

The Inflation Reduction Act: A Catalyst for Investing in Water

April 2023

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In August 2022, President Biden signed the Inflation Reduction Act (IRA) into law, marking what the White House describes as the "most significant action Congress has taken on clean energy and climate change in the nation's history¹." The IRA aims to make the United States a global leader in clean energy manufacturing, technology, and innovation, all while creating high-quality American jobs. Additionally, the IRA seeks to lower energy costs for families and small businesses through clean energy investments and related tax incentives around solar, wind, and clean fuels/biofuels. With the passage of the Inflation Reduction Act—in combination with the Bipartisan Infrastructure Law and other actions—the Department of Energy (DOE) estimates that the United States will achieve a 40% reduction in economy-wide greenhouse gas emissions below 2005 levels by 2030. Additionally, the DOE estimates that the clean energy provisions of the Inflation Reduction Act and the Bipartisan Infrastructure Law could reduce emissions by more than 1,000 million metric tons of CO2e in 2030, equivalent to the combined annual emissions released from every home in the United States.²

The IRA incentivizes owner-occupied households to make energy-efficiency improvements to their existing homes, including purchasing residential clean energy equipment and upgrades to appliances, such as switching out water heaters for energy-efficient heat pumps. Tax credits are also available for income-eligible individuals who purchase new and used electric vehicles. For businesses, there are many different incentives around clean vehicles, manufacturing, sustainable aviation, and clean fuel production, to name a few. Funding is also provided to support various government agencies and their associated programs, such as air pollution monitoring (Environmental Protection Agency), greenhouse gas corporate reporting (EPA), and establishing clean fleets (U.S. Postal Service). While solar, wind, and clean energy are front and center in the IRA, water, on the other hand, is a lesser focus. The water crisis³ in the western part of the US is addressed explicitly in the IRA via legislation providing \$550 million in grants and other financial support for disadvantaged communities to help them access potable drinking water supplies. The funding will cover up to 100% of the cost of planning, designing, or constructing eligible water projects. As mentioned above, eligible homeowners and businesses are incentivized to upgrade their appliances from electric to geothermal water heaters. Outside of the drought legislation and the incentives to upgrade certain water-related appliances, drinking water, potable water, and wastewater are not explicitly addressed in the IRA. With water being a limited and essential resource that is directly related to global sustainability efforts, we believe that there is an opportunity to invest in water as a part of a wider climatesustaining, ESG-related strategy and that the water industry will be an indirect beneficiary of the global clean energy transition, including through legislation such as the IRA. The ISE Clean Edge Water™ Index (HHO™) provides investors with a way to track the companies that are most involved in the water industry. The HHO is tracked by the First Trust Water ETF (FIW).

ISE Clean Edge Water Index Overview

The ISE Clean Edge Water Index (HHO) tracks the performance of US-listed companies that derive a substantial portion of their revenues from the potable water and wastewater industry. Industry exposure includes utilities and water distribution, infrastructure (pumps, pipes, and valves), water solutions (purification and filtration), and ancillary services such as consulting, construction, and metering. To be eligible for

¹ https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/

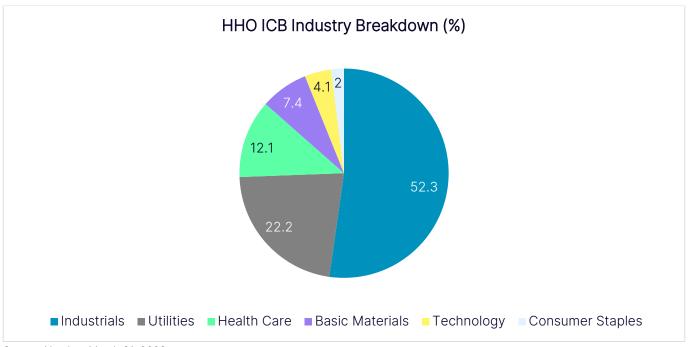
 $^{^2\} https://www.whitehouse.gov/cleanenergy/?utm_source=www.cleanenergy.gov$

³ https://www.doi.gov/pressreleases/secretary-haaland-announces-125-million-restore-nations-lands-and-waters-part

inclusion in the ISE Clean Edge Water Index, an issuer of a security must derive a substantial portion of its revenues from the potable and wastewater industry, according to Clean Edge. Securities must be listed on the Nasdaq Stock Market, the New York Stock Exchange, NYSE American, or the CBOE Exchange. Additionally, eligible constituents must have a minimum worldwide market capitalization of \$100 million and a three-month average daily dollar trading volume (ADDTV) of at least \$500,000. The ISE Clean Edge Water Index is evaluated biannually in March and September. Stocks are evaluated for inclusion using market data as of the end of January and July. Securities meeting the criteria are included in the Index. Security additions and deletions are made effective after the close of trading on the third Friday in March and September.

