

# The Impact of Energy Sector Investments on the Financial Value of Tech 401(k) Funds

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## Executive Summary

This report presents the results of analyses conducted on the Equity Funds and Target Date funds held within the 401(k) plans of twelve major US Tech Sector companies. The estimated cumulative returns with and without public equity Energy Sector<sup>1</sup> investments have been analyzed for the 10-year time period ending December 31, 2023.

The funds analyzed, and their respective market values are those provided by *As You Sow* taken from each plans' Form 5500 filing with the U.S. Department of Labor<sup>i</sup>, where mutual fund versions of the respective 401(k) collective investment trusts were used as proxies to complete performance statistic calculations.

Market values were based off of data from each plans' Form 5500 filing provided by *As You Sow*, as of December 31, 2022. December 31, 2023 valuation data were not publically available at time of this analysis; therefore, December 31, 2022 valuations were used as proxies for illustrative purposes and aligned to the respective performance metrics up to December 31, 2023.

The scope of the analysis is based on data provided by Bloomberg workstation<sup>2</sup>. Data was gathered and analyzed for the 401(k) plans of the following publicly traded companies:

- Adobe Inc. 401(k) Retirement Savings Plan
- Amazon 401(k) Plan
- Apple 401(k) Plan
- Broadcom U.S. 401(k) Plan
- Google LLC 401(k) Savings Plan
- Intuit Inc. 401(k) Plan
- Meta Platforms, Inc. 401(k) Plan
- Microsoft Corporation Savings Plus 401(k) Plan
- Netflix 401(k) Plan
- Oracle Corporation 401(k) Savings and Investment Plan
- Qualcomm Incorporated Employee Savings and Retirement Plan
- SAP America, Inc. 401(k) Plan

The analysis illustrates that a difference in absolute returns and relative returns exists between the original reference portfolio and the same portfolios with Energy Sector investments removed. Over the 10-year period analyzed, ending Dec. 31, 2023, the illustrated cumulative outperformance of the Ex-Energy sector portfolios across all 401(k) plans analyzed amounted to approximately \$5.13 billion.

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<sup>1</sup> <https://www.msci.com/documents/1296102/11185224/GICS+Sector+Definitions+2023.pdf>

<sup>2</sup> The data obtained from Bloomberg workstation does not in every case match return or valuation figures published by the mutual funds that are the subject of this study. However, the Bloomberg platform is a widely-used and accepted sources of business data and analysis, and the desired data for the study's ten-year scope was not uniformly available on the funds' respective websites. The use of data from Bloomberg allowed for representative comparisons using a consistent methodology for the full reference period of the study.

## Methods

The following section will present the methods used for the analysis based on data provided by Bloomberg workstation and *As You Sow*.

### Bloomberg Analysis

For the financial performance, data retrieval was conducted of portfolio performance metrics from Bloomberg Finance L.P. using the <PORT> function for the 10-year period ending December 31, 2023. Funds identified by *As You Sow* as not meeting the required analysis criteria, such as those identified as fixed income, money market, real estate, less than ten years since fund inception, collective trusts with no open fund proxy or those with data not available have been excluded. For the Fund of Fund<sup>3</sup> portfolios and other select portfolios<sup>4</sup>, year-end portfolio weightings and annual performance metrics were generated for each year within the sample period as source data. From which, the portfolios were reconstructed to generate 10-year compounded metrics. For all other portfolios, 10-year compounded metrics were generated and sourced directly from Bloomberg workstation.

Two scenarios were then plotted:

- Scenario 1: The reported actual portfolio (Reference portfolio) without any exclusions of equity sector holdings.
- Scenario 2: Ex-Energy portfolio with the GICS Energy Sector excluded as defined by the Bloomberg terminal. The weight of the removed equity holdings was redistributed equally across the remaining holdings. This exclusion was run directly using the Bloomberg <PORT> function.

Total 10-year portfolio returns under each scenario were then compared and applied to the respective market values provided for each holding.

### As You Sow

For this analysis, the following source data was provided by *As You Sow*:

- Plan investment options taken from each plans' Form 5500 filing with the U.S. Department of Labor, and respective mutual fund proxies to analyze.
- Market value of such funds as of December 31, 2022, taken from each plans' Form 5500 filing.

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<sup>3</sup> "A fund of funds invests in other mutual funds, exchange-traded funds, and more-exclusive investment vehicles"

Source: <https://www.morningstar.com/investing-definitions/fund-of-funds->

<sup>4</sup> FBAKX, VTSNX, VEMIX

## Discussion

The results of the analysis demonstrate that the cumulative portfolio value and cumulative return of all 12 plans analyzed is estimated to have been higher if they had divested from the Energy Sector ten years ago on an absolute basis. The average difference between the total returns of the Reference portfolios and the Ex-Energy portfolios over the 10-year sample period is approximately 8.9% (Figure 5) or 0.86% per year invested.

Of the twelve 401(k) plans analyzed using data obtained from the Bloomberg database and *As You Sow*, the total cumulative value of the Ex-Energy portfolios is estimated to have been approximately \$128.12 billion by December 31, 2023, while the cumulative value of the Reference portfolios was approximately \$122.99 billion. Hence, the difference is estimated at approximately \$5.13 billion (Table 1).

The analysis consisted of 60 individual stand-alone funds and 19 Fund of Funds, commonly held in the respective 401(k) plans. In review of underlying holdings held within the portfolios as of Dec 31, 2023, the average Ex-Energy alpha achieved was 9.16%, with 89% (Figure 1) of the funds showing positive Ex-Energy 10-year return alphas ranging from 0.19% to 32.1%. Of the nine funds analyzed which did not show positive alpha, two funds displayed negative Ex-Energy 10-year return alphas of -3.56% and -1.97%, whereas the remaining seven were all considerably less than -1%. When ranking funds by their cumulative Ex-Energy alpha, it was found that the top 10 portfolios displayed performance alphas between 18%-32% (Figure 32).

Of the standalone equity funds analyzed where Sharpe Ratios<sup>5</sup> were available, 91% (Figure 2) of the funds analyzed showed positive Ex-Energy alpha, indicating that the addition of the Energy Sector in a portfolio over the 10-year period analyzed reduced portfolio efficiency on a risk adjusted basis as well.

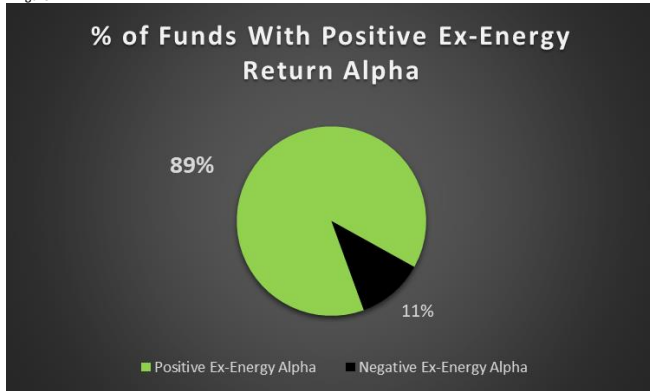
The results from the analysis of each respective 401(k) portfolio are displayed alphabetically in the following section.

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<sup>5</sup> Sharpe Ratio defined as portfolio risk premium divided by portfolio risk. Source: Bloomberg workstation.

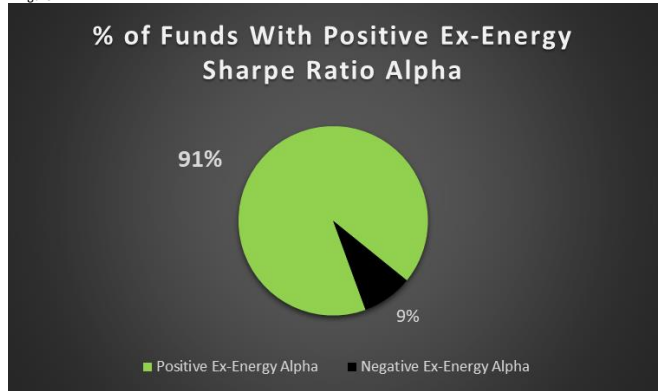
# Results

Figure 1.



Source: Bloomberg, 2024

Figure 2.



Source: Bloomberg, 2024

Table 1.

Ex-Energy Portfolio Valuation Illustration (Dec, 2023)			
	Reference Portfolio	Ex-Energy Portfolio	Ex-Energy Alpha
<b>Adobe</b>	\$ 2,657,003,759	\$ 2,786,008,964	\$ 129,005,205
<b>Amazon.com</b>	\$ 14,568,934,000	\$ 15,160,921,859	\$ 591,987,859
<b>Apple</b>	\$ 12,419,385,786	\$ 12,895,564,763	\$ 476,178,977
<b>Broadcom</b>	\$ 4,928,940,221	\$ 5,136,157,972	\$ 207,217,751
<b>Google</b>	\$ 25,741,108,341	\$ 26,893,230,224	\$ 1,152,121,883
<b>Intuit</b>	\$ 2,145,492,532	\$ 2,234,214,675	\$ 88,722,143
<b>Meta</b>	\$ 6,910,568,707	\$ 7,214,453,120	\$ 303,884,413
<b>Microsoft</b>	\$ 26,261,442,593	\$ 27,159,186,982	\$ 897,744,389
<b>Netflix</b>	\$ 1,163,394,329	\$ 1,209,596,173	\$ 46,201,844
<b>Oracle</b>	\$ 15,721,380,000	\$ 16,440,553,676	\$ 719,173,676
<b>Qualcomm</b>	\$ 5,148,973,263	\$ 5,394,289,586	\$ 245,316,323
<b>SAP America</b>	\$ 5,322,440,388	\$ 5,593,220,345	\$ 270,779,957
<b>Total</b>	\$ 122,989,063,919	\$ 128,117,398,339	\$ 5,128,334,420

Source: Bloomberg, 2024

# Results Cont.

Figure 3.

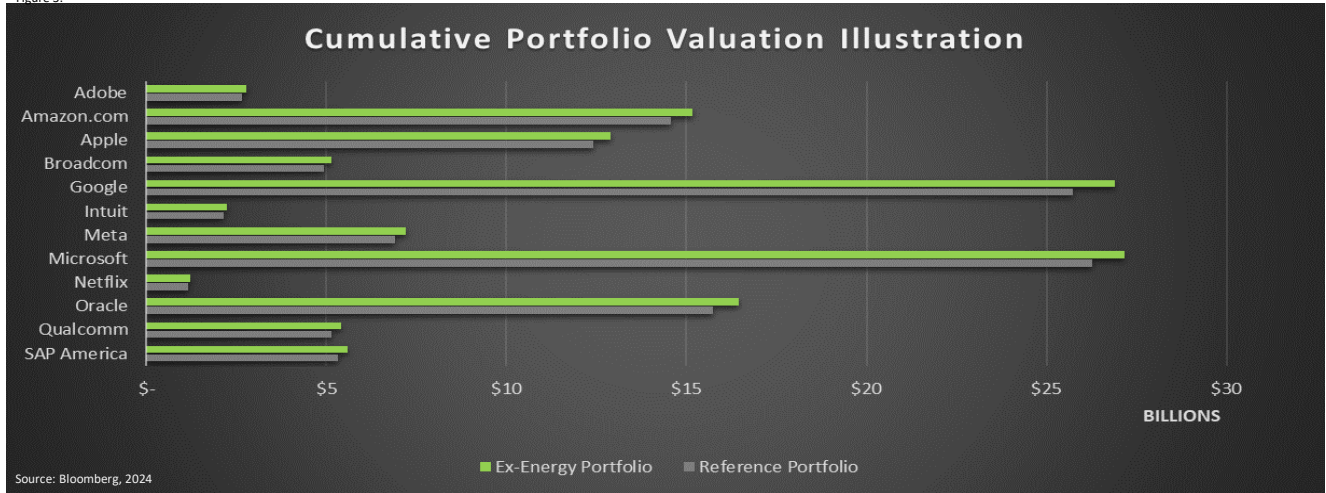


Figure 4.

