



# Innovation Meets Sustainability

Nasdaq-100 ESG™ Index (NDXESG™) &  
Nasdaq Next Generation 100 ESG™ Index (NGXESG™)

September 2024 Reconstitution

September 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 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®)/ Nasdaq Next Generation 100™ Index (NGX™) (very low tracking error).



September 2024 Reconstitution

# 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.



September 2024 Reconstitution

# 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 the ESG Risk Rating Score, the higher the weight in the NDXESG Index, and vice versa. Same for Nasdaq Next Generation 100 and NGXESG.



## September 2024 Reconstitution

# 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.	0.88
ADI	Analog Devices	Technology	Revenue from military contracting weapon-related products and/or services.	0.75
CEG	Constellation Energy	Utilities	Revenue from nuclear production and oil & gas generation.	0.53
AEP	American Electric Power	Utilities	Revenue from thermal coal power generation, nuclear production, and oil & gas generation.	0.36

## September 2024 Reconstitution

# NDXESG™ ESG Exclusions: 8

Symbol	Company Name	ICB Industry	Nasdaq-100 ESG: Reason(s) for Exclusion	Nasdaq-100® Weight (%)
BKR	Baker Hughes	Energy	Revenue from oil & gas supporting products/services.	0.24
FANG	Diamondback Energy	Energy	Revenue from oil & gas production. Involvement in shale energy extraction and/or production.	0.22
XEL	Xcel Energy	Utilities	Revenue from thermal coal power generation, nuclear production, oil & gas production, and oil & gas generation.	0.22
ARM	Arm Holdings	Technology	ESG Risk Rating Score Unavailable	0.12

## September 2024 Reconstitution

# NGXESG™ ESG Exclusions: 13

Symbol	Company Name	ICB Industry	Nasdaq Next Generation 100 ESG: Reason(s) for Exclusion	Nasdaq Next Generation 100™ Weight (%)
AXON	Axon Enterprise	Industrials	Manufacture riot control protection equipment and riot control weapons.	1.98
DKNG	DraftKings	Consumer Discretionary	Revenue from gambling operations.	1.28
LNT	Alliant Energy	Utilities	Revenue from oil & gas generation and thermal coal power generation.	1.03
EVRG	Evergy	Utilities	Revenue from nuclear production and thermal coal power generation.	0.95

## September 2024 Reconstitution

# NGXESG™ ESG Exclusions: 13

Symbol	Company Name	ICB Industry	Nasdaq Next Generation 100 ESG: Reason(s) for Exclusion	Nasdaq Next Generation 100™ Weight (%)
CASY	Casey's General Stores	Consumer Staples	Revenue from tobacco products – retail.	0.93
BIDU	Baidu	Technology	Global Standards Screening non-compliance.	0.83
CHK	Chesapeake Energy	Energy	Revenue from oil & gas production. Involvement in shale energy extraction and/or production.	0.70
CHDN	Churchill Downs	Consumer Discretionary	Revenue from gambling operations.	0.67



## September 2024 Reconstitution

# NGXESG™ ESG Exclusions: 13

Symbol	Company Name	ICB Industry	Nasdaq Next Generation 100 ESG: Reason(s) for Exclusion	Nasdaq Next Generation 100™ Weight (%)
WWD	Woodward	Industrials	Revenue from military contracting weapon-related products and/or services, and oil & gas supporting products/services.	0.67
APA	APA	Energy	ESG Risk Rating Score is greater than 40. Revenue from oil & gas production. Involvement in shale energy extraction and/or production.	0.62
CZR	Caesars Entertainment	Consumer Discretionary	Revenue from gambling operations.	0.59
WYNN	Wynn Resorts	Consumer Discretionary	Revenue from gambling operations.	0.59

## September 2024 Reconstitution

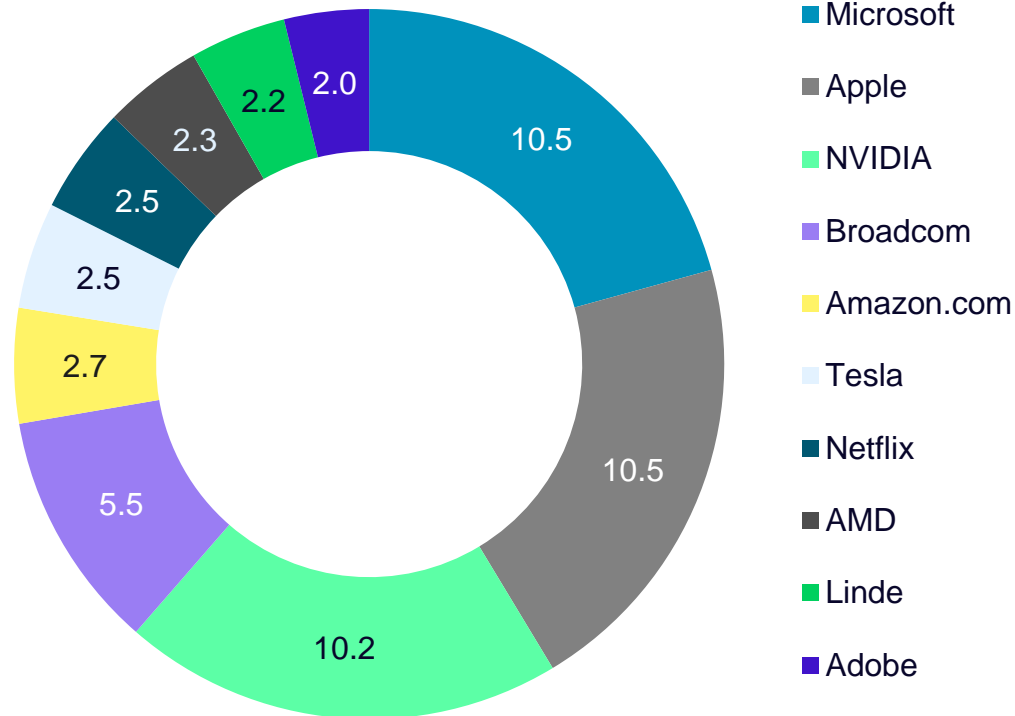
# NGXESG™ ESG Exclusions: 13

Symbol	Company Name	ICB Industry	Nasdaq Next Generation 100 ESG: Reason(s) for Exclusion	Nasdaq Next Generation 100™ Weight (%)
LLYVK	Liberty Media	Consumer Discretionary	ESG Risk Rating Score has not yet been determined.	0.18

