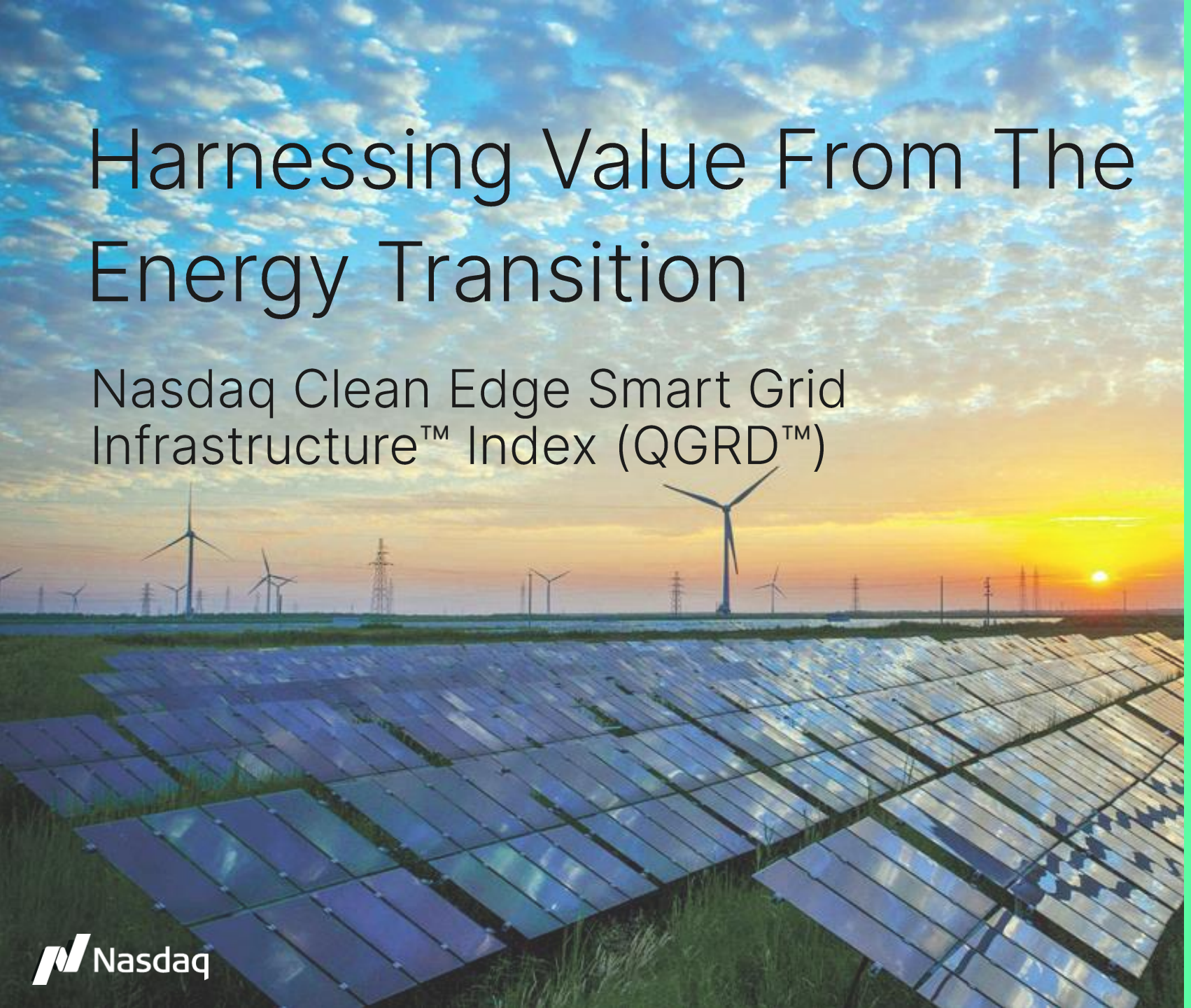
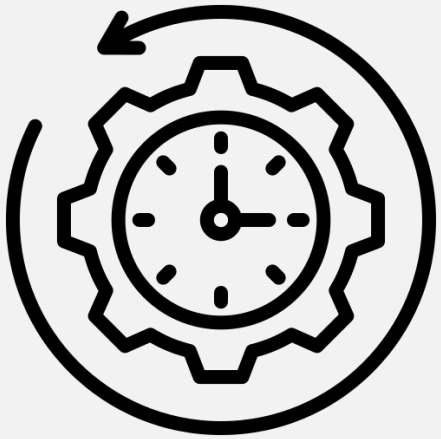
Harnessing Value From The Energy Transition

Nasdaq Clean Edge Smart Grid Infrastructure™ Index (QGRD™)



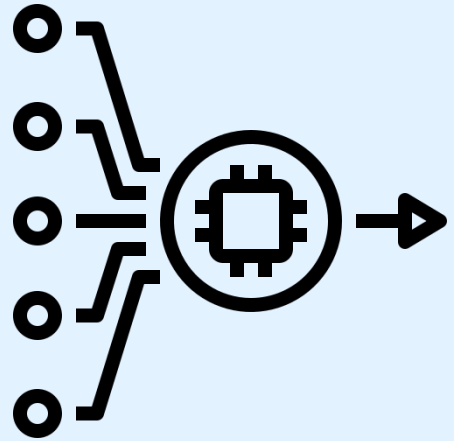
Nasdaq

The Divide Between Innovation and Infrastructure



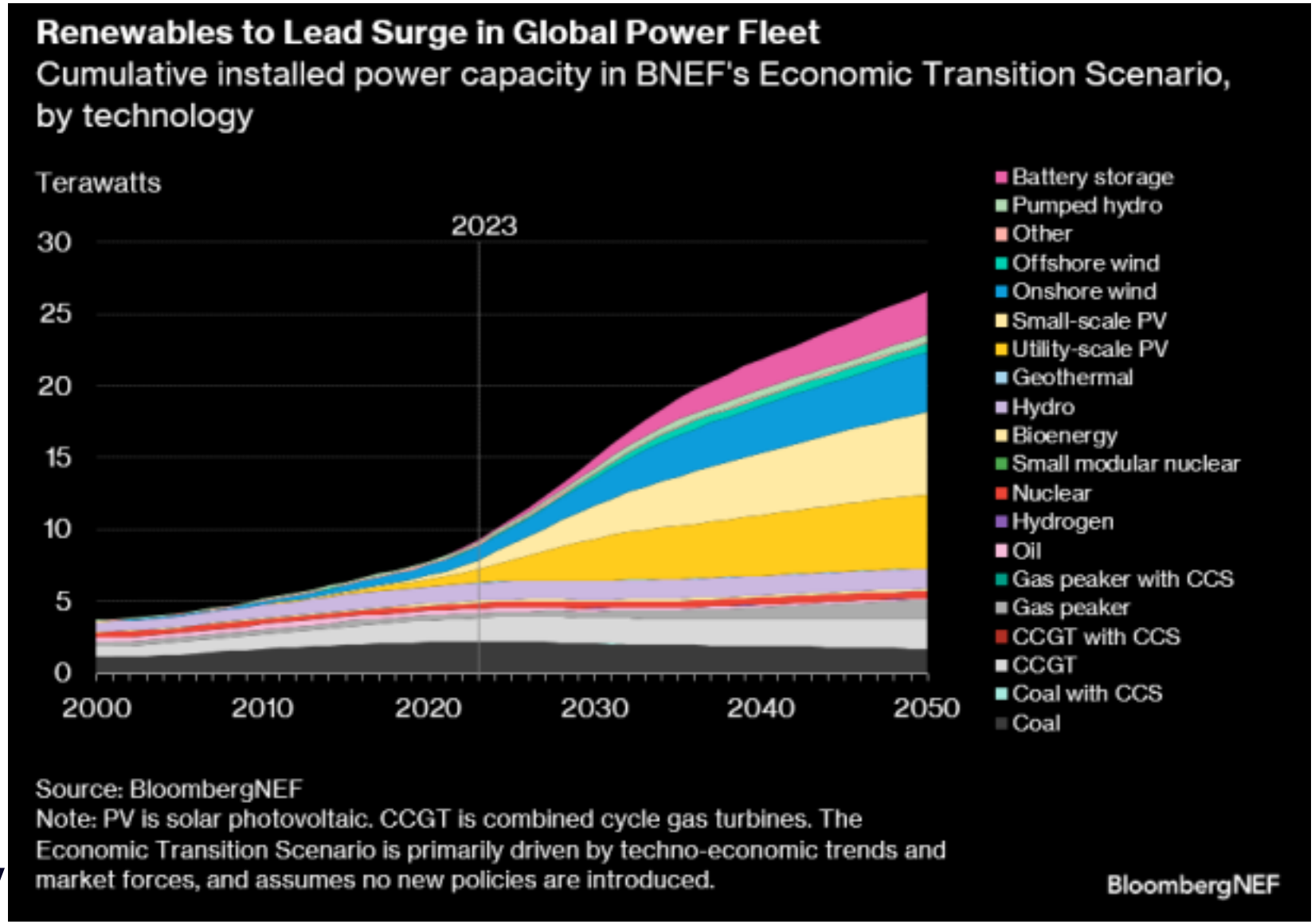
- The power grid that underpins the modern economy was constructed roughly 50 years ago
- Originally designed to support a one-way flow of electricity from fossil fuel-based power plants to consumers

- New sources of energy such as solar, wind and storage require significant investments in infrastructure
- New modes of energy production and consumption cannot be fully realized until systems are modernized and adapted to reflect technological innovations



Source: McKinsey & Co., Powermag

Massive Increase in Power Supply from Renewables

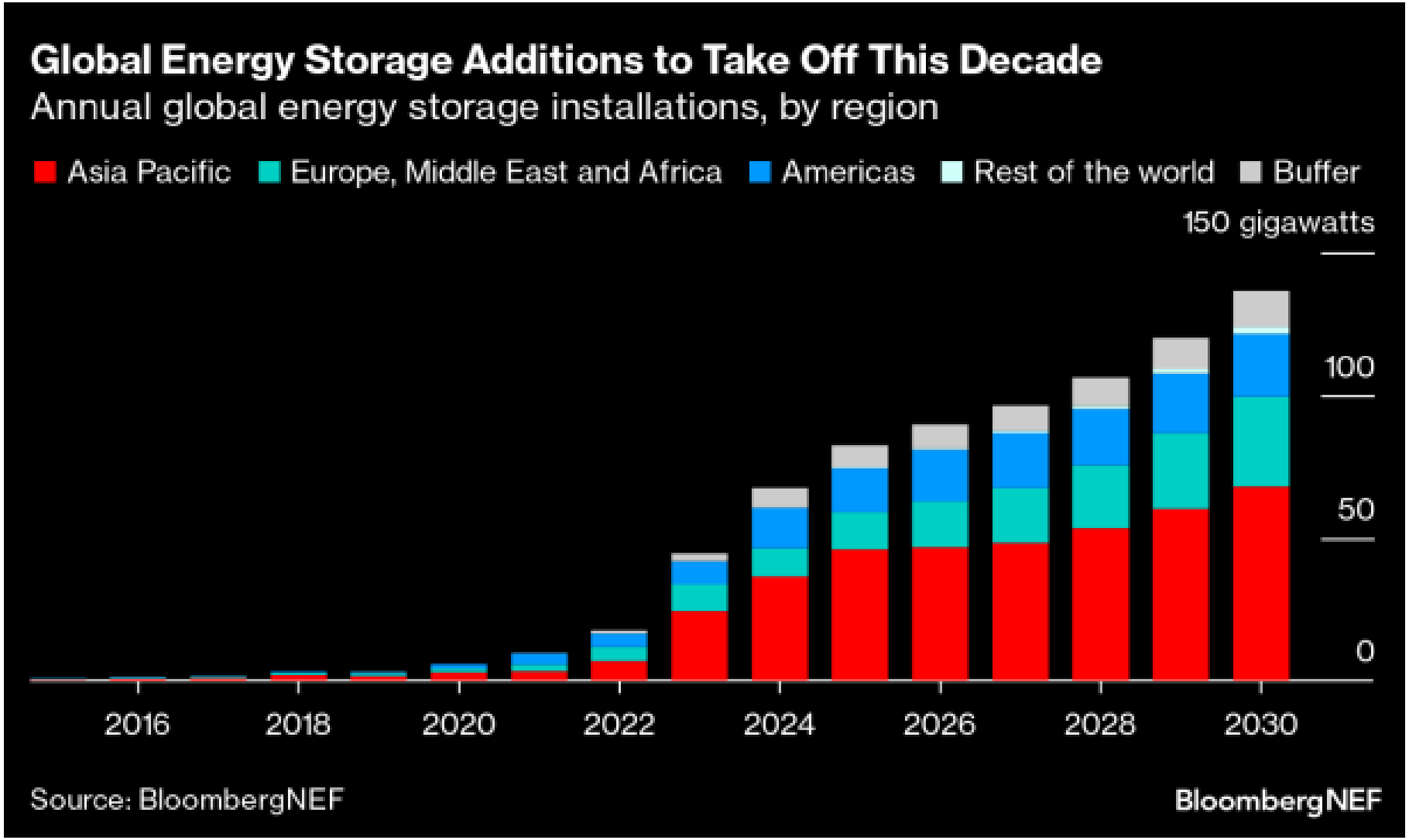


Per BloombergNEF's research, the amount of renewables installed capacity is expected to more than double from 4.1 terawatts in 2023 to 8.9TW in 2030, then nearly double again to 17.2TW by 2050 (per base case i.e. "Economic Transition Scenario").

