

Considerations for Assessing Companies' Exposure to Water Risk



Excerpted from
*Water Scarcity &
Climate Change:
Growing Risks
for Businesses
& Investors,*
February 2009

1. Does the company measure and understand its water footprint?

a) Does the company know its direct water use?

- ◆ Does the company measure how much water is required and used in its direct operations?
- ◆ Does the company measure the quantity and quality of its wastewater discharges?
- ◆ Does the company understand the connections between its energy and water use?

b) Does the company know its indirect water use?

- ◆ Does the company know which parts of its supply chain are most water-intensive?
- ◆ Is the company aware of how much water is used or discharged in association with its products and services?

2. Has the company assessed the business risks associated with its water footprint?

a) Has the company evaluated water risks associated with its direct operations?

- ◆ How are the company's direct operations dependent on quantity, quality, timing and cost of water supply?
- ◆ What is the nature of the company's water rights and legal obligations with regard to quantity, quality, price, reliability and duration of water supply?
- ◆ What percentage of the company's direct operations is located in water-stressed or ecologically sensitive regions? Is water demand growing in those regions?
- ◆ What percentage of the company's direct operations relies on energy sources that require large amounts of water to produce?
- ◆ What percentage of the company's direct operations is located in the areas where local population lacks access to clean and affordable drinking water and sanitation?
- ◆ What is the water infrastructure situation and water management capacity in regions with key operations?
- ◆ How does the amount and source of the company's water withdrawals impact local communities and ecosystems?
- ◆ How does the quantity and quality of wastewater discharges impact local communities and ecosystems?
- ◆ What is the quantity/quality of the company's wastewater discharges in relation to permitted levels and/or industry averages?

b) Has the company considered water risks related to its extended supply chain?

- ◆ How might the company's supply chain be affected by changes in water supply, quality, reliability, and price?
- ◆ What percentage of the company's supply chain is located in water-stressed or ecologically sensitive regions?
- ◆ Has the company considered water-related regulatory risks of key suppliers?
- ◆ What percentage of the company's key suppliers relies on energy sources that require large amounts of water to produce?

c) Has the company considered water risks related to its products and services?

- ◆ How are the company's products and services dependent on quantity, quality, reliability and the price of water supply? How do they perform in relation to competitors?
- ◆ What percentage of the company's product users and customers is located in water-stressed or ecologically sensitive regions? Are those customers and users located in regions with growing water demand?
- ◆ Do the company's services and products have potential impacts on water resources when disposed of or recycled?
- ◆ How will water supply, quality, and reliability in the company's key markets be potentially affected by climate change?
- ◆ What percentage of the company's direct operations and supply chain are located in areas where the local population lacks access to clean and affordable drinking water and sanitation?
- ◆ Has the company considered water-related regulatory risks of its products and services?

d) Does the company have contingency plans to respond to water risks, such as supply disruptions, price increases, more stringent regulations, etc.?

- ◆ Does the company conduct contingency planning for regions with key operations?
- ◆ Does the company have contingency plans to respond to supply chain disruptions or raw material price increases due to water issues?

e) Has the company assessed how climate change will affect water availability, reliability, price and quality?

- ◆ How might the company's direct operations be affected by changes in water supply quantity, quality, and reliability due to climate change?
- ◆ Does the company assess how its raw material supply and supply chain may be affected by change in water supply quantity, quality and reliability due to climate change?

- ◆ Does the company assess how users of its products and services may be affected by change in water supply quantity, quality and reliability due to climate change?
- ◆ How might water price, permits and water quality regulation be affected by climate change in key places the company operates?

3. Does the company engage with key stakeholders (e.g., local communities, non-governmental organizations, government bodies, suppliers, employees) as a part of its water risk assessment, management, and long-term planning?

- ◆ Does the company consult with local communities and non-governmental organizations regarding water impacts as it considers where and how to site or expand its operations?
- ◆ Does the company work with local governments, businesses and communities to develop and implement integrated watershed management in locations with key operations?
- ◆ Does the company collaborate with governments and communities to address issues related to access to drinking water and sanitation?

4. Has the company integrated water risk into its overall business planning and governance structure?

a) Does the company have a water management policy and plan?

- ◆ Has the company's top management (i.e. CEO and board) publicly expressed its commitment to sustainable water management?
- ◆ Has the company made water management the responsibility of a direct report to the CEO and ensured that a board-level committee has water management as part of its mandate?
- ◆ Has the company formed an integrated water-energy team staffed by a representative of every business function that uses significant amounts of water or energy, or has the potential to pollute water?
- ◆ Has the company developed water management programs with specific priorities, tasks, measures and quantified performance goals based on the company's water, energy, and carbon footprints and impact assessments?
- ◆ Does the company have a system that promotes continuous improvement in water management and performance?

b) Does the company meet or exceed regulatory requirements for water use and quality?

- ◆ Does the company meet or exceed regulatory requirements in its direct operations?
- ◆ Does the company work with suppliers to make sure that they meet or exceed regulatory requirements for water use and quality?

c) Does the company's water management planning integrate the impacts of climate change on water resources?

- ◆ Does the company consider impacts of climate change on water for siting or investment decisions?
- ◆ Does the company consider the energy implications of water management plans and activities?

d) Does the company develop or invest in business opportunities that address water issues?

- ◆ Does the company develop and provide solutions to water scarcity and quality, such as water efficiency or treatment technologies, water-efficient products, etc.?
- ◆ Does the company apply best available technologies to improve water efficiency or wastewater quality?
- ◆ Does the company consider energy implications of measures and solutions to water issues?

5. Does the company disclose and communicate its water performance and associated risks?

a) Does the company report and communicate its water policies and management plans?

b) Does the company report its water performance, using broadly accepted metrics or indicators, such as those provided by the Global Reporting Initiative?

- ◆ Does the company report its water use/discharges for direct operations?
- ◆ Does the company report water use/discharges at the regional or facility levels?
- ◆ Does the company report water use/discharges for key suppliers?

c) Does the company disclose water-related risks in its 10-K or other financial filings?