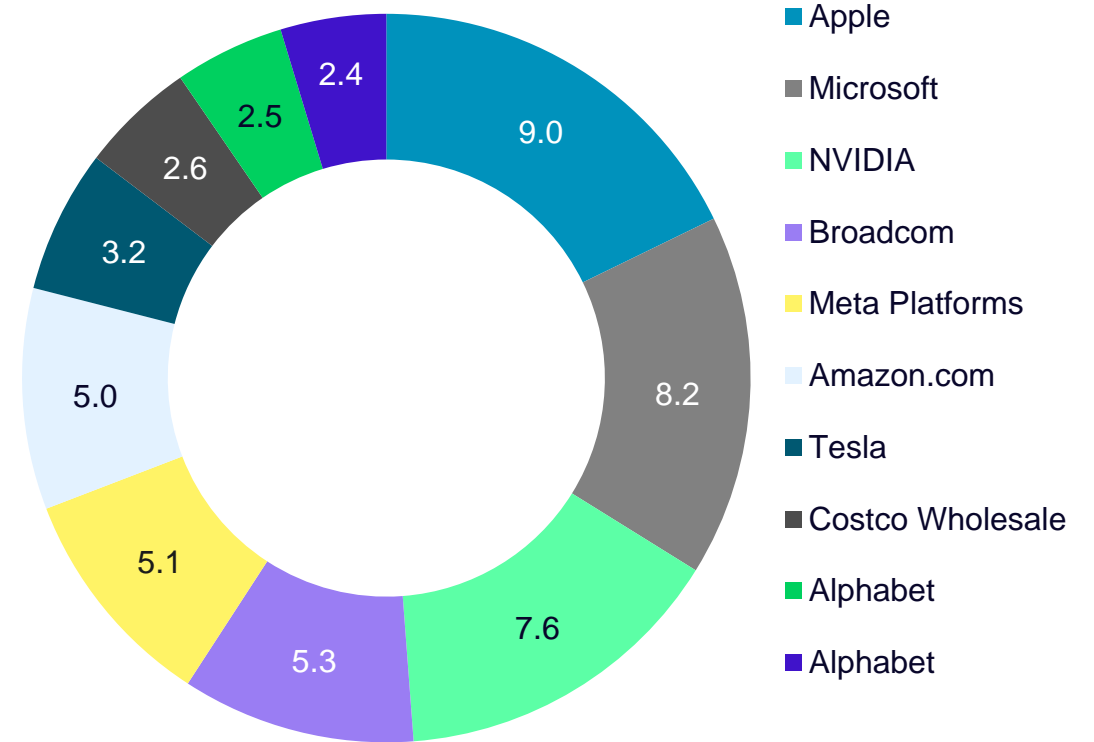
## September 2024 Reconstitution

# Top 10 Constituents by Index Weight (%)

NDXESG  
Top 10 Weight = 50.8%



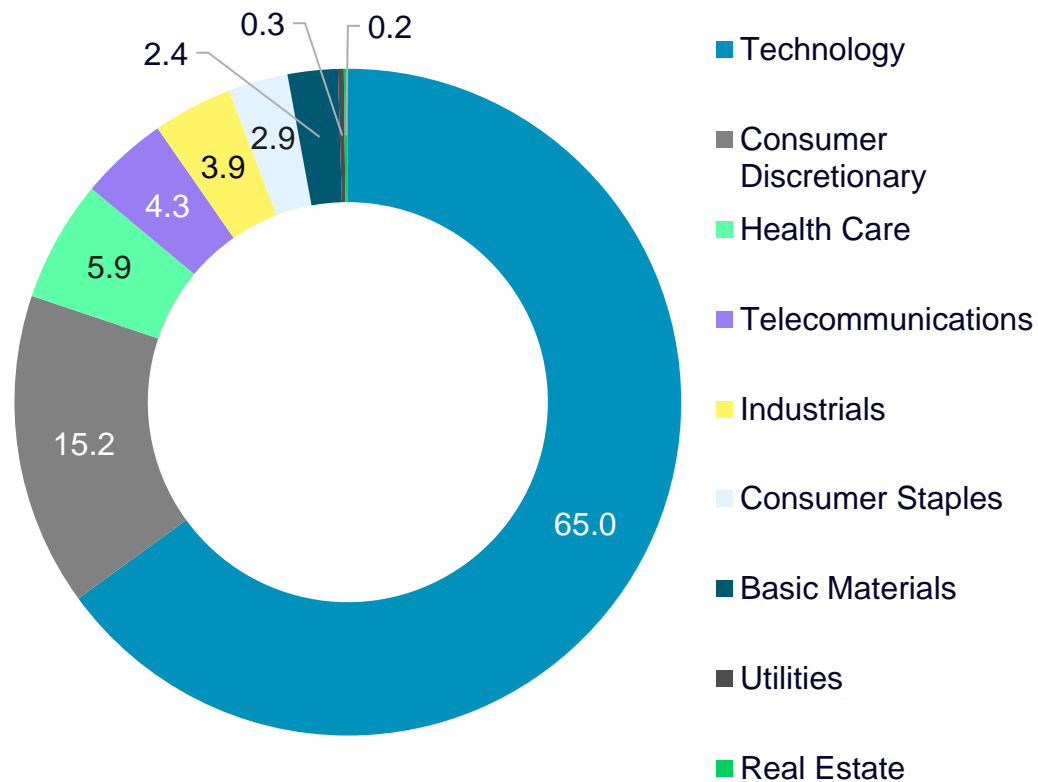
NDX  
Top 10 Weight = 50.8%



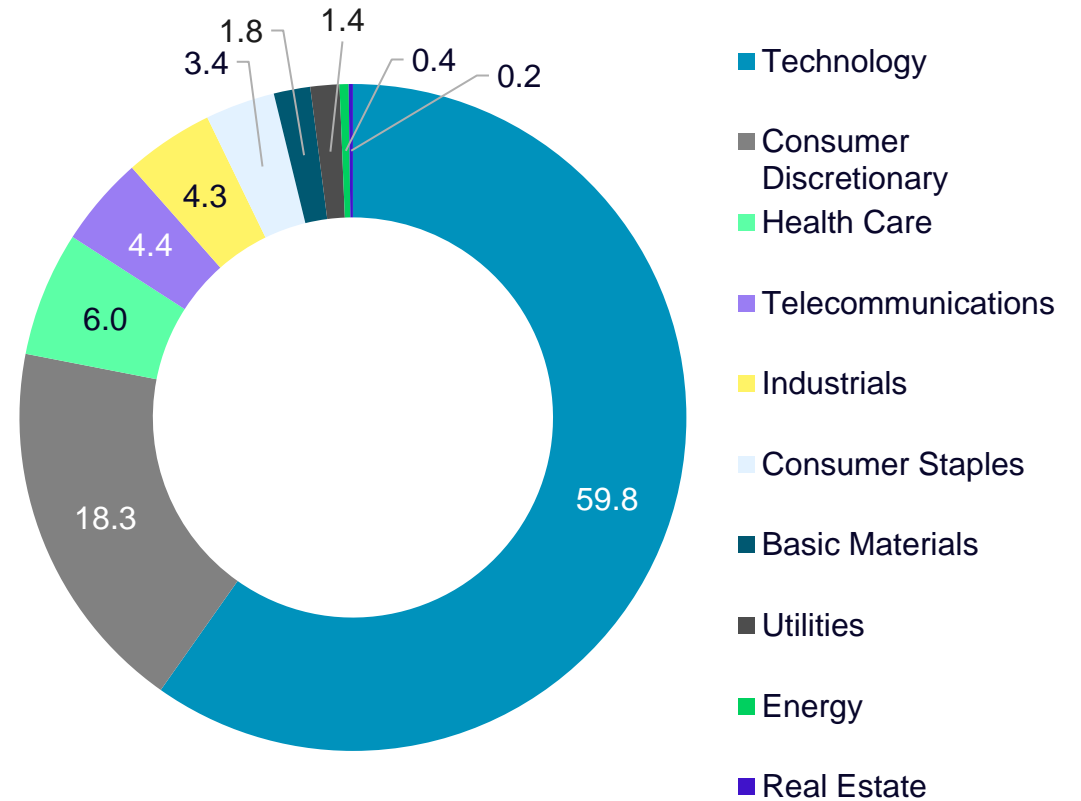
