



Innovation Meets Sustainability

Nasdaq-100 ESG™ Index &
Nasdaq Next Generation 100 ESG™ Index

March 2024 Reconstitution

NDXESG™ / NGXESG™ Index Objectives

- Reduce the degree to which the portfolio's economic value is at risk because of Environmental, Social, and Governance (ESG) factors, or more technically, aim to significantly improve the portfolio's ESG score;
- Exclude enterprises that create reputational risks or violate fundamental values;
- Eliminate business exposures that are off-limit for most ESG-conscious investors and
- Aim to deliver similar performance to the Nasdaq-100® (NDX®)/ Nasdaq Next Generation 100™ Index (NGX™) (very low tracking error).

NDXESG / NGXESG Index Mechanics

- At all times, the Nasdaq-100 ESG™ Index (NDXESG™) / Nasdaq Next Generation 100 ESG™ Index (NGXESG™) consists of a selection of securities in the Nasdaq-100 / Nasdaq Next Generation 100 Index.
- The Nasdaq-100 and Nasdaq Next Generation 100 Indexes are reconstituted annually in December.
- The ESG characteristics of the underlying issuers are re-evaluated each quarter (March, June, September, and December). Hence, there is an NDXESG / NGXESG reconstitution and rebalancing each quarter.
- Securities removed from the Nasdaq-100 / Nasdaq Next Generation 100 Index outside of a reconstitution are removed from the Nasdaq-100 ESG Index / Nasdaq Next Generation 100 ESG Index and are not replaced.

NDXESG / NGXESG Weighting Scheme

- The Nasdaq-100 ESG Index / Nasdaq Next Generation 100 ESG Index are modified market capitalization-weighted indexes that consider a company's ESG Risk Rating Score as an adjustment factor.
- Two factors play into the index weight of an issuer:
 - The Nasdaq-100 / Nasdaq Next Generation 100 Market Value, and
 - The ESG Risk Rating Score.
- In general, for each issuer:
 - Everything else equal, the higher the weight in the Nasdaq-100 and/or the better ESG risk rating, the higher the weight in the NDXESG Index, and vice versa. Same for Nasdaq Next Generation 100 and NGXESG.

March 2024 Reconstitution

NDXESG™ ESG Exclusions: 7

Symbol	Company Name	ICB Industry	Nasdaq-100 ESG: Reason for Exclusion	Nasdaq-100® Weight (%)
HON	Honeywell International	Industrials	Revenue from military contracting weapons. Involvement in Controversial Weapons: Tailor-made and essential.	0.97
ADI	Analog Devices	Technology	Revenue from military contracting weapon-related products and/or services.	0.71
CEG	Constellation Energy	Utilities	Revenue from nuclear production and oil & gas generation.	0.42
AEP	American Electric Power	Utilities	Revenue from thermal coal power generation, nuclear production, and oil & gas generation.	0.33
FANG	Diamondback Energy	Energy	Revenue from oil & gas production. Involvement in shale energy extraction and/or production.	0.26
BKR	Baker Hughes	Energy	Revenue from oil & gas supporting products/services.	0.24
XEL	Xcel Energy	Utilities	Revenue from thermal coal power generation, nuclear production, oil & gas production, and oil & gas generation.	0.22

March 2024 Reconstitution

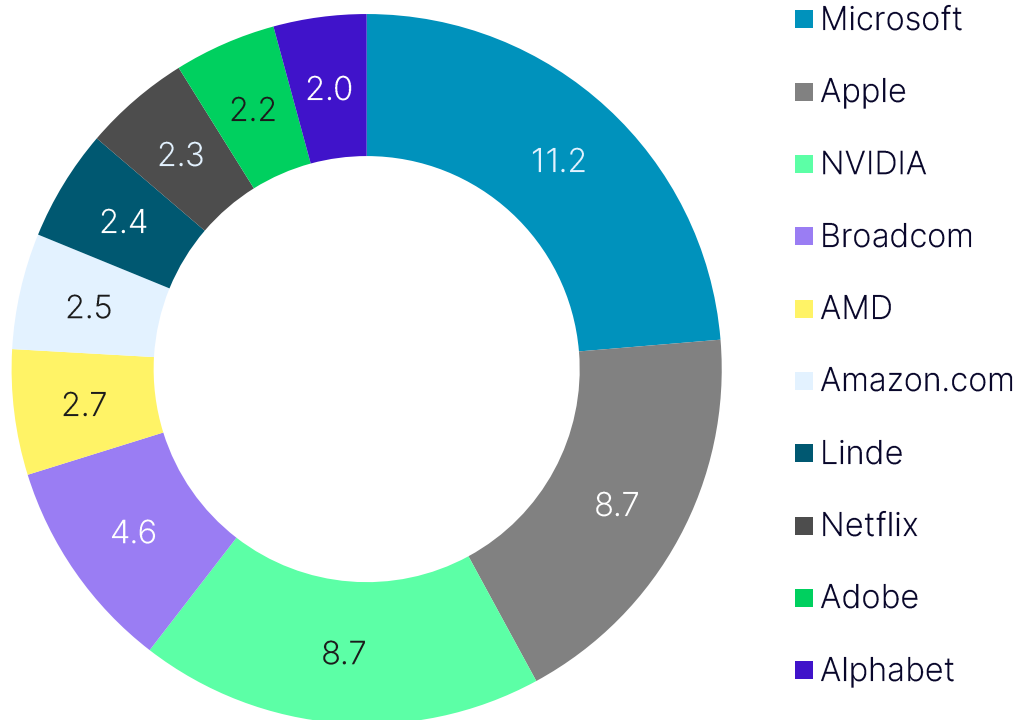
NGXESG™ ESG Exclusions: 13

Symbol	Company Name	ICB Industry	Nasdaq Next Generation 100 ESG: Reason for Exclusion	Nasdaq Next Generation 100® Weight (%)
AXON	Axon Enterprise	Industrials	ESG Risk Rating Score is greater than 40. Manufacture riot control protection equipment and riot control weapons.	1.55
DKNG	DraftKings	Consumer Discretionary	ESG Risk Rating Score has not yet been determined. Revenue from gambling operations.	1.41
BIDU	Baidu	Technology	Global Standards Screening non-compliance.	0.94
LNT	Alliant Energy	Utilities	Revenue from oil & gas generation and thermal coal power generation.	0.85
EVRG	Evergy	Utilities	Revenue from nuclear production and thermal coal power generation.	0.81
CASY	Casey's General Stores	Consumer Staples	Revenue from tobacco products – retail.	0.78
CHK	Chesapeake Energy	Energy	ESG Risk Rating Score is greater than 40. Revenue from oil & gas production. Involvement in shale energy extraction and/or production.	0.76
WYNN	Wynn Resorts	Consumer Discretionary	Revenue from gambling operations.	0.75
APA	APA	Energy	ESG Risk Rating Score is greater than 40. Revenue from oil & gas production. Involvement in shale energy extraction and/or production.	0.68
CZR	Caesars Entertainment	Consumer Discretionary	Revenue from gambling operations.	0.62
WWD	Woodward	Industrials	Revenue from military contracting weapon-related products and/or services, and oil & gas supporting products/services.	0.61
CHDN	Churchill Downs	Consumer Discretionary	Revenue from gambling operations.	0.60
LLYVK	Liberty Media	Consumer Discretionary	ESG Risk Rating Score has not yet been determined.	0.18

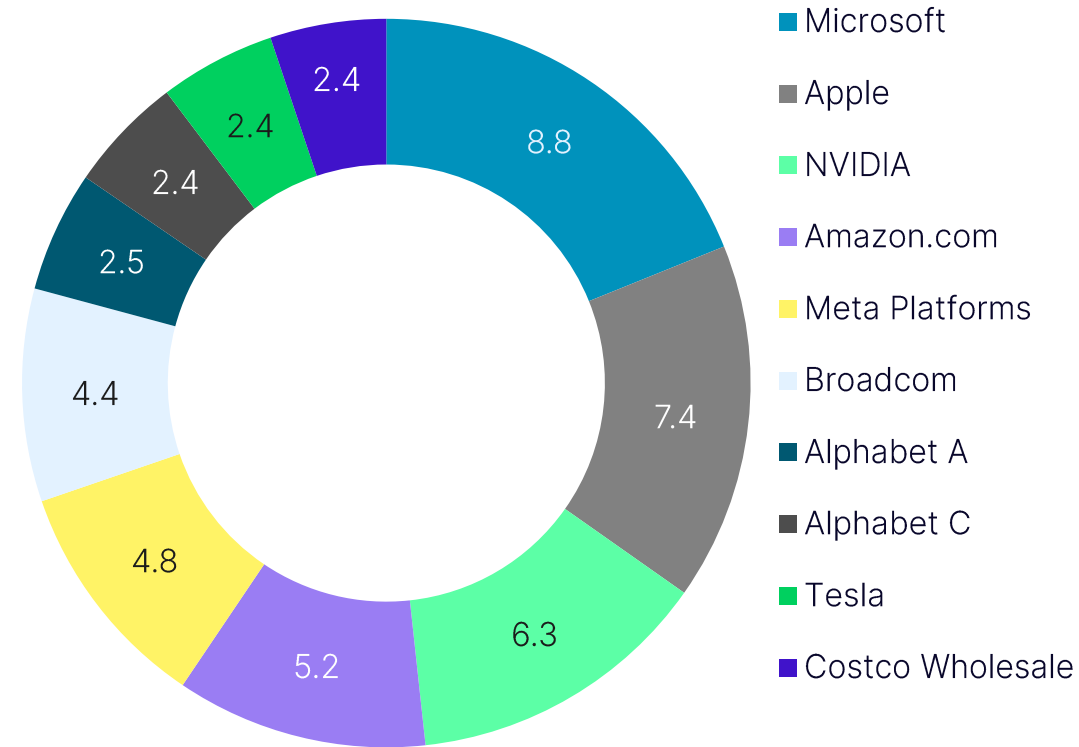
March 2024 Reconstitution

Top 10 Constituents by Index Weight (%)

