

# Water Is The Core Of Health & Sustainable Development -- World Water Day Meets Technology

In the past week, sustainable development, the environment and technology have been at the forefront of domestic and international attention. Ambassadors from around the world joined business owners and policymakers at the United Nations for [World Water Day](#) while the Supreme Court [heard arguments](#) on behalf of states and associations versus the Environmental Protection Agency ([EPA](#)). The goals of all these activities are to improve the health of people around the world through better and viable nutrition, industry and communities. [Ambassador Denis Antoine](#) of Grenada – an island nation that struggles for clean water – said, “Water is life.” He noted that, “Water impacts all sectors, including food sustainability, sanitation, tourism and health.”

[At present, half of the world’s hospital beds are filled with people affected by a disease due to poor water and sanitation.](#) An estimated [783 million people](#) have no access to clean water, and [one-fifth of deaths](#) for those under the age of five are related to water-based disease.

[Water impacts everything that we touch and are; health, food, nature, peace, economy, development and industry.](#) As the United Nations says, “Humanity Needs Water.” And, with the current constraints that exist, alternative methods of cleaning, sterilizing and distributing water need to be created.



A Kashmiri girl cleans utensils at a hand pump in Bandipora, north of Srinagar, on March 22, 2015. A new UN report of World Water Day warned of an urgent need to manage the world’s water more sustainably and highlight the problem of groundwater over-extraction, particularly in India and China. AFP PHOTO/Tauseef MUSTAFA/Getty Images)

## Uniting The Nations For Common Goals

To relieve pressure on natural resources, support the world's population, grow poor economies and create peace where there is conflict, many argue the simplest method is to create more clean water around the world. Or, as Ermanno Santilli, CEO of [MagneGas](#), stated, "Blue is the new black. The past was all about energy and oil. Before that, it was geographic expansion for minerals. Now, as the population grows, water is needed more and more to support agriculture and people." [The President of the U.S. Federation of Middle East Peace Sally Kader agreed that water is a growing source of significant conflict. She contends the, "Wars of next century will be over water. And this scarcity can be used as a catalyst to accelerate innovation."](#)

The Ambassador of Costa Rica [Juan Carlos Mendoza](#) added that water is, "The center of sustainable development." He noted that improving the process to filter clean water and sterilize reusable wastewater could make or break the progress of an entire country, like his. This was reiterated by Ambassador Antoine, whose country has focused on training an entire workforce on development and sustainment of a [drip irrigation system](#).

In the Bahamas, [Ambassador Elliston Rahming](#) talked about the troubles facing Nassau, where there is not enough clean water for the local and tourist populations, and the economic impact of having to barge in water, as well as outsource [wastewater sterilization](#). To do this, he highlighted the importance his nation puts into science, technology and distribution. All of which are needed to manage day-to-day life for people and the economy.

As microbiology, technology and innovation move to the forefront of water filtration, sanitization and distribution, countries that have been successful in new initiatives, like [Singapore](#), are becoming world leaders in new fields. [When some estimates have concluded that California has one year of water left, even wealthy developed countries have to be thinking about the health and wellness of their water supply.](#)

## Technology Could Be The Key To Peace

Director of [Environment New York](#), and former advisor to the Dominican Republic, Heather Leibowitz believes that, "Usable and reusable water are key." That's why their nonprofit is devoted to supporting and highlighting technology, companies and public education efforts that help transform the way we think about water in the U.S. While speaking at the United Nations, she and Marc Yaggi, the Executive Director of [Waterkeeper Alliance](#), reiterated that whether we are talking about the U.S. or a developing country, water is a basic building block to society and productivity.

UN World Water Day Panel. March 23, 2015

Whether it is [Resolute Marine](#), who is working with the U.S. Navy to produce energy from ocean waves or [Epiphany Solar Water Solutions](#), which it claims will revolutionize the purification of drinking water, there is no shortage of technologies that are focused on using and reusing water. According to Tom Joseph, CTO of Epiphany, the organization's greatest contribution is its ability to [decentralize desalination](#), making "water-on-demand" as common as cell phones usage.

However, some argue that desalination alone will never be enough. The [German Aerospace Center](#) concluded that even if all the clean water that exists today was recycled, it would be an economic disaster for countries to try and keep up. MagneGas has therefore used its technology to eliminate pathogens from liquid waste – sterilization – with the aim of turning the waste into energy.

Nevertheless, no matter what part of the water system a company is targeting, or the innovation that is in the pipeline, in many ways developed countries (and our regulating bodies) have a lot to learn from developing countries. Just as they have often avoided our four-walled hospital system in lieu of tele-based services, their desperate need for clean water is allowing them to move faster than the EPA will in the states.

### **Public Private Partnerships**

In the last few decades, Europe has placed a higher value on the importance of monitoring the environment and clean water. [With the knowledge that globally we will need to produce 60% more food by 2050 than we do today, they realize no one idea can change the game for everyone. GDP in developing countries](#) will need to increase, meaning wasted time at well sites for clean water will need to shorten and death from water-borne illnesses will need to decrease drastically, as well as new food production and agricultural shifts will need to occur.

For the economic development to go hand-in-hand with the health and wellness of individuals, entire communities will have to partner with public and private organizations. Nonprofits, for-profits and researchers will have to come together, and privatization of water filtration, sanitization and access will have to be addressed. And this will have to be done on a country-to-country, or community-to-community basis.

Further, in countries like the U.S. government and regulating bodies will have to work in partnership with states and organizations to ensure good ideas and technologies are supported. Yet, a balance must be struck to protect the environment and ensure that only safe and cost-effective solutions are carried out. Just as the oral arguments before the Supreme Court last week addressed, each situation is different, and the EPA – [like the FDA](#) – is going to have to become very nimble for the flood of technologies that will be entering the market in the coming years. And, we should not be shy to look to other countries for precedent.

The annual update to the United Nations World Water Development Report can be [found here](#).