## September 2024 Reconstitution

# Sector Exposure by Index Weight (%)

### NDXESG Index Weight by ICB Industry

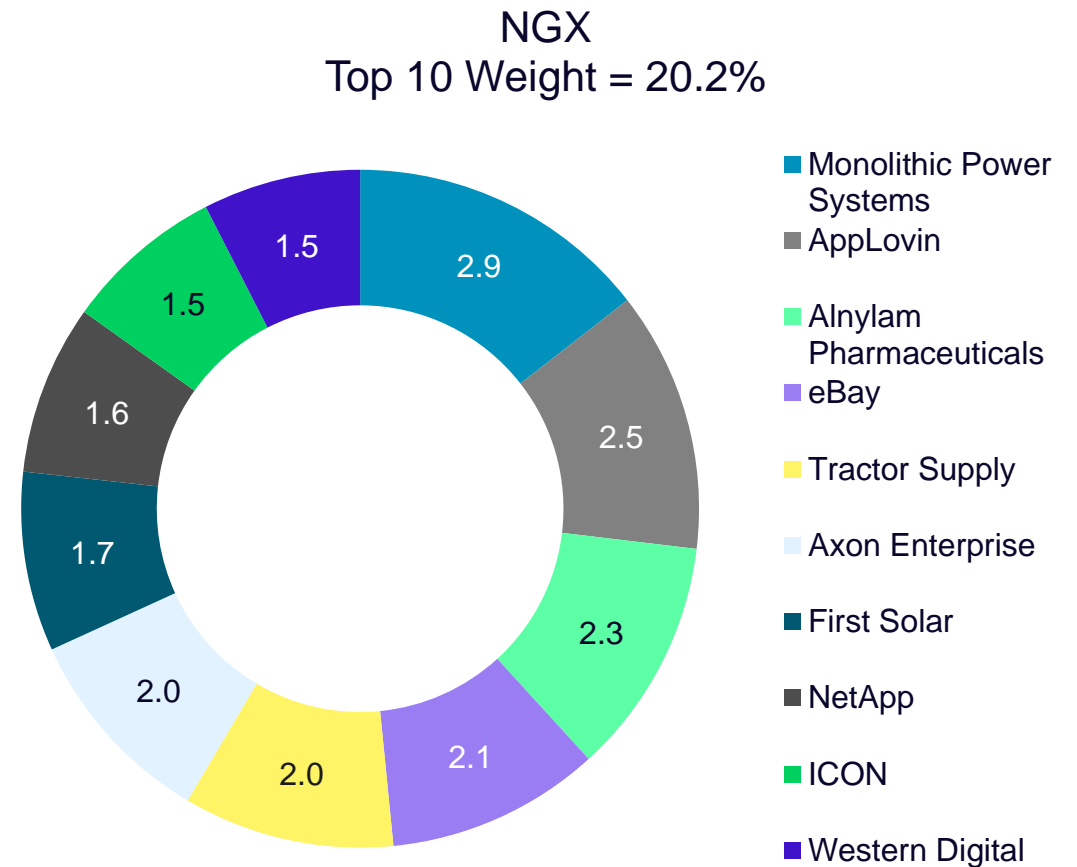
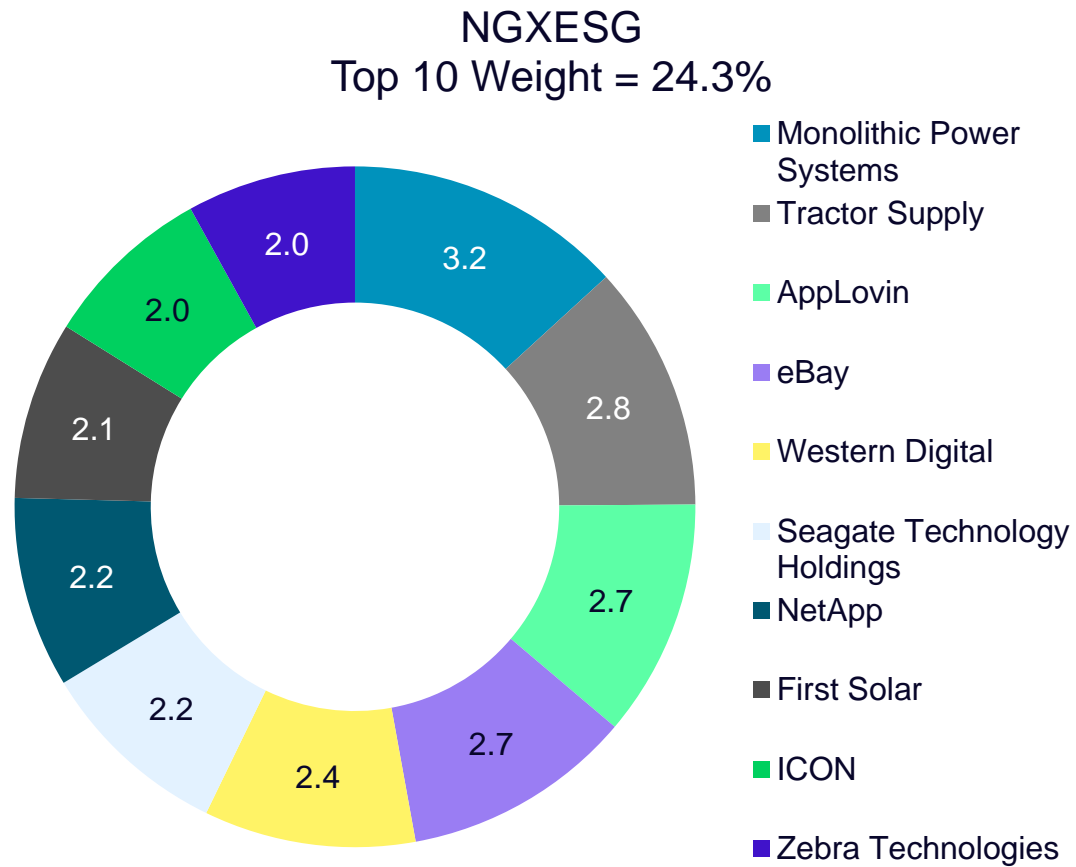


### NDX Index Weight by ICB Industry



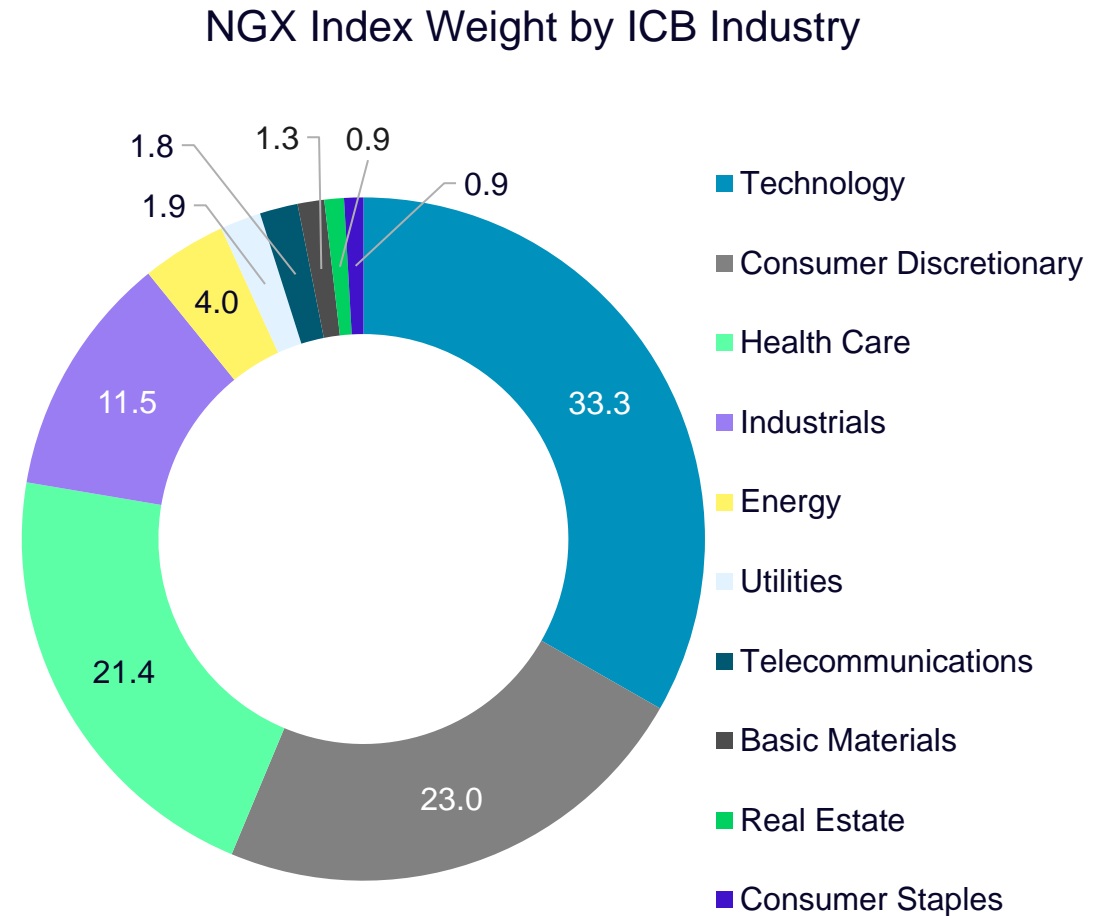
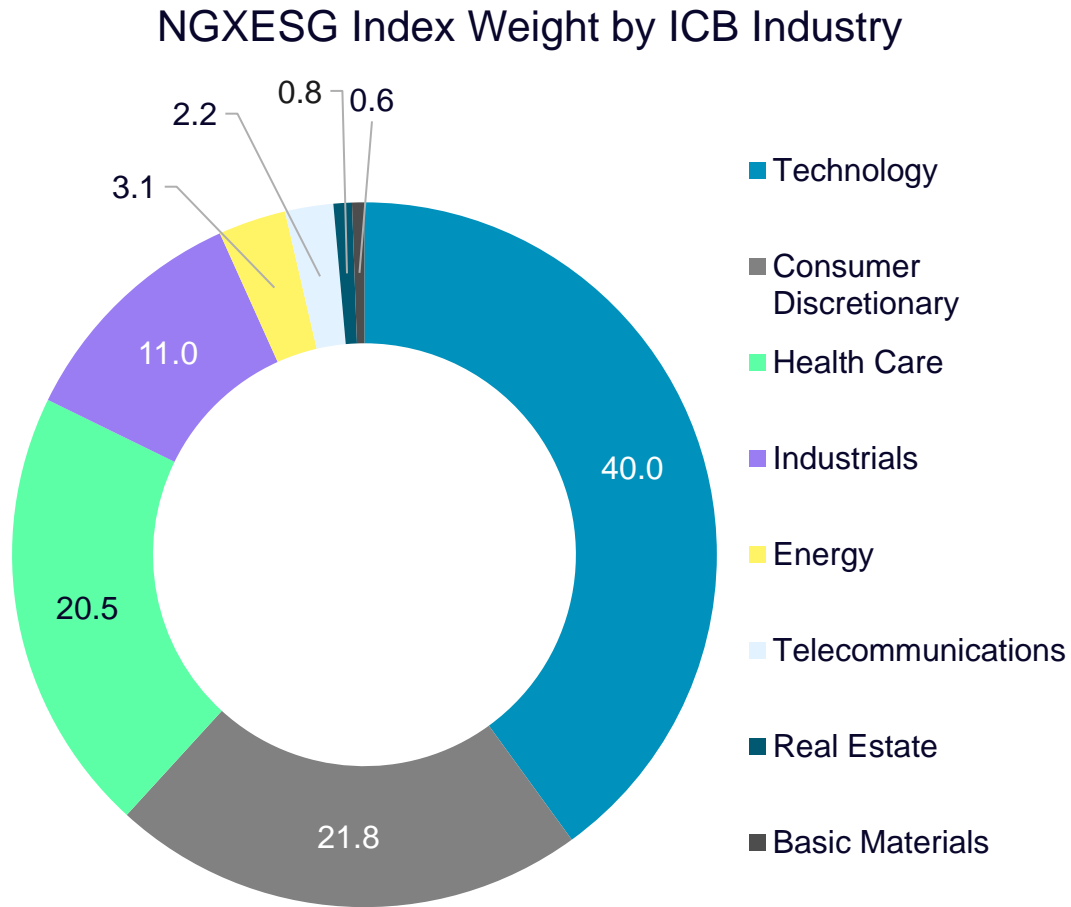
## September 2024 Reconstitution

