

Overcoming Barriers to Effective Corporate Water Risk Management

A report by CDP and the International Water Stewardship Programme (IWaSP) of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



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The International Water Stewardship Programme (IWaSP) is an innovative donor-funded program that improves water security for people and economic development in catchments around the world.

It has been commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ), is co-funded by the UK Department for International Development (DFID) and is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. IWaSP enables public sector, private sector and civil society actors to reach consensus on water risks and solutions, and partner to implement joint action plans to improve water security. Currently IWaSP supports over 17 partnerships in seven countries with over 50 partners, improving ecosystem protection, water supply access, infrastructure investment and water governance.

Across the nine countries IWaSP operates in at the time of writing this report, our international and local experts support 22 companies to manage their water risks through 20 partnerships, involving over 52 partners. CDP engages with almost 650 investors and over 3,000 companies to catalyze action to improve water security globally. These emerging forms of multi-stakeholder water management not only benefit businesses and investors but also directly improve water security for communities and ultimately whole economies. By supporting collective action, IWaSP aims to directly improve water security for over one million poor and vulnerable people while CDP aims to shift the trillions to fund this outcome.

However, we believe that this is just the start. We are witnessing an increasing number of companies waking up to the severity of the water risks they face, the causes of which are often outside their control. Consequently, more and more companies are willing to look for innovative solutions to address their water risks, pushing them to work with new partners. It is our belief that multi-stakeholder, collective water management is the only way that local business operations can effectively manage their water risks. This supports integrated management of water resources, the prevailing paradigm that most water policy is based upon. Water managers and users must work together to collectively govern a highly interconnected common resource, which flows through all aspects of our lives and economies.

The most proactive companies we work with are ensuring that they and their local stakeholders have water security in advance of any problems, allowing these companies to plan future investments.

However, despite the growing risks and rationale to take a multi-stakeholder approach

to water management, this approach is far from mainstreamed, and rather exists as scattered islands of excellence. A large proportion of companies are in the more difficult position of reacting once their water risks materialize and hit their bottom lines. These companies usually face a double-edged sword: first, there are generally no quick fixes to water problems that bring long term benefit so their businesses suffer while solutions are found; second, water problems are more often than not accompanied by conflict, making it much harder to work with the other actors necessary to fix the problem. Some are facing difficult decisions like whether to write off significant assets or shoulder high relocation costs.

Some business leaders have not yet woken up to water risk and as a result, still side-line water management as a CSR or environmental issue that doesn't warrant much attention. Others seem paralyzed by the scale, uncertainty and complexity of water security challenges, are skeptical about working with government and civil society actors, or are unaware of what they could actually achieve through effective partnerships. However, there is a growing force of private sector enterprises that realize their very survival depends on the sustainable and equitable management of water resources. For companies really committed to reducing their water risks, especially those operating in emerging and developing economies, where water governance is normally weak, the only path is the holistic one – playing a role to help to build the capacities and clarify the incentives of all actors to work together to improve water security.

We are committed to working with these companies to push the boundaries of corporate water stewardship. We are innovating new approaches and tools – through corporate reporting and on the ground – coupled with the advisory and facilitation capacities to help businesses develop effective and impactful partnerships with public authorities and civil society organizations, to sustainably improve water security for all.

CDP and GIZ - IWaSP partnered to undertake this study for two reasons: first, to clarify some of the barriers for companies to engage in collective action to mitigate a very real risk; second to provide the investor and international business community with ideas and inspiration of how local business operations and suppliers can better manage their water risks. After all, water is always a local issue and therefore always requires local action.

Water security is becoming a strategic concern for most global businesses – the leaders of industries and nations have crowned water the greatest risk of the decade (WEF Global Risk Report 2016).

Increasing population, economic activity and consumption, coupled with declining water availability and quality, and weak water governance in many geographic regions are all leading to increased competition for this critical resource. Since these drivers of water challenges lie outside of any one company's sphere of control, finding sustainable solutions is not straightforward. Individual business action will always have limited impact and most water risks can only be mitigated by the effective and concerted action of a collection of relevant stakeholders.

Importantly, the underlying health and water security of the catchment¹ in which a business is situated is increasingly being recognized as synonymous with business health and security. Likewise, the water security of a country usually plays a critical role in its economic health. Despite this growing risk and awareness, corporate engagement in meaningful collective action remains confined to islands of excellence, rather than a mainstream activity.

This report, commissioned by and developed in conjunction with the International Water Stewardship Programme (IWaSP), a German-UK funded program implemented by GIZ, helps to establish why corporate engagement in collective action remains low and identifies opportunities to address this. It combines the findings of CDP's analysis of global companies' water risk disclosure responses and the results of focused consultation workshops with IWaSP's direct on-the-ground experience of working with companies in catchments to overcome shared threats to water security.

This mix of research and lessons from experience reveals that barriers to corporate engagement in collective action are common across many companies and industry sectors. Some of the barriers identified fall beyond the ability of any one company to influence. For example, the lack of internationally agreed standards for water risk assessments; or the real or perceived lack of enabling environments for collective action within many catchments.

