



Innovation Meets Sustainability

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

June 2023

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.

Exclusions June 2023: NDXESG™ – 9

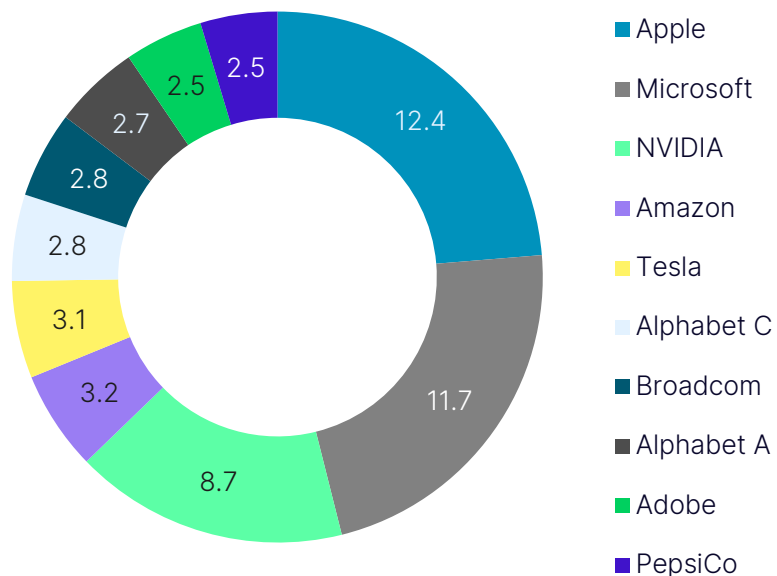
Symbol	Nasdaq-100 ESG Reason for Exclusion	Nasdaq-100® Weight (%)	Company Name	ICB Industry
HON	Revenue from military contracting weapons. Involvement in Controversial Weapons: Tailor-made and essential.	0.9	Honeywell International	Industrials
ADI	Revenue from military contracting weapon-related products and/or services.	0.6	Analog Devices	Technology
AEP	Revenue from thermal coal power generation, nuclear production, and oil & gas generation.	0.3	American Electric Power Company	Utilities
GEHC	ESG Risk Rating Score has not yet been determined.	0.2	GE HealthCare Technologies Inc	Health Care
XEL	Revenue from thermal coal power generation, nuclear production, oil & gas production, and oil & gas generation.	0.2	Xcel Energy	Utilities
BKR	Revenue from oil & gas supporting products/services.	0.2	Baker Hughes Co.	Energy
CEG	Revenue from nuclear production and oil & gas generation.	0.2	Constellation Energy Corp	Utilities
WBD	ESG Risk Rating Score has not yet been determined.	0.2	Warner Bros Discovery Inc.	Consumer Discretionary
FANG	Revenue from oil & gas production. Involvement in shale energy extraction and/or production.	0.2	Diamondback Energy Co.	Energy

Exclusions June 2023: NGXESG™ – 8

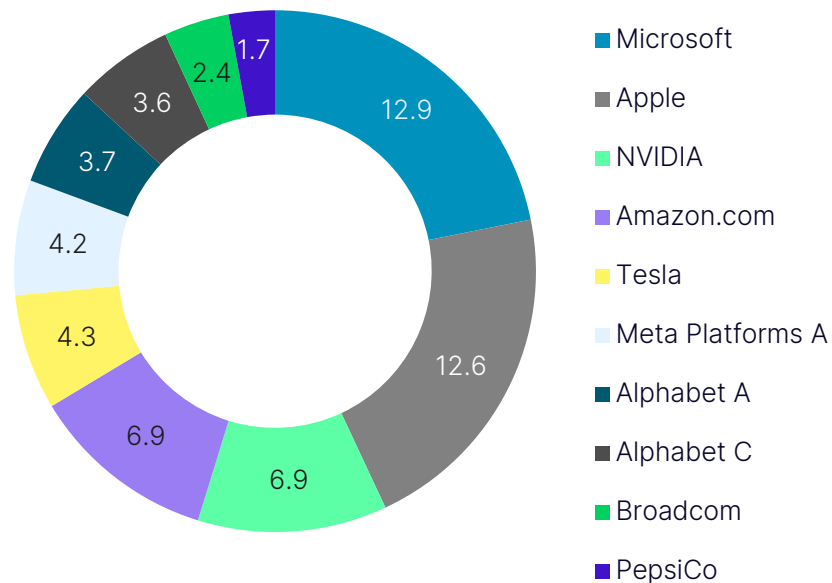
Symbol	Nasdaq Next Generation 100 ESG Reason for Exclusion	NGX® Weight (%)	Company Name	ICB Industry
BIDU	Global compact non-compliance.	1.3	Baidu Inc.	Technology
AXON	ESG Risk Rating Score is greater than 40. Manufacture riot control protection equipment and riot control weapons.	1.0	Axon Enterprise Inc.	Industrials
LNT	Revenue from oil & gas generation and thermal coal power generation.	0.9	Alliant Energy Corp.	Utilities
CHK	ESG Risk Rating Score is greater than 40. Revenue from oil & gas production. Involvement in shale energy extraction and/or production.	0.8	Chesapeake Energy	Energy
CZR	Revenue from gambling operations.	0.8	Caesars Entertainment Inc.	Consumer Discretionary
APA	ESG Risk Rating Score is greater than 40. Revenue from oil & gas production. Involvement in shale energy extraction and/or production.	0.8	APA Corp.	Energy
CASY	Revenue from tobacco products – retail.	0.7	Casey's General Stores Inc.	Consumer Staples
NFE	ESG Risk Rating Score is greater than 40. Revenue from oil & gas production.	0.4	New Fortress Energy Inc.	Energy