# Top 10 Constituents by Index Weight (%)



September 2024 Reconstitution

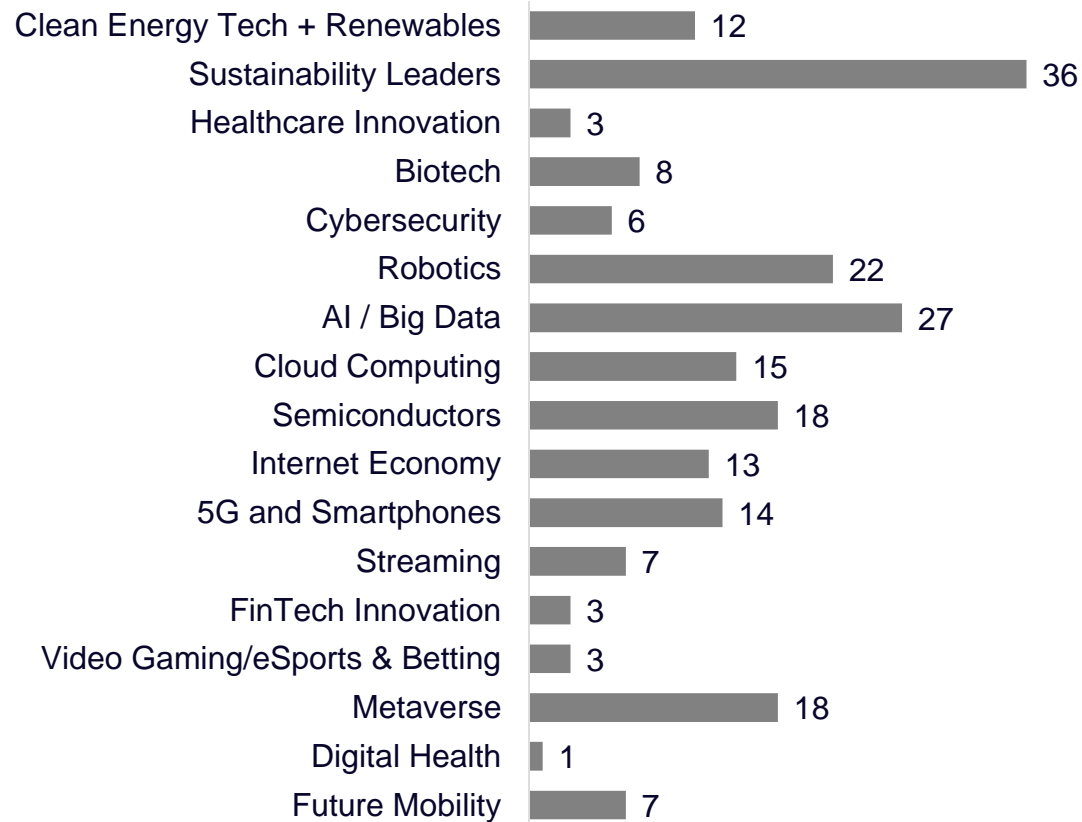
# Sector Exposure by Index Weight (%)