Many of the barriers however were found to exist within the companies themselves, suggesting that these could be easier to overcome:

▼ **Commitment to water stewardship from leadership**

Evidence suggests that commitment from company leadership is a critical factor for effective engagement in collective action, both at the corporate and operational levels. For many companies, water is a long term emerging risk and therefore needs to be prioritized at the strategic level, so as not to be forgotten in the urgency of day to day operations. Leaders with foresight are prioritizing water risk reduction as a core business issue, and are creating the right incentives and internal enabling environment for local operational managers, and in some cases suppliers, to engage in meaningful, collective water management.

▼ **Alignment of internal governance practices with water stewardship expectations**

Companies that have integrated water risk management and stewardship into their internal governance practices, including publishing a clear, comprehensive water stewardship strategy and setting mandates and KPIs for water risk reduction, are the best placed to manage their water risks. Acknowledging and communicating that the only way to address water security risks is to mobilize and support others in the catchment enables those with responsibility for water management to act in a more holistic, collective manner.

▼ **Leverage support of trusted advisors**

The support that companies manage to mobilize is fundamental to their ability to engage in collective action. Participants identified that chances of success were greatly increased with the involvement of a trusted advisor. An advisor with local knowledge of the political economy governing the water sector to help guide them, and an honest broker to help convene and mobilize other actors to jointly develop impactful solutions at scale. Examples include water utility companies, river basin management authorities, development agencies, and local and international NGOs.



¹ A catchment is the collection of rainfall over a natural drainage area and is used in this report as the definition for the boundaries for an area of local water management.



Introduction

Many of the water-related challenges reported by companies in the catchments they operate in, source from or sell their products to are also shared by others in the same catchments.

Since the drivers of these challenges are very often outside a company's sphere of control, they can only be effectively mitigated by working together with other stakeholders, such as public water management authorities or other upstream water users. The responses to these challenges are therefore not straightforward for companies, and many seem at a loss of what to do despite coming under increasing pressure to act from shareholders, insurers, communities and NGOs.

The underlying health and water security of the catchment along with the adequacy of water supply and sanitation services is increasingly synonymous with business security. Collective action is emerging as a potential solution. By working collectively with local stakeholders, a small but growing number of companies are realizing that they can reduce their

own water-related risks by improving public water infrastructure and ecosystems, by helping others to reduce their water-related impacts, and by helping to strengthen water services and governance for the benefit of all.

Despite this growing awareness, our research findings show that meaningful solutions involving corporate-driven collective action at scale in catchments or cities remain the exception rather than the norm. This report, commissioned by and developed in conjunction with the International Water Stewardship Programme (IWaSP), a German and UK funded program implemented by GIZ, helps to establish why corporate engagement in collective action remains isolated to islands of excellence, and identifies opportunities to overcome inhibiting factors to scale and spread multi-stakeholder approaches to water risk management.

What is collective action and multi-stakeholder water risk management?

Companies engage in water stewardship by taking steps to help ensure the sustainable use and management of water, within their own operations, along their value chains and in the broader context that surrounds them – e.g. a city or river catchment. They do this as a strategy to reduce their water-related impacts and risks, whether they are physical, reputational or regulatory.

In order to improve the overall water security situation and therefore reduce the risk of conflict with other users, companies engage in collective action with other companies, water utilities, public authorities, civil society organizations and various other organizations (e.g. donor agencies and international NGOs). Through working collectively, they can help others become good water stewards, increase water users' resilience, improve water-related infrastructure and ecosystems and strengthen water services and governance for the benefit of all. When done in a strategic manner, jointly prioritizing water risks and solutions, this is also known as multi-stakeholder water risk management.

While some forms of collective action can take place at international levels, like global policy dialogues, multi-stakeholder water risk management can only meaningfully take place through location-specific collective action with local stakeholders (IWaSP 2015).

Scope and approach of research

CDP, a global not-for-profit organization, now holds the world's largest publicly available database of primary corporate water data.

Responses from
338
companies were
analyzed

For the purpose of this research, responses from 338 of the world's largest companies from CDP's 2014 public water dataset were analyzed.

In addition to this desk study, CDP's corporate network was leveraged to gain deeper insights. Two workshops were held in conjunction with IWaSP in Paris and New York alongside telephone interviews with both companies and water stewardship experts² to bridge gaps in understanding and increase sector representation in the analysis. In total, data and insights from more than 375 organizations and institutions informed the outcomes of this study.

Finally, anecdotal evidence has been drawn from the wealth of experience GIZ has accumulated over the last seven years through supporting companies as they engage in multi-stakeholder water risk management, through IWaSP and other collective action partnerships.

The study is structured around the following questions:

1. What is the current state of corporate strategic responses to water risks?
2. What are the biggest barriers to corporate engagement in multi-stakeholder water risk management?
3. What opportunities exist to overcome these barriers and support multi-stakeholder water risk management?



What is the current state of corporate strategic responses to water risks?

Companies taking the most strategic approach to water risk management are those that look at all interfaces their business has with water, and where vulnerabilities might exist.

This can range from the operational water supply and use, including wastewater management, to water security in the supply chain, to the broader context of water management in the catchments and communities in which companies operate. Since water is always a local issue, companies must undertake comprehensive water risk assessments at the site and catchment level to best understand how changing factors like urban development, industrialization, climate change, etc. affect the water situation in the catchment and might affect their business.

Therefore, water risk assessments are at the heart of strategic approaches to water risk management and are an important step towards effective risk mitigation. When conducted in a comprehensive and inclusive manner, water risk assessments provide practitioners with a solid set of foundations for meaningful actions that can help to mitigate the root causes of water risks. On the contrary, water risk assessments that are poorly designed or conducted may lead practitioners to incorrect conclusions of risk drivers resulting in ill-informed targets, unsound investments and flawed focus on issues that do little to address their underlying water risks.

