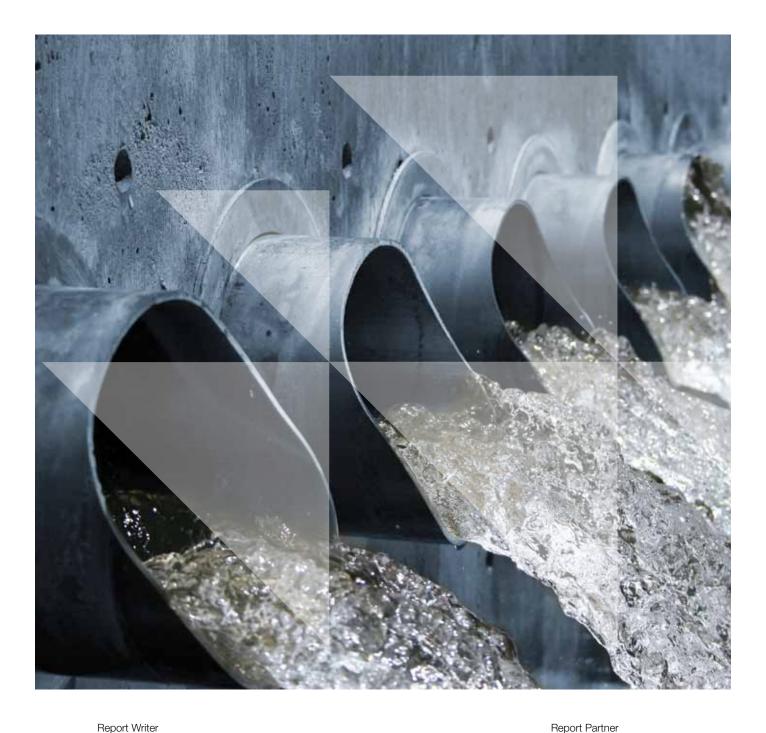


Safeguarding India's Water Resources

The business case for corporate water disclosure in India

CDP's water program is supported by 573 investors with \$60 trillion in assets





GRUNDFOS X



With great pleasure, CDP announced an exciting change this year.

Over ten years ago CDP pioneered the only global disclosure system for companies to report their environmental impacts and strategies to investors. In that time, and with your support, CDP has accelerated climate change and natural resource issues to the boardroom and has moved beyond the corporate world to engage with cities and governments.

The CDP platform has evolved significantly, supporting multinational purchasers to build more sustainable supply chains. It enables cities around the world to exchange information, take best practice action and build climate resilience. We assess the climate performance of companies and drive improvements through shareholder engagement.

Our offering to the global marketplace has expanded to cover a wider spectrum of the earth's natural capital, specifically water and forests, alongside carbon, energy and climate.

For these reasons, we have outgrown our former name of the Carbon Disclosure Project and rebranded to CDP. Many of you already know and refer to us in this way. Our rebrand denotes our progress as we continue to catalyze action and respond to business, finance, investment and environmental needs globally.

We now have a bolder, more dynamic look and logo that reflects the scale of the work we must undertake in the coming years to move the markets ahead of where they would otherwise be on these issues and realize truly sustainable economies.

- Over 1,000 companies from all over the world have been asked to report vital water-related information to CDP this year;
- More than 593 of the world's largest companies¹ engage with CDP to enable effective measurement and management of water-related issues, including reduction of risks and detrimental impacts;
- This is a 59% increase in the number of companies using CDP to communicate their water management efforts to investors since last year, making the primary corporate water information now available at www.cdp.net the largest and most comprehensive set in the world.

¹ This includes respondents who have submitted corporate water-related information through CDP's supply chain program. Please refer to CDP's website for information on this program. https://www. cdproject.net/en-US/ Programmes/Pages/ CDP-Supply-Chain.aspx

CDP is a not-for-profit organization. If you would like to support our vital work to safeguard water resources through donations or sponsorship opportunities, please email the Head of Water, cate.lamb@cdp.net

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CDP Foreword



Paul Simpson CEO, CDP

The economic effects of mismanaging water resources are becoming increasingly apparent. The newly released Intergovernmental Panel on Climate Change (IPCC) report forecasts longer periods of drought and heavier extreme rainfall. The United Nations has reported that several countries are close to their water limits but that food output must increase by up to 100% by 2050 if current population growth is to be sustained.

These factors will limit economic development and greatly exacerbate rural poverty, particularly in emerging and developing economies. Already countries such as China and India are realizing they have to solve water problems if they are to sustain growth or improve quality of life. The Indian Planning Commission last year established that the country's existing approach to water jeopardizes its economic growth and political stability. It recommends a paradigm shift in the management of water resources. In China, home to 20% of the global population but only 7% of its fresh water, former premier Wen Jibao said water shortages threaten "the very survival of the Chinese nation". In Peru, violent protest from communities fearing for their own water supply has led to the suspension of a US\$4.8 billion gold and copper mining project.

It is therefore no surprise that investors are filing record numbers of environmental and social policy resolutions, particularly in the United States.² Investors and companies that understand the complexities of water and devise and implement a strategy that drives water stewardship will be the long term winners in an increasingly water stressed



Damandeep Singh Director, CDP India

world. A report by CDP and Eurizon Capital analysing the metals & mining sector, revealed that companies acting to manage water strategically, perform better financially.

Companies that are responding to water challenges and are using CDP's unique system are able to identify profitable business opportunities as a result. General Motors, for example, forecast that recognized brand value in areas of water stress where it has demonstrated leadership in water efficiency and conservation could have a direct impact on revenue.

While some companies are realizing water-related gains, a significant disparity between investor expectations and company actions exists. The number of investors requesting corporate water data through CDP has quadrupled in just three years, the number of Global 500 companies taking action and disclosing this has not matched this pace. A shift in practice is required if companies are to realize the true benefits of water stewardship, achieve business resilience and competitive advantage. Using the insights from standardized company disclosures, investors can enhance risk management of this critical issue.

As UN focuses attention on water-energy nexus this year, Bloomberg reports that India has come up with another novel idea: it will wean millions of farmers from archaic power lines and expensive diesel fuel to run water pumps with solar energy. CDP partners with Grundfos India, which has ambitious plans to reduce water and energy consumption, to spread awareness among the business community.

² Sustainable Investments Institute (Si2), 20th August 2013.

