

VERSION 3



# Water for Business

Initiatives guiding sustainable water management  
in the private sector

August 2012



wbcsd water



SustainAbility



## A collage image featuring a dam, a large splash of water, and a yellow banner with the numbers 11 and 12. The dam is on the left, the water splash is in the center, and the banner is on the right.

A collection of five puzzle pieces arranged vertically. From top to bottom: a piece with a blue and white marbled pattern; a piece with a green grassy pattern; a piece with a dark blue and white marbled pattern; a piece with an orange and black abstract pattern; and a piece with a grey and orange abstract pattern.

# 1. Foreword

Dear reader,

This guide is the third edition of Water for Business. The initial version was launched in August 2009, and an update was published in March 2010. It should be considered as a “living document” providing an overview of initiatives involved in and supporting corporate sustainable water use. The scope of this report is by no means exhaustive, and the inclusion of a tool or initiative does not signify an endorsement.

Water for Business helps businesses identify the water tools and initiatives that will best meet their specific needs. Our goal is to advance understanding of how tools can be combined to yield a practical and effective approach to corporate water management.

Some tools are under development and still evolving, while others are not yet available. Different companies may be using the same tool in different ways. Feedback on existing and anticipated tools will allow this document to remain current, and thus to remain relevant, as

the field expands. The information provided will promote development and improvement of tools, by catalyzing constructive dialogue among users and developers.

In the following pages, we aim to:

- Provide an overview of water initiatives, so that readers understand “who is doing what”;
- Develop a common language for business on water and sustainability;
- Facilitate business engagement in relevant initiatives, and uptake of tools accelerating action;
- Enable the identification of risks and opportunities, gaps and complementarities;
- Help the developers of water tools to increase their impact through consensus building and joint action.

We welcome all comments, questions and opinions.

Sincerely,

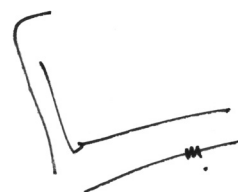


Julia Marton-Lefèvre  
*Director General IUCN*

A handwritten signature in black ink that reads "Julia Marton-Lefèvre".



Peter Bakker  
*President WBCSD*





## 2. Introduction

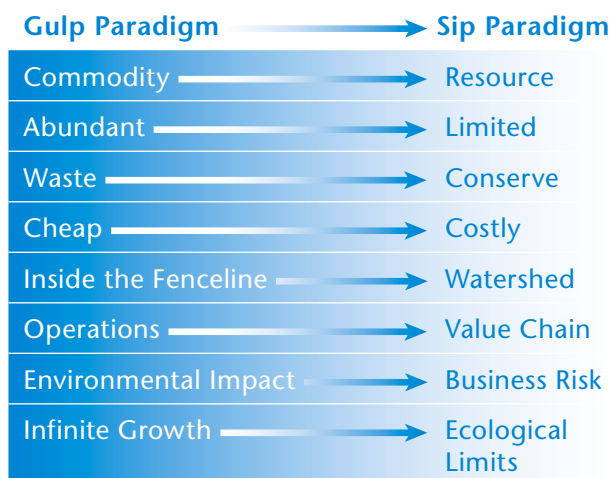
The future of business and society depend on the sustainability of Earth's water<sup>1</sup> resources, yet we find ourselves nearing the brink of a global water crisis.

Some 80 percent of the population (approximately 5.6 billion people) now lives in areas where the threat to water security is high,<sup>2</sup> and the global population continues to rise. In turn, global businesses are expanding into new markets – particularly in emerging economies – where the spread of industrial and agricultural activity is putting additional stress on local aquifers.

As a result, we progressively see this global challenge taking its toll locally on watersheds around the globe. From Australia to the United States, and from India to South Africa, there are dozens of river basins in which water consumption exceeds water availability by a ratio of more than three to one.<sup>3</sup> It is very likely that many more are heading towards a similar fate.

With our future at risk, stakeholder concerns and expectations of corporate water management practices are high. In a 2011 GlobeScan/SustainAbility survey of more than 500 experts representing the corporate, governmental, NGO, academic and service sectors, nearly four in five experts rated water scarcity as an urgent issue, and 70 percent rated water pollution as an urgent issue.<sup>4</sup> PwC's latest 2012 survey of 141 CEOs worldwide concluded that 65% of the surveyed state that water scarcity is quite important or very important for their business in 2012, rising to 78% for 2022.

Water risks are increasingly capturing the attention of large institutional investors as well. In 2012, 470 investors collectively managing \$50 trillion in assets, backed the Carbon Disclosure Project (CDP) Water's third annual survey. Meanwhile, several more tools and approaches have also emerged, specifically targeting the information needs of this critical stakeholder group, including the Ceres Aqua Gauge, WWF/DEG Water Risk Filter, and IFC performance standards.



These business drivers are forcing corporate executives to shift their water management practices from a “gulp” paradigm to a “sip” paradigm, and confront some challenging questions. These include:

- Where are the internal and supply chain “hot spots” that may be vulnerable to business interruption, or a significant increase in cost?
- What are the water needs and vulnerabilities of the local communities in which we operate?
- What are the regulatory/political climates across key geographies?
- How can we work collaboratively with local stakeholders to develop and execute strategies, which ensure water availability over the long term?
- What level of performance constitutes leading practice in water management?

While daunting, the global business community increasingly recognizes and has begun to address these water challenges. Despite our growing awareness, however, a lot of work remains ahead of us. Overcoming the looming water crises will require more effective guidance and new tools and initiatives to catalyze more sustainable business practices. We hope that companies will find appropriate guidance in the following pages of this report.

<sup>1</sup> The term “water” used throughout this document refers to freshwater, unless otherwise indicated.

<sup>2</sup> [www.nature.com/nature/journal/v467/n7315/full/nature09440.html](http://www.nature.com/nature/journal/v467/n7315/full/nature09440.html)

<sup>3</sup> [www.ceres.org/resources/reports/aqua-gauge](http://www.ceres.org/resources/reports/aqua-gauge), page 41

<sup>4</sup> The Sustainability Survey, GlobeScan and SustainAbility, September 2011.

## Purpose and Scope

Our purpose is to help businesses and key stakeholders identify the water tools and initiatives that will best meet their specific needs, and to preserve the sustainability of our water resources.

In the following pages, we aim to:

- Provide an overview of water initiatives, so that readers understand “who is doing what;”
- Develop a common language for business on water and sustainability;
- Facilitate business engagement in relevant initiatives and, uptake of tools accelerating action;
- Enable the identification of risks and opportunities, gaps and complementarities;
- Help the developers of water tools to increase their impact through consensus building and joint action.

Ultimately we believe that by highlighting the connections between key business needs and specific water tools, this version of *Water for Business* will help companies to better understand (1) when and how to use specific tools, and (2) how a combination of water tools can support a holistic approach to water management.

The scope of this report is by no means exhaustive. WBCSD and SustainAbility have updated the guide to reflect the latest developments in major business-relevant water initiatives. Since Version 2 of *Water for Business* was released in 2010, we have added new initiatives that have emerged and removed others from consideration. We have for example decided to include only those that are in the public domain.

Finally, please note that inclusion of a tool or initiative does not signify an endorsement. Again, one of our chief objectives is to help companies understand “who is doing what” on the corporate water landscape, so that business leaders can participate in the development of tools and standards, and use the outputs more effectively.

## Structure

This report is organized into four main sections:

- Key Messages: Conclusions and lessons learned from updating the *Water for Business* guide.
- Understanding Water Management: Summaries of the five stages of water management, and the key functions within a corporation where information about water management is becoming more relevant. For each stage and function, we recommend various tools that can be used to enhance sustainable water management practices
- Initiative Factsheets: Overviews of specific water initiatives, enabling businesses to compare and contrast them as effectively as possible, and to find out where to go for more information.
- Glossary: Key terms and definitions in the area of water management.

## A Living Document

This guide is the third version of *Water for Business*. The initial version was launched in August 2009, during the Stockholm World Water Week, and the second version was published in March 2010.

WBCSD considers *Water for Business* a “living document,” and will keep it in an electronic format that can be downloaded from:

- [www.wbcd.org/work-program/sector-projects/water.aspx](http://www.wbcd.org/work-program/sector-projects/water.aspx)
- [www.iucn.org/about/work/programmes/water/](http://www.iucn.org/about/work/programmes/water/)



### 3. Key Messages

In order to grasp the importance of corporate water management, stakeholders must understand the range of risks associated with poor water management practices. These include:



- **Financial risks:** Companies without sound programs to assess and manage their water use and discharges are likely to face restricted access to capital, higher loan rates and insurance premiums.
- **Operational risks:** Production costs may escalate, due to decreasing availability, quality, and reliability of the water supply.
- **Product risks:** As customers and clients become increasingly concerned about their environmental impacts, companies risk losing market share to competitors that offer products with lower ecosystem impacts.
- **Reputational risks:** Public disputes, in which corporate water use competes with local community needs, can threaten the company's license to operate.
- **Regulatory risks:** Businesses risk new fees, regulations, and lawsuits, where their water use is seen as conflicting with the public interest.

It should be clarified that water risks are different from water impacts. Whereas a company's impacts refer to the volume and quality of water they use or discharge, that company's risks can depend as much on what happens outside their fence line as what happens within it. For example, a company with sound water management practices may be "at risk" if other

stakeholders are damaging or depleting the watershed that they share.<sup>5</sup> With this in mind, it is crucial that businesses, communities, and other stakeholder groups work together to manage our water resources effectively.

Water has been referred to as "the new carbon" – a high priority, cross-cutting global issue for business and society. It is important, however, to note a few key differences. For example, water and carbon footprints cannot be measured and addressed in the same manner. Greenhouse gas emissions generally have the same impact, regardless of where they are emitted (based on CO<sub>2</sub> equivalents developed by the Intergovernmental Panel on Climate Change (IPCC)). Water footprints, however, do not have this common currency. Water impacts take place locally, and a liter of water used in one location cannot be offset by a liter saved somewhere else. Therefore, unlike a carbon footprint, a single and aggregate number for a water footprint is of little material value. Disclosure on water requires greater context informed by local conditions and stakeholder considerations.

#### Key Messages for Initiative Developers

As initiative developers refine and further develop water management initiatives, we ask you to bear the following principles in mind:

- **One initiative alone will not satisfy the needs of every business, local community or stakeholder group.** It is a combination of complementary tools that will best meet wide-ranging needs, and help businesses to manage the complexity of water-related challenges.
- **While business needs an array of water management initiatives, we need to agree upon one common language** – with consistent metrics, terminology and definitions – to communicate most effectively about water. Seek to engage with other water management initiatives, to ensure compatibility, coherence and clear communication.

<sup>5</sup> Ceres Aqua Gauge, 15.

- It is not enough for water management initiatives to use the same language, and be globally consistent; **they must also be flexible and adaptive to local conditions**, different industrial sectors, and product categories. If necessary, provide more specific guidance for key regions or sectors within this overall framework.
- **Encourage tool users to gather metrics that enhance their decision-making processes** rather than reporting processes alone. Companies need better guidance on how to set meaningful targets, and report on performance. Other stressors – including economic, social and political factors – must also be considered.
- **Recognize that metrics do not exist in isolation** – tradeoffs almost always exist among environmental, social, and economic sustainability metrics; tools that highlight and explore these tradeoffs would be useful in understanding sustainability.
- **Help to establish the link between sustainability metrics and financial performance.** This will encourage companies to manage their sustainability impacts in an integrated manner with a full range of business implications in mind.
- **Recognize that global companies are complex entities with myriad functions** involved in the development and implementation of water management strategy, and the communication of results. Companies must be clear about the corporate functions with which they seek to engage and support.
- **Address both positive and negative water impacts** to remain a credible initiative in the eyes of NGOs, governments, consumers, and business. Moreover, leverage this balanced approach to help determine an acceptable level of impact.