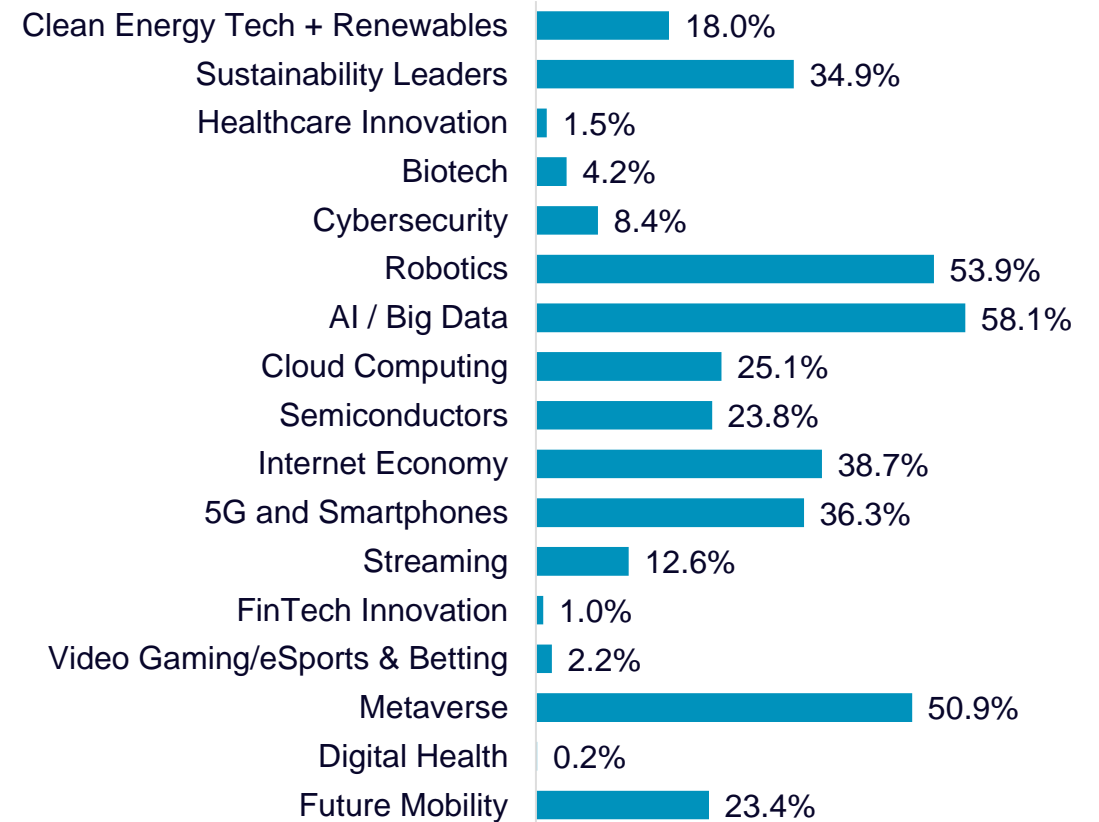
## September 2024 Reconstitution

# Thematic Exposure: Nasdaq-100

### # of Constituents per Theme



### Index Weight per Theme

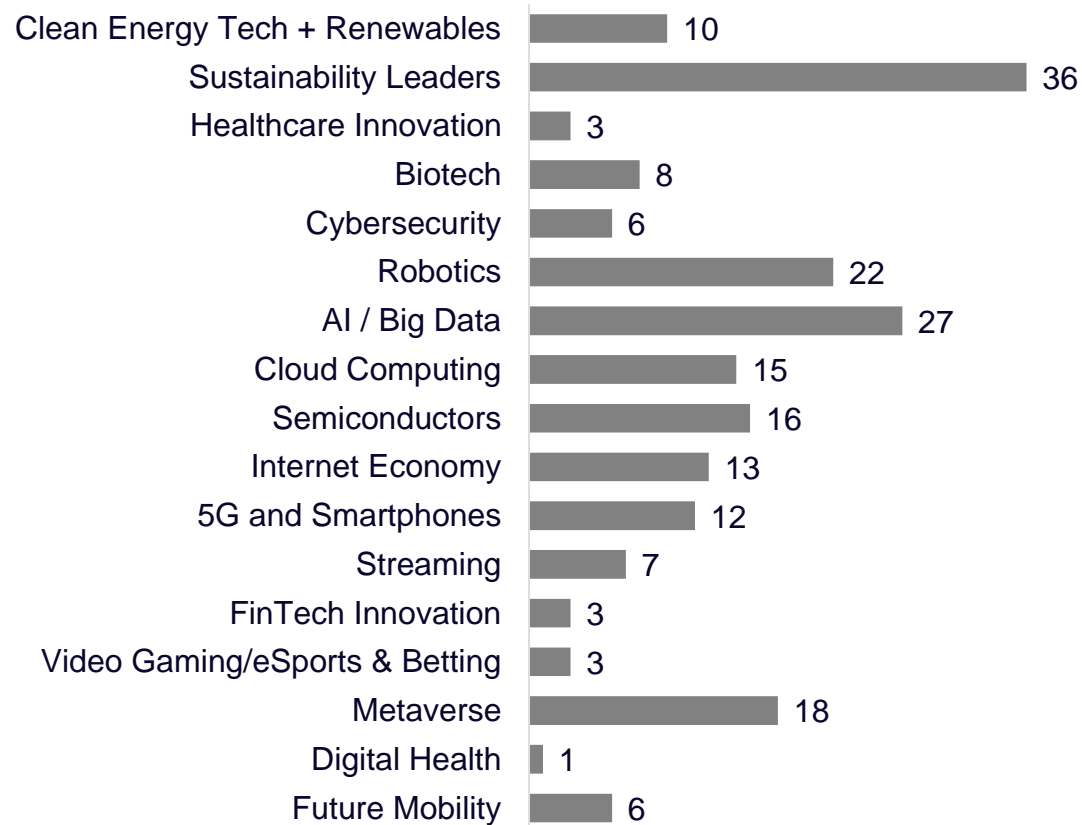


Source: Nasdaq, FactSet. Data as of 09/30/2024.

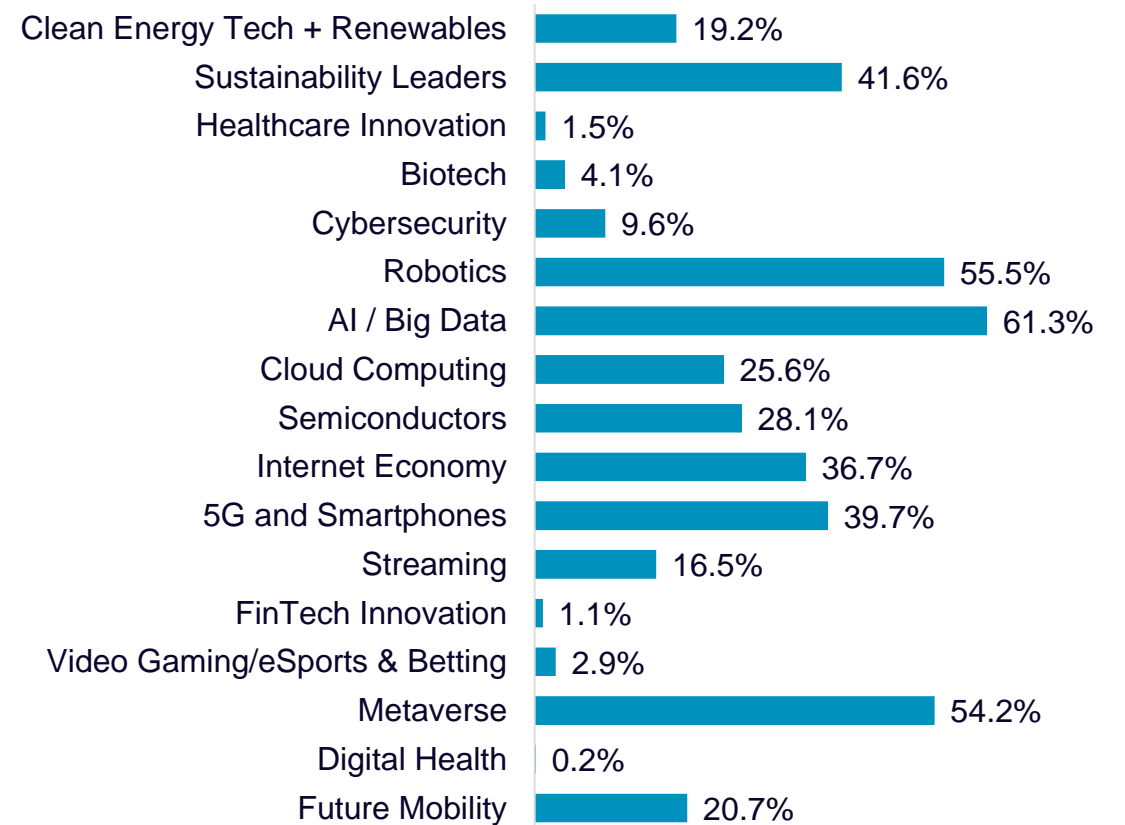
Based on overlap with existing Nasdaq Thematic Indexes, except for 5G and Smartphones, Streaming, and Video Gaming/eSports & Betting where competitor products were analyzed.

# Thematic Exposure: Nasdaq-100 ESG

# of Constituents per Theme



Index Weight per Theme



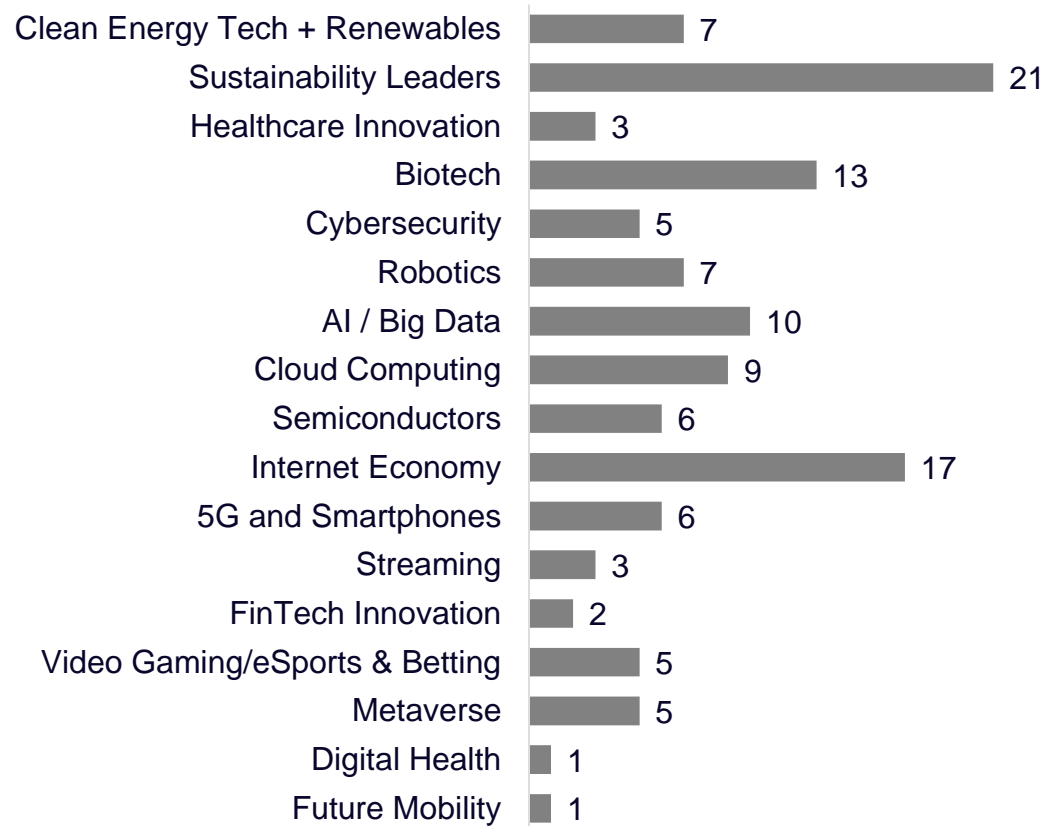
Source: Nasdaq, FactSet. Data as of 09/30/2024.

