Thirsty business: Why water is vital to climate action

2016 Annual Report of Corporate Water Disclosure

Written on behalf of 643 investors with US$67 trillion in assets

CDP Report I November 2016

Water scoring partner south pole group

Lead partner NORGES BANK INVESTMENT MANAGEMENT

Reimagining Disclosure – sector strategy and TCFD recommendations

Our 2017-2020 strategy is to build on the momentum of the Paris Agreement to fulfil our mission to incorporate environmental stewardship into the economic system. We have been the catalyst for global disclosure over the past 15 years. We want to continue to drive the future of meaningful disclosure to help companies and investors better understand environmental risk and accelerate the transition to a more sustainable economy.

To deliver this, we have launched our Reimagining Disclosure initiative to work in consultation with you and our other key stakeholders. Our aim is to produce a step change in benefits for disclosers and users of disclosure information.

We are pleased to announce that the first deliveries from this initiative will be implemented by Q4 2017. We are evolving our climate, water and forests questionnaires to be more sector specific, and to implement the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. Our sector work will focus initially on the high impact sectors in Energy, Transport, Materials and Agriculture.

We look forward to partnering with you on our Reimagining Disclosure initiative to increase the efficiency and relevance of our disclosure process. This way, we will continue to ensure we are the go-to disclosure platform for data and analysis to manage environmental risk, and to drive financial decision-making.

CEO foreword
Water's role in securing the low-carbon transition

Our analysis of the emissions reduction activities disclosed by companies shows that nearly a quarter are water-dependent.

The entry into force of the Paris Agreement marked a shift in gears in the global effort to address climate change. For all countries, the focus moves from planning to delivery – to the implementation of policies and measures that will deliver the ambitious goal to hold the increase in global temperatures to well below two degrees.

Water was not explicitly mentioned in the text of the Paris Agreement, but having a stable and sustainable supply of water – commonly referred to as water security – will be central to efforts both to adapt to the effects of climate change, and to mitigate rising greenhouse gas (GHG) emissions. In addition, the need to ensure availability and sustainable management of water and sanitation for all is clearly stated as the sixth Sustainable Development Goal.

Our analysis of the emissions reduction activities disclosed by companies shows that nearly a quarter (24%) of these activities depend on having a reliable supply of water for their success. These activities are estimated to cut 125 million metric tons of carbon dioxide emissions annually, the equivalent of shutting down 36 coal-fired power plants for a year.

Conversely, better water management can help reduce energy use and the associated emissions: more than half of disclosing companies report that more efficient use of water has led to lower GHG emissions. Global efforts to decarbonize the economy could therefore sink or swim based on how companies manage water.

Indeed, almost all forms of energy production rely on a stable supply of good quality water. Some 70% of current US electricity comes from power plants that require water for cooling[1]. Less carbon-intensive power sources such as biofuels, nuclear power and, of course, hydropower all require significant amounts of water. Even solar photovoltaics, one of the least water-intensive sources of power, require water for cleaning.

In California, the six years of recent and still ongoing drought cost consumers US$2.4 billion in higher power costs, and led to an 8% increase in carbon dioxide emissions from the state's power plants as they turned to natural gas to make up shortfalls in hydropower[2]. In practice, some low-carbon energy systems could potentially be more water intensive than those they replace, especially if they expect to rely on carbon capture and storage in the future.

Unfortunately, reliable supplies of water can no longer be guaranteed in many parts of the world. Melting glaciers, empty reservoirs, and dusty riverbeds are all vivid reminders that climate change is making the world less water secure. Rising demand due to a combination of population growth and economic expansion, as well as increasingly polluted water sources are expected to make the situation worse.

With trillions of dollars' worth of assets set to be at risk from drying and drowning, investors are more focused than ever on leaders and laggards in the sustainability transition. Information is fundamental to their decisions. Through CDP, more than 600 institutional investors with assets of over US$67 trillion are asking companies to disclose how they are managing the risks posed by worsening water security.

The responses to this year's investor-backed request for water data suggests that corporations have yet to fully grasp the implications of a less water secure world. As the World Bank warns, "current energy planning and production is often made without taking into account existing and future water constraints."[3] This is reflected in our analysis: more than a third (37%) of energy companies disclose that they do not evaluate how water risk could impact their business in the future. Within the utility sector, that figure is one in five. This clearly needs to change.

Measurement and transparency are where meaningful action on water security starts, and as governments work to implement the Paris Agreement and the Sustainable Development Goals, CDP will be shining a spotlight on progress and driving the race to a water-secure world for all. High quality information will signpost the way to this future for companies, investors and governments – never has there been a greater need for it.

