



# Why Water?













# The Debate on Water

Water issues—scarcity, access, infrastructure, sanitation—lie at the center of a convergence of global challenges, including energy and climate change, population growth, public health and food shortages.



Water touches every industry, every sector and every aspect of economic growth—and in fact can be a prerequisite for growth: among the world's poor countries, those with access to improved water and sanitation services experience an annual average growth nearly four percent greater than those with the same per capita income but without the same access to water.<sup>1</sup>

However, in developing and industrialized countries alike, water demand exceeds supply. In parts of the United States, China and India, groundwater is being consumed faster than it is being replenished, and groundwater tables are steadily falling. Some rivers, such as the Colorado River in the western United States, often rundry before they reach the sea.

As the world's population continues to grow at an unprecedented rate, many more areas are expected to experience this imbalance in the near future: by 2025, an estimated 5.5 billion people—two-thirds of the world's population—will live in areas facing moderate to severe water stress.<sup>2</sup> In the United States, most states expect water shortages by 2013.<sup>3</sup> In Australia, the situation is already dire, with cities like Adelaide facing an inability to meet residents' "critical human needs."<sup>4</sup>

What used to be seen as local incidents—droughts in California and Australia, disputes over withdrawal rights in Georgia and

Florida and usage rights in Mozambique—today seem evidence of a global problem. And this global problem is driving a new global debate about water, and the role the private and public sectors as well as individuals should play.

Adding to the debate is the impact of climate change, which among other things promises to affect the availability of water for consumption, irrigation and energy production—and particularly hydropower, which accounts for about 20 percent of world electricity supply.<sup>5</sup>

#### Business sits at the center of this debate.

As little as a decade ago, people held government responsible for ready access to clean water and the stewardship of water resources. As supplies dwindle, this is changing. In recent years, some the most meaningful strides have been made by business in collaboration with NGOs; multilateral agencies; and national, state and local governments. From companies like Shell providing innovative technologies for clean water to South African communities<sup>6</sup> to PepsiCo developing new business models for sustainable water use, business is acknowledging its responsibility.

And with this responsibility comes the opportunity to innovate, lead, collaborate and ultimately, be part of the solution.

"Some of the most pressing challenges the world faces poverty, food insecurity, disease and access to energy—have water at their core. These issues are not just community issues. They are business issues. It is therefore critical that water become a central consideration for governments and the private sector alike—and both must begin by acknowledging and understanding the needs and concerns of local stakeholders."



—Kirsten Thorne, Corporate Advisor Global Issues and Policy, Chevron



### Water is Different

Unlike other global crises, which often have one "solution" (e.g., climate change requires a reduction in carbon emissions), the issue of water scarcity requires many solutions at once: pressure on water supply is as often the result of poor stewardship as it is lack of infrastructure, drought, and climate change. For this reason, the global debate on water is splintered.

Still, three common threads emerge.

# 1. Demand for Regulation is Growing

The need for investment in water delivery and sanitation systems is becoming more urgent by the day: population growth, particularly in cities, and industrial growth in emerging markets are putting enormous pressure on water delivery systems already suffering from decades of underinvestment and/or underdevelopment. For instance, the United States Environmental Protection Agency (U.S. EPA) estimates that the nation's 53,000 community water systems and 21,400 not-for-profit non-community water systems will need to invest an estimated \$334.8 billion between 2007 and 2027. In Delhi, water infrastructure and supply has become a hot political issue, with two major national parties blaming each other for the city's "growing [water] insecurity."

But where will these funds come from? Privatizing delivery systems and increasing the water pricing are options, but remain too controversial to be politically feasible. And so governments are turning their eyes to corporate water usage and withdrawal, the "right" to water, and the price charged for it.

Water-intense industries, including the energy and beverage sectors, are particularly at risk of public examination: water use by companies like Nestlé and Coca-Cola continues to be loudly and publicly criticized, increasing pressure on policymakers to act. And China, in its Five-Year Plan (2006-2010), mandated that water usage by industry be decreased by 30 percent – a policy affecting heavy users most.

In this environment, business must ensure that it fully understands its

role in water-related issues as well as the implications of water usage and withdrawal—and conversely, that local communities and policymakers, and also national and even global NGOs and advocates, understand its point of view, and do not make decisions in isolation of it.

# 2. Consumers Are Beginning to Take an Interest

In the United States and other developed countries, advocates like Michael Pollan, author of "The Omnivore's Dilemma," films like Food, Inc. and NGOs like the Sierra Club, are drawing attention to the environmental impact of food choices. Advocates like the Water Footprint Network are promoting the use of labels on packaged food to indicate how much water was used in its production. As a June 2009 article in the *Christian Science Monitor* noted, "...the next shoe to drop in the popular awareness of eco-issues is the 'water footprint."