Top 10 Constituents: NDXESG vs NDX

NDXESG: Top 10 Weight = 52.3%

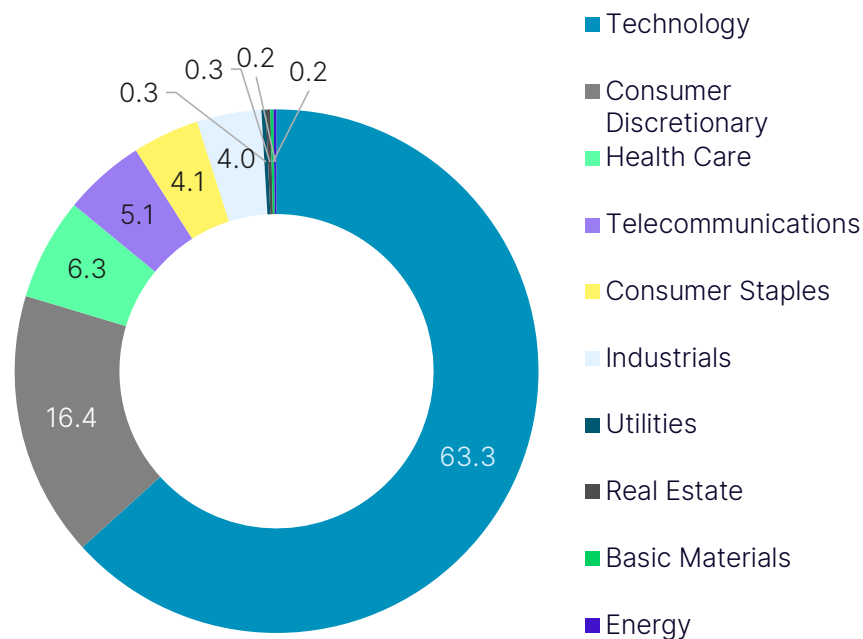


NDX: Top 10 Weight = 59.2%

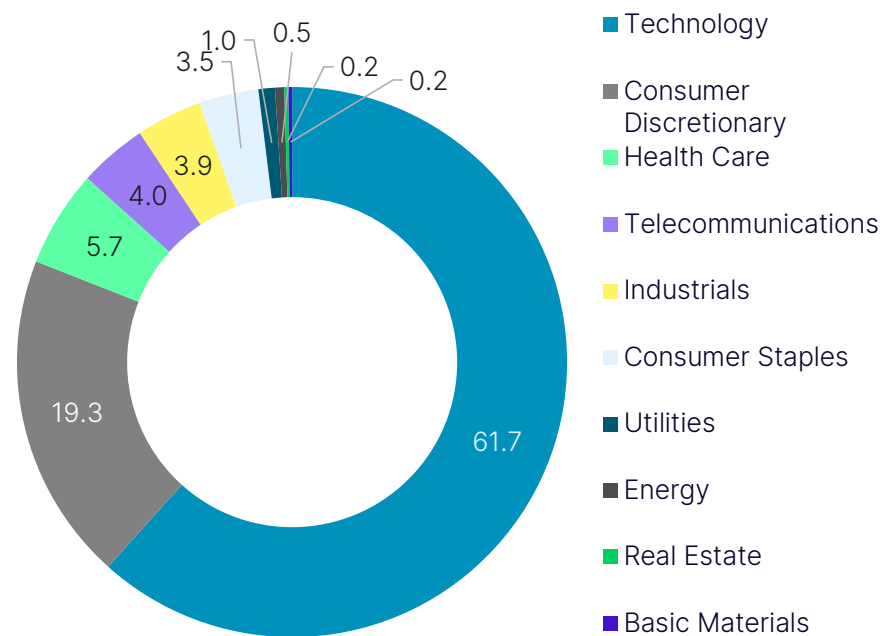


Sector Exposures: NDXESG vs NDX

NDXESG Index Weight (%) by ICB Industry

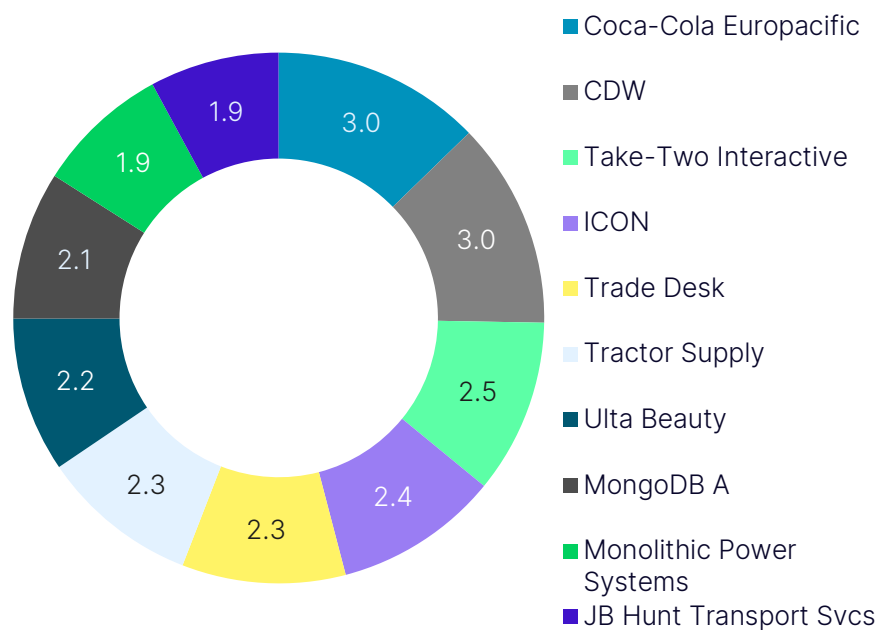


