

# Tortoise QuickTake

## Water Podcast



Oct. 4, 2018

**Welcome to the Tortoise QuickTake podcast. Thank you for joining us. Today, senior members of Tortoise provide a timely update on trending topics in the market.**

**Pam Kearney:** Welcome to the Tortoise podcast series on the water sector. Thanks for listening. I'm Pam Kearney, and I'm joined by Nick Holmes and Evan Lang, co-portfolio managers of Tortoise's actively managed water strategy. As we enter the final stretch of the year, we're here to touch base on the active strategy and review the latest events in the water sector. Let's kick things off with an update on the water sector. We will start with you, Evan.

**Evan:** Thanks, Pam. The water sector continues to advance, producing attractive returns and growing as an asset class. The broader water sector, represented by the S&P Global Water Index, closed the third quarter up 4.2%, as the sector was propelled by strong earnings and an attractive growth outlook. The water sector continues to face a critical need for additional investment, with the world facing a global water crisis today as 30% of all people live in areas of water shortage.

We believe investment in infrastructure and technology is needed *now* to solve the water shortfall across the globe. The investment opportunity is compelling, with estimates ranging from 8 to 21 trillion dollars to solve the water supply/demand imbalance. This deep project backlog provides a long runway of earnings growth going forward. We expect the private sector, including investments in publicly listed securities and private equity, will play a key role in funding these projects. As the water crisis unfolds, we believe the asset class will attract an increasing amount of investor attention and capital.

**Pam Kearney:** Thanks, Evan. How do you see the asset class growing from here?

**Evan:** We believe one of the most exciting aspects of the water story is the emergence of water as a standalone asset class. We saw more evidence of this happening during the last quarter, including a new IPO filing and an active M&A market. On the IPO front, Viomi Technology, a Chinese supplier of point-of-use water purification systems, registered for a \$150 million IPO on the NASDAQ exchange. This high growth water technology company will be an attractive addition to the water sector. On the M&A front, a noteworthy transaction was conducted by Suez who sold a 20% stake in its U.S. regulated water business for \$600 million at a 30x earnings and 15x EBITDA multiples. We expect continued capital market activity to increase the size of the water universe from its current market cap of approximately \$500 billion, as companies continue to highlight the value of their water businesses. We believe investors will benefit from attractive returns and low correlation to the broader equity market as the water asset class grows.

**Pam Kearney:** Great, that's a helpful backdrop on the water sector. Turning to you Nick, how is the actively managed strategy positioned?

**Nick:** Sure, I'd be happy to provide detail on our strategy. At its core, the strategy seeks to invest in companies across the globe and throughout the water value chain that are in a position to benefit from the pursuit of solving the water supply/demand imbalance.

We are focused on three key themes that we believe will improve current and projected supply/demand imbalance. These themes include maximizing water supply, improving water efficiency and upgrading water infrastructure.

Let's tackle each, one by one.

- I'll start with maximizing water supply. We believe the key strategies to maximizing water supply are water loss prevention technologies, water reuse and desalination.
  - Water loss prevention technologies are critical to maximize supply as an astounding 34% of water is lost during the transmission and distribution of water globally. To reduce water loss, the industry is turning to smart meter networks, which enable the detection and communication of water loss in real time.

- Moving along, water reuse is as straightforward as it sounds – it is simply treating wastewater and putting it back into the water supply. While less than 3% of the water globally is reused, the future is bright for this alternative form of water as industry leaders are using cutting edge technology to economically implement water reuse. Israel is the leading example of reuse globally as the country recycles 87% of the country's water use.
- Desalination is another exciting alternative form of water. Like water reuse, desalination is little used today, but looking ahead, desalination capacity is expected to double by 2025 as advancements in technology are expected to increase adoption as costs decline.
- Next, we'll shift to improving water efficiency. Water efficiency is simply using less water. We believe water efficiency will increase across all demand components, including agriculture, industrial and residential.
  - Water efficiency is expected to improve in agriculture by the adoption of efficient irrigation techniques, such as mechanized irrigation, drip irrigation and precision farming.
  - Industrial efficiency will improve as companies adopt water-efficient equipment and processes, meet environmental regulations, and implement sustainability programs.
  - Residential use will improve as households turn to water efficient appliances and equipment.
- I'll wrap up with upgrading infrastructure. Estimates suggest that sizable investment is needed to ensure safe and reliable water supply across the globe.
  - We believe investment will be directed at rehabilitating deteriorating infrastructure in developed markets.
  - In emerging markets, we expect investment will be focused on building out essential infrastructure to provide clean water and proper sanitation.

