



Innovation Meets Sustainability

Nasdaq-100 ESG™ Index (NDXESG™)

June 2024 Reconstitution

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NDXESG 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 Sustainalytics ESG Risk Rating 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®) (very low tracking error).



NDXESG Index Mechanics

- At all times, the Nasdaq-100 ESG Index (NDXESG) consists of a selection of securities in the Nasdaq-100 Index®.
- The Nasdaq-100 Index is 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 reconstitution and rebalancing each quarter.
- Securities removed from the Nasdaq-100 Index outside of a reconstitution are removed from the Nasdaq-100 ESG Index and are not replaced.



NDXESG Weighting Scheme

- The Nasdaq-100 ESG Index is a modified market capitalization-weighted index that considers a company's ESG Risk Rating Score as an adjustment factor.
- Two factors play into the index weight of an issuer:
 - The Nasdaq-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 the ESG Risk Rating Score, the higher the weight in the NDXESG Index, and vice versa.



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NDXESG ESG Exclusions: 8

Symbol	Company Name	ICB Industry	Nasdaq-100 ESG: Reason(s) for Exclusion	Nasdaq-100® Weight (%)
HON	Honeywell International	Industrials	Revenue from military contracting weapons. Involvement in Controversial Weapons: Tailor-made and essential.	0.94
ADI	Analog Devices	Technology	Revenue from military contracting weapon-related products and/or services.	0.77
CEG	Constellation Energy	Utilities	Revenue from nuclear production and oil & gas generation.	0.46
AEP	American Electric Power	Utilities	Revenue from thermal coal power generation, nuclear production, and oil & gas generation.	0.31



Data as of 6/24/2024.

Sources: Sustainalytics, Nasdaq Global Indexes

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NDXESG ESG Exclusions: 8

Symbol	Company Name	ICB Industry	Nasdaq-100 ESG: Reason(s) for Exclusion	Nasdaq-100® Weight (%)
FANG	Diamondback Energy	Energy	Revenue from oil & gas production. Involvement in shale energy extraction and/or production.	0.23
BKR	Baker Hughes	Energy	Revenue from oil & gas supporting products/services.	0.22
XEL	Xcel Energy	Utilities	Revenue from thermal coal power generation, nuclear production, oil & gas production, and oil & gas generation.	0.20
ARM	Arm Holdings	Technology	ESG Risk Rating Score Unavailable	0.13

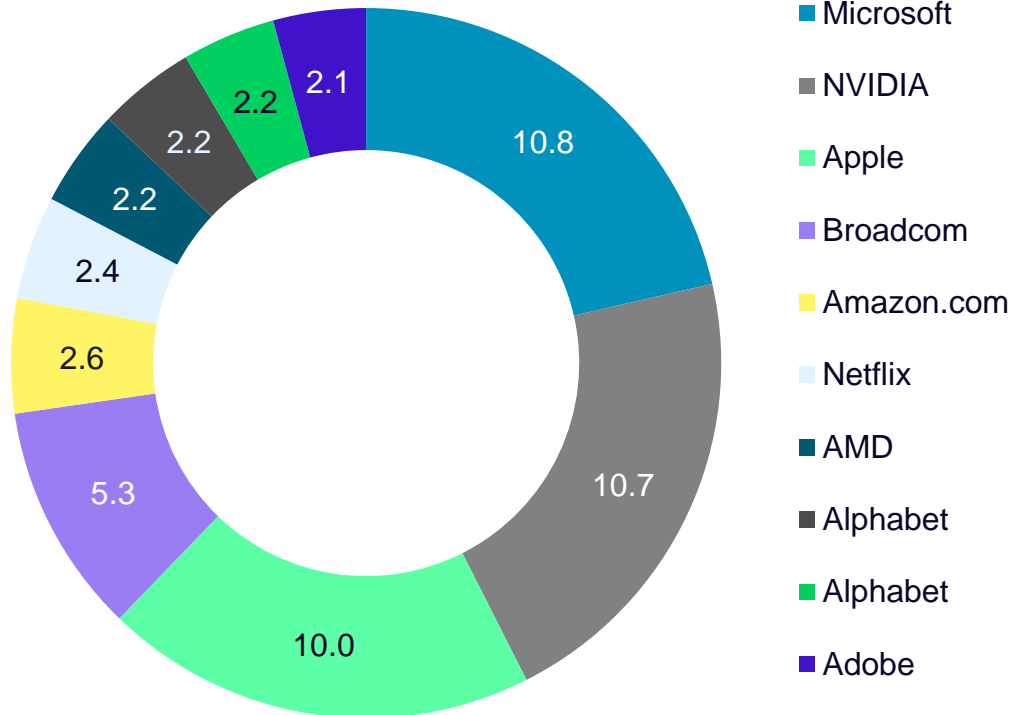


Data as of 6/24/2024.