## Key Messages for Tool Users

For corporate practitioners, the objective is to turn the risks outlined at the beginning of this section into opportunities. Accordingly, we recommend that companies consider the following concepts, as they aim to better manage their impacts:

- **Water risks cannot, and should not, be managed in isolation from other impacts**, including land use, energy consumption, and greenhouse gas emissions. Often businesses make decisions that involve difficult trade-offs between their various impacts; therefore, knowing the corporate water footprint is not enough.
- **Work closely with stakeholders at the watershed level**, to understand the company's water impacts, and communicate performance meaningfully. Footprints need to be understood within the context of the local environment and stakeholder concerns.
- **Adopt a value chain approach**; often the biggest material risks, impacts and water dependencies are associated with a company's extended value chain, rather than in its direct operations.
- **Focus on your company's material water risks** – i.e. important water use impacts (which are not necessarily where the bulk of the water is used) – rather than undertaking a comprehensive assessment of the entire supply chain, or low water volume uses.
- **We emphasize the need for reliable data.** It can be difficult to ensure the quality and integrity of third-party data, so whenever feasible, we recommend using the company's data, and submitting to internal quality assurance protocols.
- **Further to the previous point, advocate for improved watershed data sets that are comparable across the globe.** The relevance and credibility of any assessment is determined by the robustness of the water data underpinning it. Thus, obtaining the right data is critical, because tools are only as good as the quality of the data contained within them.

## 4. Understanding Water Management

Corporate water management is a complex, iterative process that requires companies to assess and reassess the water situation, evaluate and reevaluate their impacts, and determine the best course of action on a continual basis. One approach to corporate management is outlined below.<sup>6</sup>

### Five Stages of Corporate Water Management

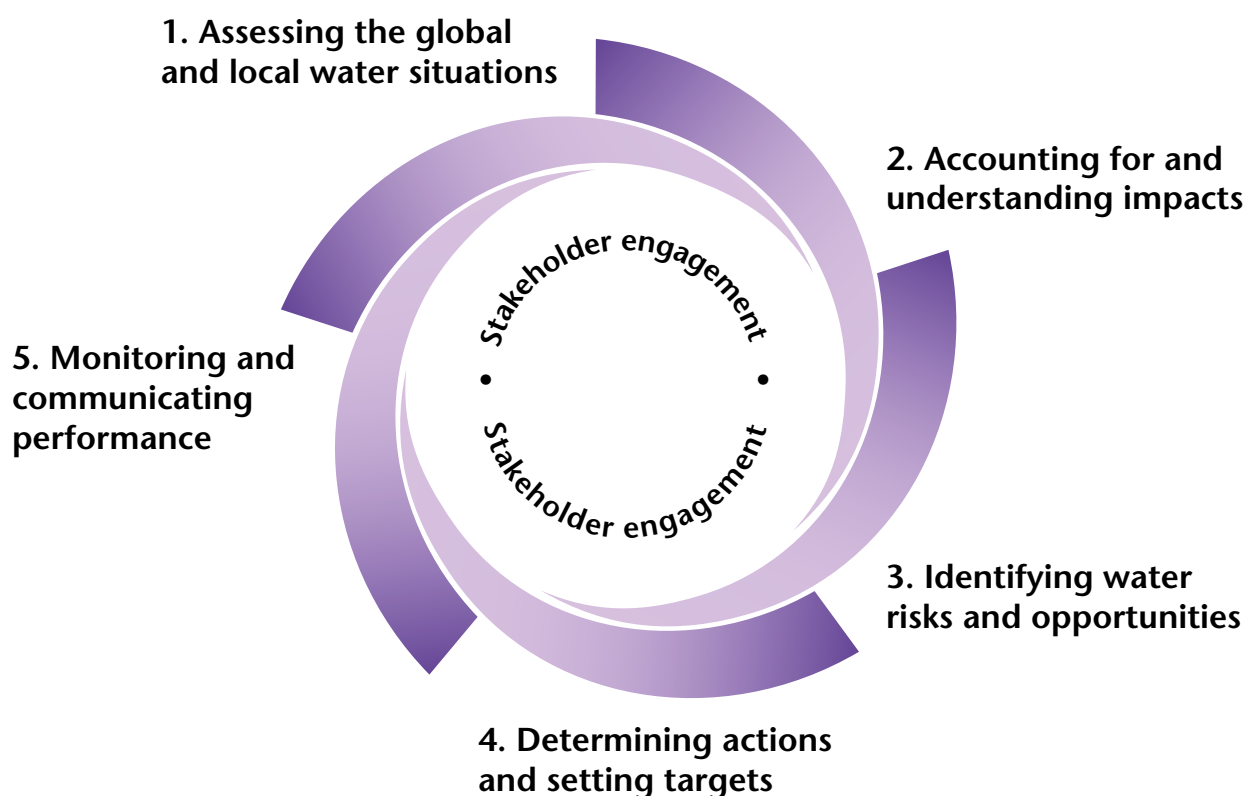
The five stages of corporate water management include:

1. Assessing the global and local water situations. Companies with worldwide operations can begin by thinking through how their overall water footprint relates to the global water situation, and then focus on the critical, local points in their value chain that deserve prioritization.
2. Accounting for water use and understanding its impacts on the local water situation.

3. Identifying specific water risks and opportunities by interpreting findings from stages one and two.
4. Determining action and setting targets.
5. Monitoring and communicating performance with internal and external stakeholders.

Because the process is iterative, we recommend engaging with key stakeholders during every stage of this process. Stakeholder engagement is critical, particularly at the watershed level.

Upon completing stage five, companies should revisit their water strategy and reassess opportunities for continuous improvement.



<sup>6</sup> The process outlined here is not meant to be prescriptive, or to provide the "best" approach to corporate water management. It has been developed specifically for the purposes of this report, so that we can connect water tools to specific business needs as effectively as possible. It is based on practical input from corporate executives in the WBCSD Water Leadership Group.



Within each of these five stages, corporate practitioners should consider and address various questions that inform the company's water strategy. In the table below, we outline these key questions, and the water tools that

can help practitioners to answer them. This list is not exhaustive, and aims to provide high-level guidance only. In some cases, the water sustainability tools are not sufficiently developed to adequately answer key stage questions.

Stage	Key Questions	Tools to Consider
<b>1. Assessing the global and local water situations (i.e. those which exist "beyond the fence line")</b>	<p>How much water is available, at what cost?</p> <p>What is the regulatory framework (local, regional, and national)?</p> <p>What is the local demand for water? Will that change in the future?</p> <p>Is the local area water-stressed? Are there ecosystem services which can be impacted by water availability and degraded quality? Do people have access to improved water sources and sanitation?</p> <p>What are the expectations on business?</p>	<p>WBCSD Global Water Tool</p> <p>WRI Aqueduct</p> <p>Water Risk Filter</p> <p>WFN Assessment Tool and Manual</p>
<b>2. Accounting for and understanding impacts</b>	<p>How much water is used or consumed?</p> <p>What kind of water?</p> <p>Where, when and how is it used or consumed?</p> <p>How is it returned to the water system?</p> <p>What contaminants are present in water discharges?</p> <p>What are the impacts on local water supplies, ecosystems and communities?</p>	<p>BIER Practical Perspective on Water Accounting</p> <p>GEMI™ Local Water Tool</p> <p>ISO Water Footprint: Requirements and Guidelines</p> <p>Water Accounting: An Australian Framework for the Minerals Industry</p> <p>WFN Assessment Tool and Manual</p> <p>Water Impact Index</p> <p>Water Use Assessment within Life Cycle Assessment</p>



Stage	Key Questions	Tools to Consider
<b>3. Identifying water risks and opportunities</b>	<p>How many of my sites, suppliers, employees, customers are located in water-stressed countries?</p> <p>How much of my total production is generated from my most at-risk sites?</p> <p>Is there adequate water supply for the business and value chain?</p> <p>Will water security impact on employees and customers?</p> <p>Can water consumption be justified, with regard to other users?</p> <p>Are there opportunities for providing broader solutions to water stress?</p>	<p>GEMI Local Water Tool™</p> <p>UNEP Finance Initiative: Chief Liquidity Series</p> <p>Water Impact Index</p> <p>Water Risk Filter</p> <p>WBCSD Global Water Tool</p> <p>WRI Aqueduct</p>
<b>4. Determining action and setting targets</b>	<p>What level of performance constitutes best practice in this situation?</p> <p>What response enables the business to address water risks and opportunities identified?</p> <p>What targets are reasonable and achievable?</p>	<p>Alliance for Water Stewardship</p> <p>Ceres Aqua Gauge</p> <p>European Water Stewardship Standard</p> <p>GEMI Local Water Tool™</p> <p>UN CEO Water Mandate</p> <p>Water Accounting: An Australian Framework for the Minerals Industry</p> <p>Water Impact Index</p> <p>Water Stewardship Australia</p>
<b>5. Monitoring and communicating performance</b>	<p>What indicators are needed to assess performance, monitor improvement and communicate this to stakeholders?</p> <p>How to make sustainability claims credible and robust?</p>	<p>Alliance for Water Stewardship</p> <p>CDP Water</p> <p>Ceres Aqua Gauge</p> <p>European Water Stewardship Standard</p> <p>GRI Water Performance Indicators</p> <p>ISO Water Footprint: Requirements and Guidelines</p> <p>UN CEO Water Mandate</p> <p>Water Stewardship Australia Limited</p>



## Meeting the Needs of Various Stakeholders

Historically, plant managers have borne the risk and responsibility of ensuring adequate water supply and quality for their facilities, but that paradigm is shifting. Today, the leaders of various corporate functions have their own needs and expectations with respect to water management.

The table below summarizes the priorities and key questions of various internal stakeholders, and recommends how the different tools can be used to address them.

Business Function	Priorities	Key Questions	Tools to Consider
<b>Corporate Communications<sup>7</sup></b>	A story which clearly and accurately reflects how the company is managing its water usage, and how it is impacting its water stakeholders.	<p>How can we get a system-wide view of water use across the company?</p> <p>What are examples of management of water challenges, and of “hot spots” and vulnerabilities?</p> <p>Which communication and reporting mechanisms will enable communication of the company’s water story?</p> <p>How are hotspots identified and vulnerabilities dealt with?</p>	<p>Alliance for Water Stewardship</p> <p>CDP Water Disclosure</p> <p>Ceres Aqua Gauge</p> <p>European Water Stewardship Standard</p> <p>GEMI Local Water Tool™</p> <p>GRI Water Performance Indicators</p> <p>UN CEO Water Mandate</p> <p>Water Impact Index</p> <p>Water Risk Filter</p> <p>Water Stewardship Australia Limited</p> <p>WBCSD Global Water Tool</p>
<b>Corporate Finance (CFO, Investor Relations etc.)</b>	<p>Solid, long-term returns on capital investments, and facilities which are able to operate without interruption.</p> <p>A company story line which ensures investors that the company is profitable over the short and long term.</p>	<p>How will long-term water availability impact our investment decisions?</p> <p>What are the financial impacts of increases in the cost of water, and disruption or reduction in the supply of water?</p> <p>How will water availability impact the profitability of the company?</p>	<p>CDP Water Disclosure</p> <p>Ceres Aqua Gauge</p> <p>UNEP FI Chief Liquidity Series</p> <p>Water Risk Filter</p> <p>WRI Aqueduct</p>

<sup>7</sup> This table is intended to capture corporate internal audiences only. The factsheets in section five aims to support corporate disclosure needs by identifying the external audience for each water management initiative.