KPMG Foreword



Raajeev Batra

Partner and Head Governance Risk and Compliance Services, Climate Change and Sustainability

A growing demand for water, as a result of increasing population, industrialisation and urbanisation, exacerbated by the impacts of climate change, means the world now faces an unprecedented global water crisis. For the third consecutive year, global water crisis has been identified as the 3rd greatest risk in the World Economic Forum's Global Risk report.³ According to the 2030 Water Resources Group, demand for water in India is set to outstrip supply by 50% by 2030.⁴ A significant challenge faced by the business community

in India is therefore increased competition for water across operations and geographies.

KPMG recognizes the need for coordinated action by both the public and private sectors for strategic resolution of this pressing issue and the important role played by CDP in driving change towards safeguarding water resources.

Currently, the lack of a robust, standardised and centralised system for corporate water disclosure in India, has created serious gaps and inadequacies in the availability, scope, coverage and quality of water data collected. As a result, improving the capacities for robust national resource data maintenance and corporate water disclosures is a nation-wide exercise, to be driven by the central and the state governments.

We believe the knowledge gap between investors, the government and private sector can be bridged by introducing CDP's water program in India. CDP puts reliable, comparable information at the heart of policy, investment and corporate decision making processes. As a result, this drives behavior in the economy towards safeguarding water resources for the growing needs of India. KPMG is proud to play a role in leading the water movement in India, by partnering with CDP. Together, we have produced this report that puts forward the case for introducing CDP's water program in India. The launch of CDP's water program in India will be a critical step in leading the water movement and driving responsible, sustainable management of water resources in the country.

KPMG's Climate Change and Sustainability practice is a team of highly skilled professionals specializing in different areas like carbon, water and ethical sourcing, who are helping clients across the globe manage their sustainability performance. There is a clear business case for corporate water disclosure in India and with this report, we support CDP's "call to action" for motivating Indian companies to report their impacts on water resources and take action to reduce them.

³ http://www.weforum.org/ issues/global-risks ⁴ Charting Our Water Future-Economic frameworks to inform decision-making: 2030 Water Resources Group Indian corporations, their investors and policymakers have significant responsibility to treat water with the strategic importance it deserves, to consider the role they should play in tackling water challenges, and to provide the leadership required to build a more resilient future. This report, prepared by CDP and KPMG and supported by Grundfos India, demonstrates the business case for corporate water disclosure in India and its role in safeguarding water resources. It is a call to action for policy makers, investors and the business community to take positive action to address the Indian water crisis and create a more resilient future for all.

India has 4% of the world's water which has to cater for 16%⁵ of the world's population, leading to steady shrinking of per-capita availability. It is estimated that by 2020, India will become a water-scarce nation. Nearly 50% of villages do not have any source of protected drinking water.⁶ The actions of businesses will have a significant effect on the scale and impact of such scarcity, and on the development and implementation of potential solutions. CDP's water program plays a key role in catalysing positive action within businesses to address such critical water issues.

CDP is an international, not-for-profit organization providing the only global system for companies and cities to measure, disclose, manage and share vital environmental information. The number of investor signatories to CDP's water program has more than quadrupled since it began in 2010. This year the water questionnaire was issued to over 1,400 companies on behalf of 573 investors representing \$60 trillion in assets. These signatories are requesting companies to disclose water-related information that is critical to business, to enable informed decision making and drive strategic alignment of investments.

CDP's water program has quickly established itself as the pre-eminent platform for corporate water disclosure and holds the world's largest database of corporate water related information. Such data sits at the heart of strategic business, investment and policy decisions. Implementing CDP's water program in India will help businesses, institutional investors and policy makers to better understand the risks

Water security is one of the most tangible and fastest-growing social, political and economic challenges faced today

World Economic Forum



and opportunities associated with water scarcity and other water-related issues; as well as catalyse action to safeguard water resources for those who need them most.

This report, aimed at government, business and investor communities builds the case for corporate water disclosure, and identifies the reasons for it being the most effective way to stimulate a rational and coherent business response to the issues of water availability. The report identifies that:

- India faces an impending water crisis as it moves on into the 21st century with the potential to stifle economic growth;
- Water is a critical business issue that deserves serious attention;
- An increasing number of stakeholders are calling for transparent and comparable disclosure of water related information from Indian companies for consideration in decision making;
- Indian businesses are currently underestimating water-related risks due to a lack of effective measurement and monitoring;
- The introduction of CDP's water program in India will address this information gap by driving companies to measure, monitor and ultimately manage water-related risks.

⁵ http://articles. economictimes.indiatimes. com/2011-01-17/ news/28431152_1_freshwater-ground-water-waterbodies ⁶ http://www.azadindia.org/ social-issues/water-problemin-india.html

The Water Challenge in India

India faces an impending water crisis as it moves on into the 21st century. This crisis threatens the basic right to drinking water in some instances and also puts the livelihoods of millions at risk while potentially stifling economic growth. The demands of a rapidly industrializing economy and urbanizing society come at a time when the potential for augmenting supply is limited, water tables are falling and water quality issues are increasingly coming to the fore.

In the past 50 years, India's population has almost tripled, making it the second most populated country in the world, with over 1.2 billion people (Census of India, 2011). This rapid population growth coupled with mass industrialization, expanding agriculture and urbanization has resulted in an increase in competing demands for water resources. The country thus faces a looming water crisis where demand is set to outstrip supply by 50% by 2030 according to 2030 Water Resources Group.

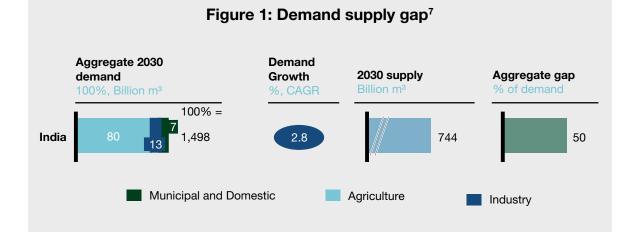
Climate change is set to compound the issue. India has always been dependent on natural hydrological sourcing of freshwater through rainfall. Climate change and its resulting impacts such as changes in rainfall patterns, increase in frequency and severity of extreme weather events along with droughts and floods will make water security and distribution even more difficult and costly to achieve.

We recognise the social, economic and environmental value of water and the increasing global concern of water scarcity. We understand that water is a key resource and needs to be used responsibly, balancing the needs of many different users.

Sesa Goa



India's economic growth and political stability are at stake in the coming years if it does not change its approach to water management. The water crisis can be alleviated, but to do this a more structured way of thinking with increased momentum is required. The bottom-line is, "we need to act now".