ISE Clean Edge Water Index Composition

As of March 31, 2023, the ISE Clean Edge Water Index (HHO) holds 36 stocks, and its industry exposure is heavily weighted in Industrials (52.3%), Utilities (22.2%), and Healthcare (12.1%) according to the Industry Classification Benchmark (ICB) system. The remaining three industries represented in the index are Basic Materials (7.4%), Technology (4.1%), and Consumer Staples (2.0%).



Source: Nasdaq, March 31, 2023

ISE Clean Edge Water Index Performance Stats vs. Benchmarks

The ISE Clean Edge Water Total Return™ Index (HHOTR™) has demonstrated long-term alpha generation through security selection. It has outperformed the Nasdaq U.S. Benchmark Total Return™ Index (NQUSBT™), the Nasdaq US Benchmark Industrials Total Return™ Index ("Industrials"), and the Nasdaq US Benchmark Utilities Total Return™ Index ("Utilities") industry indexes over the last 1-, 3-, 5-, 7- and 10-year time horizons.

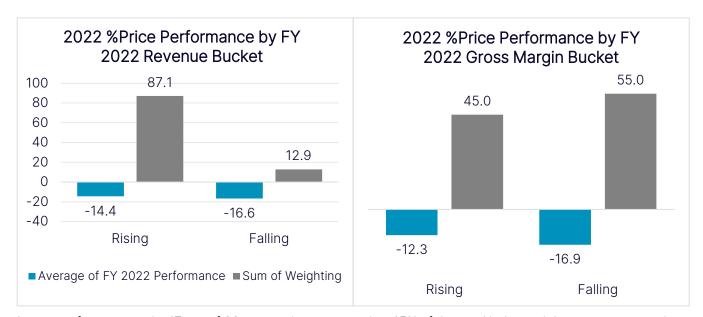
Total Return Statistics

	HHOTR (%)	NQUSBT (%)	INDUSTRIALS (%)	UTILITIES (%)
1Y	0.5	-9.0	-3.6	-5.2
3Y	22.1	18.4	18.4	10.7
5Y	13.4	10.4	8.4	9.9
7Y	15.7	12.0	11.3	8.7
10Y	12.8	11.8	11.3	9.7

Source: Nasdaq, March 28, 2013 - March 31, 2023

Revenue and Gross Margin Trends vs. ISE Clean Edge Water Index Performance

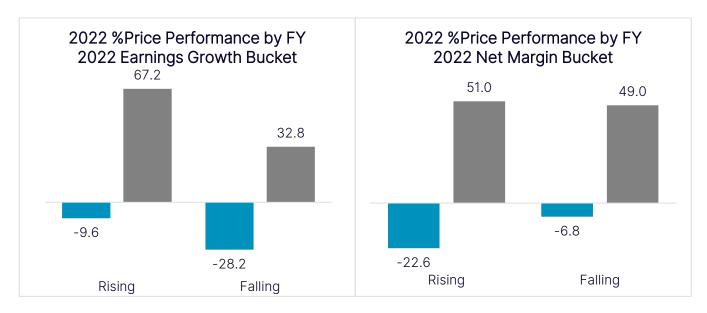
The companies that make up the ISE Clean Edge Water Index have shown significant strength in fundamentals over the past year despite a challenging and volatile macroeconomic backdrop, including rising interest rates, recession fears, high inflation, and supply chain challenges. Of the 36 stocks currently held in the index, 31 companies (representing 87% of total index weight) saw revenues increase in 2022 versus 2021. Only five companies saw revenues decline in 2022, representing approximately 13% of the total index weight. It is encouraging that an overwhelming majority of index constituents posted revenue growth despite the macroeconomic headwinds and market backdrop. In terms of fundamentals leading performance, companies with revenue growth in 2022 slightly outperformed those with falling growth in 2022, although performance was negative, with an average return of -14.4%.



In terms of gross margin, 17 out of 36 companies representing 45% of the total index weight saw gross margins rise in 2022, while 19 companies saw gross margins fall. Companies with rising gross margins returned -12.3% on average in 2022, outperforming those with falling gross margins by 4.5%.

Earnings and Net Margin Trends vs. ISE Clean Edge Water Index Performance

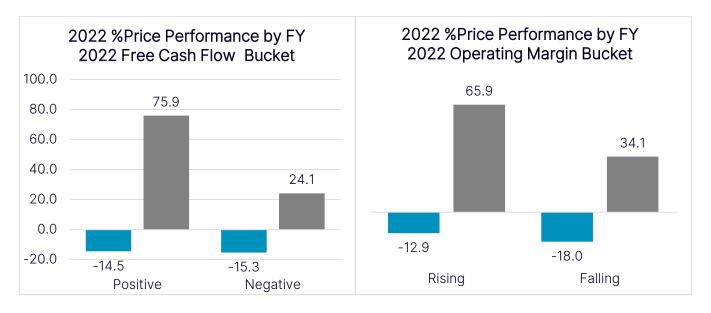
26 of 36 companies (representing 67% of the index weighting) in the index saw earnings rise in 2022. These companies returned -9.6% in 2022 on average. Those 10 companies that experienced a decrease in earnings account for only 33% of the total index weighting and lost a whopping -28.2% on average in 2022.