Business Function	Priorities	Key Questions	Tools to Consider
<b>External Relations</b> (Community Affairs, Government Affairs, etc.)	Positive relationships with the communities and governments in which company's facilities are located, ensuring predictable regulatory and operating environments.	<p>What are the water needs and vulnerabilities of the local communities in which we operate?</p> <p>What are the regulatory/ political climates across key geographies?</p> <p>How can we work collaboratively with local stakeholders to develop and execute strategies, which ensure water availability over the long term?</p> <p>What are the risks associated with a lax regulatory environment, and how do stronger water regulations support a more stable long-term business climate?</p>	<p>Alliance for Water Stewardship</p> <p>European Water Stewardship Standard</p> <p>GEMI Local Water Tool™</p> <p>UN CEO Water Mandate</p> <p>Water Accounting: An Australian Framework for the Minerals Industry</p> <p>Water Impact Index</p> <p>Water Stewardship Australia Limited</p> <p>WBCSD Global Water Tool</p>
<b>Operations</b> (plant managers)	Ensure an adequate water supply at all facilities, so the business can operate at full capacity, without interruption.	<p>Within the plant, where and how is water used?</p> <p>What is the local regulatory/ political climate (beyond permit requirements), and associated cost/ availability risks?</p>	<p>BIER Practical Perspective on Water Accounting</p> <p>European Water Stewardship Standard</p> <p>GEMI Local Water Tool™</p> <p>ISO Water Footprint</p> <p>Water Accounting: An Australian Framework for the Minerals Industry</p> <p>Water Footprint Network</p> <p>Water Impact Index</p> <p>Water Stewardship Australia Limited</p> <p>WRI Aqueduct</p>



Business Function	Priorities	Key Questions	Tools to Consider
<b>Procurement</b>	A supply chain which is resilient in the face of increasing water stress, to ensure a reliable and inexpensive supply of materials in the quantity and quality needed for continuous operation.	<p>Where are the “hot spots” where suppliers are particularly vulnerable to water shortages/ constraints, both physical and political/regulatory?</p> <p>What is the water footprint (in context of local conditions) of key suppliers?</p> <p>What does water availability look like throughout the supply chain? How does the plant impact the local watershed?</p> <p>What are the broad trends that can alter resource availability where suppliers operate?</p>	<p>CDP Water Disclosure</p> <p>European Water Stewardship Standard</p> <p>Water Use Assessment within Life Cycle Assessment</p> <p>WBCSD Global Water Tool</p>
<b>Research &amp; Development</b>	Designing new products which meet a market need, and make efficient use of water resources.	<p>What does water availability look like throughout the supply chain?</p> <p>What are the life-cycle water impacts of our existing and future products?</p> <p>How can we steer product / service innovation to enhance water efficiency”?</p>	Water Use Assessment within Life Cycle Assessment



Business Function	Priorities	Key Questions	Tools to Consider
<b>Sales &amp; Marketing</b>	Products which meet a market need, and a strong story with which to sell them.	<p>What are the life-cycle water impacts of our products?</p> <p>How can we get a system-wide view of water use across the company?</p> <p>How can we develop customer collateral which enables communication of the company's water story?</p>	<p>ISO Water Footprint</p> <p>Water Impact Index</p> <p>Water Use Assessment within Life Cycle Assessment</p>
<b>Sustainability</b>	That the company's business divisions understand and address water availability in a way that makes good business sense, and is acceptable to key external stakeholders, including communities and legislators.	<p>All questions listed within this column.</p> <p>How to weigh / balance environmental measures against social and economic sustainability measures to ensure a positive overall outcome?</p>	All tools listed within this report.

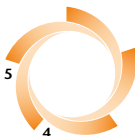
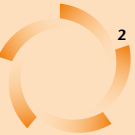

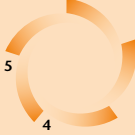

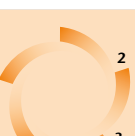

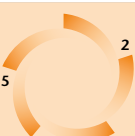


## 5. Initiative Factsheets

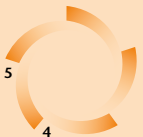


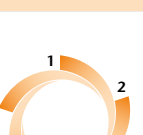
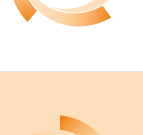
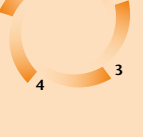
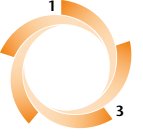
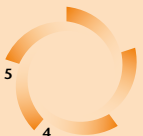
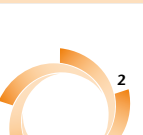
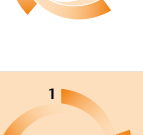
Below we have provided an overview of 18 water initiatives, enabling businesses to compare and contrast them as effectively as possible.

For the purposes of this report, we have decided to focus on the most prominent aspects of each water tool. We acknowledge that many of

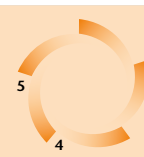
these tools may touch upon water management activities, or provide value to users not referenced herein.<sup>8</sup>

Overview and Key Attributes						
NAME	SPONSORING ORGANIZATION	LEVEL OF APPLICATION	ACTIVITIES ADDRESSED <sup>8</sup>	GEOGRAPHIC FOCUS	PRIMARY CORPORATE USERS	IN USE OR DEVELOPMENT
Alliance for Water Stewardship	Ten board organizations	Site		Global with regional and sectoral distinctions	Corporate Communications, External Relations, Sustainability	First draft released March 2012. In development through mid-2013
BIER Water Footprint Working Group	Beverage Industry Environmental Roundtable (BIER)	Corporate, Site		Global	Operations Sustainability	In use
CDP Water Disclosure	Carbon Disclosure Project (CDP)	Corporate		Global	Corporate Communications, Corporate Finance, Procurement, Sustainability	In use
Ceres Aqua Gauge	Ceres	Corporate		Global	Corporate Communications, Corporate Finance, Sustainability	In use
European Water Stewardship Standard	European Water Partnership	Site		Europe	Corporate Communications, External Relations, Operations, Procurement, Sustainability	In use
GEMI Local Water Tool™	Global Environmental Management Initiative (GEMI)	Site		Global	Corporate Communications, External Relations, Operations, Sustainability	In use
GRI Water Performance Indicators	Global Reporting Initiative (GRI)	Corporate		Global	Corporate Communications, Sustainability	In use
ISO Water footprint: Requirements and Guidelines	International Organization for Standardization (ISO)	Product, processes and organizations		Global	Operations, Sales & Marketing, Sustainability	In development; final publication of the standard is expected in 2014

<sup>8</sup> When reviewing the Activities Addressed, please refer back to the five stages of corporate water management, explained in section four of this report.


NAME	SPONSORING ORGANIZATION	LEVEL OF APPLICATION	ACTIVITIES ADDRESSED <sup>8</sup>	GEOGRAPHIC FOCUS	PRIMARY CORPORATE USERS	IN USE OR DEVELOPMENT
UN CEO Water Mandate	United Nations (UN)	Corporate		Global	Corporate Communications, External Relations, Sustainability	In use
UNEP Finance Initiative: Chief Liquidity Series	United Nations Environment Program (UNEP)	Corporate		Global	Corporate Finance, Sustainability	In use
Water Accounting: An Australian Framework for the Minerals Industry	Minerals Council of Australia (MCA)	Site		Australia	External Relations, Operations, Sustainability	In use
Water Footprint Network	Water Footprint Network (WFN)	Product, processes and organizations		Global with river basins distinctions	Operations, Sustainability	In use (manual and database)  In development through 2012 (tool)
Water Impact Index	Veolia Environment Research & Innovation	Product, processes and organizations		Global	Corporate Communications, External Relations, Operations, Sales & Marketing, Sustainability	In use
Water Risk Filter	World Wide Fund for Nature (WWF) and DEG	Corporate		Global	Corporate Communications, Corporate Finance, Sustainability	In use
Water Stewardship Australia	Water Stewardship Australia Limited	Site		Australia	Corporate Communications, External Relations, Operations, Sustainability	In use
Water Use Assessment within Life Cycle Assessment	United Nations Environment Program (UNEP) and Society for Environmental Toxicology and Chemistry (SETAC)	Product, processes and organizations		Global	Procurement, Research & Development, Sales & Marketing, Sustainability	In use; phase two runs from 2007 to 2012
WBCSD Global Water Tool	World Business Council on Sustainable Development (WBCSD)	Corporate		Global	Corporate Communications, External Relations, Sustainability	In use
WRI Aqueduct	World Resource Institute (WRI)	Site		Global with river basin distinctions	Corporate Finance, Operations, Sustainability	In use (Orange-Senqu and Yellow River Basins)

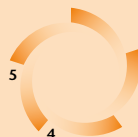


<b>PURPOSE AND OBJECTIVES</b>	To establish a credible global water stewardship program that recognizes and rewards responsible water users, by improving impacts and verifying the mitigation of both site-level and shared water risk.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	The majority of funding for the Alliance for Water Stewardship (AWS) has been provided by The Nature Conservancy (TNC) and World Wildlife Fund (WWF), with additional financial and in-kind support coming from other sources, including A.O. Smith, Alcoa Foundation, American Standard, Badger Meter, Bucyrus International, Constellation Energy, Diversy, FEMSA Foundation, GIZ, Marks & Spencer, MillerCoors, Nalco, Quad/Graphics, Rio Tinto, Veolia, and the Walmart Foundation.
<b>GOVERNANCE</b>	<p>The AWS Board comprises representatives of the Carbon Disclosure Project, European Water Partnership, International Water Management Institute, UN CEO Water Mandate, TNC, The Pacific Institute, Water Environment Federation, Water Stewardship Australia, Water Witness International and WWF. Primary functions include representing stakeholders, approving membership on the International Standard Development Committee (ISDC), and securing funds for the continuance of the AWS.</p> <p>The governance of the AWS Standard is managed by the ISDC – a representative group of 15 different stakeholders from three sectors and eight regions. The ISDC is independent of the AWS Board, and decides on the content of the AWS Standard, based upon stakeholder input.</p>
<b>KEY COMPONENTS</b>	<p>AWS seeks to establish a voluntary certification program for water users based on:</p> <ul style="list-style-type: none"> <li>• A robust international standard, with a focus on the impacts of direct and indirect water use at the site and watershed level.</li> <li>• Verification to determine performance against standards and risk mitigation.</li> <li>• A global brand that allows managers, users and organizations to demonstrate compliance with, or support for, water stewardship.</li> <li>• Training and education.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Determining actions and setting targets.</li> <li>• Monitoring and communicating performance.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global, with regional initiatives in Africa, Europe, Latin America and the Caribbean, North Asia, South Asia, Central Asia, and North America (see also the European Water Stewardship Standard, page 23, and Water Stewardship Australia Limited, page 44).
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Corporate Communications</li> <li>• External Relations</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Governments</li> <li>• Local communities</li> <li>• NGOs</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	<ul style="list-style-type: none"> <li>• Final requirements are unknown as yet, and will be likely to differ by region, sector, and watershed need.</li> <li>• Likely to include external verification and compliance to the standard's principles, criteria and indicators.</li> </ul>
<b>WEBSITE AND RESOURCES</b>	<p>Initiative information:  <a href="http://www.allianceforwaterstewardship.org/">www.allianceforwaterstewardship.org/</a></p> <p>Contact information:  <a href="mailto:adrian@allianceforwaterstewardship.org">adrian@allianceforwaterstewardship.org</a></p>
<b>KEY TERMS</b>	Standards, certification, disclosure, engagement, performance assessment, watershed impacts.

