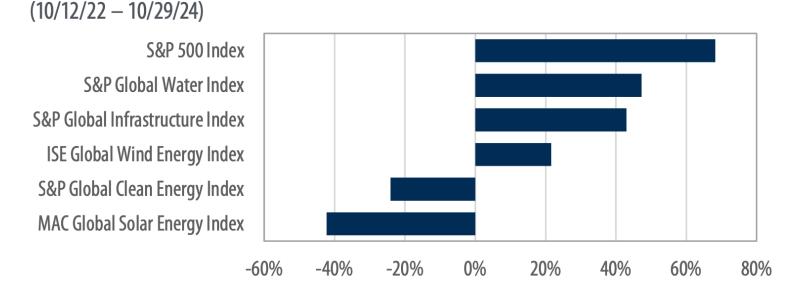
TUCKER ASSET MANAGEMENT

Market Commentary

First Trust Advisors | November 2024

I'll Just Have Water, Thank You

Utility & Infrastructure - Related Indices vs. S&P 500 Cumulative Total Returns (10/12/22 - 10/29/24)



Source: Bloomberg. Past Performance is no guarantee of future results.

For today's post, we compare the cumulative total returns of several utility and infrastructure-related indices to that of the S&P 500 Index between 10/12/22 (the start of the current bull market) and 10/29/24. As revealed in the chart, when it comes to an investment in infrastructure stocks, water stands out above them all. Water plays a critical role in socio-economic development, the production of food and energy, and crucially, human survival itself. The United Nations reported that 2.2 billion people around the world lacked access to safely managed drinking water, and 3.5 billion did not have access to safely managed sanitation in 2022. We discuss what we believe have been catalysts to growth for the companies involved in water utility, infrastructure, materials, and equipment below.

• In the U.S., an estimated 2 million people currently live without running water inside their homes. While most U.S. citizens have access to clean water and sanitation, the infrastructure that provides these services is aging. The pipe that makes up the U.S. water network is 45 years old, on average. Some of the oldest cast iron pipes still in use were put in service more than 100 years ago, according to McKinsey & Company.

• The U.S. drinking water infrastructure is comprised of 2.2 million miles of underground pipe, according to the American Society of Civil Engineers (ASCE). The ASCE noted that an estimated 6 billion gallons of treated potable water is lost through leaks in this piping infrastructure each day. The U.S. Environmental Protection Agency (EPA) expects water-pipe replacement rates to peak in 2035, with somewhere between 16,000 to 20,000 miles of piping being replaced per year.

• We've written about estimated impact of artificial intelligence (AI) on the energy grid in previous posts (click here), but AI's demand for water cannot be understated. A recent report by J.P. Morgan revealed that large data centers use as much as 5 million gallons of water per day to effectively cool the chipsets that process AI intensive workloads. Notably, the U.S. was home to 5,381 data centers at the end of March 2024. For comparison, Germany, the U.K., and China were home to just 1,484 data centers combined as of the same date.

• Funding for updated water infrastructure has accelerated in recent years. In 2021, the U.S. government revealed legislation that designated \$55 billion toward water infrastructure improvements. Fifteen billion dollars of that funding was set aside to replace each of the 9.2 million lead service lines still in use, by 2031. In October 2024, the EPA announced \$6.2 billion in additional funding to upgrade U.S. water infrastructure.

• The cumulative total returns of each of the indices in today's chart were as follows: S&P 500 Index (68.23%), S&P Global Water Index (47.27%), S&P Global Infrastructure Index (42.96%), ISE Global Wind Energy Index (21.60%), S&P Global Clean Energy Index (-24.08%), and the MAC Global Solar Energy Index (-42.27%).

Takeaway

The results in today's chart highlight the essential role of clean water and sanitation in both developed and developing nations. By 2030, an estimated \$1.37 trillion is needed to provide clean water to 2.2 billion people worldwide. In the U.S., aging water infrastructure is losing 6 billion gallons daily to leaks—about 14%-18% of daily usage. Data centers are also increasing their water consumption to cool AI chipsets, further straining resources. Given the critical importance of water infrastructure, the sector's outperformance is not surprising, and we expect these companies to benefit from ongoing global and domestic modernization efforts.