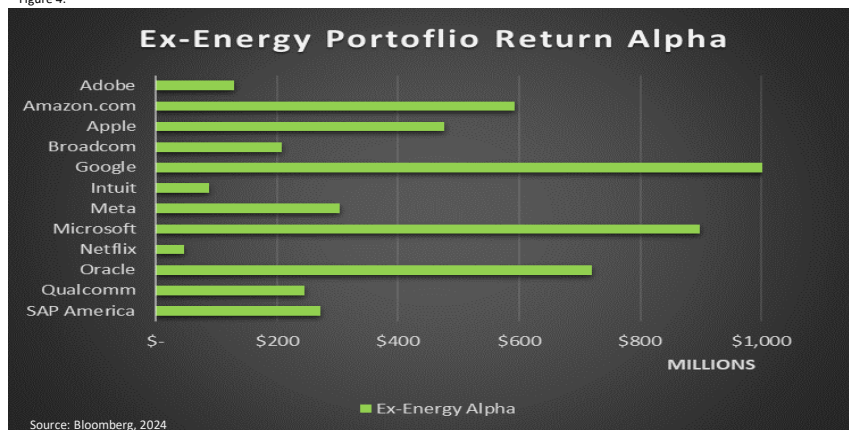
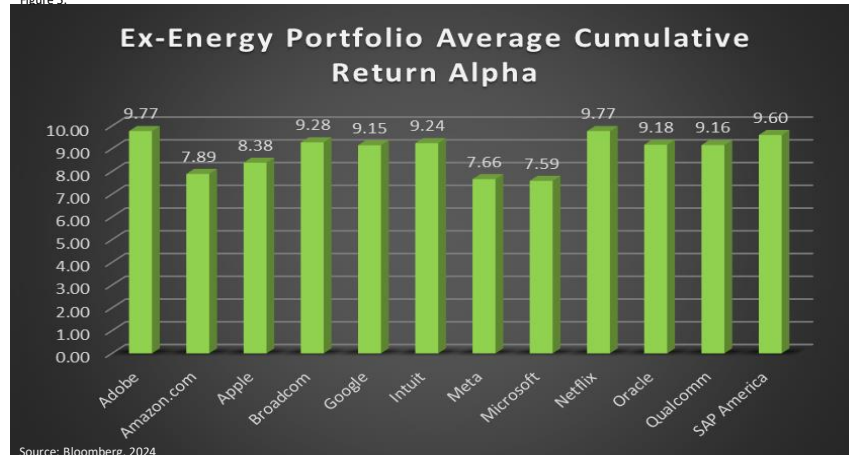


Figure 5.



# Results Cont.

Table 2.

Adobe Inc. 401(k) Retirement Savings Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
Ticker	Name	Dec 2023 - % Energy Sector	Reference Port.	10 Yr Total Return (%)		Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
				Ex-Energy	Ex-Energy Alpha			
DODFX	Dodge & Cox International Stock Fund	8.43	58.68	59.41	0.75	\$ 52,121,186	\$ 52,376,848	\$ 245,661.66
VEKAX	Vanguard Extended Market Index Fund	4.34	86.15	118.23	32.08	\$ 158,978,731	\$ 186,373,100	\$ 27,394,368.34
VEKRX	Vanguard Explorer Fund	4.33	157.06	166.09	9.03	\$ 44,003,687	\$ 45,549,865	\$ 1,546,178.26
VFIAX	Vanguard 500 Index Fund; Admiral	3.97	210.46	230.37	19.91	\$ 485,293,641	\$ 516,409,849	\$ 31,116,207.80
VFWPX	Vanguard FTSE All-World ex-US Index Fund	5.46	55.33	57.53	2.20	\$ 196,313,537	\$ 199,059,579	\$ 2,786,041.64
VFTNX	Vanguard FTSE Social Index Fund	0.00	231.90	249.62	17.72	\$ 44,134,930	\$ 46,491,816	\$ 2,356,885.89
VTINX	Vanguard Target Ret. Income Fund; Inv.	1.46	30.69	32.64	1.95	\$ 12,444,829	\$ 12,630,274	\$ 185,444.55
VTWIX	Vanguard Target Ret. 2020 Fund; Inv.	1.95	55.71	60.06	4.35	\$ 20,395,291	\$ 20,965,366	\$ 570,075.22
VTTVX	Vanguard Target Ret. 2025 Fund; Inv.	2.62	69.25	74.49	5.24	\$ 85,703,160	\$ 88,356,964	\$ 2,653,804.05
VTHRK	Vanguard Target Ret. 2030 Fund; Inv.	3.07	84.76	90.75	5.99	\$ 144,793,649	\$ 149,485,615	\$ 4,691,966.46
VTHHX	Vanguard Target Ret. 2035 Fund; Inv.	3.43	94.73	101.68	6.95	\$ 220,577,774	\$ 228,445,741	\$ 7,867,967.12
VFORX	Vanguard Target Ret. 2040 Fund; Inv.	3.79	103.66	111.42	7.76	\$ 236,839,451	\$ 245,862,000	\$ 9,022,548.38
VTIVX	Vanguard Target Ret. 2045 Fund; Inv.	4.14	112.98	121.32	8.33	\$ 254,091,405	\$ 264,032,952	\$ 9,941,546.60
VFIKX	Vanguard Target Ret. 2050 Fund; Inv.	4.41	114.86	123.13	8.27	\$ 246,832,364	\$ 256,333,348	\$ 9,502,784.48
VFFVX	Vanguard Target Ret. 2055 Fund; Inv.	4.41	122.98	131.80	8.82	\$ 149,712,117	\$ 155,630,926	\$ 5,918,809.08
VTTSX	Vanguard Target Ret. 2060 Fund; Inv.	4.41	114.90	123.15	8.26	\$ 62,971,508	\$ 65,390,663	\$ 2,419,154.67
VWUAX	Vanguard US Growth Portfolio	0.29	236.91	243.63	6.72	\$ 89,128,643	\$ 90,907,438	\$ 1,778,794.63
VWENX	Vanguard Wellington™ Fund	4.80	121.26	132.50	11.24	\$ 94,568,734	\$ 99,371,867	\$ 4,803,133.18
VWMAX	Vanguard Windsor™ II Fund	6.31	178.45	198.60	20.15	\$ 58,089,122	\$ 62,293,953	\$ 4,203,831.18
Total						\$ 2,657,003,759	\$ 2,786,008,964	\$ 129,005,205

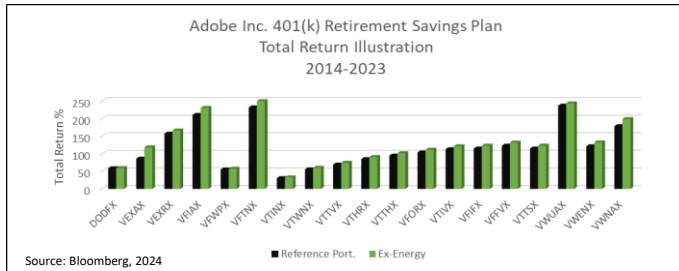


Figure 6.

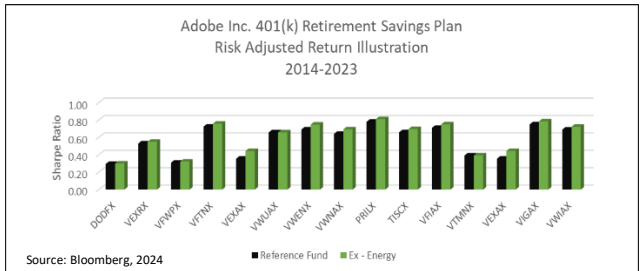


Figure 7.

Table 3.

Amazon 401(k) Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
Ticker	Name	Dec 2023 - % Energy Sector	Reference Port.	10 Yr Total Return (%)		Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
				Ex-Energy	Ex-Energy Alpha			
REGX	AF EuroPacific Growth R6	7.98	82.94	79.38	-3.56	\$ 99,297,000	\$ 97,366,359	\$ -1,930,641.30
OAKIX	Harris Oakmark International Fund	0.00	56.99	56.31	-0.68	\$ 60,054,000	\$ 59,793,312	\$ -260,687.89
VEKRX	Vanguard Explorer Fund	4.33	157.06	166.09	9.03	\$ 375,278,000	\$ 388,464,320	\$ 13,186,319.67
VFTNX	Vanguard FTSE Social Index I	0.00	231.90	249.62	17.72	\$ 441,119,389	\$ 441,119,389	\$ 22,362,388.90
VFIAX	Vanguard 500 Index Fund; Admiral	3.97	210.46	230.37	19.91	\$ 1,933,405,000	\$ 2,057,371,660	\$ 123,966,659.89
VRGWX	Vanguard Russell 1000 Growth Index I	0.50	296.93	307.28	10.35	\$ 749,866,000	\$ 749,923,810	\$ 19,057,809.93
VRVIX	Vanguard Russell 1000 Value Index I	7.80	124.10	142.26	18.16	\$ 241,614,000	\$ 261,190,555	\$ 19,576,554.95
VSIIX	Vanguard Small Cap Value Index I	4.37	126.69	137.58	10.90	\$ 202,133,000	\$ 211,848,108	\$ 9,715,107.82
VTINX	Vanguard Target Ret. Income Fund; Inv.	1.46	30.69	32.64	1.95	\$ 103,210,000	\$ 104,747,967	\$ 1,537,966.67
VTWIX	Vanguard Target Ret. 2020 Fund; Inv.	1.95	55.71	60.06	4.35	\$ 96,244,000	\$ 98,934,146	\$ 2,690,146.45
VTTVX	Vanguard Target Ret. 2025 Fund; Inv.	2.62	69.25	74.49	5.24	\$ 309,032,000	\$ 318,601,196	\$ 9,569,196.43
VTHRK	Vanguard Target Ret. 2030 Fund; Inv.	3.07	84.76	90.75	5.99	\$ 573,703,000	\$ 592,293,562	\$ 18,590,561.50
VTHHX	Vanguard Target Ret. 2035 Fund; Inv.	3.43	94.73	101.68	6.95	\$ 959,093,000	\$ 993,303,664	\$ 34,210,664.36
VFORX	Vanguard Target Ret. 2040 Fund; Inv.	3.79	103.66	111.42	7.76	\$ 1,238,063,000	\$ 1,285,227,797	\$ 47,164,796.71
VTIVX	Vanguard Target Ret. 2045 Fund; Inv.	4.14	112.98	121.32	8.33	\$ 1,709,147,000	\$ 1,776,018,859	\$ 66,871,858.77
VFIKX	Vanguard Target Ret. 2050 Fund; Inv.	4.41	114.86	123.13	8.27	\$ 2,051,940,000	\$ 2,130,937,516	\$ 78,997,515.80
VFFVX	Vanguard Target Ret. 2055 Fund; Inv.	4.41	122.98	131.80	8.82	\$ 1,957,177,000	\$ 2,034,553,215	\$ 77,376,215.34
VTTSX	Vanguard Target Ret. 2060 Fund; Inv.	4.41	114.90	123.15	8.26	\$ 1,154,850,000	\$ 1,199,215,473	\$ 44,365,473.47
VTSNX	Vanguard Total Intl Stock Index I	5.61	55.72	57.88	2.17	\$ 355,071,000	\$ 360,010,952	\$ 4,939,951.52
Total						\$ 14,568,934,000	\$ 15,160,921,859	\$ 591,987,859

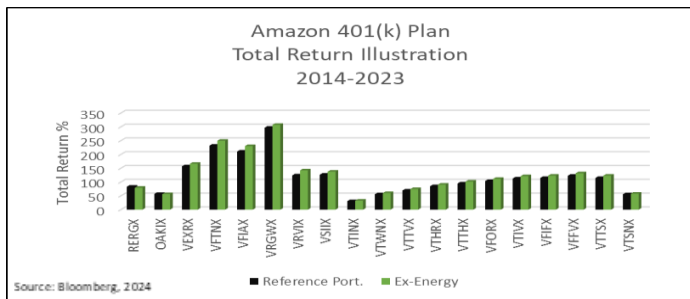


Figure 8.