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

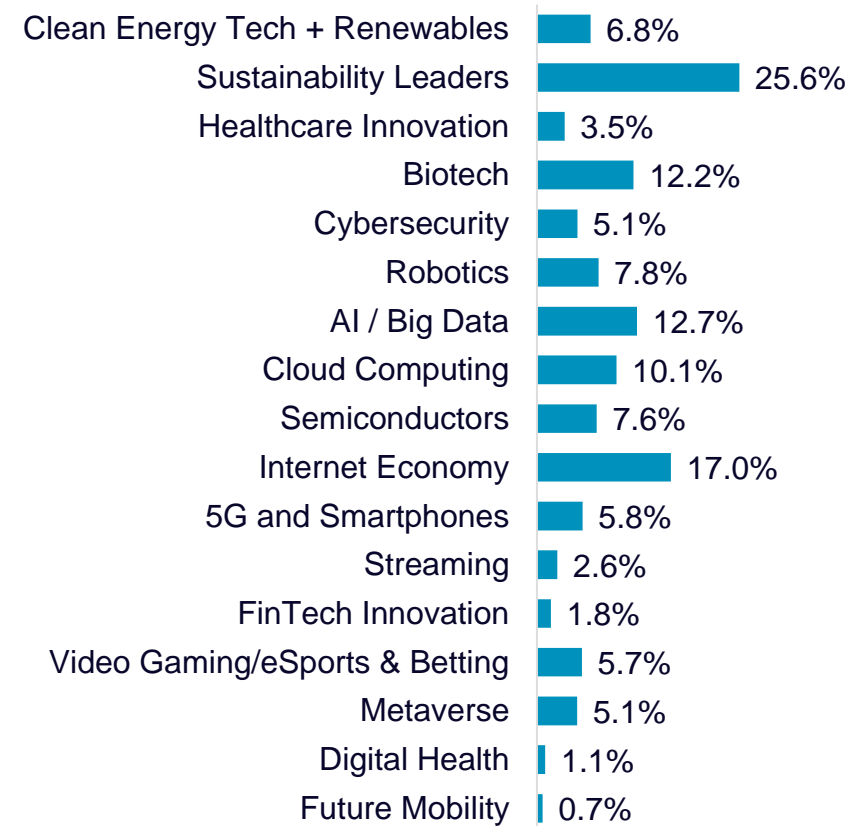


# Thematic Exposure: Nasdaq Next Generation 100

# of Constituents per Theme



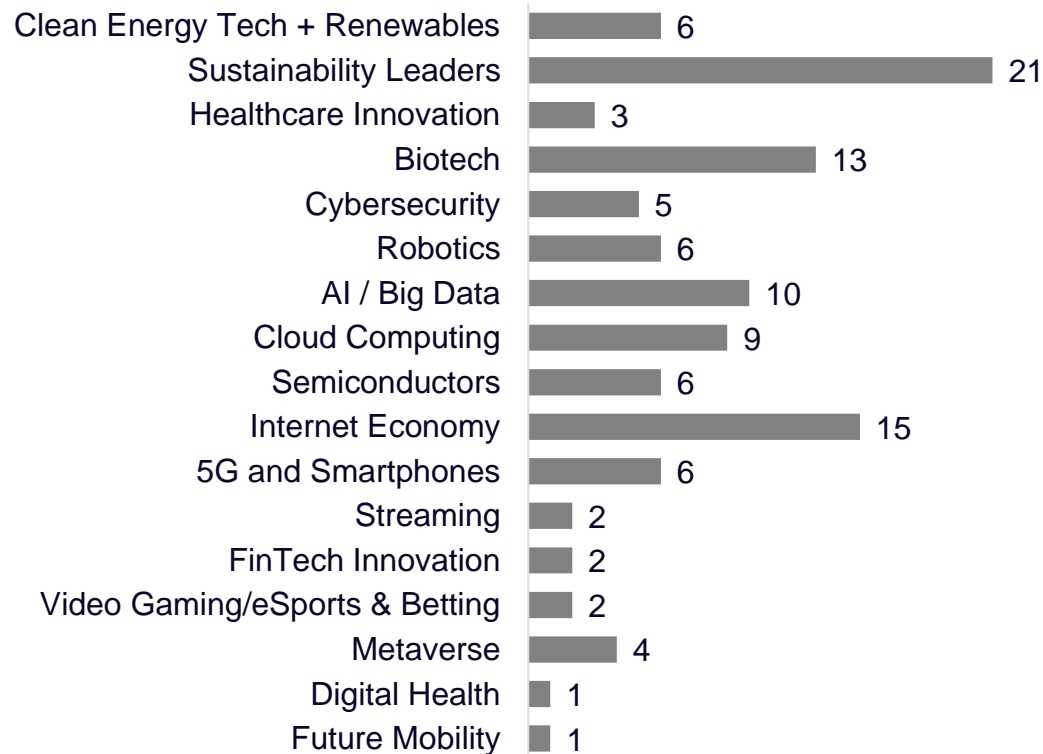
Index Weight per Theme



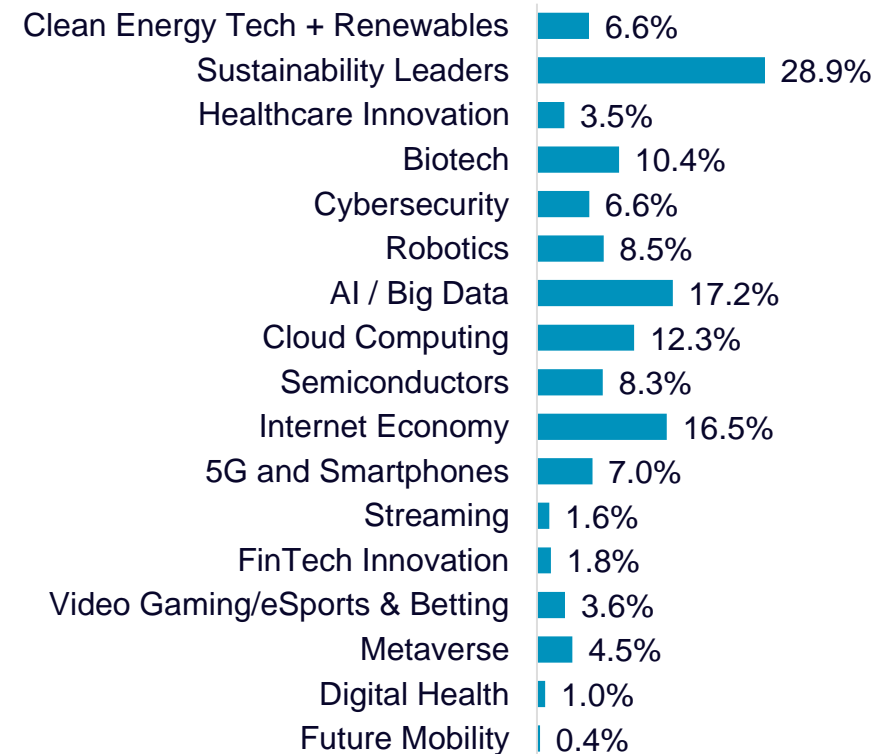
## September 2024 Reconstitution

# Thematic Exposure: Nasdaq Next Generation 100 ESG

# of Constituents per Theme



Index Weight per Theme



Source: Nasdaq, FactSet. Data as of 09/30/2024.

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

## September 2024 Reconstitution

# Top 10 Largest Overweights: NDXESG vs. NDX

Symbol	Company Name	ICB Industry	Nasdaq-100 ESG Weight (%)	Nasdaq-100 Weight (%)	Weight Difference (%)
NVDA	NVIDIA	Technology	10.2	7.6	2.6
MSFT	Microsoft	Technology	10.5	8.2	2.4
AAPL	Apple	Technology	10.5	9.0	1.5
LIN	Linde	Basic Materials	2.2	1.5	0.7
AMD	AMD	Technology	2.3	1.7	0.6
CSCO	Cisco Systems	Telecommunications	1.9	1.4	0.5
AMAT	Applied Materials	Technology	1.6	1.1	0.5
NFLX	Netflix	Consumer Discretionary	2.5	2.0	0.5
ADBE	Adobe	Technology	2.0	1.5	0.4
QCOM	QUALCOMM	Technology	1.7	1.2	0.4

## September 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	1.8	5.1	-3.2
AMZN	Amazon.com	Consumer Discretionary	2.7	5.0	-2.3
COST	Costco Wholesale	Consumer Discretionary	1.8	2.6	-0.8
TSLA	Tesla	Consumer Discretionary	2.5	3.2	-0.8
GOOG	Alphabet	Technology	1.8	2.5	-0.7
GOOGL	Alphabet	Technology	1.9	2.5	-0.6
TMUS	T-Mobile US	Telecommunications	1.2	1.6	-0.4
PDD	PDD Holdings	Technology	0.3	0.6	-0.3
MNST	Monster Beverage	Consumer Staples	0.1	0.3	-0.2
KHC	Kraft Heinz	Consumer Staples	0.1	0.3	-0.2