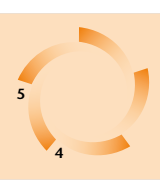


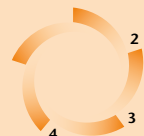
<b>PURPOSE AND OBJECTIVES</b>	Inform and catalyze existing initiatives, by providing an in-depth analysis of sector-specific considerations to fill the critical gaps between a generic water footprint model, and one that reflects unique aspects of water usage in the beverage sector.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	The Beverage Industry Environmental Roundtable (BIER) is a technical coalition of leading global beverage companies, working together to advance environmental sustainability through industry specific data collection methodologies and best practice sharing. Antea Group's Global Corporate Consultancy facilitates the coalition.
<b>GOVERNANCE</b>	Antea Group's Global Corporate Consultancy facilitates the coalition and has managed the benchmarking study since its inception, including data collection, analysis, verification, and reporting.
<b>KEY COMPONENTS</b>	Members work in collaboration to: <ul style="list-style-type: none"> <li>• Produce <i>A Practical Perspective on Water Accounting in the Beverage Sector</i>, for the purpose of achieving sector consistency in measuring and accounting for water withdrawal, consumption and wastewater discharge throughout the value chain.</li> <li>• Perform quantitative benchmarking study related to water use.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Accounting for and understanding impacts.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Operations</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Beverage Industry Trade Associations</li> <li>• Government</li> <li>• NGOs</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	In 2010, member enterprises were required to submit three years (2007, 2008, 2009) of facility-specific data, including total water use, total beverage production, facility type, and location, to participate in the annual benchmark.
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.bierroundtable.com/water_stewardship.html">www.bierroundtable.com/water_stewardship.html</a></p> <p>Contact Information:  <a href="mailto:info@bierroundtable.com">info@bierroundtable.com</a></p>
<b>KEY TERMS</b>	Benchmarking, water accounting, sector specific guidance, opportunity and risk.


<b>PURPOSE AND OBJECTIVES</b>	<p>By acting as a platform for information sharing, the Carbon Disclosure Project (CDP) aims to:</p> <ul style="list-style-type: none"> <li>• Increase investor and business awareness and understanding of the financial risks and opportunities around water.</li> <li>• Make meaningful reporting on water standard corporate practice globally.</li> <li>• Provide data that informs decision-making by investors, companies and governments.</li> </ul>
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	<p>A program of the CDP, an independent non-profit organization working to drive GHG emissions reduction and sustainable water use by business and cities. Norges Bank Investment Management provided initial funding for the development of the CDP Water Disclosure information request. Molson Coors and Deloitte are also lead sponsors, contributing to the evolution of the information request and the program's growth.</p>
<b>GOVERNANCE</b>	<p>CDP's Board of Trustees is disclosed on its website. Trustees are not involved in reviewing the methodology, but approve any new initiatives.</p>
<b>KEY COMPONENTS</b>	<p>CDP Water Disclosure is a reporting platform focused on three core areas:</p> <ul style="list-style-type: none"> <li>• Water management and governance.</li> <li>• Water related risks and opportunities inside a company's direct operations and supply chain.</li> <li>• Water accounting metrics, including withdrawals, discharges and intensity of use.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Monitoring and communicating performance.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	<p>In 2012, the information request was sent to approx. 315 of the 500 largest water-intensive companies globally (based on market capitalization), 60 of the 100 largest companies in Australia, 60 of the 100 largest companies in South Africa, and 340 of the largest 500 companies in the USA.</p>
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Corporate Communications</li> <li>• Corporate Finance</li> <li>• Procurement</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Governments</li> <li>• Investors</li> <li>• Suppliers</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	<p>All companies are welcome to submit a response whether or not they are formally invited to.</p> <p>Responses to CDP can either be made "public" or "non-public":</p> <ul style="list-style-type: none"> <li>• Public responses will be made available on the CDP website, as outlined in the Guidance document.</li> <li>• Non-public responses will not be made available on the website. They will only be seen by signatory investors and used in the production of aggregate statistics.</li> </ul>
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.cdproject.net/en-US/Programmes/Pages/water.aspx">www.cdproject.net/en-US/Programmes/Pages/water.aspx</a></p> <p>Guidance:  <a href="http://www.cdproject.net/Documents/Guidance/Water/Water2011ReportingGuidance.pdf">www.cdproject.net/Documents/Guidance/Water/Water2011ReportingGuidance.pdf</a></p> <p>Contact Information:  <a href="mailto:water@cdproject.net">water@cdproject.net</a></p>
<b>KEY TERMS</b>	<p>Disclosure, institutional investors, reporting, risk and opportunity.</p>

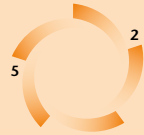
<b>PURPOSE AND OBJECTIVES</b>	To help equity investors better understand and engage with companies concerning their water management issues, and to provide guidance to companies seeking to build or strengthen their corporate water strategy and management approach.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	Ceres, a non-profit organization based in the United States, leads a coalition of investors, environmental organizations, and other public interest groups, working with companies to address sustainability challenges. Aqua Gauge was developed with the WBCSD, Irbaris, and the Investor Responsibility Research Centre (IRRC), in consultation with representatives from over 50 financial institutions, companies, and NGOs.
<b>GOVERNANCE</b>	The Aqua Gauge framework will be updated on a regular basis, and informed by on-going stakeholder feedback, to reflect advances in 21st century water management.
<b>KEY COMPONENTS</b>	<p>The Aqua Gauge is a flexible Excel-based tool and associated methodology that:</p> <ul style="list-style-type: none"> <li>Identifies the range of management activities that a company can take to address water issues, and identifies leading practices and relevant examples within each area.</li> <li>Allows investors to scorecard a company's water management activities against detailed definitions of leading practice.</li> <li>Provides a resource to inform and strengthen company water management strategies, as well as perform self-assessments.</li> </ul> <p>The Quick Gauge asks nine simple questions, focusing on core management and value chain issues, whereas the detailed performance assessment asks 28 questions, focusing on four strategic areas of measurement, management, stakeholder engagement, and disclosure.</p>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>Determining actions and setting targets.</li> <li>Monitoring and communicating performance.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>Corporate Communications</li> <li>Corporate Finance</li> <li>Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>Investors</li> <li>NGOs</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	<ul style="list-style-type: none"> <li>Where possible, the Aqua Gauge uses terminology that is consistent with other tools and initiatives, such as the CDP Water Survey, and UN CEO Water Mandate.</li> <li>Aqua Gauge also includes, where possible, disclosure references under each activity identified as leading practice in the framework.</li> </ul>
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.ceres.org/issues/water/aqua-gauge">www.ceres.org/issues/water/aqua-gauge</a></p> <p>Framework:  <a href="http://www.ceres.org/resources/reports/aqua-gauge">www.ceres.org/resources/reports/aqua-gauge</a></p> <p>Contact Information:  <a href="mailto:barton@ceres.org">barton@ceres.org</a></p>
<b>KEY TERMS</b>	Institutional investors, engagement, self-assessment.



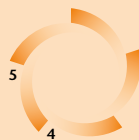
<b>OBJECTIVES AND PURPOSE</b>	To change the behavior of all water users towards sustainable water management, by establishing the integrative system for business and agriculture to assess, verify and communicate sustainable water management practices. EWS defines a system of clear steps towards sustainable water management at operational and river basin levels. It is in line with the EU's comprehensive set of regulations to achieve Resource Efficiency, including the Water Framework Directive.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	The European Water Partnership (EWP) is a non-profit member association comprising organizations from industrial, governmental, NGO and research sectors. Memberships are divided into members, strategic partners, project partners and institutional partners. The EWS standard is the result of a multi-stakeholder process, coordinated by EWP, including pilot testing at company and farm sites.
<b>GOVERNANCE</b>	The EWS Board represents different stakeholders and geographical regions involved in the standard development. In addition, the EWP Board of Directors and Board of Administrators provide advice to the EWS on current and future activities.
<b>KEY COMPONENTS</b>	<p>The EWS consists of a standard, an inspection and certification scheme, and communication guidelines. The standard includes:</p> <ul style="list-style-type: none"> <li>• Four principles, which outline the overarching aims of the standard and associated criteria.</li> <li>• Criteria are further divided into indicators, which are used to evaluate compliance with the principles and criteria.</li> <li>• Indicators are classified as major indicator, minor indicator or recommendation. <ul style="list-style-type: none"> <li>– The major and minor indicators have to be complied with, in order to achieve the referring objective.</li> <li>– The indicators classified as “recommendations” are non-obligatory.</li> </ul> </li> </ul> <p>Participants can then be certified Bronze, Silver or Gold.</p>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Determining actions and setting targets.</li> <li>• Monitoring and communicating performance.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Europe
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Corporate Communications</li> <li>• External Relations</li> <li>• Operations</li> <li>• Procurement</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Government</li> <li>• Local communities</li> <li>• NGOs</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	EWP convenes EWS, the recognized European regional initiative of the global Alliance for Water Stewardship (AWS).
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.ewp.eu/">www.ewp.eu/</a></p> <p>European Water Stewardship:  <a href="http://www.ewp.eu/activities/water-stewardship/">www.ewp.eu/activities/water-stewardship/</a></p> <p>Contact Information:  <a href="http://www.ewp.eu/activities/water-stewardship/contact">www.ewp.eu/activities/water-stewardship/contact</a></p>
<b>KEY TERMS</b>	Standards, certification, disclosure, engagement, performance assessment, watershed impacts.

