

CDP Water 2015

Training: Turkey

Friday 10th April

Esther Stoakes – Senior Technical Officer CDP

Agenda

- ▼ 1: Global water challenges
- ▼ 2: Responding to Water Challenges
- ▼ 3: CDP's 2015 water information request
- ▼ 4: Increasing CDP's impact – Scoring
- ▼ 5: Discussion: Corporate water issues in Turkey

Session 1: Global water challenges

Company risks & investor interest

Water: a critical business issue

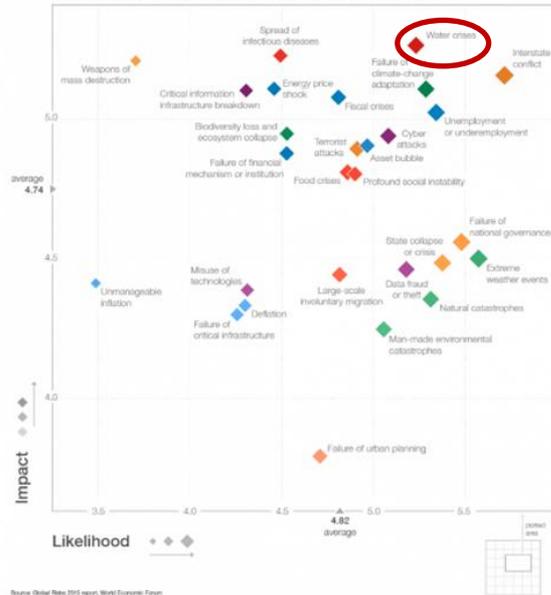
WEF 2015 finds Water is the No. 1 global risk

The Global Risks 2015 Report



The Global Risks Landscape 2015

Respondents were asked to assess the impact and likelihood of each global risk on a scale of 1 to 7 and in the context of a 10-year time frame.



Source: Global Risks 2015 report, World Economic Forum

Learn more at <http://wef.ch/gr2015> Get in touch: GlobalRisksReport@weforum.org or call +41 (0)22 869 1212
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1. Water crises
2. Rapid and massive spread of infectious diseases
3. Weapons of mass destruction
4. Interstate conflict
5. Failure of climate change adaptation

by 2030...

Population

8.3 billion

Global water shortfall

40%

Water is already halting business

53%

Companies that have already suffered detrimental impacts from water

40% increase from 2011

Barrick Gold suspends construction of \$8.5 billion Pascua Lama Mine in Chile due to water risks and stringent permitting conditions



Substantive risks are becoming more immediate

68%

Substantive risks anticipated to impact now or next three years

19% increase from 2012

American Electric Power forecasts **US\$1 billion costs** due to new Environmental Protection Agency water regulations affecting as many as 31 coal-fired power plants

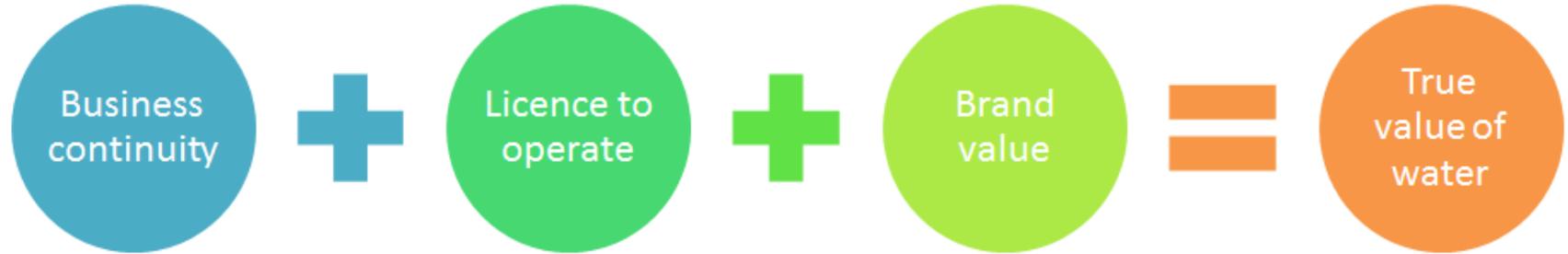


Water scarcity: evaporating growth?

“The growth of our products is at risk. The use of Unilever products can account for over 90% of domestic water use. Those consumers experiencing water scarcity are making trade-offs about which household tasks will get their scarce ration of water.”



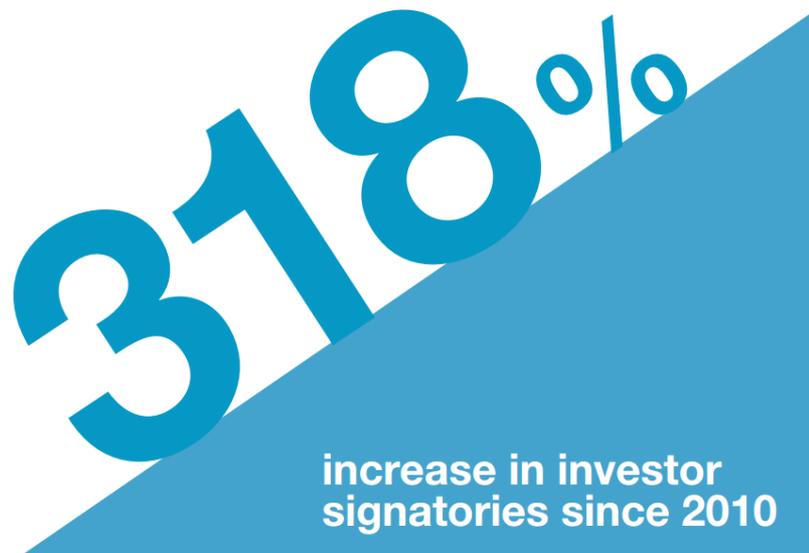
Realizing the true value of water



Investors are waking up to water risk

▼ CDP investor signatories hold companies accountable for the economic, environmental and human consequences of their water use and management.

▼ CDP uses their significant voice to move companies beyond business as usual, to protect assets from current and future water-related risk.



Investor interest in CDP's water data

CDP

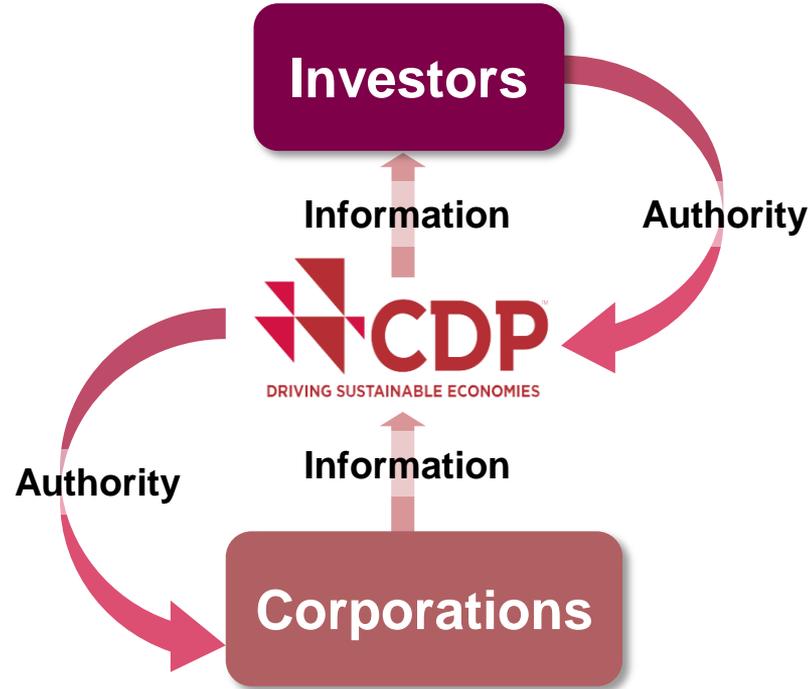
A not-for-profit that has pioneered and provides the only global natural capital disclosure system for companies and cities to measure, manage and share vital environmental information.

We play a critical role in driving the transition towards sustainable economies.