NDX Index Weight (%) by ICB Industry

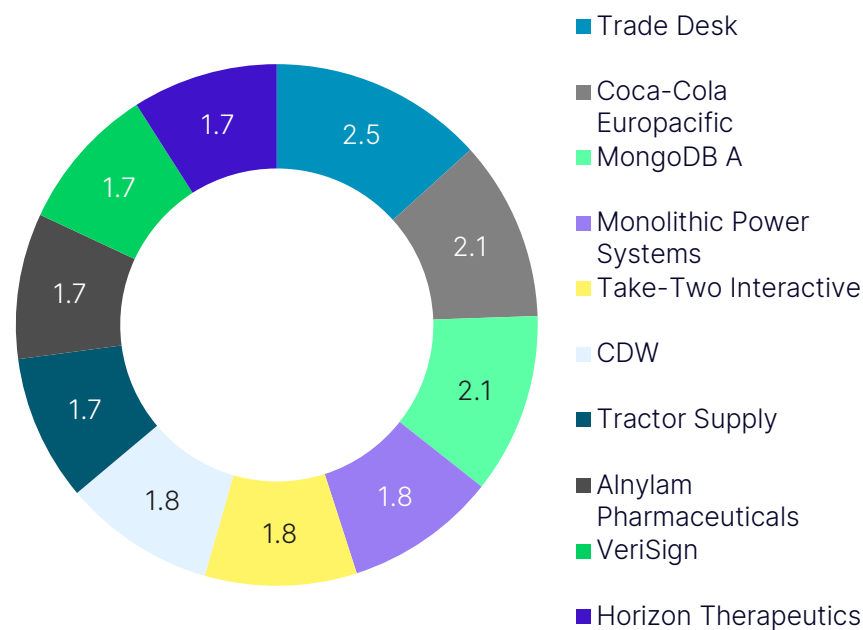


Top 10 Constituents: NGXESG vs NGX

NGXESG: Top 10 Weight = 23.5%

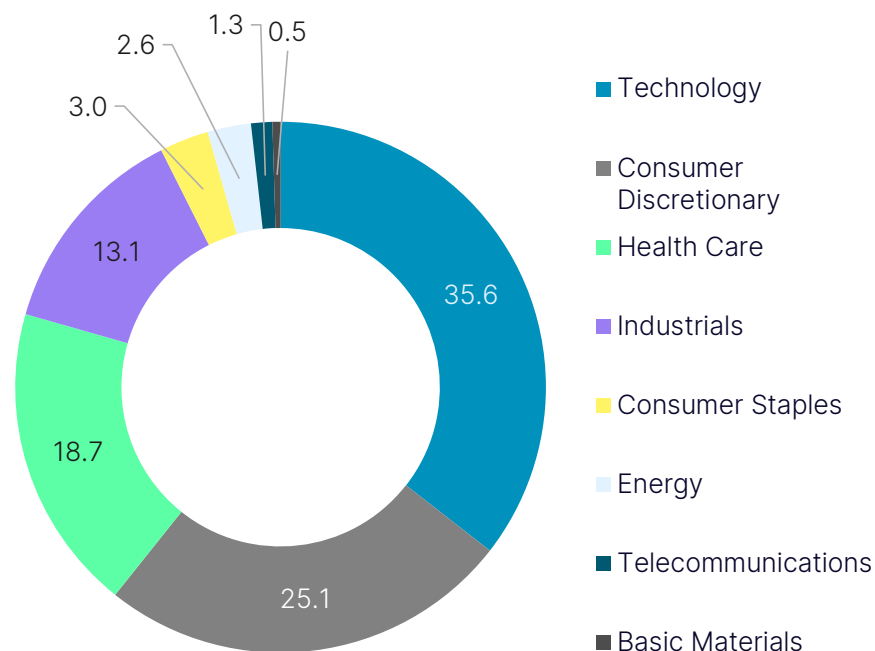


NGX: Top 10 Weight= 18.8%

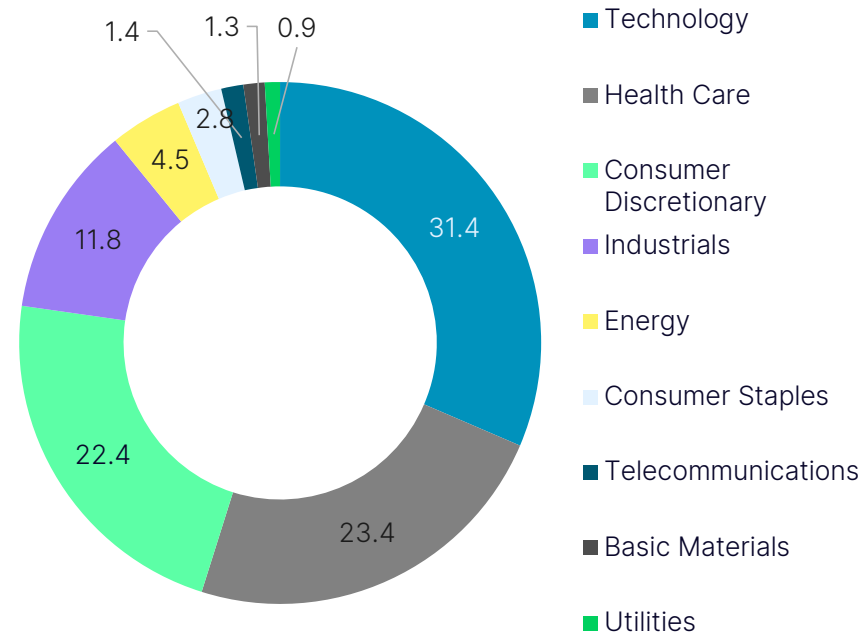


Sector Exposures: NGXESG vs NGX

NGXESG Index Weight by ICB Industry