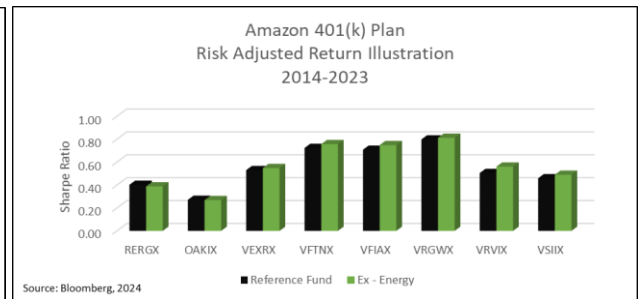


Figure 9.



# Results Cont.

Table 4.

Apple 401(k) Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
Ticker	Name	Dec 2023 - % Energy Sector	Reference Port.	10 Yr Total Return (%)		Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
				Ex-Energy	Ex-Energy Alpha			
ABSIX	AB US Small Mid-Cp Value CIT W Series	5.14	123.60	150.07	26.47	\$ 180,018,607	\$ 201,329,622	\$ 21,311,015.26
BGIFX	Baillie Gifford International Alpha CIT	1.80	88.65	88.88	0.22	\$ 266,634,564	\$ 266,959,795	\$ 316,230.87
LIBKX	BlackRock LifePath® Index 2025 K	1.72	75.66	76.83	1.18	\$ 268,413,868	\$ 270,212,878	\$ 1,799,009.62
LINKX	BlackRock LifePath® Index 2030 K	2.30	92.65	94.39	1.74	\$ 510,060,857	\$ 514,660,316	\$ 4,599,458.84
LIJXX	BlackRock LifePath® Index 2035 K	2.89	105.36	107.83	2.47	\$ 733,358,403	\$ 742,195,167	\$ 8,836,764.46
LIKXX	BlackRock LifePath® Index 2040 K	3.51	121.14	124.26	3.12	\$ 936,025,596	\$ 949,216,436	\$ 13,190,840.37
LIHXX	BlackRock LifePath® Index 2045 K	4.30	128.14	132.37	4.23	\$ 1,273,720,036	\$ 1,297,339,876	\$ 23,619,839.70
LIPXX	BlackRock LifePath® Index 2050 K	4.82	135.59	139.92	4.33	\$ 1,302,803,329	\$ 1,326,771,012	\$ 23,967,683.14
LIVXX	BlackRock LifePath® Index 2055 K	4.91	138.21	143.62	5.42	\$ 983,491,276	\$ 1,005,849,561	\$ 22,358,285.32
LIRXX	BlackRock LifePath® Index Retire K	1.51	48.57	46.60	-1.97	\$ 278,267,250	\$ 274,580,878	\$ -3,686,371.64
FCNIX	Fidelity Contrafund K	3.94	255.36	270.89	15.54	\$ 1,175,075,357	\$ 1,226,447,682	\$ 51,372,325.16
TVLIX	Touchstone Value Institutional	12.17	165.56	179.28	13.72	\$ 537,949,398	\$ 565,732,630	\$ 27,783,232.36
VEVAX	Vanguard Extended Market Index Admiral	4.34	86.15	118.23	32.08	\$ 692,603,637	\$ 811,949,412	\$ 119,345,774.76
VFIAX	Vanguard 500 Index Admiral	3.92	210.46	230.37	19.91	\$ 2,320,952,194	\$ 2,469,767,725	\$ 148,815,530.77
VTSNX	Vanguard Total Intl Stock Index I	5.61	55.72	57.88	2.17	\$ 637,882,546	\$ 646,757,134	\$ 8,874,588.04
WSMDX	William Blair Small-Mid Cap Growth I	7.07	209.64	213.18	3.53	\$ 322,128,868	\$ 325,803,638	\$ 3,674,769.76
<b>Total</b>						<b>\$ 12,419,385,786</b>	<b>\$ 12,895,564,763</b>	<b>\$ 476,178,977</b>

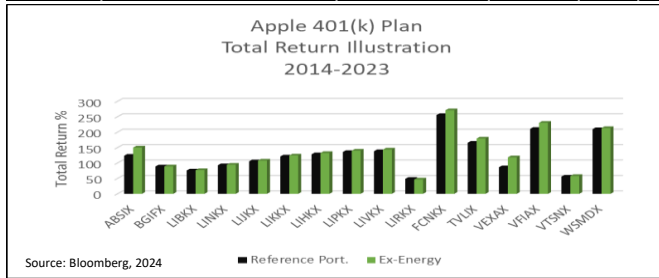


Figure 10.

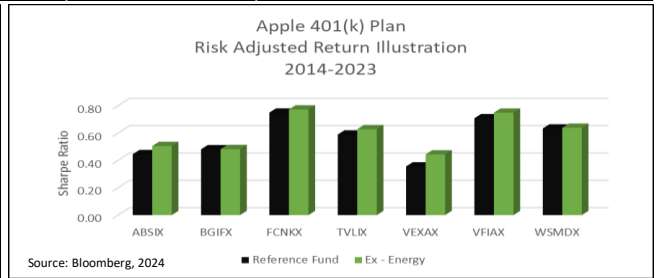


Figure 11.

Table 5.

Broadcom U.S. 401(k) Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
Ticker	Name	Dec 2023 - % Energy Sector	Reference Port.	10 Yr Total Return (%)		Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
				Ex-Energy	Ex-Energy Alpha			
REGGX	AF EuroPacific Growth RG	7.98	82.94	79.38	-3.56	\$ 161,048,902	\$ 157,917,612	\$ -3,131,289.57
DODGX	Dodge & Cox Stock I	7.20	184.52	206.37	21.85	\$ 151,256,676	\$ 162,873,764	\$ 11,617,087.87
FGCKX	Fidelity Growth Company K	1.33	402.44	418.68	16.24	\$ 1,211,191,148	\$ 1,250,337,664	\$ 39,146,515.86
MEFZX	MassMutual Mid Cap Growth I	3.74	179.44	200.02	20.59	\$ 197,199,838	\$ 211,729,312	\$ 14,529,473.87
VFIAX	Vanguard 500 Index Fund/Admiral	3.97	210.46	230.37	19.91	\$ 1,060,973,909	\$ 1,129,001,762	\$ 68,027,853.31
VMCIX	Vanguard Mid Cap Index Institutional	4.38	147.17	158.89	11.72	\$ 205,825,041	\$ 215,582,594	\$ 9,757,552.83
VSCIX	Vanguard Small Cap Index I	4.71	125.31	137.52	12.21	\$ 141,889,832	\$ 149,577,563	\$ 7,687,731.09
VTINX	Vanguard Target Ret. Income Fund/Inv.	1.46	30.69	32.64	1.95	\$ 57,099,200	\$ 57,950,054	\$ 850,854.24
VTWNX	Vanguard Target Ret. 2020 Fund/Inv.	1.95	55.71	60.06	4.35	\$ 109,881,407	\$ 112,952,737	\$ 3,071,329.92
VTTVX	Vanguard Target Ret. 2025 Fund/Inv.	2.62	69.25	74.49	5.24	\$ 279,224,647	\$ 287,870,857	\$ 8,646,209.76
VTHRX	Vanguard Target Ret. 2030 Fund/Inv.	3.07	84.76	90.75	5.99	\$ 343,000,110	\$ 354,114,859	\$ 11,114,748.64
VTHX	Vanguard Target Ret. 2035 Fund/Inv.	3.43	94.73	101.68	6.95	\$ 330,872,746	\$ 342,674,914	\$ 11,802,167.74
VFORX	Vanguard Target Ret. 2040 Fund/Inv.	3.79	103.66	111.42	7.76	\$ 265,798,607	\$ 275,924,374	\$ 10,125,766.83
VTIVX	Vanguard Target Ret. 2045 Fund/Inv.	4.14	112.98	121.32	8.33	\$ 167,639,414	\$ 174,198,451	\$ 6,559,037.47
VFIAX	Vanguard Target Ret. 2050 Fund/Inv.	4.41	114.86	123.13	8.27	\$ 109,617,011	\$ 113,837,150	\$ 4,220,138.78
VFFIX	Vanguard Target Ret. 2055 Fund/Inv.	4.41	122.98	131.80	8.82	\$ 38,562,977	\$ 40,087,549	\$ 1,524,571.98
VTSFX	Vanguard Target Ret. 2060 Fund/Inv.	4.41	114.90	123.15	8.26	\$ 12,509,457	\$ 12,990,028	\$ 480,571.49
VTSNX	Vanguard Total Intl Stock Index I	5.61	55.72	57.88	2.17	\$ 85,349,299	\$ 86,536,727	\$ 1,187,428.43
<b>Total</b>						<b>\$ 4,928,940,221</b>	<b>\$ 5,136,157,972</b>	<b>\$ 207,217,751</b>

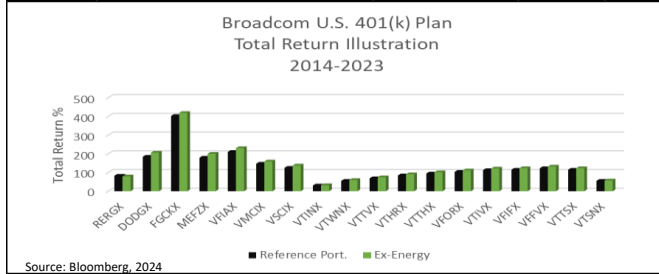


Figure 12.

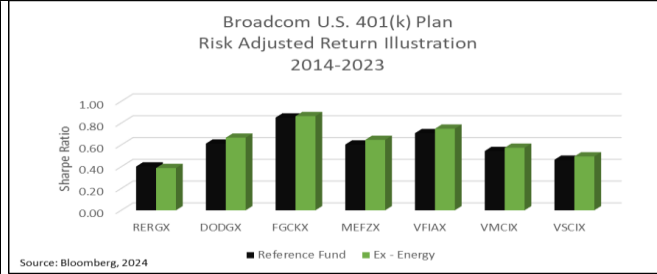


Figure 13.

# Results Cont.

Table 6.