What we do

- ▼ Work with investors
- ▼ Climate change program
- ▼ Water program
- ▼ Supply chain program
- ▼ Forests program
- ▼ Cities program
- ▼ Work with governments & policymakers

CDP operates on behalf of investors and purchasers



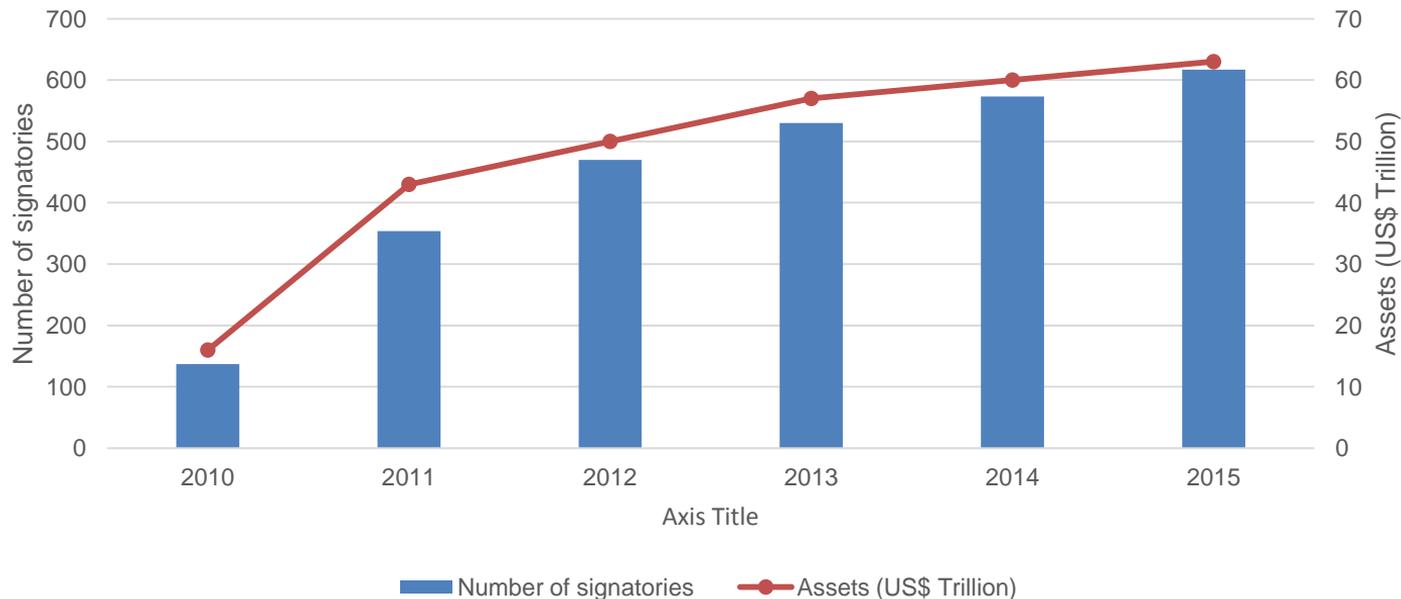
Water 2015

617 investor signatories

US\$63 trillion in assets

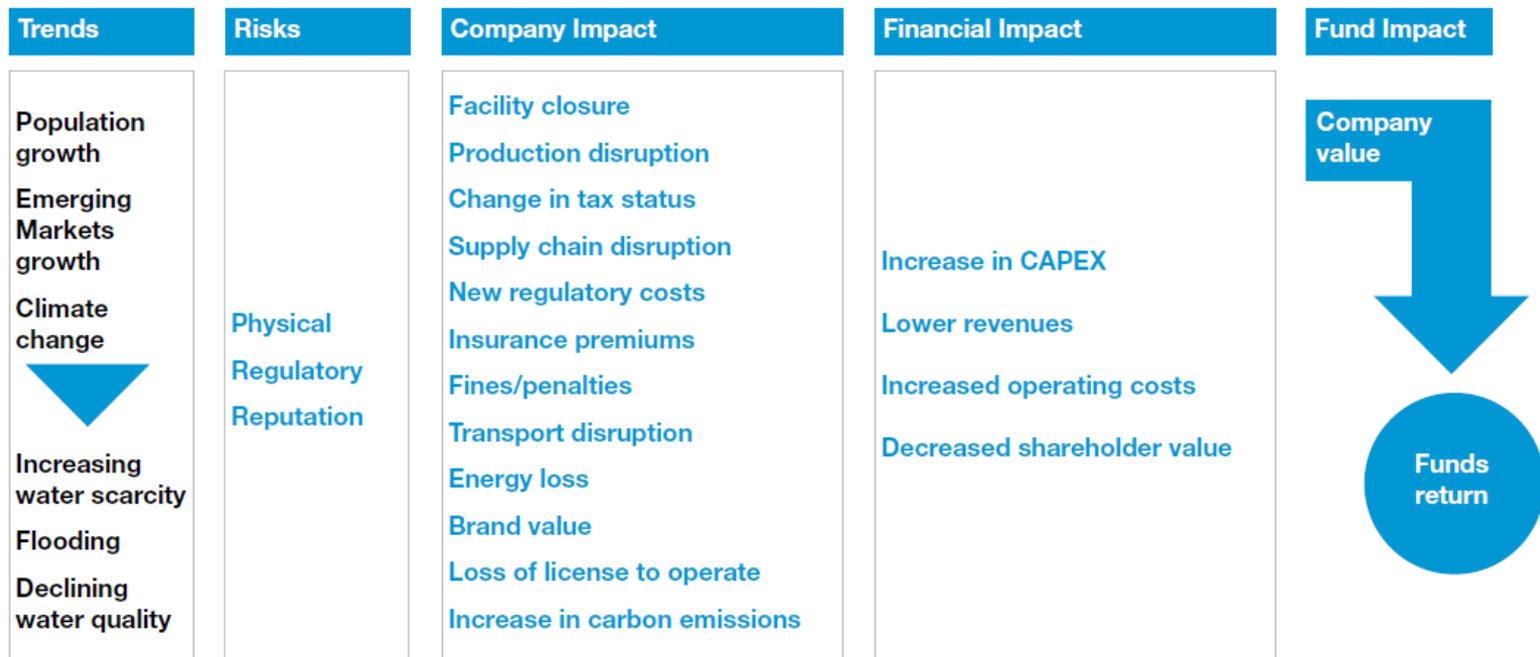
Investors are waking up to water risk

CDP Signatories & Assets: 2010 - 2015



Why investors care about corporate water disclosure

Water is a material issue for investors



Key investor concerns

- ▼ Water availability and scarcity poses 'limits to growth' and 'license to operate' questions for investors;
- ▼ Companies and suppliers face disruptions in their business if water runs out; and
- ▼ Companies run the risk of finding themselves in conflict with communities over access to water.

Key investor questions

- ▼ Are any of your operations or critical suppliers exposed to water risks – regulatory, operational or reputational?
- ▼ What systems do you have in place to manage your water risks in direct operations and supply chain?
- ▼ How confident are you that you will have access to the quantity and quality of water required to operate now and in the future?

CDP's water data

- ▼ Large pool of companies to analyse: 1064 companies – 79% increase compared to 2013

- ▼ Historical comparison*
 - ▼ Risks and Opportunities
 - ▼ Financial impacts
 - ▼ Water accounting
 - ▼ Governance

* Historical analysis can be challenging due to questionnaire changes

CDP's water data

▼ Materiality

- ▼ Financial impacts of water related events
- ▼ Cost of mitigation strategies
- ▼ Facilities at risk and production loss due to water risks

▼ Comparability

- ▼ All companies report risks and opportunities from the same categories
- ▼ All companies use similar units when disclosing water withdrawals, discharges, etc.

Water impact on valuation models

EXHIBIT 3
Integrating water risk into a Utility company's discounted cash flow valuation

| TRADITIONAL ANALYSIS | | WATER |
|--|-----------------------|---|
| Power plant capacity; Utilisation rates; Power demand | Volume of units sold | Access to sufficient water is necessary for power generation either for hydro power or for cooling thermal power. |
| | x | |
| Commodity prices; Inflation; Allowed return; RAB | Revenue per unit | In Brazil, drought led to high thermal generation which increased fuel costs. These are ultimately paid by the final consumers. Power shortages due to water scarcity would also result in higher prices. |
| | - | |
| Fuel, Operating & Maintenance costs; Employees | Operating costs | In the UK, the cost of water abstraction licences may increase in areas of water scarcity. |
| | - | |
| Maintenance and construction of facilities | Capital Investment | Air-cooling power plants require higher investment cost, and more land space, than water-cooling plants (e.g. China) |
| | - | |
| Current tax rate; countries of operation | Tax | |
| | - | |
| Interest rates; amount of debt | Interest | |
| | = | |
| | FREE CASH FLOW | |
| | x | |
| Age of power plants | Useful Life of Assets | Closure of plants that do not meet the required environmental legislation (e.g. Entergy) |
| | + | |
| Cost of equity, cost of debt | Discount Rate | All risks above could impact the discount rate. |
| | | |
| | EQUITY VALUE | |

Source: Company Data, Morgan Stanley Research

Investor Water Reports

 EurizonCapital

 CDP
DRIVING SUSTAINABLE ECONOMIES

Metals & Mining: a sector under water pressure

Analysis for institutional investors of critical issues facing the industry

July 2013



Morgan Stanley

December 9, 2014

 CDP
DRIVING SUSTAINABLE ECONOMIES

MORGAN STANLEY RESEARCH

 S+R Sustainable & Responsible

MORGAN STANLEY RESEARCH
Global

Jessica Aleford¹
Richard Felton¹
Bobby Chada¹
Emmanuel Turpin¹
Timothy Ho¹
Stephen Byrd²
Devin McDermott²
Simon Lee³
Qin Zhang³
Miguel Rodrigues⁴
Fernando Amaral⁴

Power Generation Utilities
Navigating Global Water Risk

The Power Generation industry is heavily reliant on water as a resource. Around 90% of global power production depends on water, either directly or via the fuel supply chain, making water a current and future strategic issue for electric utilities.