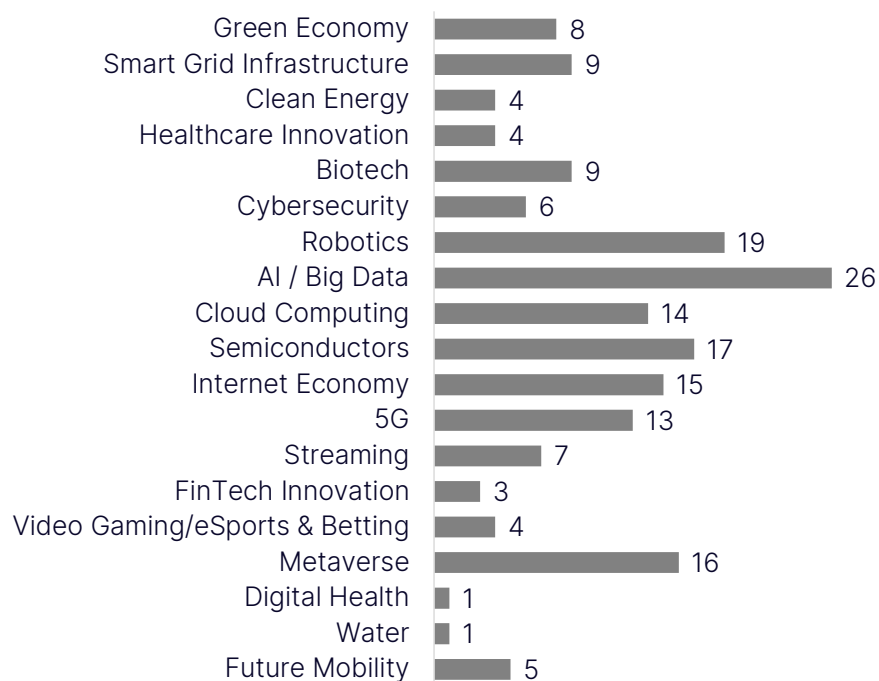


NGX Index Weight by ICB Industry

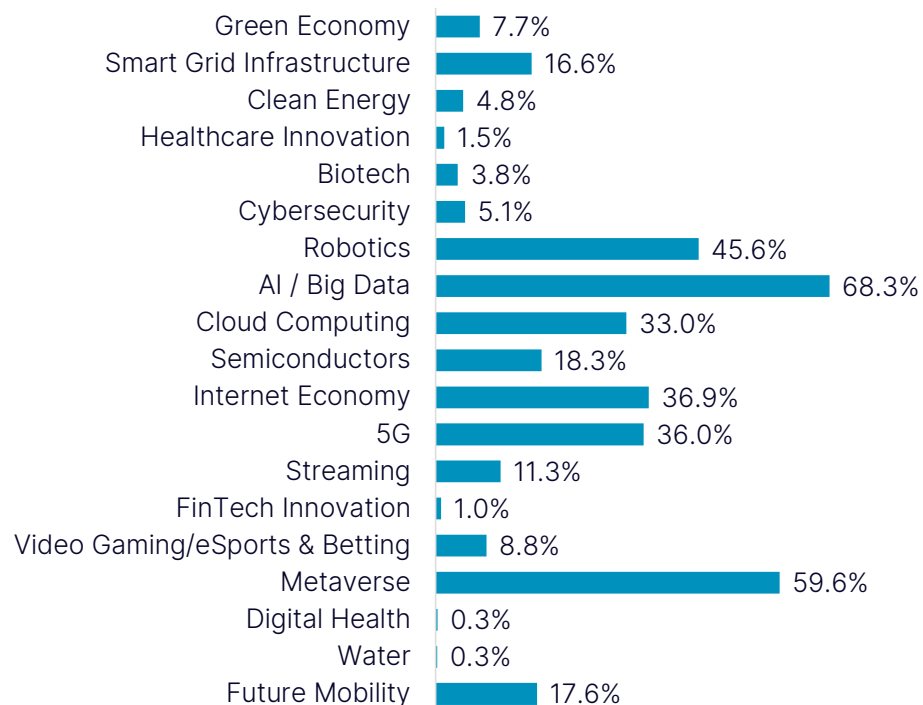


Nasdaq-100 by Thematic Exposures

of Constituents per Theme



Index Weight per Theme

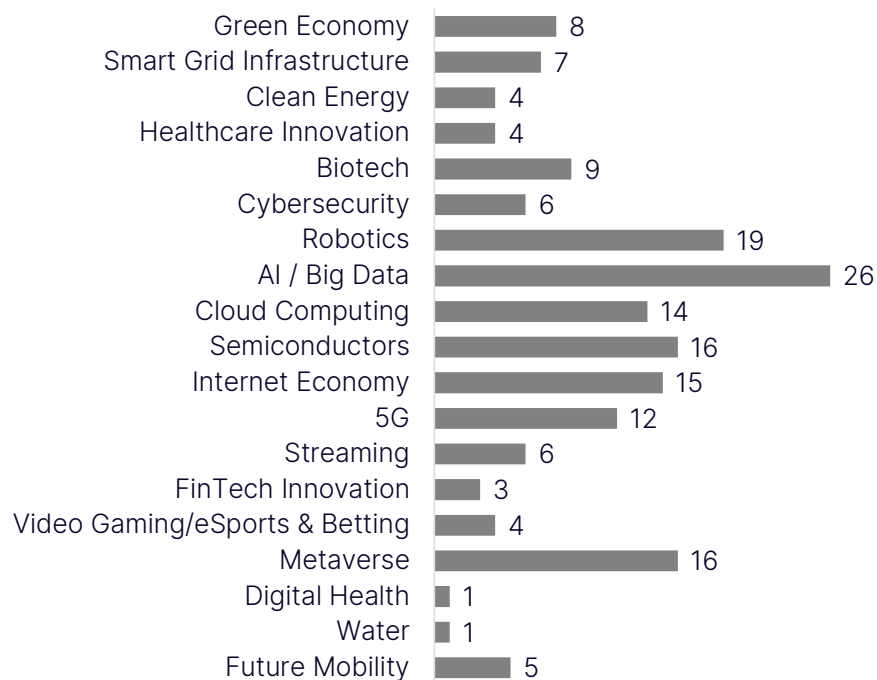


Source: Nasdaq, FactSet. Data as of 6/30/2023.