Per BloombergNEF's New Energy Outlook 2024:

"The shift to renewable energy and the electrification of road transport, buildings and industry necessitates a concurrent overhaul of the power grid. Global annual power grid investment in both the base case and the climate scenario rise, reaching two to three times historical annual investment, which has hovered around $300 billion between 2020 and 2023."

The Massive Increase in Energy Storage Needs

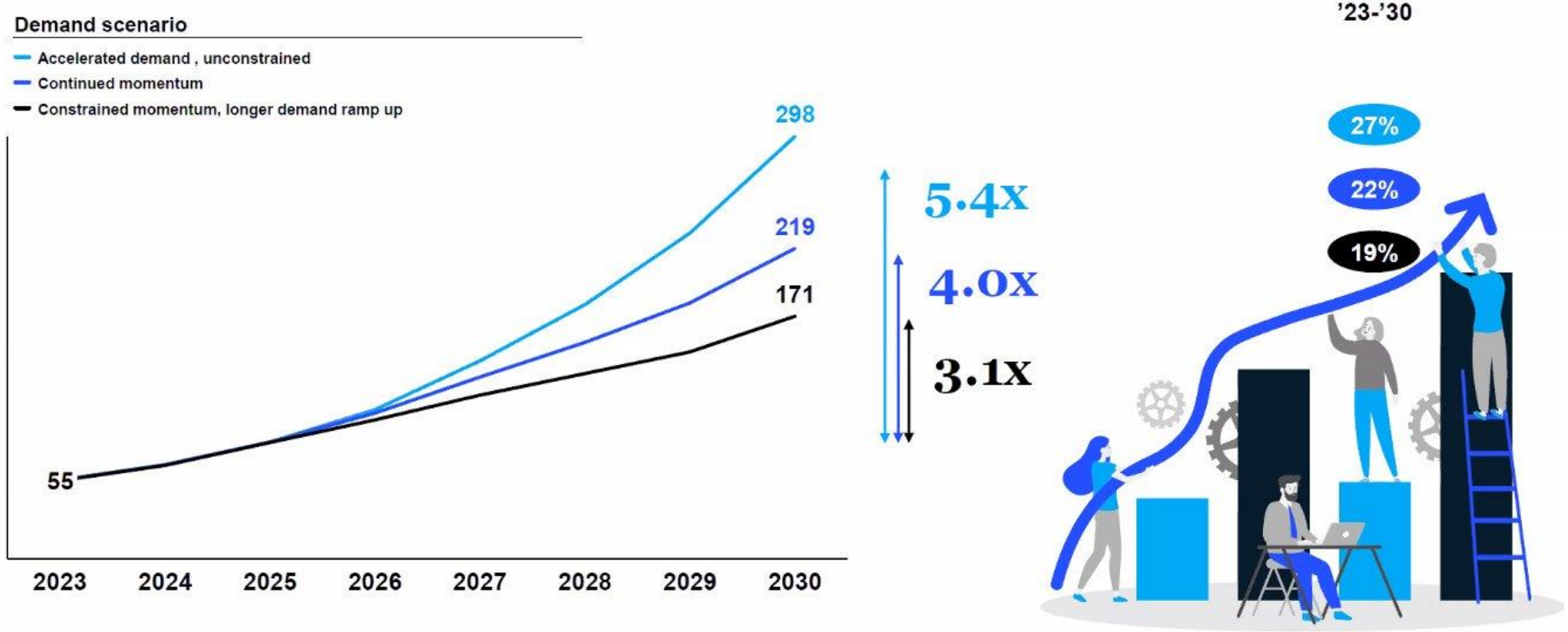


Per BloombergNEF's New Energy Outlook 2024: *"The remarkable growth story of renewables hits an economic wall though, as the power system struggles to integrate further solar into the system after the technology reaches an economic limit after 2030. Simply adding more batteries won't be enough. To take the transition to the next level the focus needs to shift to the enablers that drive deeper decarbonization: increased flexibility on both demand and supply side and building the future grid that can connect an increasingly decentralized and dynamic power system."*

The Massive Increase in Power Demand from AI

Global data center demand will more than triple to atleast ~170 GW by 2030 at 19% CAGR

Estimated Global Data Center Demand, in GW



Source: McKinsey Proprietary datacenter demand model

A Catalyst For The Clean Energy Future

Expand the production of clean energy and lower the overall cost of energy

Bolster U.S. self-sufficiency in areas of clean energy, semiconductors, and healthcare

Reduces prescription drug costs for 5-7 million Medicare beneficiaries

Adopts consumer tax credits for individuals that purchase electric vehicles

The Inflation Reduction Act

Intends to reduce carbon emissions by 40% by 2030

Expansion of production credits by $30 billion to facilitate sustainable energy investments

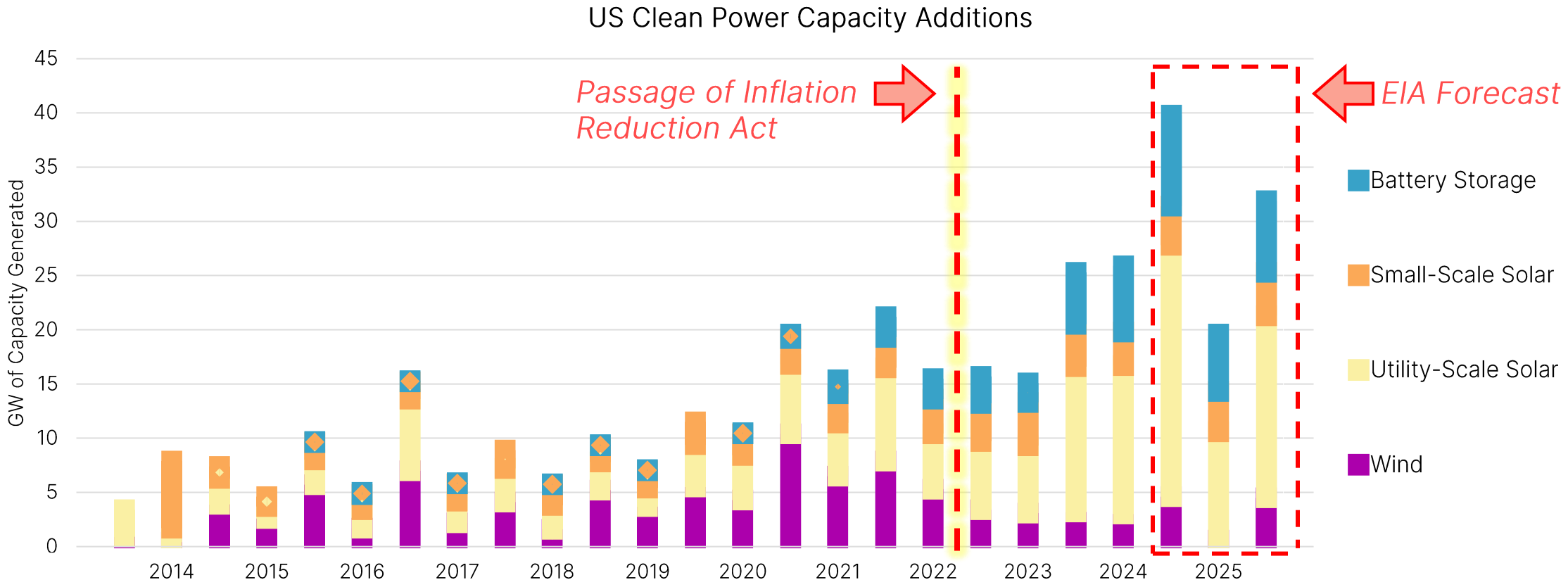
Aims to create 950 million solar panels, 120k wind turbines, and 2,300 grid-scale battery plants

Implements financial incentives for consumers and producers alike to promote an energy transition

Sources: Whitehouse.gov, Wall Street Journal

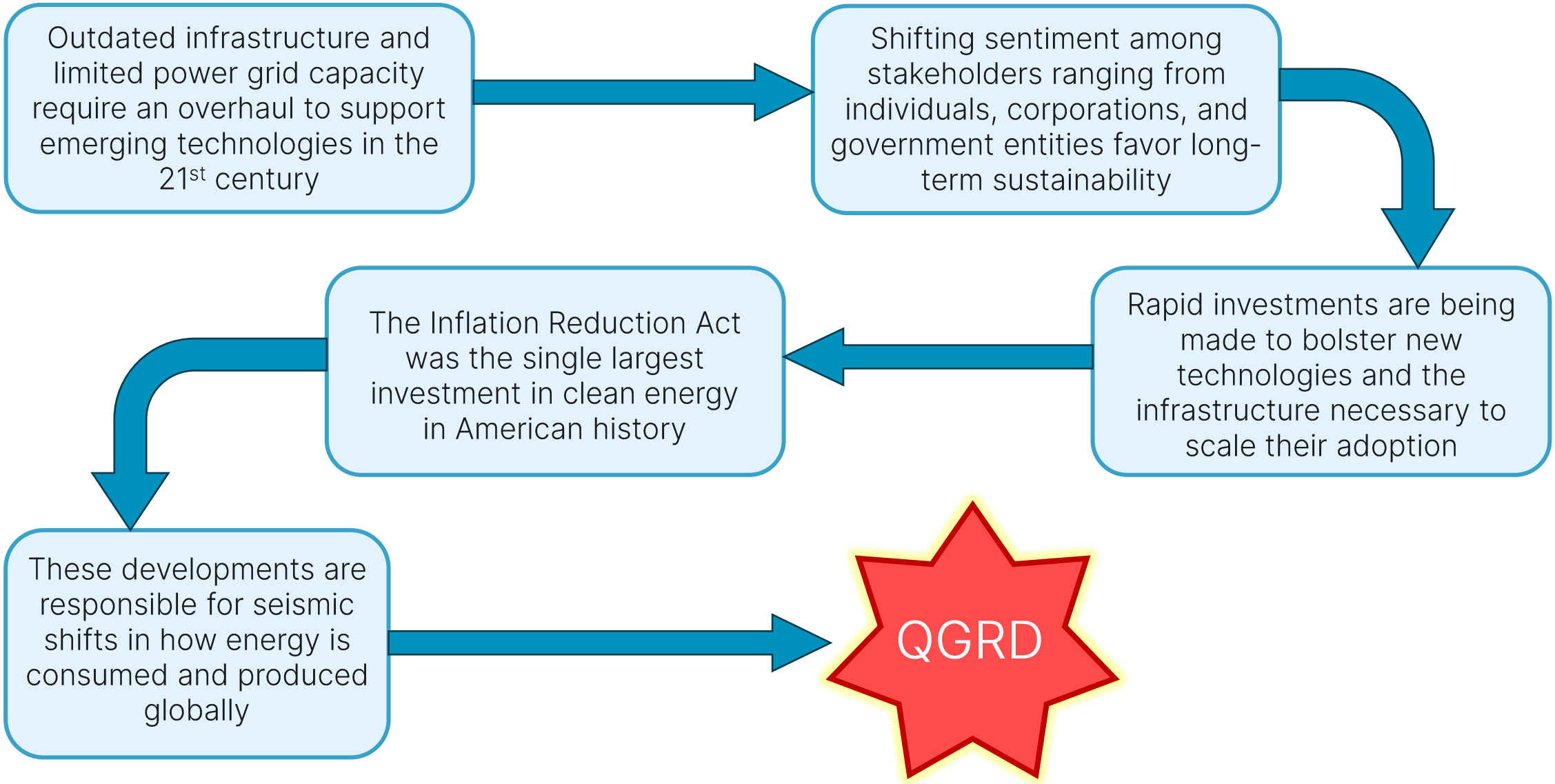
The Inflation Reduction Act (IRA) In Action

US EIA data suggests that the second half of 2024 will mark the fastest pace of clean power additions in American history by a large margin, over 40 GW driven by Utility-Scale Solar and Battery Storage. The IRA aims to reduce carbon emissions by ~40% by 2030 via >$300 billion in clean energy investments, including energy transmission



Source: US Energy Information Administration Data for the Period between 2013 and Projections through 2025

The Energy Transition Is Well Underway



Nasdaq Clean Edge Smart Grid Infrastructure Index (QGRD)

QGRD Methodology Overview

Eligibility Criteria

- Be classified as a smart grid, electric infrastructure, EV network, smart building, software, or other grid-related activities company according to Clean Edge
- Be listed on an index-eligible global stock exchange
- Have a minimum worldwide market capitalization of $100 million
- Have a minimum three-month average daily dollar trading volume of $500,000
- A minimum free float of 20%

