



# Innovation Meets Sustainability:

Nasdaq Next Generation 100 ESG Index™

March 2022

# Index Objectives

- Reduce the degree to which the portfolio's economic value is at risk because of 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 and very low tracking error to the Nasdaq Next Generation 100 Index™ (NGX™).

# Index Mechanics

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

# Weighting Scheme

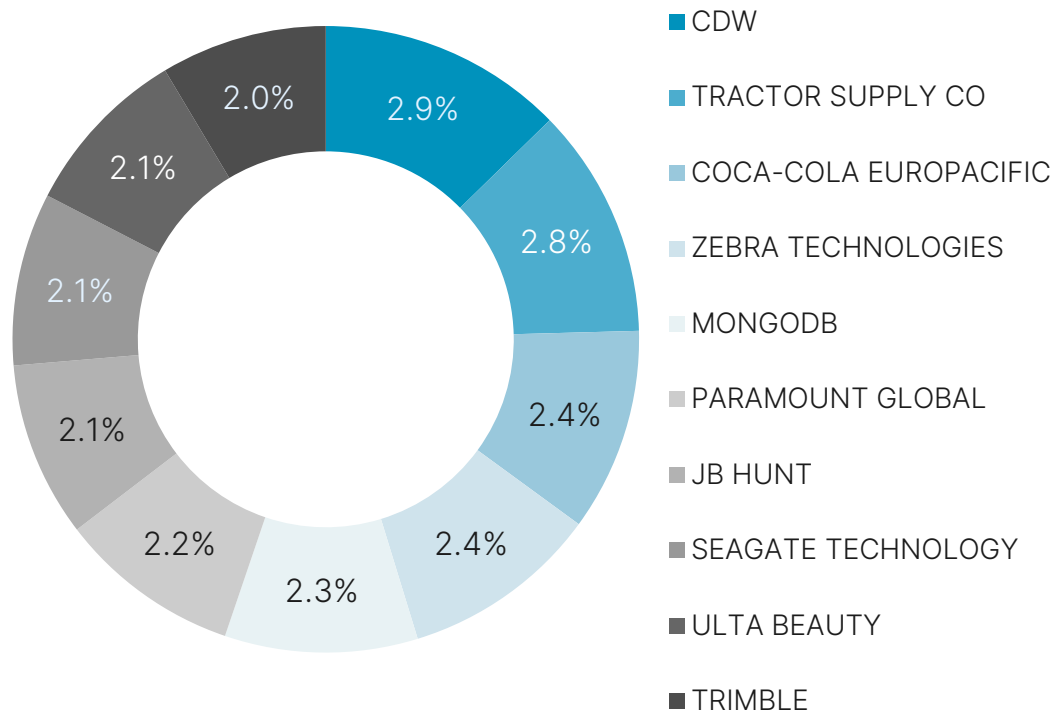
- The Nasdaq Next Generation 100 ESG Index is a modified market capitalization-weighted indexes that consider a company's ESG Risk Rating Score as an adjustment factor.
- Two factors play into the index weight of an issuer:
  - The Nasdaq Next Generation 100 Index Market Value, and
  - The ESG Risk Rating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