<b>PURPOSE AND OBJECTIVES</b>	To help companies assess impacts, risks and opportunities, and manage water-related issues at specific sites; to provide a common and consistent “visualization platform” for internal and external communication; to provide interconnectivity between global and local water risk assessments and a uniform approach between site assessments; and to form a central repository of information to create reports for multiple water questionnaires.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	GEMI’s Local Water Tool™ (LWT) was created with the leadership of CH2M Hill. Project participants include over 40 companies from diverse industry sectors.  It was developed in cooperation with the WBCSD and IPIECA ensuring compatibility across tool.
<b>GOVERNANCE</b>	Governed by GEMI.
<b>KEY COMPONENTS</b>	GEMI’s Local Water Tool™ (LWT) may be used in conjunction with the WBCSD Global Water Tool. An Oil & Gas sector specific module was also created, to interface with the IPIECA Global Water Tool for Oil & Gas (specialized version of the WBCSD GWT). Using Microsoft Excel, it enables users to: <ul style="list-style-type: none"> <li>• Work inside their companies secured IT systems.</li> <li>• Identify and rank specific impacts, risks and opportunities at the site level.</li> <li>• Create and monitor effectiveness of local water management plans to address impacts and risk.</li> <li>• Develop metrics and report, in accordance with Bloomberg, CDP Water, Dow Jones Sustainability Index and GRI.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Accounting for and understanding impacts.</li> <li>• Identifying water risks and opportunities.</li> <li>• Determining actions and setting targets.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Corporate Communications</li> <li>• External Relations</li> <li>• Operations</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	Local communities  NGOs
<b>REQUIREMENTS AND OTHER TIPS</b>	None
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.gemi.org/localwatertool/">www.gemi.org/localwatertool/</a>  <a href="http://www.ipieca.org/focus-area/water">www.ipieca.org/focus-area/water</a></p> <p>Contact Information:  <a href="mailto:info@gemi.org">info@gemi.org</a>  <a href="mailto:info@ipieca.org">info@ipieca.org</a></p>
<b>KEY TERMS</b>	Management tool, reporting indicators, impact and risk assessment.


<b>OBJECTIVES AND PURPOSE</b>	Provide a standardized reporting format, giving guidelines and boundaries to the process of water reporting, while improving the comparability and credibility of disclosed information.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	The Global Reporting Initiative (GRI) is a network-based organization producing a widely used, comprehensive sustainability-reporting framework. GRI is committed to the Framework's continuous improvement and application worldwide. New guidelines are developed using GRI's multi-stakeholder international consultation process, public consultation periods, diverse expert Working Groups and GRI's approval procedures.
<b>GOVERNANCE</b>	A series of multistakeholder governance bodies coordinate the formal components of the GRI network, including a Board of Directors, Stakeholder Council, and Technical Advisory Committee and Organizational Stakeholders. Organizational Stakeholders comprised of hundreds of organizations and individuals form the foundation of the governance structure.
<b>KEY COMPONENTS</b>	<p>G3.1 Guidelines include:</p> <ul style="list-style-type: none"> <li>• EN8: Total water withdrawal by source.</li> <li>• EN9: Water sources significantly affected by withdrawal of water.</li> <li>• EN10: Percentage of total volume of water recycled and reused.</li> <li>• EN21: Total water discharge by quality and destination.</li> <li>• EN25: Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Monitoring and communicating performance.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Corporate Communications</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Customers</li> <li>• NGOs</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	The next iteration of GRI Guidelines, the G4, is expected in 2013.
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.globalreporting.org/Home">www.globalreporting.org/Home</a></p> <p>G3.1 Guidelines:  <a href="http://www.globalreporting.org/ReportingFramework/G31Guidelines/#AnchorTwo">www.globalreporting.org/ReportingFramework/G31Guidelines/#AnchorTwo</a></p> <p>Contact Information:  <a href="mailto:info@globalreporting.org">info@globalreporting.org</a></p>
<b>KEY TERMS</b>	Disclosure, reporting indicators.

<b>OBJECTIVES AND PURPOSE</b>	To provide an international standard specifying requirements and guidelines, to assess and report water footprint of products, processes and organizations, based on life cycle assessment (LCA).
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	ISO is an NGO coordinating across the public and private sectors, as the world's largest developer and publisher of international standards. ISO standards are developed by technical committees, (subcommittees or working groups) comprised of experts from the industrial, technical and business sectors, which have asked for the standards, and subsequently put them to use. Financing comes from membership fees and the selling of standards.
<b>GOVERNANCE</b>	The General Assembly consists of a meeting of the Principal Officers of ISO and delegates nominated by the member bodies. ISO Statutes stipulate that, while the General Assembly is the ultimate authority of the Organization, most of the governance functions of ISO are performed by the Council. The Technical Management Board (TMB) reports to the Council, and is itself responsible for the overall management of the technical work, including technical committees, such as the committee responsible for developing the Water Footprint Guidelines (TC207/SC5/WG8). The conveners of ISO 14046 are Switzerland and Mexico, and the Secretariat is the Swiss Association for Standardization (SNV).
<b>KEY COMPONENTS</b>	ISO 14046 – Water Footprint standard (under development) focuses on: <ul style="list-style-type: none"> <li>• Terms and definitions.</li> <li>• Water inventory and elementary water flows calculation.</li> <li>• Water impact assessment and water footprint profile requirements.</li> <li>• Reporting and critical review.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Accounting for and understanding impacts.</li> <li>• Monitoring and communicating performance.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Operations</li> <li>• Sales and Marketing</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Customers</li> <li>• NGOs</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	<ul style="list-style-type: none"> <li>• Final publication of the standard is expected in 2014.</li> <li>• Liaison Organizations: CI, EC, ECOS, FAO, IAI, ICM, IDF, INLAC, SETAC, WBCSD, WFN, World Steel Association</li> </ul>
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.iso.org/iso/iso_technical_committee.html?commid=54854">www.iso.org/iso/iso_technical_committee.html?commid=54854</a></p> <p>Contact Information:  Marcel Schulze (SNV): <a href="mailto:marcel.schulze@snv.ch">marcel.schulze@snv.ch</a>  Sebastien Humbert (convener): <a href="mailto:sebastien.humbert@quantis-intl.com">sebastien.humbert@quantis-intl.com</a></p>
<b>KEY TERMS</b>	Life cycle assessment, standard, water footprint profile.



<b>OBJECTIVES AND PURPOSE</b>	To make a positive impact on the emerging global water crisis by: 1) mobilizing a critical mass of business leaders to advance water sustainability solutions and 2) producing research and guidance that give companies insight into their water-related risks, and how they can drive improved performance and sustainable water management .
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	United Nations Global Compact (UNGC) is a strategic policy initiative for businesses committed to aligning their operations and strategies with 10 universally accepted principles. As an initiative of UNGC, the CEO Water Mandate convenes businesses and their stakeholders to discuss water-related challenges, and develop effective and responsible solutions. Major workstreams include responsible policy engagement and collective action, human rights and business, and corporate water disclosure.
<b>GOVERNANCE</b>	The CEO Water Mandate is governed by a Steering Committee whose membership is composed of Endorsers from multinational businesses, Special Advisors from NGOs and multilateral organizations, and Ex-Officio representatives from the initiative's Secretariat. The Pacific Institute is currently a member of the Mandate Secretariat, and acts as the initiative's operational arm.
<b>KEY COMPONENTS</b>	<p>The formal CEO Water Mandate is:</p> <ul style="list-style-type: none"> <li>• A commitment by CEOs to advance water sustainability solutions across the company's value chain.</li> <li>• A framework of six core elements (i.e., Direct Operations, Supply Chain &amp; Watershed Management, Collective Action, Public Policy, Community Engagement, and Transparency) that guide companies' understanding and implementation of a wide range of stewardship practices.</li> </ul> <p>Activities conducted within the Mandate include:</p> <ul style="list-style-type: none"> <li>• Convening forums for discussion of water-related business challenges and best-practice sharing.</li> <li>• Developing research and guidance that advance corporate water stewardship.</li> <li>• Facilitating on-the-ground actions that encourage cross-sectoral partnerships among businesses, and others that address key water-related challenges and risks.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Determining action and setting targets.</li> <li>• Monitoring and communicating performance.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Corporate Communications</li> <li>• External Relations</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Governments</li> <li>• Local communities</li> <li>• NGOs</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	<ul style="list-style-type: none"> <li>• Requires the endorsement of a company's Chief Executive Officer, or equivalent.</li> <li>• Restricted to existing corporate endorsers of the UN Global Compact. Companies not currently signatories of the UN Global Compact may endorse the CEO Water Mandate provided they intend to join the UNGC within six months of endorsement.</li> <li>• Signatories are required to publish an annual communication on progress.</li> </ul>
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.ceowatermandate.org">www.ceowatermandate.org</a></p> <p>The Mandate:  <a href="http://ceowatermandate.org/files/Ceo_water_mandate.pdf">ceowatermandate.org/files/Ceo_water_mandate.pdf</a></p> <p>Contact:  <a href="mailto:ceowatermandate@unglobalcompact.org">ceowatermandate@unglobalcompact.org</a></p>
<b>KEY TERMS</b>	Collective action, disclosure, engagement, human rights, public policy, transparency.

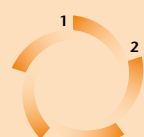


<b>PURPOSE AND OBJECTIVES</b>	To raise awareness on the business implications of adverse water-related developments, and the opportunities in water-related investment while strengthening the business case for action, and providing the financial sector with information and tools for adequate identification, assessment and management of water-related risks and opportunities.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	UNEP FI pursues active collaboration with the UNEP Regional Seas Program, SIWI, OECD, FAO and Environment Protection Authority Victoria. Core work-stream members include ASN Bank, Australia and New Zealand Banking Group, BMCE, Calvert, Citigroup, Connexis, DEG, Development Bank of Southern Africa, FBR Capital Markets, IDC, IL & FS, Intesa SanPaolo, Mecu, Nedbank, Nordea, Piraeus Bank, Rabobank, Robeco, Standard Bank, Standard Chartered, Sustainable Asset Management, UN Water and Westpac Banking Corporation.
<b>GOVERNANCE</b>	The UNEP FI Steering Committee provides executive direction on strategic, work program and budgetary issues. The Committee is composed of 3 commission representatives, 4 thematic champions, and 5 regional task force representatives, UNEP DTIE Director (supported by Head of Unit).
<b>KEY COMPONENTS</b>	<ul style="list-style-type: none"> <li>Creates awareness and capacity among the financial community, in order to promote their proactive approach to two main water issues.</li> <li>Water Supply: increase the channeling of funds into the “water sector” (water/sanitation-infrastructure, services, technologies, utilities), in an ESG-inclusive manner, in order to support the achievement of the MDG Drinking Water and Sanitation Target.</li> <li>Water Use: introducing water considerations into risk/opportunity assessment processes, in the context of both water-exposed businesses “downstream” and private households.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>Identifying water risks and opportunities.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>Corporate Finance</li> <li>Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>Investors</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	None
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.unepfi.org/work_streams/water/index.html">www.unepfi.org/work_streams/water/index.html</a></p> <p>Chief Liquidity Series (with specific guidance for the power and agribusiness sectors):  <a href="http://www.unepfi.org/work_streams/water/liquidity/index.html">www.unepfi.org/work_streams/water/liquidity/index.html</a></p> <p>Contact Information:  <a href="mailto:water@unepfi.org">water@unepfi.org</a></p>
<b>KEY TERMS</b>	Financial institutions, risk and opportunities.