As a result, consumers are beginning to understand, and take an interest in, the fact that the production of one kilogram of beef requires 16,000 liters (4,222.4 gallons) of water and one cup of coffee requires 140 liters (36.9 gallons).8 This increased understanding has resulted in numerous consumer campaigns, from calls to buy more local products to those to stop buying bottled water. While all brands risk damage to their image, among consumer brands, food products are especially vulnerable to criticisms about water because agriculture is responsible for more than 70 percent of global water withdrawal.9

As such considerations begin to drive purchasing behavior, consumer brands



# 1. How is the debate on water changing?

Corporate leaders, elected officials and private citizens around the world are spending less time these days debating why water is a challenge, or debating the scale and scope of that challenge now and in the future. Rather they are looking more closely at what the most effective solutions are to these challenges: How can stakeholders work together to address global water challenges, in a fashion that meets the needs of one billion people for safe drinking water (and sanitation), the needs of farmers and industry, the needs of the environment, and how does climate change impact all of the above?

# 2. What are the top water issues that businesses face?

Businesses need to stay on top of water from several perspectives:

- First, how efficiently are they using water in their operating environments? How many liters of water per widget, and what quality is the effluent water from a factory?
- Second, what water-related risks and opportunities exist up and down the value chain? Do raw material suppliers have the water they need to provide those materials (e.g., agricultural and mineral

commodities)? Do end users have the water they need to use the consumer goods (e.g., food, cleaning products)? Do employees and their families suffer from preventable, sometimes fatal, waterborne disease that keeps them from work (e.g., diarrhea or Guinea Worm)? Do the communities and households around manufacturing facilities in developing countries have the water they need to survive? Is a company perceived as being in competition with the community for local water supplies, or is that company perceived as being part of the solution to local development challenges?

# 3. Is business doing enough to address and manage these issues?

Many businesses, particularly those with high risk and opportunity in developing countries, are *individually* looking at water both operationally and from a broader community development perspective.

Examples include GlaxoSmithKline, Dow Chemical, PepsiCo, Procter & Gamble, The Coca-Cola Company and others.

Several networks and alliances are bringing companies *together* to address these challenges, including the World Business Council on Sustainable Development, the World Economic Forum and the Global Environmental Management Initiative. These efforts, both individual

and collective, are often driven by tangible cost savings, risk minimization efforts or branding and market expansion opportunities.

#### 4. What should they be doing?

A business never wants to be perceived as competing with a local community for water resources or as a source of pollutants contaminating that water. So companies first need to make sure that they are in fact not competing for that water or polluting the environment. Beyond that, active engagement in waterrelated programs offers many companies an opportunity to achieve less tangible, longer-term gains as well. Programs that provide safe drinking water for local communities offer companies the opportunity to reduce the risk of being seen as just taking and not giving back. Plus safe drinking water and sanitation facilities save lives and prevent debilitating illness, and local communities know and appreciate that. Business leaders at different levels (corporate, brand, business unit, country office) have many effective and cost-effective opportunities to include water in their philanthropic, citizenship and social responsibility initiatives around the world. A partial list of strong partners includes Water For People, Watercredit. org, CARE, WaterAid America, Rotary, UNICEF and many more.

must not only reexamine their own water usage, but also how it will communicate changes in behavior—water reduction goals, for example. Today, business needs both a defensive strategy, to protect the company from attack, and an offensive one, to seize leadership and demonstrate commitment.

# 3. Water is Becoming a Business Risk

Business faces three related but distinct kinds of water risk: 1) operational, or the need for access to water of acceptable quality and in sufficient quantity, 2) reputational, or the threats to corporate image or brand, and 3) regulatory, the prospect of new governmental policy,

including permits, pricing and discharge rules. Water scarcity and diminished quality means global businesses are less likely move to certain communities, which in turn can result in depressed economic development and growth. For businesses, scarcity can result in production interruptions—many British retailers, for example, are already considering whether to relocate food production away from areas with depleting water—and supply chain risk, resulting in increased cost, a higher cost of capital and damage to a company's "license to operate."

Partly in recognition of this fact, in 2008, almost all major U.S. investment banks produced investor reports on water; while not yet common, over the past eight years, the number of shareholder resolutions demanding disclosure on water policies and practices increased 14 percent.<sup>10</sup>

The universe of people who care about water is growing, and with it, demand and mandates for transparency and disclosure in reporting: As a result, in 2007, the Global Reporting Initiative (GRI) created water reporting guidelines: total water withdrawn by source; water sources significantly affected by the withdrawal of water; and total water discharge by quality and destination. In addition, NGOs like the World Resources Institute (WRI) are working with investors to develop more meaningful disclosure around corporate water use and behavior.