Deteriorating water security is already affecting Utility companies. 38% of respondents to CDP's 2014 survey reported water issues causing detrimental impacts to their business operations. On occasions, this has resulted in financial losses that have affected profit margins, in some cases significantly.

Looking ahead, we believe water-related risks are only going to increase. The UN estimates that water demand for global power generation is set to increase by 140% by 2050. This substantially raises the risk of water scarcity impacting the production of electricity. There are certainly ways that water risks and impacts can be mitigated, but only 55% of respondents to CDP's survey reported concrete targets or goals for their direct operations.

*See page 2 for all contributors to this report

1 Morgan Stanley & Co. International plc¹
2 Morgan Stanley & Co. LLC²
3 Morgan Stanley Asia Limited³
4 Morgan Stanley C.T.V.M. S.A.⁴

CDP
Cate Lamb
Charles Fruiterer

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How are investors using CDP's water data?



ICCR uses CDP's water data to understand companies' water-related risk exposure and water stewardship opportunities.

ICCR (\$3.74 trillion assets under management)



Sell Side

SOCIETE GENERALE
Cross Asset Research

EQUITY
21 October 2013

| SRI report |

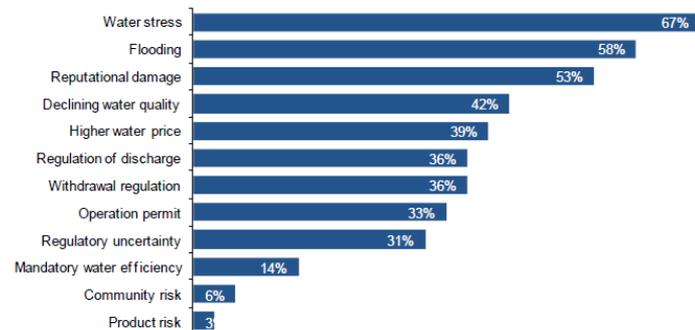
Mining and Water Risk

Clear or muddy waters ahead?



In response to the CDP's 2012 request for water information, almost all respondents (92%) identified some form of water risk that has the potential to generate a substantive change in their business operation, revenue or expenditure now or within the next five years. Increased **water stress** was the most commonly reported risk, which is consistent with the finding that one-third of the respondents have the majority of their operations located in regions subject to water stress or scarcity. **Flooding** is the next most frequently reported risk, which is notably the risk reported as most likely to impact business now, followed by **declining water quality**.

Proportion of respondents reporting category of risk (in %)



Index Providers

MSCI

MSCI
ESG Research

A Well Running Dry: Identifying and Assessing Water-related Risks for Investors

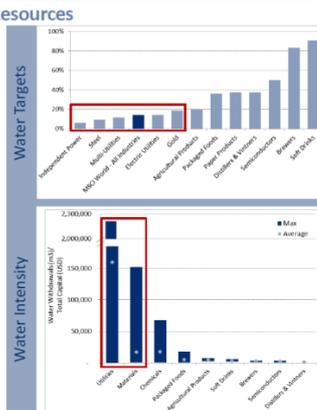
October 29, 2013

MSCI
ESG Research



Misallocation of Management Resources

- The most water-intensive industries commit to water targets less frequently than the entire MSCI World index



MSCI
ESG Research

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Business Value at Water Risk

Investors need to know how **companies** compare in their **aggregate** exposure to, and management of, water risk.

For that we need metrics that are meaningful and comparable

Water Risk

- 1 • Water dependence: WFN
- 2 • Water security: Aqueduct (WRI), Water Risk Filter (WWF)
- 3 • Water risk management: Aqua Gauge (Ceres)
- 4 • Aggregation across operations (MSCI?)
- 5 • Disclosure: CDP, <IR>, SASB (Bloomberg)

36



Investors demand more data



“Corporate disclosure of water-related risk is seriously inadequate ...The financial impact of water shortages on sectors and companies is unclear, because information on water use data and impacts is spotty and partial.”

JP Morgan (\$1.5 trillion assets under management)



Boston Common demands more data

- ▼ Boston Common Asset Management engaged with companies in its portfolio around CDP water
- ▼ Launched campaign across portfolios targeting companies that had not responded or declined to participate in CDP's 2013 water questionnaire
- ▼ Wrote to 20 companies in the Consumer Discretionary, Consumer Staples, Energy, Healthcare, Industrials, Information Technology, Materials and Utilities Sectors

Nordea demands more data

- ▼ CDP issued our water questionnaire to 33 of the most highly water dependent companies within Nordea's emerging stars portfolio
- ▼ CDP provided direct support in the form of one-to-one engagement, webinars and guidance
- ▼ CDP will analyse all responses received and provide analysis, raw data and accompanying recommendations back to Nordea
- ▼ Nordea will use this to encourage these companies to do more to manage water risks



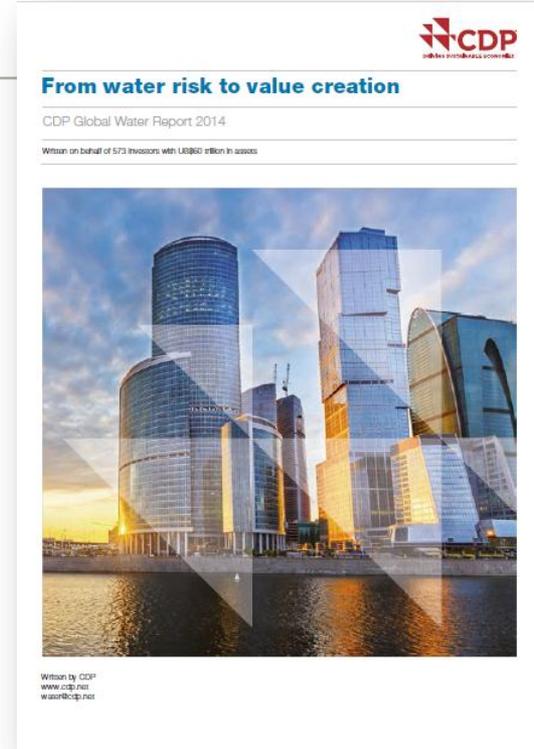
Key takeaways

- ▼ Investors understand the real value of water and that corporate water information collected by CDP's standardized reporting platform helps support value creation
- ▼ Inadequate reporting on water issues hinders investor ability to assess how companies may be affected by the threats or opportunities that water poses
- ▼ Companies that fail to respond to CDP's water program are missing an opportunity to enhance shareholder confidence by demonstrating awareness of, and resilience to, water challenges which have the potential to substantively impact financial performance and shareholder value

CDP's Global Water Report 2014

High level findings

- ▼ 174 Global 500 respondents
- ▼ 42% failed to meet investor demands for transparency
- ▼ 68% report exposure to substantive water risks, 43% of which are anticipated to impact now or in the next 3 years
- ▼ Almost one quarter (22%) report that water could limit the growth of their business. One-third expects that constraint to be felt in the next 12 months



Leaders and laggards



Consumer
Discretionary

49%



Consumer
Staples

69%



Energy

42%



Health Care

72%



Industrials

50%



Information
Technology

50%



Materials

73%



Utilities

74%

Water issues remain poorly understood in many businesses

- ▼ Some companies clearly recognise water as an issue, but **too few recognise its importance or understand the risk drivers**:
 - Regulatory (or lack of regulations)
 - Reputational
 - Physical
- ▼ The **immediacy of risks is underestimated**
 - Water shortages and restrictions in licenses to operate may not be as far away as some companies think
- ▼ To many companies are failing to engage at a river basin level and as a result are pursuing ad hoc strategies; setting meaningless targets; and making unsubstantiated claims

Top tier media

The Economist
Companies and water: Value diluted
Water is a growing business problem. Many companies haven't noticed
Nov 8th 2014 | From the print edition

The Wall Street Journal
Risk & Compliance Journal.
The Morning Risk Report: Companies Discover Water, Water Everywhere—No More

The Guardian
Two thirds of world's largest companies exposed to serious water risks
Severe droughts in São Paulo and California shatter the misguided belief in a limitless supply of water, and business is starting to feel the effects

DW
Businesses fear water risks to growth
Two thirds of the world's largest firms are reporting exposure to water risks, according to a survey by CDP. The survey also reflects rising investor concern for those firms' growth.