NDXESG
Top 10 Weight = 47.4%

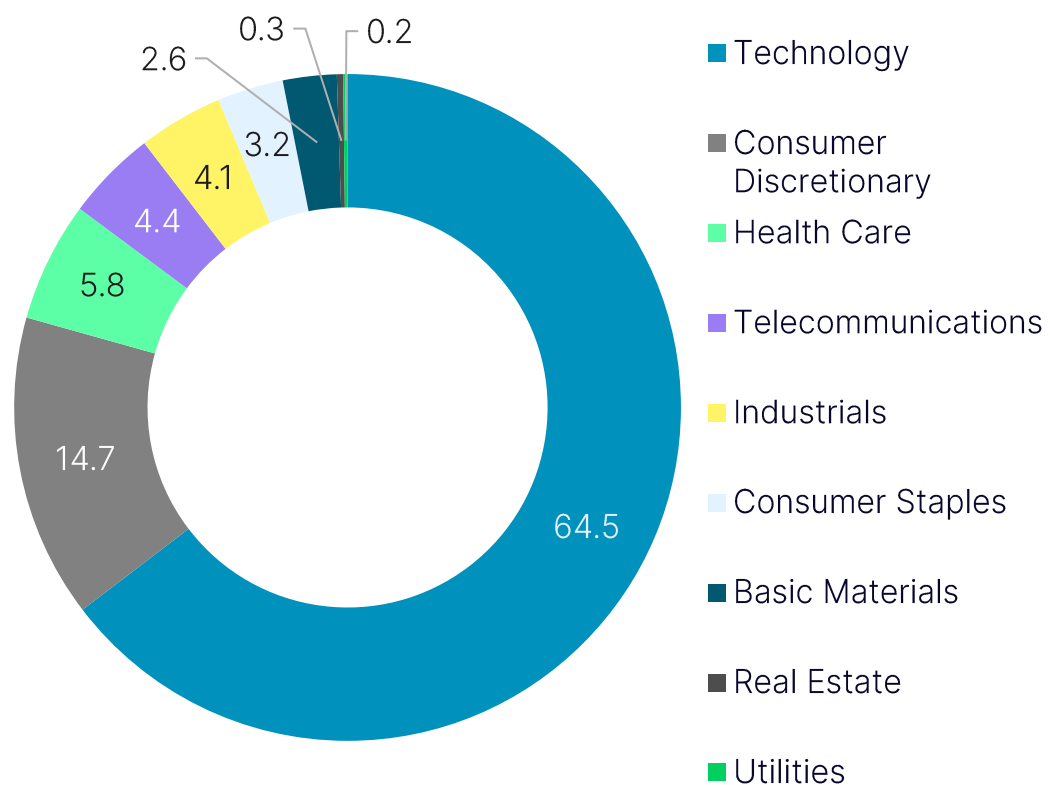


NDX
Top 10 Weight = 46.6%

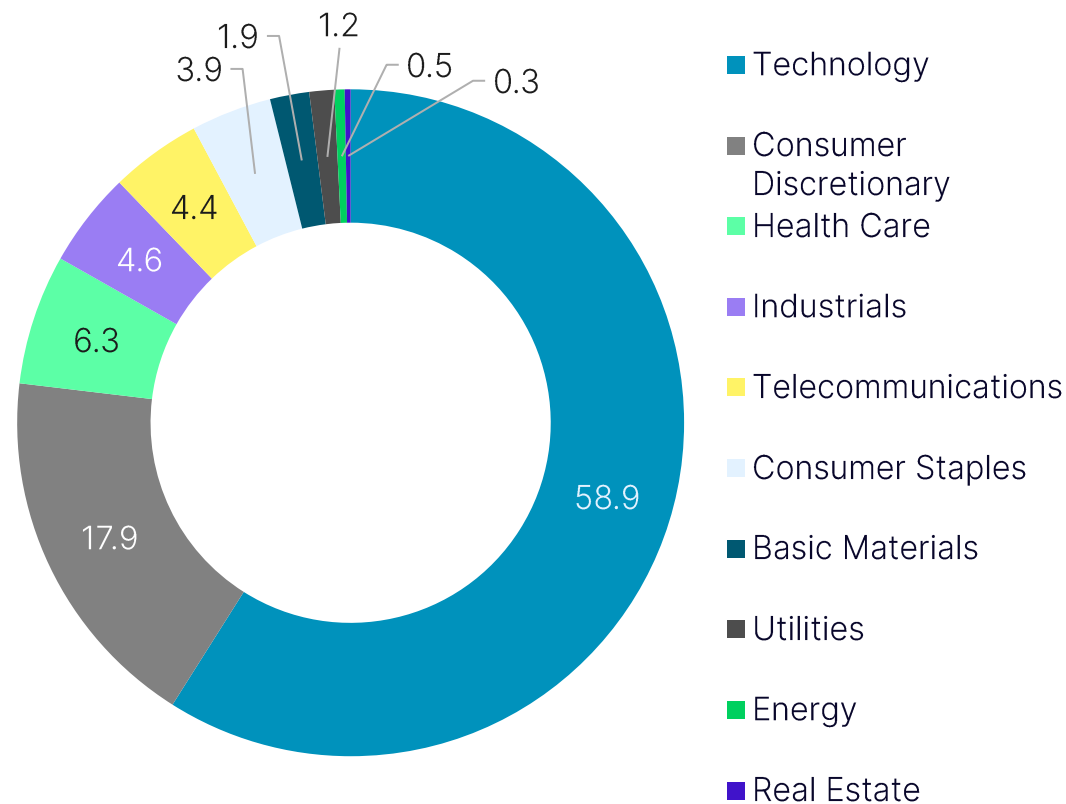


Sector Exposure by Index Weight (%)