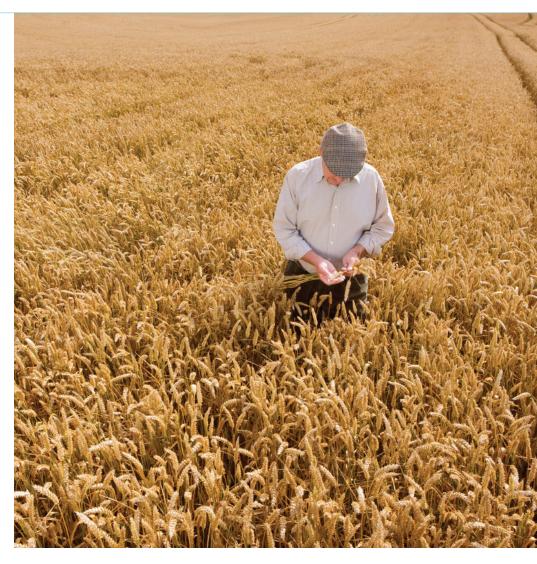
### What Now?

As the voices of advocacy grow louder, what should business do to manage the reputational, regulatory and operational risks of its water usage? There are four answers—the scale and intensity of each will vary by sector, geography, and customer base.

#### 1. Understand Stakeholder Expectations

At the moment, myriad voices are raising the alarm about water and asking for solutions. But few are leading. Herein lies the opportunity: business can lead the discussion even if it does not want to lead the debate. And it can do so in a variety of ways:

Listen—it is important for businesses
to not only put forth their position, but
also to have that position be informed
by others, including critics. In listening
to others' points of view, business will
also better understand the implications
of its own behavior.



# Strategic Corporate Philanthropy to Address Water Issues





"WITHOUT CLEAN WATER, NONE OF THE OTHER FUNDAMENTALS LEADING TO A HEALTHY AND PROSPEROUS LIFE ARE POSSIBLE. WE BELIEVE THAT THE WORLD WATER CRISIS IS ONE OF THE MOST PRESSING CHALLENGES OF OUR AGE. AS A GLOBAL FOOD AND BEVERAGE COMPANY, OUR SUCCESS DEPENDS ON BEING RESPONSIBLE STEWARDS OF THIS LIMITED RESOURCE."

-Indra Nooyi, PepsiCo Chairman and Chief Executive Officer

Food and beverage companies, with a clear interest in water issues, have traditionally used philanthropy to strategically engage with research institutions and NGOs to address issues of water scarcity and stewardship. PepsiCo has entered into a series of water-related partnerships through the PepsiCo Foundation and as part of the company's Performance with Purpose strategy for sustainable development and corporate citizenship.

In one of the largest philanthropic commitments related to water, the PepsiCo Foundation established a partnership with H2O Africa, a foundation focused

on clean water initiatives in Africa and committed to a \$6 million, three-year partnership with the Earth Institute at Columbia University. Both partnerships hope to drive sustainable water practices as part of PepsiCo's ongoing commitment to achieve the Millennium Development Goals. Other key partnerships help expand PepsiCo's leadership locally including capacity-building work with the China Women's Development Foundation to expand availability of safe drinking water for the people of Western and Central China; WaterPartners to provide safe drinking water and sanitation in India; and the Safe Water Network in Ghana, India, and Bangladesh.



"Global population growth, urbanization and diminishing supplies of clean fresh water are leading us to pay more attention to how we use, treat and re-use our water, and will require massive investment in infrastructure. New costeffective and efficient water and wastewater treatment technologies are being developed, but to meet our future water needs around the world we also need a greater sense of shared responsibility among all stakeholders, including government, private citizens and industry."



—Gretchen McClain, President of Fluid and Motion Control, ITT

- Be an honest broker—bring stakeholders together in communities most affected by shortages to discuss potential solutions. In convening others, business can demonstrate its ability to lead—and willingness to learn.
- Develop the right partnerships—develop partnerships with stakeholders in a way that highlights shared responsibility as well as the shared search for solutions.
- Ask the right questions—what is the best way to demonstrate commitment? How can our business reassure the community, policymakers, consumers? How can we help you?
- Share best practices—many businesses have for years been making operations more water efficient. Now it is time to share the lessons learned.