18 out of 36 companies (representing 49% of index weight) tracked by the index saw net margins rise due to a combination of solid revenue growth, cost optimization efforts, a more favorable price-cost relationship, and subsiding inflationary pressures. The remaining 18 companies (representing 51% of index weight) tracked by the index saw net margins decline. Those companies with rising net margins were rewarded nicely in terms of performance, as the average return of a company with rising net margins outperformed the average return of a company with falling net margins by 16 percentage points.

Free Cash Flow and Operating Margin Trends vs. ISE Clean Edge Water Index Performance

26 out of 36 companies (representing 76% of the total index weight) tracked by the index were free cash flow (FCF) positive due to a combination of factors, including margin improvement, business cyclicality, and working capital efficiency. 10 companies (representing 24% of index weight) were free cash flow negative. On average, companies that were FCF positive were down 14.5% in 2022 vs. companies that were FCF negative, down 15.3%.



23 out of 36 companies (representing 66% of index weight) tracked by the index saw operating margins rise, mainly due to price increases and cost optimization efforts. 13 companies (representing 34% of index weight) tracked by the index saw operating margins decline primarily due to higher operating expenses in accounting, legal and marketing combined with acquisition-related expenses. Companies with improving

operating margins outperformed companies with worsening operating margins by approximately 5 percentage points.

Current Valuations vs. Year-End 2021

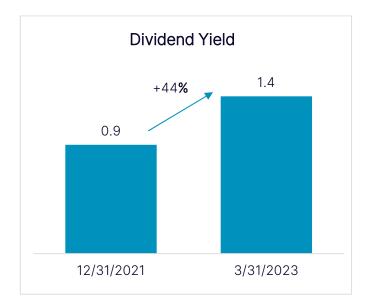
Over the course of 2022, the ISE Clean Edge Water Index became significantly cheaper on a wide variety of index-weighted valuation metrics, including price-to-earnings(P/E), price-to-book (P/B), enterprise value-to-sales (EV/Sales), and enterprise value-to-EBITDA (EV/EBITDA). Concerns around the macroeconomic environment, industry headwinds such as supply-chain challenges, and company-specific headwinds weighed on valuations in 2022. Per Bloomberg, the P/E ratio for HHO recently dropped to only 23.8, which was within the range of a broad-based benchmark like the S&P 500 Index.





Dividend Growth

Since the end of 2021, the ISE Clean Edge Water Index has seen its dividend yield grow by over 44% from 0.9% to 1.4%. The Index, which is overweight Industrials and Utilities, both traditionally higher-yielding areas of the US equity market, is expected to see this trend of rising dividends continue over the near future. At the end of 2023, HHO's dividend yield is estimated to come in at 1.5%; in 2024, it is estimated to hit 1.9%. In contrast, the S&P 500 Index (SPX) has seen its dividend yield fall from 1.7% at the end of 2022 to 1.6% through March 31, 2023, and is estimated to slowly recover to 1.7% by year-end 2024. Thus, the ISE Clean Edge Water Index is clearly on an accelerated trajectory of dividend growth compared to a broad benchmark like the SPX.



Conclusion

The Inflation Reduction Act was signed into law in 2022, marking a historic move for the transition to clean energy in the United States. While the IRA does not explicitly address water and wastewater and focuses more on solar and wind, it incentivizes homeowners and businesses via tax credits to upgrade their water-related appliances for more energy-efficient ones. Additionally, the IRA addresses the water crisis in the western part of the country via legislation providing \$550 million in grants and other financial support for disadvantaged communities to help them access potable drinking water supplies. The global clean energy push, including the IRA legislation, creates opportunities for investors looking to invest in sustainability, innovation, and efficiency related to limited resources and new technologies around wind and solar. And while drinking water and wastewater are not explicitly addressed in the IRA, we believe the legislation may create momentum around global sustainability efforts, indirectly benefitting water-related investments and other limited resources required for life on this planet. Additionally, water will become an increasingly important part of ESG portfolios as investors seek to create positive impacts on water infrastructure and drive continued innovation in water efficiency. The ISE Clean Edge Water Index (HHO) allows investors to track US-listed companies related to the water and wastewater industries and is tracked by the First Trust Water ETF (FIW). The ISE Clean Edge Water Index maintains a good fundamental backdrop, creating opportunities for investors looking to take advantage of the overall sustainability push.

Sources: Nasdaq Global Indexes, Bloomberg, FactSet.

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