Water forms the lifeblood of the global economy. Essentially, no water means no business. Growing population and increasing industrialization coupled with declining water quality has resulted in businesses facing significant competition for this scarce resource, and impacts such as operational and supply chain disruptions are widespread. Businesses are increasingly recognizing that the real value of water is not adequately reflected in its cost, but resides in securing licenses to operate, business continuity and protecting brand value. Companies including Coca-Cola and Pepsi have both announced plans to invest \$5bn in India by 2020.8 However, India's worsening water shortages and the highly-emotive politics over access to water - could pose additional problem to these companies' ambitious growth plans.

For instance, in 2013, more businesses recognized water-related risks than ever before. Two thirds of the Global 500 respondents to CDP's water questionnaire reported exposure to water-related risks, of which 64% have the potential to impact business now or within the next 5 years. Companies commonly report three categories of water risks:⁹

Physical – reconfiguring supply chains due to disruptions from drought;

Regulatory – delaying or suspending operational permits; and

Reputational – mishandling water related issues alienating customers, suppliers or investors.

Tata Chemicals Limited in 2013, reported an indirect risk of water on its business, which is linked

Coca-Cola has met fierce local resistance in India in the past. A decade ago, the company was forced to close a bottling plant in the southern state of Kerala, after activists accused it of depleting the local water table. Now, for the second time Coca-Cola has been forced to mothball a bottling line in India.⁸



to increasing water stress in the agriculture sector. The company anticipates that such a situation might result in reduced fertilizer demand, which in turn would affect the company's revenues. Similarly, **Sesa Goa** identified the physical risks of declining water quality and its potential impacts on the operational costs that are linked to water pre- treatment processes.

This increased recognition of water-related risks may be linked to the fact that detrimental impacts from water issues are already being felt. 53% of the Global 500 companies report having experienced detrimental water-related business impacts in the past 5 years.

In India, the share of water consumption in thermal power plants amounts to approx. 87% of total Industrial water utilization¹⁰ and power companies are struggling to meet the water demand in their operations.

In Maharashtra, the Parli thermal power plant with an installed capacity of 1130 MW was partially shut down in October 2012. Since February 2013, the plant has been completely shut down owing to water supply constraints. Similarly, Chandrapur Super Thermal Power Station (CSTPS), was forced to shut down on 15 May 2007 due to an unprecedented scarcity of water.¹¹

A total of c6GW of coal-based generation capacity faced closure in 2011 and c1.5GW in 2012. The most severe black-out faced by the country in 2012 was attributed to water supply shortage.¹²



⁹ CDP Global water report 2013: https://www.cdp.net/ CDPResults/CDP-Global-Water-Report-2013.pdf

¹⁰ www.teriin.org/policybrief/ docs/TERI_Policy_Brief_ Dec_2012.pdf

¹¹ http://www.dnaindia.com/ mumbai/report-maharashtras-largest-thermal-powerplant-to-close-all-units-bymay-15-1368282

¹² HSBC report- India Renwables: Good bye winter, hello spring. April 2013 For example, **Barrick Gold** experienced a water shortage at one of its mines in Papua New Guinea in 2010¹³ that forced a plant to shut down for two weeks straight, resulting in an undetermined loss of revenue. Companies including **Baker Hughes**, **Pernod Ricard** and **Croda International**, which almost entirely depend on India for supply of vital raw materials like Guar gum, Sorgho and Castor Oil, report that these are supplied from regions in India that are subject to water-related risks and are hence anticipating increasing procurement challenges.

In 2014, for the third consecutive year, the World Economic Forum identified water crises and extreme weather events as two of the top 10 global risks. This is hardly surprising, given the devastating impacts of having too little or too much water. While water's immediate impacts are often local, water security is now recognized as a systemic global risk.

Recognized as a global risk, water has dramatically climbed up the political agenda in India with the country's 12th Five Year Plan¹⁴ asserting that "there is a need for a paradigm shift in the management of water resources in India". Industry has a significant role to play in delivering this paradigm shift by reducing its overall impact on water resources through reductions in consumption as well as instituting reuse/recycle and collaborative measures that give adequate consideration to priorities of the local water basin to protect and enhance water resources for local habitats. The government has proposed to implement a 'Bureau of water use efficiency' to oversee a 20% water use reduction by industry as an initial target. Consequently, for both government and industry, accounting for and valuing water has become fundamental to building economic stability and prosperity both within India and beyond.

Public outcry, media scrutiny, growing consumer awareness about water-related impacts on their life and health are already being witnessed on multiple scales... Given the considerable asymmetries in exposure and vulnerability between various sectors, industry response to these imperatives will require innovative and collaborative action at the local and basin-level, in order to sustain strong economic growth, while meeting societal and environmental needs that are equally important

Water stewardship for industries WWF-Accenture report¹⁵



¹³ CDP Global water report 2013: https://www.cdp.net/ CDPResults/CDP-Global-Water-Report-2013.pdf

¹⁴ http://www.epw.in/ special-articles/watertowardsparadigm-shift-twelfth-plan. html

¹⁵ http://awsassets.wwfindia. org/downloads/water_ stewardship_report_final_ edited_1.pdf



Increasing Stakeholder Expectations

Transparent water reporting will help investors understand the specific risk exposures of different companies, as well as sectorial or regional challenges. Granularity of information reported at company and site levels is essential to understand the operational business resilience of companies to local water challenges and relevance of risk mitigation strategies. This is a necessary step towards assisting investors in managing and mitigating risks across their investment portfolio and a valuable process to support sustainable water management

Jan Thomsen, Chief Risk Officer Norges Bank Investment Management (NBIM)



Accounting for and valuing the world's natural capital is fundamental to building economic stability and prosperity and the global economy will favour businesses that take a pro-active approach to water stewardship.

The significance of corporate water issues is now being widely recognized in investment terms. Water risks can manifest not just in company's own operations but across the entire value chain, which, if undetected or unmanaged, can expose investors to potentially significant risks. Therefore, an increasing number of institutional investors and buyers are calling for transparent and comparable disclosure of water related information for consideration in their investment and purchasing decision making. This is reflected in increasing sector-specific risk assessments conducted by financial institutions, like **HSBC** (on thermal, and food and beverages).¹⁶

Investors have significant influence on the economy, and as a result they can drive positive change. Investors have the ability to conduct shareholder resolutions or even divest from companies that they perceive to be managing water issues poorly. They are now holding companies accountable for the economic, environmental and human consequences of their water use and management practices. While an increasing number of institutions are recognising the importance of water in determining the success of their portfolio companies, they also recognise that there is a challenge in making informed decisions. As Piet Klop of **PGGM** explains, "the business value at water risk remains unclear because company information on water is rarely comparable and meaningful".

