

Catching up with the leaders: Accelerating corporate water stewardship in Europe

CDP European Water Report 2017

Written on behalf of 634 investors with EUR 65 trillion in assets





About this report

CDP's water program acts on behalf of 634 institutional investors, representing EUR 65 trillion in assets. They use the water data collected via CDP to engage with portfolio companies, inform investment decisions and catalyze change.

The program seeks water-related disclosure from the largest publicly listed companies globally, focusing only on those companies that have the greatest ability to impact on or be impacted by freshwater resources. In 2016, CDP requested water information from 1,252 companies globally, of which 607, or 48%, responded. This compares with 1,073 in 2015, of which 405 (38%) responded.

In 2015, CDP launched the expansion of our water program in Europe, with the generous support of the **Stavros Niarchos Foundation** and **SUEZ**. Through this expansion, CDP aims to drive a transformation among European companies, from passive users to proactive actors of corporate water stewardship.

This second European water report summarizes and analyzes the responses made by the 121 European companies that disclosed corporate water data in 2016. It builds on the key findings from 2015 to provide an update as to the current state of corporate water stewardship in Europe and outlines the key actions necessary for companies to become leaders.

It is aimed at companies facing water risks and opportunities and investors seeking to better understand how water issues might impact their portfolios.

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CDP foreword

Morgan Gillespy, Head of Water, CDP



As governments and companies work to implement the Paris Agreement and meet the SDGs, CDP will be shining a spotlight on progress towards a water secure world for all.

After the breakthroughs of 2015 – the Paris Agreement and the Sustainable Development Goals (SDGs) – business and investors begin 2017 facing uncertainty about the policy response to the world’s sustainability challenges. In the face of this uncertainty, however, the corporate response is only getting stronger. CDP has seen growing levels of disclosure to our water program as well as rising numbers of companies attaining an ‘A’ in our scoring methodology.

The reason for that increased corporate commitment can be found in the growing sustainability threats that companies face. A changing climate poses severe risks of disruption to water resource availability and quality. For the fourth year in a row, the World Economic Forum cited water crisis as a top-three global risk, in terms of its potential impact.¹ Meanwhile, responses to climate change are, themselves, placing greater demands on water resources. Research by CDP found that 24% of corporate activities to reduce greenhouse gas emissions depend on a stable supply of good quality water.

This is the context in which CDP’s water program operates. It is backed by 634 institutional investors, representing EUR 65 trillion in assets, who want to understand how companies in key water-exposed sectors are managing the risks – and seizing the opportunities – associated with growing demand for water as the global climate changes.

Last year, CDP requested water-related information from 288 European companies; 121 (42%) responded, up from 113 (38%) of the 299 European companies approached in 2015. The analysis of their responses forms the basis of this report, the second Europe-focused study carried out by the program.

There is much to celebrate. European companies are over-represented in the vanguard of corporate water stewardship. Out of the 25 companies in CDP’s 2016 Water A List – which comprises those respondents that achieved the highest rating in our water scoring methodology – half are based in Europe. In many metrics, such as those related to water governance, European respondents are substantially ahead of global averages.

But beyond the leaders, there is much to do – starting with disclosure itself. Of most concern is that the majority of European water-exposed companies approached (58%) declined to respond to a request from their investors to disclose crucial investment-relevant information. This clearly needs to change. Among respondents, there is a growing gulf between leading European companies and the remainder. Crucial metrics, relating to risk assessment and engagement beyond direct operations, are still poorly addressed by a majority of European companies. This is creating risk for investors, and for the companies themselves.

As governments and companies work to implement the Paris Agreement and meet the SDGs, CDP will be shining a spotlight on progress towards a water secure world for all. High quality information will signpost the way to this future for companies, investors and governments – and never has there been a greater need for it.

Morgan Gillespy
Head of Water,
CDP



SUEZ has collaborated successfully with CDP to support the development of its Water Program in Europe. Notwithstanding the increase in the response rate to the questionnaire, progresses remain to be done to sustain the involvement of companies.

SUEZ foreword

Jean-Louis Chaussade, CEO, SUEZ

Last year was the warmest ever recorded on Earth since the beginning of temperature measurements at the end of the 19th century, thus breaking the consecutive records of 2014 and 2015. In addition, the disruption of the climate has already led to an increase in the frequency and intensity of extreme weather events. It is also causing the growth in the number and lifespan of droughts, and threatens the food security of a global population that may exceed 9 billion inhabitants by 2050.

For the first time in the history of the UNFCCC, a Water Day was organized during last year’s COP22. It brought together international coalitions on water, which comprise more than 450 organizations throughout the world, namely the Business Alliance for Water and Climate, initiated by SUEZ and CDP, the Paris Pact on Water and Adaptation to Climate Change in the Basins of Rivers, Lakes, and Aquifers, and the Megacities Alliance. In Marrakech, the three Alliances created the Global Water Alliances Coalition, making a common commitment to rally more partners, to promote good practice and to support the development of new field projects focused on resilience to climate change-related water security issues.

The engagement of the private sector is now considered essential to the efficient implementation of climate action. This is a success for those who shaped and advocated for a new role for companies, directed towards the preservation of the Common Good. I believe that CDP played a crucial role in achieving this paradigm shift, by incentivizing companies to increase their level of transparency, by helping them to improve their global performance, and by supporting collaborative and sectorial climate initiatives.