# Water Accounting: An Australian Framework for the Minerals Industry



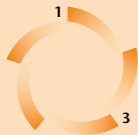
<b>PURPOSE AND OBJECTIVES</b>	To promote a strategic approach to water management at mining and processing sites so that water is more efficiently managed and valued as a vital business, community and environmental asset.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	The Minerals Council of Australia (MCA) represents Australia's exploration, mining and minerals processing industry, nationally and internationally, in its contribution to sustainable development and society.
<b>GOVERNANCE</b>	Water working group of the Minerals Council of Australia, chaired by Rio Tinto, and working collaboratively with the University of Queensland's Sustainable Minerals Institute to develop a single set of water metrics for the Australian mining industry, to enable consistent reporting within industry.
<b>KEY COMPONENTS</b>	<p>The current version of the MCA Water Accounting Framework provides:</p> <ul style="list-style-type: none"> <li>• A consistent approach for quantifying flows into, and out of, reporting entities, based on their sources and destinations.</li> <li>• A consistent approach for reporting of 'water use' by minerals operations that enables comparison with other users, and relates to water sharing planning processes.</li> <li>• A consistent approach in quantifying and reporting water 'reuse' and 'recycling' efficiencies in order that the reliance on sourced water is reduced.</li> <li>• A model for the more detailed operational water balance, as guidance for those businesses which currently do not have an effective operational water model, or see the opportunity to develop this new approach.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Accounting for and understanding impacts.</li> <li>• Determining action and setting targets.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Australia
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• External Relations</li> <li>• Operations</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Governments</li> <li>• Local communities</li> <li>• NGOs</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	<ul style="list-style-type: none"> <li>• The framework is only relevant to Metals and Mining Companies; inputs required include a combination of existing data and modeled estimates, depending on an operation's existing data holdings.</li> </ul>
<b>WEBSITE AND RESOURCES</b>	<p>Access the guidance:  <a href="http://www.wateraccounting.net.au">www.wateraccounting.net.au</a></p> <p>Contact Information:  <a href="http://www.minerals.org.au/contact">www.minerals.org.au/contact</a></p>
<b>KEY TERMS</b>	Risk and opportunity, management tools, accounting framework.

<b>PURPOSE AND OBJECTIVES</b>	To promote the transition towards sustainable, fair and efficient use of fresh water resources worldwide by advancing the concept of the 'water footprint', increasing the water footprint awareness of communities, government bodies and businesses, and encouraging forms of water governance that reduce the negative ecological and social impacts of water use.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	The Water Footprint Network (WFN) is an international learning community with academia, business, government, investor, NGO, and international organization partners. WFN is a platform for connecting diverse communities interested in sustainability, equitability and efficiency of water use. Founding members include University of Twente, WWF, UNESCO, IHE Institute for Water Education, the Water Neutral Foundation, WBCSD, the International Finance Corporation and the Netherlands Water Partnership.
<b>GOVERNANCE</b>	The Water Footprint Network has a Board consisting of at least two directors. A Supervisory Council holds fiduciary responsibility for the WFN. An Advisory Council advises on the strategies to be followed with regard to achieving the Network's objectives. The Scientific Peer Review Committee is called upon to provide scientific guidance on the published methodology, guidelines criteria and tools of the WFN.
<b>KEY COMPONENTS</b>	<p>The Water Footprint Network Assessment Manual (Hoekstra, Chapagain, Aldaya and Mekonnen, 2011):</p> <ul style="list-style-type: none"> <li>• Provides a comprehensive set of methods for water footprint assessment.</li> <li>• Shows how water footprints can be calculated for individual processes and products, as well as for consumers, nations and businesses.</li> <li>• Contains detailed, worked examples of how to calculate green, blue and grey water footprints.</li> <li>• Describes how to assess the sustainability of the aggregated water footprint within a river basin, or the water footprint of a specific product.</li> <li>• Includes an extensive library of possible measures that can contribute to water footprint reduction.</li> </ul> <p>The WaterStat Database including:</p> <ul style="list-style-type: none"> <li>• Product water footprint statistics.</li> <li>• National water footprint statistics.</li> <li>• International virtual water flows statistics.</li> <li>• Water scarcity statistics.</li> </ul> <p>Water Footprint Assessment Tool (to be released mid-2012):</p> <ul style="list-style-type: none"> <li>• Facilitates Water Footprint Assessment.</li> <li>• Provides easy access to WaterStat Database.</li> <li>• Produces maps, graphs, output tables and reports.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Assessing global and local water situations.</li> <li>• Accounting for and understanding impacts.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global

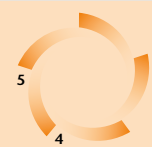
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Operations</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Government</li> <li>• NGOs</li> <li>• Suppliers</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	<ul style="list-style-type: none"> <li>• The network is open to partners from all relevant stakeholders in water resources management.</li> <li>• The Water Footprint provides significant open source resources (e.g. data, publications, tools, etc.), training, technical assistance and project activities to support the implementation of Water Footprint Assessment.</li> </ul>
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.waterfootprint.org/?page=files/home">www.waterfootprint.org/?page=files/home</a></p> <p>Contact Information:  <a href="http://www.waterfootprint.org/index.php?page=files/Contact">www.waterfootprint.org/index.php?page=files/Contact</a></p>
<b>KEY TERMS</b>	Accounting, and sustainability assessment, response formulation, water footprint.




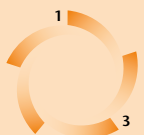
<b>PURPOSE AND OBJECTIVES</b>	The Water Impact Index (WIIX) aims to measure the impact of activities on local water resources. It integrates volume, quality, and local stress factors into a single indicator.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	The indicator has been developed by Veolia Environnement Research & Innovation, with the help of Veolia Water Technical Department, and Veolia Water North America who first tested it. Veolia Water is the world leading provider of water and wastewater services.
<b>GOVERNANCE</b>	WIIX is hosted on the Growing Blue Initiative website. Veolia Water, in collaboration with Global Water Intelligence, is the main underwriter of the site, in consultation with industry colleagues, scientists, academia and NGOs, such as CleanWater America Alliance and the International Food Policy Research Institute. Updates to the tool will be managed by the developer.
<b>KEY COMPONENTS</b>	<p><b>A new metric for assessing water impacts.</b></p> <p>The online application allows assessing two equivalent technical solutions. It also enables identification of water hotspots in the value chain and could provide information on the main environmental improvement leverages.</p>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>Accounting for and understanding impacts.</li> <li>Identifying water risks and opportunities.</li> <li>Determining actions and setting targets.</li> </ul>
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>Corporate Communications</li> <li>External Relations</li> <li>Operations</li> <li>Sales &amp; Marketing</li> <li>Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>Local communities</li> <li>NGOs</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	<ul style="list-style-type: none"> <li>The tool is designed for those with some degree of operational understanding of water and wastewater systems, and requires an understanding of a variety of factors including water chemistry and the energy-water nexus. It can be used to analyze both municipal and industrial systems.</li> <li>The results of the calculation can be used in conjunction with a traditional cost analysis to determine the best ROI in terms of areas in which impact on local water resources can be minimized – and may lead to cost savings.</li> </ul>
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://growingblue.com/footprint-tools/water-impact-index/">growingblue.com/footprint-tools/water-impact-index/</a></p> <p>Contact Information:  <a href="mailto:mathieu.tolian@veoliaeau.fr">mathieu.tolian@veoliaeau.fr</a></p>
<b>KEY TERMS</b>	Water footprint, impact and risk assessment, decision making tool.

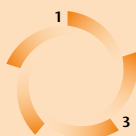
<b>PURPOSE AND OBJECTIVES</b>	To create a practical tool that will help investors understand and analyze their exposure to water-related business risks during the scanning and due diligence phases, and/or integrated in portfolio monitoring.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	The World Wildlife Fund (WWF) is one of the world's largest independent conservation organizations. DEG finances private-sector investments in developing countries, with the aim of improving the living conditions of the people. Working in collaboration, WWF and DEG produced the Water Risk Filter and accompanying report.
<b>GOVERNANCE</b>	The Water Risk Filter is an evolving tool. Upon completion of the first version, further testing and on the ground application will highlight areas that require improvement.
<b>KEY COMPONENTS</b>	<ul style="list-style-type: none"> <li>The Water Risk Filter system is intended to identify water-related risks at an early point in time, so they can be considered in investment decisions.</li> <li>The tool also outlines possible courses of action for companies from different industries and regions, which may be threatened by water shortage or pollution, either directly or in their supply chain.</li> <li>The tool can be divided into two: <ul style="list-style-type: none"> <li>The in-depth tool uses a large set of risk indicators all based on publicly available datasets with global coverage, selected and compiled as part of this project. The second strain of water risk assessment draws on specific information from the water risk questionnaire, and is more specific to the company.</li> <li>The Risk Filter also includes a simpler 'pre-assessment,' which only requires very basic input of the country or basin where the company is located, as well as the relevant industry sector.</li> </ul> </li> <li>The risk levels are determined based on scores related to the answers to a set of questions/indicators multiplied by a corresponding weighing – for each indicator (48 in total), five different answer options are defined, from 1 ('no or very limited risk') to 5 ('very high risk').</li> <li>The calculated risk levels are reflected on two levels, a matrix in which all assessed companies are plotted, and as detailed risk levels for the specific company.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>Assessing global and local water situations.</li> <li>Identifying water risks and opportunities.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>Corporate Communications</li> <li>Corporate Finance</li> <li>Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>Investors</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	None
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.waterriskfilter.panda.org">www.waterriskfilter.panda.org</a></p> <p>Contact Information:  <a href="mailto:waterriskfilter@wwfint.org">waterriskfilter@wwfint.org</a></p>
<b>KEY TERMS</b>	Investor, risk.



<b>PURPOSE AND OBJECTIVES</b>	To enable the assessment, certification and public endorsement of water stewards operating in the Australia and Asia Pacific region.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	Water Stewardship Australia (WSA) joined with The Nature Conservancy and Pacific Institute in 2008 to form the Alliance for Water Stewardship (AWS). Water Stewardship Australia Limited has been constituted as a member based, non-profit organization empowered to develop the governance structure and business model for an Australian water stewardship enterprise.
<b>GOVERNANCE</b>	WSA has developed and implemented a Strategic Plan to guide the organization to deliver on its objectives. More specifically, it is to build WSA Limited into an influential, financially viable organization able to engage a wide range of stakeholders in the on-going development and application of a water stewardship system in Australia. The plan and responsibilities can be downloaded from the website.
<b>KEY COMPONENTS</b>	<p>Water stewardship standards are defined at the site level, with the aim to achieve sustainable water use at the catchment level. The draft standard focuses on four key elements to deliver catchment sustainability:</p> <ul style="list-style-type: none"> <li>• Water flow regime.</li> <li>• Water quality.</li> <li>• Water governance.</li> <li>• Habitat.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Determining actions and setting targets.</li> <li>• Monitoring and communicating performance.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Australia
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Corporate Communications</li> <li>• External Relations</li> <li>• Operations</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Governments</li> <li>• Local communities</li> <li>• NGOs</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	<ul style="list-style-type: none"> <li>• Membership is open to all who support WAS objectives, including individuals and incorporated or unincorporated entities represented by individuals.</li> </ul>
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.waterstewardship.org.au/index.html">www.waterstewardship.org.au/index.html</a></p> <p>Contact Information:  <a href="mailto:info@waterstewardship.org.au">info@waterstewardship.org.au</a></p>
<b>KEY TERMS</b>	Standards, certification, disclosure, engagement, performance assessment, watershed impacts.