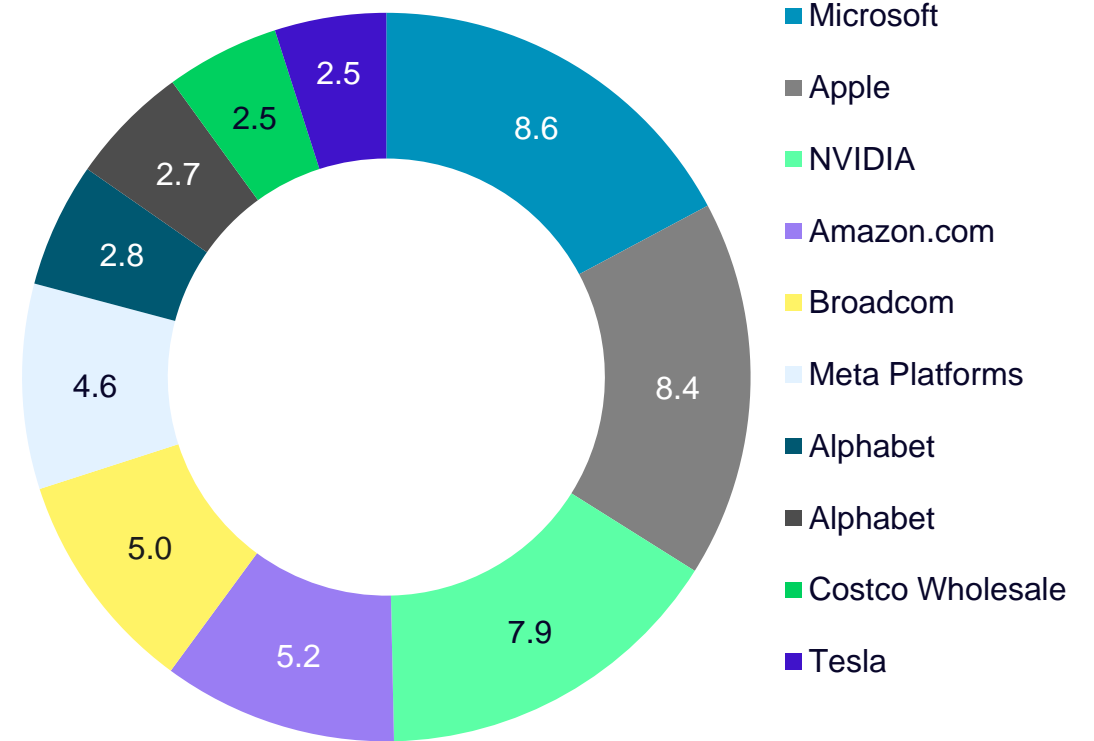
Sources: Sustainalytics, Nasdaq Global Indexes.

Top 10 Constituents by Index Weight (%)