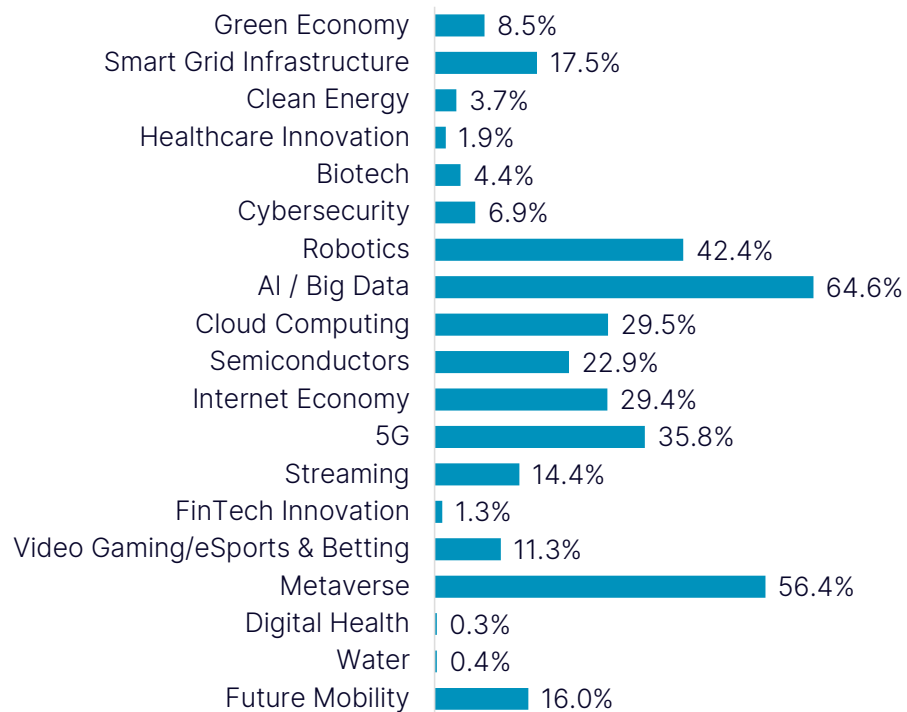
Based on overlap with existing Nasdaq Thematic Indexes, except for 5G, Streaming, and Video Gaming/eSports & Betting where competitor products were analyzed.

Nasdaq-100 ESG by Thematic Exposures

of Constituents per Theme



Index Weight per Theme

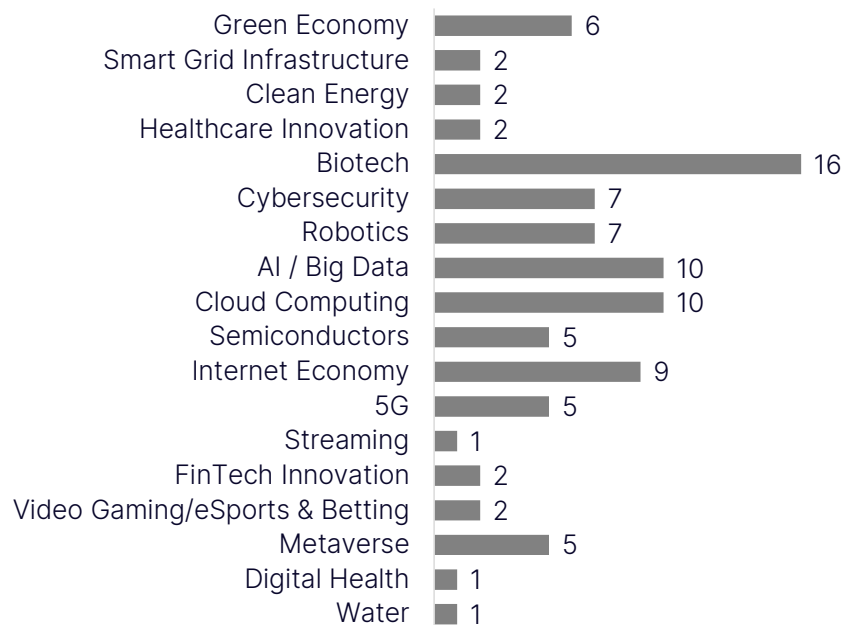


Source: Nasdaq, FactSet. Data as of 6/30/2023.

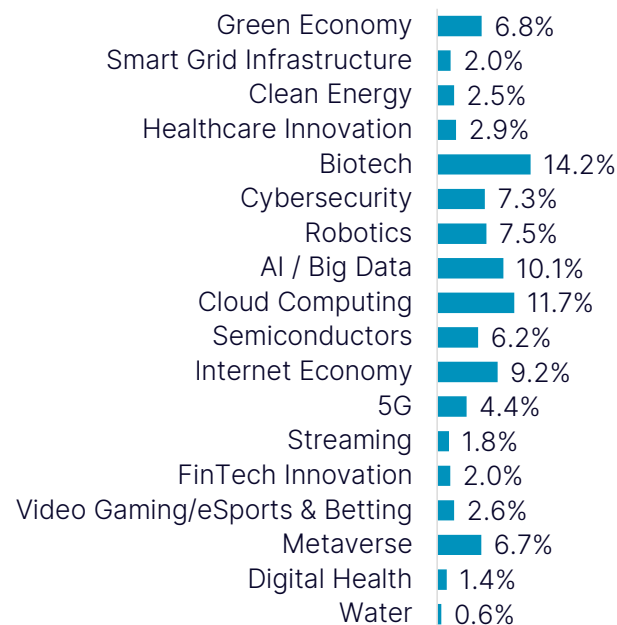
Based on overlap with existing Nasdaq Thematic Indexes, except for 5G, Streaming, and Video Gaming/eSports & Betting where competitor products were analyzed.