This is translating into an increase in the number of Investors and corporate customers calling for greater transparency of corporate water data. The number of investors requesting companies to submit water data through CDP's water program has more than quadrupled in just four years. In 2014, 573 investors representing US\$60 trillion in assets,¹⁷ and a number of major multinational purchasing organizations including **Dell**, **L'Oreal**, **Pfizer** and **Unilever**,¹⁸ will ask more than 1,800 corporations to provide them with business critical water-related information and water stewardship efforts through CDP's global, standardised water disclosure system.

As a founding water member of CDP's supply chain program, launched in 2013, we have asked approximately 200 of our strategic raw material and packaging suppliers, as well as third-party manufacturing organizations to disclose their waterrelated risk and mitigation strategies via CDP. We were pleased to see our Indian suppliers such as Tata Chemicals and ITC report on their water-related information this year which helps us to assess wider supply chain risks.

Unilever

¹⁶ http://awsassets.wwfindia. org/downloads/water_ stewardship_report_final_ edited_1.pdf

¹⁷ CDP Global water report 2013: https://www.cdp.net/ CDPResults/CDP-Global-Water-Report-2013.pdf

¹⁸ CDP supply-chain report 2014: https://www.cdp.net/ CDPResults/CDP-Supply-Chain-Report-2014.pdf National governments are increasingly putting pressure on industries to adopt international best practices to improve water use efficiency. The Planning Commission of India, in its 12th national five year plan, has proposed a three step process to drive action towards water stewardship by Indian companies:¹⁹

Step 1: Make comprehensive water audits a recurring feature of industrial activity in order to understand water use in the industrial sector. This is so that changes can be monitored, and the most cost-effective package of water efficiency technologies and processes can be designed and implemented. The aim is to reduce water demand and increase industrial value-add per unit of water consumed. The water audit will consider both quantitative and qualitative aspects.

Step 2: Examine the measures to levy charges for water use and incentivise water conservation.

Step 3: Publically validate water audit of industries so that this builds experience and confidence on the identified best practices.

¹⁹ http://www.indiawaterportal. org/sites/indiawaterportal. org/files/water_towards_a_ paradigm_shift_in_the_ twelfth_plan_dr_mihir_shah_ planning_commission.pdf In view of the tightening conditions from corporate buyers and stricter regulations from governments, coupled with increasing investor interest, companies must move quickly, efficiently and collectively to address the global challenge of water scarcity.

It is extremely important to reduce the water footprint of Indian industry, both in terms of fresh water used, as also polluted wastewater released untreated into the environment. The urgency of this issue is because water conflicts are increasingly arising across the length and breadth of India between competing users and uses. And industry, as a relatively new user of water, needs to recognise that economising on the use of water is now an essential ingredient in ensuring sustainability of its operations and may be in its own enlightened self-interest.¹⁹

Dr. Mihir Shah, The Planning Commission (India)



Disclosure is Good for Business

Water can be a significant driver for innovative and sustainable economic prosperity but its mismanagement can result in significant business failure. Pressure is growing for companies to build long-term resilience to water challenges into their business. Corporate water stewardship is increasingly being recognized by investors, policy makers and NGOs as a useful way to appropriately manage water-related risks.

Companies with robust water stewardship strategies are characterized by having comprehensive knowledge of water use across their value chain and the impact (current and projected) that waterrelated issues have on their business and vice versa. Most importantly, they have appropriate plans and processes in place to mitigate risks that give adequate consideration to priorities of the local water basin in which they operate. Therefore, better understanding of water measurement techniques, risk identification and greater transparency in reporting by companies is vital in this endeavour.

Why CDP?

Following the model of it's highly successful, standardized process for climate change reporting, CDP's water program has quickly established itself as the pre-eminent platform for corporate water disclosure. CDP's water program provides the only global, standardized platform for companies to measure, manage and disclose vital water related information that helps critical stakeholders.

The process of responding to the water questionnaire helps businesses and institutional investors to better understand the risks and opportunities associated with water scarcity and other water-related issues whilst promoting water stewardship and delivering insight that enables companies to take intelligent action to manage this critical resource.

There are a number of reasons why businesses disclose water-related information through CDP:

As the manager of about €140 billion of pension assets, water risk is affecting PGGM investments in a variety of ways. The problem however, is that the business value at water risk remains unclear because company information on water is rarely comparable and meaningful. CDP's work on improving and standardizing water risk disclosure is therefore vital in helping PGGM assess the water risk in our portfolios. Beyond that, we want companies to reduce their water use and increase collective water security.

Piet Klop, Senior Advisor, Responsible Investment PGGM Investments



CDP's water program has received a great response since its launch in 2010. The number of investor signatories to CDP's water program has quadrupled in the space of just four years; Almost 600 companies responded to the water questionnaire in 2013, a 59% increase in comparison to 2012. CDP now holds the largest and most comprehensive set of publicly reported corporate water information – spanning 112 countries, 91 industry sub-sectors - providing insights into corporate water risk exposure and

Manage risks: The questionnaire provides a platform for companies to investigate risks arising from water scarcity, pollution and flooding and ways to manage them.

Discover opportunity: The questionnaire provides a platform to explore business opportunities around water stewardship and enhances the ability of organizations to increase efficiency and reduce unnecessary costs.

Be transparent: The questionnaire can help organisations communicate and build trust with shareholders, clients and the society at large.

Share & learn: Companies can learn from the actions implemented by their peers facing similar challenges.

Save time: The questionnaire provides a standardized and centralized communication to investors focusing specifically on water, reducing the reporting burden for companies.

mitigation strategies.²⁰ Finally, CDP's water program was recently acknowledged in a Greenbiz survey²¹ of almost 300 sustainability leaders as providing a water stewardship framework that companies trust the most.

Who is disclosing?

The water questionnaire is sent to the world's largest companies from industry sectors that have the greatest potential to impact upon, or be impacted by, water resources. CDP's water program continues to expand its global reach, and currently targets companies that are in the:

- Largest 500 companies globally (FTSE GEIS)
- Largest 100 Australian companies (ASX 100)
- Largest 100 South African companies (JSE 100)
- Largest 500 US companies (S&P 500)
- Largest 100 Japanese companies (TSE 100)
- Largest 100 UK companies (FTSE100)

The role of disclosure in safeguarding water resources

The success of CDP has shown that disclosure of carbon and climate-related risk has a key role to play in accelerating action on such complex issues; this is also true for water-related issues. Disclosure of waterrelated risk has a number of valuable benefits:

1) Enhancing business awareness and understanding

Assessing and managing water-related risks and opportunities will need to be part of many businesses' climate change action plans. For some businesses, the need to adapt to the changing climate (including its impact on water) will be more important and challenging than managing their GHG emissions.