NDXESG Index Weight by ICB Industry

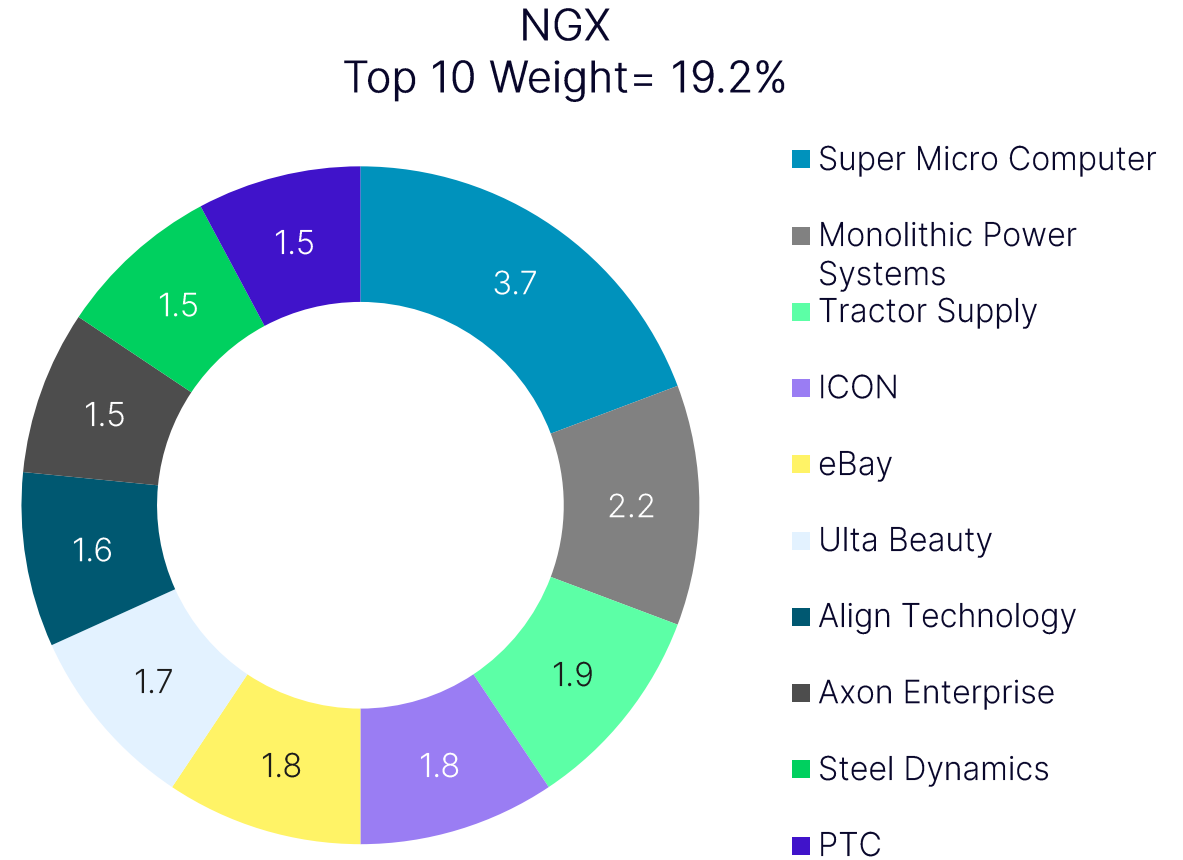
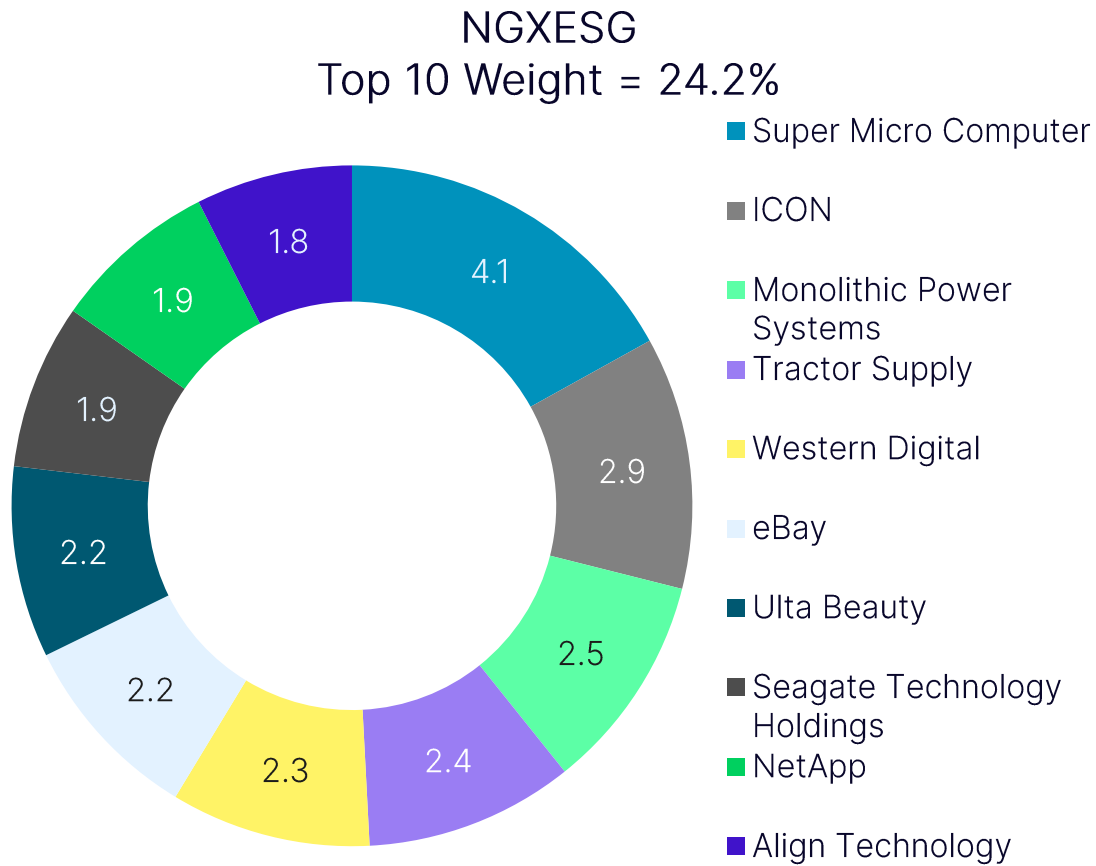


NDX Index Weight by ICB Industry



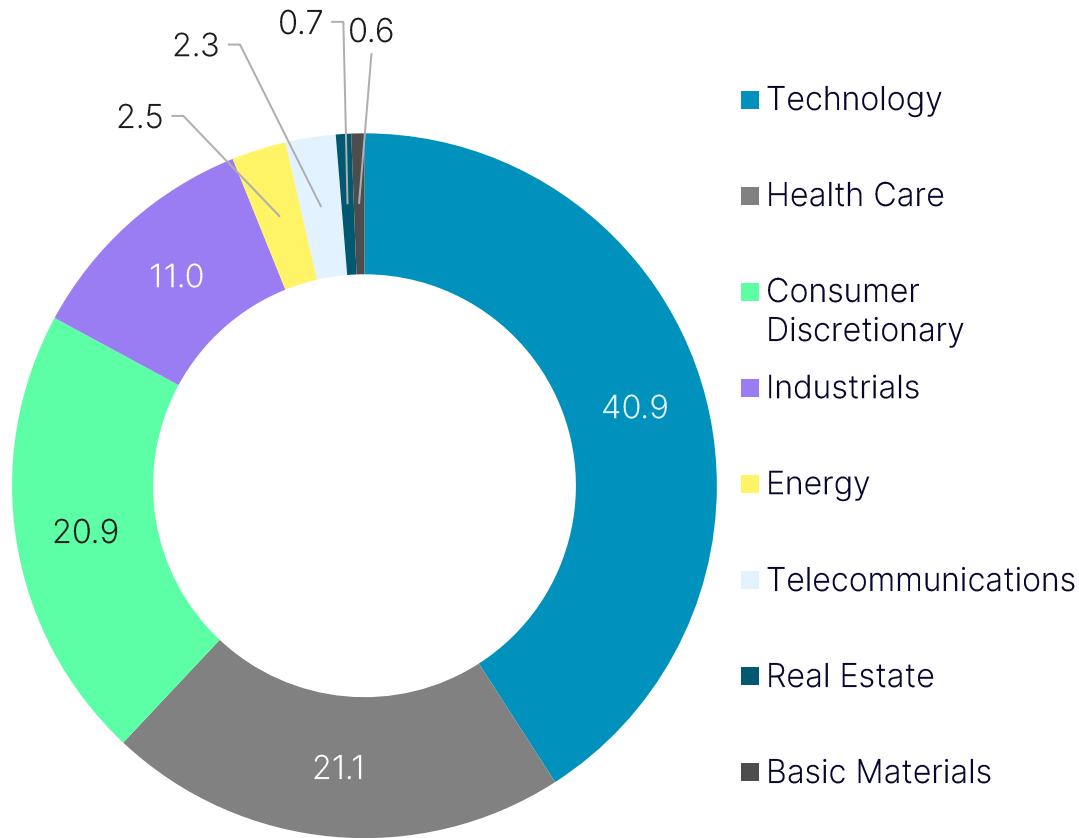
March 2024 Reconstitution

Top 10 Constituents by Index Weight (%)

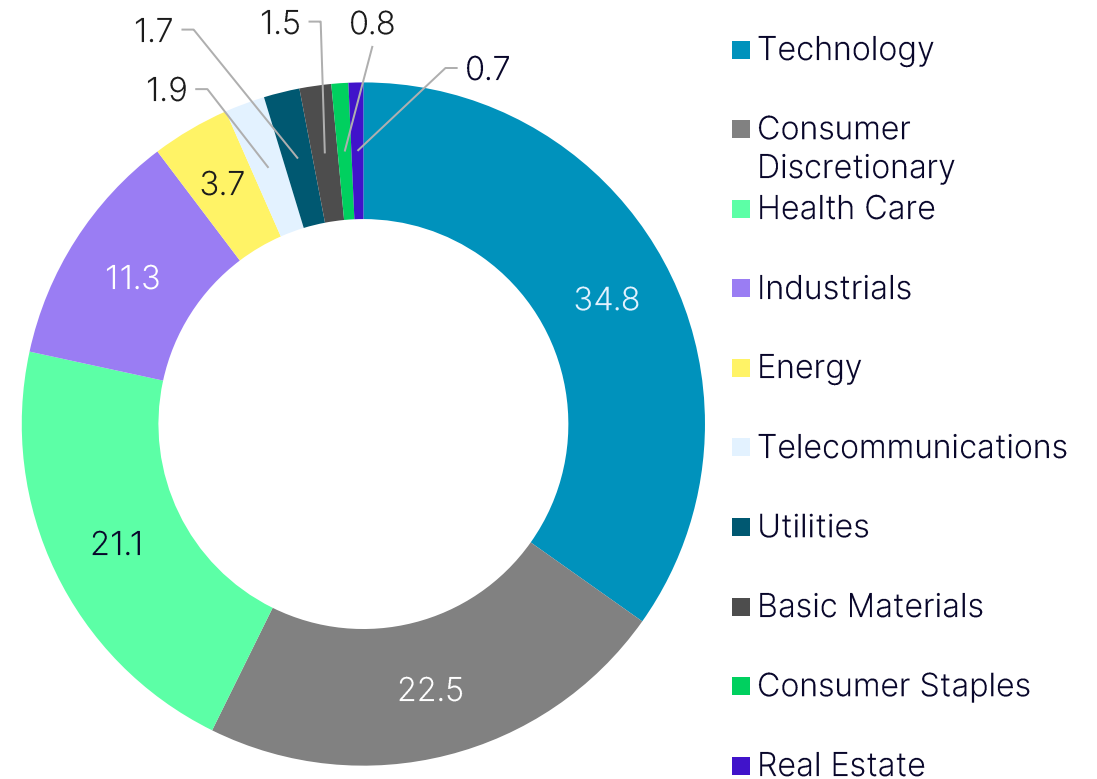


Sector Exposure by Index Weight (%)