# Exclusions March 2022: NGXESG

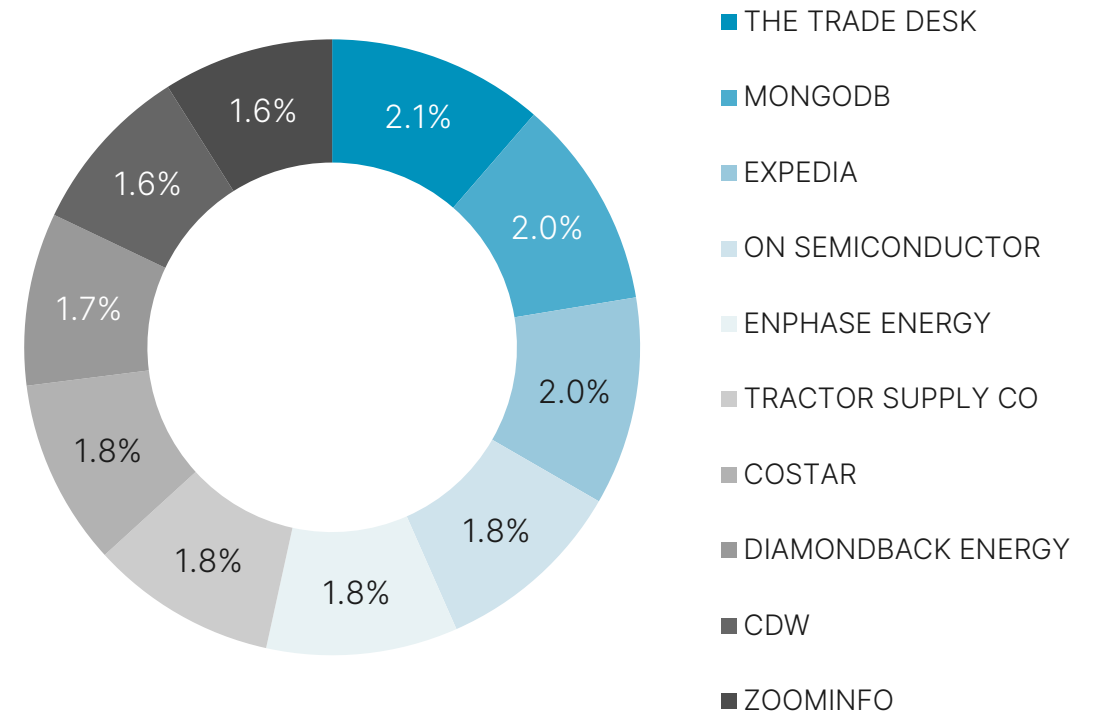
Symbol	Nasdaq Next Generation 100 ESG Reason for Exclusion	NGX Weight (%)	Company Name	ICB Industry
FANG	ESG Risk Rating Score is greater than 40. Revenue from oil & gas production and shale energy extraction.	1.66	Diamondback Energy	Energy
CZR	Revenue from gambling operations.	1.13	Caesars Entertainment	Consumer Discretionary
BNTX	ESG Risk Rating Score has not yet been determined.	1.02	BioNTech	Health Care
LNT	Revenue from oil & gas generation and thermal coal power generation.	1.07	Alliant Energy	Utilities
APP	ESG Risk Rating Score has not yet been determined.	0.88	AppLovin	Technology
AXON	ESG Risk Rating Score is greater than 40. Manufacture riot control protection equipment and riot control weapons.	0.67	Axon Enterprise	Industrials
AFRM	ESG Risk Rating Score has not yet been determined.	0.71	Affirm Holdings	Industrials
DKNG	Revenue from gambling operations.	0.54	DraftKings	Consumer Discretionary
PENN	Revenue from gambling operations.	0.49	Penn National Gaming	Consumer Discretionary
PLTK	ESG Risk Rating Score has not yet been determined.	0.54	Playtika	Consumer Discretionary
MNDY	ESG Risk Rating Score has not yet been determined.	0.47	Monday.Com	Technology