Our research suggests that current approaches to corporate water risk assessments are often hampered by the following limitations:

- They are often conducted by external technical experts, who may have limited knowledge of the complex social and political economy behind water management in a particular given situation;
- They may be based on outdated or unreliable data, especially in developing countries, because the data sources they rely on are limited in what they can obtain;
- They do not generally bring other critical stakeholders on board until too late in the process; and
- They do not make use of existing water risk assessments that have been conducted by others in the same catchment or city.

CDP response data were analyzed to establish the current state of water risk assessments being undertaken on average by the majority of 338 companies. A comparison is made of this average response with that of leading companies over the next two pages.



We work with others at larger level. At facility level, it's internal. Local consulting groups might help with the assessment at the facility. But not engagement with external stakeholders.

Food Products company



We only started doing a river basin level assessment when we started responding to CDP.

Chemicals company



² Organizations such as The Pacific Institute, Partnerships in Practice, Water Witness International and WWF were consulted.

Average CDP respondent profile

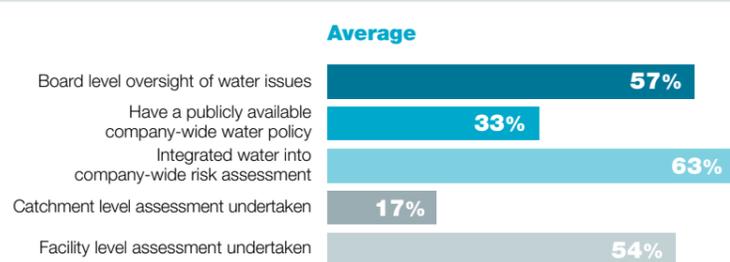
Key findings

Our analysis suggests that strategic leadership and alignment of internal governance practices with water stewardship expectations are essential for effective corporate responses to water risks. The data presented below indicates that the average company responding to CDP's water information request in 2014 has:

- Relatively low levels of leadership commitment with only 57% of companies reporting Board level responsibility for water issues; and
- Low instances of publicly available company-wide water policies with just a third of respondents reporting to have this.

The authors posit that, perhaps as a result, these same companies demonstrate:

- Very low instances of catchment-level water risk assessments undertaken;
- Very few companies extending their oversight beyond their direct operations into their supply chains; and
- A dominant focus on shorter term technological risk response strategies and a preference to wait for changes in regulation.



Leading CDP respondent profile

Key findings

In comparison, analysis of a sub-set of companies demonstrating leading practice supports the hypothesis that strategic leadership and alignment of internal governance practices with water stewardship expectations are essential for effective corporate responses to water risks. The data presented below indicates that leading companies responding to CDP's water information request in 2014 had:

- Very high levels of leadership commitment; and
- Significant instances of publicly available company-wide water policies.

The authors posit that, perhaps as a result, these same companies demonstrate:

- Greater numbers extending their oversight beyond their direct operations into their supply chains;
- A higher proportion pursuing multi-stakeholder approaches to water risk assessments including stakeholders such as water utilities and regulators; and
- Pursuit of greater use of multi-stakeholder water risk response strategies.

Interestingly, both categories of companies demonstrate very low instances of catchment-level assessments undertaken. The rest of this report takes a closer look at why this may be the case and what opportunities exist to overcome this.

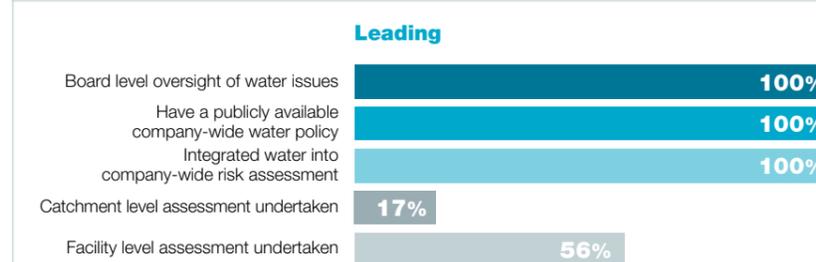


Figure 1 – Most common water issues factored into average company risk assessment

- 90% Water availability and quality
- 80% Water regulatory frameworks and tariffs
- 53% Stakeholder conflicts
- 51% Ecosystem and habitat health
- 45% Supply chains



Figure 2 – Most common stakeholders factored into average company risk assessment

- 60% Customers
- 69% Employees
- 60% Investors
- 71% Local communities
- 79% Local regulators
- 50% NGOs
- 47% Other water users
- 33% Statutory special interest groups
- 43% Suppliers
- 58% Water utilities



Figure 3 – Most common water risk response strategies pursued by average companies



Figure 4 – Most common water issues factored into leading company risk assessment

- 92% Water availability and quality
- 82% Water regulatory frameworks and tariffs
- 71% Ecosystem and habitat health
- 63% Stakeholder conflicts
- 61% Supply chains