NGXESG Index Weight by ICB Industry



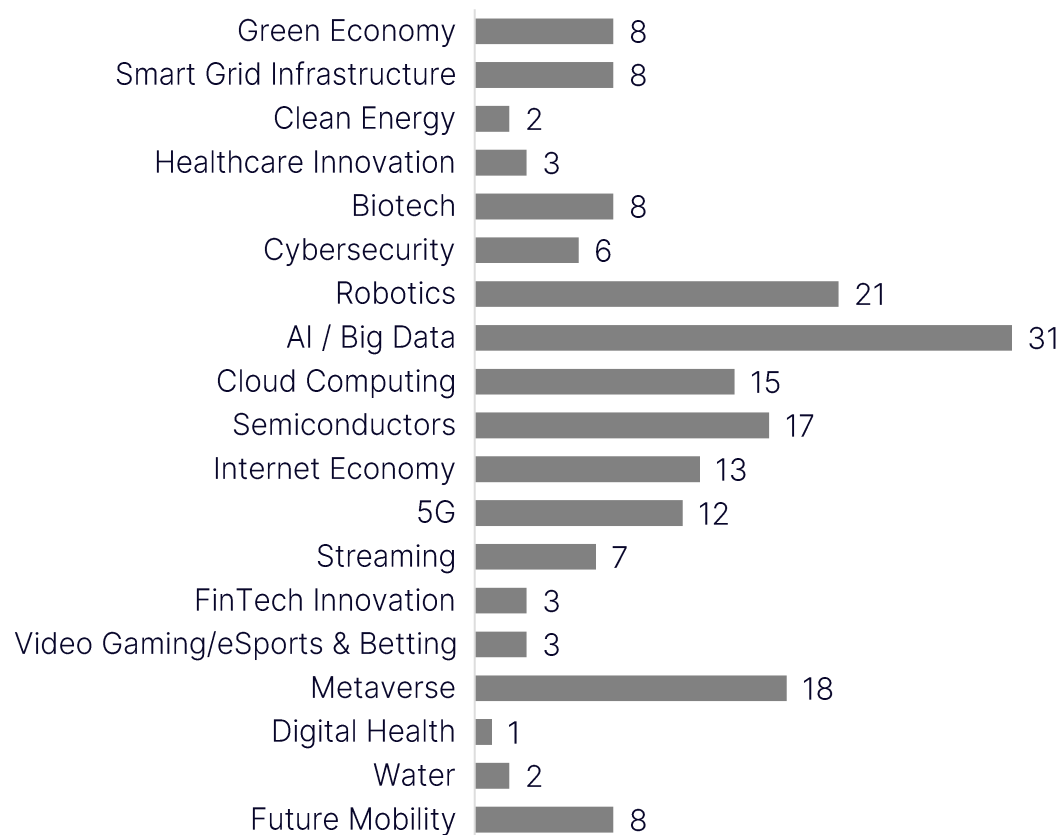
NGX Index Weight by ICB Industry



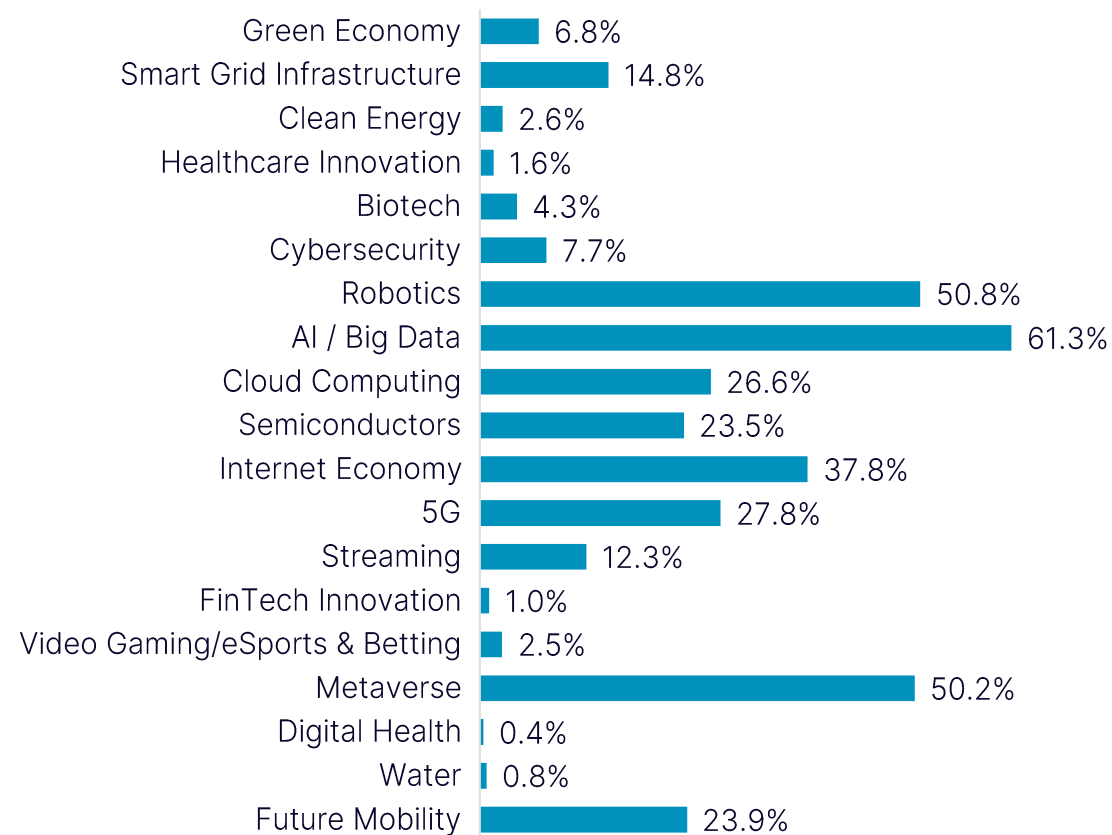
March 2024 Reconstitution

Thematic Exposure: Nasdaq-100®

of Constituents per Theme



Index Weight per Theme

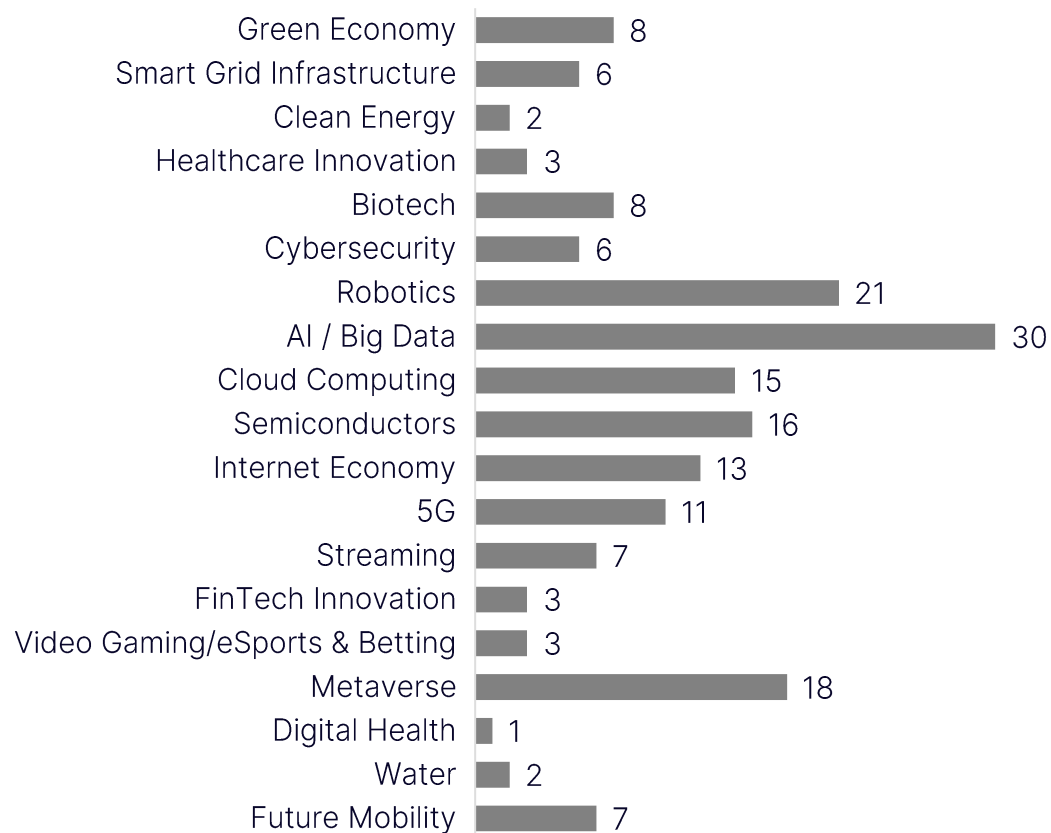


Source: Nasdaq, FactSet. Data as of 3/28/2024.