Meaningful and relevant information on water use and risks is an essential first step to understanding such risks. Many of the businesses operating in, or sourcing from, areas facing water issues lack awareness of the risks related to water use and the business benefits of reducing impact on water resources throughout the value chain. Seeking disclosure of water-related risks across the supply chain will engage a wide range of businesses and simply posing questions relating to water-related risk will begin to stimulate an understanding of the issues and opportunities for the businesses and their key stakeholders.

2) Developing standard measures

The absence of effective standards has limited the number of companies disclosing meaningful and comparable information and has resulted in most companies disclosing only minimal information on water use in their direct operations. There has been much debate on standards and a consensus is now emerging on how to address some of the key questions. Standards only become established, however, when they achieve widespread acceptance and use. CDP believes that a 'learning by doing' approach driven by disclosure will contribute greatly to developing effective, workable and accepted standards, along with providing pragmatic examples of the most suitable data or initiatives that deliver most value to different stakeholders across different sectors.

3) Providing relevant information for investors and other key stakeholders

New policies and regulatory environments will inevitably be needed to ensure sustainable water use, and greater transparency and corporate debate will help provide valuable information in shaping the regulatory environment and stimulating new

Companies that are responding to water challenges and are using CDP's unique system are able to identify profitable business opportunities as a result. General Motors, for example, forecast that recognized brand value in areas of water stress where it has demonstrated leadership in water efficiency and conservation could have a direct impact on revenue. A 10% rise of vehicle sales in Mexico would vield an additional US\$301 million in revenue. General Electric has established that reducing projected water use at a Texan site by 52% would save an estimated US\$230,000 per year.

Paul Simpson, CEO, CDP

²⁰ CDP Global water report 2013: https://www.cdp.net/ CDPResults/CDP-Global-Water-Report-2013.pdf
²¹ http://www.greenbiz.com/ blog/2013/08/19/why-cdpgri-djsi-stand-out-amongsustainability-frameworks measures including market-based structures. Investors will also have a role to play and helping to raise their awareness and providing them with better information is important. Only when investors have access to adequate data will they be able to make informed decisions and direct the flow of capital away from risks and towards solutions. Making the data for such decisions widely available is a key goal of CDP.

4) Raising general awareness

An improved collective understanding of the risks and opportunities will be essential to sustainable water management and to this end, cross-communication between stakeholders will be crucial. Unlike carbon, watersheds require collective management and whilst both have the potential to be politically sensitive, water is arguably an even more difficult political issue. Disclosure will help to highlight the water-related linkages between different sectors and supply chains, including the increasingly crucial interface between water and energy. Better water-related information will help businesses and other stakeholders to identify long term trends and potential 'hotspots' which can in turn be tackled individually or collaboratively.

5) Action and dialogue

Raising awareness and creating better metrics for benchmarking performance will eventually lead to the most important outcome of all – action. Challenging businesses to disclose their performance and targets as well as raising water as a strategic business issue will create pressure on them to take demonstrable action. Increasing disclosure allows progress to be tracked and to ensure that companies are moving in the right direction towards sustainable water use.

By posing questions to corporations on their relationship with water on behalf of investors and purchasing organizations, CDP has successfully sparked a dialogue and debate around water that until 2010 was limited in both scope and reach.

Cate Lamb, Head of Water, CDP

Disclosure: An Investor's Perspective



Jan Thomsen

Chief Risk Officer Norges Bank Investment Management commentary

The Government Pension Fund Global (the 'Fund') is exposed to water-related risks through its investments in more than 8,000 companies, many of which rely on water as an input or output factor in their operations and supply chains. Water Management has been a strategic focus for us since 2009. Within a context of increasing water scarcity and adverse water-related events, Norges Bank Investment Management identified that its longterm returns may be impacted by company-specific risks or increased systematic risks driven by those externalities. Mapping and understanding such risks can be a challenge, but is fundamental in supporting investment decisions. The Fund has investments in several water-intensive sectors in 82 countries worldwide, and has agrowing exposure to emerging markets. The World Bank has highlighted wide global disparities in water resources, with increasing needs being placed on the supply of concentrated freshwater in emerging economies. China and India alone account for over one third of total global water demand. Over-taxed aquifers in developing economies have heightened concerns, as having inadequate resources to meet growing needs from population and industries in developing economies may impair future economic growth.

We support CDP's work on water, including the development of deeper and richer reporting of waterrelated risks and the expansion of geographical coverage to developing economies, including India. Transparent water reporting will help investors understand the specific risk exposures of different companies, as well as sectorial or regional challenges. Transparent and detailed information reported at company and site levels is essential to understanding a company's operational resilience to local water challenges and the effectiveness of its risk mitigation strategies. These are necessary steps towards enabling investors to manage and mitigate risks across their investment portfolios and a valuable process that can be utilised to support sustainable water management.

CDP's global water dataset provides investors with critical information as to how companies identify, manage and mitigate risks and create opportunities related to water. In an increasingly resourceconstrained world, water-related risks may affect the global competitive landscape and will need to be managed.

As a lead sponsor of CDP's Water Program since 2009, we look forward to continuing our joint efforts with CDP to promote transparent water reporting and sustainable water management by companies. The continued development of CDP's water program and risk-related response data, and extended geographical coverage, including India, are important milestones in helping investors secure valuable information in their investment decision process. Beyond 2014 we will continue to support further developments to expand depth in datasets to increase the relevance and understanding of risks at corporate and company site levels.

Optimizing the Water – Energy Nexus is Critical for India: Grundfos Persepctive



Ranganath N.K., Managing Director, Grundfos India

Water and energy play a critical role in the development of any country be it social, environmental or economical. The two have a significant inter dependant relationship that is commonly referred to as the water-energy nexus.

Energy is critical for water and vice versa. Most water supply systems, both urban and rural require power to distribute water through pipe networks and farmers need power to run pump sets and irrigate their fields. Municipal works need power to supply clean water or take away dirty water. Water is critical for energy. Thermal power plants use nearly 88% of water used in industry. More than 70% of existing and planned thermal and hydropower capacity is located or expected in water-scarce or water-stressed areas. This co-dependence of water and energy leads to them interacting at multiple points.

Considering that the most profligate consumer of water and also the most inefficient is agriculture, a lot of focus is required on this sector. The agriculture sector is the largest user of water; insofar as it takes energy to pump and transport water they are also one of the largest users of free or subsidised energy. Around 60 percent of irrigated agriculture in India depends on pumped groundwater. Agriculture being a politically and emotionally sensitive area, to achieve results there has to be reforms, education, technology and good policies from the Government and good support from the industry as well as the public.