Weighting Scheme

- Clean Edge categorizes each constituent as either ‘Pure Play’ or ‘Diversified’. These collective category weights cannot exceed 80% and 20% respectively
- No more than 5 ‘Pure Play’ securities may exceed 4% of the entire index and no single ‘Pure Play’ security can exceed 8%
- No ‘Diversified’ securities may exceed a weight of 2% of the entire index
- Modified free float market capitalization-weighting index
- Quarterly rebalances and semiannual reconstitutions

Source: Nasdaq Global Indexes

QGRD/CELS Methodology Overview

QGRD

Modified free float market capitalization-weighting index

Companies are classified as either Pure Play or Diversified, with weights not exceeding 80% and 20% respectively

Pure Play: two-stage weight adjustment
Diversified: one-stage weight adjustment

Pure Play Stage 1: No security may exceed 8% of the index
Pure Play Stage 2: Stage 1 weights maintained for securities with five largest free float market capitalization
For other Pure Play Securities, no weight may exceed 4% of the index

Diversified: No security may exceed 2% of the entire index

CELS

Modified market capitalization-weighting index

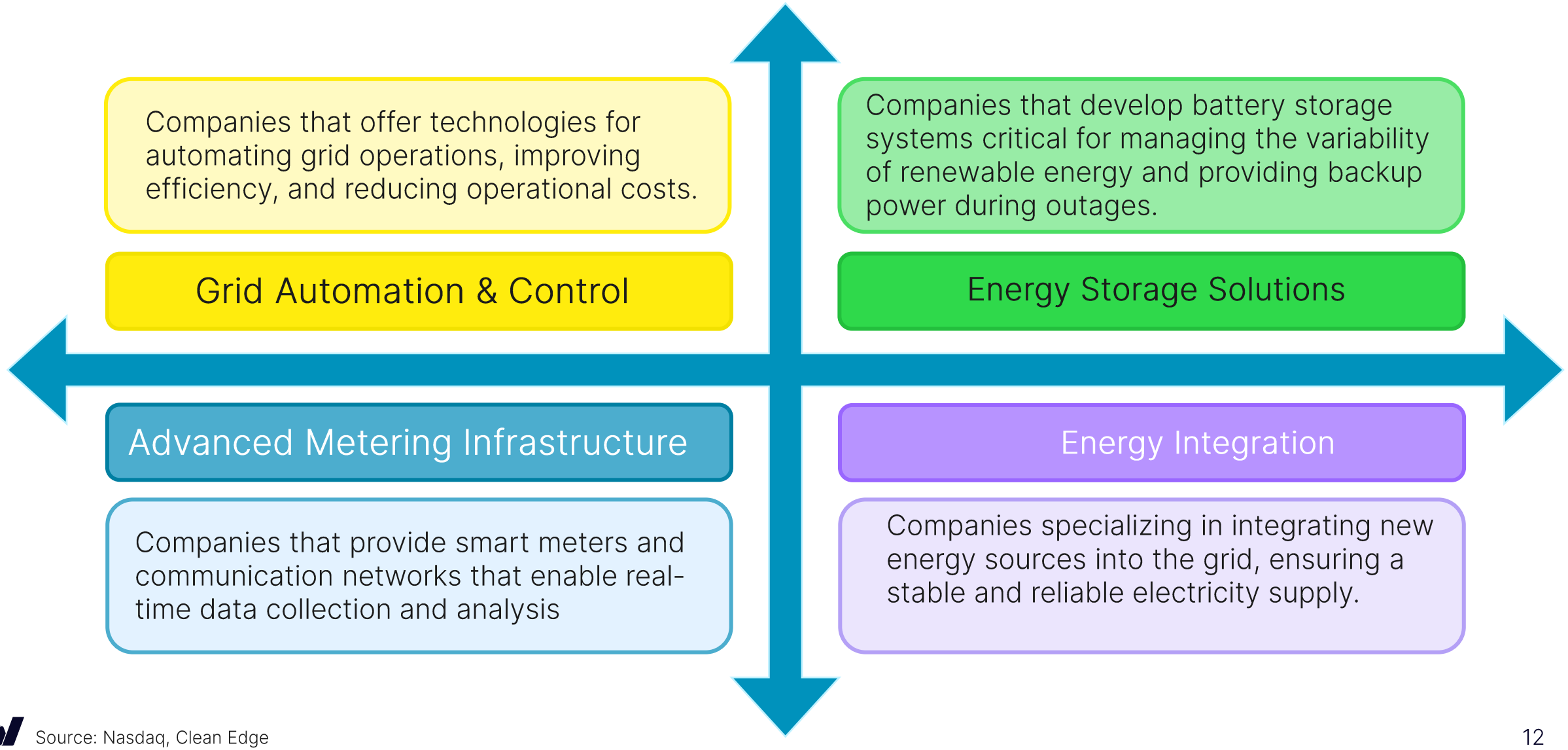
No distinction drawn between Pure Play or Diversified companies

Adopts a two-stage weight adjustment process for all securities

Stage 1: No index security may exceed 8%.
Stage 2: Stage 1 weights maintained for securities with five largest market capitalizations
For all other securities, no weight may exceed 4%

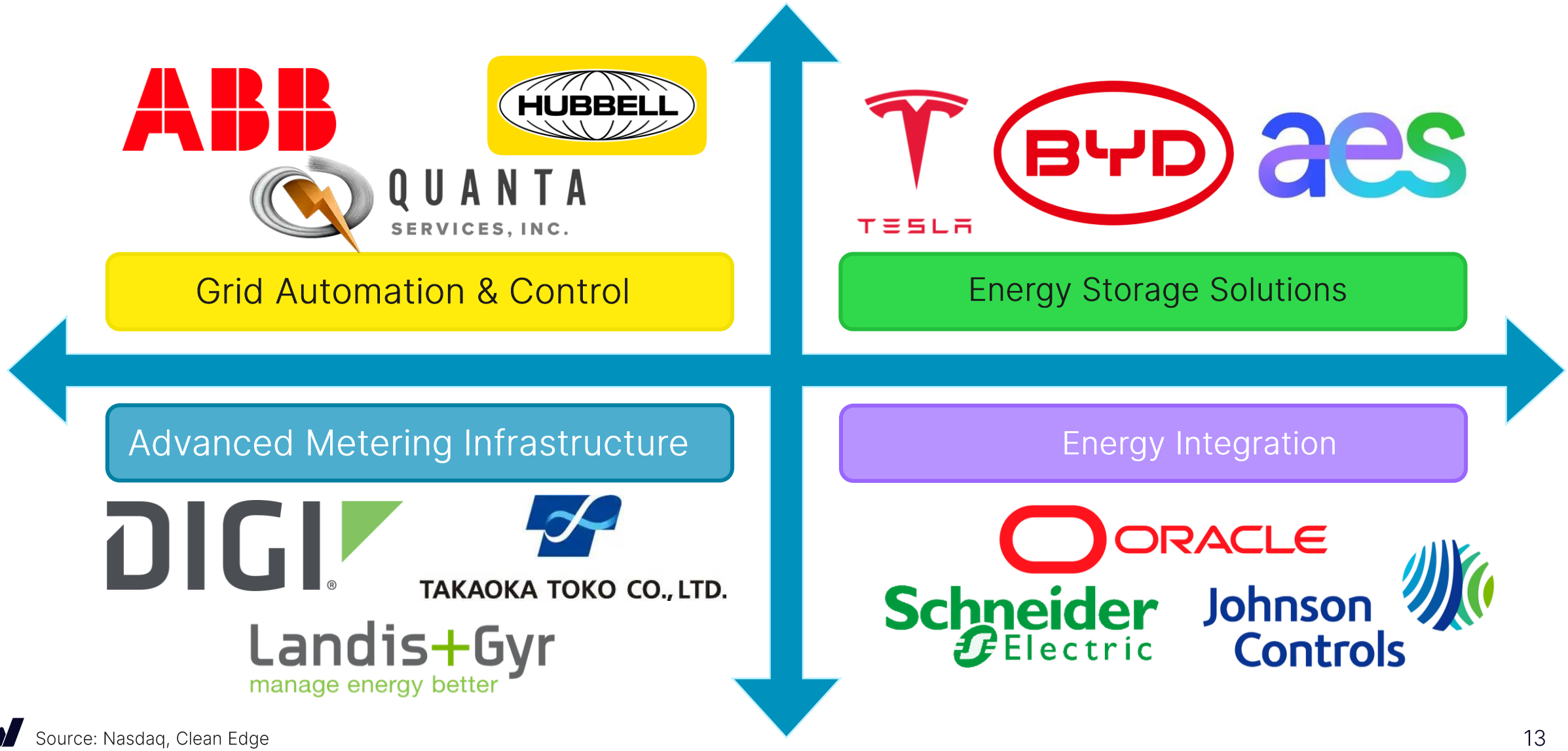
Source: Nasdaq Global Indexes

QGRD Areas of Focus



Source: Nasdaq, Clean Edge

QGRD Areas of Focus



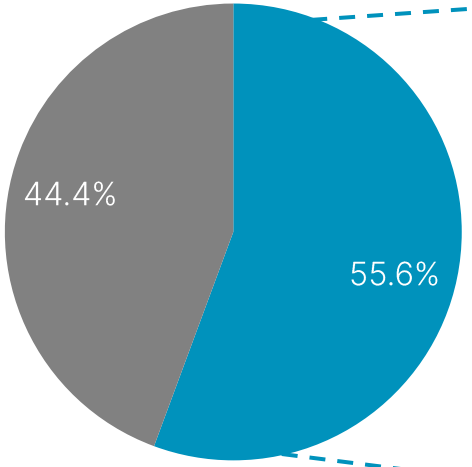
Source: Nasdaq, Clean Edge

QGRD Index Composition

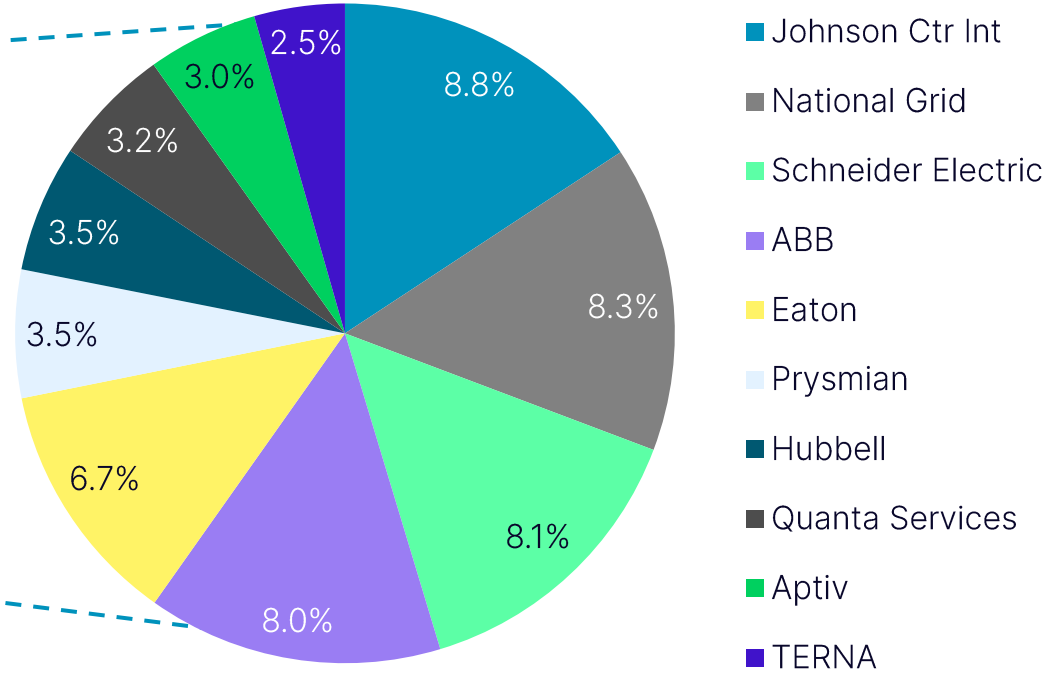
The top 10 holdings account for 55.6% of the total index weight as of February 28, 2025.

The current combined weight of the top 10 firms has slightly declined over the past decade from 60.1% in 2014.