Dry spells
Companies that have experienced water-related problems that affect their business 2014, % of respondents by industry

| Industry | % of respondents |
|------------------------|------------------|
| Utilities | ~45 |
| Consumer staples | ~40 |
| Materials | ~35 |
| Energy | ~30 |
| Consumer discretionary | ~25 |
| Industrials | ~20 |
| Health care | ~15 |
| IT | ~10 |

*Largest 500 companies in FTSE Global Equity Index
Source: CDP

Media coverage

▼ **149** articles with an advertising value of **£172,455** was generated in the media, reaching an audience of more than **192.7 million**

▼ Media coverage has **increased by nearly 50%** (articles generated 2014 vs 2013) and the number of readers reached has **risen by 70 million**

The Economist | World politics | Business & finance | Economics | Science & technology | Culture

Companies and water

Value diluted

Water is a growing business problem. Many companies haven't noticed

Nov 8th 2014 | From the print edition

Timekeeper | Like 329 | Tweet 62

IN 2013 a Chilean court ruled that Barrick of Canada, the world's largest gold-mining firm, could not go ahead with its Pascua Lama mine until it could guarantee not to pollute downstream water or damage nearby glaciers. The company eventually suspended the project, taking a \$5 billion write-down. This week it said it was in talks with Zijin Mining, a Chinese state-owned firm, to become its partner, if the development ever restarts.

Water—its scarcity, quality and the regulations affecting it—is becoming a new corporate headache. A survey by CDP, a research firm that works for institutional investors, finds that in almost two-thirds of the world's largest listed companies responsibility for dealing with water problems lies at board level. An increasing number of bosses say water is or will soon become a constraint on their firm's growth. They are right to worry, but most firms are not doing much about the problem.

Dry spells

Companies* that have experienced water-related problems that affect their business 2014, % of respondents by industry

| Industry | % of respondents |
|------------------------|------------------|
| Utilities | 45 |
| Consumer staples | 42 |
| Materials | 40 |
| Energy | 38 |
| Consumer discretionary | 25 |
| Industrials | 22 |
| Health care | 18 |
| IT | nil |

Source: CDP

* Largest 500 companies in FTSE Global Equity Index

Session 2: Responding to water challenges

CDP's water program

To eliminate the negative effects of water use and catalyse meaningful action to protect the resource

Investor 2015

617 investor signatories

US\$63 trillion in assets

Supply Chain 2015

14 global purchasers

US\$216 billion procurement spend

2014 supply chain members

▼ Catalysing water stewardship amongst suppliers allows purchasing companies to increase their knowledge of indirect water impacts whilst promoting actions to reduce risks and increase supply chain resilience

BMW Group  **COLGATE-PALMOLIVE COMPANY**

 **Imperial Tobacco**

 **BRITISH AMERICAN TOBACCO**







JUNIPER NETWORKS



L'ORÉAL

NISSAN MOTOR CORPORATION
  





PHILIP MORRIS INTERNATIONAL



Questionnaire will be sent to over 3000 companies in 2015

Targeted industry sectors include:

- Apparel
- Chemicals
- Food & beverage
- Metals & mining
- Oil & gas
- Pharmaceuticals
- Power generation
- Semiconductors

Companies outside these sectors and regions are welcome to respond voluntarily; to register email respond@cdp.net

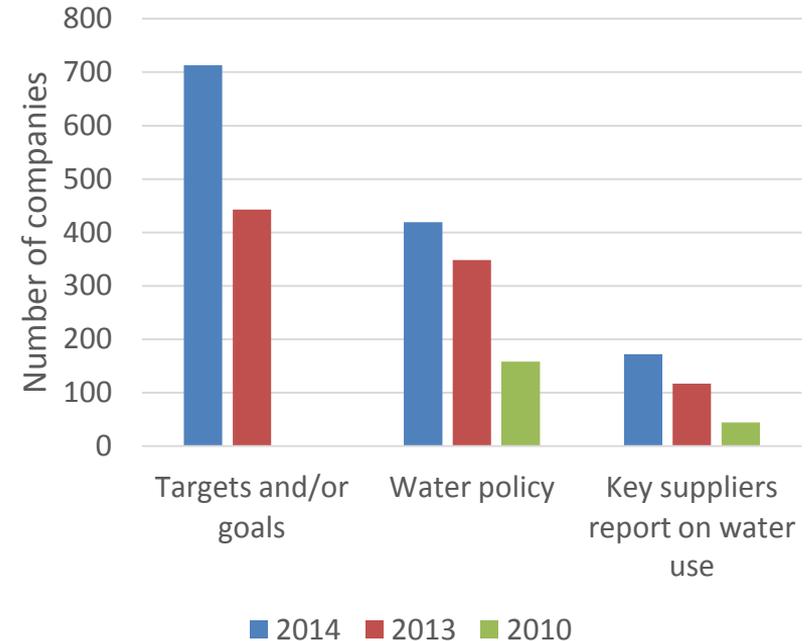


Corporate action: CDP's findings

Results show companies take action to reduce water impact

▼ Growth in the number of companies demonstrating water management and performance:

- 713 companies responding to the water questionnaire reported targets and/or goals compared with 443 companies in 2013, a 61% increase;
- The number of companies that have a water policy, strategy or plan has increased from 158 in 2010, to 348 in 2013, to 419 in 2014; and
- The number of companies requiring key suppliers to report their water use, risks and management has increased from 44 in 2010, to 117 in 2013, to 172 in 2014.



Positive actions by the Global 500 in 2014

- ▼ 82% companies are setting targets;
- ▼ Responsibility for water issues lies at board level in 62% of respondents (up from 58% in 2013);
- ▼ The vast majority of companies (90%) integrate water into their group-wide business strategies; and
- ▼ 75% report that water offers operational, strategic or market opportunities.

Water opportunities 2014 reported by the G500

78

Sales of new products and services

COST SAVINGS

103



6 Staff retention

88

Improved water efficiency



71 brand value
Increased

Company action: case studies

Merck – investing in water quality

▼ In 2011, Merck established a **US\$100 million capital fund** to invest in the company's water and wastewater infrastructure with the goal of **reducing water demand**, improving water and wastewater **quality**, strengthening its compliance position, improving operational **efficiency** and **reducing the discharge** of active pharmaceutical compounds and biologics from manufacturing plants.

▼ To date, over **35 projects** have been chartered and US\$67 million committed. Full benefit realization of the capital investments is expected by 2017 and is forecast to **reduce demand** for fresh water by 1.5 billion gallons per year and to **cut annual operating costs** by approximately US\$1.5 million.





We know that stakeholder conflicts could have a negative impact on our business by preventing cooperative relationships and reliability of supply. As water scarcity increases, increased conflict is predicted. In an effort to mitigate this risk we have begun a process of dialogue with local stakeholders.

Takeda Pharmaceutical Company Limited



EDF – partnerships with local farmers

- ▼ In the Durance hydro dams (France), EDF encourages farmers to save water through an agreement which commits EDF to pay back part of the savings if targeted objectives are reached over a six year period.
- ▼ As a result, agricultural water consumption decreased by 35%.
- ▼ This is a ‘win-win’ situation not only because it allows EDF to increase the availability of water resources (and thus hydroelectric power) in dams but also because it increases the productive efficiency during peak demand.



Sasol Limited – a shared approach to scarcity

- ▼ Sasol require a reliable supply of water of good quality to run its operations - primarily to generate steam and cool processes - **making water a vital input for operations**
- ▼ The Sasol risk management process is used to identify and rank Sasol's top water risks and further **annual strategy reviews** are undertaken.
- ▼ An **annual detailed analysis** of the water risk facing South African operations which are **dependent** on the integrated Vaal River System is undertaken and further monitoring of key changes and developments around the top risk is reported on quarterly.
- ▼ In response to physical risk, particularly water scarcity, we have initiated **water conservation partnerships with municipalities** to drive beyond fence line water savings to advance **water security for all catchment users**. In an effort to mitigate regulatory risk, we pro-actively **engage** with the National Department of Water Affairs on policy and regulatory matters in South Africa.