## September 2024 Reconstitution

# Top 10 Largest Overweights: NGXESG vs. NGX

Symbol	Company Name	ICB Industry	NGXESG Weight (%)	NGX Weight (%)	Weight Difference (%)
WDC	Western Digital	Technology	2.4	1.5	0.9
TSCO	Tractor Supply	Consumer Discretionary	2.8	2.0	0.8
STX	Seagate Technology Holdings	Technology	2.2	1.5	0.7
ZBRA	Zebra Technologies	Industrials	2.0	1.2	0.7
FLEX	Flex Ltd	Technology	1.5	0.9	0.6
EBAY	eBay	Consumer Discretionary	2.7	2.1	0.6
TRMB	Trimble	Industrials	1.6	1.0	0.6
LOGI	Logitech International	Technology	1.5	0.9	0.6
NTAP	NetApp	Technology	2.2	1.6	0.6
POOL	Pool	Consumer Discretionary	1.4	0.9	0.5

## September 2024 Reconstitution

# Top 10 Largest Underweights: NGXESG vs. NGX

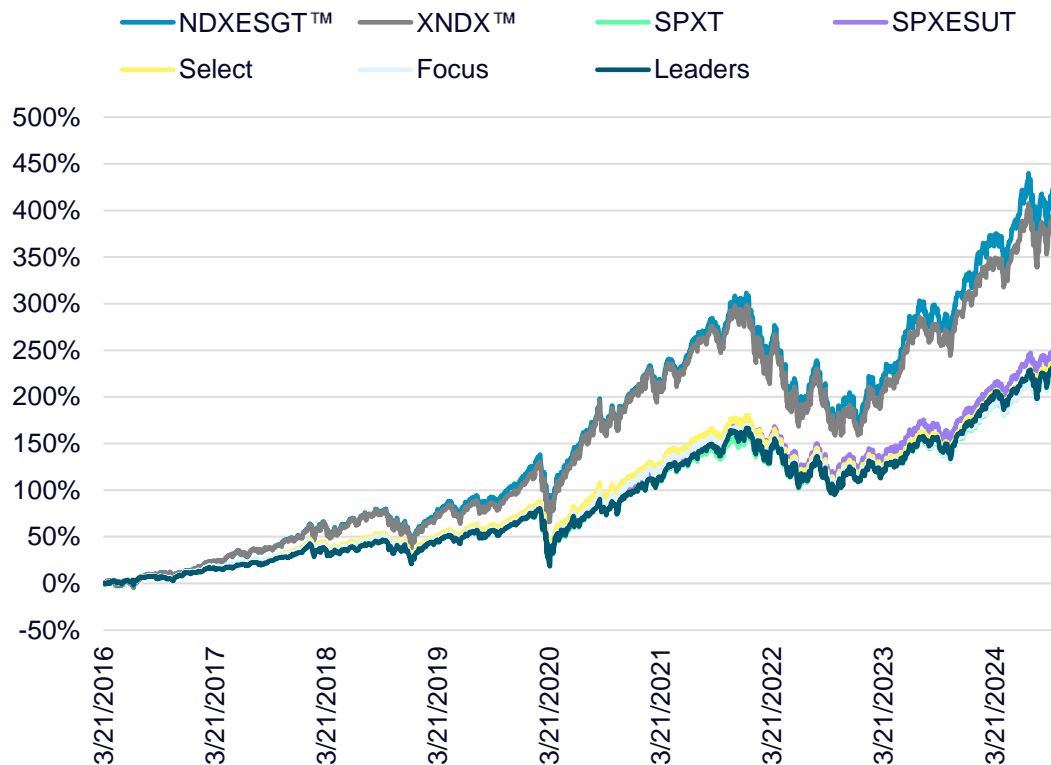
Symbol	Company Name	ICB Industry	NGXESG Weight (%)	NGX Weight (%)	Weight Difference (%)
ALNY	Alnylam Pharmaceuticals	Health Care	1.5	2.3	-0.8
STLD	Steel Dynamics	Basic Materials	0.6	1.3	-0.7
UAL	United Airlines Holdings	Consumer Discretionary	0.5	1.2	-0.7
ZG	Zillow Group	Real Estate	0.2	0.7	-0.5
RIVN	Rivian Automotive	Consumer Discretionary	0.4	0.7	-0.4
JD	JD.com	Consumer Discretionary	0.9	1.2	-0.3
ARGX	argenx	Health Care	0.9	1.1	-0.3
RPRX	Royalty Pharma	Health Care	0.6	0.8	-0.3
TECH	Bio-Techne	Health Care	0.6	0.8	-0.2
VTRS	Viatis	Health Care	0.7	0.9	-0.2