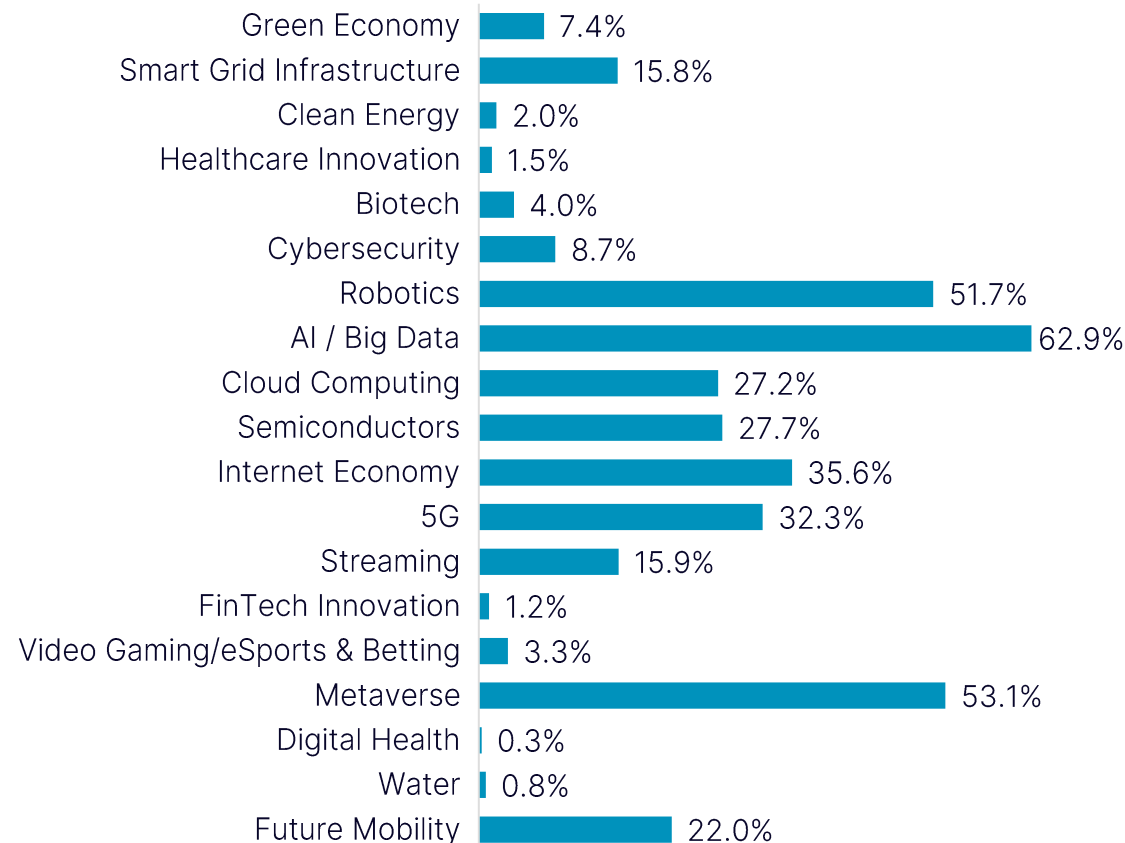
Based on overlap with existing Nasdaq Thematic Indexes, except for 5G, Streaming, and Video Gaming/eSports & Betting where competitor products were analyzed.

Thematic Exposure: Nasdaq-100 ESG™

of Constituents per Theme



Index Weight per Theme

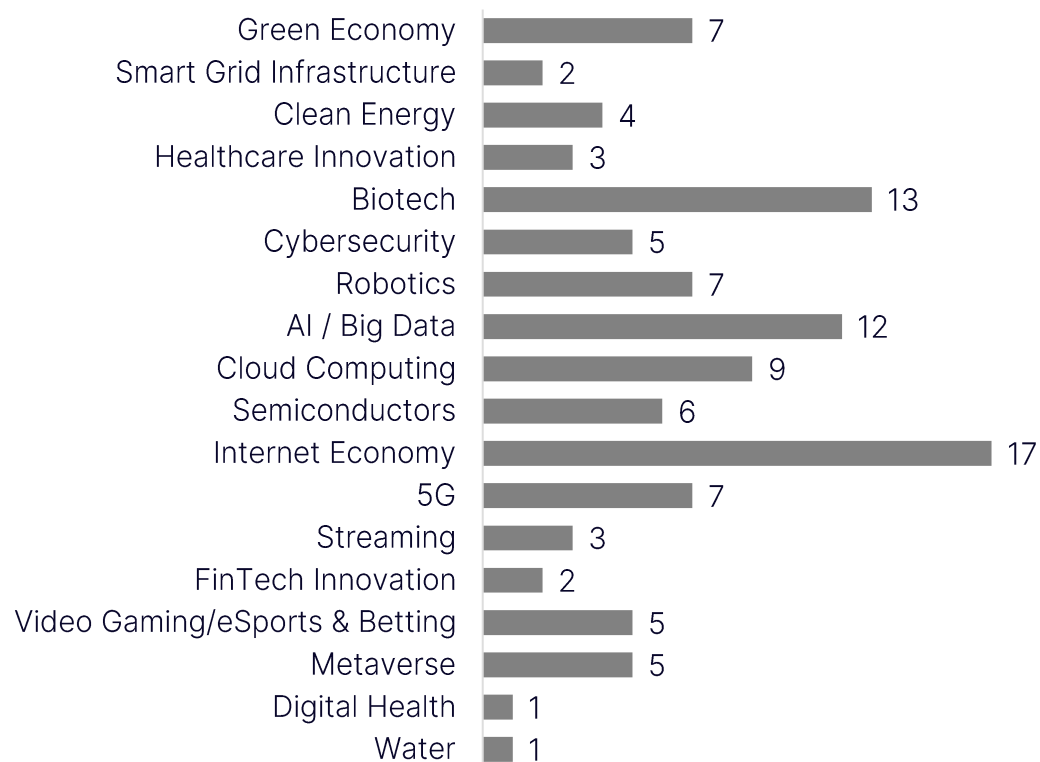


Source: Nasdaq, FactSet. Data as of 3/28/2024.

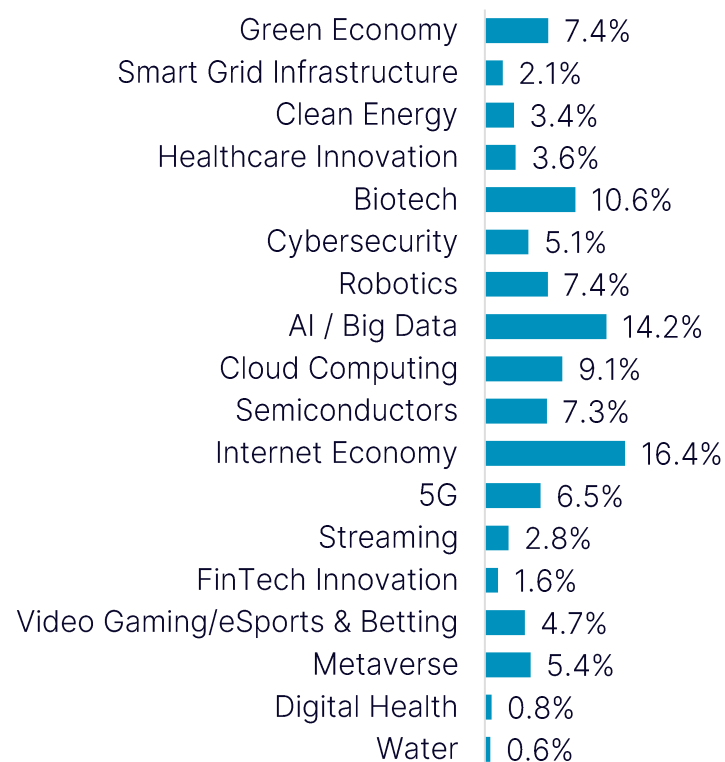
Based on overlap with existing Nasdaq Thematic Indexes, except for 5G, Streaming, and Video Gaming/eSports & Betting where competitor products were analyzed.