NDXESG
Top 10 Weight = 50.6%



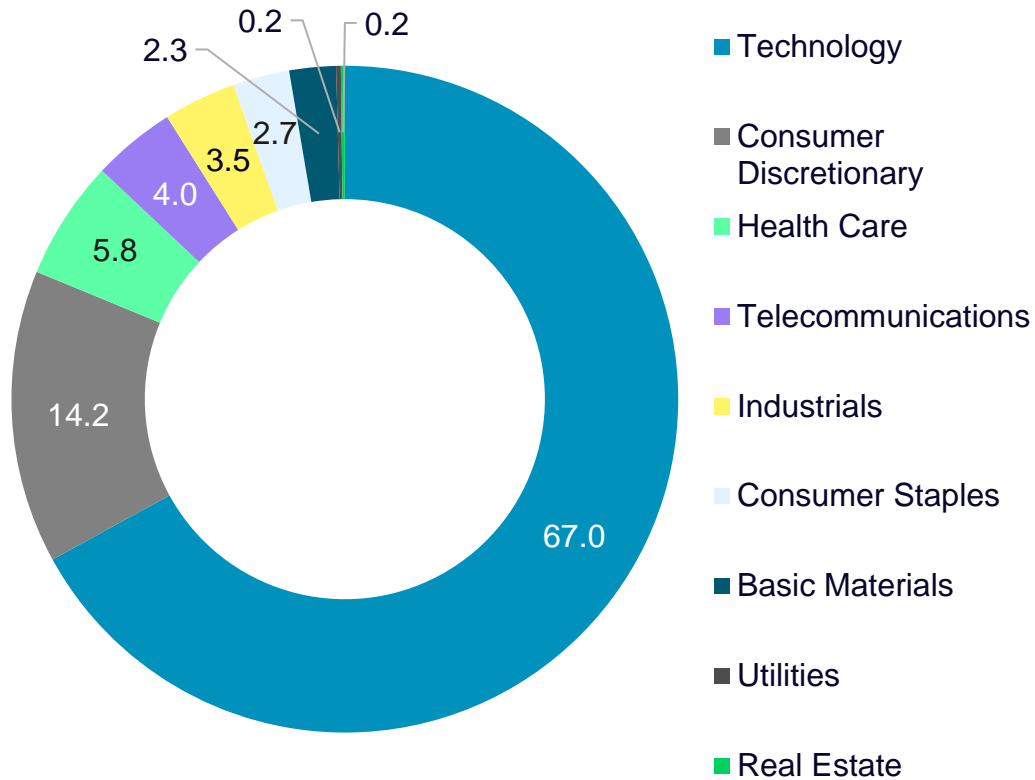
NDX
Top 10 Weight = 50.2%



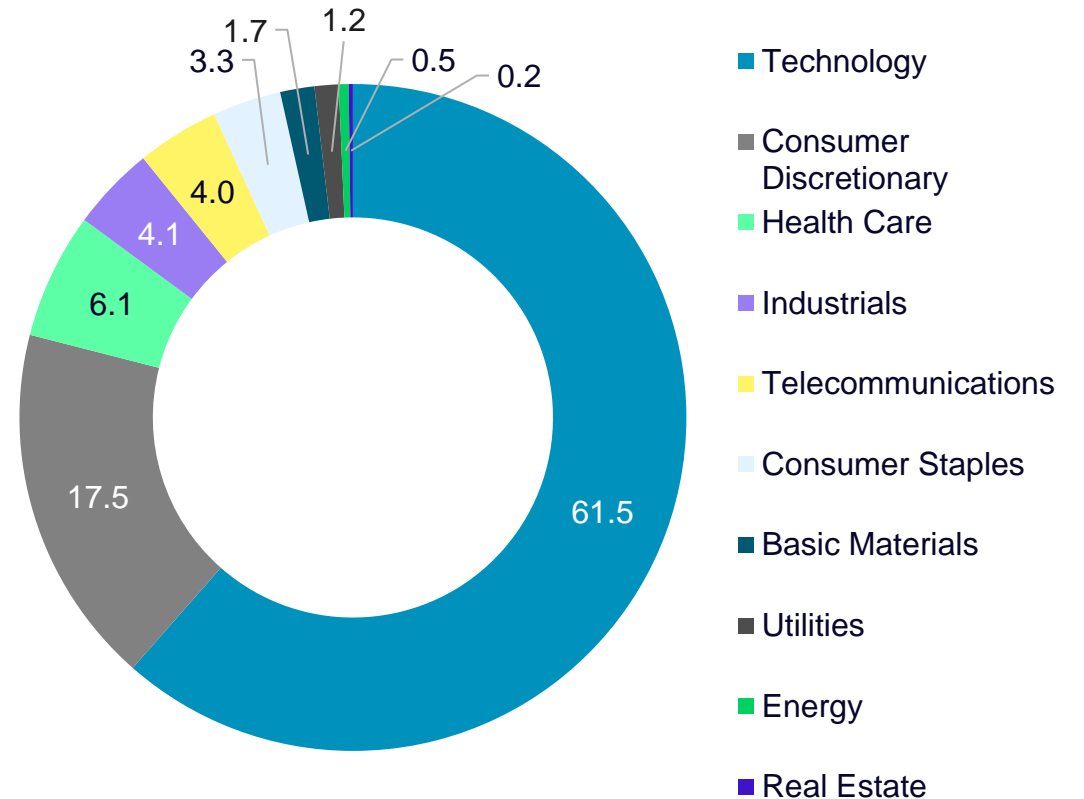
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Sector Exposure by Index Weight (%)