# Top 10 Constituents: NGXESG vs NGX

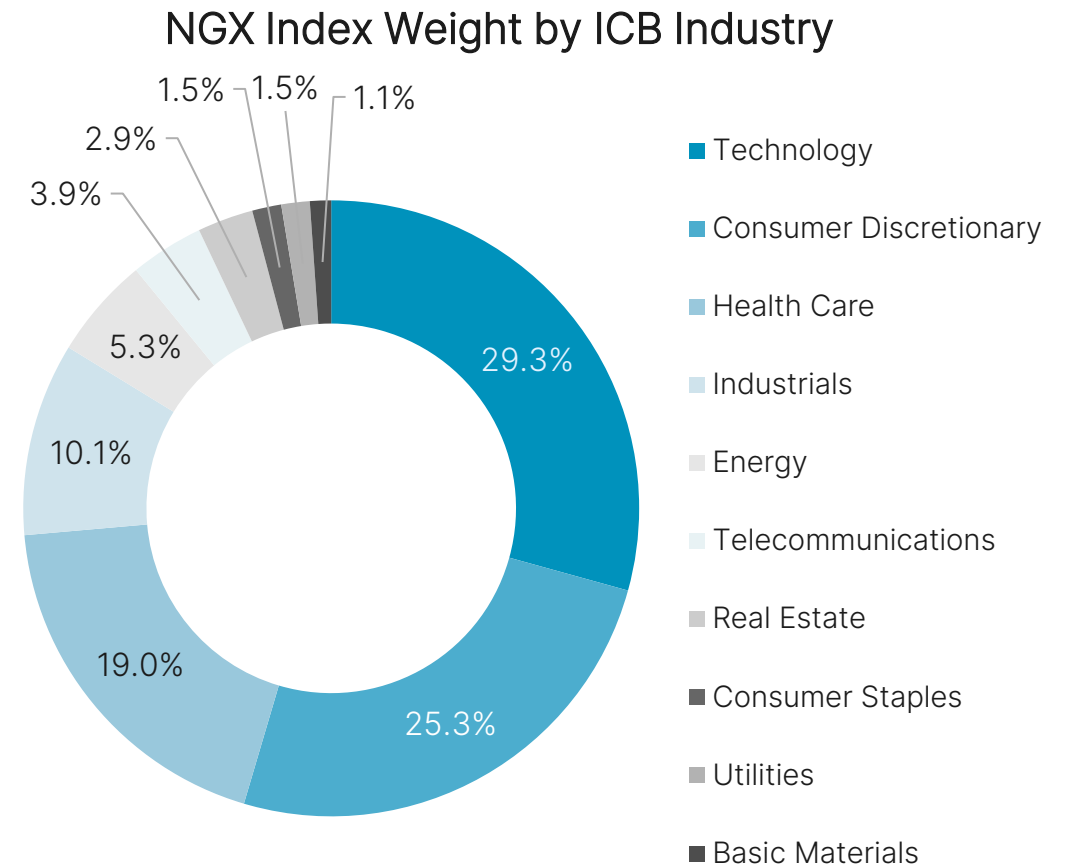
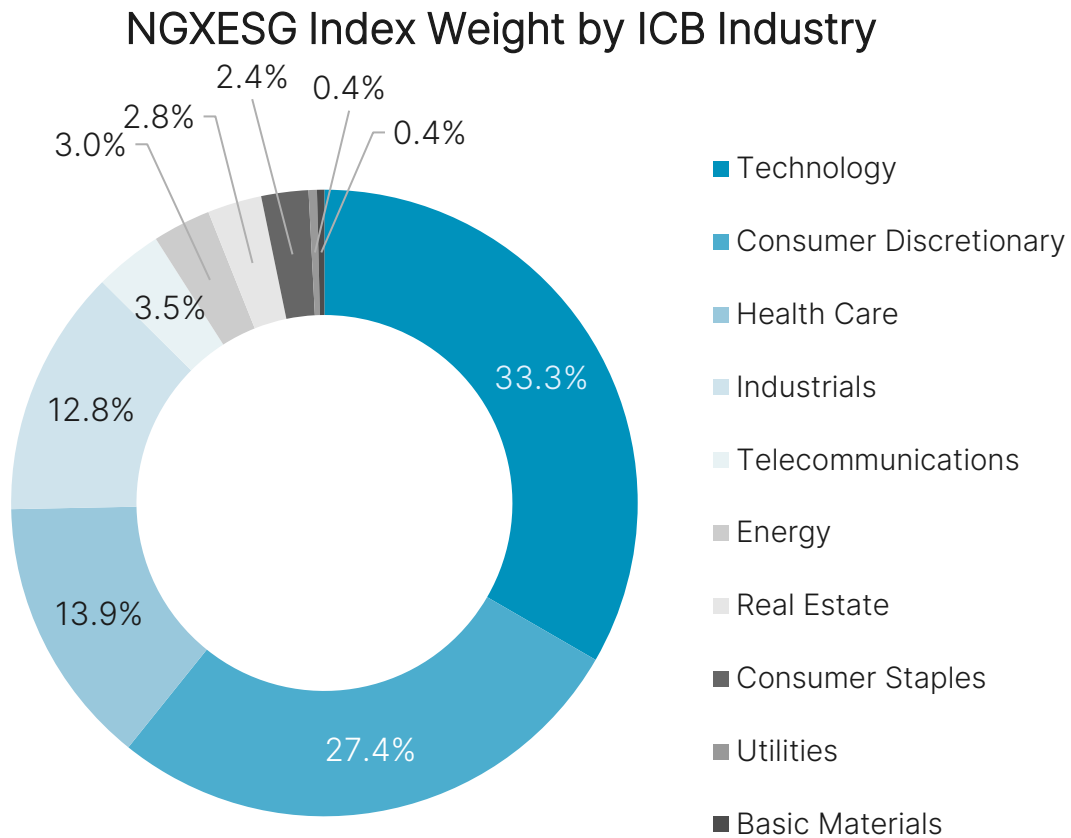
NGXESG: Top 10 Weight = 23.2%