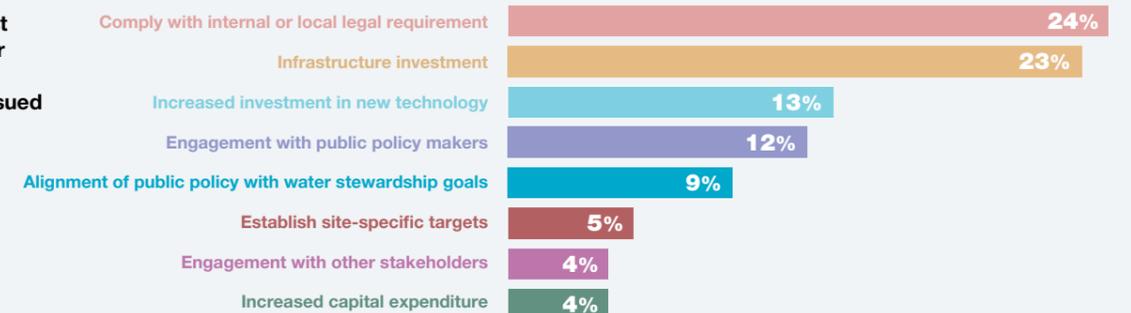


Figure 5 – Most common stakeholders factored into leading company risk assessment

- 84% Customers
- 76% Employees
- 76% Investors
- 74% Local communities
- 84% Local regulators
- 63% NGOs
- 45% Other water users
- 53% Statutory special interest groups
- 63% Suppliers
- 76% Water utilities



Figure 6 – Most common water risk response strategies pursued by leading companies



Do current approaches enable collective action?

Examples of multi-stakeholder water risk response strategies from CDP data include partnerships with industry-led initiatives, academic partnerships and capacity building of suppliers.

Although this is an encouraging start, there are few examples of local data collation and sharing with other stakeholders or tackling of governance issues. It is also not clear in most examples where companies worked with local government if the latter took the lead in any collaborative project or indeed if the company actions had a longer term shared benefit for catchment water users or ecosystems.

GIZ's experience through IWaSP is that leading companies are willing to support stakeholders to collectively conduct truly participatory water risk assessments. These assessments consider the shared threats to water security for an entire catchment, sub-catchment or city. The participatory approach adopted creates high stakeholder buy in and ownership of both the process and results. These allow other stakeholders to come forward with their own concerns, ideas, information and priorities, not only enriching the process and data collection, but also helping to build a spirit of cooperation necessary for collective action. Once this assessment has been done and stakeholders agree on the best available information, companies can take this and apply their own specific business risk assessments to it. To support this process IWaSP has developed a Water Risk and Action Framework (WRAF). The WRAF has been developed by IWaSP since 2013 and has been updated with international best practice and lessons learnt from projects implemented at community level. The proven five-phase process ensures high quality partnerships which deliver accelerated and sustainable results to achieve water security for businesses, communities

and government. Within the five-phase process, the WRAF provides a set of tools for flexible application, as partnerships and their development differ case by case. These tools are incorporated under various themes, such as building relationships, water risk and opportunity assessment, and business case development. The WRAF has already been used successfully in more than 10 partnerships.

While these might be funded in part or in full by the company, a multi-stakeholder governance structure ensures all actors are able to input into the terms of reference, select the consultants, steer and monitor the consultancy, provide critical feedback and data inputs and review the final results. In developing and emerging economies, special care often has to be taken to ensure that communities can be integrated and fairly represented in this process. This is participatory governance within the water risk assessment process which is critical to ensure high levels of integrity and stakeholder ownership.

In the cases of best practice, companies are supporting the mandated government authorities (e.g. the water resources management authority) to engage stakeholders to conduct broader water resources assessments, which are necessary for developing comprehensive catchment management plans required by the water policy in most countries. This not only helps empower water management authorities, but also creates the enabling environment for multi-stakeholder participatory water governance. In most cases, this is the only sustainable way that water risks can be mitigated.

In Ndola, Zambia, IWaSP has been partnering with seven public sector organisations, Zambian Breweries and 12 elected community representatives for the Itawa Springs Protection Project since 2013. The springs are a critical water source for the community, Zambian Breweries (the local subsidiary of SABMiller) and the local water utility. This important resource was under threat from pollution and physical damage, largely caused by community encroachment, poor sanitation and activities like farming and brickmaking.

The project has involved establishing a multi-stakeholder committee of the above mentioned parties, jointly designing and steering a highly participatory water risk and solutions assessment. This identified a range of actions, which the committee prioritized and is jointly implementing. These include building water kiosks, washing slabs and drains, ecologically restoring and legally protecting the spring, developing alternative low-impact livelihoods and relocating 28 informally settled houses that are negatively impacting the spring. To date cash and in-kind commitments to the project include \$700,000 from Zambian Breweries, \$500,000 from IWaSP and over \$60,000 from public authorities. IWaSP has acted as the core facilitator and coordinator, initially housing the secretariat and now supporting the City Council to assume this role, as well as providing stakeholder engagement and water-related expertise. It has also helped capacitate actors, particularly the community members, to contribute to the project. Zambian Breweries has contributed expertise, funding and led the coordination of construction projects. The public sector actors have contributed with their expertise and community engagement by facilitating processes through their respective organizations and through the provision of water supply and sanitation services. This project has mitigated a significant water risk for Zambian Breweries, while helping to significantly strengthen community and stakeholder relations, as well as creating a sense of shared responsibility for the future protection of this shared resource.