Google LLC 401(k) Savings Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
10 Yr Total Return (%)								
Ticker	Name	Dec 2023 - % Energy Sector	Reference Port.	Ex-Energy	Ex-Energy Alpha	Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
FKIDX	Fidelity Diversified International K6 Fund	5.96	47.64	45.86	-1.77	\$ 171,609,587	\$ 169,548,490.19	-\$ 2,061,096.81
PRILX	Parnassus Core Equity Fund;Inst.	0.00	235.05	250.30	15.25	\$ 597,658,984	\$ 624,866,013.16	\$ 27,207,029.16
TISCX	TIAA-CREF Social Choice Equity Fund; Inst.	4.70	194.32	211.21	16.89	\$ 192,815,556	\$ 203,880,263.51	\$ 11,064,707.51
VFIAX	Vanguard 500 Index Fund;Admiral	3.97	210.46	230.37	19.91	\$ 3,724,332,054	\$ 3,963,129,928.77	\$ 238,797,874.77
VTMNX	Vanguard Developed Markets Index Fund;Inst	5.65	62.32	62.16	-0.16	\$ 852,438,093	\$ 851,611,583.36	-\$ 826,509.64
VEMRX	Vanguard Emerging Markets Stock Index Fund;Inst.	5.89	46.81	46.81	0.00	\$ 342,255,500	\$ 342,251,014.21	-\$ 4,485.79
VEXAX	Vanguard Extended Market Index Fund;Admiral	4.74	86.15	118.23	32.08	\$ 1,033,878,428	\$ 1,212,025,122.92	\$ 178,146,694.92
VIGAX	Vanguard Growth Index Fund;Admiral	1.34	274.31	298.73	24.41	\$ 12,037,611	\$ 12,822,739.34	\$ 785,128.34
VTINX	Vanguard Target Ret. Income Fund;Inv.	1.46	30.69	32.64	1.95	\$ 85,830,202	\$ 87,109,186.50	\$ 1,278,984.50
VTWXX	Vanguard Target Ret. 2020 Fund;Inv.	1.95	55.71	60.06	4.35	\$ 107,708,137	\$ 110,718,721.17	\$ 3,010,584.17
VTTVX	Vanguard Target Ret. 2025 Fund;Inv.	2.62	69.25	74.49	5.24	\$ 313,097,571	\$ 322,792,658.11	\$ 9,695,087.11
VTHRX	Vanguard Target Ret. 2030 Fund;Inv.	3.07	84.76	90.75	5.99	\$ 722,054,854	\$ 745,452,683.84	\$ 23,397,829.84
VTTHX	Vanguard Target Ret. 2035 Fund;Inv.	3.43	94.73	101.68	6.95	\$ 1,342,095,992	\$ 1,389,968,300.03	\$ 47,872,308.03
VFORX	Vanguard Target Ret. 2040 Fund;Inv.	3.79	103.66	111.42	7.76	\$ 2,228,021,324	\$ 2,312,899,212.13	\$ 84,877,888.13
VTIVX	Vanguard Target Ret. 2045 Fund;Inv.	4.14	112.98	121.32	8.33	\$ 3,612,755,220	\$ 3,754,107,401.44	\$ 141,352,181.44
VFIAX	Vanguard Target Ret. 2050 Fund;Inv.	4.41	114.86	123.13	8.27	\$ 4,338,708,294	\$ 4,505,743,966.11	\$ 167,035,672.11
VFFIX	Vanguard Target Ret. 2055 Fund;Inv.	4.41	122.98	131.80	8.82	\$ 3,713,958,567	\$ 3,860,788,443.82	\$ 146,829,876.82
VTTSX	Vanguard Target Ret. 2060 Fund;Inv.	4.41	114.90	123.15	8.26	\$ 1,807,906,066	\$ 1,877,359,768.74	\$ 69,453,702.74
VWIAX	Vanguard Wellesley Income Fund;Admiral	3.82	73.02	74.36	1.34	\$ 541,946,301	\$ 546,154,726.81	\$ 4,208,425.81
<b>Total</b>						<b>\$ 25,741,108,341</b>	<b>\$ 26,893,230,224.14</b>	<b>\$ 1,152,121,883</b>

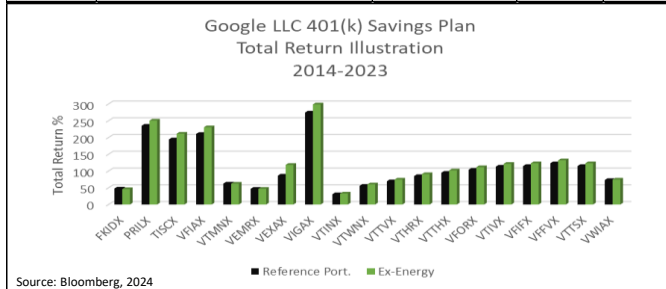


Figure 14.

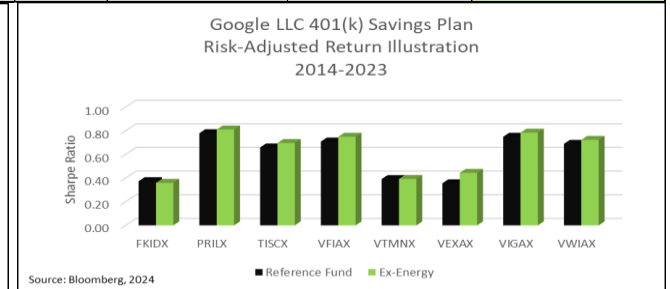


Figure 15.

Table 7.

Intuit Inc. 401(k) Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
10 Yr Total Return (%)								
Ticker	Name	Dec 2023 - % Energy Sector	Reference Port.	Ex-Energy	Ex-Energy Alpha	Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
SVSPX	State Street S&P 500 Index N	3.90	212.64	233.08	20.44	\$ 258,288,011	\$ 275,176,063	\$ 16,888,051.87
VFTNX	Vanguard FTSE Social Index Fund	0.00	231.90	249.62	17.72	\$ 33,025,493	\$ 34,789,115	\$ 1,763,621.66
VRTIX	Vanguard Russell 2000 Index I	6.74	101.23	109.01	7.78	\$ 54,110,994	\$ 56,203,381	\$ 2,092,387.45
VSPMX	Vanguard S&P Mid-Cap 400 Index I	5.03	132.77	150.29	17.52	\$ 78,275,232	\$ 84,165,895	\$ 5,890,663.10
VTINX	Vanguard Target Ret. Income Fund;Inv.	1.46	30.69	32.64	1.95	\$ 31,096,343	\$ 31,559,720	\$ 463,376.99
VTWXX	Vanguard Target Ret. 2020 Fund;Inv.	1.95	55.71	60.06	4.35	\$ 43,497,666	\$ 44,713,483	\$ 1,215,817.01
VTTVX	Vanguard Target Ret. 2025 Fund;Inv.	2.62	69.25	74.49	5.24	\$ 143,827,275	\$ 148,280,896	\$ 4,453,621.14
VTHRX	Vanguard Target Ret. 2030 Fund;Inv.	3.07	84.76	90.75	5.99	\$ 208,181,515	\$ 214,927,534	\$ 6,746,018.86
VTTHX	Vanguard Target Ret. 2035 Fund;Inv.	3.43	94.73	101.68	6.95	\$ 302,936,487	\$ 313,742,174	\$ 10,805,686.71
VFORX	Vanguard Target Ret. 2040 Fund;Inv.	3.79	103.66	111.42	7.76	\$ 289,229,518	\$ 300,247,900	\$ 11,018,382.28
VTIVX	Vanguard Target Ret. 2045 Fund;Inv.	4.14	112.98	121.32	8.33	\$ 254,579,413	\$ 264,540,053	\$ 9,960,640.34
VFIAX	Vanguard Target Ret. 2050 Fund;Inv.	4.41	114.86	123.13	8.27	\$ 232,973,968	\$ 241,943,219	\$ 8,969,250.91
VFFIX	Vanguard Target Ret. 2055 Fund;Inv.	4.41	122.98	131.80	8.82	\$ 158,293,987	\$ 164,552,077	\$ 6,258,089.90
VTTSX	Vanguard Target Ret. 2060 Fund;Inv.	4.41	114.90	123.15	8.26	\$ 57,176,630	\$ 59,373,165	\$ 2,196,534.84
<b>Total</b>						<b>\$ 2,145,492,532</b>	<b>\$ 2,234,214,675</b>	<b>\$ 88,722,143</b>

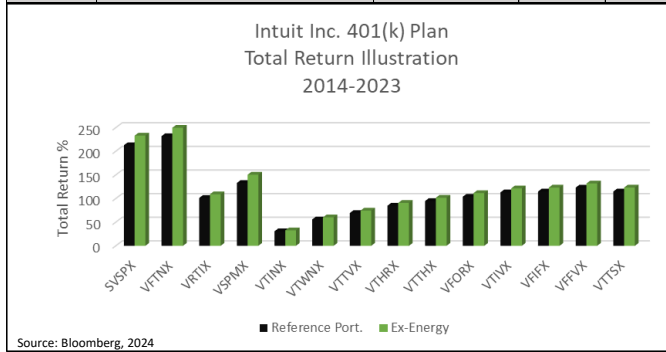


Figure 16.

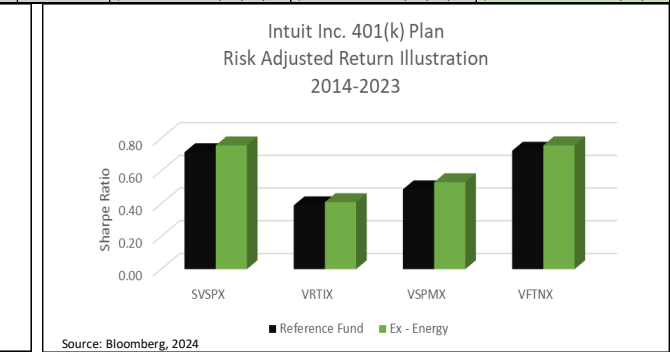


Figure 17.

# Results Cont.

Table 8.

Meta Platforms, Inc. 401(k) Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
10 Yr Total Return (%)								
Ticker	Name	Dec 2023 - % Energy Sector	Reference Port.	Ex-Energy	Ex-Energy Alpha	Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
FSKAX	Fidelity Total Market Index	3.98	196.01	214.39	18.38	\$ 1,678,666,870	\$ 1,782,909,200	\$ 104,242,329.78
VTINX	Vanguard Target Ret. Income Fund;Inv.	1.46	30.69	32.64	1.95	\$ 41,117,278	\$ 41,729,980	\$ 612,702.29
VTWNX	Vanguard Target Ret. 2020 Fund;Inv.	1.95	55.71	60.06	4.35	\$ 23,844,562	\$ 24,511,049	\$ 666,486.89
VTTVX	Vanguard Target Ret. 2025 Fund;Inv.	2.62	69.25	74.49	5.24	\$ 67,340,600	\$ 69,425,860	\$ 2,085,266.16
VTHRX	Vanguard Target Ret. 2030 Fund;Inv.	3.07	84.76	90.75	5.99	\$ 134,555,651	\$ 138,915,860	\$ 4,360,209.21
VTTHX	Vanguard Target Ret. 2035 Fund;Inv.	3.43	94.73	101.68	6.95	\$ 284,338,095	\$ 294,480,381	\$ 10,142,285.61
VFORX	Vanguard Target Ret. 2040 Fund;Inv.	3.79	103.66	111.42	7.76	\$ 541,934,010	\$ 562,579,330	\$ 20,645,320.48
VTIVX	Vanguard Target Ret. 2045 Fund;Inv.	4.14	112.98	121.32	8.33	\$ 870,248,647	\$ 904,297,880	\$ 34,049,233.11
VFIXX	Vanguard Target Ret. 2050 Fund;Inv.	4.41	114.86	123.13	8.27	\$ 1,233,102,502	\$ 1,280,575,642	\$ 47,473,139.76
VFFVX	Vanguard Target Ret. 2055 Fund;Inv.	4.41	122.98	131.80	8.82	\$ 1,264,328,385	\$ 1,314,313,106	\$ 49,984,720.53
VTTSX	Vanguard Target Ret. 2060 Fund;Inv.	4.41	114.90	123.15	8.26	\$ 771,092,107	\$ 800,714,886	\$ 29,622,779.08
<b>Total</b>						<b>\$ 6,910,568,707</b>	<b>\$ 7,214,453,120</b>	<b>\$ 303,884,413</b>

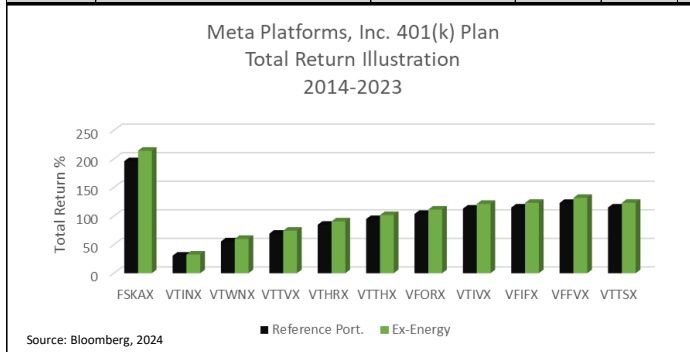


Figure 18.