Thematic Exposure: Nasdaq Next Generation 100™

of Constituents per Theme



Index Weight per Theme

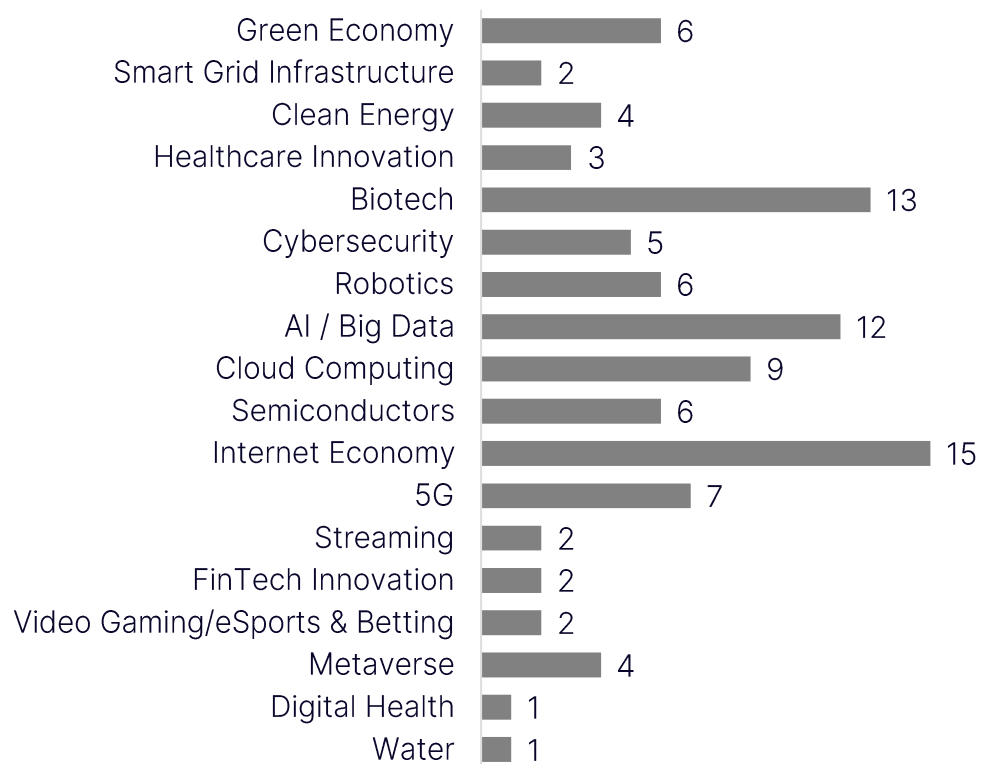


Source: Nasdaq, FactSet. Data as of 3/28/2024.

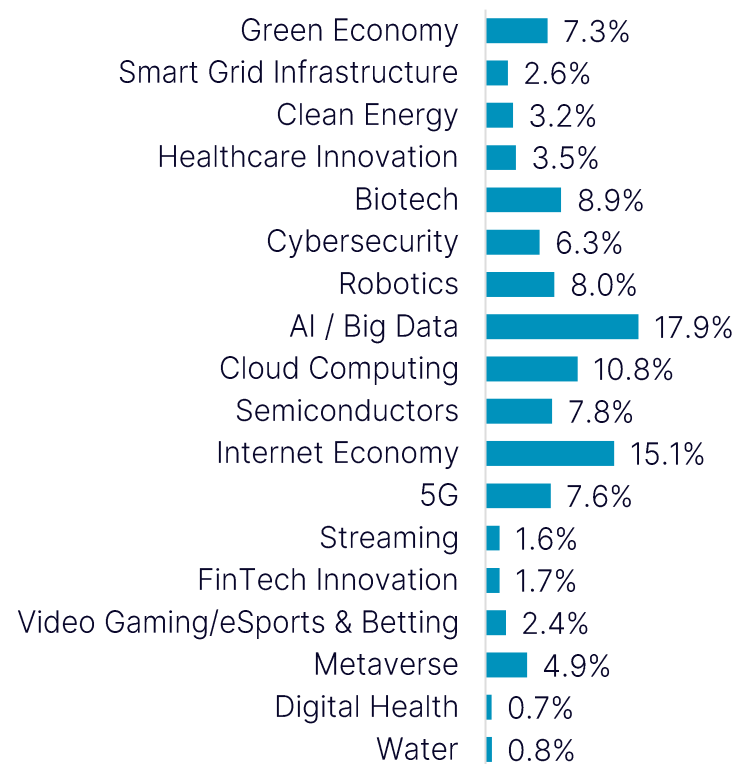
Based on overlap with existing Nasdaq Thematic Indexes, except for 5G, Streaming, and Video Gaming/eSports & Betting where competitor products were analyzed.

Thematic Exposure: Nasdaq Next Generation 100 ESG™

of Constituents per Theme



Index Weight per Theme



Source: Nasdaq, FactSet. Data as of 3/28/2024.

Based on overlap with existing Nasdaq Thematic Indexes, except for 5G, Streaming, and Video Gaming/eSports & Betting where competitor products were analyzed.

March 2024 Reconstitution

Top 10 Largest Overweights: NDXESG vs NDX

Symbol	Company Name	ICB Industry	Nasdaq-100 ESG Weight (%)	Nasdaq-100 Weight (%)	Weight Difference (%)
MSFT	Microsoft	Technology	11.2	8.8	2.5
NVDA	NVIDIA	Technology	8.7	6.3	2.3
AAPL	Apple	Technology	8.7	7.4	1.3
LIN	Linde	Basic Materials	2.4	1.6	0.8
AMD	AMD	Technology	2.7	2.1	0.6
CSCO	Cisco Systems	Telecommunications	2.0	1.5	0.5
ADBE	Adobe	Technology	2.2	1.6	0.5
AMAT	Applied Materials	Technology	1.7	1.2	0.5
NFLX	Netflix	Consumer Discretionary	2.3	1.9	0.4
QCOM	QUALCOMM	Technology	1.7	1.4	0.4

March 2024 Reconstitution

Top 10 Largest Underweights: NDXESG vs NDX

Symbol	Company Name	ICB Industry	Nasdaq-100 ESG Weight (%)	Nasdaq-100 Weight (%)	Weight Difference (%)
META	Meta Platforms	Technology	1.6	4.8	-3.2
AMZN	Amazon.com	Consumer Discretionary	2.5	5.2	-2.7
COST	Costco Wholesale	Consumer Discretionary	1.7	2.4	-0.7
TSLA	Tesla	Consumer Discretionary	1.8	2.4	-0.6
GOOGL	Alphabet A	Technology	2.0	2.5	-0.4
GOOG	Alphabet C	Technology	2.0	2.4	-0.4
TMUS	T-Mobile US	Telecommunications	1.1	1.4	-0.3
MNST	Monster Beverage	Consumer Staples	0.2	0.4	-0.3
PDD	PDD Holdings	Technology	0.3	0.6	-0.2
KHC	Kraft Heinz	Consumer Staples	0.1	0.3	-0.2

March 2024 Reconstitution

Top 10 Largest Overweights: NGXESG vs NGX

Symbol	Company Name	ICB Industry	NGXESG Weight (%)	NGX Weight (%)	Weight Difference (%)
ICLR	ICON	Health Care	2.9	1.8	1.1
WDC	Western Digital	Technology	2.3	1.5	0.8
STX	Seagate Technology Holdings	Technology	1.9	1.3	0.6
ZBRA	Zebra Technologies	Industrials	1.6	1.0	0.6
LOGI	Logitech International	Technology	1.5	0.9	0.6
POOL	Pool	Consumer Discretionary	1.6	1.0	0.5
TSCO	Tractor Supply	Consumer Discretionary	2.4	1.9	0.5
LKQ	LKQ	Consumer Discretionary	1.5	0.9	0.5
FLEX	Flex Ltd	Technology	1.3	0.8	0.5
TRMB	Trimble	Industrials	1.5	1.0	0.5