For almost three years, SUEZ has collaborated successfully with CDP to support the development of its Water Program in Europe. Notwithstanding the increase in the response rate to the questionnaire, more remains to be done to sustain the involvement of companies. It is necessary to work in more depth to identify water-related risks and prioritize tangible solutions for handling them. I think specifically about solutions that address the control of water consumption, such as smart metering or drip irrigation. Natural-based water treatment infrastructure, such as artificial wetlands, can considerably reduce the impacts of industrial parks’ discharges on the natural environment. Alternative water resources, such as treated wastewater or desalinated water, could contribute to reducing water withdrawal.

In addition, I am convinced that the circular economy model will not only help us to reduce the pressure on water resources, but it will also enable us to reduce wastage in food supply systems, whose water footprint is significant. This is the orientation taken by several French companies which have recently published their “100 commitments in favor of a circular economy” as part of a working group that I chair at the AFEP. I strongly encourage European companies to follow their example.

Together, let us make this new circular economy model the reference point for global climate action in the areas of greenhouse gas mitigation and water resource preservation!

Jean-Louis Chaussade
Chief Executive Officer,
SUEZ

¹ The Global Risks Report 2017, World Economic Forum

The current state of play

▲▲
A cluster of interconnected environment-related risks – including extreme weather events, climate change and water crises – has consistently featured among the top ranked global risks for the past seven editions of The Global Risks Report.²

World Economic Forum

For companies operating in much of Europe, with its well-developed infrastructure and plentiful rainfall, water security may appear to be of little concern. However, water resources in many parts of the world are under increasing pressure from rapidly growing demand and climate change – and Europe is no exception.

Southern Europe is perennially water-stressed, while climate change is altering patterns of precipitation across the continent as a whole in unpredictable ways. In the winter of 2015-16, the UK saw its worst flooding since 1947. Water quality is a growing issue: Germany faces prosecution in the European Court of Justice over failure to address nitrates pollution from agriculture.

Furthermore, European companies may face serious risks in their supply chains. Prudent water management also requires that they make their contribution to reducing pressure on watersheds on which their direct operations, supply chains and other water users rely.

A stewardship approach to water management is increasingly recognized as the most appropriate framework for meaningful action, enabling companies to safeguard their business and finite water supply. Corporate water stewardship is an approach that allows companies to identify and manage the water-related

risks and impacts they face in their direct operations and value chain, seizing water-related opportunities, and working collaboratively with all water users to ensure sustainable water management. The **European Water Stewardship (EWS)** initiative provides a practical tool with its standard and certification scheme to evaluate the performance of water users and to acknowledge water stewards.

The good news: against our five key action areas, addressed on each of the following five pages, European companies are moving forward, with a number of leaders at the forefront. The bad news is that the laggards are still the majority, with many responders only at the start of their stewardship journey. This performance gap is a concern to investors.



In the coming decades, climate change will pose a major challenge for water management across the EU.³

European Commission



² The Global Risks Report 2017, World Economic Forum

³ The EU Water Framework Directive, ISBN: 978-92-79-36449-5



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.

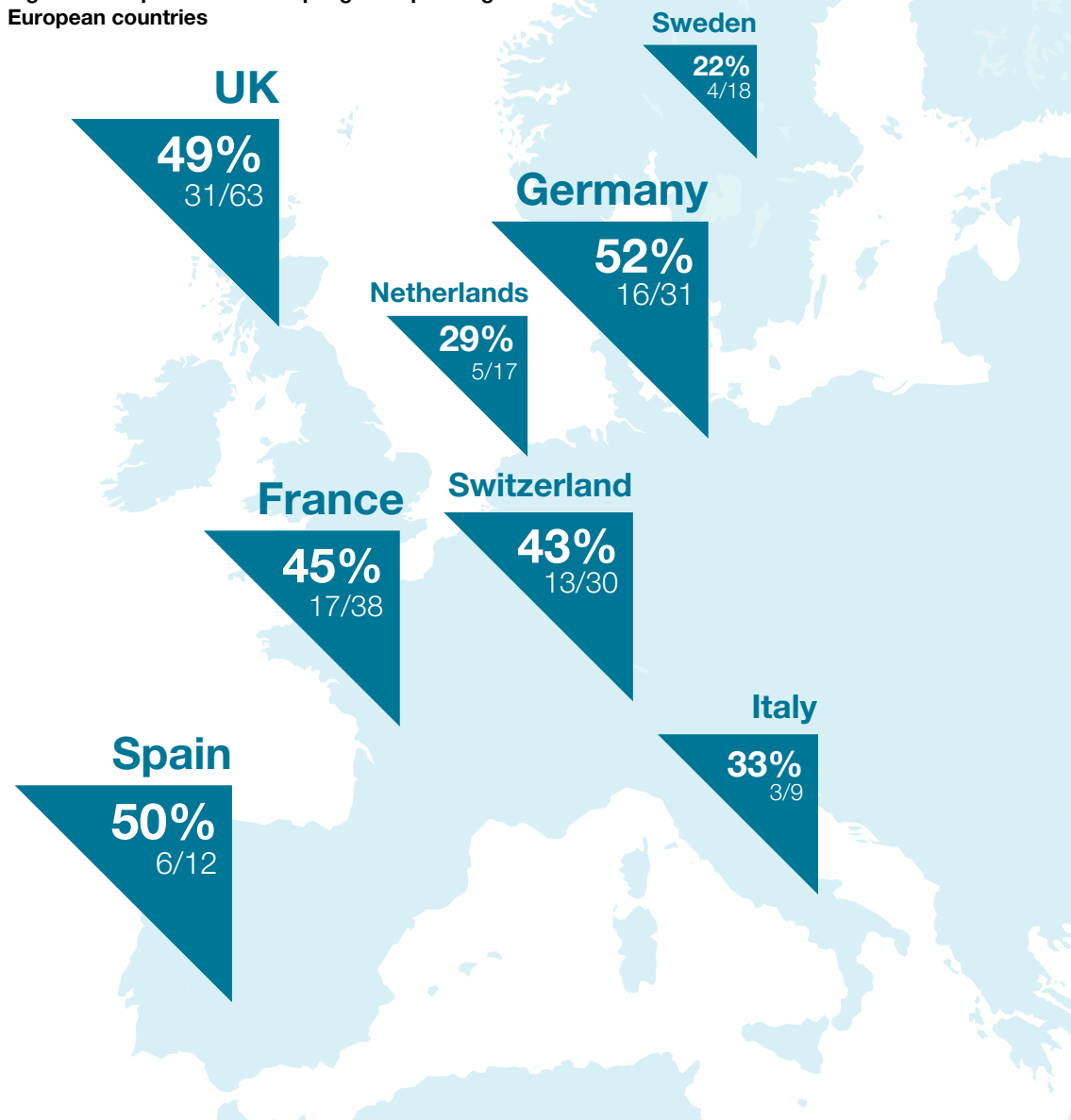
Norges Bank Investment Management
(EUR 801 billion)