By 2030, energy demand is estimated to increase by at least 35 percent, creating greater demand for solutions that reduce energy consumption. Even then we will be 65% dependent on thermal power from coal. Water demand will increase by 30 percent and water stress is a serious global sustainability challenge driven by urbanisation, population growth, increasing food production, water pollution and climate change. A global response is therefore needed and there is a demand for product solutions and systems that can contribute to solving these societal problems. Energy efficiency and water conservation will be key elements of sustainable future. India's requirement of water is expected to double by 2050.

Water is essential for basic survival, food production and business growth. Considering the fact that India is heading towards being a water stressed country every single drop that is saved counts. We in Grundfos have committed to reduce our total water per capita consumption by 50 % of 2008 level by 2025 and to improve the quality of discharged water aiming for zero impact on the surrounding environment. Taking our own medicine is more than anything, about creating environmental mind-set, management commitment and committed employees. Grundfos has made an internal commitment that the Co2 emissions by 2015 will not be more than the emissions in 2008.

It is imperative that we in India wake up to the fact that we need to approach the water-energy nexus in a holistic manner, especially as we know that the demand for water and energy will increase substantially as the country urbanises and more people move above the poverty line. A lot of studies and efforts are going into reporting and documenting the energy consumption and carbon footprint while the documentation of the water footprint is at a nascent stage. It is vital to make the reporting of water footprint a corporate agenda in India, encouraging companies to disclose information on their water consumption and conservation as is being done for energy.

As the acceptance of water auditing and annual water footprint reporting within corporate India is gaining momentum, we think that the expansion of CDP's water program into the country is timely. Grundfos India is proud to partner with CDP on this report to help promote 'the business case for water disclosure in India'. We believe that water is a major driver for innovative and sustainable economic prosperity but its mismanagement can result in significant business failure. Its effective management is one of the most critical business and sustainability challenges of the 21st century. We hope that through this report, we are able to raise the awareness for water conservation and reporting among the corporate community in India.

Key Findings from Indian Disclosures

In 2013, 29 Indian companies comprising of large, medium and small scale industries, demonstrated real leadership on this issue by engaging with CDP to report their water stewardship efforts to their investors and customers.

The information sought by CDP from these companies includes qualitative and quantitative information around governance, risks and opportunities and accounting of water related parameters. Responding companies were able to provide valuable information on their water usage and water-related issues and activities.

Responses are diverse, from basic responses with a strong focus on direct operations to more comprehensive responses that include information across the value chain. However, the results act as a dip-stick test, highlighting Indian business awareness and readiness to manage water, making the case for corporate water disclosure in India even stronger.

Respondent Companies in India Disclosing Water-related Information

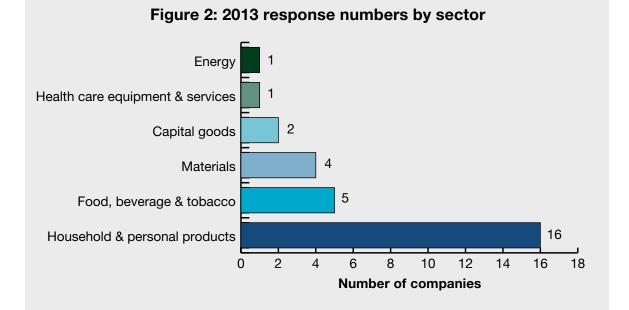


Table 1: Indian responding companies

Capital Goods	Household & Personal Products	Prime Health Care Products
Hindustan Construction Company	Aero Pharma Silvasa	RM Chemicals
Larsen & Toubro	Alfa Packaging	Rudraksh Detergent & Chemicals
Energy	Avalon Cosmetcs	Vaishnavi Kosmeticos Industries
Oil & Natural Gas	Caress Beauty	Materials
Food, Beverage & Tobacco	Chemex Detergent	JSW Steel
Akash Yog Health Products	Herbal Concepts Health Care	NIRMA LIMITED
ITC Limited	Hi-Tech Surfactants	Sesa Goa
Jitender Flour Mills	IPF-Vikram India	Tata Chemicals
Shakti – Tea	Laxmivinayak Ventures	
Swaraj Techno	Naga Dets	
Health Care Equipment & Services	Oriclean	
Galaxy	Pioneer International	

Disclosure Analysis

1) Water crisis is viewed by Indian businesses as serious and immediate

More than half of Indian respondents (55%) consider themselves exposed to water-related risks that have the potential to generate a substantive change in their business operation, revenue or expenditure. or are uncertain about it.

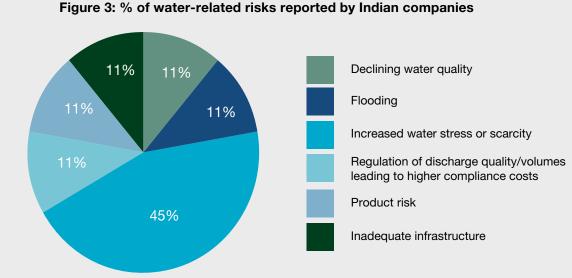
A third (31%) of respondents reported that they have operations in water-stressed regions of which almost half have majority of their operations in such regions.

As water scarcity and competition for water continue to rise, companies face increasing physical, regulatory, and other water related risks. Tata Chemicals has assessed that competing water demand may generate conflict amongst shared water users. Therefore, as a risk management strategy the company is engaging with the local community on various watershed initiatives.

ITC has reported a decline in water quality. Given the company's strong focus on product quality, declining water quality poses a substantive risk to its agri-business in terms of the quality of raw materials available for conversion into finished product.

Though businesses in India are realizing the risks related to water, they are grossly underestimating them. Risks across the value chain are not understood holistically and the recognition of water as a shared resource and therefore a shared risk is missing. As a result, risk mitigation strategies are still at a nascent stagemostly internal and short-term. Such responses may not be enough to insulate the business risk to companies operating in water-scarce or stressed areas. It also increases the vulnerability of ecosystems and communities dependent on the watershed or basin.

Water stewardship for industries WWF-Accenture report¹⁵



2) The majority of Indian respondents are able to report water accounting data for direct operations

The majority of companies have data on water withdrawal (79%) and water recycled/reused (59%) within their operations. Most of the companies (72%) are also able to identify their water discharge by standard effluent parameters and none of them report to have paid any penalty/fine for breach of discharge regulations.

At ITC, water related data for all units is recorded in ITC's Integrated Sustainability Data Management System as per the Standard Operating Procedures. In addition, third party verification of water related data is also conducted at selected units. Such disclosure of water withdrawal data enables the reporting organization and its stakeholders to perform benchmarking exercises and, thus, provide a basis for optimizing water use.