Nasdaq Next Generation 100 by Thematic Exposures

of Constituents per Theme



Index Weight per Theme

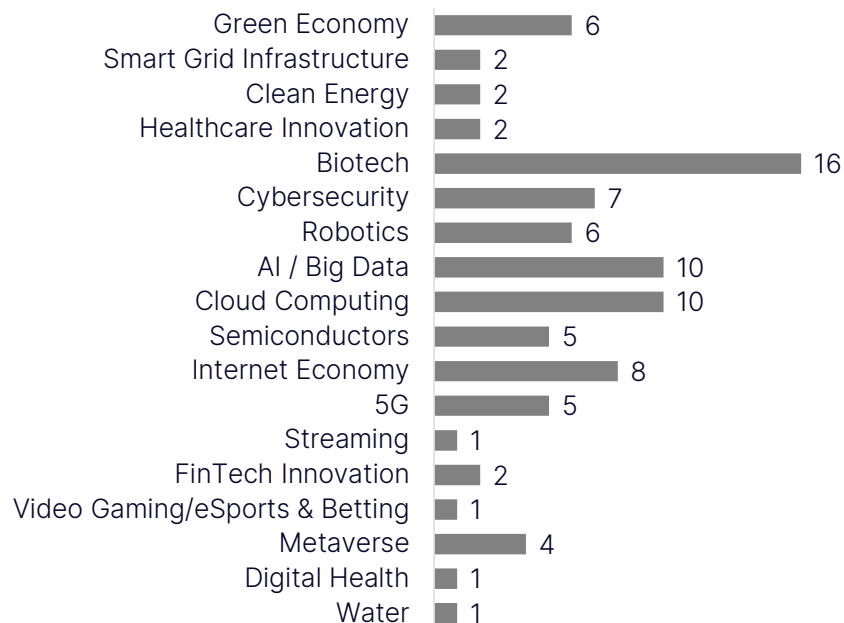


Source: Nasdaq, FactSet. Data as of 6/30/2023.

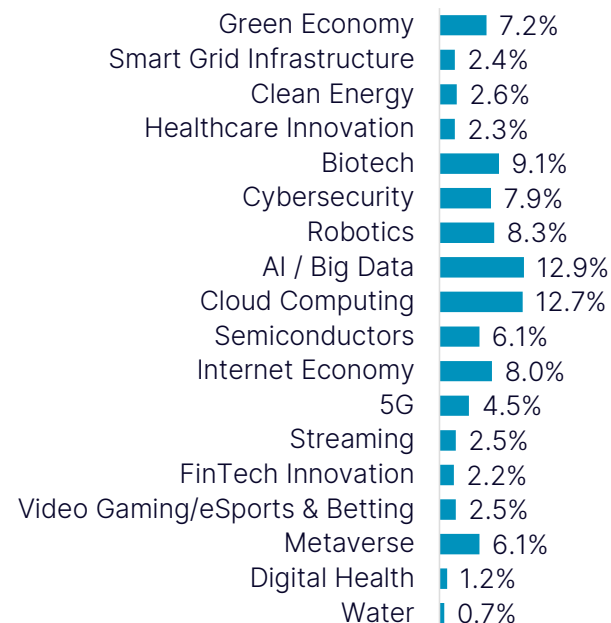
Based on overlap with existing Nasdaq Thematic Indexes, except for 5G, Streaming, and Video Gaming/eSports & Betting, where competitor products were analyzed.

Nasdaq Next Generation 100 ESG by Thematic Exposures

of Constituents per Theme



Index Weight per Theme



Top 10 Largest Overweights: NDXESG vs NDX

Symbol	Nasdaq-100 ESG Weight (%)	Nasdaq-100 Weight (%)	Difference Weight (%)	Company Name	ICB Industry
NVDA	8.7	6.9	1.8	NVIDIA	Technology
CSCO	2.4	1.4	1.0	Cisco Systems	Telecommunications
ADBE	2.5	1.5	1.0	Adobe	Technology
PEP	2.5	1.7	0.8	PepsiCo	Consumer Staples
NFLX	1.9	1.3	0.6	Netflix	Consumer Discretionary
AMAT	1.4	0.8	0.6	Applied Materials	Technology
QCOM	1.4	0.9	0.5	QUALCOMM	Technology
INTU	1.3	0.9	0.4	Intuit	Technology
ASML	0.8	0.4	0.4	ASML Hold NY Reg	Technology
ADP	1.0	0.6	0.4	Automatic Data Processing	Industrials

Top 10 Largest Underweights: NDXESG vs NDX

Symbol	Nasdaq-100 ESG Weight (%)	Nasdaq-100 Weight (%)	Difference Weight (%)	Company Name	ICB Industry
AMZN	3.2	6.9	-3.7	Amazon.com	Consumer Discretionary
META	1.4	4.2	-2.8	Meta Platforms A	Technology
MSFT	11.7	12.9	-1.2	Microsoft	Technology
TSLA	3.1	4.3	-1.2	Tesla	Consumer Discretionary
GOOGL	2.7	3.7	-1.0	Alphabet A	Technology
GOOG	2.8	3.6	-0.9	Alphabet C	Technology
AAPL	12.4	12.6	-0.2	Apple	Technology
KHC	0.1	0.3	-0.2	Kraft Heinz	Consumer Staples
MCHP	0.2	0.3	-0.2	Microchip Technology	Technology
MNST	0.3	0.4	-0.1	Monster Beverage	Consumer Staples