Transparency is fundamental to modern economies and efficient investment, and it is the starting point of the work CDP does on behalf of our signatories.

Without transparency on the crucial environmental metrics we track, it is impossible for investors – and difficult for the companies themselves – to understand the risks and opportunities they face and the steps they need to take to ensure water security.

The number of European companies disclosing water data to CDP has increased slightly since 2015, rising to 121 from 113. The 121 responding companies account for about 60% of the market capitalization of all requested companies in Europe. However, 58% of European companies approached failed to disclose critical water-related information.

Figure 1: Response rate of top eight responding European countries

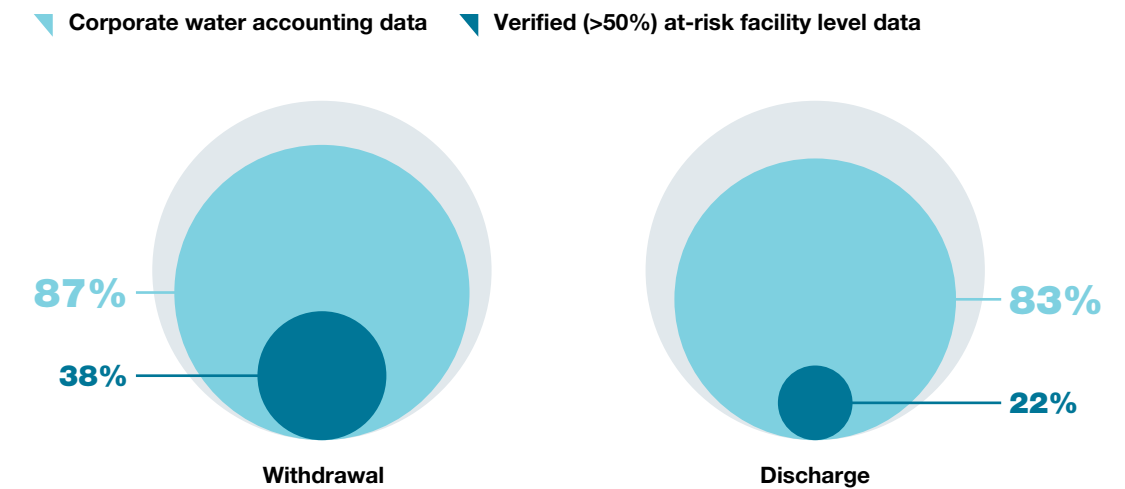


To understand water risk, investors and company management depend on accurate water withdrawal, discharge and consumption data.

Here, most disclosing companies in Europe provide high-level information, such as water withdrawals (reported by 87%) and discharges (83%). However, at a more granular level, a minority (38%) of companies verify (>50%) total volume of water withdrawal data by source for at-risk facilities. The story is similar for at-risk facility discharges – indeed, this figure has fallen to 22% from 28% last year.

Companies should aim to generate water data for all potentially exposed sites, as has been achieved by German pharma group **Bayer**, which centrally monitors this data through its site information system BaySIS.

Figure 2: Percentage of European companies measuring and monitoring water withdrawal and discharge



We firmly believe that the disclosure and external communication of our performance on water management issues has a positive impact on our reputation.

Endesa



Risk assessment

Water risks pose social, environmental and ultimately financial risks. Therefore it is obligatory for all sites, affiliates and operations to include a water risk assessment within their overall risk assessment procedures.

Roche Holding

Data without analysis are just numbers. Companies need to understand the river basin conditions within which their direct operations and supply chains operate, in order to assess how water risks could impact the bottom line: indeed, 36% of respondents report exposure to water risks in both their direct operations and supply chains.

However, this figure is likely to understate the extent of water exposures, given that fewer than half (46%) of companies undertake a comprehensive company-wide risk assessment that covers both direct operations and the supply chain. Similarly, only a third (32%) of companies carry out risk assessment at the river basin scale – which is the most appropriate scale to properly understand and manage water-related risks.

Leading practice involves not only a comprehensive assessment of risk in direct operations and supply chains, but should also take into consideration key stakeholders and contextual issues into the water risk assessment. For example, **Anglo American** engages with local communities to factor their concerns and perspectives into its water risk assessment in order to avoid losing its social license to operate, as it faced previously with demonstrations by local communities outside its platinum operations in South Africa due to water supply issues.