NGX: Top 10 Weight = 18.3%

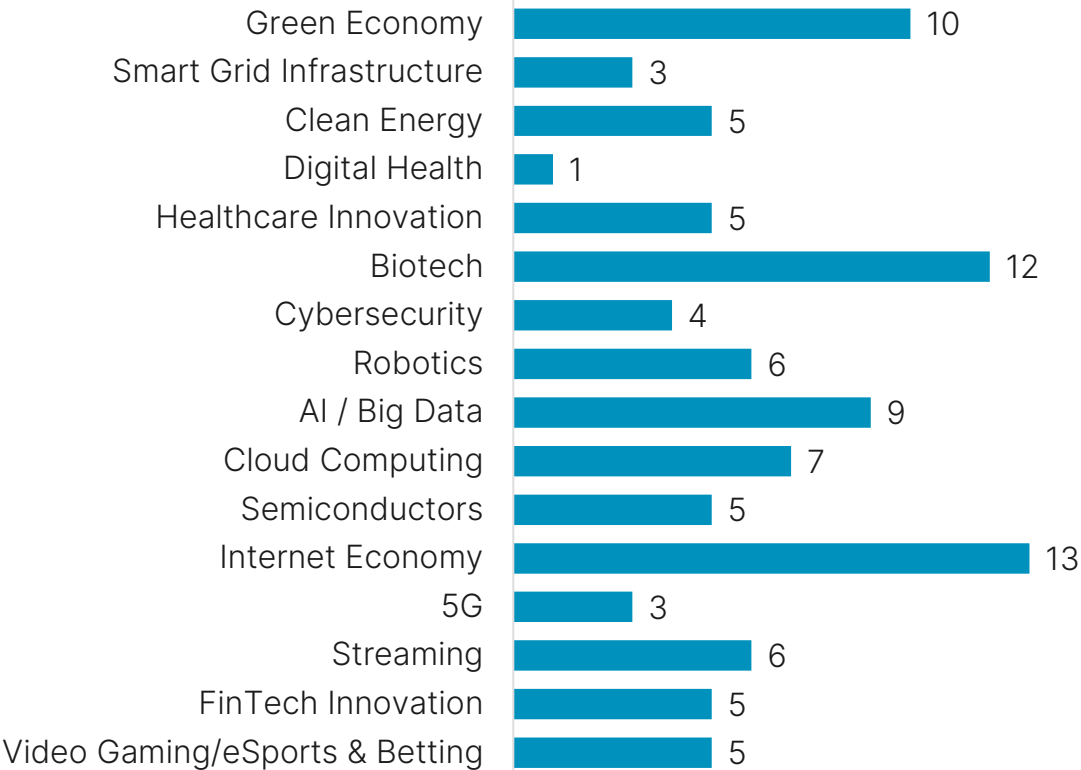


# Sector Exposures: NGXESG vs NGX

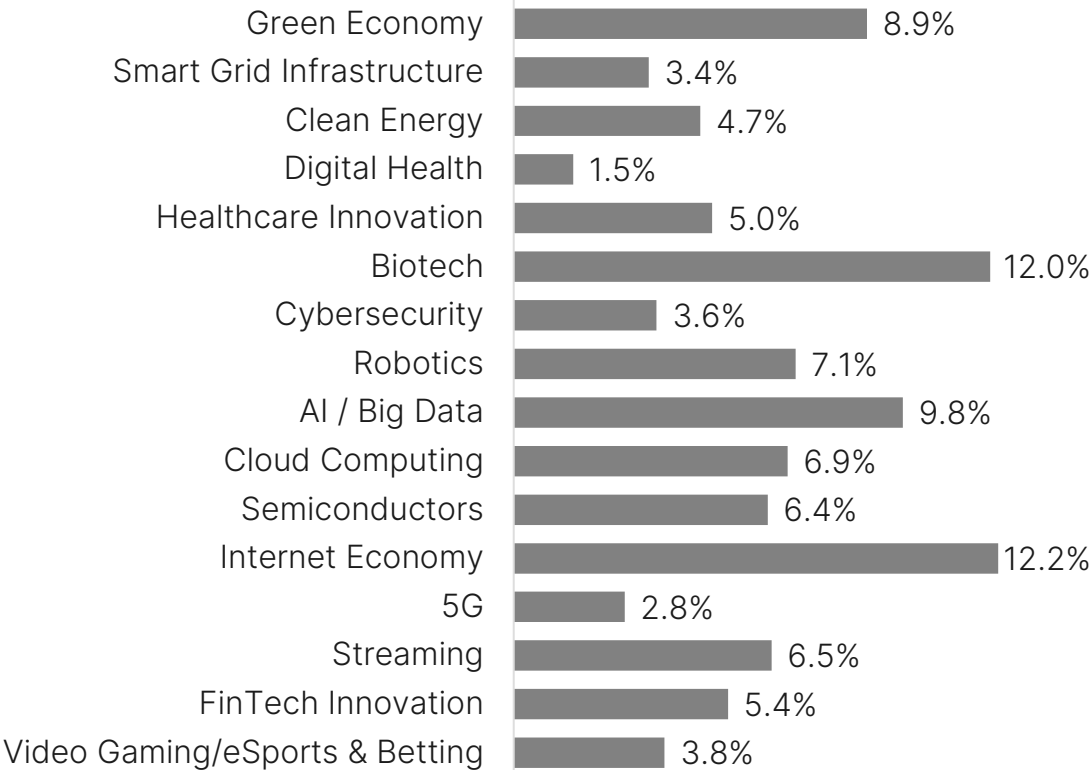


# Nasdaq Next Generation 100 by Thematic Exposures

# of Constituents per Theme



Index Weight per Theme

