

A New Era Growth investment in water. *By David Henderson*

I'm frequently asked about the sudden interest from angel investors, venture capitalists and growth equity managers in water companies. While interest may appear sudden, the simple fact is that underlying trends, in the works since the industrial revolution, are making water an attractive growth equity investment market.

Water scarcity and the effects of water pollution can now be seen in everyday circumstances in all regions of the world. For example, the Colorado River—a major shared water supply for states such as California, Nevada, Colorado, and Arizona—no longer reaches the ocean during certain periods of the year. Water levels in the Great Lakes, once thought to be an endless source of fresh water, are decreasing. Some of the highly contaminated tailing ponds in Alberta resulting from oil and gas production can actually be seen from space. And one of the most sensitive and attention-grabbing issues of the 2008 Olympics in China was water shortages and pollution.

Unfortunately, the global macro trends of population growth, continued industrialization and resulting urbanization, as well as climate change which continue to shrink the Earth's natural freshwater storage capacity will only make these water problems worse before they get better.

The last wave of innovation in the water sector was fuelled by regulatory compliance, but today's economic pain points are driving behaviour change in the water industry. The water regulations adopted by most western countries in the 1970s and 1980s created new acceptable limits and standards around water quality. In order to meet these regulations, predominately municipal and industrial users deployed new technologies and solutions driving a wave of innovation across the industry. ZENON Environmental, Trojan Technologies and hundreds of other water technology companies were born in this era.

Today, water scarcity and pollution are significantly altering the economics of water use. Farmers, industry, commercial buildings and even consumers are faced in the quantity of water they are supplied each year. In

some cases, users are supplied water of lesser quality and are forced to invest in treatment technologies to bring it up to appropriate standards.

Water is mission critical to most industrial processes and the problem is twofold: water scarcity is driving higher costs for water, but perhaps more importantly, dwindling water supply to force production stoppages, rendering billions of dollars of equipment worthless. These types of challenges are not just faced by companies in China and India; shrinking water supplies are making farmers cut back on the number of acres they plant, forcing plants to temporarily—and in some cases permanently—shut down, preventing homeowners from filling their pools in all corners of the United States.

Get ready for one of the biggest investment booms since the internet.

The water industry structure has undergone a dramatic transformation over the past decade. According to a recent report by Lux Research there have been 244 water industry acquisitions (not including utilities) worth over \$49 billion from 1998 to 2008, including biggies like General Electric's acquisition of ZENON. An industry that was highly concentrated in the mid-market (companies with \$50 million to \$500 million in revenue) has turned to a structure dominated by large multinationals at the top of the food chain, very few mid-market companies and thousands of emerging water companies at the bottom driving the new generation of innovation.

The industry's new market structure is very conducive to private equity investing. As the multinationals harvest their acquisitions, innovation is now owned by the smaller emerging companies. We're seeing entrepreneurial management talent (once the leaders of the acquired mid-market companies) recycled into these smaller companies, and the multinationals that now dominate the water sector all have growth by acquisition strategies. It

makes for the perfect alignment to fuel the private equity food chain.

Angel investors, venture capitalists and growth equity players are now investing in next-gen water companies that a competitive list of multinationals will be ready to buy once they've grown to a decent size. This investment cycle delivers what every private investor is seeking—a superior return on investment.

In addition to repeat entrepreneurs leading some of the up-and-coming water companies, we're also witnessing an unprecedented turnover at the senior plant operator level—a large wave of certified professionals will retire. They are, however, being replaced by younger and technically savvy operators hungry for data, automation and a real-time operating universe.

Along with new talent entering the market, we have new corporate and research entrants. For example, IBM recently announced its new strategic focus on the water sector. The company believes the data and systems needed to operate the water plants and processes in the future will create an enormous opportunity for new software and data systems. Or take the formation of WaterCAMPWS, the largest National Science Foundation program in the United States which brings together over eleven research institutions and universities focused on solving critical drinking and wastewater challenges. These developments are bringing new types of companies and entrepreneurs to the sector, engaging new thinking from a cross-discipline of science and business faculties.

New thinking, people and innovation create an environment that supports private investment. Get ready for one of the biggest investment booms since the internet as water scarcity and quality issues continue to disrupt the lives of more people, and the operations of a growing number of industrial, agricultural, and commercial users. ■



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