Figure 3: Respondents that factor scenario analysis of contextual issues into their water risk assessment

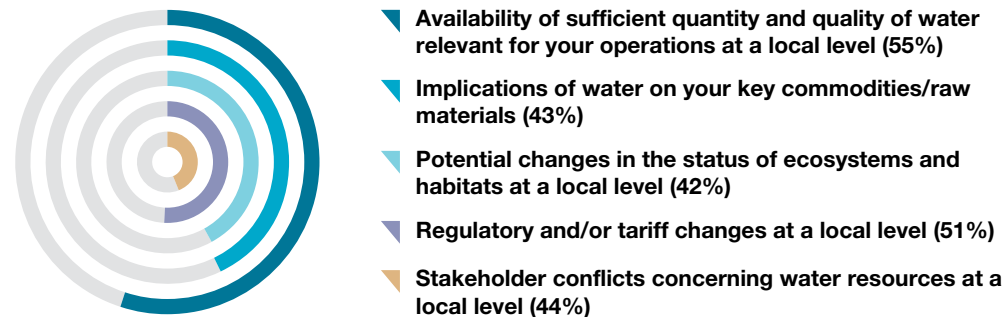


Figure 4: Respondents that factor key stakeholders into their water risk assessment



Figure 5: Respondents' water risk assessment practices and exposure



Governance and strategy

Investors like to see management engagement with issues that present material risks and opportunities. In this regard, European respondents perform well.

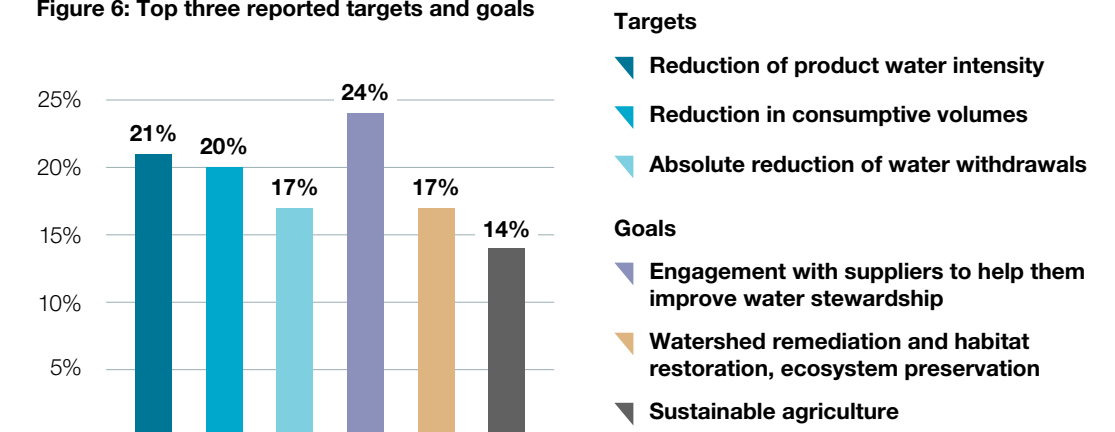
Three quarters (76%) report board-level oversight of water issues, compared with the global average of 69%. Four-fifths (80%) report that they integrate water issues into business strategy.

The majority - 60% - has both quantitative and qualitative targets and goals in place. Encouragingly, water stewardship was the top reported motivation amongst European companies.

For example, **Saint-Gobain's** Water Purchasing Action Plan aims to mitigate water risks and improve water stewardship by sharing best practices with suppliers to help them reduce their water consumption.

Ideally, such targets and goals should extend beyond direct operations. To improve water security for all users in the river basin, beverage company **Diageo** has set a target to replenish, by 2020, 100% of the water used in its final product in water-stressed areas.

Figure 6: Top three reported targets and goals



Context-based water targets

The commitments and targets companies set are fundamental to determining the status of water resources. However, unlike for carbon emissions, no universally accepted standard exists for the setting of meaningful and measurable corporate water targets.

Water security requires collective action and coordination on shared water challenges at a local level. Meaningful targets are therefore those that are closely linked to the context within which a company's direct operations and supply chains are located.

CDP is partnering with the **UN CEO Water Mandate**, **The Nature Conservancy**, **World Resources Institute** and **WWF** to develop a common methodology that will assist companies in setting context-based targets that:

- Are based in science;
- Align with public sector efforts, particularly the targets relating to the United Nations' 2030 Sustainable Development Goals; and
- Reflect the principles of water stewardship.



GlaxoSmithKline's water impact measure addresses the whole value chain, assessing risk based on volumetric availability, quality, regulatory and social factors at a local level.

GlaxoSmithKline

The ultimate objective of corporate attention to water stewardship issues is to enhance shareholder value, whether by reducing risk or seizing opportunities. Indeed, almost three-quarters (68%) of respondents report that they have identified water-related opportunities for their business. However, companies could be doing more: only 42% of those reporting opportunities to CDP also report strategies to realize them.

Collaboration, with suppliers, regulators, local communities and other water users in the river basin, is fundamental to effective water stewardship. The percentage of European respondents requiring key suppliers to report on water use, risks, and management has risen, to 45% from 42% in 2015. Leading companies engaging with their suppliers reported opportunities related to cost savings, efficiency gains and improved business resilience.

For example, Germany-based sportswear company **Adidas** is working with its cotton supply chain to move by 2018 to 100% organic cotton, which is produced under strictly defined criteria, including water consumption per unit of crop produced.

In addition, cosmetics company **L'Oréal** has used campaigns around water issues to build its brand among concerned consumers.