<b>PURPOSE AND OBJECTIVES</b>	To provide industrials with a coherent framework within which to measure and compare the environmental performance of products and operations regarding freshwater use, and related environmental consequences.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	Working Group under the auspices of the United Nations Environment Program (UNEP), and the Society for Environmental Toxicology and Chemistry (SETAC)'s Life Cycle Initiative, which is a partnership enabling users to put life cycle thinking into effective practice.
<b>GOVERNANCE</b>	The International Life Cycle Board (ILCB) is the governing body of the UNEP/SETAC Life Cycle Initiative. The ILCB decides on the work plan and carries out the supervision of all work elements. The ILCB meets twice a year, unless conditions and activities dictate additional meetings. The two founding organizations, UNEP and SETAC appointed the first ILCB members. Subsequent members are appointed and approved by the ILCB itself.
<b>KEY COMPONENTS</b>	<p>The Life Cycle Initiative's long term deliverables are focused on:</p> <ul style="list-style-type: none"> <li>Integrating indicators within the ISO 14040 standardized Life Cycle Assessment (LCA) framework that already provides a standardized carbon footprinting methodology.</li> <li>Developing indicators that measure the environmental impacts on human health, ecosystems and freshwater resources generated by freshwater use and depletion.</li> <li>Developing a multi-criteria assessment scheme within the LCA framework that allows industrials to benchmark the performances of products, processes and services on freshwater resources, human health and biodiversity protection.</li> <li>Training modules for SMEs and developing countries.</li> <li>Strategies for communication of life cycle information to relevant stakeholders.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>Accounting for and understanding impacts.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>Procurement</li> <li>Research &amp; Development</li> <li>Sales and marketing</li> <li>Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>NGOs</li> <li>Suppliers</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	Phase 2 was launched in 2007, and will end in 2012. Further information regarding a Phase 3 is not currently available.
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://fr1.estis.net/sites/lcinit/default.asp?site=lcinit&amp;page_id=15CFD910-956F-457D-BD0D-3EF35AB93D60">fr1.estis.net/sites/lcinit/default.asp?site=lcinit&amp;page_id=15CFD910-956F-457D-BD0D-3EF35AB93D60</a></p> <p>Contact Information:  <a href="http://fr1.estis.net/sites/lcinit/default.asp?site=lcinit&amp;page_id=10AD70A8-EE91-488B-8EBE-DC6C3CF694BE">fr1.estis.net/sites/lcinit/default.asp?site=lcinit&amp;page_id=10AD70A8-EE91-488B-8EBE-DC6C3CF694BE</a></p>
<b>KEY TERMS</b>	Benchmark, environmental performance, life cycle assessment.

<b>PURPOSE AND OBJECTIVES</b>	To map a company's water use, and assess water risks relative to global operations and supply chains, establish relative water risks in company portfolios, create an effective knowledge base for driving improved water consumption and efficiency, and enable effective communication with internal and external stakeholders.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	The WBCSD is a CEO-led organization of forward-thinking companies that galvanizes the global business community to create a sustainable future for business, society and the environment. Together with its members, the council applies thought leadership and effective advocacy to generate constructive solutions, and take shared action.
<b>GOVERNANCE</b>	Some 26 companies from 11 industrial sectors work in the leadership group of the water project (as of June 2012), its decision-making body, forwarding its vision and objectives. The project also benefits from a wider working group, which participates in the implementation of activities. Technical development of the tool was provided by member CH2M HILL.
<b>KEY COMPONENTS</b>	<p>The tool is composed of:</p> <ul style="list-style-type: none"> <li>• An Excel workbook.</li> <li>• An online mapping system plotting site locations with external water, sanitation, population and biodiversity datasets.</li> <li>• Spatial viewing via Google Earth interface.</li> </ul> <p>The tool generates automatic outputs including:</p> <ul style="list-style-type: none"> <li>• GRI, CDP Water, DJSI and Bloomberg water related indicators.</li> <li>• Inventories, risk and performance metrics charts and maps combining company sites' location with country and/or watershed data.</li> <li>• The tool establishes relative water risks in a global company's portfolio, in order to prioritize action.</li> </ul> <p>Two sector customizations are also available:</p> <ul style="list-style-type: none"> <li>• Global Water Tool for Power Utilities</li> <li>• Global Water Tool for Oil &amp; Gas (led by IPIECA)</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Assessing the global and local water situation.</li> <li>• Identifying water risks and opportunities.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Corporate Communications</li> <li>• Operations</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Customers</li> <li>• NGOs</li> <li>• Suppliers</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	GEMI's Local Water Tool is designed to be used in conjunction with the WBCSD Global Water Tool.
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="http://www.wbcd.org/work-program/sector-projects/water.aspx">www.wbcd.org/work-program/sector-projects/water.aspx</a>  <a href="http://www.ipieca.org/focus-area/water">www.ipieca.org/focus-area/water</a></p> <p>Contact Information:  <a href="mailto:GlobalWaterTool@wbcd.org">GlobalWaterTool@wbcd.org</a>  <a href="mailto:info@ipieca.org">info@ipieca.org</a></p>
<b>KEY TERMS</b>	Global risk assessment, management tool, reporting indicators, online geographic mapping.

<b>PURPOSE AND OBJECTIVES</b>	Provides a comprehensive database and water risk maps for the globe, and ten river basins around the world. Aqueduct developed credible metrics to track water risks at a scale appropriate for developing sound business and investment strategies.
<b>SPONSORING ORGANIZATION AND DEVELOPERS</b>	The World Resources Institute (WRI), a global environmental think tank, works with governments, companies, and civil society, to build solutions to urgent environmental challenges. An 'Aqueduct Alliance' supports the project financially and substantively, to ensure a robust, credible, and independent final product. It includes General Electric, Goldman Sachs, Bloomberg, The Coca Cola Company, Skoll Global Threats Fund, Talisman Energy, John Deere, DOW, Dupont, and United Technologies Corporation.
<b>GOVERNANCE</b>	Expert advisors – from companies, government agencies, NGOs and academia – participate in an Aqueduct Alliance Working Group focusing on Design, Sector Weighting, and Application Task Teams.
<b>KEY COMPONENTS</b>	<p>The Aqueduct Atlas tool creates high-resolution maps of water risks, tailored to unique risk exposure profiles for different industry sectors based on the analysis of a total of 14 aggregated indicators.</p> <p>Indicators are divided into three main categories of water risks to businesses including:</p> <ul style="list-style-type: none"> <li>• Physical Risks related to Quantity.</li> <li>• Physical Risks related to Quality.</li> <li>• Regulatory and Reputational Risks.</li> </ul> <p>Individual indicators address:</p> <ul style="list-style-type: none"> <li>• Supply.</li> <li>• Variability.</li> <li>• Storage.</li> <li>• Water quality.</li> <li>• Public awareness.</li> <li>• Government awareness.</li> <li>• Ecosystem services.</li> </ul>
<b>ACTIVITIES ADDRESSED</b>	<ul style="list-style-type: none"> <li>• Assessing the global and local water situation.</li> <li>• Identifying water risks and opportunities.</li> </ul> 
<b>GEOGRAPHIC FOCUS</b>	Global, with the ability to measure (sub)basin-level risks.
<b>PRIMARY CORPORATE USERS</b>	<ul style="list-style-type: none"> <li>• Corporate Finance</li> <li>• Operations</li> <li>• Sustainability</li> </ul>
<b>TARGET EXTERNAL AUDIENCE</b>	<ul style="list-style-type: none"> <li>• Investors</li> </ul>
<b>REQUIREMENTS AND OTHER TIPS</b>	None
<b>WEBSITE AND RESOURCES</b>	<p>Initiative Information:  <a href="https://insights.wri.org/aqueduct/welcome">insights.wri.org/aqueduct/welcome</a></p> <p>Contact Information:  <a href="https://insights.wri.org/aqueduct/contact">insights.wri.org/aqueduct/contact</a></p>
<b>KEY TERMS</b>	Risk mapping and measuring, data and information platform, watershed engagement, reporting, public-private action, opportunity.

## 6. Glossary

Sources (if not otherwise indicated):

- Aquastat: FAO's Information System on Water and Agriculture, [www.fao.org/nr/water/aquastat/main/index.stm](http://www.fao.org/nr/water/aquastat/main/index.stm)
- European Environment Agency online glossary, [www.eea.europa.eu/maps/ozone/resources/glossary](http://www.eea.europa.eu/maps/ozone/resources/glossary)
- EWS Glossary, The European Water Partnership, [www.ewp.eu/wp-content/uploads/2010/11/EWS+Standard\\_Glossary+v2.10.pdf](http://www.ewp.eu/wp-content/uploads/2010/11/EWS+Standard_Glossary+v2.10.pdf)
- Glossary of Hydrology, UN World Water Assessment Program, [hydrologie.org/glu/aglo.htm](http://hydrologie.org/glu/aglo.htm)
- The GEMI Local Water Tool, [www.gemi.org/localwatertool/](http://www.gemi.org/localwatertool/)
- The Water Footprint Network Online Glossary, [www.waterfootprint.org/?page=files/Glossary](http://www.waterfootprint.org/?page=files/Glossary)

Term	Definition(s)
<b>Aquifer</b>	Permeable water-bearing formation capable of yielding useable quantities of water.
<b>Blue water</b>	Fresh surface and groundwater, i.e. the water in freshwater lakes, rivers and aquifers.
<b>Brackish water</b>	Water containing salts at a concentration significantly less than that of sea water, but in amounts that exceed normally acceptable standards for municipal, domestic and irrigation uses. The concentration of total dissolved salts is usually in the range 1,000 to 10,000 mg/l.
<b>Consumption (of water)</b>	In general, it is meant to represent an amount of water that was used but not returned to its proximate source. Water evaporated, transpired, incorporated into products, crops or waste, consumed by man or livestock, or otherwise removed from the local resource is often defined as "consumed". In some cases, water that is polluted to an extent prohibiting its use by others wishing access is termed "consumption." Also referred to as consumptive water use.
<b>Depletion</b>	Continued withdrawal of water from groundwater or other water body at a rate greater than the rate of replenishment.
<b>Diffuse source pollution</b>	Source of pollution primarily associated with run-off from larger areas of the land. Contributing sources may include air deposition, rural or urban development, agriculture, forestry and land management of solid wastes.
<b>Direct water use</b>	Refers to the water used by a consumer or producer itself (i.e., water used at home; water used for producing, manufacturing and supporting activities). The term contrasts with "indirect water use." <sup>9</sup>
<b>Ecosystem services</b>	The benefits people obtain from ecosystems. These include provisioning services, such as food and water; regulating services, such as regulation of floods, drought, land degradation, and disease; supporting services, such as soil formation and nutrient cycling; and cultural services, such as recreational, spiritual, religious, and other non-material benefits. The classification of water as a provisioning service rather than a regulating service is debated, but this does not affect its general meaning <sup>10</sup> .
<b>Effluent</b>	Waste water (treated or untreated) or substance that is discharged into a water body (typically from a point source).

<sup>9</sup> Gerbens-Leenes and Hoekstra. 2008. "Business Water Footprint Accounting". *Value of Water Research Report Series No. 27*, UNESCO-IHE Institute for Water Education, Delft, the Netherlands, and University of Twente, Enschede, the Netherlands, and Delft University of Technology, Delft, the Netherlands, [www.waterfootprint.org/Reports/Report27-BusinessWaterFootprint.pdf](http://www.waterfootprint.org/Reports/Report27-BusinessWaterFootprint.pdf), accessed March 2012.