Top 10 Largest Overweights: NGXESG vs NGX

Symbol	NGXESG Weight (%)	NGX Weight (%)	Difference Weight (%)	Company Name	ICB Industry
CDW	3.0	1.8	1.2	CDW	Technology
ICLR	2.4	1.5	0.9	ICON	Health Care
CCEP	3.0	2.1	0.9	Coca-Cola Europacific	Consumer Staples
FLEX	1.6	0.9	0.7	Flex Ltd	Technology
TTWO	2.5	1.8	0.7	Take-Two Interactive	Consumer Discretionary
LKQ	1.8	1.1	0.6	LKQ	Consumer Discretionary
ZBRA	1.7	1.1	0.6	Zebra Technologies A	Industrials
ULTA	2.2	1.7	0.5	Ulta Beauty	Consumer Discretionary
TSCO	2.3	1.7	0.5	Tractor Supply	Consumer Discretionary
JBHT	1.9	1.3	0.5	JB Hunt Transport Svcs	Industrials

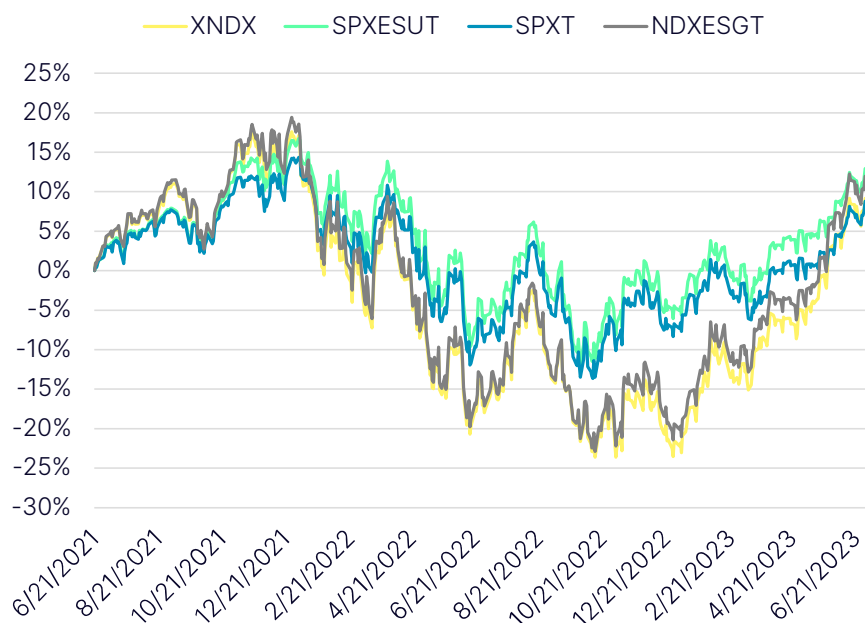
Top 10 Largest Underweights: NGXESG vs NGX

Symbol	NGXESG Weight (%)	NGX Weight (%)	Difference Weight (%)	Company Name	ICB Industry
HZNP	0.4	1.7	-1.2	Horizon Therapeutics	Health Care
STLD	0.5	1.3	-0.8	Steel Dynamics	Basic Materials
ALNY	1.0	1.7	-0.7	Alnylam Pharmaceuticals	Health Care
UAL	0.8	1.3	-0.5	United Airlines Holdings	Consumer Discretionary
ARGX	0.3	0.8	-0.5	argenx ADR	Health Care
SRPT	0.3	0.8	-0.5	Sarepta Therapeutics	Health Care
SWKS	0.8	1.3	-0.4	Skyworks Solutions	Technology
RPRX	0.6	1.0	-0.4	Royalty Pharma A	Health Care
VTRS	0.5	0.9	-0.4	Viatis	Health Care
EXPE	0.7	1.1	-0.4	Expedia Group	Consumer Discretionary

Performance – NDX vs. NDXESG

Since Inception

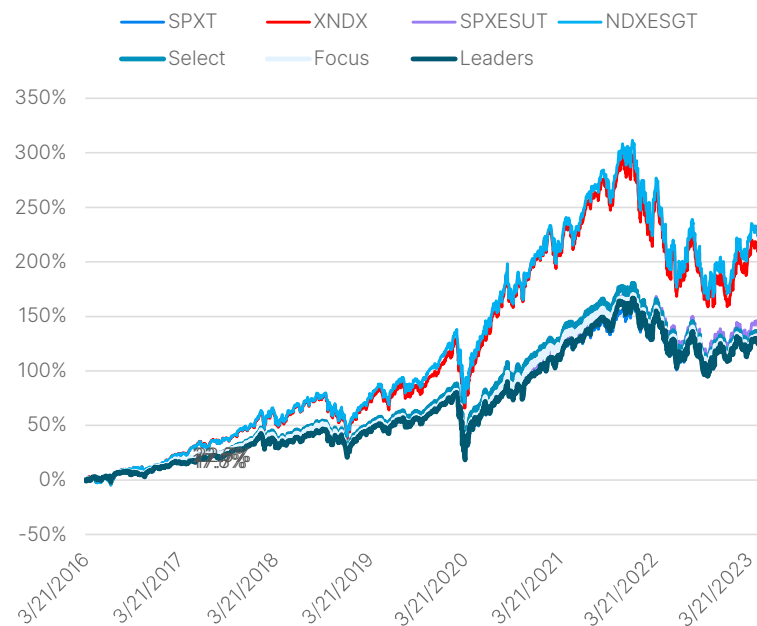
6/21/2021 – 6/30/2023



*XNDX: Nasdaq-100 TR; NDXESGT: Nasdaq-100 ESG TR; 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