In the Eastern Cape Province of South Africa, IWaSP has partnered with one of the largest short-term and agricultural insurance providers in South Africa as a private sector partner, the Commonland Foundation/Four Returns, the NGO Living Lands, and the Department of Water and Sanitation. There are several components of the business case for the insurer to engage in good water risk management: it needs to better understand the natural risks facing its client base in order to ensure accurate underwriting; increased risk of natural disasters could lead to higher insurance premiums for customers; or, when not addressed, the risk to businesses may become

too high to insure. Therefore the insurer has an intrinsic motivation to better understand and help its customers address their water-related risks.

In the context of the partnership, the following activities are currently being implemented and additional partners are joining to complement these measures.

1. IWaSP commissioned the development of a hydrological model to predict potential flooding and water scarcity that could arise under different future scenarios of impact and mitigation. The user-friendly visualization of this assessment is being used to illustrate the business case for companies to consider their water risks and mitigation options.
2. Commonland is developing alternative business models for farmers to help them revert to crops with a lesser environmental impact. This will support alternative stable incomes for local farmers, as well as employment opportunities.
3. The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in South Africa supports capacity building in the Sarah Baartman District Municipality. A capacity needs assessment has been completed and is now being used to develop measures, in close cooperation with the municipality and Santam's Business-Adopt-a-Municipality-Programme, to help them improve capacity for disaster risk management and climate change adaptation planning.
4. The project partners are working towards getting more corporate partners onboard to extend the project activities. The aim is to link to existing initiatives in the region and to also address water-use efficiency in Port Elizabeth to support better use of the water gained from the upstream activities.
5. Complementing the core partnership activities, the Coca-Cola Africa Foundation has committed funds to allow for the restoration of wetlands.

The success of this partnership is dependent on getting as many farmers and industries as possible on board to really have a collective and significant impact on water security in the region and for the city of Port Elizabeth. Good progress has already been made in this regard, even before the project activities have commenced, with long-standing relationships with local farmers and other large industries in Port Elizabeth expressing their interest to join and co-fund activities. A priority will also be to encourage strong government involvement to ensure that improvements to water resources management and disaster risk management will be sustained.



We have developed risk assessment practices because our clients have asked for it.

Utilities company



Basin level risk assessments were encouraged through reporting to CDP.

Utilities company



What are the biggest barriers and possible solutions to corporate engagement in multi-stakeholder water risk management?

Our analysis has so far indicated that senior level commitment to systematically manage water risk across business operations and supply chains is a core factor in the comprehensiveness of the water risk assessments conducted and subsequently on the mitigation strategies many companies pursue.

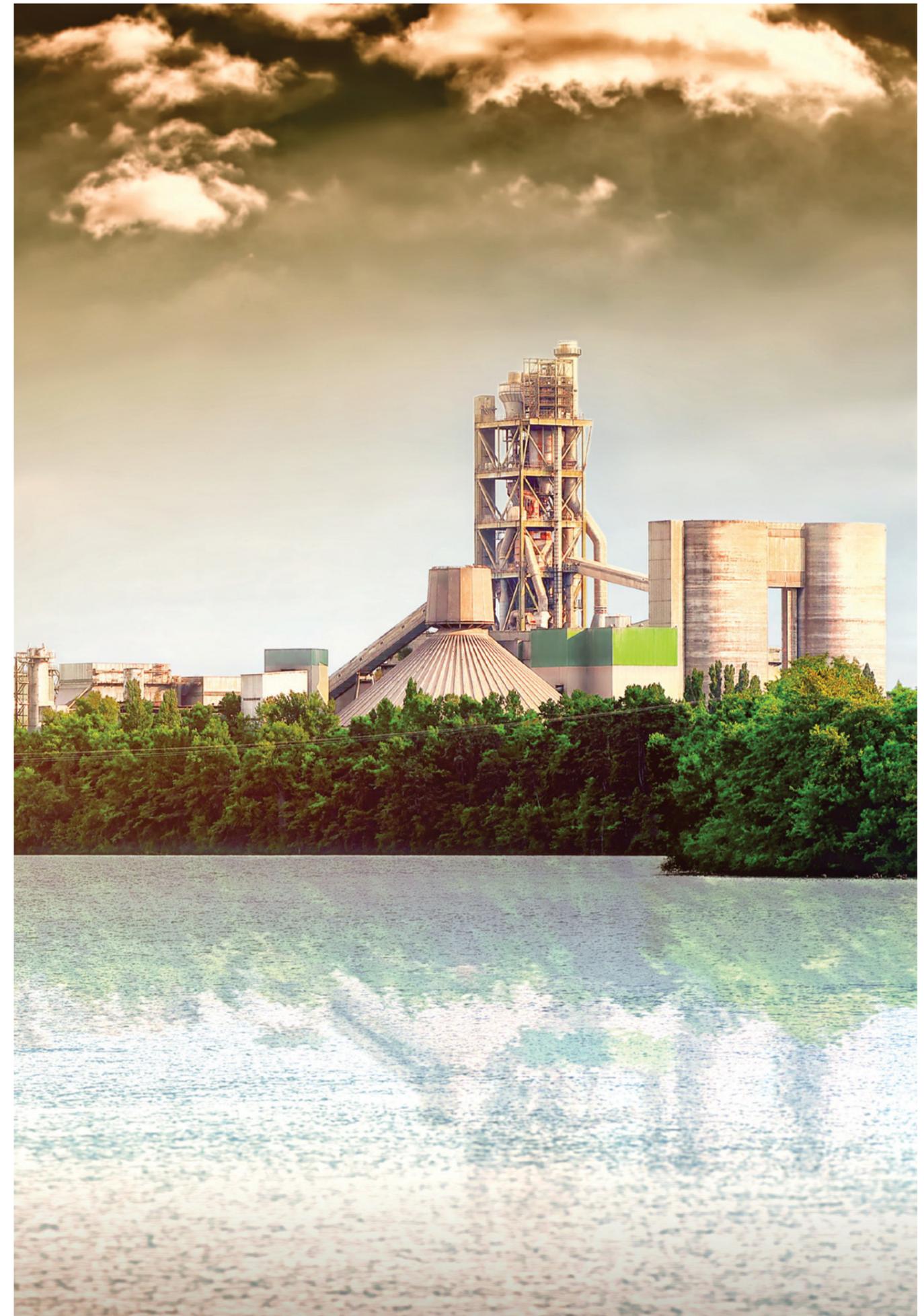
It will also contribute to ensuring that the right policies and strategies are in place to foster good water risk management and help to ensure the targets, processes and resources are in place for effective and systematic implementation.