Top 10 vs. Rest of the Index



Top 10 Index Weights, as of February 28, 2025 (%)



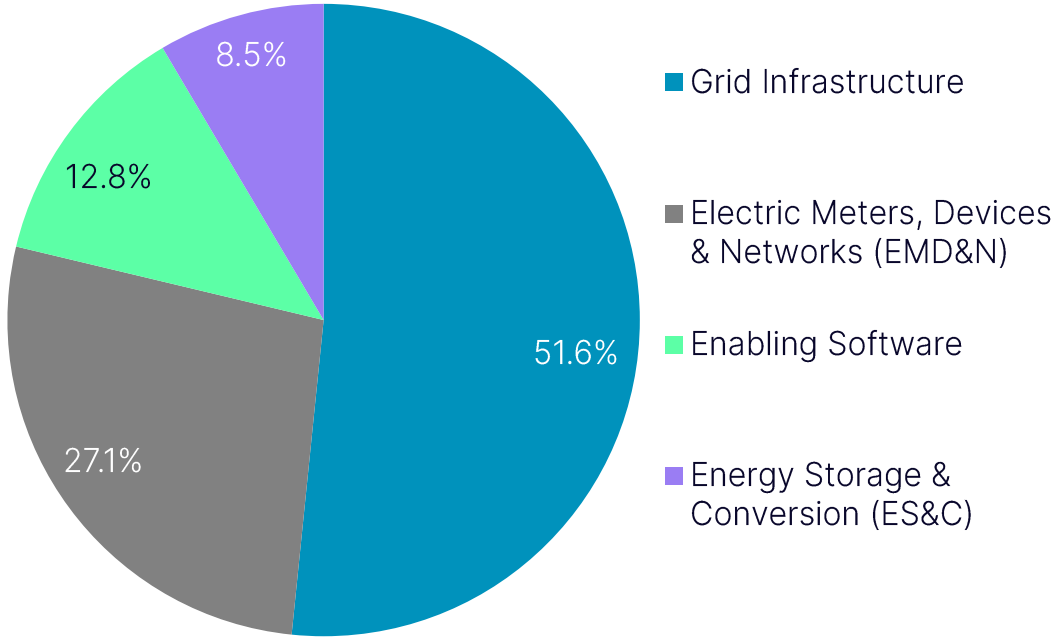
Source: Nasdaq Global Indexes as of February 28, 2025. All figures above were rounded to the nearest 10th of a decimal place.

Sector Allocation and Clean Energy Exposure

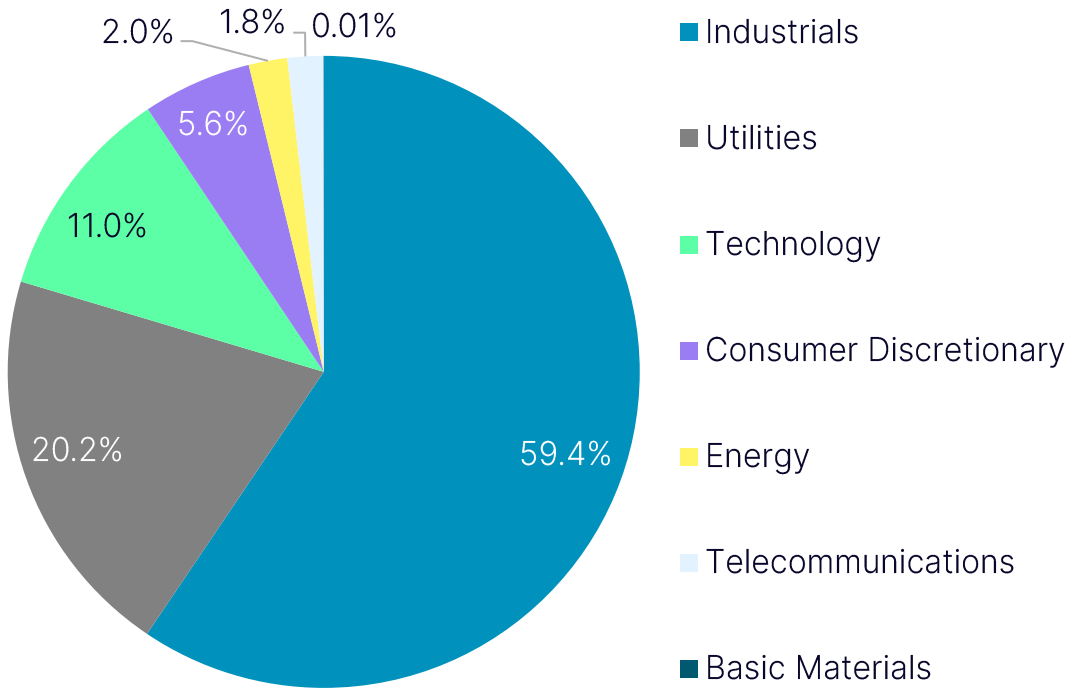
~50% of QGRD is comprised of firms with primary exposure to Grid Infrastructure as defined by Clean Edge

~80% of QGRD constituent weightings are categorized as Industrials or Utilities under existing ICB classification

QGRD Index Weight by Clean Edge Category



QGRD ICB Industry Allocation (%)



Source: Nasdaq, Bloomberg, Clean Edge data as of February 28, 2025

QGRD Sector Attribution

1-Year Returns (%), 12/29/2023-12/31/2024	
Sectors	Contribution to Total Returns (%)
Electric Meters, Devices & Networks	7.1
Energy Storage & Conversion	-2.6
Enabling Software	4.8
Grid Infrastructure	7.0

Note: Total Returns for the index for the 1-year period ending 12/31/2024 was 16.3%

3-Year Returns (%), 12/29/2021-12/31/2024	
Sectors	Contribution to Total Returns (%)
Electric Meters, Devices & Networks	3.2
Energy Storage & Conversion	-7.1
Enabling Software	8.7
Grid Infrastructure	18.7

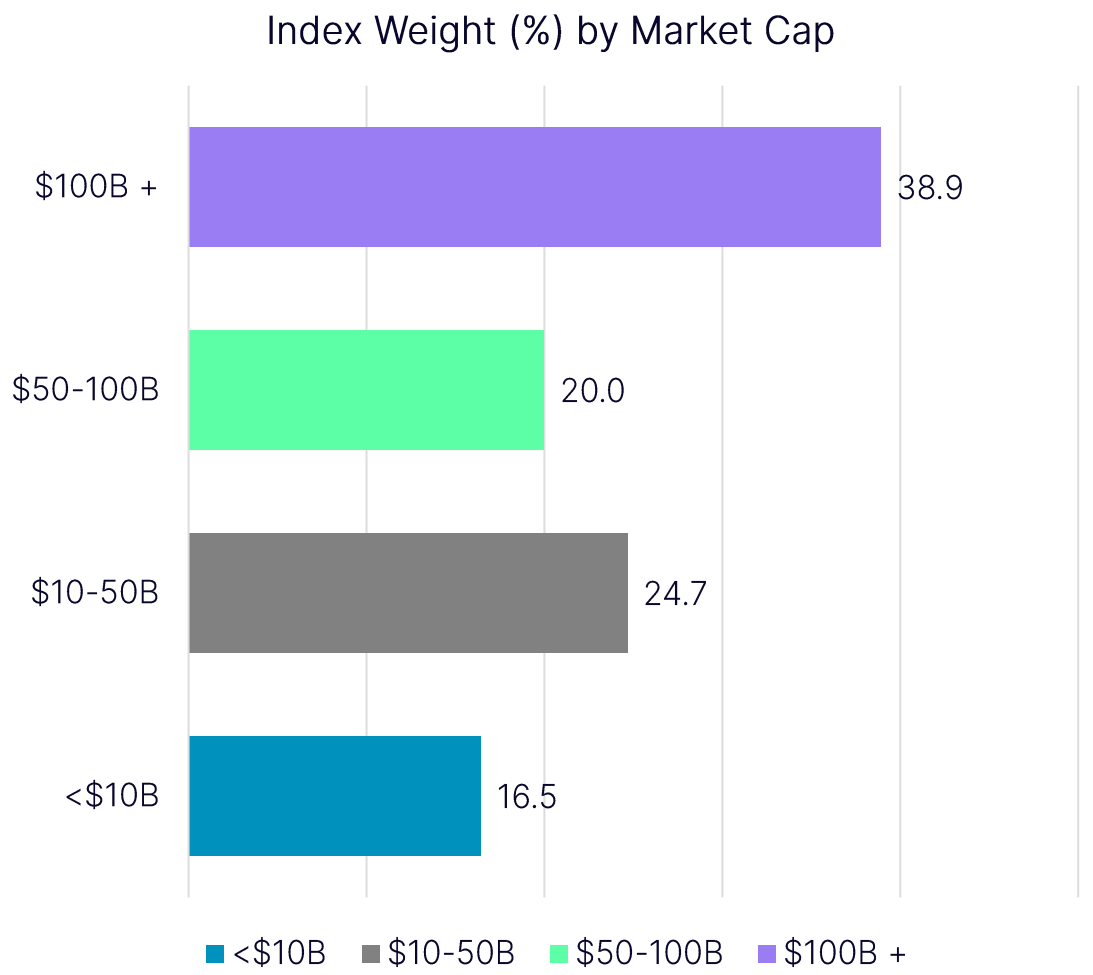
Note: Total Returns for the index for the 3-year period ending 12/31/2024 was 23.5%

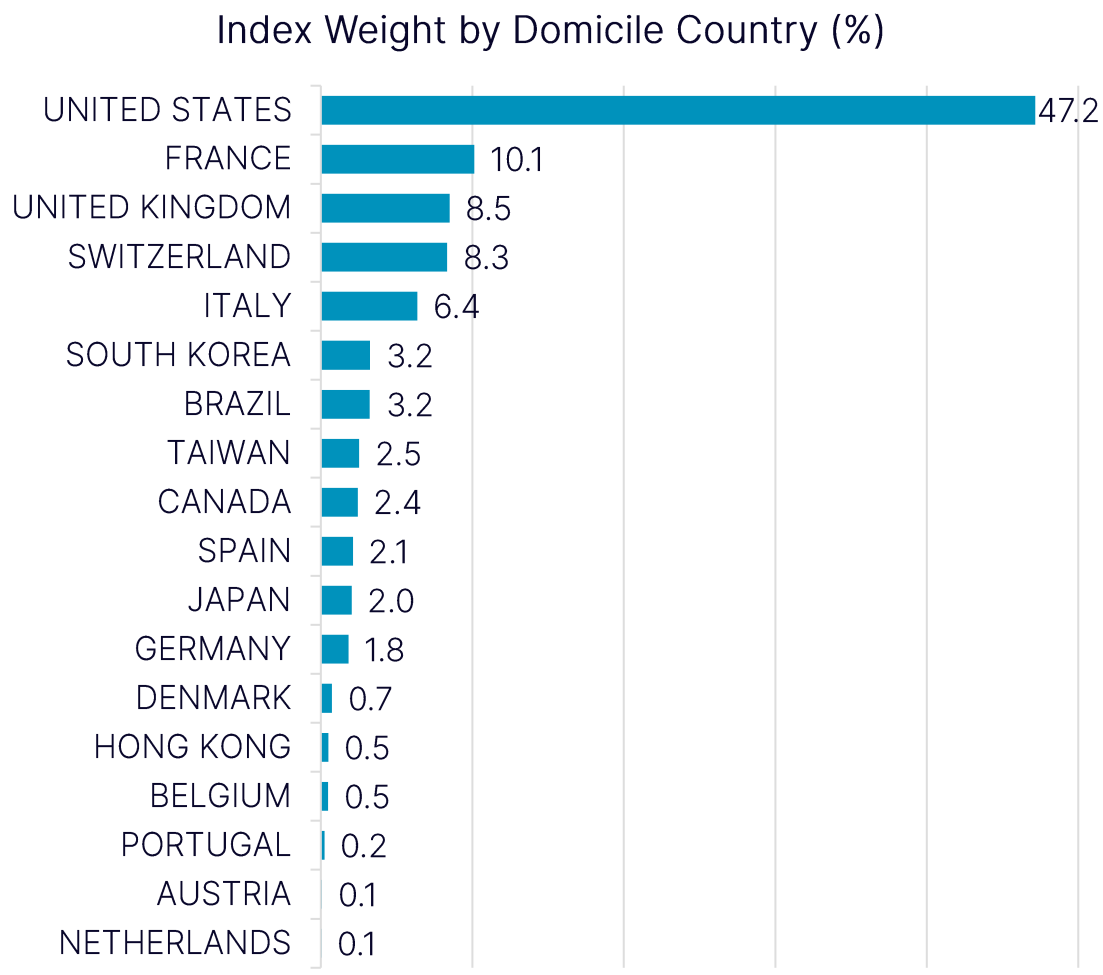
5-Year Returns (%), 12/29/2019-12/31/2024	
Sectors	Contribution to Total Returns (%)
Electric Meters, Devices & Networks	36.9
Energy Storage & Conversion	27.0
Enabling Software	23.1
Grid Infrastructure	52.5

Note: Total Returns for the index for the 5-year period ending 12/31/2024 was 139.5%