Figure 7: Top five reported opportunities

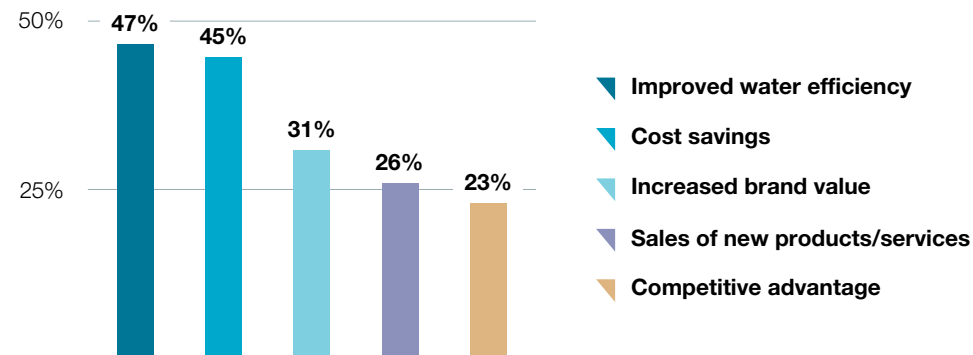
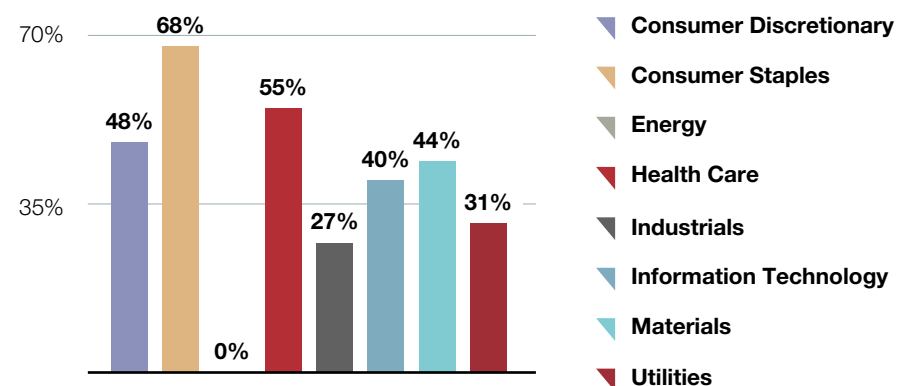


Figure 8: Respondents requesting their suppliers report on their water use, risks and/or management



A call to action

CDP has developed a set of leadership indicators to track a company's progression towards best practice in water management (see page 15).

This year's analysis reveals that, overall, much needs to be done by Europe's water-exposed companies to close the gap with the A list, to ensure their water security and the water security of those with whom they and their suppliers share water resources.

The investors backing the CDP water program want to see companies:

- Respond to the information request. Corporate disclosure is a crucial first step towards water stewardship. Without transparency, investors cannot assess the adequacy of corporate responses to water risk and opportunity;
- Conduct comprehensive, company-wide water risk assessments, at the river basin level, to ensure they are aware of, and fully prepared for, potential impacts to their business; and
- Move from a focus on direct operations to engaging with suppliers and river basin stakeholders to take collective action to ensure sustainable and equitable water use for all.

CDP's water scoring methodology is based on four consecutive levels, representing the steps a company takes as it progresses to become a water steward. These are: disclosure; awareness; management; and leadership. Companies eligible for an A are those that achieve 75% of the points available in the leadership band and have submitted a public response.

Out of the 25 companies in CDP's 2016 Water A List, 12 European companies are leading the way towards water stewardship. Through disclosure and strategic action, more companies need to follow in their footsteps, to protect shareholder value and the water resources on which we all depend.



Consumer Discretionary

Fiat Chrysler Automobiles (Italy)



Consumer Staples

Coca-Cola European Partners (UK)
Diageo (UK)
L'Oréal (France)
Unilever (UK)



Health Care

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



Materials

BASF (Germany)
Metsä Board (Finland)



Utilities

Acciona (Spain)
Centrica (UK)

Leadership Indicators	% of responding companies meeting requirement
Provide a comprehensive and complete disclosure to investors and customers via CDP.	42%
Regularly measure, monitor and disclose more than 75% of all water withdrawals by source, discharges by destination and consumption.	27%
Require suppliers to report water use, risks and management and include this within water risk assessments.	45%
Account for river basin conditions in comprehensive, company-wide water risk assessments.	21%
Consider a broad range of river basin contextual issues and factors relevant issues into water risk assessments.	36%
Consider a broad range of river basin stakeholders and factors relevant issues into water risk assessments.	23%
Identify and capitalize on water-related opportunities.	42%
Disclose all water withdrawals by source, discharges by destination and consumption data for "at risk" facilities.	26%
Strategic responsibility for water management resides with the highest decision-making level within the business.	55%
Implement a company wide, publicly available water policy that: <ul style="list-style-type: none"> includes performance standards for both direct operations and supplier, procurement and contracting best practice; and includes a commitment to customer education and acknowledges the human right to water, sanitation and hygiene. 	23%
Have achieved or is making progress against strategic water management targets and goals.	17%
Have identified, taken action and developed a policy for managing environmental trade-offs and/or linkages.	50%
Responsibility for CDP water disclosure resides at the highest decision-making level within the business.	37%

Regional snapshot: Austria, Germany & Switzerland

47%

response rate (30/64)

In anticipation of changing weather patterns and potential shortages of water, we have made water efficiency a key strategic ambition shaping our product range.

