

Measuring Your Water Footprint

What's Next in Water Strategy

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By now, carbon neutrality is such a catchphrase in the world of responsible business, it's impossible to ignore the carbon footprint of a new product or service. But with the exception of a few companies like Coca-Cola, Nestlé and Suez, the concept of water neutrality, or mea-

What is Water Neutrality?

A business is water neutral when every reasonable effort has been undertaken to reduce the company's water footprint and when the firm takes measures to offset or compensate for the adverse social and environmental consequences of its residual water footprint.

asuring your water footprint, is still under the radar. It's time to take note: In a landscape where the demand for water is fast outstripping supply, focusing on water neutrality is a key corporate strategy in managing water use and casting your company as a responsible business.

The water footprint of a business is measured by considering two elements: the company's operations and its supply chain. The first measurement looks at the direct freshwater use — the amount of freshwater used within the business itself. The supply chain water footprint refers to the indirect freshwater use — the water used to produce all the goods and services that form the input of the business. A water footprint carries three components: blue, green and gray. The blue water footprint is the volume of freshwater that evaporated from the global blue water resources (surface and groundwater); the green water footprint is the volume of water evaporated from the global green water resources (rainwater stored in the soil); and the

gray water footprint is the volume of polluted water associated with the production of goods and services. The water footprint is a geographically explicit indicator, showing not only volumes of water use and pollution, but also the locations.

Defining Water Neutrality for Business

In business, water neutrality is used as a tool to reduce and offset the social and environmental impacts of a company's water footprint. The idea is to stimulate corporations to make their activity "water neutral" by investing in water-saving technology, water-conservation measures, wastewater treatment and water supply to those who do not have proper water supply. In other words, a water-neutral business reduces and offsets the adverse environmental and social consequences of water use.

In a strict sense, the term "water neutral" is misleading. While it is possible to reduce a company's water footprint through pollution prevention and water reuse, it is generally impossible to bring it down to zero. Some processes like growing crops and washing inherently need water. And because these processes don't necessarily replace the water used, most businesses will always have a residual water footprint. The idea of water neutral is therefore different from carbon neutral, because it is theoretically possible to generate energy without emitting carbon.

Pursuing Water Footprint Reduction and Offsets

In order to be water neutral, a business should meet at least two requirements: First, it must do all that is reasonably possible to reduce its water footprint. This is most urgent in regions where

the impact of the water footprint is high. Second, the company must offset its residual water footprint by making a reasonable investment in establishing or supporting projects that aim to make water use sustainable and equitable.

One of the best ways a business can improve its operational water use is through technology. A business can also use its power to influence its suppliers to reduce their footprint as well. (After all, it's always possible to switch to another supplier that has a lower water footprint.) It's important to note that a business relying on a supply chain that cannot be characterized as "water neutral" is not water neutral itself.

After reviewing what it can do to reduce its operational water footprint, a business has several options for offsetting its residual footprint. For instance, it can invest in the development of its own water project, or it can provide funds to support projects run by others. The size of the investment (the offset or "pay off" price) should be a function of the vulnerability of the region where the (residual) water footprint is located. A water footprint in a water-scarce area or in an area suffering from a period of drought is worse, and thus requires a larger offset effort than an area of a similar size that is not suffering from water scarcity or drought.



Way Forward

Still at its early stages in development, the water neutral concept is subjective. There is no consensus about the level of effort considered "reasonable" in reducing an existing water footprint, and likewise, there's no standard for what can reasonably be expected of a company to offset its residual water footprint.

As we move toward attaining water neutrality in business, some key questions should be addressed:

- **How much reduction of a water footprint can reasonably be expected?** Is this performance achieved by applying so-called better management practices in agriculture, or best available technologies in manufacturing? How does one deal with totally new products or activities?
- **What is an appropriate water offset price?** What type of efforts count as an offset? Ideally, whether projects or payments, efforts should be focused on those specific areas where a water footprint has greatest impact.
- **Over what time span should mitigation activities be spread, and how long should they last?** If the footprint is measured at one period of time, when should the offset become effective?

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■ **What are the spatial constraints?** When a water footprint impacts a specific place, should the offset activity cover the same place, or may it cover an area within a certain reasonable distance from the footprint zone of impact?

As we answer these questions and others, accounting systems need to be developed that prevent double offsetting. For example, if a business can offset its supply chain water footprint even as the business in the supply chain offsets its own operational water footprint, how do these companies share offsets? Likewise, when offsets are achieved in projects that are joint efforts, how much of any calculated water benefits can an individual entity claim?

Despite the possible pitfalls and unanswered questions, the

water neutral concept offers a useful tool to bring stakeholders in water management together to discuss water footprint reduction targets and mechanisms to offset the environmental and social impacts of residual water footprints. The concept will be most beneficial in contributing to wise management of the globe's water resources once clear definitions and guidelines are developed and agreed upon. ■

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