However, insights gained from CDP responses, workshops and interviews with companies suggests that the following barriers and opportunities for overcoming these exist:

Barrier 1	Solution
<p>A large number of participants acknowledged difficulty in making the business case for catchment-based collective action to both senior management and plant-based staff due to a lack of guidance tools and internal education.</p>	<p>Making the internal business case on water</p> <ol style="list-style-type: none"> Continued pressure from levers such as investors and customers using benchmarking methods like CDP's scoring methodology so companies can make the business case internally to change long-term company mind-set on water risks and challenges. Decision tree on how to undertake a collaborative water risk assessment to include in group or corporate level guidance to create some form of standardization that could be then adapted at facility level. Create internal water expertise and 'councils'. Choose the team carefully with representation from facility engineers, procurement, sustainability team and senior management. Employ experts or build understanding amongst existing staff on the causes of water insecurity and the fundamentals of sustainable water management. Challenge the water assumptions the company's growth and prosperity is founded on. Most companies have assumed that a stable supply of good quality fresh water is always available to them. This is no longer guaranteed in many regions. Demonstrating where business success may either be constrained or strengthened due to this can be a powerful motivator for change. <p>In IWaSP's experience, business cases consist of three main elements: first, the cost of risks to the company if they materialize; second, the cost benefit of proposed solutions; third, the trust of the company that the stakeholders will deliver on their promises and solutions will be implemented through collective action.</p> <p>Companies disclosing to CDP can learn how to compile a business case for action on water by reading about the experiences of over 1,000 companies. Comparing responses and benchmarking actions with their peers will spur many of them into action as they read about leading practice within the river basins and catchments in which they operate and their own business sectors.</p>

Barrier 2	Solution
<p>A real or perceived lack of reliable, independent and verifiable data to support decision making is currently causing paralysis amongst research participants and a lack of standardization is limiting the application of existing water risk tools and frameworks. Participants were also unaware of the simple "no-brainer" actions available to them to get started.</p>	<p>Sourcing reliable data and accessing useful tools</p> <ol style="list-style-type: none"> Better education for companies on available datasets or a centralized platform to signpost verified data sources. Greater advocacy for improved innovative monitoring of water data at national and catchment level by government. Undertake global level water hotspot mapping and model how water risks could potentially affect the business. Provide instruments and methods to translate data into usable information that can be used in collaborative decision making processes including companies, responsible public authorities and the general public. <p>In IWaSP's experience there are a number of options to help compensate for perceived or actual data gaps. First, there is often a lot of evidence that can be gathered by expert and water user interviews on real-life experiences regarding water. Second, by taking a participatory approach where stakeholders own the process, they are much more likely to avail of the data they have which is not always publicly available. Third, companies can actually support government with resources to set up monitoring systems. And last but not least IWaSP is exploring and testing modern technology such as satellite data, radar, sensor networks, crowd sourcing data and using visualization tools to translate the data into information to come to an improved decision making process.</p> <p>CDP provides support materials and hosts webinars that signpost to both generic and sector specific data sources, tools, and third-party facilitators for companies. We are constantly adding to our database, reviewing and advocating research and platforms undertaken by other parties that might assist companies.</p>
Barrier 3	Solution
<p>Time and a lack of obvious and suitable platforms are preventing many participants from sharing proprietary data publicly to increase knowledge and the quality of data may be questionable, unless independently verified.</p>	<p>Overcoming company reluctance to share data and research</p> <ol style="list-style-type: none"> Develop an independent or publicly sponsored database where companies might upload useful pre-competitive local water information anonymously. <p>There is an important opportunity where the private sector can usefully contribute to improved water resources management. Where companies monitor boreholes, river flows or weather for example, they can agree with public authorities to share their own data in the format that the authority can use it.</p>