Source: Bloomberg

Index Weight (%) by Market Cap and Country





Source: Nasdaq, Factset data as of February 28, 2025

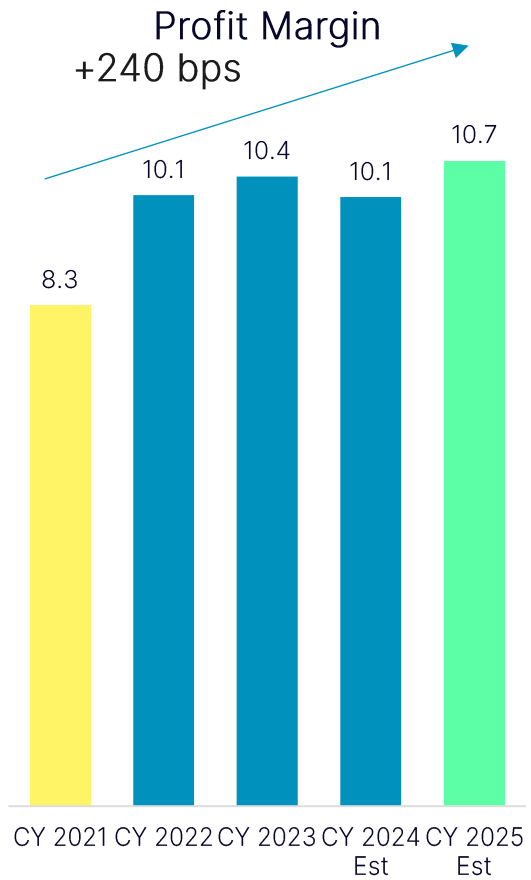
QGRD Index Valuations vs. Last 5 Years

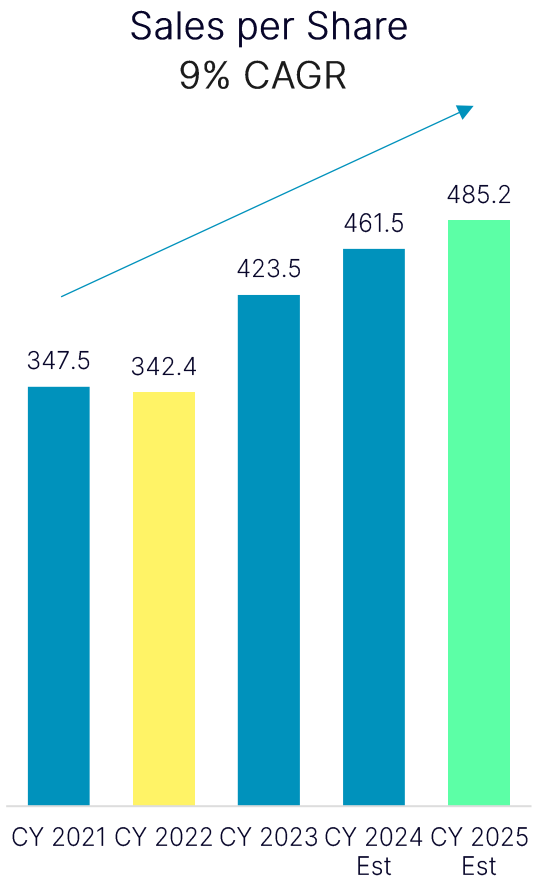
Over the course of 2022, QGRD became cheaper on a wide variety of index-weighted valuation metrics, including price-to-earnings (P/E), price-to-book (P/B), EV/Sales and EV/EBITDA, mostly due to macroeconomic headwinds. Despite gains of ~20% in 2023 and ~15% in 2024, QGRD valuations remain substantially cheaper vs. peak levels in 2020/2021 as strong fundamental growth rates across revenues, earnings, and cashflow (EBITDA) have largely kept pace with the rise in index price levels.

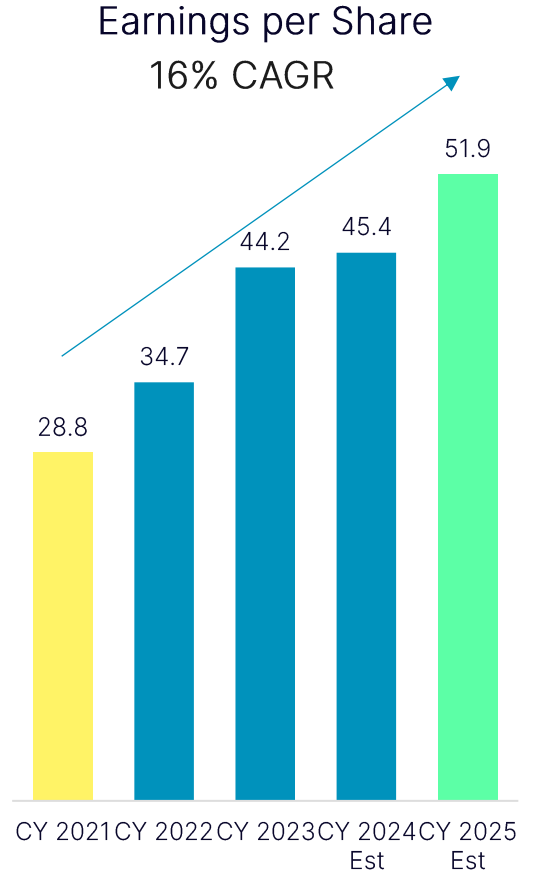
Source: Nasdaq Global Indexes, Bloomberg as of December 27, 2024

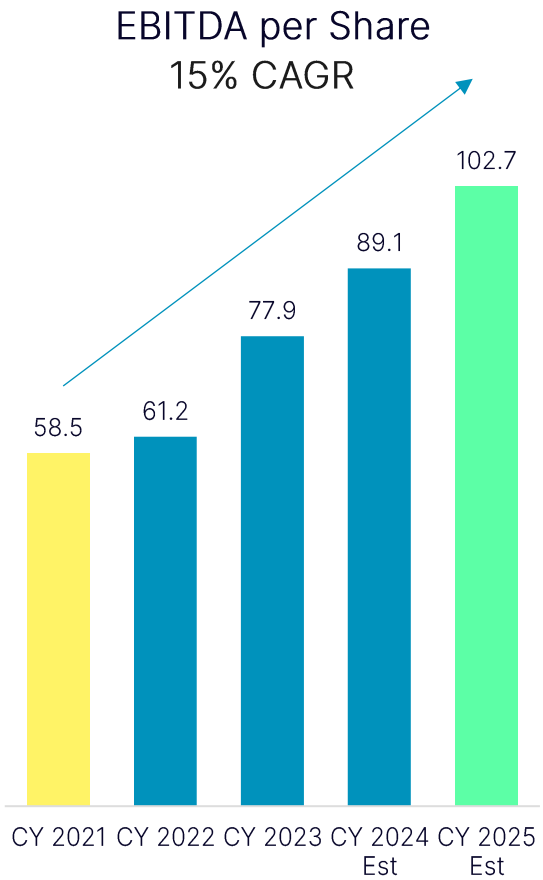
QGRD Index Fundamentals: 5 Year Trend

Profit margins stable for the third consecutive year despite macro headwinds including supply chain disruptions, inflation, and higher rates. Consensus estimates for 2024 show a 3% growth in index-weighted EPS vs. 2023, accelerating to 14% in 2025 and leading to an overall CAGR of 16% vs. 2021. EBITDA expected to grow by ~14% YoY, + another 15% in 2025, leading to an overall CAGR of 15% vs. 2021. Sales expected to grow by 5% in 2025, following 9% growth this year, leading to an overall CAGR of ~9%





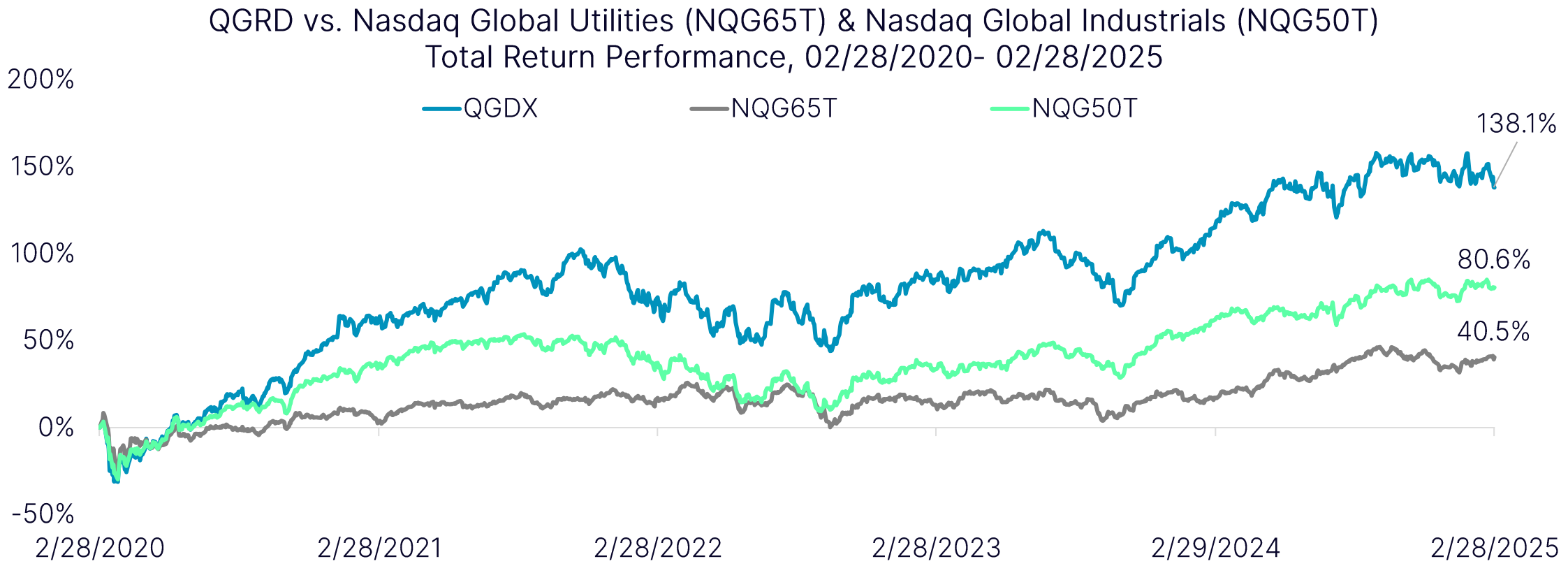




Source: Nasdaq Global Indexes, Bloomberg as of December 27, 2024

QGRD Performance Relative to Broad Sectors

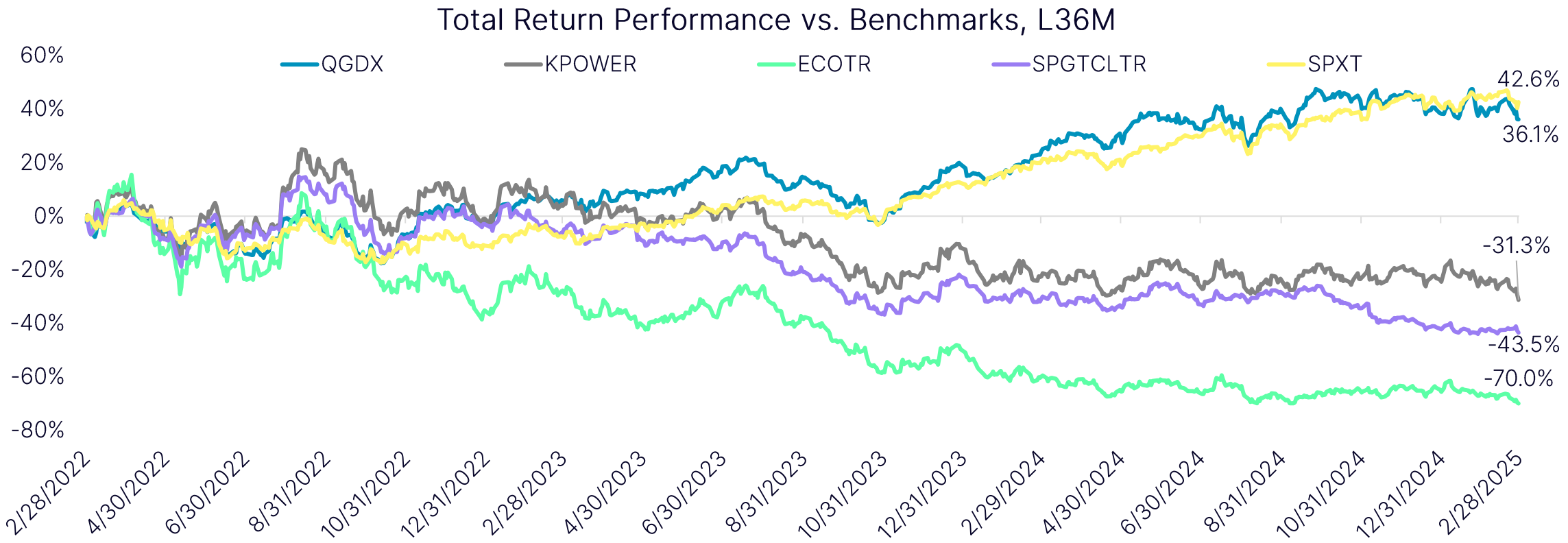
Despite its roughly 60% and 20% exposure to the Industrials and Utilities sectors respectively, QGRD (QGDX Total Return version) has continued to outperform both broad based sector indexes over the past 5 years by sizeable margins



Source: Nasdaq Global Indexes, Bloomberg as of February 28, 2025

QGRD Performance Relative to Competitors

QGRD has been massively outperforming more traditional clean energy offerings such as the WilderHill Clean Energy Index (ECOTR), S&P Global Clean Energy Index (SPGTCLTR), and S&P Kensho Clean Power Index (KPOWER). Each of these competitor indexes has experienced painful drawdowns in the last few years.