Syngenta

The economy in this part of Europe is dependent on water-intensive industries: Germany is the world's fourth largest automotive manufacturer, and both Germany and Switzerland have major chemical and pharmaceutical industries, including two A list companies: **Bayer** and **BASF**. These industries rely on long and complex supply chains, with related water-risk exposures.

Key findings

- Transparency is increasing: Germany has the highest response rate (52%) of any country in Europe, up from 38% in 2015; however, there is more to do: while responses from Switzerland have increased in absolute terms, from 10 to 13, that figure represents fewer than half (43%) of requested companies.
- Good progress has been recorded in requiring suppliers to report on water issues, with 63% of German companies doing so in 2016, up from 45% in 2015. For example, **Symrise** requests all its suppliers, regardless of size and location, to report on their water use, risks and management in order to identify water risks within its extensive raw material portfolio.
- The region demonstrates the highest percentages of companies with board level oversight of water policy, strategy or plan, which stands at 94% in Germany and 85% in Switzerland.
- Germany has the highest percentage of respondents (75%) in Europe conducting water risk assessments that are company-wide and comprehensive, including their direct operations and their supply chains.

Risks and opportunities

- Tightening regulation threatens the ability of companies to access adequate water, as carmaker **Volkswagen** reports in the Danube river basin, in Slovakia. It is responding with site-specific targets and investments, as well as engagement with local communities and policymakers.
- Transparency is key for companies wanting to understand water risks and opportunities related to their supply chain. Retailer **METRO GROUP** joined CDP Supply Chain Program to request disclosure on water from its top suppliers.
- Coca-Cola HBC** established water management incentives for senior management, which includes using the true cost of water, with a water stress multiplier, for water optimization projects. Meanwhile, food and drink giant **Nestlé** extended its acceptable return on investment period for equipment funding that delivers water savings, recognizing that such activities often require longer-term investment.

Taking collective action

Extensive supply chains provide opportunities to spread water stewardship practices widely and build business resilience. For example, chemicals firm **BASF** has a training program in place with Brazilian and Chinese suppliers to educate them on sustainability standards, with a goal of reaching 2,000 suppliers by 2019. The company also has a program to provide access to water, sanitation and hygiene to residents around its site in Dahej, India.

Regional snapshot: France and Benelux

41%

response rate (26/63)

Our long-term goal is to withdraw as little water as possible, and aim for zero industrial liquid discharge, while preventing negative impacts on ecosystems and stakeholders.

Saint-Gobain

France is facing additional water stress as a result of climate change, especially in its southern regions, due to significant increases in the duration and intensity of summer droughts. In addition, France and the Netherlands are also likely to be exposed to increased risks of flooding.

Of note to investors, France has taken a leadership position in regulating corporate transparency, with the passage in 2015 of its Energy Transition Law, whose **Article 173** requires environmental disclosure by investors on a 'comply or explain' basis.

Key findings

- Despite two global leaders, **L'Oréal** and **Unilever**, which achieved an 'A' in all three CDP Programs (Water, Forests and Climate Change), there has been no progress in the overall response rate in the region. There has been a small decline in French companies disclosing to CDP, falling to 17 from 20. Dutch companies collectively have been consistently poor responders. Fewer than one in three responded in 2016.
- Energy giants **Total** in France and **Royal Dutch Shell** in the Netherlands are consistently failing to disclose water-related information, reflecting the worryingly low response rate (12%) within the energy sector across Europe.
- There has been no progress in companies undertaking comprehensive water risk assessments, and no Dutch companies carry out river basin level assessments.
- However, almost all French respondents set targets and goals. For example, luxury goods group **Kering** publicly committed to reduce its water usage resulting from the production of products and services by 25%, while accounting for the growth of its business by 2016.

Risks and opportunities

- As a member of the Business Alliance for Water and Climate Change, French retailer **Carrefour** has committed to reduce impacts on water availability throughout its value chain. Specifically, it engages with more than 21,000 suppliers to report on their water use, risk and management.
- Engie** is developing a water footprinting calculation for each kilowatt hour of electricity that the power utility produces, and for each power plant in extremely water-stressed areas, allowing it to assess the supply chain water risk based upon the extraction of the underlying fuel.
- Électricité de France** has introduced a water policy that addresses four major issues: responding to regulatory and societal change; contributing to multi-purpose water management and local economic development; optimizing the operational management of water for production activities; and preparing for a future in which the sharing of resources becomes more complex.

Taking collective action

French food and beverage company **Danone** carries out extensive community and stakeholder engagement to ensure continued access to water resources, and to avoid reputational exposures. It ensures its subsidiaries have tools in place for stakeholder engagement processes, works with local communities on projects such as creating nature reserves, and it participates in a major watershed protection program in San Juan, Mexico.

Regional snapshot: The Nordics

28%
response rate (11/40)

Nordic investors have been strong advocates of responsible investment, and **NBIM**, the manager of Norway's sovereign wealth fund, is a lead sponsor of CDP's water program. A focus on the environment is also demonstrated through a high commitment to sustainability leadership. For example, Sweden, Denmark, Norway and Finland take the top four places in the Sustainable Development Goals Index, a report card for tracking progress towards the SDGs.⁴

Most recently, Sweden has proposed one of the world's most ambitious climate change goals, introducing binding legislation to make the country carbon-neutral by 2045.



UPM takes into account that there is enough water available for other water users in the area.