NDXESG Index Weight by ICB Industry

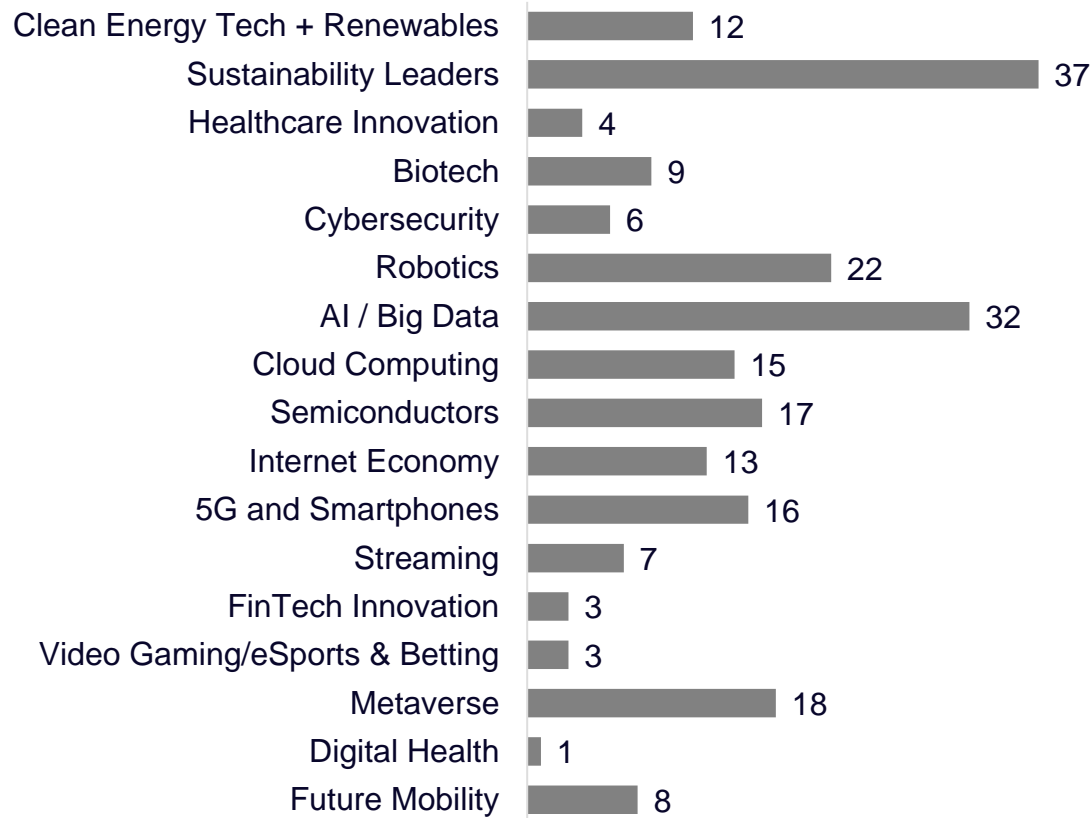


NDX Index Weight by ICB Industry

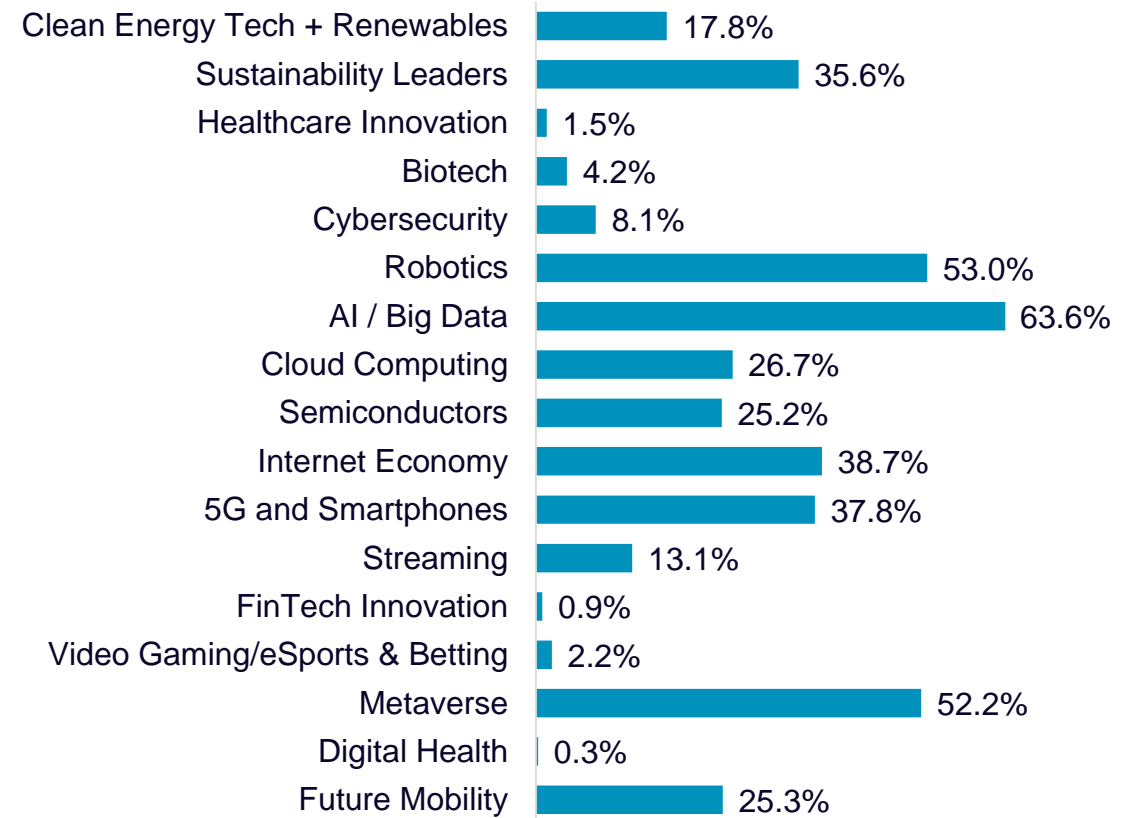