**Pam Kearney:** Well that's great detail into the strategy. How are these strategies coming to life?

**Nick:** Great question. We have seen a number of examples across the globe just in the past month, particularly within the maximizing water supply theme.

First, earlier this month, Pakistan's largest city, Karachi, home of approximately 15 million people, announced that it will engage the private sector to help reduce the severe water shortage in the city. The investment is sizable as Karachi plans to invest up to \$640 million to improve its water and wastewater services. The investment will be focused on reducing water loss from its current level of 50-60%.

Here in the U.S., we saw a significant announcement on water reuse just last week. The San Diego City Council approved a \$614 million loan to begin construction of the city's \$1.25 billion water reuse project. The water reuse facility marks phase 1 of San Diego's Pure Water Program, which calls for reuse to supply 30% of region's water supply by 2035. This announcement is representative of the strong momentum in capex spend seen in the U.S. According to U.S. census, annualized spending in June on drinking water infrastructure topped \$15 billion that is up 29% year over year and the highest level since December 2010 when the stimulus package was in place.

South of the U.S., the environmental authority in Chile approved the development of the largest desalination plant in Latin America, with an initial investment of \$500 million. This facility is expected to play a key role in the development of industrial activity in a region that faces severe water constraints today.

**Pam Kearney:** Okay, one more question for you Nick. What's driving the growth of these trends?

**Nick:** The key in our mind is technology. We believe that technology is transforming the sector, as the industry continues to innovate and adopt cutting edge products and services. Higher-end technologies including smart water networks, desalination, ultraviolet disinfection, filtration and testing, offer a better, more economical solution to maximizing supply, improving water efficiency and reducing spend associated with expensive water infrastructure, as well as improving water quality. We expect those with higher-end technologies will generate higher growth than the industry average, as well as benefit from higher barriers to entry and improved profitability. We believe the adoption of this technology will drive attractive returns.

**Pam Kearney:** Thanks Nick. That's an exciting set-up for the water sector. It reminds me of the energy sector at the dawn of the shale revolution. Turning to you Evan, what are some other differentiating factors of the actively managed strategy?

**Evan:** Our strategy uses the same proven investment process and value chain approach that Tortoise implemented at the inception of the firm and used to generate strong performance since 2002. Through our investment process, we believe our strategy delivers best-in-class exposure to pure-play water companies and water technology providers, as well as mitigates risk with the implementation of company-specific ESG principals.

**Pam Kearney:** Okay, thanks, Evan. Before we wrap up, do you have any other final thoughts?

**Evan:** Sure, we believe the water sector is at an inflection point. The global water crisis is unfolding today, and investment is needed now to reduce the growing water shortage, as supply is limited and demand is ever increasing. At Tortoise, we are excited to fulfill our "Making an Impact" mission by aligning the capital needed through our active and passive products to forge a better future for the world's most essential commodity. Thanks for listening.

**Thank you for joining us. And stay tuned for our next cast. Have topics you want covered or other feedback to share? Write us at [info@tortoiseadvisors.com](mailto:info@tortoiseadvisors.com).**

**The S&P Global Water Index** provides liquid and tradable exposure to 50 companies from around the world that are involved in water related businesses. To create diversified exposure across the global water market, the 50 constituents are distributed equally between two distinct clusters of water related businesses: Water Utilities & Infrastructure and Water Equipment & Materials.

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