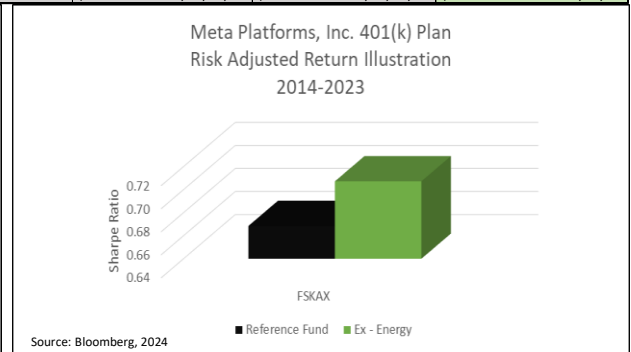


Figure 19.

Table 9.

Microsoft Corporation Savings Plus 401(k) Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
10 Yr Total Return (%)								
Ticker	Name	Dec 2023 - % Energy Sector	Reference Port.	Ex-Energy	Ex-Energy Alpha	Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
APHMX	Artisan Mid Cap Institutional	0.00	150.07	157.58	7.51	\$ 1,486,550,555	\$ 1,531,203,420	\$ 44,652,865.23
LIBKX	BlackRock LifePath® Index 2025 K	1.72	75.66	76.83	1.18	\$ 126,814,045	\$ 127,664,000	\$ 849,954.92
LINXK	BlackRock LifePath® Index 2030 K	2.30	92.65	94.39	1.74	\$ 1,699,484,388	\$ 1,714,809,439	\$ 15,325,050.69
LJXKX	BlackRock LifePath® Index 2035 K	2.89	105.36	107.83	2.47	\$ 335,616,329	\$ 339,660,412	\$ 4,044,083.27
LKXKX	BlackRock LifePath® Index 2040 K	3.51	121.14	124.26	3.12	\$ 2,999,777,309	\$ 3,042,051,349	\$ 42,274,040.16
LHXX	BlackRock LifePath® Index 2045 K	4.30	128.14	132.37	4.23	\$ 523,917,442	\$ 533,632,957	\$ 9,715,514.91
LIPKX	BlackRock LifePath® Index 2050 K	4.82	135.59	139.92	4.33	\$ 3,094,938,037	\$ 3,151,875,637	\$ 56,937,599.52
LIVKX	BlackRock LifePath® Index 2055 K	4.91	138.21	143.62	5.42	\$ 647,126,798	\$ 661,838,312	\$ 14,711,513.91
LIRKX	BlackRock LifePath® Index Retire K	1.51	48.57	46.60	-1.97	\$ 539,445,613	\$ 532,299,256	\$ 7,146,356.65
FCNXX	Fidelity Contrafund K	3.94	255.36	270.89	15.54	\$ 1,871,018,466	\$ 1,952,816,257	\$ 81,797,791.48
FGCKX	Fidelity Growth Company K	1.33	402.44	418.68	16.24	\$ 3,527,299,452	\$ 3,641,304,152	\$ 114,004,700.40
VRGWX	Vanguard Russell 1000 Growth Index I	0.50	296.93	307.28	10.35	\$ 1,789,480,212	\$ 1,836,142,081	\$ 46,661,869.28
VRVIX	Vanguard Russell 1000 Value Index I	7.80	124.10	142.26	18.16	\$ 1,524,972,041	\$ 1,648,531,516	\$ 123,559,474.88
VRTGX	Vanguard Russell 2000 Growth Index I	4.41	95.83	101.44	5.60	\$ 1,139,866,432	\$ 1,171,975,751	\$ 32,609,318.80
VFIAX	Vanguard 500 Index Admiral	3.92	210.46	230.37	19.91	\$ 4,955,635,474	\$ 5,273,382,442	\$ 317,746,968.36
<b>Total</b>						<b>\$ 26,261,442,593</b>	<b>\$ 27,159,186,982</b>	<b>\$ 897,744,389</b>

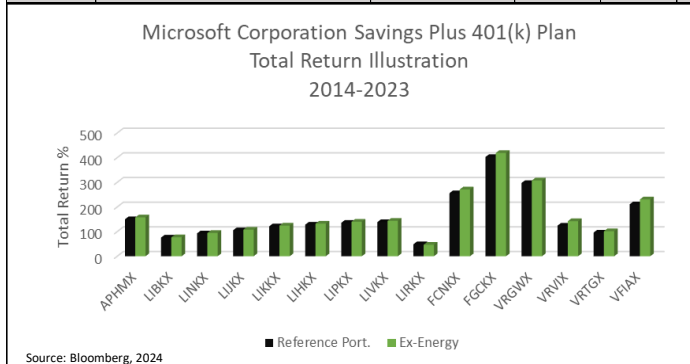


Figure 20.

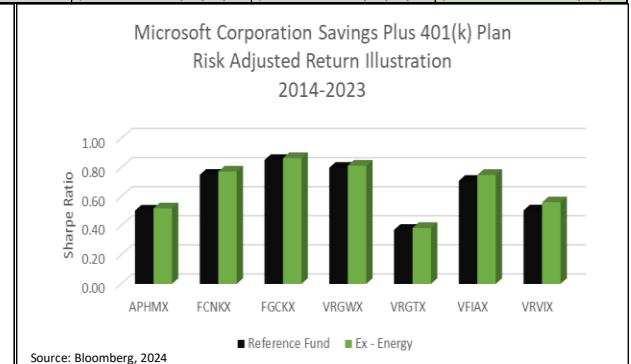


Figure 21.

# Results Cont.

Table 10.

Netflix 401(k) Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
Ticker	Name	Dec 2023 - % Energy Sector	10 Yr Total Return (%)			Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
			Reference Port.	Ex-Energy	Ex-Energy Alpha			
ABLYX	American Beacon Large Cap Value Y	9.83	143.14	158.65	15.51	\$ 14,474,283	\$ 15,397,793	\$ 923,509.53
ABSYX	American Beacon Small Cap Val Y	7.44	129.39	147.05	17.66	\$ 14,075,901	\$ 15,159,265	\$ 1,083,364.07
FBAKX	Fidelity Balanced K	3.09	255.36	270.89	15.54	\$ 20,554,304	\$ 21,452,904	\$ 898,599.72
FCNKK	Fidelity Contrafund K	3.94	255.36	270.89	15.54	\$ 54,161,940	\$ 56,529,809	\$ 2,367,869.24
FSMAX	Fidelity Extended Market Index	4.32	121.00	132.99	11.99	\$ 24,069,532	\$ 25,375,155	\$ 1,305,622.64
FCAKX	Fidelity Capital Appreciation K	4.13	217.68	238.93	21.24	\$ 16,790,866	\$ 17,913,749	\$ 1,122,882.95
FSPSX	Fidelity International Index	4.21	61.81	63.41	1.61	\$ 28,969,042	\$ 29,256,590	\$ 287,548.03
FNCMX	Fidelity Nasdaq Composite Index	0.63	303.47	308.83	5.36	\$ 81,775,143	\$ 82,860,582	\$ 1,085,438.79
FSKAX	Fidelity Total Market Index	3.98	196.01	214.39	18.38	\$ 119,739,964	\$ 127,175,612	\$ 7,435,647.75
FSMLX	Franklin Small Cap Growth R6	2.96	119.88	135.26	15.38	\$ 9,127,626	\$ 9,765,884	\$ 638,258.47
MDIUX	MFS Intl Diversification I	5.23	96.66	95.96	-0.71	\$ 3,151,320	\$ 3,199,998	\$ 48,678.54
OTCKX	MFS Mid Cap Growth R6	2.40	206.91	218.33	11.41	\$ 15,556,824	\$ 16,135,355	\$ 578,531.22
MLAIX	MainStay Winslow Large Cap Growth I	0.00	288.12	293.05	4.93	\$ 23,644,718	\$ 23,945,252	\$ 300,533.35
VTINX	Vanguard Target Retirement Income Fund	1.46	30.69	32.64	1.95	\$ 6,556,372	\$ 6,654,071	\$ 97,698.69
VTWVX	Vanguard Target Retirement 2020 Fund	1.95	55.71	60.06	4.35	\$ 5,183,379	\$ 5,328,261	\$ 144,882.26
VTVVX	Vanguard Target Retirement 2025 Fund	2.62	69.25	74.49	5.24	\$ 12,071,818	\$ 12,445,623	\$ 373,804.65
VTHRXX	Vanguard Target Retirement 2030 Fund	3.07	84.76	90.75	5.99	\$ 24,888,558	\$ 25,695,059	\$ 806,501.39
VTTXX	Vanguard Target Retirement 2035 Fund	3.43	94.73	101.68	6.95	\$ 68,162,772	\$ 70,594,125	\$ 2,431,353.07
VFORXX	Vanguard Target Retirement 2040 Fund	3.79	103.66	111.42	7.76	\$ 102,712,240	\$ 106,625,128	\$ 3,912,888.06
VTIVX	Vanguard Target Retirement 2045 Fund	4.14	112.98	121.32	8.33	\$ 151,393,674	\$ 157,317,083	\$ 5,923,408.80
VFIKX	Vanguard Target Retirement 2050 Fund	4.41	114.86	123.13	8.27	\$ 179,431,649	\$ 186,339,577	\$ 6,907,928.31
VFFVX	Vanguard Target Retirement 2055 Fund	4.41	122.98	131.80	8.82	\$ 123,380,748	\$ 128,258,557	\$ 4,877,808.83
VTTSX	Vanguard Target Retirement 2060 Fund	4.41	114.90	123.15	8.26	\$ 33,587,201	\$ 34,877,509	\$ 1,290,307.90
VEVIX	Victory Sycamore Established Value I	3.87	212.68	227.50	14.82	\$ 29,934,455	\$ 31,353,232	\$ 1,418,776.72
	<b>Total</b>					\$ 1,163,394,329	\$ 1,209,596,173	\$ 46,201,844

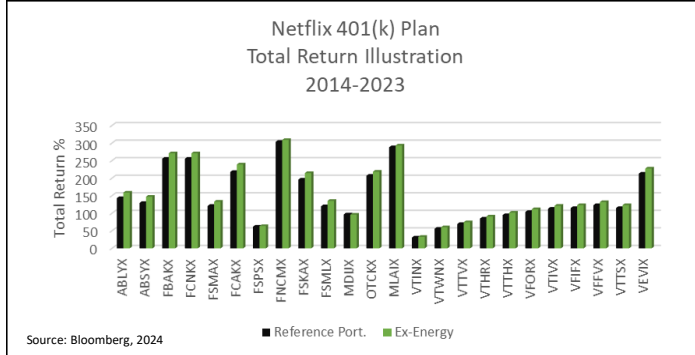


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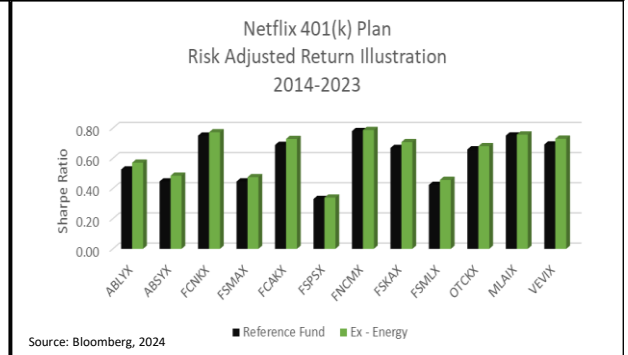


Figure 23.

Table 11.