Since Beginning of Backtest

3/21/2016 – 6/30/2023

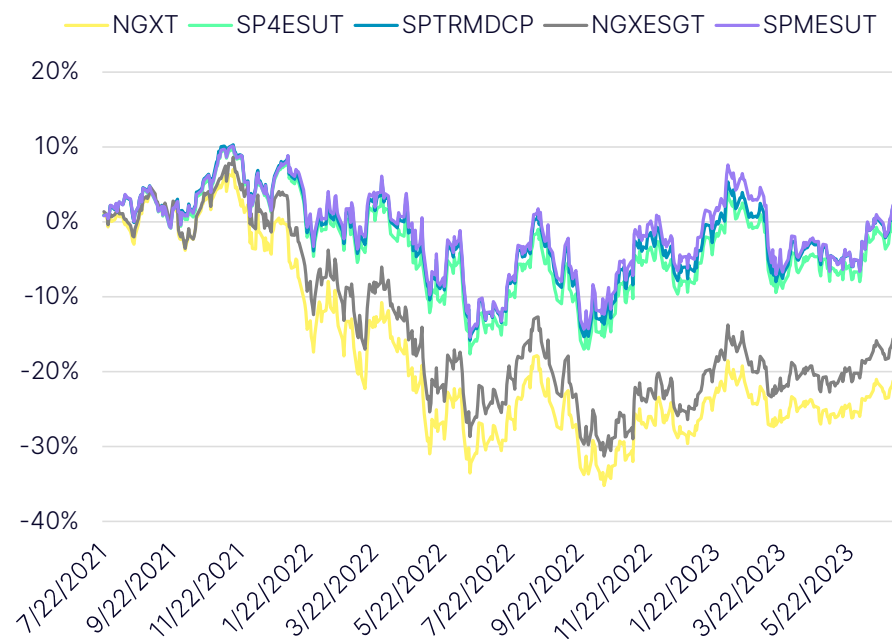


Total Return Data as of 6/30/2023.

Source: Nasdaq Global Indexes, FactSet, Bloomberg.

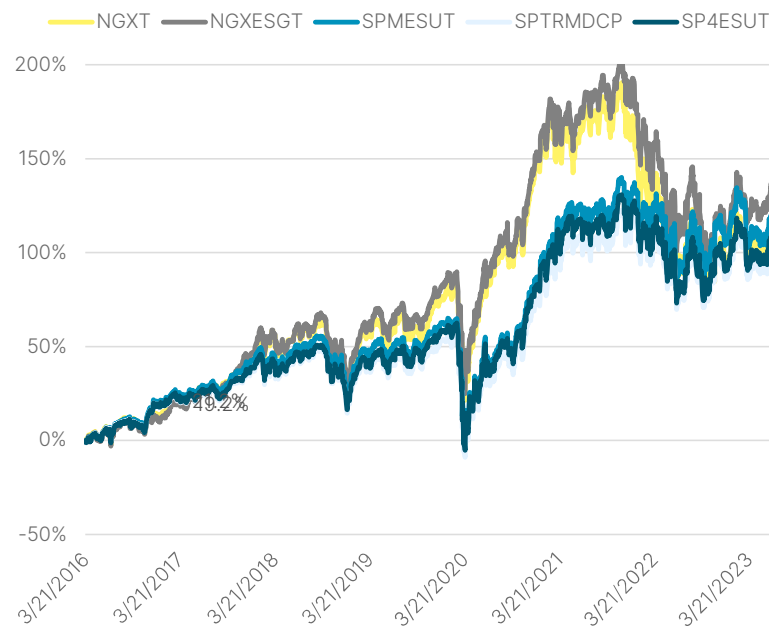
Performance – NGX vs. NGXESG

Since Inception
7/22/2021 – 6/30/2023



*NGXT: Nasdaq Next Generation 100 TR; NGXESGT: Nasdaq Next Generation 100 ESG TR; SP4ESUT: S&P Sustainability Screened TR; SPTRMDCP: S&P MidCap 400 TR; SPMESUT: S&P MidCap 400 ESG TR

Since Beginning of Backtest
3/21/2016 – 6/30/2023



ESG Comparisons – NDXESG/NDX

Index	Benchmark	Number of Securities	% Exclusion from the Benchmark	Weighted Average Sustainalytics ESG Risk Score	Simple Average Sustainalytics ESG Risk Score
MSCI USA Index	--	627	n/a	21.4	21.7
MSCI USA Extended ESG Focus Index	MSCI USA Index	300	52%	20.6	20.8
MSCI USA Extended ESG Leaders Index	MSCI USA Index	296	53%	19.3	19.9
MSCI USA ESG Universal Select Business Screens Index	MSCI USA Index	584	7%	19.9	21.2
Nasdaq-100 Index	--	101	n/a	20.2	20.3
Nasdaq-100 ESG Index	Nasdaq-100 Index	92	9%	18.4	19.7
S&P 500 Index	--	503	n/a	21.4	21.8
S&P 500 ESG Index	S&P 500 Index	321	36%	20.4	20.7

ESG Comparisons – NGXESG/NGX

Index	Benchmark	Number of Securities	% Exclusion from the Benchmark	Weighted Average Sustainalytics ESG Risk Score	Simple Average Sustainalytics ESG Risk Score
Nasdaq Next Generation 100 Index	--	103	n/a	21.0	21.6
Nasdaq Next Generation ESG 100 Index	Nasdaq Next Generation 100 Index	95	8%	18.1	20.5
S&P MidCap 400 Index	--	402	n/a	23.0	23.2
S&P MidCap 400 Sustainability Screened Index	S&P MidCap 400 Index	365	9%	22.3	22.5
S&P MidCap 400 ESG Index	S&P MidCap 400 Index	275	32%	22.0	22.2

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

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

- 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

*For Illustrative
Purposes Only.*

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

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%

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