## September 2024 Reconstitution

# Performance – NDXESG vs. NDX

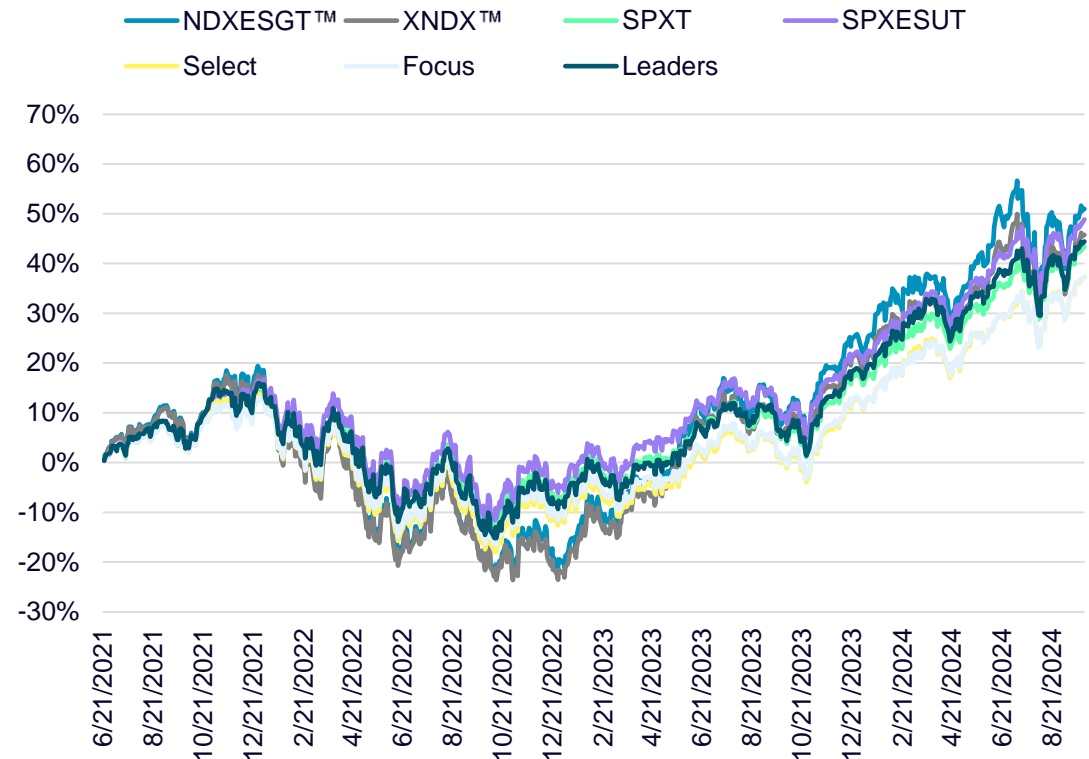
### Since Beginning of NDXESG Backtest

3/21/2016 – 9/30/2024



### Since NDXESG Inception

6/21/2021 – 9/30/2024

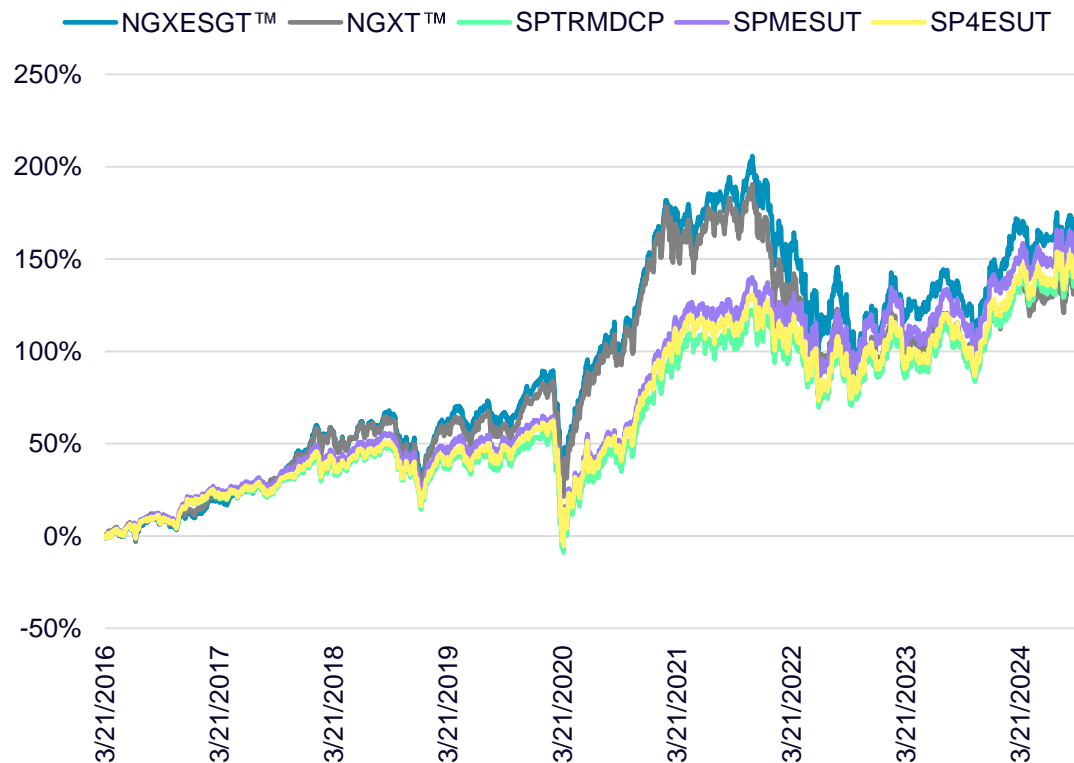


## September 2024 Reconstitution

# Performance – NGXESG vs. NGX

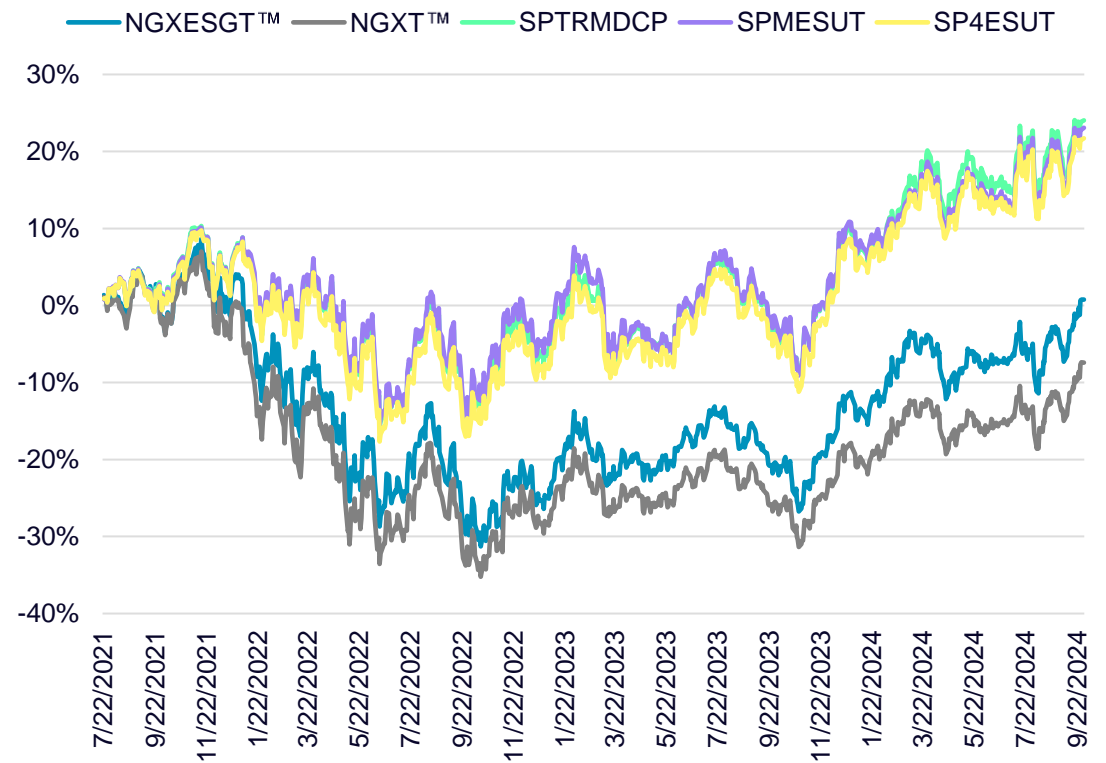
### Since Beginning of NGXESG Backtest

3/21/2016 – 9/30/2024



### Since NGXESG Inception

7/22/2021 – 9/30/2024





## September 2024 Reconstitution

# ESG Comparisons – NDXESG vs. NDX

Index Name	Benchmark	# of Securities	% Exclusion from the Benchmark	Sustainalytics ESG Risk Score	
				Weighted Average	Simple Average
Nasdaq-100 Index®	--	101	n/a	19.5	19.2
Nasdaq-100 ESG™ Index	Nasdaq-100®	93	8%	17.6	18.7
MSCI USA Index	--	593	n/a	20.5	20.7
MSCI USA Extended ESG Focus Index	MSCI USA	285	52%	19.6	19.7
MSCI USA Extended ESG Leaders Index	MSCI USA	293	51%	18.0	19.1
MSCI USA ESG Universal Select Business Screens Index	MSCI USA	551	7%	19.1	20.2
S&P 500 Index	--	504	n/a	20.4	20.5
S&P 500 ESG Index	S&P 500	316	37%	19.2	19.6



Data as of 9/30/2024.

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

## September 2024 Reconstitution

# ESG Comparisons – NGXESG vs. NGX

Index Name	Benchmark Index	# of Securities	% Exclusion from the Benchmark	Sustainalytics ESG Risk Score	
				Weighted Average	Simple Average
Nasdaq Next Generation 100™ Index	--	102	--	19.4	19.6
Nasdaq Next Generation ESG 100™ Index	Nasdaq Next Generation 100™	89	13%	17.2	18.6
S&P MidCap 400 Index	--	401	--	21.8	22.1
S&P MidCap 400 Sustainability Screened Index	S&P MidCap 400	355	11%	21.2	21.4
S&P MidCap 400 ESG Index	S&P MidCap 400	272	32%	20.9	21.1



Data as of 9/30/2024.

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](https://indexes.nasdaqomx.com/docs/methodology_NDXESG.pdf)
- Research
  - [https://indexes.nasdaqomx.com/docs/NDXESG\\_Research.pdf](https://indexes.nasdaqomx.com/docs/NDXESG_Research.pdf)
- Fact Sheet
  - [https://indexes.nasdaqomx.com/docs/FS\\_NDXESGT.pdf](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](https://indexes.nasdaqomx.com/docs/methodology_NGXESG.pdf)
- Research
  - [https://indexes.nasdaqomx.com/docs/NGXESG\\_Research.pdf](https://indexes.nasdaqomx.com/docs/NGXESG_Research.pdf)
- Fact Sheet
  - [https://indexes.nasdaqomx.com/docs/FS\\_NGXESGT.pdf](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 Score 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 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 / NGXESG 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/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

*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%

# Disclaimer

Nasdaq® is a registered trademark of Nasdaq, Inc. The information contained above is provided for informational and educational purposes only, and nothing contained herein should be construed as investment advice, either on behalf of a particular security or an overall investment strategy. Neither Nasdaq, Inc. nor any of its affiliates makes any recommendation to buy or sell any security or any representation about the financial condition of any company. Statements regarding Nasdaq-listed companies or Nasdaq proprietary indexes are not guarantees of future performance. Actual results may differ materially from those expressed or implied. Past performance is not indicative of future results. Investors should undertake their own due diligence and carefully evaluate companies before investing. **ADVICE FROM A SECURITIES PROFESSIONAL IS STRONGLY ADVISED.**

© 2024. Nasdaq, Inc. All Rights Reserved.

Copyright © 2024 Sustainalytics. All rights reserved. This report contains information developed by Sustainalytics. Such information and data are proprietary of Sustainalytics and/or its third-party suppliers (Third-Party Data) and are provided for informational purposes only. They do not constitute an endorsement of any product or project, nor an investment advice and are not warranted to be complete, timely, accurate or suitable for a particular purpose. Their use is subject to conditions available at <https://www.sustainalytics.com/legal-disclaimers>