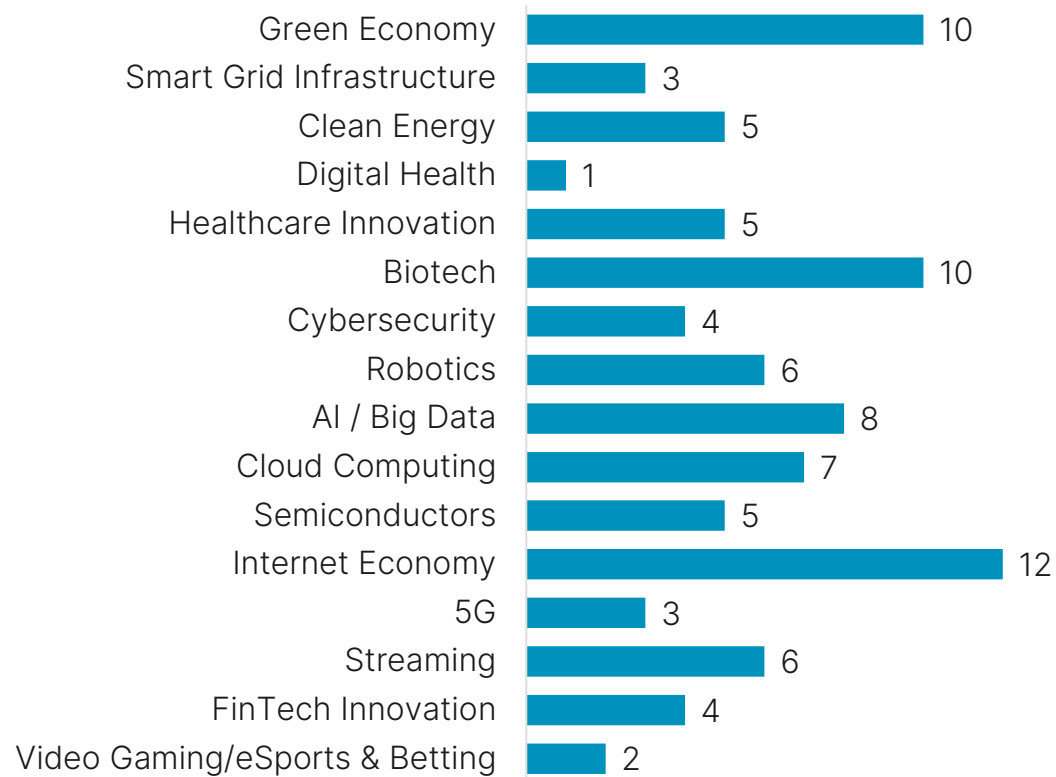


Source: Nasdaq, Bloomberg, FactSet. Data as of 12/31/2021. Based on overlap with existing Nasdaq Thematic Indexes, except for Digital Health, Healthcare Innovation, 5G, Streaming, and Video Gaming/eSports & Betting where competitor products were analyzed.