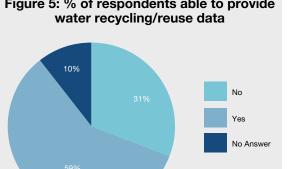
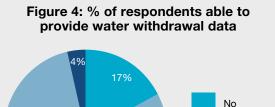


Figure 5: % of respondents able to provide



Yes

No Answer

3) Companies are aware of increasing water related risks but actions to manage water issues at a corporate level are inadequate

Most of the companies are able to identify whether their operations are located in water stressed regions (86%) and if their key inputs or raw materials come from regions subject to water-related risks (76%).

More than half of the reporting companies (55%) have a water policy, strategy or management plan in place. There is scope for improvement when we compare it with the Global 500 figure of 92%. Moreover, only about half of these policies include concrete quantitative goals or targets for water resource management.

Galaxy Surfactants reduced its overall water consumption by 8% in FY 2012-13, and has set a target of 25% reduction by 2015 over base year 2011-12.

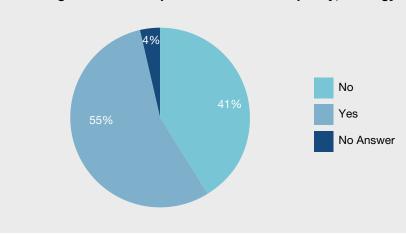
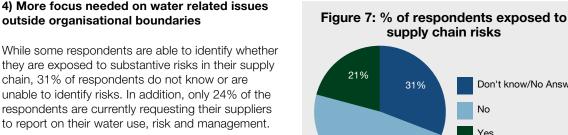
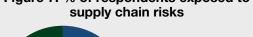
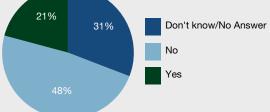


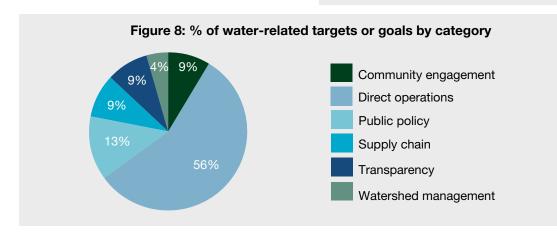
Figure 6: % of respondents with water policy, strategy or management plan



60% of the companies analysing water related risks are doing so only at facility or business unit







level. Similarly, 56% of all the water-related goals and targets are focused on direct operations. While focusing on water usage in direct operations is an important first step that may indicate where efficiency and reduction opportunities lie, companies that continue with such a narrow focus could be missing opportunities and overlooking serious risks.

L&T has identified that water is a key component in its supply chain and as a risk management strategy, conducts awareness sessions on water conservation measures during its stakeholder meetings. Tata Chemicals Ltd., has set goals and targets not only in the category of direct operations but also in the category of supply chain, watershed management, public policy and community engagement, thus moving beyond direct operations.

5) Water also presents a strategic opportunity for improving financial and brand performance

Perceptions of strategic opportunities arising out of the water crises vary across cost savings, increased brand value, sales of new products or services and other business opportunities, including water conservation, recycling and reuse of wastewater. However, the most commonly cited opportunity relates to cost savings followed by general reputational benefits. For example, ITC foresees substantial cost savings through the implementation of integrated watershed development programmes in the community. Such programmes improve the reliability of available water resources to farmers and thus assure a stable supply of agricultural products in the supply chain of ITC.

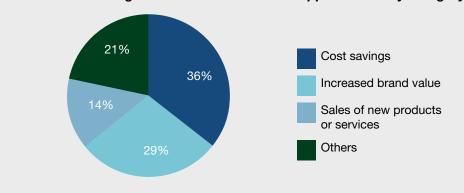


Figure 9: % of water-related opportunities by category

So What Needs to be Done Now?

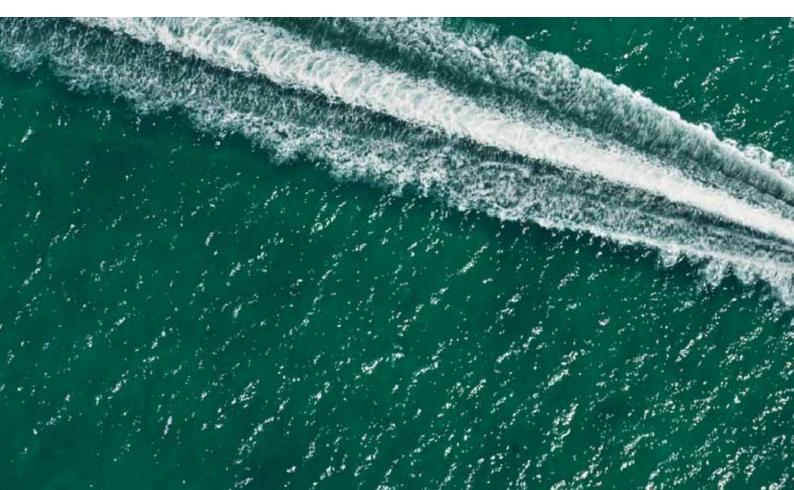
Developing an effective programme for disclosure will provide significant benefits, and is essential to businesses ultimately managing their risks and opportunities. Much needs to be done in order for business to address water-related issues. In particular, action is needed to facilitate the disclosure of water usage by businesses and the water-related issues they face – notably to raise awareness amongst key stakeholders, to develop robust standards, to roll out an effective disclosure programme, and to ensure that disclosure is linked to action. The key requirements for an effective disclosure programme are:

- Developing acceptable reporting standards and measurement tools that can be adopted meaningfully across a wide range of circumstances. In practice, given the complexity of the issues, it may be that standards will evolve significantly over time as the lessons learned from early analysis help to refine what is needed and clarify what is truly important to report;
- Securing commitment from leading companies and key stakeholders to making disclosure happen and taking action on the results of such disclosure; and
- Creating the practical framework to manage the collection, analysis and dissemination of data in a format accessible to businesses, investors, policy makers and other stakeholders. (Clearly this is

an area where CDP already has deep experience and a strong track record.) Disclosure itself is not sufficient; the ultimate goal must be for it to result in positive proactive action to address the underlying issues.