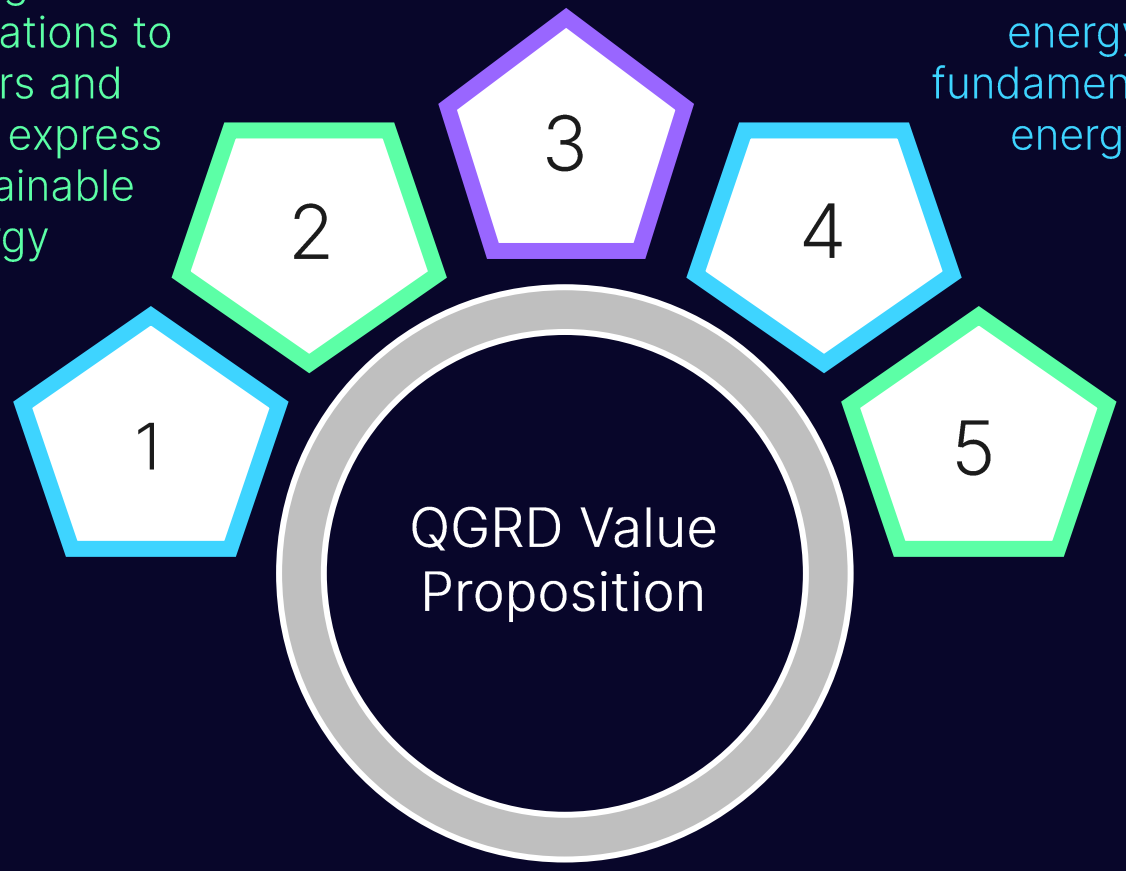
Source: Nasdaq Global Indexes, Bloomberg as of February 28, 2025

Rewriting The Future of Energy

Smart grid modernization and economies of scale are necessary to fully realize the benefits of alternative energy sources

Stakeholders ranging from legislators and corporations to individual consumers and investors continue to express their desire for sustainable sources of energy

Public and private investments in energy infrastructure are fundamentally changing the way energy is consumed and produced



The electric grid of the 20th century is no match for the emerging technologies of the 21st century

QGRD offers investors a front row seat to the seismic shift unfolding within the energy industry, without much of the more volatile exposures of some leading clean energy/power benchmarks

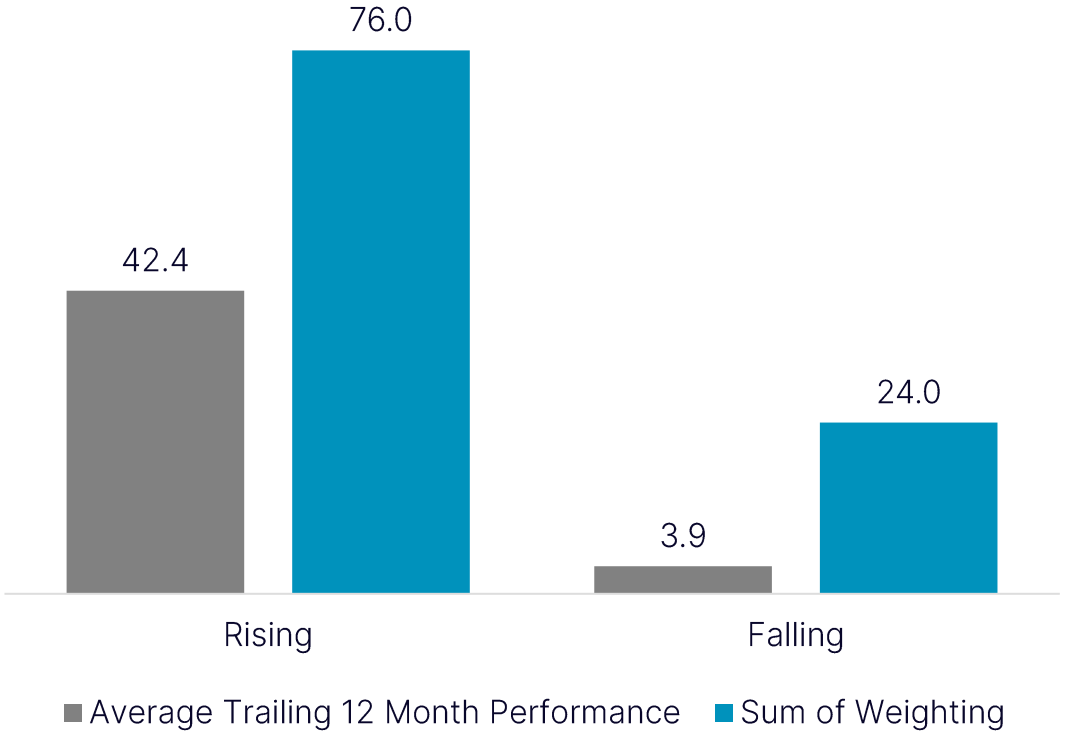
Appendix

Additional Fundamental Analysis

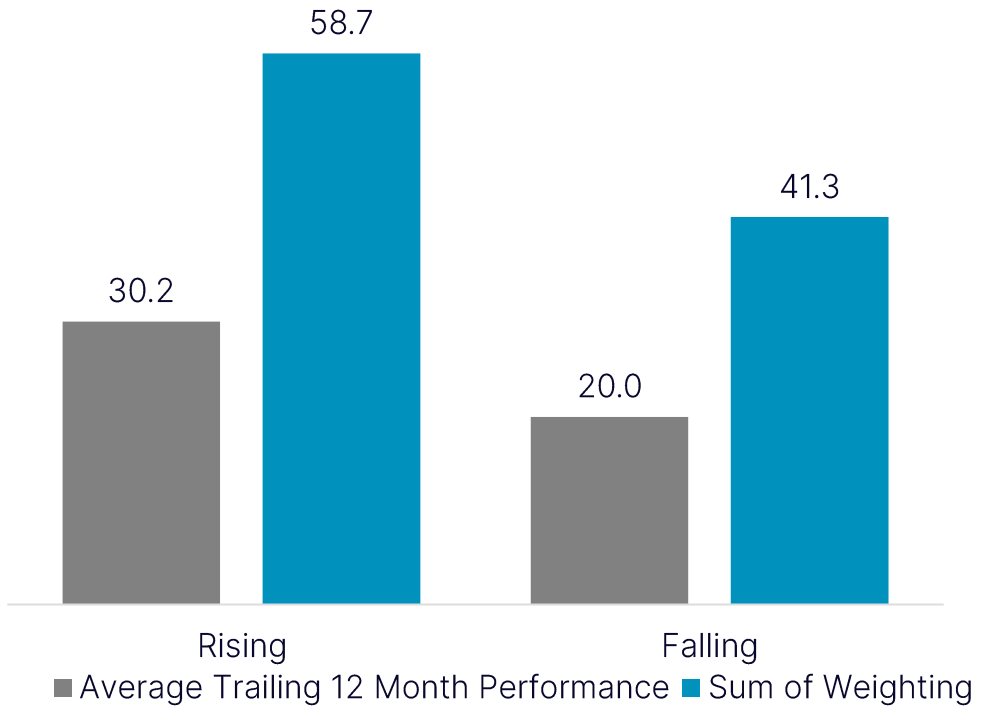
QGRD Revenue Growth & Gross Margins

76% of QGRD's current index weight is allocated to constituents that showed year-over-year revenue growth, and their average price performance was ~42%. ~59% of QGRD's exposure is allocated to companies with improving gross margins

Trailing 12 Month Price Performance (%) by Trailing 12 Month Revenue Growth



Trailing 12 Month Price Performance (%) by Trailing 12 Month Gross Margin

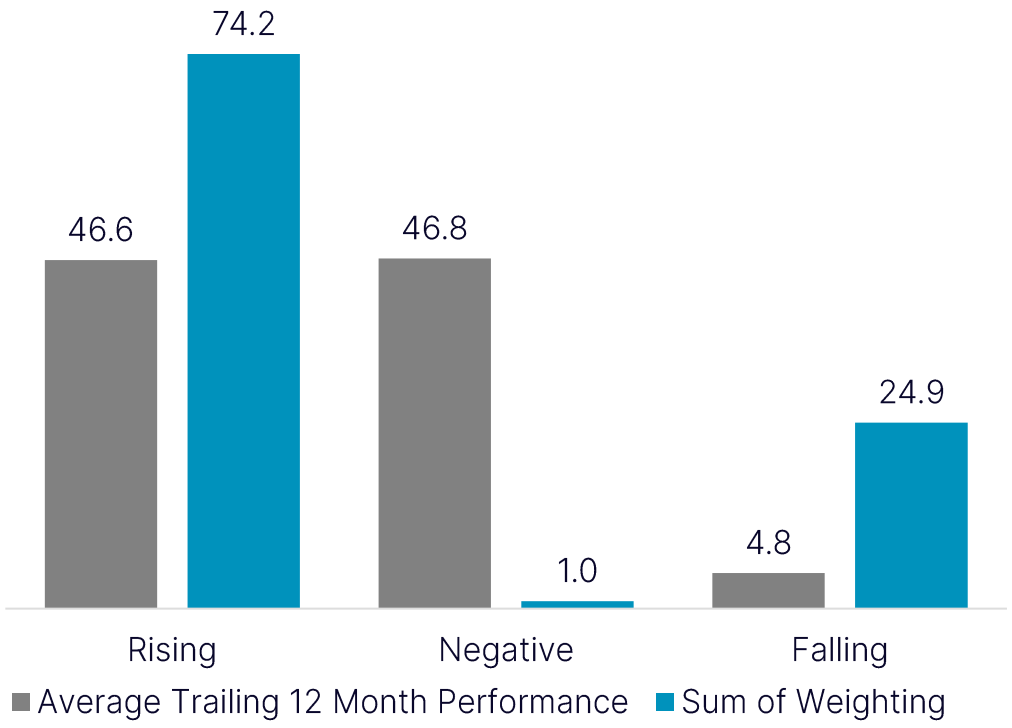


Source: Nasdaq Global Indexes, FactSet, Bloomberg. Price performance as of 6/21/2024. Index weightings as of 6/21/2024. Fundamental data as of 6/21/2024.

