



Nate Maguire

Water reuse helps businesses improve sustainability efforts

Business Sense

Rainwater harvesting and reuse is gaining popularity in the residential sector, but commercial and industrial businesses also are getting in on the action. SWS Managing Editor Amy McIntosh asked Xylem Inc.'s Nate Maguire about water reuse trends among businesses.

Amy McIntosh: What are some global trends that are leading businesses to explore water reuse?

Nate Maguire: The United Nations Environmental Programme reported that by 2025, 40% of the world's population will live in water-scarce regions.

Many businesses have begun to explore water reuse due to global water shortages. These shortages are spreading as a result of unsustainable withdrawal rates, increased water consumption, changing climate and precipitation patterns, pollution and source water contamination. By implementing water reuse, businesses are reducing their reliance on freshwater while improving the sustainability of their operations. Xylem has seen a significant increase in water reuse activity as more organizations are looking for capable partners and as they evaluate and employ reuse technologies.

McIntosh: What types of businesses are employing water reuse? How are these businesses applying water reuse practices?

Maguire: According to American Water, an estimated 1.7 billion gal of water are reused and reclaimed daily in the U.S. Additionally, on a volume basis, reclaimed water use is growing at an estimated 15% annually.

Many businesses have implemented water reuse practices. Some municipalities implement water reuse to irrigate parks and landscaping and water golf courses.

Chemical and pharmaceutical companies are increasingly looking at water reuse for heating and cooling purposes. The food and beverage industry is an early adopter of water reuse for nonprocess, auxiliary applications.

McIntosh: How do businesses benefit from applying water reuse practices?

Maguire: Water is a resource that has been taken for granted for decades. But that is starting to change as industries and consumers alike are gaining a better understanding of the true costs and risks associated with water. One region where water has rapidly become a focus area is California. California's extended drought is stressing aquifers and many of the state's reservoirs are at historic lows.

Several California cities and municipalities are responding. By implementing a new onsite water reclamation system policy, for example, San Francisco established an efficient and affordable way to monitor the community's water use. According to an article in the Huffington Post, San Francisco is the first city in the United States to mandate newly constructed buildings (more than 250,000 sq ft) install onsite water reclamation systems. Under the new mandate, rainwater, greywater, blackwater and storm water will be repurposed for non-potable demands, including cooling, toilet flushing and irrigation. This will help reduce the overall potable water demand and help sustain the community's water supply.

For many applications, water reuse technology can produce high-quality water at a lower total lifecycle cost, which includes all of the costs associated with withdrawal, treatment and distribution. Reusing water can be a smart choice for businesses because treatment intensity can be matched to the requirements of the application. SWS

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