Session 3: CDP's 2015 water information request

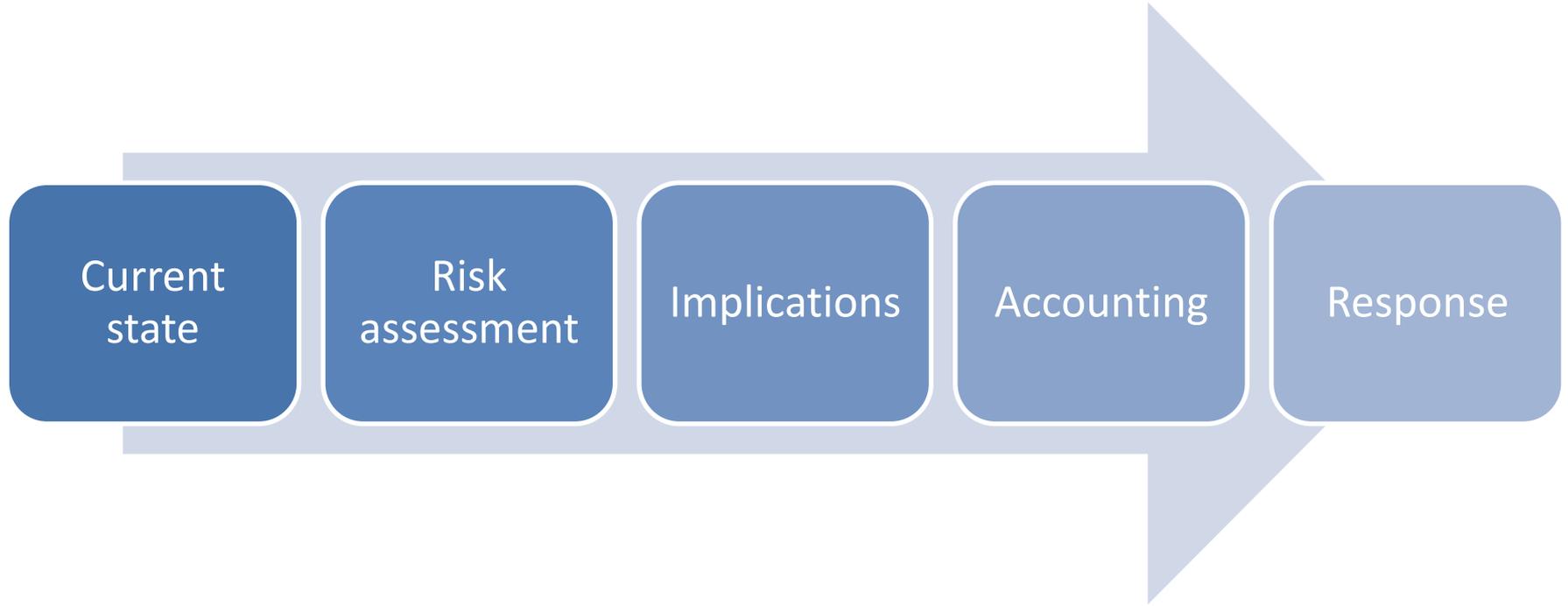
Why to respond and where to start



Water reporting challenges

- ▼ Water is a local or hyper-local issue
- ▼ Water issues are complex
- ▼ Few agreed standards
- ▼ Best practice is emerging

CDP's water information request – a journey to stewardship



Where to start: Water reporting roadmap

| Water questionnaire | 0. Non-responder | 1. Basic response | 2. Developing ability | 3. Complete response | 4. Best practice |
|-----------------------------------|-------------------------|--------------------------------|---|--|---|
| 0. Introduction | W0.1, W0.2, W0.3, W0.4, | W0.1, W0.2, W0.3, W0.4 | W0.1, W0.2, W0.3, W0.4 | W0.1, W0.2, W0.3, W0.4 | W0.1, W0.2, W0.3, W0.4 |
| 1.Context | | W1.1, W1.2a, W1.2b, W1.3, W1.4 | W1.1, W1.2, W1.2a, W1.2b, W1.2c, W1.3, W1.3a, W1.3b, W1.4, W1.4a, W1.4b | W1.1, W1.2, W1.2a, W1.2b, W1.2c, W1.3, W1.3a, W1.3b, W1.4, W1.4a, W1.4b | W1.1, W1.2, W1.2A, W1.2b, W1.3, W1.3a, W1.3b (see scoring methodology for leadership points for this section) |
| 2. Risk assessment | | W2.1,W2.2, W2.3, W2.4, W2.5 | W2.1, W2.2, W2.3, W2.4, W2.4a, W2.4b, W2.5, W2.6, W2.7, W2.8 | W2.1, W2.2, W2.3, W2.4, W2.4a, W2.4b, W2.5, W2.6, W2.7, W2.8 | W2.1, W2.2, W2.3, W2.4, W2.4a, W2.4b, W2.5, W2.6, W2.7, W2.8 (see scoring methodology for leadership points for this section) |
| 3.Water risks | | W3.1, W3.2, | W3.1, W3.2, W3.2a, W3.2b, W3.2c, W3.2f or W3.2g | W3.1, W3.2, W3.2a, W3.2b, W3.2c, W3.2d, W3.2e/f/g (level of detail in each response increases) | W3.1, W3.2, W3.2a, W3.2b, W3.2c, W3.2d, W3.2e/f/g (see scoring methodology for leadership points for this section) |
| 4.Water opportunities | | W4.1 | W4.1, W4.1a, W4.1b, W4.1c | W4.1, W4.1a, W4.1b, W4.1c (level of detail in response increases) | W4.1, W4.1a, W4.1b, W4.1c (level of detail in response increases) |
| 5.Facility level water accounting | | | W5.1, W5.2, W5.3 | W5.1, W5.1a, W5.2, W5.2a, W5.3, W5.4 | W5.1, W5.1a, W5.2, W5.2a, W5.3, W5.4 (see scoring methodology for leadership points for this section) |
| 6.Governance & strategy | | W6.1, W6.2, W6.3 | W6.1, W6.2, W6.2a & W6.2b or W6.2c, W6.3, W6.3a | W6.1, W6.2, W6.2a & W6.2b or W6.2c, W6.3, W6.3a, W6.4 | W6.1, W6.2, W6.2a & W6.2b or W6.2c, W6.3, W6.3a, W6.4 (see scoring methodology for leadership points for this section) |
| 7.Compliance | | W7.1 | W7.1, W7.1a, W7.1b | W7.1, W7.1a, W7.1b, W7.1c | W7.1, W7.1a, W7.1b, W7.1c |
| 8.Targets and initiatives | | W8.1 | W8.1, W8.1a, W8.1b | W8.1, W8.1a, W8.1b (level of detail in response increases) | W8.1, W8.1a, W8.1b (see scoring methodology for leadership points for this section) |
| 9. Linkages and Trade-offs | | W9.1 | W9.1 | W9.1, W9.1a | W9.1, W9.1a |

Plan ahead to progress through levels and achieve best practice in water stewardship

CEO Water Mandate disclosure guidelines



The CEO Water Mandate

▼ ceowatermandate.org



Third party water risk tools

- ▼ FAO/AQUASTAT
- ▼ GEMI Local Water Tool
- ▼ Maplecroft Global Water Security Risk Index
- ▼ UNEP Vital Water Graphics
- ▼ WBCSD Global Water Tool – free, water availability only
- ▼ WRI water stress definition
- ▼ WRI Aqueduct – free, has sector-specific information
- ▼ WWF-DEG Water Risk Filter – free, knowledge base