UPM-Kymmene Corporation

Key findings

- Despite the region's high commitment to sustainability, it has the lowest percentage of companies responding to the CDP water program, with just 28% doing so.
- About half (45%) of respondents claim to be exposed to water risks in their direct operations and supply chain. However, these risks could be underestimated as only 27% of companies require key suppliers to report water use, risks and management.
- Only two companies in this region, Swedish company **Hennes & Mauritz** and Finland's **UPM-Kymmene**, carry out risk assessment at the river basin scale. This may reflect low domestic water risk, but could overlook supply chain exposures.
- However, there is a high level of awareness (75%) amongst Swedish companies of the linkages and trade-offs between water use and other environmental issues.

Risks and opportunities

- Swedish consumer goods and pulp and paper company **SCA** is one of the respondents that requires its suppliers to report on their water use and discharge, covering almost all its purchases of pulp, packaging and chemicals.
- A List Finnish company **Metsä Board** has set a target to reduce by 2020 process water use per tonne of production by 17% from the 2010 level. The implementation of water and energy efficiency measures resulted in estimated cost savings of EUR 3.8 million in the reporting year.
- Swedish manufacturer **ASSA ABLOY** recognizes that there is a positive linkage between recirculated water, water usage and energy consumption. Water recirculation not only decreases water usage, but it also decreases energy consumption as the water does not need to be heated for each production cycle.

Taking collective action

Holmen, a Swedish pulp and paper company, has worked with farmers local to its Workington mill, in the UK, when it developed a biomass-fired combined heat and power plant. It sought to encourage farmers to grow willow on marginal land to supply feedstock. As well as providing farmers with a regular, long-term income, willow coppicing provides flood mitigation benefits, and improves water quality by reducing excess run-off.

⁴ See www.sdgindex.org

Regional snapshot: Southern Europe

34%
response rate (10/29)

Many parts of the region are already substantially water stressed, and climate change is making conditions worse, including one of the worst droughts Iberia has seen for three centuries. The drought, combined with severe storms in early 2017, hit agricultural production, which has reduced harvests by up to 60% and impacted export revenues.

Policy and regulatory responses will need to ratchet up, as countries in the region implement the second management cycle of the EU Water Framework Directive. Companies need to prepare for more stringent restrictions on water use.



Ferrovial developed a methodology for water footprint calculation and reporting, applicable to all operations throughout the Ferrovial Group over which we exercise operational control.

Ferrovial

Key findings

- All Spanish and Italian companies report on their water withdrawals and discharges but only half of Spanish and a third of Italian companies verify, for at risk facilities, (>50%) total volume of water withdrawal data by source as well as water discharge quality data by destination.
- Two-thirds (67%) of Italian and Spanish respondents undertake a comprehensive company-wide risk assessment that covers both direct operations and supply chains, the second highest rate after Germany (75%).
- Spain has the highest percentage of respondents (83%) in Europe who have identified water-related opportunities. Cost saving was the top opportunity identified, as reported by **Endesa**, **Gas Natural**, **Iberdrola**, and **Inditex**.

Risks and opportunities

- Gas Natural** reports increased brand value from its EUR 60 million rehabilitation of the Meirama opencast lignite coal mine in Spain, which resulted in the creation of a large lake providing a stable supply of water to the city of A Coruña.
- Italian carmaker **Fiat Chrysler Automobiles** has developed a comprehensive program to address water risks in its supply chain, with suppliers expected to optimize their resource use and develop low-impact products. The company includes questions on water stewardship in its supplier sustainability assessment processes.
- Utility **ENEL** successfully achieved its target to reduce by 2020 its water consumption (litres/kWh) by 10% from its levels in 2010. It has now increased its water consumption target from 10% to 30% by 2020.

Taking collective action

Spanish retailer **Inditex** has introduced a Global Water Management Strategy that involves extensive collective action with its suppliers to reduce water use and impacts. Initiatives include: its 'Green to Wear' standard to reduce impacts from suppliers' wet process factories; a shift to less water-intensive organic cotton and other sustainable materials; and its support for the Bangladesh Water PaCT: Partnership for Cleaner Textile, that seeks to reduce water and energy use of the country's wet process sector.

Regional snapshot: The United Kingdom

49%
response rate (31/63)

Climate change threatens the UK with severe water shortages, for which the country is poorly prepared, according to the Committee on Climate Change, a government advisory body. It notes that some water-intensive industries, such as paper manufacturing in Kent and chemicals in the north-west of England, are clustered in areas at risk of water scarcity.⁵

Flooding over parts of the UK in winter 2015-16 was one of the two worst flood events of the last century. Climate change is expected to increase the frequency and magnitude of severe flooding across the UK.

From a business and risk management point of view, CNH Industrial recognizes that the economic importance of proper water management lies in the continuity of supply for industrial processes.

CNH Industrial

Key findings

- Almost two in five (39%) of responding UK companies experienced detrimental water-related impacts during the reporting period in either direct operations or supply chains. Severe drought in South Africa, for example, caused production disruption leading to reduced outputs of **Associated British Foods** products, resulting in financial impacts of EUR 34 million.
- However, UK-based companies have made good progress in some areas since 2015: the number undertaking a risk assessment at river basin scale has risen to 14 from 9; 30 out of 31 set targets or goals.
- UK companies are over-represented among leaders in water stewardship, accounting for half (six) of the 12 European companies to achieve an 'A' score in CDP's water scoring methodology.

