.1%

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