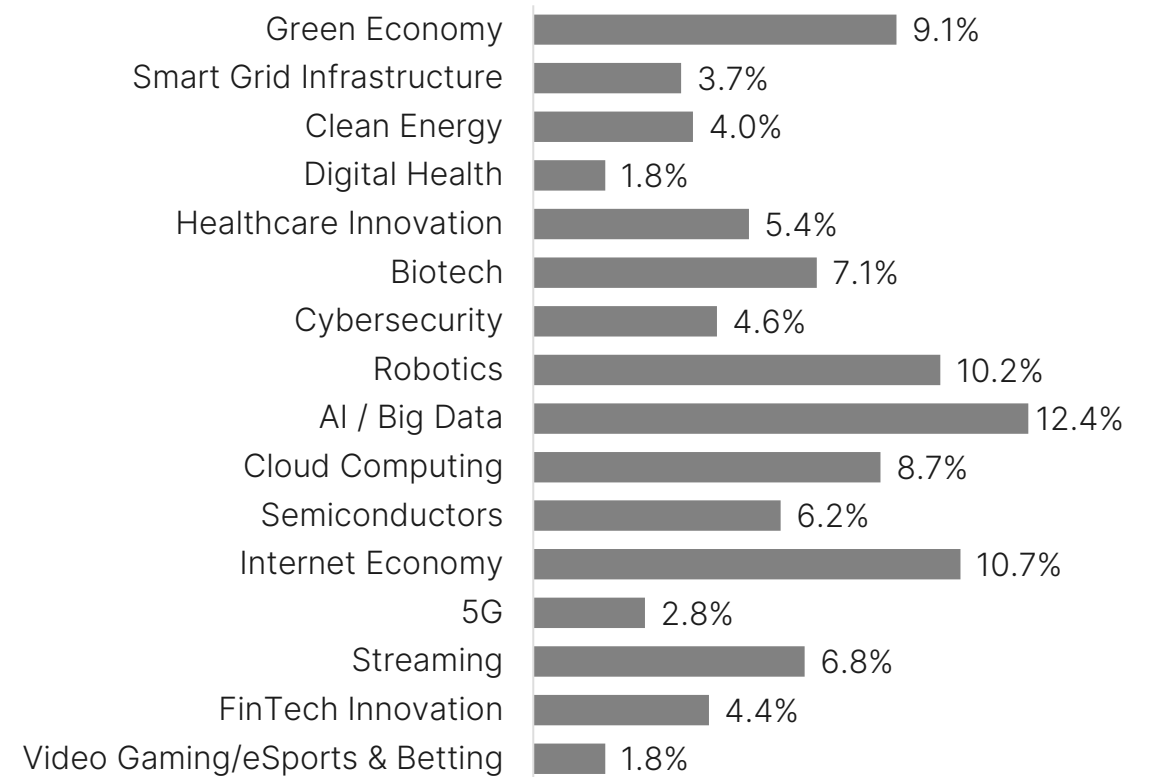


# Nasdaq Next Generation 100 ESG by Thematic Exposures

## # of Constituents per Theme



## Index Weight per Theme



Source: Nasdaq, Bloomberg, FactSet. Data as of 12/31/2021.