Oracle Corporation 401(k) Savings and Investment Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
Ticker	Name	Dec 2023 - % Energy Sector	10 Yr Total Return (%)			Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
			Reference Port.	Ex-Energy	Ex-Energy Alpha			
APHIX	Artisan International Institutional	2.06	59.33	59.24	-0.10	\$ 132,754,000	\$ 132,674,492	\$ 79,507.87
DODFX	Dodge & Cox International Stock I	8.43	58.66	59.41	0.75	\$ 301,693,000	\$ 301,114,690	\$ 1,421,690.35
DODGX	Dodge & Cox Stock I	7.20	184.52	206.37	21.85	\$ 984,162,000	\$ 1,059,749,384	\$ 75,587,383.85
FBAKX	Fidelity Balanced K	3.09	139.63	148.66	9.03	\$ 615,215,000	\$ 638,392,706	\$ 23,177,706.49
FCNKK	Fidelity Contrafund K	3.94	255.36	270.89	15.54	\$ 1,635,225,000	\$ 1,706,714,296	\$ 71,489,296.34
FGCKX	Fidelity Growth Company K	1.33	402.44	418.68	16.24	\$ 1,957,997,000	\$ 2,021,280,785	\$ 63,283,785.34
FLPKX	Fidelity Low-Priced Stock K	8.47	28.84	29.02	0.19	\$ 525,315,000	\$ 526,074,490	\$ 759,490.26
FWIFX	Fidelity Advisor Worldwide I	4.18	174.73	189.51	14.78	\$ 266,877,000	\$ 281,239,255	\$ 14,362,224.66
VFIAX	Vanguard 500 Index Admiral	4.34	210.46	230.37	19.91	\$ 2,825,053,000	\$ 3,006,190,622	\$ 181,137,622.19
VEAXX	Vanguard Extended Market Index Admiral	4.32	86.15	118.23	32.08	\$ 575,338,000	\$ 674,477,184	\$ 99,139,183.93
VTINX	Vanguard Target Retirement Income Fund	1.46	30.69	32.64	1.95	\$ 157,568,000	\$ 159,915,973	\$ 2,347,973.39
VTWVX	Vanguard Target Retirement 2020 Fund	1.95	55.71	60.06	4.35	\$ 325,099,000	\$ 334,185,945	\$ 9,086,944.88
VTVVX	Vanguard Target Retirement 2025 Fund	2.62	69.25	74.49	5.24	\$ 613,218,000	\$ 632,206,336	\$ 18,988,336.43
VTHRXX	Vanguard Target Retirement 2030 Fund	3.07	84.76	90.75	5.99	\$ 847,359,000	\$ 874,817,248	\$ 27,458,248.48
VTTXX	Vanguard Target Retirement 2035 Fund	3.43	94.73	101.68	6.95	\$ 821,481,000	\$ 850,783,071	\$ 29,302,070.53
VFORXX	Vanguard Target Retirement 2040 Fund	3.79	103.66	111.42	7.76	\$ 759,740,000	\$ 788,682,778	\$ 28,942,778.12
VTIVX	Vanguard Target Retirement 2045 Fund	4.14	112.98	121.32	8.33	\$ 582,066,000	\$ 604,839,837	\$ 22,773,837.09
VFIKX	Vanguard Target Retirement 2050 Fund	4.41	114.86	123.13	8.27	\$ 467,588,000	\$ 485,589,642	\$ 18,001,642.42
VFFVX	Vanguard Target Retirement 2055 Fund	4.41	122.98	131.80	8.82	\$ 344,897,000	\$ 358,532,366	\$ 13,635,366.81
VTTSX	Vanguard Target Retirement 2060 Fund	4.41	114.90	123.15	8.26	\$ 219,557,000	\$ 227,991,645	\$ 8,434,645.44
VTSNX	Vanguard Total Intl Stock Index I	5.61	55.72	57.88	2.17	\$ 485,787,000	\$ 492,545,548	\$ 6,758,547.52
WSMDX	William Blair Small-Mid Cap Growth I	7.07	209.64	213.18	3.53	\$ 277,391,000	\$ 280,555,411	\$ 3,164,410.76
	<b>Total</b>					\$ 15,721,380,000	\$ 16,440,553,676	\$ 719,173,676

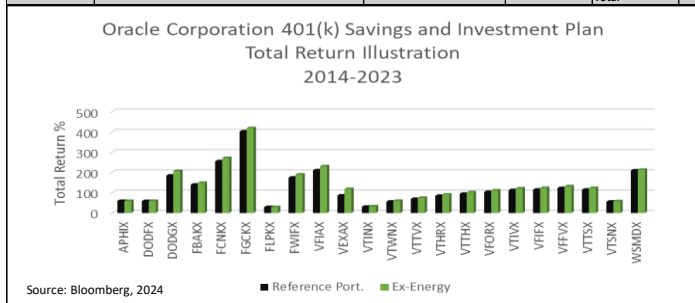


Figure 24.

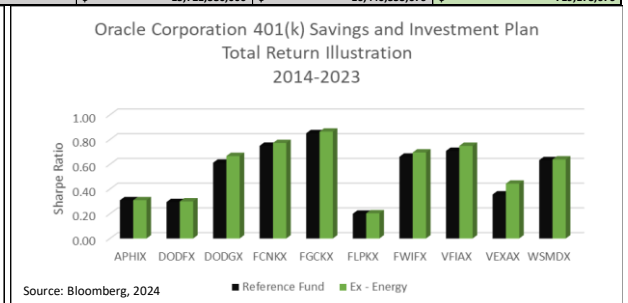


Figure 25.

# Results Cont.

Table 12.

Qualcomm Incorporated Employee Savings and Retirement Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
Ticker	Name	Dec 2023 - % Energy Sector	Reference Port.	10 Yr Total Return (%)		Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
				Ex-Energy	Ex-Energy Alpha			
AVFIX	American Beacon Small Cap Val R5	7.44	129.39	147.05	17.66	\$ 227,249,831	\$ 244,740,314	\$ 17,490,482.68
RERGX	American Funds Europacific Growth R6	7.98	82.94	79.38	-3.56	\$ 126,663,308	\$ 124,200,581	\$ -2,462,727.10
FCNXX	Fidelity Contrafund K	3.94	255.36	270.89	15.54	\$ 725,571,218	\$ 757,291,976	\$ 31,720,757.58
FOCKX	Fidelity OTC K	5.06	377.73	382.08	4.35	\$ 718,235,959	\$ 724,774,297	\$ 6,538,337.87
VEXRK	Vanguard Explorer Adm	4.33	157.06	166.09	9.03	\$ 140,457,265	\$ 145,392,578	\$ 4,935,313.01
VFIAX	Vanguard 500 Index Admiral	3.97	210.46	230.37	19.91	\$ 993,199,747	\$ 1,056,882,036	\$ 63,682,288.63
VEVAX	Vanguard Extended Market Index Admiral	4.34	86.15	118.23	32.08	\$ 295,162,304	\$ 346,023,102	\$ 50,860,798.25
VTINX	Vanguard Target Retirement Income Fund	1.46	30.69	32.64	1.95	\$ 88,677,005	\$ 89,998,411	\$ 1,321,405.67
VTWNX	Vanguard Target Retirement 2020 Fund	1.95	55.71	60.06	4.35	\$ 38,907,092	\$ 39,994,596	\$ 1,087,504.42
VTTVX	Vanguard Target Retirement 2025 Fund	2.62	69.25	74.49	5.24	\$ 245,005,879	\$ 252,592,502	\$ 7,586,623.45
VTHRX	Vanguard Target Retirement 2030 Fund	3.07	84.76	90.75	5.99	\$ 151,454,663	\$ 156,362,476	\$ 4,907,813.30
VTHXK	Vanguard Target Retirement 2035 Fund	3.43	94.73	101.68	6.95	\$ 352,162,621	\$ 364,724,194	\$ 12,561,573.50
VFORX	Vanguard Target Retirement 2040 Fund	3.79	103.66	111.42	7.76	\$ 177,043,933	\$ 183,788,534	\$ 6,744,601.14
VTIVX	Vanguard Target Retirement 2045 Fund	4.14	112.98	121.32	8.33	\$ 342,334,631	\$ 355,728,770	\$ 13,394,139.35
VFIKX	Vanguard Target Retirement 2050 Fund	4.41	114.86	123.13	8.27	\$ 128,269,081	\$ 133,207,305	\$ 4,938,223.67
VFFVX	Vanguard Target Retirement 2055 Fund	4.41	122.98	131.80	8.82	\$ 99,533,431	\$ 103,468,446	\$ 3,935,014.63
VTTSX	Vanguard Target Retirement 2060 Fund	4.41	114.90	123.15	8.26	\$ 59,835,515	\$ 62,134,195	\$ 2,298,680.32
VTSNX	Vanguard Total Intl Stock Index I	5.61	55.72	57.88	2.17	\$ 47,497,793	\$ 48,158,610	\$ 660,816.55
VWNAX	Vanguard Windsor™ II Admiral™	6.31	178.45	198.60	20.15	\$ 181,220,416	\$ 194,335,092	\$ 13,114,676.36
			Total			\$ 5,148,973,263	\$ 5,394,289,586	\$ 245,316,323

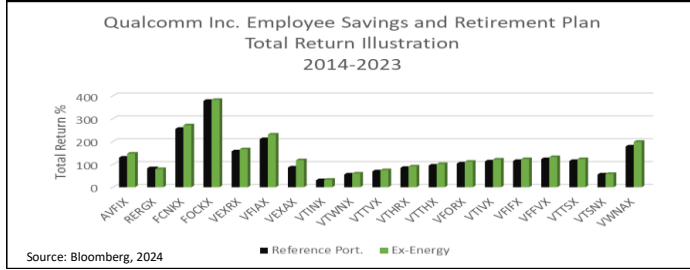


Figure 26.

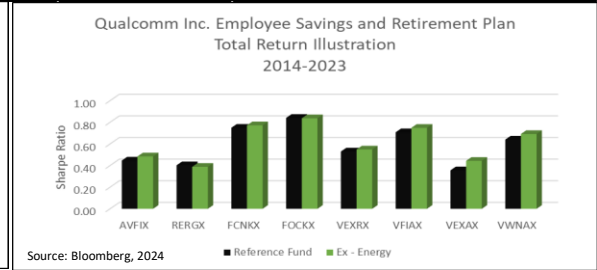


Figure 27.

Table 13.