#### 2. Have a Point of View

Having a point of view can allow business to move from reaction (e.g., answering media questions) to proactive engagement. The process of developing a point of view will also influence if and how the company will develop policies and commitments.

This point of view gives a company a solid foundation to lead the discussion. For example, GE understands that "... companies have the responsibility to act with due diligence, to respect the right to water and to conduct operations in ways that do not interfere with government's obligation to protect that right." Nestlé believes that "The problem of water scarcity must be addressed while increasing production of food, and at the same time, we must work to bring rural communities into the cash economy with adequate access to nutrition, water and sanitation."

#### 3. Develop a Water Policy

A water policy is a road map—it marries the company's point of view with stakeholder concerns and demands, and applies it to a timeline. While the goals and aggressiveness of the timeline must vary, developing such a policy demonstrates the tenets of good citizenship: a willingness to listen, the ability to learn and a commitment to act. Understanding stakeholder expectations will be critical—a policy that addresses business concerns but not stakeholder demands is irrelevant.

#### 4. Tell Your Story

A truism in communications is that it is always better to define yourself than to have others define you—and this is also true of water issues. We have entered a new age of public engagement, where communications is no longer top-down; it is fluid and continuous through an array of social media channels. Today, not just media but NGOs, employees and consumers now inform the conversation around water. Most critical, the element of trust is no longer the province of identified authorities. Instead, it's the outcome of a dialogue, the collective wisdom of a wider public and galaxy of dispersed but influential stakeholders.

Stakeholders are moving from viewers to collaborators and want to be part of a company's water efforts. Proactive communication and engagement should be an integral part of water planning because stakeholders don't just want to have a say in how a company performs or how its products are made—they expect it.

As the challenges of climate change, population growth and water scarcity converge, water is front and center on the global stage.

As governments look to meet growing demand, businesses—particularly those in water-intensive industries—are at risk. Communication lies at the heart of managing, and ultimately mitigating, this risk. And there are steps businesses can and must take now to contribute, innovate and lead.

## **Appendix:**

#### A SAMPLING OF ORGANIZATIONS SHAPING THE WATER DEBATE

#### **UNESCO**

The United Nations Educational, Scientific and Cultural Organization (UNESCO) manages the International Hydrological Programme, the only broadly based science program in water research, resources management, education and capacity-building. The organization also manages the World Water Assessment Programme (WWAP), a joint initiative of 24 UN bodies dedicated to the ongoing assessment and preservation of freshwater bodies.

#### The UN Global Compact

The UN Global Compact is an initiative for businesses committed to aligning their operations and strategies with 10 universally accepted principles in the areas of human rights, labor, environment and anti-corruption. Its CEO Water Mandate, launched in 2007, is a public-private initiative designed to assist companies in the development, implementation and disclosure of water sustainability policies and practices.

#### NGOs

#### The World Wildlife Fund

The World Wildlife Fund, the world's largest conservation organization, works to preserve ecosystems and freshwater basins. The organization works to advance conservation science and make an impact on environmental policy issues. WWF's flagship corporate partnership is with Coca-Cola to improve water efficiency in its operations and conserve the world's largest freshwater basins.

#### **NRDC**

The Natural Resource Defense Council (NRDC)'s Water and Oceans Program works to protect U.S. water quality, fish populations, wetlands and oceans. NRDC partners with local governments, business and other NGOs to ensure that overtaxed water resources, particularly on the U.S. West coast, are sustained for future generations.

#### **Environmental Defense Fund**

The Environmental Defense Fund focuses its water efforts around preservation and safe ecosystems by lobbing for stronger local, state and national conservation policies. EDF forges large-scale partnerships with multinational corporations, such as Wal-Mart and McDonald's, to incorporate sustainability into specific business operations and improve their water stewardship systems.

#### WaterAid

WaterAid aims to provide access to safe water, sanitation and hygiene education to those in impoverished areas of the world. The organization partners with local governments, business and NGOs to build capacity, raise awareness and shape water policy. Through these programs, WaterAid aims to annually help one million people gain access to water and one million gain access to sanitation.

#### Eau Vive

Eau Vive is a French nonprofit organization dedicated to building capacity in impoverished parts of Africa. The organization provides communities with on-the-ground tools and training, as well as financial assistance, to build efficient water systems and gain access to clean water and sanitation. Eau Vive aims to help these communities reach autonomy in assessing and managing their water issues in a sustainable way.

# International Organization for Standardization

The International Organization for Standardization (ISO) has developed two standards that relate to management of water systems, both of which require external certification from an accredited auditing body. The ISO 9000 standards are focused on ensuring quality management within a system and the ISO 14001 standards provide a framework for a holistic approach to an organization's environmental policy, plans and actions.