Thematic Exposure: Nasdaq-100

of Constituents per Theme



Index Weight per Theme

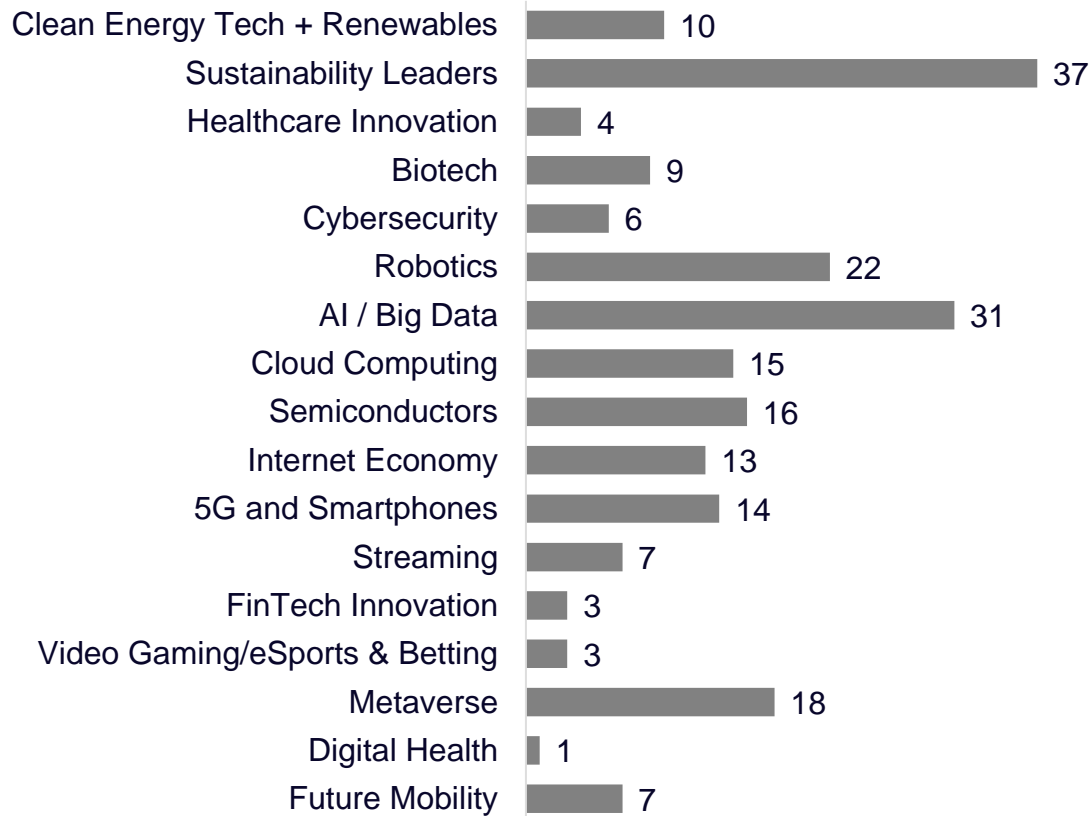


Source: Nasdaq, FactSet. Data as of 6/28/2024.