SAP America, Inc. 401(k) Plan								
Ending Dec 2023 (Sources: Bloomberg Terminal, As You Sow)								
Ticker	Name	Dec 2023 - % Energy Sector	Reference Port.	10 Yr Total Return (%)		Actual Market Value (2022/12/31)	Estimated Ex-Energy Market Value	Ex-Energy minus Reference Portfolio
				Ex-Energy	Ex-Energy Alpha			
ESPNX	Allspring Special Small Cap Value Inst	6.67	135.51	150.44	14.92	\$ 16,923,253	\$ 17,995,709	\$ 1,072,455.89
WFFRX	Allspring Special Mid Cap Value R6	5.79	155.34	172.93	17.59	\$ 41,212,858	\$ 44,052,381	\$ 2,839,522.52
CMGK	BlackRock Mid-Cap Growth Equity Instl	1.73	173.04	182.35	9.30	\$ 29,070,105	\$ 30,060,698	\$ 990,592.77
RRBGX	T. Rowe Price Blue Chip Growth R	0.29	227.69	233.22	5.53	\$ 259,700,776	\$ 264,080,438	\$ 4,379,661.52
VEMIX	Vanguard Emerging Mkts Stock Idx Instl	6.61	46.81	46.81	0.00	\$ 47,690,270	\$ 47,689,645	\$ -625.32
VEXRK	Vanguard Explorer Adm	4.33	157.06	166.09	9.03	\$ 138,023,540	\$ 142,873,338	\$ 4,849,798.07
VHGXK	Vanguard Global Equity Inv	2.39	127.86	138.33	10.47	\$ 129,171,939	\$ 135,109,464	\$ 5,937,525.43
VFIAX	Vanguard 500 Index Admiral	3.97	210.46	230.37	19.91	\$ 975,078,851	\$ 1,037,599,258	\$ 62,520,407.41
VEVAX	Vanguard Extended Market Index Admiral	4.34	86.15	118.23	32.08	\$ 311,140,926	\$ 364,755,075	\$ 53,614,149.41
VTINX	Vanguard Target Retirement Income Fund	1.46	30.69	32.64	1.95	\$ 39,252,149	\$ 39,837,058	\$ 584,909.38
VTWNX	Vanguard Target Retirement 2020 Fund	1.95	55.71	60.06	4.35	\$ 61,636,962	\$ 63,359,796	\$ 1,722,834.20
VTTVX	Vanguard Target Retirement 2025 Fund	2.62	69.25	74.49	5.24	\$ 135,149,147	\$ 139,334,049	\$ 4,184,902.39
VTHRX	Vanguard Target Retirement 2030 Fund	3.07	84.76	90.75	5.99	\$ 198,623,604	\$ 203,059,903	\$ 4,436,299.46
VTHXK	Vanguard Target Retirement 2035 Fund	3.43	94.73	101.68	6.95	\$ 225,716,057	\$ 233,767,306	\$ 8,051,248.69
VFORX	Vanguard Target Retirement 2040 Fund	3.79	103.66	111.42	7.76	\$ 181,539,729	\$ 188,455,600	\$ 6,915,871.35
VTIVX	Vanguard Target Retirement 2045 Fund	4.14	112.98	121.32	8.33	\$ 130,945,881	\$ 136,069,252	\$ 5,123,371.17
VFIKX	Vanguard Target Retirement 2050 Fund	4.41	114.86	123.13	8.27	\$ 103,491,123	\$ 107,475,422	\$ 3,984,298.55
VFFVX	Vanguard Target Retirement 2055 Fund	4.41	122.98	131.80	8.82	\$ 67,349,178	\$ 70,011,801	\$ 2,662,622.98
VTTSX	Vanguard Target Retirement 2060 Fund	4.41	114.90	123.15	8.26	\$ 33,505,180	\$ 34,792,337	\$ 1,287,156.93
VTSNX	Vanguard Total Intl Stock Index I	5.61	55.72	57.88	2.17	\$ 359,718,273	\$ 364,722,880	\$ 5,004,607.05
VWILX	Vanguard International Growth Adm	1.34	107.87	107.83	-0.04	\$ 179,115,423	\$ 179,079,740	\$ -35,683.01
VSCIX	Vanguard Small Cap Index I	4.71	125.31	137.52	12.21	\$ 91,334,246	\$ 96,282,826	\$ 4,948,579.56
VWENX	Vanguard Wellington™ Admiral™	4.80	121.26	132.50	11.24	\$ 1,376,347,516	\$ 1,446,252,019	\$ 69,904,503.49
VWNAX	Vanguard Windsor™ II Admiral™	6.31	178.45	198.60	20.15	\$ 190,703,402	\$ 204,504,349	\$ 13,800,947.23
			Total			\$ 5,322,440,388	\$ 5,593,220,345	\$ 270,779,957

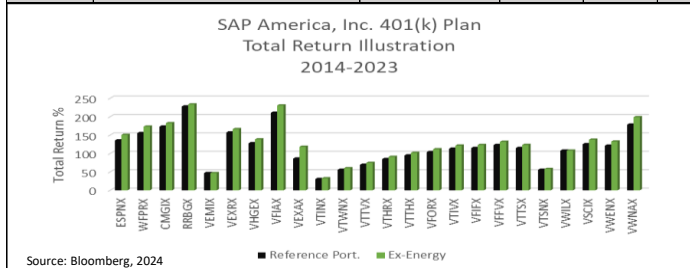


Figure 28.

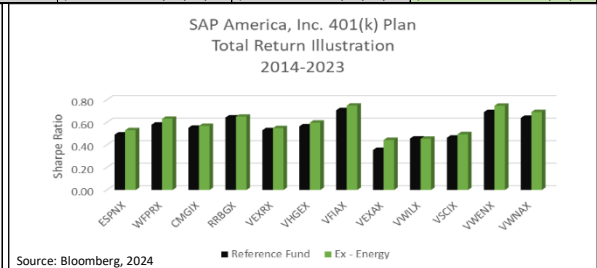


Figure 29.

# Results Cont.

Figure 30.

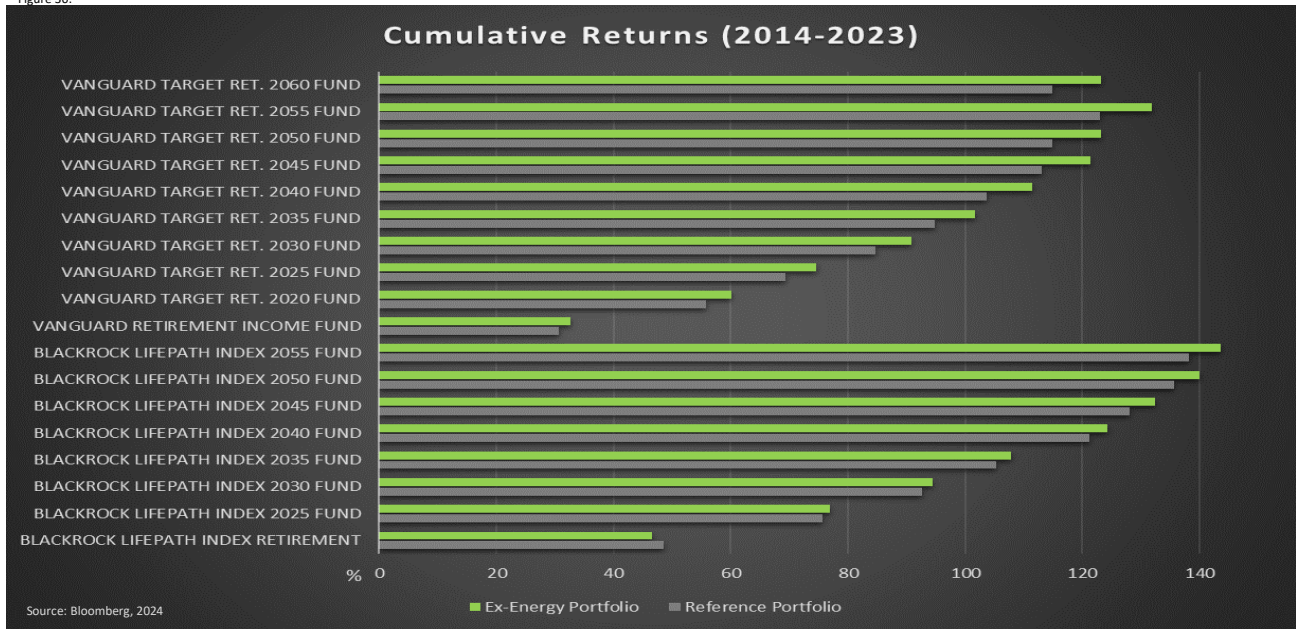


Figure 31.

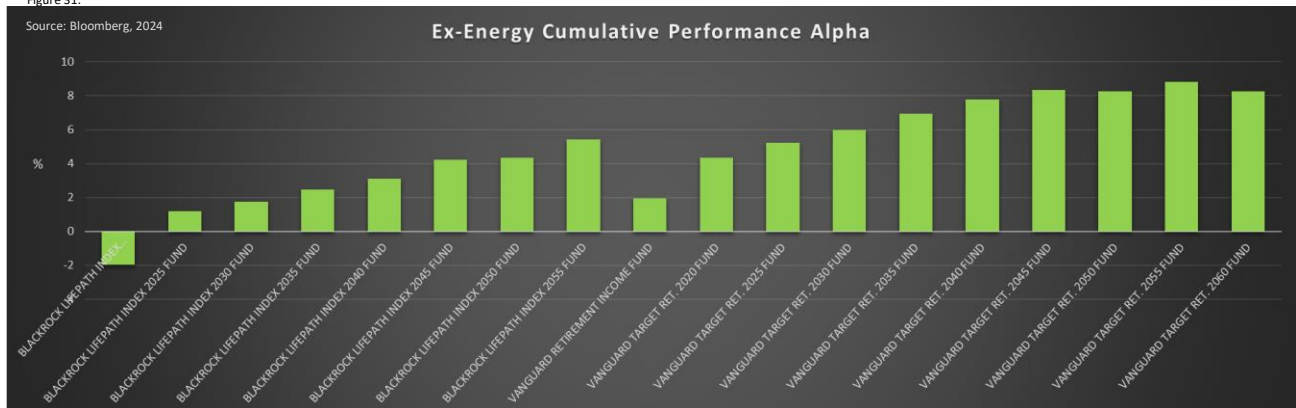


Figure 32.

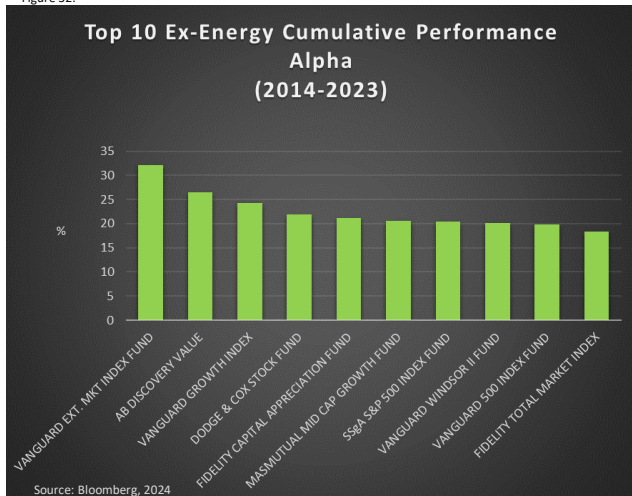
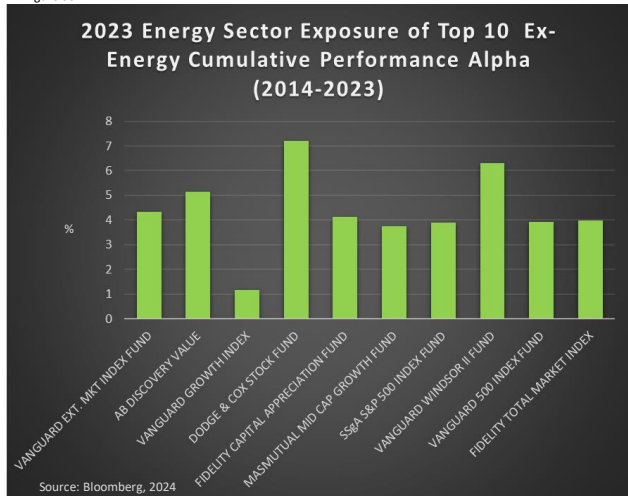


Figure 33.