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

# Top 10 Largest Overweights: NGXESG vs NGX

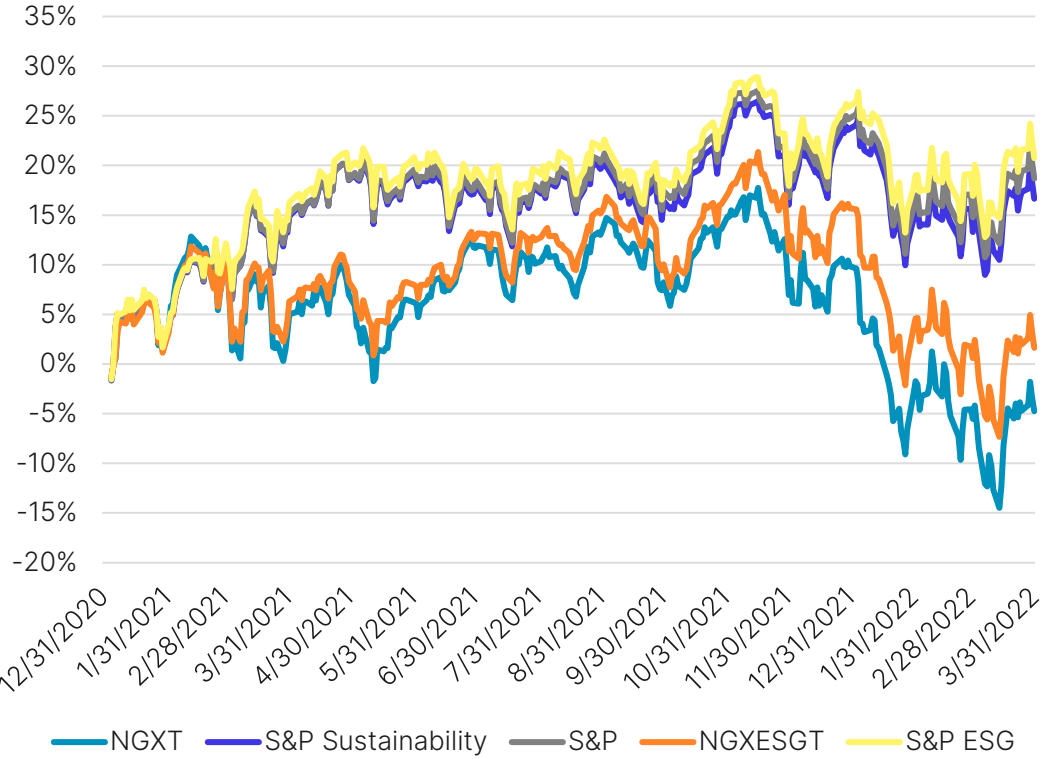
Symbol	NGXESG Weight (%)	NGX Weight (%)	Difference Weight (%)	Company Name	ICB Industry
CDW	3.01	1.64	1.36	CDW Corporation	Technology
TSCO	2.79	1.79	1.00	Tractor Supply Co	Consumer Discretionary
ZBRA	2.40	1.50	0.91	Zebra Technologies	Industrials
CCEP	2.41	1.51	0.89	Coca-Cola Europacific	Consumer Staples
STX	2.11	1.34	0.77	Seagate Technology	Technology
TRMB	1.99	1.23	0.75	Trimble. Inc.	Industrials
JBHT	2.19	1.43	0.75	J B Hunt	Industrials
POOL	1.86	1.16	0.70	Pool Corporation	Consumer Discretionary
WDC	1.76	1.06	0.70	Western Digital Corp	Technology
PARA	2.20	1.57	0.64	Paramount Global	Consumer Discretionary