Paul Simpson
CEO, CDP

1 EIA: http://www.eia.gov/todayinenergy/detail.php?id=14971
2 Impacts of California's Ongoing Drought: Hydroelectricity Generation, Pacific Institute, 2015
3 Will Water Constrain Our Energy Future, World Bank, 2014

Executive summary

This year has seen the largest response yet to CDP's annual request for investment-relevant information on listed companies in sectors exposed to water risk. Of the 1,252 companies approached in 2016, 607 (48%) responded; up from 405 out of the 1,073 companies approached last year.

Our analysis reveals a number of insights into how companies are managing water risks and seizing opportunities. Key findings include:

- **Water risks are rapidly materializing for business:** Disclosing companies reported US$14 billion in water-related impacts this year, a five-fold increase from last year. Over a quarter of companies have experienced detrimental impacts from water this year, and companies expect over half (54%) of the 4,416 water risks they identified to materialize within the next six years.

- **Corporates are not moving fast enough:** Year-on-year disclosures through CDP show that companies are not moving fast enough to address the sustainable management of water. Disclosure around key metrics, such as tracking water use, assessing risk, and ensuring strategic management shows that performance has not improved markedly since last year.

- **A new international regime to cut carbon creates more demand and pressure to improve water management:** The Paris deal is now international law, meaning the nearly 200 countries that submitted climate plans are now mandated to deliver emissions reductions. CDP's data shows that this will necessitate better management of water: 24% of GHG emissions reduction activities reported by business depend on a stable supply of good quality water. Encouragingly, however, over half of companies (53%) report that better water management is delivering GHG reductions, showing that water can potentially make – or break – the low-carbon transition.

- **A pivot towards water stewardship is underway:** There is a bright spot emerging in the increasing numbers of companies recognizing the value of managing water in a more holistic sense. More companies are citing water stewardship as the basis for their water targets, and this year's Water A List includes 17 more companies than last year.