## Exclusions

### Adobe

- DFA US Small Cap Value Portfolio Inst'l Class (DFSVX): Holdings data unavailable in Bloomberg Terminal
- PIMCO Total Return Fund; Institutional Class (PTTRX): Fixed income fund, money market fund, or cash account
- Vanguard Inflation-Protected Securities Fund: Inst'l Shares (VIPIX): Fixed income fund, money market fund, or cash account
- Vanguard Target Retirement 2065 Trust Plus (VLXVX): Less than 10 years since fund inception
- Vanguard Target Retirement 2070 Trust Plus (VSVNX): Less than 10 years since fund inception
- Vanguard Institutional Total Bond Market Index Trust (VBTIX): Fixed income fund, money market fund, or cash account
- Vanguard Federal Money Market Fund: Fixed income fund, money market fund, or cash account
- Vanguard Retirement Savings Trust III: Fixed income fund, money market fund, or cash account

### Amazon.com

- PIMCO TOTAL RTN II (PMBIX): Fixed income fund, money market fund, or cash account
- SSGA SM/MID CAP (SSMKX): Less than 10 years since fund inception
- VANGUARD TARGET 2065 (VLXVX): Less than 10 years since fund inception
- VANGUARD TARGET 2070 (VSVNX): Less than 10 years since fund inception
- VG IS TOT BD MKT IDX (VBTIX): Fixed income fund, money market fund, or cash account
- AMAZON.COM STOCK: Employer stock
- VANG RET SVNG TR II: Fixed income fund, money market fund, or cash account
- VANG VMMR-FED MMKT: Fixed income fund, money market fund, or cash account

### Apple

- BlackRock Global LifePath Index 2060 Account A (LIZKX): Less than 10 years since fund inception
- BlackRock Global LifePath Index 2065 Account A (LIWKX): Less than 10 years since fund inception
- BNY Mellon EB Global Real Estate Sec II (DRLYX): Real estate fund
- Eaton Vance Trust Co CIT High Yield CIV (EVHY): Fixed income fund, money market fund, or cash account
- Loomis Sayles Core Plus Fixed Income D (NERYX): Fixed income fund, money market fund, or cash account
- Vanguard Total Bond Market Index Trust (VBTIX): Fixed income fund, money market fund, or cash account
- Stable Value Fund Separately Managed Account: Fixed income fund, money market fund, or cash account

### Broadcom

- TCW Total Return Bond I (TGLMX): Fixed income fund, money market fund, or cash account
- Vanguard Short-Term Bond Index Fund Institutional (VBIPX): Fixed income fund, money market fund, or cash account
- Vanguard Target Retirement 2065 (VLXVX): Less than 10 years since fund inception
- Vanguard Total Bond Market Index Fund Institutional (VBTIX): Fixed income fund, money market fund, or cash account
- Boston Partners Mid Cap Value Equity: Collective trust or Separately Managed Account with no holdings data available
- Fidelity Investments Money Market Treasury - Class I: Fixed income fund, money market fund, or cash account
- Fidelity Investments Money Market Treasury - Institutional Class: Fixed income fund, money market fund, or cash account
- Invesco Stable Value Trust Class A1: Fixed income fund, money market fund, or cash account

## Google

- Metropolitan West Funds Total Return Bond Fund Class P (MWT SX): Fixed income fund, money market fund, or cash account
- The Vanguard Group Inc. Inflation Protection Option (VAIPX): Fixed income fund, money market fund, or cash account
- The Vanguard Group Inc. REIT Index Fund Institutional Shares (VGSNX): Real estate fund
- The Vanguard Group Inc. Target Retirement Trust 2065 (VLXVX): Less than 10 years since fund inception
- The Vanguard Group Inc. Total Bond Market Index Trust (VBTIX): Fixed income fund, money market fund, or cash account
- The Vanguard Group Inc. Total Intl Bond Market Index Fund Institutional (VTIFX): Fixed income fund, money market fund, or cash account
- The Vanguard Group Inc. Income Option: Fixed income fund, money market fund, or cash account
- EARNEST Partners EARNEST Partners Smid Cap Core Fund, Founders Class: Collective trust or Separately Managed Account with no holdings data available
- The Vanguard Group Inc. Retirement Savings Trust II (at contract value): Fixed income fund, money market fund, or cash account
- Vanguard Federal Money Market Fund: Fixed income fund, money market fund, or cash account

## Intuit

- State Street US Bond Index SL CL XIV (SSFEX): Fixed income fund, money market fund, or cash account
- State Street Global All Cap Equity Ex-US Index (SSGLX): Less than 10 years since fund inception
- Vanguard Target Retire 2065 Trust Select Fund (VLXVX): Less than 10 years since fund inception
- Vanguard Target Retire 2070 Trust Select Fund (VSVNX): Less than 10 years since fund inception
- Putnam Stable Value Fund: Fixed income fund, money market fund, or cash account

## Meta

- State Street U.S. Bond Index Securities Lending Series Fund Class XIV (SSFEX): Fixed income fund, money market fund, or cash account
- State Street Global All Cap Equity Ex-U.S. Index Securities Lending Series Fund Class II (SSGLX): Less than 10 years since fund inception
- State Street U.S. Inflation Protected Bond Index Fund (VAIPX): Fixed income fund, money market fund, or cash account
- Vanguard Target Retirement 2065 Trust Select (VLXVX): Less than 10 years since fund inception
- Vanguard Target Retirement 2070 Trust Select (VSVNX): Less than 10 years since fund inception
- Vanguard Total International Bond Index Fund Institutional Shares (VTIFX): Fixed income fund, money market fund, or cash account
- Fidelity Investments Money Market Government Portfolio - Institutional Class: Fixed income fund, money market fund, or cash account
- Invesco Stable Value Trust Class B1: Fixed income fund, money market fund, or cash account

## Microsoft

- BlackRock LifePath Index 2060 (LIZKX): Less than 10 years since fund inception
- BlackRock LifePath Index 2065 (LIWKX): Less than 10 years since fund inception
- PIMCO All Asset All Authority (PAUIX): Fixed income fund, money market fund, or cash account
- PIMCO Inflation Response Multi-Asset Response (PIRMX): Fixed income fund, money market fund, or cash account
- PIMCO Total Return Account (PTTRX): Fixed income fund, money market fund, or cash account
- International Growth Account: Collective trust or Separately Managed Account with no holdings data available
- International Value Account: Collective trust or Separately Managed Account with no holdings data available
- SMID Cap Value Account: Collective trust or Separately Managed Account with no holdings data available
- BlackRock Short-term Investment Fund: Fixed income fund, money market fund, or cash account



- Microsoft Common Stock: Employer stock
- Vanguard Short-Term Bond Index Fund (Signal): Fixed income fund, money market fund, or cash account

#### **Netflix**

- Fidelity U.S. Bond Index Fund (FXNAX): Fixed income fund, money market fund, or cash account
- PIMCO Total Return Institutional Fund (PTTRX): Fixed income fund, money market fund, or cash account
- Vanguard Target 2065 (VLXVX): Less than 10 years since fund inception
- Vanguard Target 2070 (VSVNX): Less than 10 years since fund inception
- Fidelity Government Money Market Fund: Fixed income fund, money market fund, or cash account
- Fidelity Managed Income Portfolio Fund: Fixed income fund, money market fund, or cash account

#### **Oracle**

- PIMCO Inflation Response Multi-Asset Fund Institutional (PIRMX): Fixed income fund, money market fund, or cash account
- Vanguard Target Retirement 2065 Trust Select (VLXVX): Less than 10 years since fund inception
- Vanguard Target Retirement 2070 Trust Select (VSVNX): Less than 10 years since fund inception
- Vanguard Institutional Total Bond Market Index Trust (VBTIX): Fixed income fund, money market fund, or cash account
- Broad Market Bond I: Fixed income fund, money market fund, or cash account
- Emerging Markets Stock Fund: Collective trust or Separately Managed Account with no holdings data available
- Galliard Stable Value Fund: Fixed income fund, money market fund, or cash account
- Oracle Corporation Common Stock Fund: Employer stock
- US Small Mid Cap Value Fund: Collective trust or Separately Managed Account with no holdings data available

#### **Qualcomm**

- DFA World ex US Core Equity Portfolio (DFWIX): Holdings data unavailable in Bloomberg Terminal
- MetWest Total Return Bond Fund (Class B) (MWTIX): Fixed income fund, money market fund, or cash account
- Vanguard Target Retirement 2065 Trust Plus (VLXVX): Less than 10 years since fund inception
- Vanguard Target Retirement 2070 Trust Plus (VSVNX): Less than 10 years since fund inception
- Vanguard Institutional Total Bond Market Index Trust (VBTIX): Fixed income fund, money market fund, or cash account
- Noninterest-bearing cash: Fixed income fund, money market fund, or cash account
- Short-Term Investment Fund A S (formerly "Wells Fargo/BlackRock Short Term Investment Fund (Class S)"): Fixed income fund, money market fund, or cash account
- Synthetic Guaranteed Investment Contracts: Fixed income fund, money market fund, or cash account
- Vanguard Federal Money Market Fund Investor: Fixed income fund, money market fund, or cash account

#### **SAP America**

- Federated Inst. High Yield Bond Fund (FIHBX): Fixed income fund, money market fund, or cash account
- Metropolitan West Total Return Bond Fund: Class I Shares (MWTIX): Fixed income fund, money market fund, or cash account
- PGIM Global Total Return; Class R6 (PGTQX): Fixed income fund, money market fund, or cash account
- PIMCO Income Fund (PIMIX): Fixed income fund, money market fund, or cash account
- Vanguard Target Retirement 2065 (VLXVX): Less than 10 years since fund inception
- Vanguard Target Retirement 2070 (VSVNX): Less than 10 years since fund inception
- Vanguard Institutional Total Bond Market Index Trust (VBTIX): Fixed income fund, money market fund, or cash account
- SAP ADR Stock Fund: Employer stock

- Vanguard Cash Reserves Federal MM Fund Admiral Shares: Fixed income fund, money market fund, or cash account
- Vanguard Retirement Savings Trust III: Fixed income fund, money market fund, or cash account

Short Name	Primary Plan Name	Form 5500 URL
Adobe	Adobe Inc. 401(k) Retirement Savings Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/adobe/adobe-inc-401k-retirement-savings-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/adobe/adobe-inc-401k-retirement-savings-plan-form-5500-filing-and-attachment-2022.pdf</a>
Amazon.com	Amazon 401(k) Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/amazon-com/amazon-401k-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/amazon-com/amazon-401k-plan-form-5500-filing-and-attachment-2022.pdf</a>
Apple	Apple 401(k) Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/apple/apple-401k-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/apple/apple-401k-plan-form-5500-filing-and-attachment-2022.pdf</a>
Broadcom	Broadcom U.S. 401(k) Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/broadcom/broadcom-us-401k-plan-form-5500-filing-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/broadcom/broadcom-us-401k-plan-form-5500-filing-2022.pdf</a>
Google	Google LLC 401(k) Savings Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/google/google-llc-401k-savings-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/google/google-llc-401k-savings-plan-form-5500-filing-and-attachment-2022.pdf</a>
Intuit	Intuit Inc. 401(k) Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/intuit/intuit-inc-401k-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/intuit/intuit-inc-401k-plan-form-5500-filing-and-attachment-2022.pdf</a>
Meta	Meta Platforms, Inc. 401(k) Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/meta/meta-platforms-inc-401k-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/meta/meta-platforms-inc-401k-plan-form-5500-filing-and-attachment-2022.pdf</a>
Microsoft	Microsoft Corporation Savings Plus 401(k) Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/microsoft/microsoft-corporation-savings-plus-401k-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/microsoft/microsoft-corporation-savings-plus-401k-plan-form-5500-filing-and-attachment-2022.pdf</a>
Netflix	Netflix 401(k) Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/netflix/netflix-401k-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/netflix/netflix-401k-plan-form-5500-filing-and-attachment-2022.pdf</a>
Oracle	Oracle Corporation 401(k) Savings and Investment Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/oracle/oracle-corporation-401k-savings-and-investment-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/oracle/oracle-corporation-401k-savings-and-investment-plan-form-5500-filing-and-attachment-2022.pdf</a>
Qualcomm	Qualcomm Incorporated Employee Savings and Retirement Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/qualcomm/qualcomm-incorporated-employee-savings-retirement-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/qualcomm/qualcomm-incorporated-employee-savings-retirement-plan-form-5500-filing-and-attachment-2022.pdf</a>
SAP America	SAP America, Inc. 401(k) Plan	<a href="https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/sap-america/sap-america-inc-401k-plan-form-5500-filing-and-attachment-2022.pdf">https://iyv-charts.s3.us-west-2.amazonaws.com/retirement-plans/sap-america/sap-america-inc-401k-plan-form-5500-filing-and-attachment-2022.pdf</a>