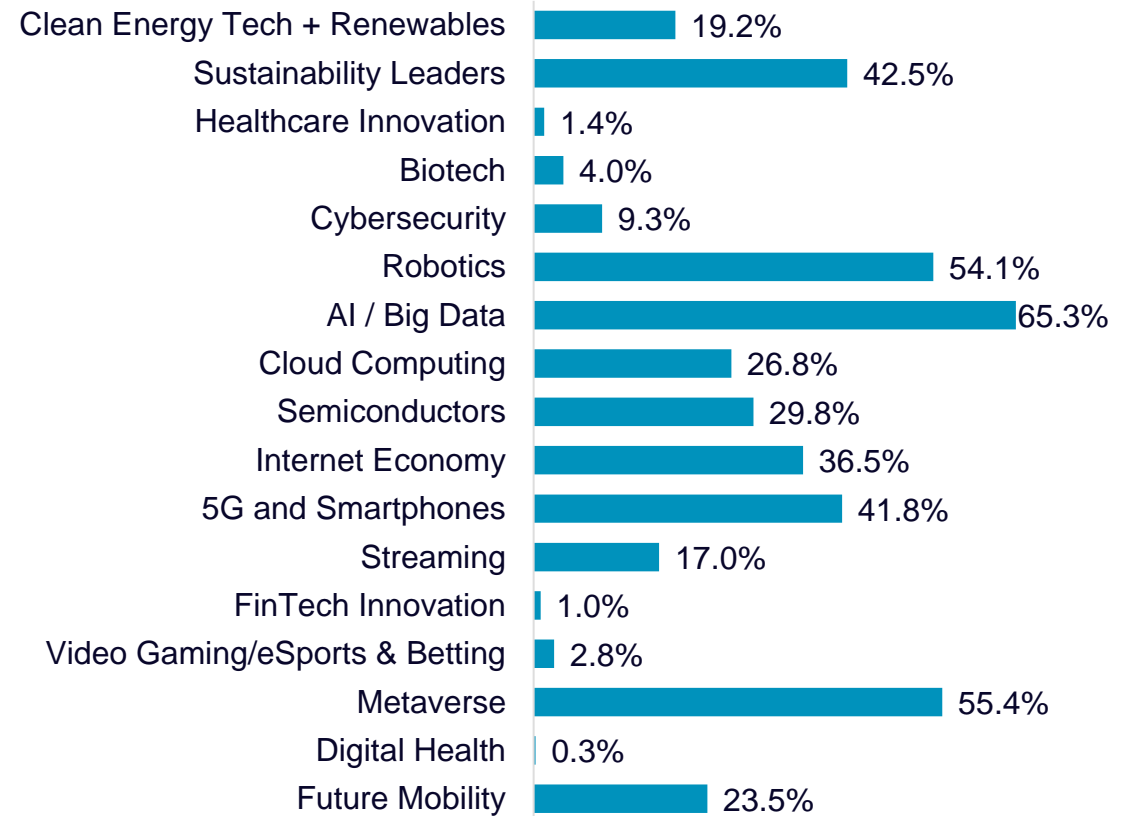
Based on overlap with existing Nasdaq Thematic Indexes, except for 5G and Smartphones, Streaming, and Video Gaming/eSports & Betting where competitor products were analyzed.

Thematic Exposure: Nasdaq-100 ESG

of Constituents per Theme



Index Weight per Theme



Source: Nasdaq, FactSet. Data as of 6/28/2024.

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

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Top 10 Largest Overweights: NDXESG vs. NDX

Symbol	Company Name	ICB Industry	Nasdaq-100 ESG Weight (%)	Nasdaq-100 Weight (%)	Weight Difference (%)
NVDA	NVIDIA	Technology	10.7	7.9	2.8
MSFT	Microsoft	Technology	10.8	8.6	2.2
AAPL	Apple	Technology	10.0	8.4	1.6
LIN	Linde	Basic Materials	2.1	1.4	0.7
AMAT	Applied Materials	Technology	1.8	1.3	0.5
CSCO	Cisco Systems	Telecommunications	1.8	1.3	0.5
AMD	AMD	Technology	2.2	1.8	0.5
ADBE	Adobe	Technology	2.1	1.7	0.5
NFLX	Netflix	Consumer Discretionary	2.4	2.0	0.4
QCOM	QUALCOMM	Technology	1.9	1.5	0.4