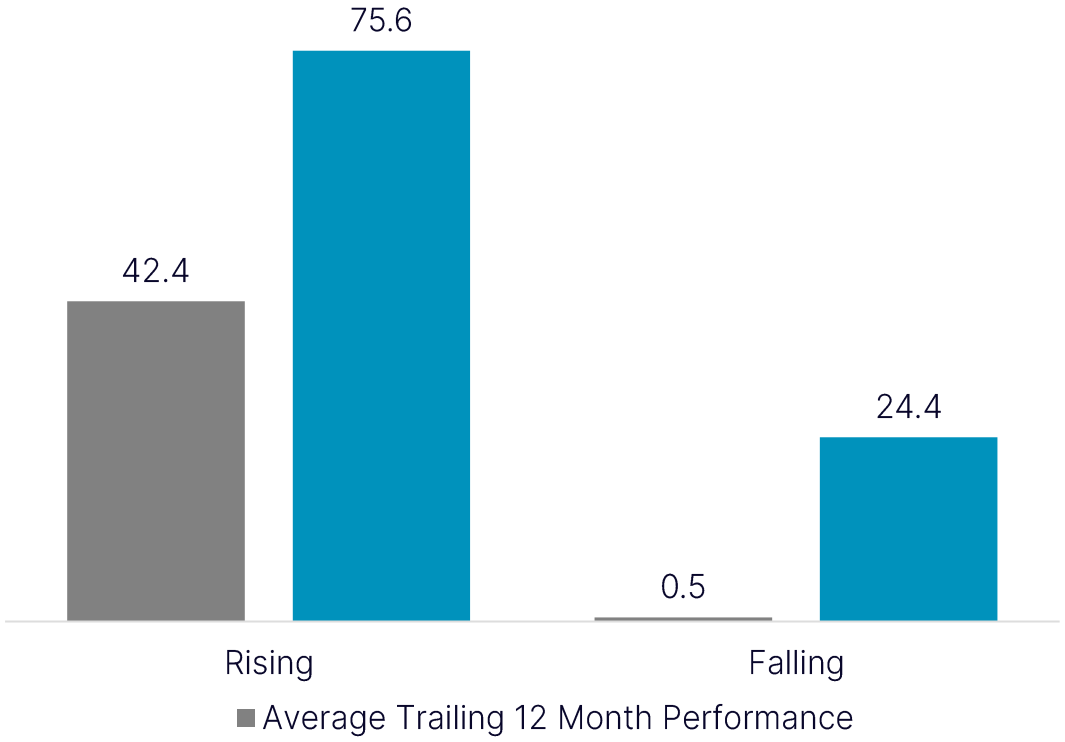
QGRD Earnings Growth & Net Margins

~74% of QGRD's current index weight is allocated to constituents that showed year-over-year earnings growth, and their average price performance was ~47%. ~76% of QGRD's exposure is allocated to companies with improving profit margins

Trailing 12 Month Price Performance (%) by Trailing 12 Month Earnings Growth



Trailing 12 Month Price Performance (%) by Trailing 12 Month Net Margin

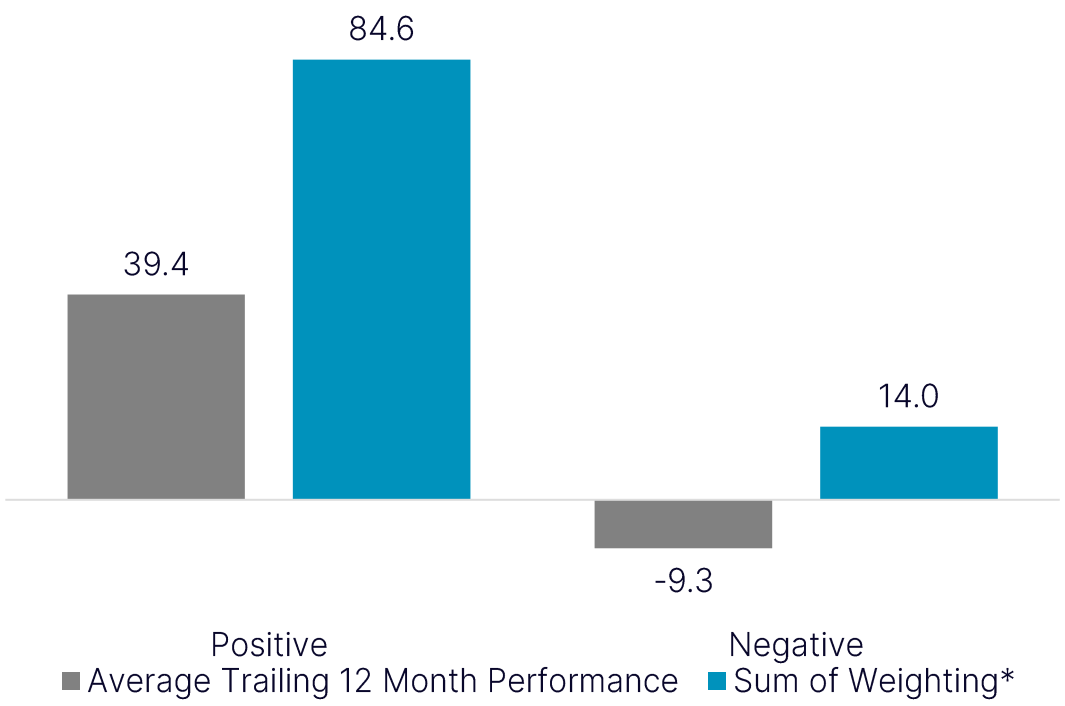


Source: Nasdaq Global Indexes, FactSet. Price performance as of 6/21/2024. Index weightings as of 6/21/2024. Fundamental data as of 6/21/2024.

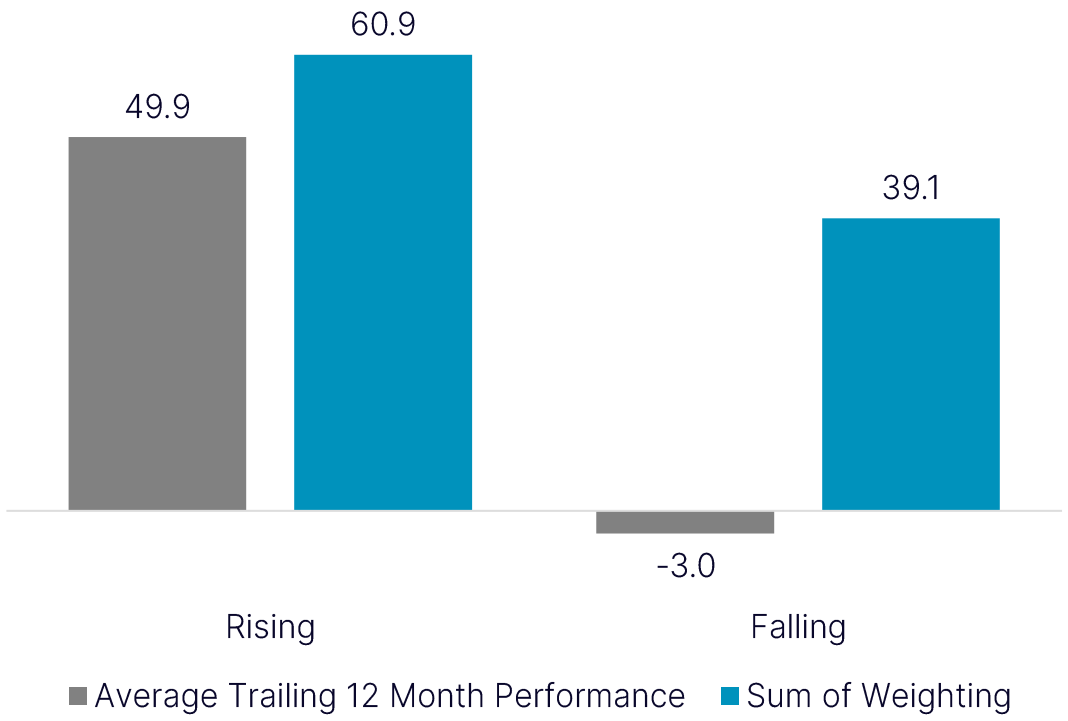
QGRD Free Cash Flow & Operating Margins

~85% of QGRD's current index weight is allocated to constituents that showed positive free cash flow in the last 12 months, and their average price performance was ~39%. ~61% of QGRD's exposure is allocated to companies with improving operating margins

Trailing 12 Months Price Performance (%) by Trailing 12 Month Free Cash Flow



Trailing 12 Months Price Performance (%) by Trailing 12 Month Operating Margin



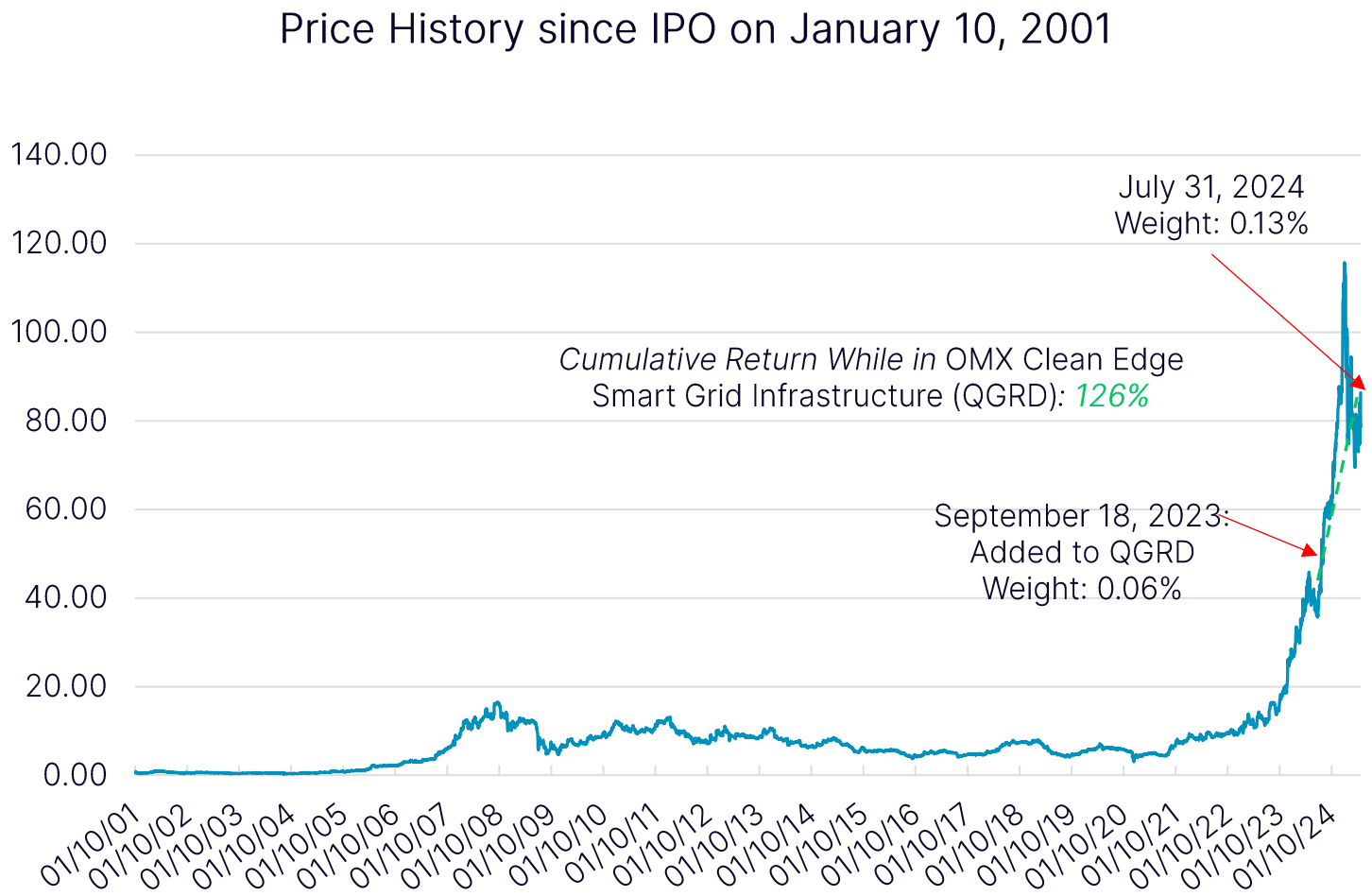
Source: Nasdaq Global Indexes, FactSet. Price performance as of 6/21/2024. Index weightings as of 6/21/2024. Fundamental data as of 6/21/2024.
*FCF actuals not available for 1.3% of index weight

Appendix

Company Case Studies

Hammond Power Solutions Inc.

- Hammond Power Solutions, Inc. engages in the design, manufacture, and sale of dry-type power distribution transformers. Its products include control and automation, low voltage distribution, medium voltage distribution and power, and potted and specialty. The firm serves the oil & gas, steel, waste & water treatment, and wind power generation industries.
- Founded in 1917 in Ontario, Canada
- ICB Industry: Industrials
- Current Market Cap: $1.0Bn
- 2Q'24 Revenue: $144MM, up 12% vs. $128MM in 2Q'23
- Gross Margin: 32.8%
- Free Cash Flow: $4.0MM
- Net Income: $17.2MM
- # of Employees: ~1,880



Source: Nasdaq, FactSet data as of 7/31/2024

Hammond Power Solutions Inc.