March 2024 Reconstitution

Top 10 Largest Underweights: NGXESG vs NGX

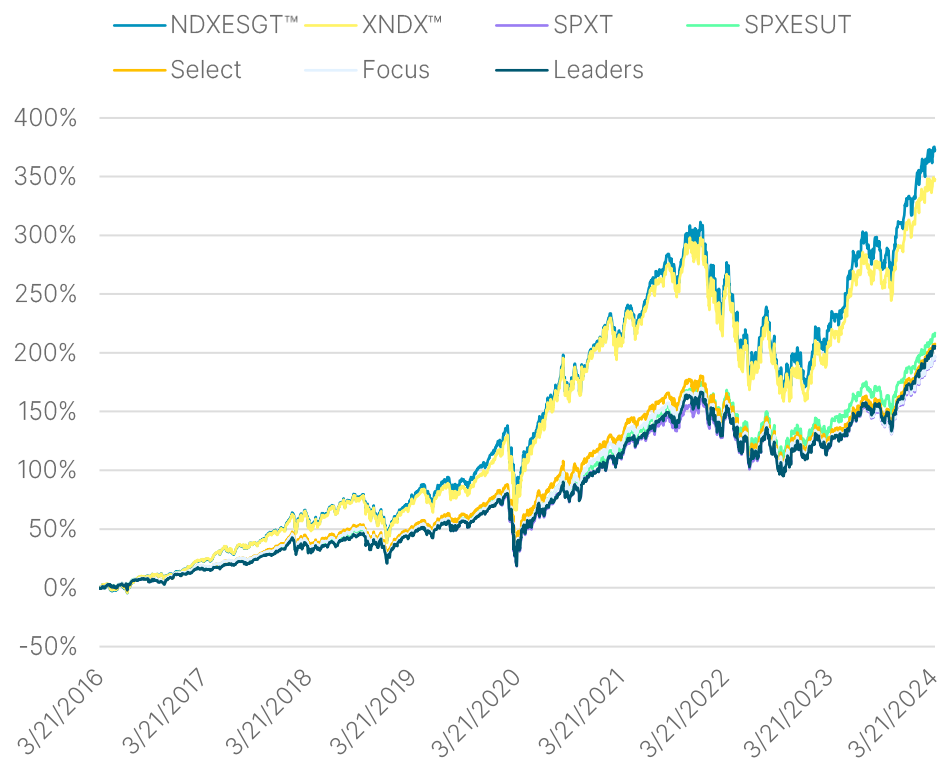
Symbol	Company Name	ICB Industry	NGXESG Weight (%)	NGX Weight (%)	Weight Difference (%)
STLD	Steel Dynamics	Basic Materials	0.6	1.5	-0.9
ALNY	Alnylam Pharmaceuticals	Health Care	0.8	1.2	-0.5
UAL	United Airlines Holdings	Consumer Discretionary	0.6	1.0	-0.4
EXPE	Expedia Group	Consumer Discretionary	0.8	1.2	-0.4
RIVN	Rivian Automotive	Consumer Discretionary	0.3	0.7	-0.4
VTRS	Viatis	Health Care	0.6	0.9	-0.3
RPRX	Royalty Pharma	Health Care	0.6	0.9	-0.3
SWKS	Skyworks Solutions	Technology	0.9	1.1	-0.2
HOLX	Hologic	Health Care	1.0	1.2	-0.2
ARGX	argenx	Health Care	0.6	0.8	-0.2