# Top 10 Largest Underweights: NGXESG vs NGX

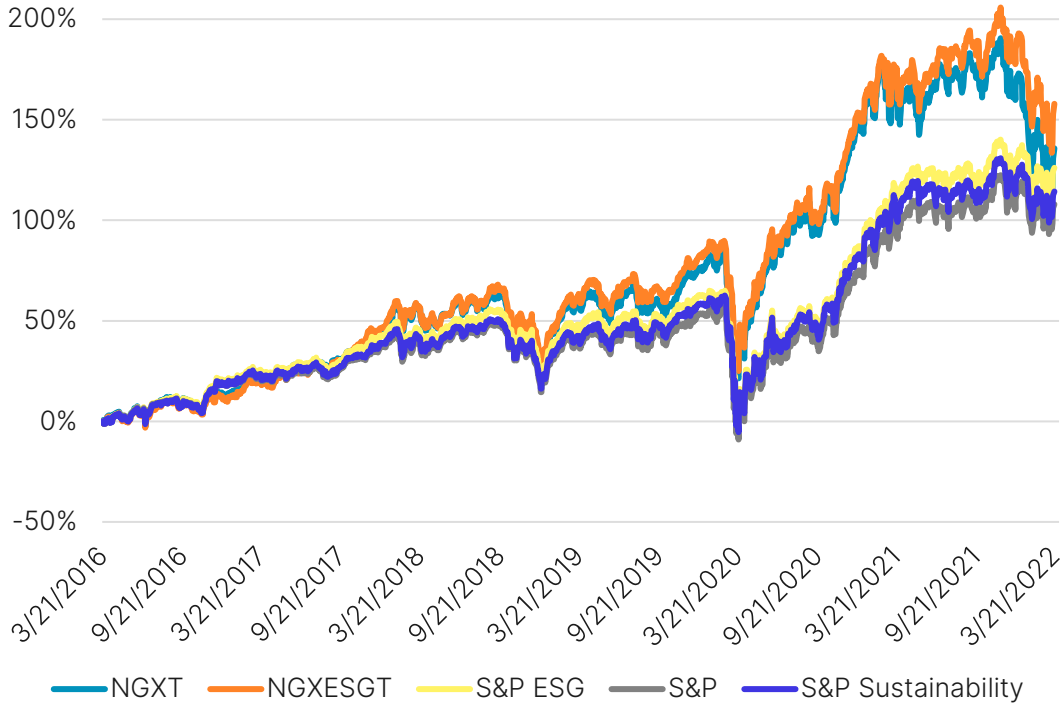
Symbol	NGXESG Weight (%)	NGX Weight (%)	Difference Weight (%)	Company Name	ICB Industry
HZNP	0.24	1.63	-1.39	Horizon Therapeutics	Health Care
STLD	0.37	1.09	-0.72	Steel Dynamics	Basic Materials
PODD	0.61	1.26	-0.65	Insulet	Health Care
ENPH	1.20	1.84	-0.64	Enphase Energy	Energy
ZI	1.05	1.64	-0.59	ZoomInfo	Technology
ALNY	0.83	1.34	-0.51	Alnylam Pharmaceuticals	Health Care
QRVO	0.42	0.92	-0.50	Qorvo	Technology
UAL	0.60	1.03	-0.43	United Airlines	Consumer Discretionary
RPRX	0.72	1.15	-0.43	Royalty Pharma	Health Care
HOLX	0.89	1.31	-0.42	Hologic	Health Care

# Performance – NGX vs. NGXESG

12/31/2020 – 3/31/2022



Since Beginning of Backtest  
3/21/2016 – 3/31/2022



# ESG Comparisons – NGX/NGXESG

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	--	100	n/a	21.60	21.80
Nasdaq Next Generation ESG 100 Index	Nasdaq Next Generation 100 Index	89	11%	18.60	21.00
S&P MidCap 400 Index	--	405	n/a	23.50	24.10
S&P MidCap 400 Sustainability Screened Index	S&P MidCap 400 Index	377	7%	23.10	23.50
S&P MidCap 400 ESG Index	S&P MidCap 400 Index	250	38%	22.70	23.20

# RESOURCES

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## RESOURCES

# Nasdaq Next Generation 100 ESG Index

- 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

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## 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.

## 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.

# 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 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

# Exclusions based on business involvements

### Business Involvement 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)

## Weighting scheme – continued

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

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

## APPENDIX

# 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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