Water Action Hub

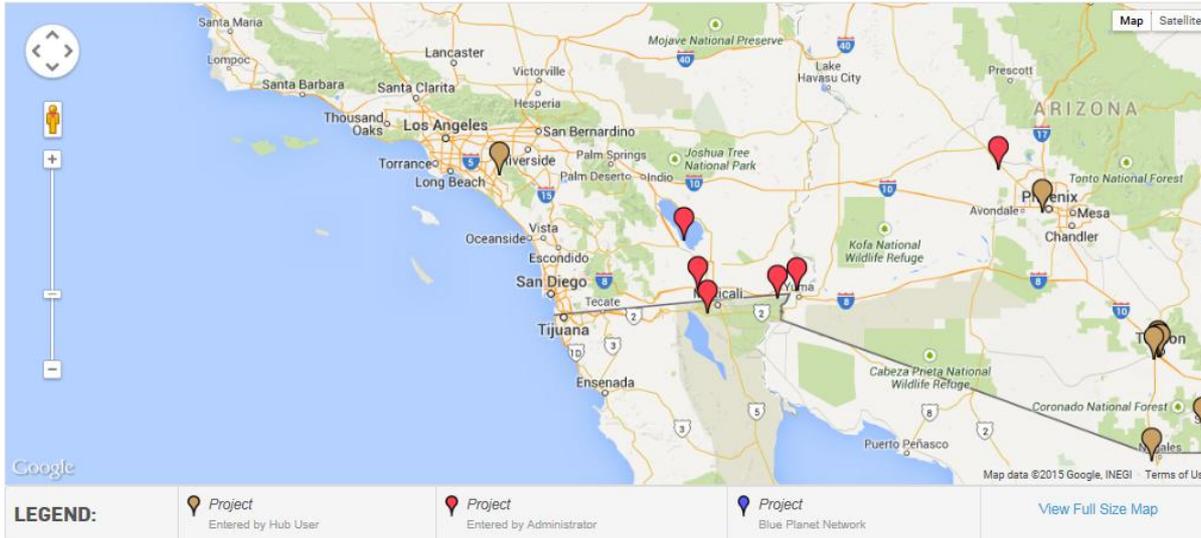
United Nations Global Compact > Business Partnership Hub > Water Action Hub

Join | Log In | Translate

Water Action Hub ORGANIZATIONS PROJECTS REGIONS ACTION AREAS RESOURCES

PROJECT MAP

313 Organizations 152 Projects 311 Project Locations



<https://wateractionhub.org/>

CDP's water information request

▼ Six modules

1. Current state (context, company-wide water accounting, supplier reporting, water impacts)
2. Risk assessment (procedures and requirements)
3. Implications (water risks & opportunities)
4. Accounting (facility-level water accounting)
5. Response (governance & strategy, compliance, targets and initiatives)
6. Linkages and trade-offs

Early release, final version to be published in January 2015

CDP's 2015 Water Information Request

CDP works to catalyze action on corporate water stewardship to safeguard water resources and address the global water crisis. In 2014, 573 investors with over US\$60 trillion in assets backed CDP's water information request.

The following set of questions form CDP's 2015 water information request. Companies are asked to answer these questions in the Online Response System (ORS) provided by CDP through its website. As such, this document is a representation of the request and whilst the questions will remain the same, the format may differ online particularly where drop down options and tables have been included for ease of response. Guidance is available on the CDP website from December 2014 which details all of the options available and provides screen shots of the ORS to aid companies in completing the request.

We request a reply to the following questions by 30 June 2015.

Please respond to the information request using our Online Response System (ORS). This is the same ORS as is used for CDP's 2015 climate change and forests information requests. In early February 2015, instructions on how to access the ORS will be sent to you by email. If you are unable to respond via the ORS, please email respond@cdp.net. In addition to investor signatories to the letter requesting your response which accompanies this request, you may also be asked to share your response with the members of CDP's supply chain program if they are your customers. In this case, you will be notified by email in early April 2015 and asked for your approval for this.

We encourage companies to consult CDP's 2015 water reporting guidance at www.cdp.net/guidance as well as refer to the guidance within the ORS. CDP's signatories are requesting this information to increase their confidence that you are aware of the water risks your organization faces as well as working to develop comprehensive risk mitigation strategies whilst realizing greater strategic advantage. Please answer the questions as comprehensively as possible. Where you do not have all of the information requested, please respond with what you have as this is more valuable to your investors than no response at all.

Where questions have been amended from 2014 to 2015 this is indicated next to the relevant questions.

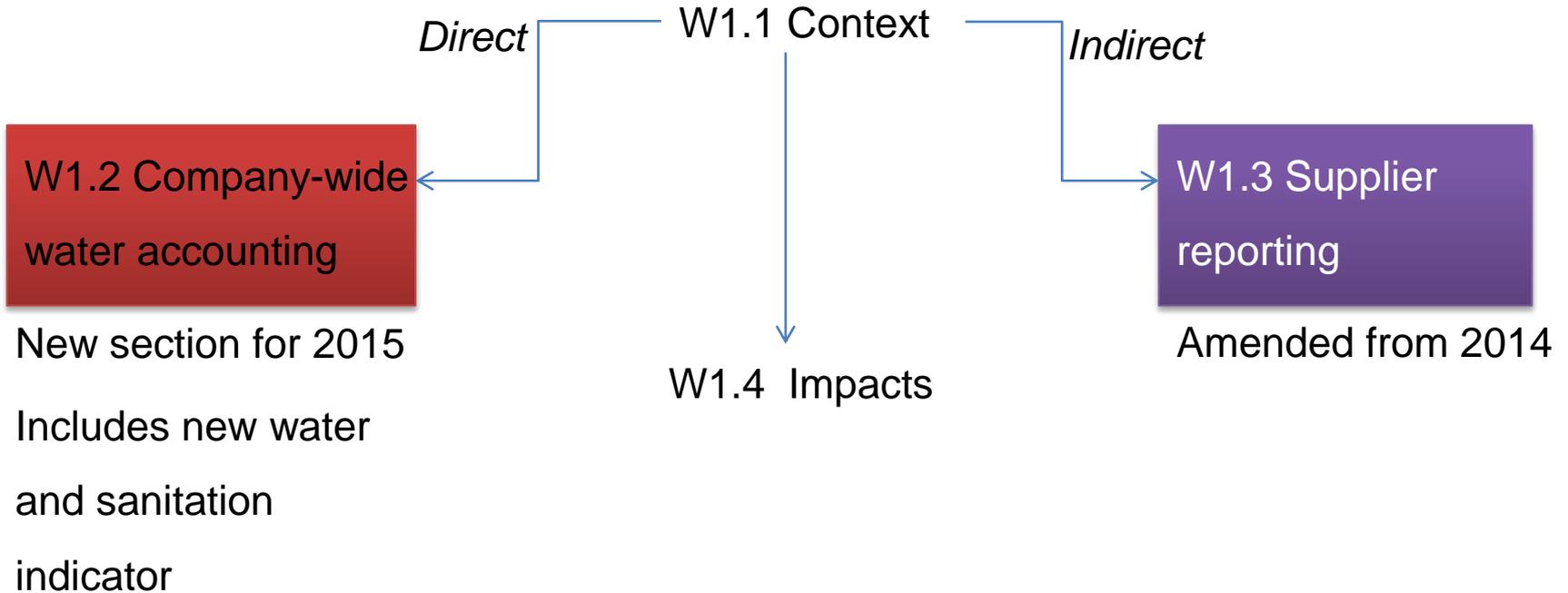
Current State module

Aims to establish the dependency of a company's business (both direct and indirect) on access to adequate volumes of good quality water for their current operations and future growth.

▼ **For companies:** Companies will need to assess how important access to adequate volumes of good quality water is to their organization, throughout their value chain, to begin to understand where and how water may affect current and future growth plans.

▼ **Investor insight:** Investors seek to understand the importance of water to a company and how water might impact current and future growth potential at the corporate level.

Current State: W1.Context



Current State: W1.Context section

New questions:

- ▼ Feedback public consultation 2014
- ▼ Opportunity for companies with no substantive risk to demonstrate management of water

Amended questions:

- ▼ Moved into Current State to provide contextual information on supply chain before Risk Assessment module
- ▼ Legal implications from word 'require'; changed to 'request'
- ▼ Change from 'key' to 'all' suppliers

Risk assessment module

Aims to establish the processes and procedures companies have implemented in their risk assessment. In absence of a globally recognized verification standard on water risk assessments, the section provides insight as to the robustness and integrity of an organization's risk assessment, establishing how well a company understands the full range of potential water risk drivers.

▼ **For companies:** Companies should be able to provide evidence of a robust risk assessment including information as to the frequency, geographic scale and timeframe assessments are completed and identify the contextual issues and stakeholders included.

▼ **Investor insight:** Investors seek confidence that a company has evaluated all potential water risk drivers; they are looking for evidence that organizations have a complete and comprehensive understanding of their exposure to water risk.