March 2024 Reconstitution

Performance – NDXESG vs. NDX

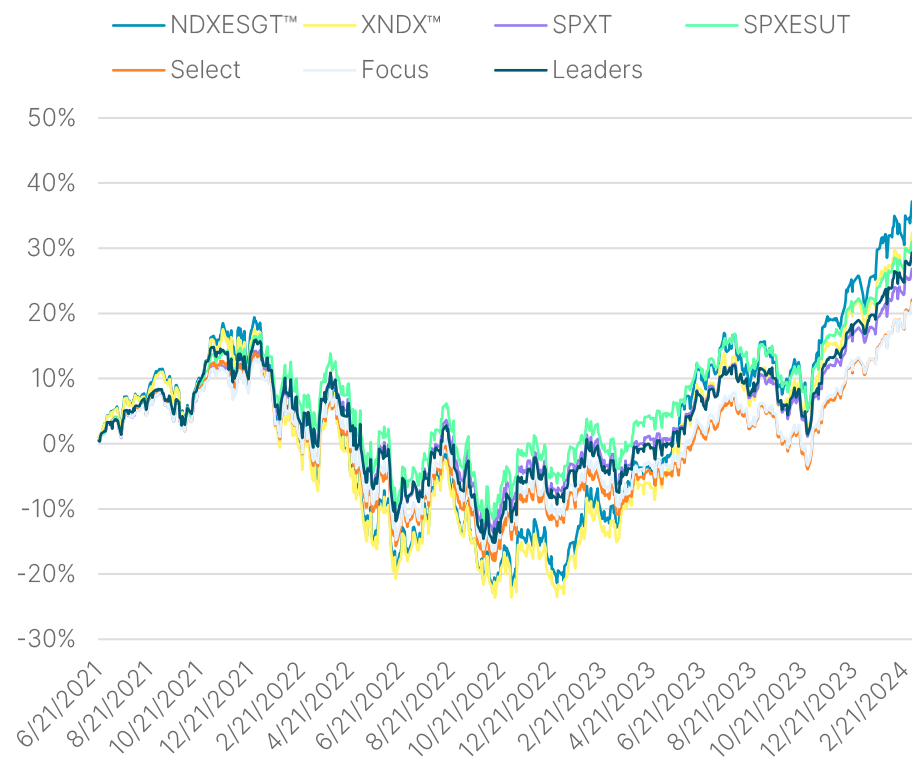
Since Beginning of NDXESG Backtest

3/21/2016 – 3/28/2024



Since NDXESG Inception

6/21/2021 – 3/28/2024

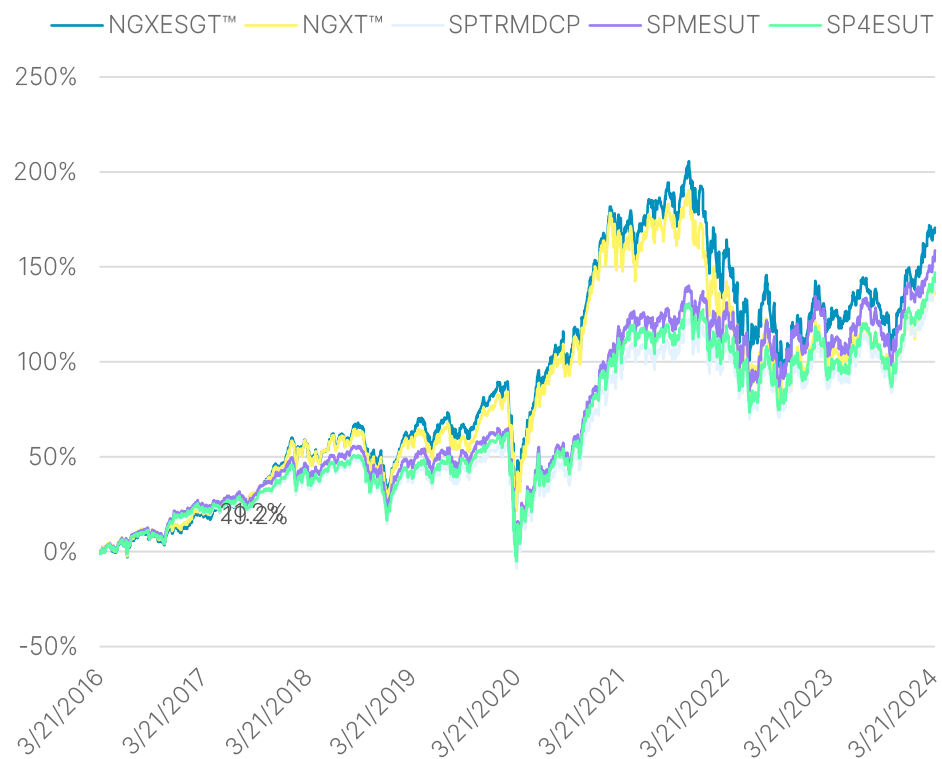


March 2024 Reconstitution

Performance – NGXESG vs. NGX

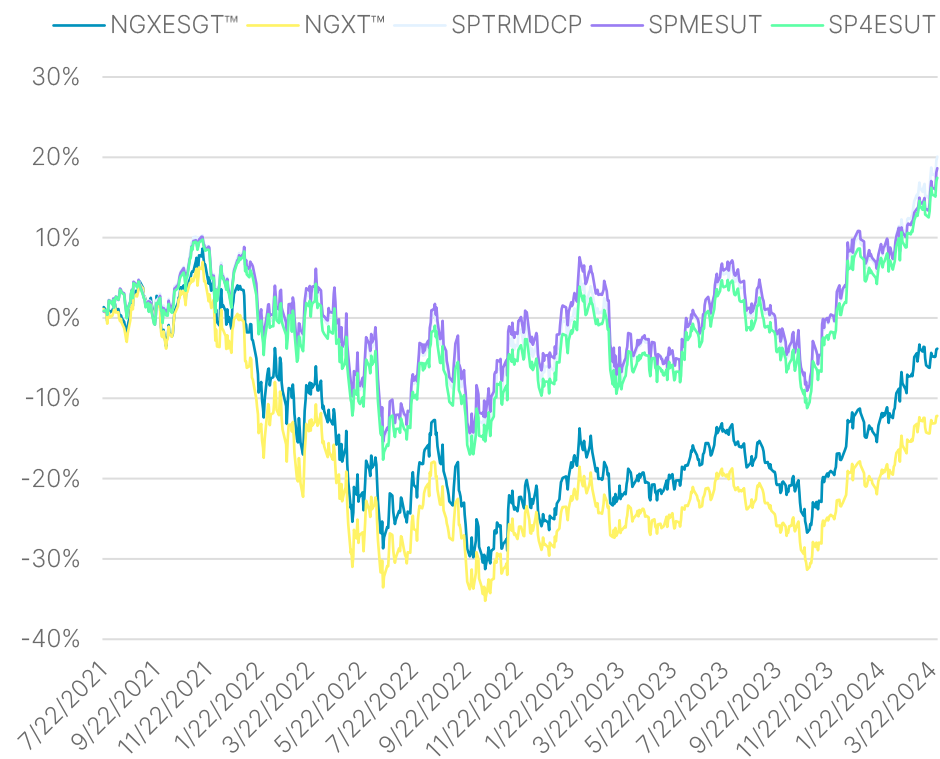
Since Beginning of NGXESG Backtest

3/21/2016 – 3/28/2024



Since NGXESG Inception

7/22/2021 – 3/28/2024



March 2024 Reconstitution

ESG Comparisons – NDXESG/NDX

Index Name	Benchmark	# of Securities	% Exclusion from the Benchmark	Sustainalytics ESG Risk Score	
				Weighted Average	Simple Average
Nasdaq-100 Index®	--	101	n/a	20.0	20.1
Nasdaq-100 ESG™ Index	Nasdaq-100®	94	7%	18.1	19.6
MSCI USA Index	--	609	n/a	21.3	21.5
MSCI USA Extended ESG Focus Index	MSCI USA	284	53%	20.4	20.4
MSCI USA Extended ESG Leaders Index	MSCI USA	281	54%	18.8	19.9
MSCI USA ESG Universal Select Business Screens Index	MSCI USA	564	7%	19.6	21
S&P 500 Index	--	503	n/a	21.3	21.4
S&P 500 ESG Index	S&P 500	315	37%	20.1	20.5

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ESG Comparisons – NGXESG/NGX

Index Name	Benchmark Index	# of Securities	% Exclusion from the Benchmark	Sustainalytics ESG Risk Score	
				Weighted Average	Simple Average
Nasdaq Next Generation 100™ Index	--	104	--	20.0	20.5
Nasdaq Next Generation ESG 100™ Index	Nasdaq Next Generation 100™	91	13%	17.9	19.4
S&P MidCap 400 Index	--	400	--	23.0	23.0
S&P MidCap 400 Sustainability Screened Index	S&P MidCap 400	360	10%	22.1	22.1
S&P MidCap 400 ESG Index	S&P MidCap 400	245	39%	22.1	22.0

RESOURCES



RESOURCES

Nasdaq-100 ESG Index (NDXESG)

- Overview
 - <https://indexes.nasdaqomx.com/Index/Overview/NDXESG>
- Methodology
 - https://indexes.nasdaqomx.com/docs/methodology_NDXESG.pdf
- Research
 - https://indexes.nasdaqomx.com/docs/NDXESG_Research.pdf
- Fact Sheet
 - https://indexes.nasdaqomx.com/docs/FS_NDXESGT.pdf
- Carbon Credit Report
 - NDXESG: <https://indexes.nasdaqomx.com/docs/Carbon%20Footprint%20Report%20-%20NDXESG.pdf>
 - NDX: <https://indexes.nasdaqomx.com/docs/Carbon%20Footprint%20Report%20-%20NDX.pdf>

RESOURCES

Nasdaq Next Generation 100 ESG Index (NGXESG)

- Overview
 - <https://indexes.nasdaqomx.com/Index/Overview/NGXESG>
- Methodology
 - https://indexes.nasdaqomx.com/docs/methodology_NGXESG.pdf
- Research
 - https://indexes.nasdaqomx.com/docs/NGXESG_Research.pdf
- Fact Sheet
 - https://indexes.nasdaqomx.com/docs/FS_NGXESGT.pdf
- Carbon Credit Report
 - NGXESG: <https://indexes.nasdaqomx.com/docs/Carbon%20Footprint%20Report%20-%20NGXESG.pdf>
 - NGX: <https://indexes.nasdaqomx.com/docs/Carbon%20Footprint%20Report%20-%20NGX.pdf>

APPENDIX

APPENDIX

NDXESG / NGXESG Exclusions Based on ESG risk

Companies with a “Severe” ESG Risk Rating are automatically disqualified from inclusion.

- A rating of greater than 40 is considered “Severe”; 30-40 is considered “High”; 20-30 is “Medium”; 10-20 is “Low”; and 0-10 is “Negligible”.

Exclude any company that has not been researched yet.

APPENDIX

NDXESG / NGXESG Exclusions Based on ESG risk – continued

- Exclude any company that has a controversy score equal to 5:
 - The controversy rating reflects:
 - Incidents with negative Environmental, Social, and Governance (ESG) implications.
 - A company's level of involvement in and how it manages these issues.
 - Categorical scores are on a scale of 1 to 5.

APPENDIX

NDXESG / NGXESG Exclusions Based on International Norms

- A company must not violate the *United Nations Global Compact*:
 - 10 principles around human rights, labor, environment, and anti-corruption.
 - <https://www.unglobalcompact.org/what-is-gc/mission/principles>
- Securities are excluded from NDXESG/NGXESG that are classified as non-compliant.
 - Each company in the index is therefore classified as either compliant or on the watch-list with the UN Global Compact framework for following international norms.

APPENDIX

NDXESG / NGXESG Exclusions Based on Business Involvements

Business Involvements Considered*:

1. Energy (Arctic Oil & Gas; Nuclear Power; Oil & Gas; Oil Sands; Shale Energy; Thermal Coal)
2. Health & Life (Alcohol; Recreational Cannabis; Tobacco)
3. Defense & Military (Controversial weapons; Military Contracting; Riot Control; Small Arms)
4. Values-Based (Adult Entertainment; Gambling)

APPENDIX

NDXESG / NGXESG Weighting Scheme

$$ESG \text{ Risk – Adjusted NDX Market Value} = \frac{40 - ESG \text{ Risk Rating Score}}{40} \times NDX \text{ Market Value}$$

- Initial security weights are calculated by dividing a security's ESG Risk-Adjusted NDX Market Value by the sum of the ESG Risk-Adjusted NDX Market Values of all Index Securities.
- Afterwards, the same four-stage weight adjustment process as exists for NDX at its annual reconstitution is applied to produce final weights on a quarterly basis for NDXESG.
- (All the above applies for NGX and NGXESG, as well.)

APPENDIX

NDXESG / NGXESG Weighting Scheme – continued

Security	Parent Index Market Value	ESG Risk Rating Score	(40-ESG Risk Rating Score)/40	ESG Adjusted Market Value	Weight in ESG Index (before capping)	Weight in Parent Index	ESG Excess Weight
Company A	157,440,900.96	9.669091	0.76	119,383,139.64	5%	2%	3%
Company B	408,425,550.79	10.14988	0.75	304,788,747.93	12%	5%	7%
Company C	466,765,510.49	10.33926	0.74	346,115,277.80	14%	6%	8%
Company D	337,399,212.20	10.56613	0.74	248,274,134.49	10%	4%	6%
Company E	36,052,270.56	12.02819	0.70	25,211,182.25	1%	0%	1%
Company F	590,398,129.57	16.18527	0.60	351,504,303.67	14%	7%	7%
Company G	268,545,835.16	19.19268	0.52	139,692,956.82	6%	3%	2%
Company H	311,917,708.29	20.84302	0.48	149,385,045.36	6%	4%	2%
Company I	547,470,308.53	22.79236	0.43	235,516,830.87	10%	7%	3%
Company J	24,733,442.74	24.69826	0.38	9,461,619.64	0%	0%	0%
Company K	435,838,825.61	27.38121	0.32	137,493,977.85	6%	5%	0%
Company L	118,577,295.32	27.73561	0.31	36,356,957.07	1%	1%	0%
Company M	307,719,744.86	28.36004	0.29	89,546,103.32	4%	4%	0%
Company N	441,090,355.41	33.1488	0.17	75,549,938.88	3%	6%	-2%
Company O	834,726,757.15	35.35263	0.12	96,982,201.14	4%	10%	-7%
Company P	550,834,597.82	37.24048	0.07	38,001,025.35	2%	7%	-5%
Company Q	269,359,777.85	37.4192	0.06	17,379,073.33	1%	3%	-3%
Company R	844,981,656.98	38.72938	0.03	26,841,302.95	1%	11%	-10%
Company S	359,845,558.64	39.02818	0.02	8,742,612.50	0%	5%	-4%
Company T	646,652,051.08	39.70698	0.01	4,736,994.67	0%	8%	-8%

For Illustrative Purposes Only.

The information included on this slide is not based on actual data.

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