Financials and Stock Performance

- In FY 2023, revenue was up 23% y/y to $526.1 million (vs $429.0 million in FY 2022) with continued growth across all parts of the business. Organic growth continued in the low double digits in North America and 17% overall for the company
- Gross margin was 32.5% (vs 29.7% in FY 2022)
- EBITDA margin was 13.7% (vs 12.6% in FY 2022)
- Net Income up 36% y/y to $47.0 million (vs $34.4 million in FY 2022)
- Hammond Power Solutions' price return from its index inclusion was +126%, outperforming both QGRD (+21%) and S&P 500 (+24%). On LTM basis, 95% (vs +12% for QGRD and +20% for the S&P 500). On a year-to-date basis, as of July 31, 2024, its price return was 40%, outperforming both the QGRD and the S&P 500, up 13% and 16%, respectively.

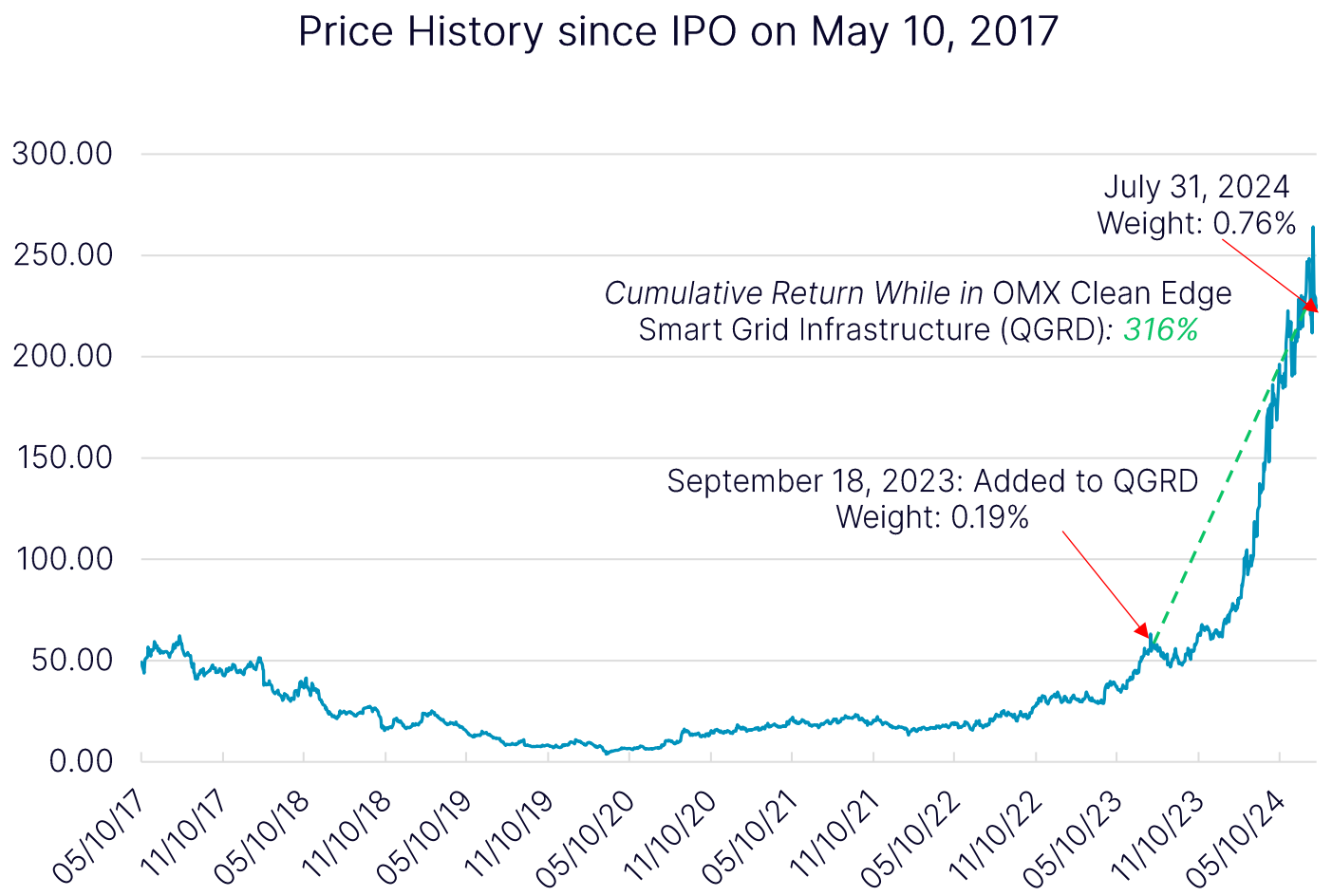
Recent Updates

- In February 2024 Hammond Power Solutions Inc. announced the appointment of Mr. John Bailey as Chief Operations Officer who will succeed Mr. Bohdan (Bob) Yusyp.

Source: FactSet, Hammond Power Solutions Inc. company website

HD Hyundai Electric Co., Ltd.

- HD Hyundai Electric Co., Ltd. engages in the manufacture of electrical equipment. Its products include power transformers, gas insulated switchgear, high-voltage motors, generators, MV/LV switchgear, distribution transformers, low-voltage motors, and MV/LV circuit breakers.
- Founded in 1977 and headquartered in Seongnam, South Korea.
- ICB Industry: Industrials
- Current Market Cap: $8.1Bn
- 2Q'24 Revenue: $668.8MM, up 37% vs. $488.3MM in 2Q'23
- R&D Expense: $13.7MM (2% of Revenue)
- Gross Margin: 31.6%
- Free Cash Flow: $91.2MM
- Net Income: $117.8MM
- # of Employees: ~2,140



Source: Nasdaq, FactSet data as of 7/31/2024

HD Hyundai Electric Co., Ltd.

Financials and Stock Performance

- In FY 2023, revenue was up 27% y/y to $2.1 billion (vs $1.6 billion in FY 2022) led by North America and Middle East markets growth.
- Gross margin was 22.2% (vs 15.5% in FY 2022)
- EBITDA margin was 13.5% (vs 8.6% in FY 2022)
- Net Income up 58% y/y to $198.3 million (vs $125.8 million in FY 2022)
- HD Hyundai Electric's price return from its index inclusion was +316%, outperforming both QGRD (+21%) and S&P 500 (+24%). On LTM basis it had returned 289% (vs +12% for QGRD and +20% for the S&P 500). On a year-to-date basis, as of July 31, 2024, its price return was 254%, outperforming both QGRD and the S&P 500, up 13% and 16%, respectively

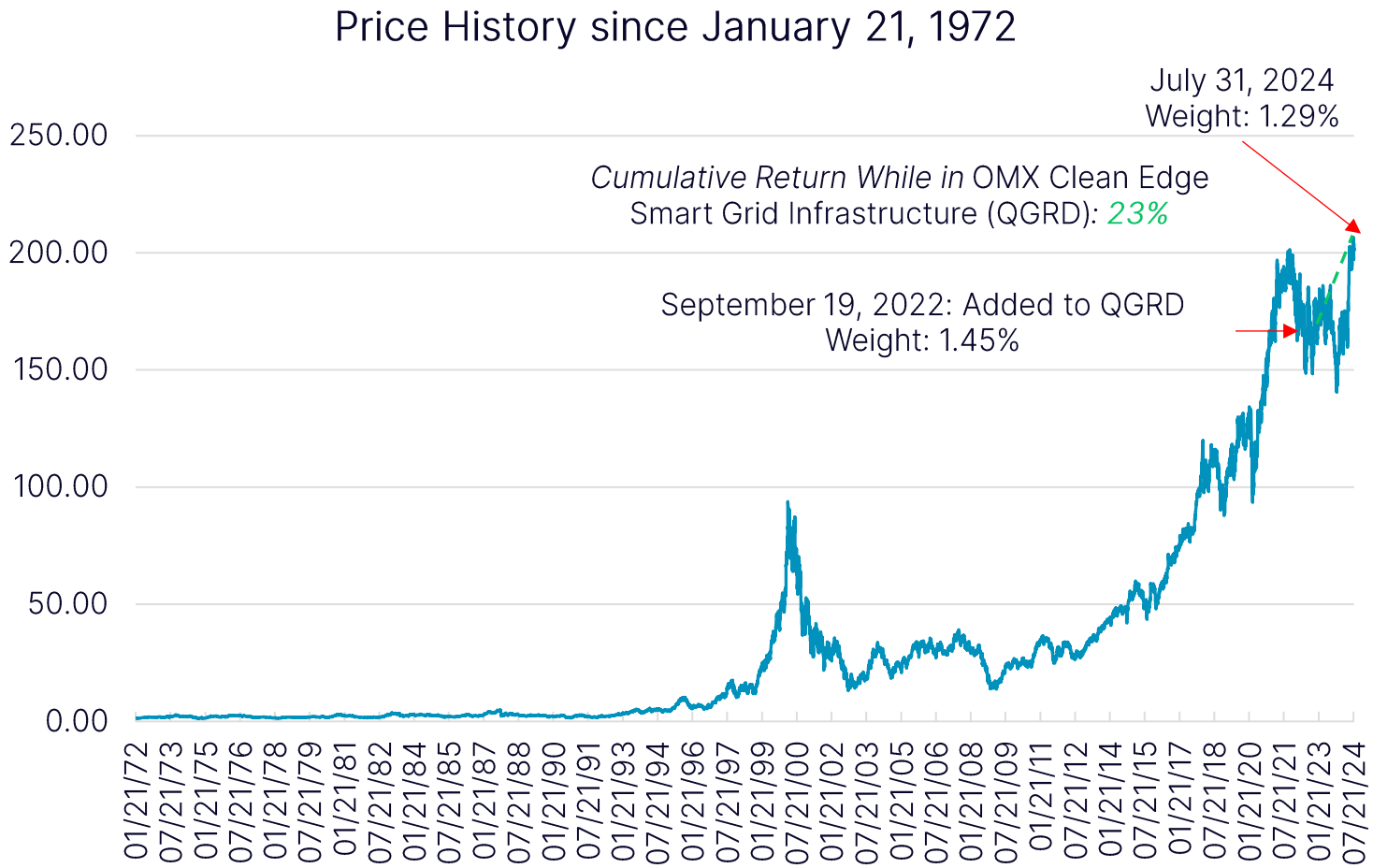
Recent Updates

- Morgan Stanley Capital International (MSCI) has announced in May 2024 that HD Hyundai Electric will join its MSCI Korea Index.
- In July 2024, announced that it has expanded the storage capacity of its manufacturing plant in Alabama to meet growing orders and improve operational efficiency. The expansion adds 12,690 square meters to the existing storage facility, which can house up to 60 power transformers.

Source: FactSet, Hyundai company website and linkedin

Texas Instruments Inc.

- Texas Instruments, Inc. (TXN) engages in the design and manufacture of semiconductors. It operates through Analog, Embedded Processing, and Other segments.
- Founded in 1930 in Dallas, Texas
- ICB Industry: Technology
- Current Market Cap: $186.1Bn
- 2Q'24 Revenue: $3.8Bn, down 16% vs. $4.5Bn in 2Q'23
- R&D Expense: $498.0MM (13% of Revenue)
- Gross Margin: 57.8%
- Free Cash Flow: -$678.0MM
- Net Income: $1.1Bn
- # of Employees: ~34,000



Source: Nasdaq, FactSet data as of 7/31/2024

Texas Instruments Inc.

Financials and Stock Performance

- In FY 2023, revenue fell 13% y/y to $17.5 billion (vs $20.0 billion in FY 2022) primarily due to lower revenue from Analog, partially offset by higher revenue from Embedded Processing.
- Gross margin was 62.9% (vs 68.8% in FY 2022)
- EBITDA margin was 48.9% (vs 56.8% in FY 2022)
- Net Income fell 26% y/y to $6.5 billion (vs $8.7 billion in FY 2022) reflecting the reduction in sales as well as increase in manufacturing and employee-related costs during the period.
- 3Q'24 outlook is for revenue in the range of $3.94 billion to $4.26 billion and earnings per share between $1.24 and $1.48.
- TXN's price return from its index inclusion was +23% (vs +41% for QGRD and +42% for the S&P 500). On LTM basis, +13% (vs +12% for QGRD and +20% for the S&P 500). On a year-to-date basis, as of July 31, 2024, its price return was **20%,** outperforming both QGRD and the S&P 500, which have returned 13% and 16%, respectively

Recent Updates

- In August 2024, announced that it would receive up to $1.6 billion in funding from the U.S. Commerce Department towards the construction of three new facilities, as a part of the latest government outlay aimed at bolstering domestic chip production
- In July 2024, rolled out new magnetic packaging technology for power modules, cutting power solution size in half.
- In June 2024, announced a long-term collaboration with Delta Electronics (a global power and energy management manufacturer) to create next-generation electric vehicle (EV) onboard charging and power solutions.
- In June 2024, the company introduced the industry's first 650V three-phase GaN IPM for 250W motor drive applications to enable smaller, more energy-efficient high-voltage motors.

Source: FactSet, Texas Instruments Inc. company website

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