June 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	1.4	4.6	-3.2
AMZN	Amazon.com	Consumer Discretionary	2.6	5.2	-2.6
COST	Costco Wholesale	Consumer Discretionary	1.7	2.5	-0.8
TSLA	Tesla	Consumer Discretionary	1.9	2.5	-0.6
GOOGL	Alphabet	Technology	2.2	2.8	-0.5
GOOG	Alphabet	Technology	2.2	2.7	-0.5
TMUS	T-Mobile US	Telecommunications	1.1	1.4	-0.3
PDD	PDD Holdings	Technology	0.3	0.6	-0.3
MNST	Monster Beverage	Consumer Staples	0.1	0.3	-0.2
AMGN	Amgen	Health Care	0.9	1.1	-0.2

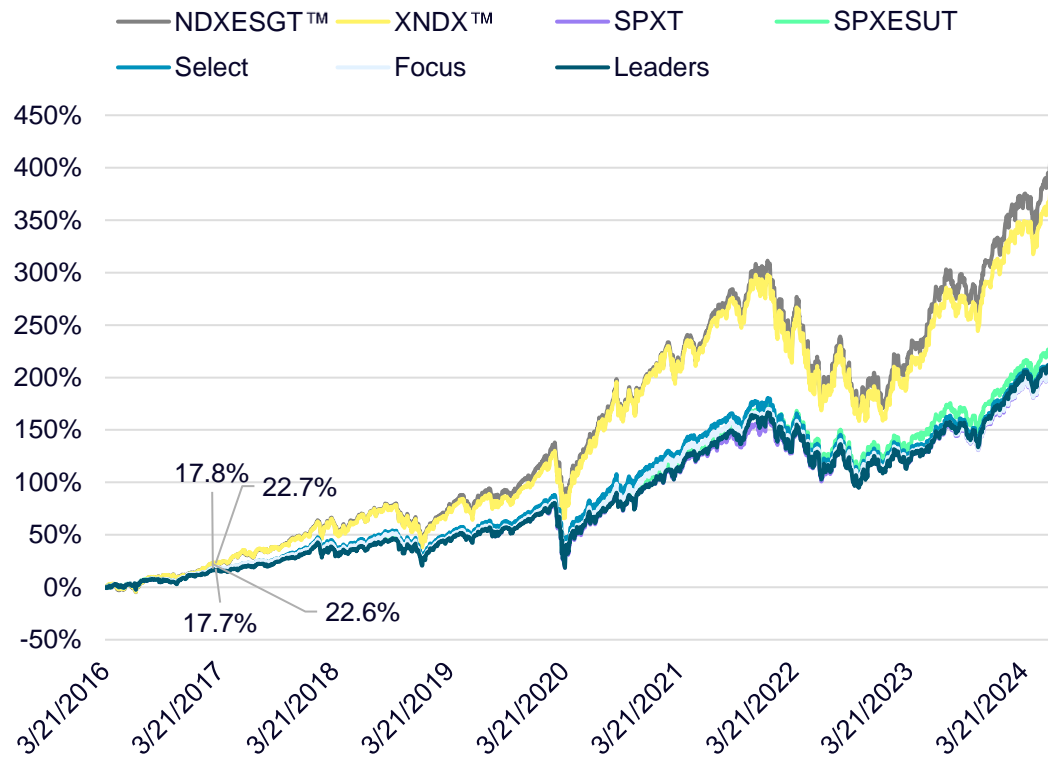


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Performance – NDXESG vs. NDX