<sup>10</sup> Millennium Ecosystem Assessment. 2005

Term	Definition(s)
<b>Environmental flow</b>	Environmental Flows describes the quantity, quality and timing of water flows required to sustain freshwater and estuarine ecosystems, and the human livelihoods and well-being that depend on these ecosystems <sup>11</sup>
<b>Environmental water stress indicator</b>	<p>Measures the proportion of water withdrawal with respect to water available to human use. Water available to human use is equal to the total amount of water available in the basin, minus the estimated environmental water demand (the water needed by the ecosystem to maintain its integrity).</p> <p>Basins with a water stress index above 0.4 are already considered, from an ecosystem perspective, as areas under environmental stress; basins with an indicator higher than 0.8, are considered highly-stressed.<sup>12</sup></p>
<b>Evapotranspiration</b>	Quantity of water transferred from the soil or vegetation surface to the atmosphere by evaporation and plant transpiration.
<b>Freshwater</b>	Naturally occurring water having a low concentration of salts, or generally accepted as suitable for abstraction and treatment to produce potable water.
<b>Global risk assessment</b>	The identification, evaluation, and estimation, of the levels of risks involved in a situation, their comparison against benchmarks or standards, and determination of an acceptable level of risk.
<b>Green water</b>	The precipitation on land that does not run off or recharge the groundwater but is stored in the soil or temporarily stays on top of the soil or vegetation. Eventually, this part of precipitation evaporates or transpires through plants.
<b>Groundwater</b>	Subsurface water occupying the saturated zone.
<b>Hot-spot</b>	<p>A hotspot is a specific period of the year (such as the dry period) in a specific (sub)catchment in which the use of water is unsustainable, for example, because it compromises environmental water needs or water quality standards, or because the water allocation and use in the catchment is considered unfair and/or economically inefficient.</p> <p>Hotspots deserve most attention when formulating response measures.</p>
<b>Impact</b>	An entity's individual impact on a particular water source is defined as the extent to which the volume and/or quality of water used by an entity in a specific watershed affects the availability of water for other uses, or harms health or ecosystems in any other way.
<b>Indirect water use</b>	The water used behind the products consumed by a consumer or used as inputs by a producer (i.e., water used in the production and supply chain of the goods and services consumed; water used in a business's supply chain). <sup>13</sup>

<sup>11</sup> The Brisbane Declaration, 2007 (10<sup>th</sup> International River symposium and Environmental Flows Conference 3-6 September 2007).

<sup>12</sup> World Resources Institute, 2003, Watershed of the World: Global Maps. Environmental Water Scarcity Index by Basin, [earthtrends.wri.org/pdf\\_library/maps/watersheds/gm16.pdf](http://earthtrends.wri.org/pdf_library/maps/watersheds/gm16.pdf), accessed March 2012.

<sup>13</sup> Gerbens-Leenes and Hoekstra. 2008.



Term	Definition(s)
<b>Life cycle assessment (LCA)</b>	Process to evaluate the environmental burdens associated with a product, process, or activity by identifying and quantifying energy and materials used and wastes released to the environment; to assess the impact of those energy and materials used and released to the environment; and to identify and evaluate opportunities to affect environmental improvements. The assessment includes the entire life cycle of the product, process or activity, encompassing, extracting and processing raw materials; manufacturing, transportation and distribution; use, reuse maintenance; recycling and final disposal. <sup>14</sup>
<b>Opportunity</b>	Potential top line business enhancements created by voluntary sustainable water management actions.
<b>Renewable versus non-renewable water</b>	<p>Renewable water is a concept referring to water quantities that are maintained by the hydrologic cycle, and thus renewed on a predictable basis.</p> <p>Non-renewable water means that groundwater bodies (i.e. deep aquifers) have a negligible rate of recharge on the human time-scale, and thus can be considered as non-renewable.</p> <p>While renewable water resources are expressed in flows, non-renewable water resources have to be expressed in quantity (stock). Sometimes referred to as fossil water.</p>
<b>Return flow</b>	<p>Any flow that returns to a stream channel or to the groundwater after use.</p> <p>Note: the quality, quantity, temperature and point of return to a watershed or aquifer compared to pre-withdrawal conditions are important elements of sustainability evaluation.</p>
<b>Risk</b>	A company's risk from using water from a particular water source is defined as potential business liabilities faced by the site as a result of impacts and external water-related drivers and constraints.
<b>River basin</b>	Area having a common outlet for its surface runoff. Synonyms include: catchment, drainage area and watershed.
<b>Run off</b>	The part of precipitation that appears as streamflow.
<b>Surface water</b>	Water that flows over, or is stored on the ground surface.
<b>Sustainable water resource</b>	The withdrawals are taken from renewable sources; the withdrawal is within the renewal capacity of that source; and then the disposition or return of the water allows others to use the water in the original river basin or watershed, usually downstream <sup>15</sup> .
<b>Wastewater versus treated water</b>	<p>Water that is of no further immediate value to the purpose for which it was used, or in the pursuit of which it was produced because of its quality, quantity or time of occurrence. However, wastewater from one user can be a potential supply to a user elsewhere. Cooling water is not considered to be wastewater.</p> <p>Treated water that has been cleaned and/or disinfected, usually for purposes of producing potable water.</p> <p>In turn, treated wastewater has received primary, secondary or advanced treatment to reduce its levels of pollutants or health hazards, and is subsequently released back to the environment. It can also be a form of effluent.</p>

<sup>14</sup> The Society of Environmental Toxicology and Chemistry, [www.setac.org/node/32](http://www.setac.org/node/32), accessed March 2012.

<sup>15</sup> Owens 2002

Term	Definition(s)
<b>Watershed</b>	Area having a common outlet for its surface runoff. Synonyms include: catchment, drainage area, and river basin.
<b>Water abstraction</b>	Also known as water withdrawal. The volume of freshwater abstraction from surface or groundwater. Part of the freshwater withdrawal will evaporate, another part will return to the catchment where it was withdrawn, and yet another part may return to another catchment, or the sea.
<b>Water allocation</b>	<p>In a hydrologic system in which there are multiple uses or demands for water, the process of assigning specific amounts of water to be devoted to a given purpose or use.</p> <p>Allocative efficiency refers to the allocation of water resources in a way that maximizes the net benefit attained through the use of water across a range of applications – household consumption, food production, consumer goods, employment and urbanization.</p>
<b>Water balance</b>	Inventory of water based on the principle that during a certain time interval, the total water gain to a given catchment area, or body of water, must equal the total water loss plus the net change in storage in the catchment or body of water.
<b>Water conservation</b>	The practice of minimizing the use of water and/or the consumption of water.
<b>Water discharge</b>	<p>(1) Liquid flowing out of a container or other system.</p> <p>(2) Water or wastewater flowing out of a reservoir or treatment plant.</p> <p>(3) Outflowing branch of a main stream or lake.</p> <p>Also known as “effluent.”</p>
<b>Water footprint</b>	<p>An indicator of freshwater use that looks at both direct and indirect water use of a consumer or producer.</p> <p>A water footprint assessment involves quantifying the water footprint, assessing its impacts, and formulating a response.</p>
<b>Water intensity</b>	Usually taken to be the ratio between a process, product, business, or human freshwater use and a defined unit of production or population.
<b>Water quality</b>	Water quality refers to the physical, chemical, biological and organoleptic (taste-related) properties of water.
<b>Water recycling/reuse</b>	<p>The act of processing used water/wastewater through another cycle before discharge to final treatment and/or discharge to the environment. In general, there are three types of water recycling/reuse:</p> <ol style="list-style-type: none"> <li>1. Wastewater recycled back in the same process or higher use of recycled water in the process cycle.</li> <li>2. Wastewater recycled/reused in a different process, but within the same facility.</li> <li>3. Wastewater reused at another of the reporting organization’s facilities.<sup>16</sup></li> </ol>

<sup>16</sup> Global Reporting Initiative. 2006. Sustainability Reporting Guidelines, Version 3.0, GRI, Amsterdam, the Netherlands, [www.globalreporting.org/resourcelibrary/G3-Sustainability-Reporting-Guidelines.pdf](http://www.globalreporting.org/resourcelibrary/G3-Sustainability-Reporting-Guidelines.pdf), accessed March 2012.

Term	Definition(s)
<b>Water scarcity</b>	<p>Occurs where there are insufficient water resources to satisfy long-term average requirements for human or ecosystem needs. It refers to long-term water imbalances, combining low water availability with a level of water demand exceeding the supply capacity of the natural system.</p> <p>Some initiatives have definitions for water scarcity that are unique to their tools.</p> <ul style="list-style-type: none"> <li>• IWMI distinguishes physical and economic scarcity<sup>17</sup>:           <p>Physical water scarcity: Water resources development is approaching, or has exceeded, sustainable limits. More than 75% of river flows are withdrawn for agriculture, industry and domestic purposes (accounting for recycling of return flows).</p> <p>Economic water scarcity: human, institutional and financial capital limit access to water, even though water in nature is locally available to meet human demands. Water resources are abundant relative to water use, with less than 25% of water from rivers withdrawn for human purposes, but malnutrition exists.</p> </li> <li>• WFN defines its blue water scarcity indicator as:           <p>Ratio of the blue water footprint in a given river basin to the blue water available, where the latter accounts for environmental water needs by subtracting from the total runoff the presumed flow requirement for ecological health. Blue water scarcity varies within the year, and from year to year. Values have been classified into four levels of scarcity (low, moderate, significant, severe).</p> </li> </ul>
<b>Water shortage</b>	Water shortage describes a state where levels of water supply do not meet minimum levels necessary for basic needs.
<b>Water stress</b>	<p>Occurs when the demand for water exceeds the available amount during a certain period, or when poor quality restricts its use. Flooding is considered as another type of water stress.</p> <p>Water scarcity measure quantifying the water stress level of each watershed from 0.01 to 1. The WSI indicates the portion of the freshwater volume consumed that deprives downstream users of their freshwater resources. It is based on the watershed-specific withdrawal-to-availability ratio from the "Water GAP 2" global model enhanced by inclusion of temporal variability in precipitation<sup>18</sup>.</p>
<b>Water Stress Index</b>	



<sup>17</sup> [www.iwmi.cgiar.org](http://www.iwmi.cgiar.org)

<sup>18</sup> Pfister S., Koehler A. & Hellweg S. (2009) Assessing the environmental impacts of freshwater consumption in LCA. *Environ Sci Tech* 43:4098-4104

## About WBCSD

The World Business Council for Sustainable Development (WBCSD) is a CEO-led organization of forward-thinking companies that galvanizes the global business community to create a sustainable future for business, society and the environment. Together with its members, the council applies its respected thought leadership and effective advocacy to generate constructive solutions and take shared action. Leveraging its strong relationships with stakeholders as the leading advocate for business, the council helps drive debate and policy change in favor of sustainable development solutions.

The WBCSD provides a forum for its 200 member companies – who represent all business sectors, all continents, and combined revenue of more than \$7 trillion – to share best practices on sustainable development issues, and to develop innovative tools that change the status quo. The Council also benefits from a network of 60 national and regional business councils and partner organizations, a majority of which are based in developing countries.

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IUCN works on biodiversity, climate change, energy, human livelihoods, and greening the world economy, by supporting scientific research, managing field projects all over the world, and bringing governments, NGOs, the UN and companies together, in order to develop policy, laws and best practice.

IUCN is the world's oldest and largest global environmental organization, with more than 1,200 government and NGO members, and almost 11,000 volunteer experts in some 160 countries. IUCN's work is supported by over 1,000 staff in 45 offices, and hundreds of partners in public, NGO and private sectors around the world.

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