Risk assessment: W2.Procedures and requirements section

Water risks assessed

- ▼ Risk assessment procedures
- ▼ Frequency
- ▼ Methodologies
- ▼ Contextual issues considered
- ▼ Stakeholders considered
- ▼ Evaluation of water risks in

future growth strategy? = Amended question from 2015

Water risks not assessed

- ▼ Degree of importance to business
- ▼ In progress?
- ▼ Lack of internal resources
- ▼ No instruction from management

Implications module

Aims to establish the consequences (risks) of the details provided in earlier sections. Companies are also invited to share any operational or market opportunities that could substantively benefit their business.

▼ **For companies:** Companies should provide information for those risks and opportunities that impact their business at the corporate level (risks and opportunities, current or future, that could generate a substantive change in business, operations, revenue or expenditure) as well as the associated mitigation and exploitation strategies.

▼ **For investors:** Companies should provide information for those risks and opportunities that impact their business at the corporate level (risks and opportunities, current or future, that could generate a substantive change in business, operations, revenue or expenditure) as well as the associated mitigation and exploitation strategies.

Implications: W3. Water risks

- ▼ Report corporate level substantive water risk only
- ▼ See water guidance document for reporting assistance
- ▼ Amended questions: W3.2a (2014) is now W3.2a and W3.2b (2015)

Implications: W3. Water risks

If Yes, direct operations and value chain; if Yes, direct operations only

W3.2a Please provide the number of facilities¹ per river basin exposed that could generate a substantive change in your business, operation expenditure and the proportion of total operations this represents

| Country | River basin | Number of facilities | Proportion of total operations exposed to risk within river basin (%) |
|--------------------------|--|----------------------|---|
| [Country drop down list] | <ul style="list-style-type: none"> List of basins Not known Other, please specify | [numeric response] | <ul style="list-style-type: none"> Less than 1% 1-5 6-10 11-20 21-30 31-40 41-50 51-60 61-70 71-80 81-90 91-100 |
| Add Row | | | |

W3.2b Please provide the proportion of financial value that could be affected at river basin level associated with the facilities listed in W3.2a

| Country | River basin | Financial reporting metric | Proportion of chosen metric that could be affected within the river basin | Comment |
|--------------------------|--|---|---|----------------------------------|
| [Country drop down list] | <ul style="list-style-type: none"> List of basins Not known Other, please specify | <ul style="list-style-type: none"> % cost of goods sold % global revenue % global production capacity % generation capacity % global production volume barrels of oil equivalent (BOE) Other, please specify | <ul style="list-style-type: none"> Less than 1% 1-5 6-10 11-20 21-30 31-40 41-50 51-60 61-70 71-80 81-90 91-100 | [open text: 1000 characters max] |
| Add Row | | | | |

Implications: W3. Water risks

- ▼ *Report corporate level substantive water risk only*
- ▼ *See water guidance document for reporting assistance*
- ▼ Amended questions: W3.2a (2014) is now W3.2a and W3.2b (2015)
- ▼ The term ‘facilities’ can be interpreted broadly

Implications: W4. Water opportunities

- ▼ **Investor insight:** Investors assess the data provided to understand whether:
 - ▼ A company is exposed to any business opportunities related to water;
 - ▼ A company has a strategy to realize these risks; and
 - ▼ The estimated timeframe within which to achieve expected outcomes

No question changes from
2014

Accounting module

Asks companies to disclose facility level water accounting data in an effort to understand how a company uses and impacts water resources at 'hotspot' or 'at risk' facilities identified in W3.2a (Implications).

▼ **For companies:** Companies are asked to provide accounting data of key water aspects for those facilities determined to be 'at-risk'.

▼ **Investor insight:** Investors use a company's ability to measure, monitor and disclose key accounting data as a proxy for sound risk assessment and management at those facilities.

Accounting: W5. Facility level water accounting



Response module

Aims to establish the corporate response to water.

▼ **Investor insight:** Similar to the accounting section, investors use evidence of good corporate governance as a proxy for sound water management at a local level. Key data points include the level of direct responsibility for water within an organization, the comprehensiveness of the water policy and what, if any, fines/penalties a company was subject to.

▼ **For companies:** This section is comprised of three subsections;

- Governance & Strategy - Has a company created systems and developed plans designed to improve its water performance and reduce water-related risks and impacts?
- Compliance - Does a company comply with applicable regulations, benchmarks and standards?
- Targets and initiatives - Has a company set company wide targets (quantitative) or goals (qualitative) related to water?

Response: W6. Governance & strategy

- ▼ Highest level of accountability
- ▼ Frequency of briefing
- ▼ Positive and negative influences on your business strategy
- ▼ Water policy content
- ▼ Investment and operating costs related to water

No question changes from 2014 – restructure to allow more tailored responses and greater comment

Response: W7. Compliance

W7.1

Identify significant/not significant breaches; amended to include enforcement orders



W7.1a

Amended to include frequency of occurrence in reporting year



W7.1b

% of total operations associated with breaches. **New question for 2015** – based on CEO Water Mandate corporate water disclosure guidelines



W7.1c

% of OPEX compared to last year

Response: W8. Targets and initiatives

- ▼ Corporate response to water risk and opportunities; (facility level targets can be reported in the response strategy column in the W3. water risks section)
- ▼ Targets should reflect the risks reported and be measurable
- ▼ Motivation behind targets very important

Linkages and trade-offs: W9. Linkages and trade-offs

- ▼ Linkages and trade-offs identified and/or considered when taking actions to manage risks or pursue opportunities related to water and other environmental issues
- ▼ Reporting on holistic management of environmental issues
- ▼ 2016 – may develop this question further

CDP offers a range of free and extensive support

- ▼ CDP water questionnaire guidance document
- ▼ CDP water scoring methodology
- ▼ CDP webinars, workshops and guidance
- ▼ CDP data portal <https://data.cdp.net/>
- ▼ CDP water reports
- ▼ CDP alliances
- ▼ CDP reporter services membership
- ▼ CDP [water consultancy partnerships](#)



Remember

- ▼ Your **investors** and **customers** request your disclosure
- ▼ Water disclosure can help you **cut costs, mitigate risks, enhance brand value** and **demonstrate** leadership
- ▼ Disclosing to CDP can **reduce reporting burden, drive performance** internally and **benchmark** against peers
- ▼ Extensive **guidance** including a menu of live webinars are available on our website: <https://www.cdp.net/en-US/Pages/guidance-water.aspx>
- ▼ Response deadline **30th June 2015**



Guidance for companies reporting on water on behalf of investors & supply chain members 2015

Water Questionnaire 2015

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Session 4: Increasing CDP's impact: water scoring

Why score water?

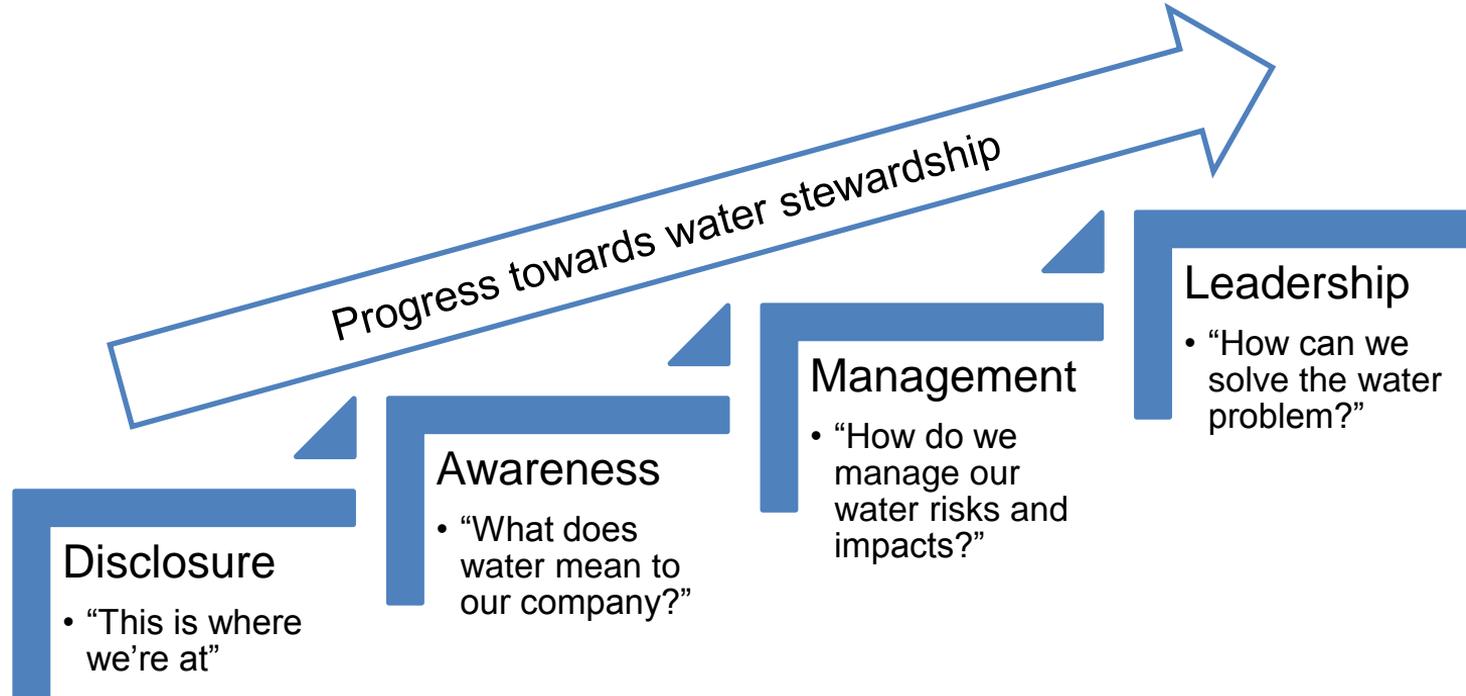
▼ Water scoring is a tool to drive action on water stewardship