#### Simavi

Simavi is a Dutch nonprofit organization working to address the health needs of those living in impoverished areas of Asia and Africa. The organization supports community-based programs to build capacity and equip local NGOs to manage safe water and sanitation initiatives. Simavi also works to develop critical water infrastructure, including wells, hand pumps and water-pipe networks, in these communities.

#### Sierra Club

The Sierra Club leads campaigns on the state and local levels in the U.S. around pollution in local sources of drinking water, sewage and stormwater runoff issues and clean water legislation. The organization mobilizes its more than one million members of local chapters to lobby for efforts to protect freshwater bodies in their communities.

#### **Conservation International**

Conservation International, an organization focused on conserving biodiversity, conducts research on oceans and freshwater ecosystem and works with business and governments to address pressing issues. The organization's Center for Environmental Leadership in Business (CELB) partners with multinational corporations to address environmental issues specific to their industry. CELB advises agribusiness and food and beverage corporations to create sustainable practices to protect ecosystems and fisheries affected by their supply chains.

#### International Union for Conservation of Nature and Natural Resources

The International Union for Conservation of Nature and Natural Resources (IUCN) Water and Nature Initiative works with local governments and communities to develop water management systems to preserve the world's 12 largest freshwater basins. The organization manages the Global Environmental Flows Network

(eFlowNet), a global hub of information for policymakers, NGOs, business and the public regarding management of freshwater to protect ecosystems and restore watersheds.

#### **Corporate Europe Observatory**

Corporate Europe Observatory works to raise public awareness the activities of European corporations and lobbying organizations, particularly around environmental issues and "greenwashing." The organization campaigns against business involvement in water management systems and infrastructure development, as well as the privatization of water around the world.

#### **Water Advocates**

Water Advocates works to increase funding for safe and affordable drinking water and adequate sanitation in impoverished areas around the world. Rather than facilitating projects itself, Water Advocates works with U.S.-based government organizations, NGOs and the private sector to identify channels for each to fund specific water projects and organizations.

#### **World Development Movement**

The World Development Movement (WDM), a UK-based anti-poverty NGO, works against privatization of water in the developing world, and advocates for water as a human right. WDM connects water campaigns to global social issues, including conflict, trade and gender equality, and lobbies the UK government and the EU to take action to address these issues.

#### **World Resources Institute**

The World Resource Institute's (WRI) People & Ecosystems initiative works with governments and business to reverse the degradation of global ecosystems and assure their ability to continue to function. WRI has developed watershed and water scarcity indicators to help companies balance water use between the agriculture sector and freshwater ecosystems.

#### The Alliance for Water Stewardship

The Nature Conservancy, together with the Pacific Institute, World Wildlife Fund, Water Environment Federation, Water Witness and an Australian organization, the Water Stewardship Initiative, launched the Alliance for Water Stewardship. The Alliance is working with water authorities, industries, local communities and environmentalists to jointly establish a global enterprise that will define water stewardship standards and recognize large scale water users and managers who meet those standards via a branded certification program.

#### Research Institutions

#### The Pacific Institute

The Pacific Institute organizes its water program around community strategies, globalization, international water and communities, climate impacts and adaptation and a business initiative. The Pacific Institute's Water Use in Business Initiative seeks to bring attention to poorly understood business risks and opportunities relating to freshwater scarcity and to define and promote responsible water management in the private sector.

#### The Water Footprint Network

The Water Footprint Network was established in October 2008 by a number of major global players from business, civil society, multilateral organizations and academia to help develop and apply broadly shared global standards on "water footprint" accounting. The basis for the water footprint concept and methodology was developed by Professor Arjen Hoekstra working at UNESCO and further developed at the University of Twente, in the Netherlands.

# The World Business Council for Sustainable Development

The World Business Council for Sustainable Development (WBCSD) is a CEO-led membership organization of companies committed to sustainability in their operations and the communities they affect. WBCSD's Water Working Group includes businesses across a range of sectors that are collaborating to provide frameworks to support water management plans and share best practices across industries. The organization also developed a Global Water Tool to help member companies map their water use and assess supply chain and operational risks.

# The World Economic Forum Water Initiative

The World Economic Forum Water Initiative is dedicated to identifying and facilitating the role of business in addressing the global water crisis. The taskforce is working to develop a set of universal indicators for water management as well as a tool to aggregate relevant information and best practices. It aims to serve as a convener on the global and regional level and facilitates dialogue between member companies, governments and stakeholders.

### **Endnotes**

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