The creation and widespread availability of meaningful and comparable data on the use of water by major businesses should be a catalyst for and support a number of other key steps that need to be taken to address the global water challenges. In particular, the availability of such information should:

- Establish performance metrics and benchmarks for companies to use in setting targets, assessing investments and developing plans;
- Catalyse other areas of the broader economy to start gathering and analyzing more relevant data, especially in the area of agriculture which is the key user of water globally;
- Encourage other smaller businesses to understand and address their own challenges and opportunities relating to water;
- Enable investors (in both the private and public sectors) to make better informed decisions about the impact of water on their investment portfolio and to identify opportunities to improve the environmental



impact and business performance of their investments;

Inform public policy development and move the debate away from focusing on the needs and activities of the water (supply) industry; and

Promote better understanding and collaborative working between different stakeholders. Water connects complex issues such as climate change, human rights, energy and waste management, and the links are often not widely or well understood. Increased awareness and the availability of reliable and relevant data can help to address this, as can communication between key public policy stakeholders.

Launching CDP's water program in India

As a result of increasing interest from the investment and corporate communities, CDP plans to launch its water program in India in 2015. CDP's work on water follows a similar format to CDP's climate change program and invites investors to become signatories to an annual information request issued to large publicly quoted Indian companies asking them to disclose regarding the impacts of water on their business. This information is disclosed via a dedicated online reporting platform.

The questionnaire covers

- Risks and opportunities in companies' own operations and supply chains (physical, regulatory and reputational);
- Water metrics in companies' own operations and supply chains (footprint, exposure to water stress etc); and
- Water management, governance and improvement plans.

CDP does not seek to develop standards in the complex area of water risk analysis or foot printing, but instead works with leading global organizations to facilitate the adoption of emerging best practice in this area. CDP has already worked with many expert organizations in establishing its water program internationally (e.g. **GRI**, **WRI**, **WBCSD**, **Pacific Institute**, **CEO Water Mandate**, **WWF**, **WEF** and the **Water Footprint Network**) and this close cooperation will continue over the expected evolution of CDP's water program.

CDP is ideally placed to lead an Indian water disclosure initiative. Its network of relationships with investors, corporations, governments and other NGOs, and its experience and expertise in managing a global disclosure programme make it the natural choice to lead on water disclosure in India and to secure the support of businesses and investors to create a successful program.



Prime Asia found CDP's disclosure process user friendly and relevant. As a company that is a member of many sustainability organizations, Prime Asia appreciates that CDP's disclosure can be accessed by many stakeholders so that Prime Asia's customers can use CDP's data collection reports to rank their suppliers according to water management or use some of CDP's data in place of collecting their own.

Prime Asia

Water may well be the defining environmental issue of the 21st century. The potential impact is huge, the challenges posed are significant and the solutions will require coordinated action from businesses, individuals and governments. Climate change will exacerbate many of the issues relating to water and any adaptation strategy must include consideration of water related issues. Disclosure is increasingly recognised as having a key role to play in the management of any business issue, but in particular those relating to the environment. CDP has started a movement and the benefits of increased disclosure of water issues are clear to investors, regulators and businesses alike.

Greater transparency, access to corporate water data, robust governance of corporate issues, longterm thinking and business planning are some of the major areas that business can explore in terms of water usage. CDP's water disclosure program provides a global, standardized platform for companies to measure, manage and disclose vital water information that helps critical stakeholders.

A growing number of stakeholders have recognized that disclosures can uncover risks and opportunities otherwise unnoticed by companies and lead to timely action. Analysis of CDP water responses received from 29 Indian companies revealed that a third of respondents are unable to identify water-related risks in their supply chain and only 24% of the respondents are currently requesting their suppliers to report on their water use, risk and management. In addition, although 55% of the reporting companies have a water policy, strategy or management plan in place, only about half of these policies include concrete quantitative goals or targets for water resource management. Clearly a lot more needs to be done.

The significance of corporate water issues is now being widely recognized by portfolio managers. Investors have been known to guide companies on certain criteria. They are increasingly holding companies responsible for economic, environmental and human consequences of their water use and management. The public and the private sector need to work in coherence with a spirit of shared responsibility that can be capitalized by both for a sustainable future.

Given the increasing calls for a transparent water disclosure initiative, CDP has decided to launch its water program in India in 2015. This initiative will aim to strengthen and accelerate the debate on water related issues amongst all stakeholders. CDP will work alongside all of the key stakeholders in the debate and believes that a water disclosure programme in India will be the most effective way to stimulate a rational and coherent business response to the issues of water availability.



Appendix

Key indicators in CDP Water Questionnaire 2013

Metrics collected – 27 in total
Response Rate
Total respondents
Public respondents
Non-public respondents
Non-respondents
Response rate
Water Management & Governance
Respondents with a water policy, strategy or plan in place
Respondents with board-level oversight of their policy, strategy or plan
Respondents with concrete goals or targets in place
Respondents reporting actions, goals or targets to manage water resources
Respondents that require key suppliers to report water use, risks and management
Risks & Opportunities
Respondents able to identify whether their operations are located in water stressed regions
Respondents with the majority of operations located in regions at risk
Respondents with key inputs or raw materials from regions subject to water-related risk
Respondents able to identify whether or not they are exposed to risk in direct operations
Respondents exposed to risks in direct operations
Respondents able to identify whether or not they are exposed to risk in supply chain
Respondents exposed to risks in supply chain
Respondents exposed to risks in either direct operations or supply chain
Respondents that have experienced water-related business impacts in past 5 years
Respondents that identify opportunity
Respondents able to identify linkages or trade-offs between water and carbon
Water Accounting
Respondents that report water withdrawals
Respondents that verify the majority of water withdrawal data
Respondents that report water recycling/reuse
Respondents that report water sources significantly affected by their water withdrawals
Respondents able to identify discharges by destination, treatment type and quality

25

Respondents that paid penalties/fines for significant breaches of discharge regulations

Respondents that report water bodies/habitats significantly affected by their discharges or runoff

Additional key indicators in CDP Water Questionnaire 2014

Context

Importance of freshwater to business

Proportion of operations in regions subject to water-related risk

Proportion of revenues generated in regions subject to water-related risk

Proportion of procurement spend in regions subject to water-related risk

Respondents that have evaluated the sustainability of their growth strategies in relation to water

Risk management processes and procedures

Respondents with water integrated into a multi-disciplinary company-wide risk management process that includes the supply chain

Respondents that undertake comprehensive water risk assessments

Respondents that engage stakeholders when conducting their risk assessments

Accounting

Respondents that monitor and measure key water aspects across the majority of their operations

Respondents that have had the majority of their water accounting data verified/assured

Management

Respondents whose Boards are engaged on water on a regular basis

Respondents that integrate water into their business strategies

Respondents reporting specific actions to integrate water into their business

Respondents taking action on inadequate access to water, sanitation and hygiene







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