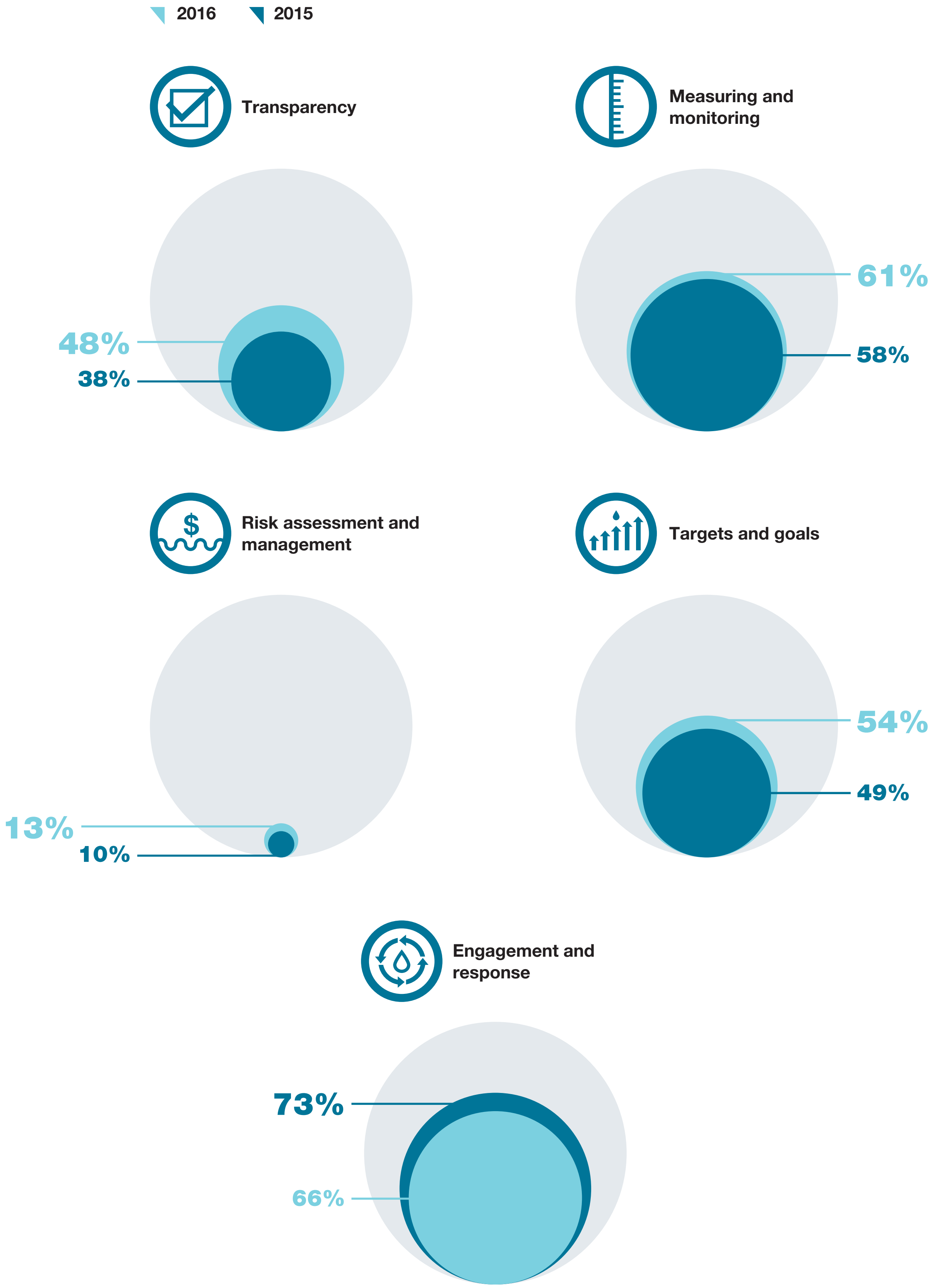
Call to action

- The role of business in delivering water security is critical, and the business case for disclosure on the issue is unequivocal. Non-disclosing companies should take immediate steps towards reporting to CDP's water program.

- Investors managing more than US$67 trillion in assets support the water program to understand and better manage risks and opportunities around water security. The greater the number of signatories, the clearer the message to companies. Investors should become a signatory to CDP's water program.

- CDP is planning to introduce a stronger disclosure framework in 2018, tailored to industry sectors, and a new reporting platform. Reporting companies should engage with the development of the disclosure framework to ensure they can provide investors with the information they need.

Year-on-year improvements



CDP's Water A List

In 2015, CDP published its first Water A list - highlighting eight companies that achieved an 'A' rating in accordance with our water scoring methodology. This year, we welcome 25 companies to our A list.

The methodology is based on four consecutive levels, representing the steps a company takes as it progresses. These are: disclosure; awareness; management; and leadership. A company needs to achieve a minimum score on each level in order to be assessed on the following one.

Every element in the questionnaire is scored for disclosure, with sections of most importance to data users carrying more weight. The awareness score measures how comprehensively the company has evaluated the ways in which water intersects with its business. Companies should consider the impacts of their activities on water, how these impacts affect people and ecosystems and, conversely, the impacts of water security on its business activities. These will influence the degree of risk that a particular company faces.

Management points are awarded for evidence of actions associated with good water management, such as the ability to account for water at the facility level, having company-specific targets and goals around water, or incorporating best practice elements in water policy. For leadership status, the company must demonstrate it is pursuing best practice, as understood by CDP and informed by other institutions we are working with to advance water stewardship, including the **Alliance for Water Stewardship**, **Ceres**, the **UN CEO Water Mandate**, **World Resources Institute** and **WWF**.

CDP's water score is an indicator of a company's commitment to transparency around their environmental risks, and the sufficiency of their response to them. These are both essential for the collaborative stewardship of water. CDP's water score is based solely on activities and positions disclosed in their CDP response. However, RepRisk, a business intelligence provider specializing in ESG risks, provides CDP with additional risk research and data into the proposed A List companies to assess whether any severe reputational issues could put their leadership status into question.

Companies eligible for an A are those that achieve 75% of the points available in the leadership band and have submitted a public response. However, not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information will receive an F, which signifies their failure to provide sufficient information to CDP to be evaluated for this purpose. An F does not indicate a failure in environmental stewardship.

Ultimately, the methodology aims to recognize companies that understand that the sustainable management of water is a business imperative and are acting to improve water security for all. For a summary of the leadership indicators, and breakdown of company responses by sector, please see Appendix III.

The continued development of CDP's water program and risk-related response data, together with the introduction and testing of scoring in 2014, is an important milestone in helping investors secure valuable information in their investment decision process.

Norges Bank Investment Management
(US$852 billion)

Consumer Discretionary

Fiat Chrysler Automobiles NV (Italy)
Ford Motor Company (USA)
Sony Corporation (Japan)
Toyota Motor Corporation (Japan)

Consumer Staples

Coca-Cola European Partners (UK)
Colgate-Palmolive Company (USA)
Diageo plc (UK)
KAO Corporation (Japan)
Kirin Holdings Co Ltd (Japan)
L'Oréal (France)
Suntory Beverage & Food (Japan)
Unilever plc (UK)

Health Care

AstraZeneca (UK)
Bayer AG (Germany)
GlaxoSmithKline (UK)

Industrials

Mitsubishi Electric Corporation (Japan)

Information Technology

LG Display (South Korea)

Materials

Anglo American Platinum (South Africa)
BASF SE (Germany)
Harmony Gold Mining Co Ltd (South Africa)
Kumba Iron Ore (South Africa)
Metsä Board (Finland)
Royal Bafokeng Platinum Ltd (South Africa)

Utilities

Acciona S.A. (Spain)
Centrica (UK)

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Scoring partners
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south pole group

RepRisk
ESG Business Intelligence