Barrier 4	Solution
<p>An enabling environment for interested companies to incentivize and support local operations to engage in collective action was acknowledged by participants as a fundamental success factor in managing water risks. However, this enabling environment is currently lacking.</p>	<p>Creating an enabling environment for companies and their stakeholders to work together</p> <ol style="list-style-type: none"> The independence and impartiality of a facilitator are key to maintaining integrity and trust in collaborations longer-term. Start to build a relationship with local stakeholders through a local or national industry forum where multiple companies are represented, helping to spread the reputational risk and incentivize action. Share best practice with the corporate laggards, through standards like the Alliance for Water Stewardship and reporting platforms like CDP to show progress of peer companies and lower the barrier for taking those first steps towards collective action. <p>In IWaSP's experience, creating the safe space to broker open and constructive multi-stakeholder dialogue is critical. All too often, actors are used to multi-stakeholder finger pointing, and this is the first barrier to overcome through careful facilitation, workshops and trust building exercises. Companies wanting to work on water have to realize that they are playing in someone else's game and therefore need to obey by the rules of others. It is the mandate of the public sector to manage water resources and, in most cases, water supply services, and companies need to respect these mandates when engaging, even if the public authorities are not fulfilling them.</p>
Barrier 5	Solution
<p>The level of competence of the local authority governing water resources was identified as one of the most important success factors.</p>	<p>Building capacity in government authorities</p> <ol style="list-style-type: none"> Sharing information, resources and technical knowledge to upskill local water management authorities could be a first step towards better governance and stronger compliance for water catchments. For larger catchments companies need to have engagement with larger regulatory authorities and start the conversation there. Facilitation by honest brokers like trusted donor agencies or NGOs could help. <p>In IWaSP's experience in developing countries, water risk mitigation strategies of companies work best when they are aligned to long-term capacity building programs of public authorities and ongoing reforms in the water sector. These long-term processes set the overarching policy agenda and the strategies and budgets of the water management authorities. These authorities are much more likely to be responsive to and support corporate risk strategies if they see the obvious link to their own processes and strategies. Since these reforms are usually centered around good governance, there are generally clear synergies to be built between public and private strategies for water security.</p>
Barrier 6	Solution
<p>Participants acknowledged the huge potential to scale up collaborative response strategies through company supply chains, but sufficient supplier data and education is needed before being able to act.</p>	<p>Incentivizing value chains to adopt collaborative approaches</p> <ol style="list-style-type: none"> Invest in supplier education and training and leverage industry wide buying power to influence decision-making by suppliers. Meaningful supplier reporting was deemed an effective method for incentivising, monitoring and supporting more effective water risk management. <p>While many solutions were tabled, participants also fed back on who they felt might take responsibility or lead in providing these solutions in addition to the companies themselves.</p>



Main action areas and actors to support effective approaches to water risk management and collective action

	What?	How?	Why?
Companies	<ul style="list-style-type: none"> Develop clear policies, strategies, KPIs and other incentives for water that will create change amongst local operations managers Design a comprehensive water risk and solutions assessment methodology and participator process to use across operations to better understand water risks Implement exchange-training between facility and corporate level staff, bringing in the experience of outsiders that have managed exemplary projects Seek independent facilitation or advice and develop a well-thought-through stakeholder engagement process Share outcomes of successful projects from your sector or operating catchments Raise awareness of facility managers on the importance of engaging with stakeholders in their operating catchment Share pre-competitive data for operating catchments between companies e.g. hydrological data and consider conducting joint water risk assessments to pool resources for more comprehensive assessments Support and contribute to industry best practice for water management or supplier engagement 	<ul style="list-style-type: none"> Create internal water councils – choose the team carefully with representation from facility engineers, procurement, sustainability team and senior management Partner with trusted NGOs or development agencies Share successful partnerships outcomes through suitable platforms like CDP or CEO Water Mandate Water Action Hub Share non-competitive water-related data useful for risk assessments through municipal or water authority databases Join industry initiatives like the Sustainable Apparel Coalition in the apparel industry or supporting ICMM in the mining industry to define the industry approach Set key performance indicators for facility managers that are linked to engaging externally 	<ul style="list-style-type: none"> Cross-pollination between facility and corporate level staff will help to share risk information and best practice Capacity building independent organizations can help companies understand their role in meaningful capacity building plus help build relationships and trust with other stakeholders Other companies will feel they are not alone in taking on water risks and are guided by their peers So facility managers equally prioritize this with other performance indicators like water efficiency These actions could lead to better quality and verifiable data for local catchments and reduce overall costs for companies Multiple engaged companies could use their leverage to act on water as part of an industry platform to influence and negotiate with customers, suppliers and other companies in their sector
Water management authorities	<ul style="list-style-type: none"> Improve guidance on where to find water datasets Promote improved representation from all catchment stakeholders in catchment decision-making Provide assistance to civil society to allow greater representation of local stakeholders in catchment decision-making Proactively engage in partnerships with companies and other stakeholders to address concrete water problems Integrate water stewardship approaches into public policy Introduce an independent database where companies might upload useful local information anonymously 	<ul style="list-style-type: none"> Funding and maintaining public water databases Better communication of local water authority datasets and tools Facilitate forums/panels to represent multiple stakeholders Investment in retention of water resource experts and proactive planning Integrate water stewardship in public policies and strategies 	<ul style="list-style-type: none"> To facilitate greater sharing of corporate data between companies and other catchment stakeholders To improve corporate decision-making and encourage greater stakeholder participation in catchment management longer-term To facilitate better representation from the corporate sector and maintain impartiality and build trust with regular face-to-face meetings To enable better representation from civil society and build trust between all stakeholders in the catchment Maintaining local expertise in government can assist with better corporate engagement and building of relationships To embed water stewardship approaches in water management authority practices
Investors	<ul style="list-style-type: none"> More holistic thinking is required amongst investors on the true value of water that is multi-beneficial and not just linked to water quantity or compliance Continued pressure from levers such as SRI and mainstream investors and business customers Investors should monitor corporate maturity on water risk and action 	<ul style="list-style-type: none"> Investor focused NGOs like UN Principles of Responsible Investment and CDP can help with education Through the use of corporate reporting platforms like CDP which gather comparable data for benchmarking purposes as well as education 	<ul style="list-style-type: none"> As their understanding matures, investors will seek more advanced solutions to water risk to protect their investments Increased and better informed investor interest could help provide cost-benefit analysis to support an internal business case to act on water Benchmarking of corporate data can facilitate improvement in the quality of company responses to water risk by helping to constantly re-evaluate what they are doing and encouraging investors to query company decisions.
Civil Society/NGOs	<ul style="list-style-type: none"> Simplification and communication of data and partnership requests in a manner that all stakeholders can understand Create a corporate water research feedback network Decision tree to show how to undertake a collaborative water risk assessment and response strategy 	<ul style="list-style-type: none"> The IWaSP Water Risk and Action Framework facilitates cooperation between local stakeholders and can also be adopted by NGOs Linking field practice to inform water risk tools, corporate water reporting guidelines and action platforms for example Create a technical working group of qualified experts under an organization like the CEO Water Mandate with each member bringing not only expertise but an avenue to promote the work 	<ul style="list-style-type: none"> To help educate all stakeholders on catchment level challenges and response strategies including companies Sharing information across different stages of water management can facilitate better education and planning by companies A decision tree would be useful to include in group or corporate level guidance to create some form of standardization that could be then adapted at facility level
Bi- and multi-lateral agencies (e.g. GIZ etc.)	<ul style="list-style-type: none"> Improved development and access to risk assessment tools Cost benefit analysis tools for water Consultant education to think beyond facility level water risk assessments, recognizing that many companies employ consultant assistance Acting as an honest broker and partnership facilitator to help support companies to engage in collective action Supporting the alignment of corporate water risk strategies with ongoing water sector reform processes to help identify and realize public-private synergies 	<ul style="list-style-type: none"> A centralized corporate platform that could link to global and regional databases and risk tools Create a technical working group of qualified experts to assess current tools and make recommendations on how to use them effectively Sharing of best practice through corporate reporting platforms like CDP or local and regional industry forums 	<ul style="list-style-type: none"> To assist companies in expanding the comprehensiveness of their water risk assessments To help companies to an indicative financial figure on the true value of water taking externalities into account To assist companies in expanding the comprehensiveness of their water risk assessments