Impacts of scoring

- ▼ Positive behaviour change
- ▼ Data quality
- ▼ Recognition
- ▼ Benchmarking
- ▼ Education

CDP's approach: scoring in levels



Scoring process and thresholds

- ▼ Scores will be calculated as a percentage
- ▼ A minimum score or threshold must be achieved on one level before a company will be scored on the next level.
- ▼ This incentivises:
 - complete reporting
 - action based on assessment of risks and impacts
 - consistent progress across different areas
- ▼ The score in the highest of the 4 levels achieved determines the final score

The approach: CDP water scoring by levels

What the levels will measure: Disclosure

- ▼ **Disclosure** – measures completeness and comprehensiveness of the CDP response
- ▼ Early stage companies can still get a good disclosure score
- ▼ Every question has disclosure points available
- ▼ Disclosure is the first step because: it is the place to start

What the levels will measure: Awareness

- ▼ **Awareness** will be automatically scored based on a subset of questions
- ▼ Identifies and rewards companies who have looked at the implications of water for and on their business
- ▼ Recognises high level, contextual knowledge of water issues
- ▼ It's the second step because: awareness is a basis for action

What the levels will measure: Management

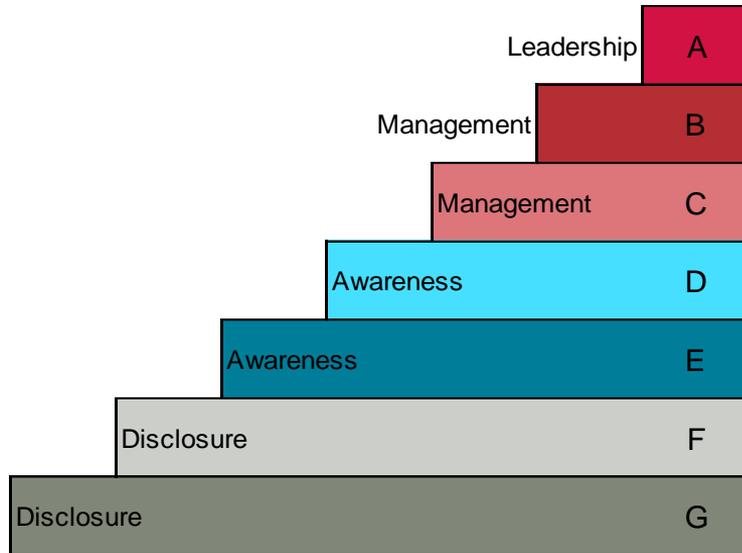
- ▼ **Management** criteria relate to water management actions
- ▼ Management scoring seeks company-specific understanding of water related issues
- ▼ Management scoring will be manual
- ▼ Management is the third step because: broad-based action precedes developing excellence

What the levels will measure: Leadership

- ▼ Leadership will be based on companies disclosing particular actions which mark them as leaders, as well as high scores across all other levels
 - ▼ Leadership will be scored manually
 - ▼ Leadership scoring requires detailed company-specific explanations
 - ▼ The requirements to achieve leadership level in 2015 will be challenging, but achievable
-

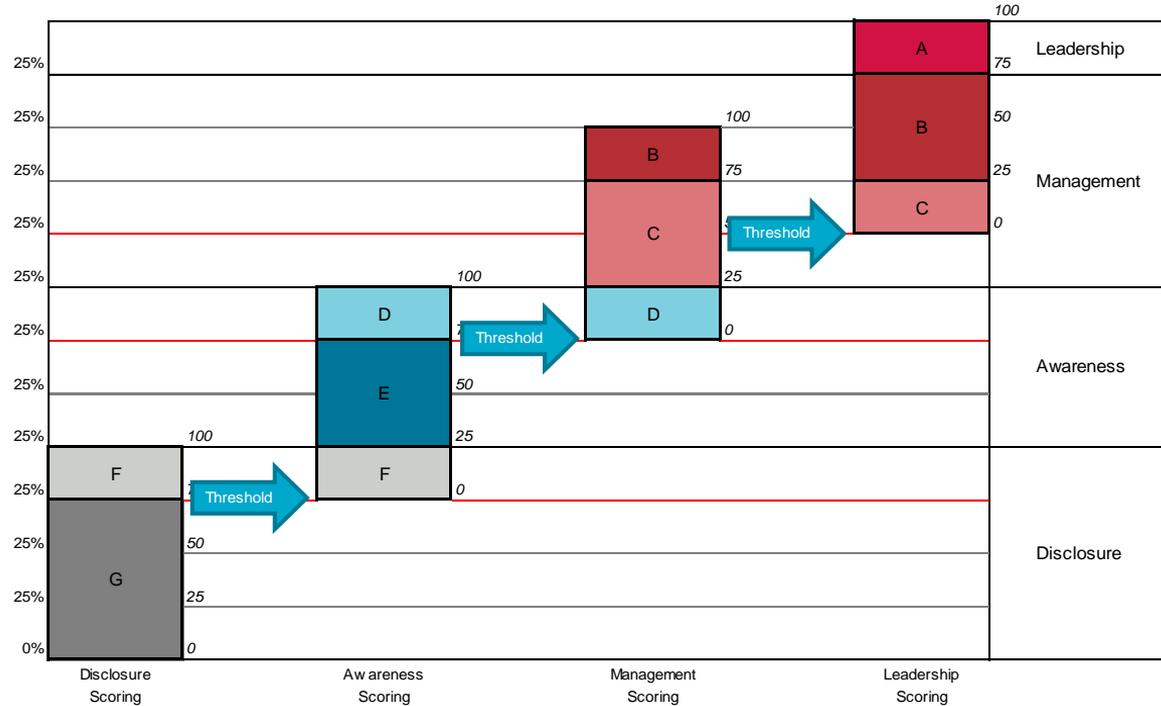
How the scores will be reported

2015 Water scores are bands A-G



- ▼ Each score also corresponds to a scoring level
- ▼ A is the highest score and corresponds to leadership level
- ▼ There are 2 bands in each of the other scoring levels

How the bands relate to the 4 scoring levels



2015 Water scoring categories

Water scoring categories 2015

- ▼ Categories are groupings of questions by topic
- ▼ They provide a breakdown of a company's score
- ▼ Categories indicate areas of strength and weakness
- ▼ Shared with responding companies and investors to give feedback on a company's performance

2015 Water categories

▼ Context

▼ Risk
assessment

▼ Governance &
strategy

▼ Risks & response:
direct operations

▼ Risks & response:
supply chain

What the categories measure

| | |
|-------------------------|---|
| Context | Measures understanding of how water impacts the business, and how the business impacts on water and the ability to consolidate and report this information. |
| Risk assessment | Measures ability to comprehensively assess water related risks |
| Governance and strategy | Measures the extent to which the company has policies and structures in place to actively manage water at the corporate level. |

Risks and response categories

▼ These categories allow a more detailed look at the main sources of risk for a company, and its response

| | |
|-------------------------------------|---|
| Risks & response: direct operations | Measures the ability to account for water data and water risks from direct operations |
| Risks & response: supply chain | Measures the ability to gather information on water and water risks from the supply chain |

Session 5: Discussion

Discussion: Corporate water issues in Turkey

- ▼ What are the key water issues in Turkey, and how do they affect your company?
- ▼ Collecting better water data – challenges and how to overcome them
- ▼ Stakeholder engagement on water – what dialogues *are* happening, and what dialogues *should be* happening now?