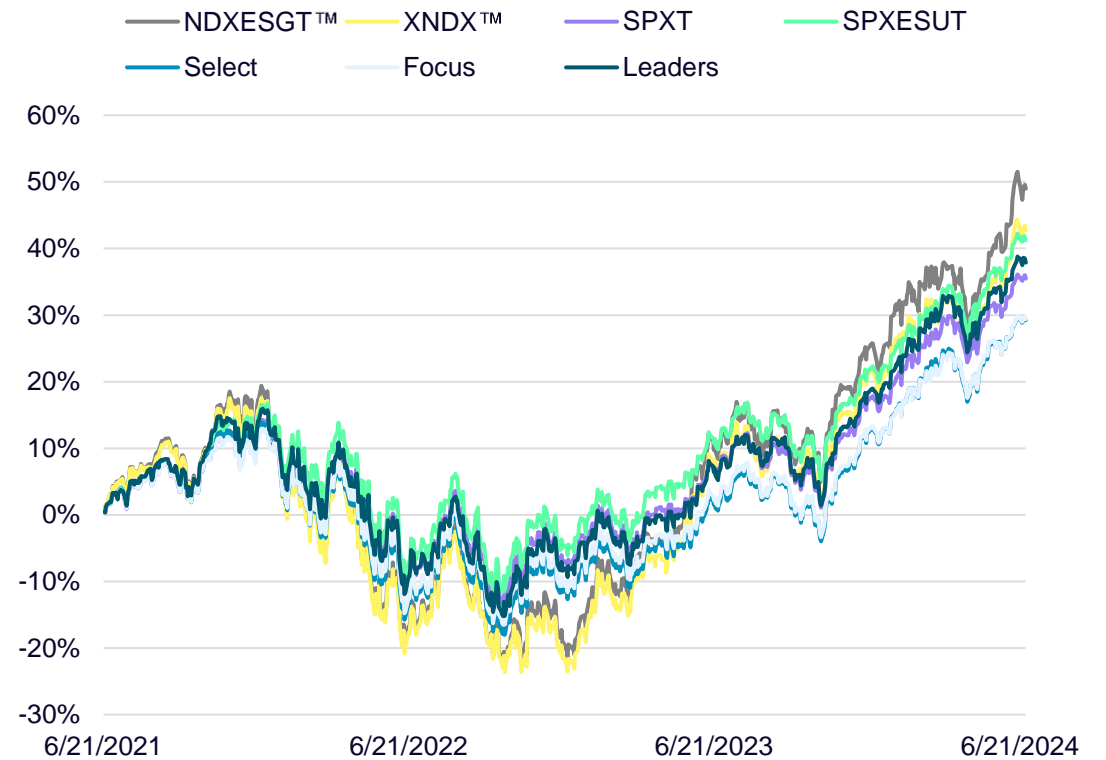
Since Beginning of NDXESG Backtest

3/21/2016 – 6/28/2024



Since NDXESG Inception

6/21/2021 – 6/28/2024



Total Return Data* as of 6/28/2024.
Source: Nasdaq Global Indexes, FactSet, Bloomberg.

*XNDX: Nasdaq-100® Total Return™; NDXESGT: Nasdaq-100 ESG Total Return™; SPXESUT: S&P 500 ESG Index TR; SPXT: S&P 500 TR; Select: MSCI USA ESG Universal Sel Business Screens TR; ; Focus: MSCI USA Extended ESG Focus TR; Leaders: MSCI USA Extended ESG Leaders TR

June 2024 Reconstitution

ESG Comparisons – NDXESG vs. NDX

Index Name	Benchmark	# of Securities	% Exclusion from the Benchmark	Sustainalytics ESG Risk Rating Score	
				Weighted Average	Simple Average
Nasdaq-100 Index®	--	102	n/a	19.3	19.2
Nasdaq-100 ESG™ Index	Nasdaq-100®	94	8%	17.4	18.8
MSCI USA Index	--	600	n/a	20.5	20.7
MSCI USA Extended ESG Focus Index	MSCI USA	278	54%	19.6	19.5
MSCI USA Extended ESG Leaders Index	MSCI USA	299	50%	18.0	19.0
MSCI USA ESG Universal Select Business Screens Index	MSCI USA	560	7%	19.1	20.2
S&P 500 Index	--	503	n/a	20.5	20.5
S&P 500 ESG Index	S&P 500	320	36%	19.1	19.6



Data as of 6/28/2024.

Source: Nasdaq Global Indexes, Sustainalytics, FactSet, Bloomberg.

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>



APPENDIX

APPENDIX

NDXESG Exclusions Based on ESG Risk

Companies with “Severe” ESG Risk Rating Scores 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 Exclusions Based on ESG Risk – continued

- Exclude any company that has a Controversy Rating 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 Exclusions Based on International Norms

- A company must not violate the United Nations Global Compact and related international norms and standards, such as the Organization for Economic Cooperation and Development (OECD) Guidelines and United Nations (UN) Guiding Principles.
 - 10 principles around human rights, labor, environment, and anti-corruption.
 - <https://www.unglobalcompact.org/what-is-gc/mission/principles>
- Securities are excluded from NDXESG that are classified as non-compliant.
 - Each company in the index is therefore classified as compliant or on the watch list with the UN Global Compact framework for following international norms.



APPENDIX

NDXESG 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 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.



APPENDIX

NDXESG 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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