From experience on the ground, the IWaSP program has found that the recipe for effective corporate water risk reduction lies in the right commitment, approach and support, both from within companies and from a company's stakeholders. CDP and GIZ's IWaSP research aimed to assess the current state of corporate water risk assessments and response strategies against these success factors, whether there was room for improvement and, if so, what barriers need to be overcome and what potential opportunities exist to enable better corporate water management that realizes a shared public benefit.

Our research concluded that:

- Managers are struggling to make the internal business case at both facility and corporate level to invest more in local stakeholder engagement on water issues and participatory water risk assessments. The managers require better guidance, tools and benchmarking to translate the financial impacts of not taking action, plus continued pressure from important levers like customers and investors.
- Analysis indicates that the majority of companies are not undertaking a comprehensive water risk assessment at catchment level, nor undertaking collaborative approaches to water risk management. Further research revealed that this appears principally due to a lack of appreciation of the benefits of this approach. Given this mindset, short-term technological solutions or waiting for a change in regulatory regime are typically preferred response strategies to corporate water risk management. Greater awareness-raising throughout the corporate sector and development of standards for a more comprehensive and participatory water risk assessment is warranted, with leadership and best practice being rewarded.
- There is appetite from companies to come together on a common water challenge, but they require an enabling environment to do so. Where there are commercial data sensitivity issues to overcome, suitable platforms and relationships need time and appropriate facilitators to develop them. This will enable sharing of information and best practice and the promotion of trust between companies and their local stakeholders.

In response, CDP will:

- Continue to incentivize and support comprehensive approaches to water risk assessment, contributing to the development of international standards where appropriate;
- Evolve water reporting and CDP's water scoring to incentivize key actors to play their part in the transition to a water secure world through engagement in collective water management;

- Leverage our corporate and cities data to identify and support opportunities for collective, catchment-based action; and
- Develop and support tools to drive water-conscious investment and procurement decisions.

IWaSP will:

- Work to identify and develop new partnerships to push the boundaries of what has previously been achieved through multi-stakeholder water risk management approaches; creating an evidence base of good practice and inspiring others to follow suit;
- Disseminate lessons learnt and best practices to support replication of water stewardship partnerships;
- Pursue multi-stakeholder water risk management partnerships in critical sectors, such as hydropower;
- Further develop and publish the Water Risk and Action Framework on the CEO water mandates website;
- Pursue opportunities to engage local investors and financial institutions to help them understand their water risk exposure and catalyze corporate engagement in collective action amongst their clients; and
- Work on improving the enabling environment for companies to engage in collective action, supporting the development of supportive public policy, and helping to build the capacity of public sector, private sector and civil society actors to engage.

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For access to a database of public responses for analysis, benchmarking and learning best practices, please contact reporterservices@cdp.net.

This report is available for download from www.cdp.net.