Risks and opportunities

- The regulatory landscape within the UK is highly uncertain. For example, utility **SSE** cites implementation of national legislation to meet the requirements of the EU Water Framework Directive as likely to impact its use of water for thermal cooling, leading to higher operating costs. However, it is currently unclear how Brexit will alter that implementation.
- UK-based multinationals face substantial exposures in overseas operations. Mining giant **Anglo American** is spending EUR 94 million/year on water management at its De Beers Snap Lake mine in Canada, due to more stringent license conditions related to the volume and quality of discharge.
- Ambitious target-setting is vital to achieving water stewardship. **GlaxoSmithKline** aims to reduce the impact of its water use across the whole value chain (operations, suppliers, and consumers) by 20% by 2020.
- Active supply chain engagement provides opportunities to reduce risk. Gas company **Centrica** uses an online self-assessment tool to assess the adequacy of suppliers' water management, and works with those with poor scores to improve performance.

Taking collective action

Brewer **SABMiller** (now part of **Anheuser-Busch Inbev**) is responding to growing water stress and declining quality with a number of community engagement programs. For example, in South Africa it has a partnership with **WWF** to help hop suppliers grow less water-intensive plants. In the US, it is working with **The Nature Conservancy** to improve barley farmers' water efficiency and quality through, among other things, supporting fencing and planting along streams to prevent damage and contamination by livestock, and co-ordinating robust landowner water monitoring programs.

⁵ UK Climate Change Risk Assessment 2017 Synthesis Report, Committee on Climate Change, 2017



Investor needs for corporate water data



CDP is an excellent framework for allowing a high caliber conversation between investors and companies.

Aviva



Investors recognize that water security poses risks to their investments and, conversely, that proactive water stewardship reduces these risks. In its 2017 ESG trends to watch, index and research firm MSCI believes that investors will increasingly shift their attention from the regulatory to the physical risks posed by climate change, not least rising levels of water insecurity around the world.⁶ To understand these risks, they will expect companies – including laggards – to disclose the relevant data.

Investors also face growing regulatory pressure to disclose. **Article 173** of the French energy transition law, adopted in August 2015, requires investors to disclose how they incorporate environmental, social and governance issues into their investment strategies.

In addition, the **Taskforce on Climate-related Financial Disclosures** (TCFD) issued its landmark report in December 2016. Set up by the Financial Stability Board, the TCFD has produced guidelines that companies can follow to incorporate environmental criteria into their mainstream financial

reports. These guidelines explicitly refer to metrics and targets associated with water, as well as disclosure of risks related to water.

With 15 years' experience in requesting key environmental data on behalf of investors, CDP has an important role to play in helping to meet investor needs around water stewardship and, by extension, helping companies become better managers of this vital shared resource.



Investors are interested in our total water stewardship as it is directly linked to our business strategy, long-term growth and company acceptance.

Coca-Cola HBC



Investor contributions

Nordea's thirst for water risk disclosure



During a field visit, in April 2015, by our responsible investment team to Hyderabad and Visakhapatnam, we found troubling evidence of water pollution resulting from pharmaceutical manufacturing. More in-depth information proved to be difficult to obtain due to the lack of corporate transparency in regards to water management in the pharma supply chain.

CDP's 2016 Global Water Report shows that, in the health sector, just 29% of reporting companies conduct assessments that cover both direct operations and supply chains. Only 38% request that their suppliers report. In Europe, only 10 European companies in the Health Care sector provided public responses to the water questionnaire.

In February 2016, we commissioned an independent on-the-ground investigation of a number of pharma suppliers around Hyderabad and Visakhapatnam.

The investigation confirmed local impacts of drug pollution and severe contamination of waterways and agricultural lands and dumping of chemical effluent in rivers, lakes and groundwater by the pharmaceutical sector. The findings were documented in a report that we shared with a number of pharmaceutical companies in our portfolio, together with our expectations on this sector. We asked the pharmaceutical sector to develop and report on their industry position and action plan to address

water pollution in India. We also asked companies to demand emissions reduction targets from their suppliers at relevant production sites and that progress towards these goals are reported on.

The feedback from companies has been positive, and a number of corporate and industry actions have been initiated. However, for us and other investors to be able to assess actions and performance related to water issues, we need better water-related data. We expect more companies to report, and ask their suppliers to report, on their water management via CDP.

Magdalena Kettis

PhD, Head of Thematic Research
Sustainable Finance, Nordea
Member of the CDP water advisory council



⁶ 2017 ESG trends to watch, MSCI, January 2017

Investor contributions

Amundi's approach to water risk analysis



When evaluating companies' exposure to the environmental component of ESG risk, great emphasis is placed on the consideration of greenhouse gas emissions. However, we know that water risk can often be significant, as evidenced by the EUR 13 billion in water-related financial impacts reported by companies disclosing to CDP in 2016. To better evaluate how portfolio companies might be impacted by worsening water security, we have developed a proprietary methodology to assess the extent to which companies are exposed.

According to a study by the Water Resources Group, the gap between supply and demand of water will reach 40% by 2030, taking into account demographic growth and assuming no advances are made in terms of efficiency. Companies that operate within sectors that are particularly water intensive, including Utilities, Mining, Beverages, and Oil and Gas, are increasingly exposed to a range of reputational, operational and regulatory water-related risks.

Our methodology uses information from public databases and company statements, including CDP data, to support analysis methods that have been developed internally.

Take the mining sector, where significant quantities of water are required during both the extraction process and for mineral processing. Increased resource depletion and frequency of extreme weather events are leading to growing uncertainty around future resource availability. To analyze companies' exposure to this risk, we have developed an innovative analysis model that combines:

- ▶ Data from the World Resources Institute that examines the probability of extreme events (floods, drought), rainfall variability, and the level of competition between users, within river basins around the world; and
- ▶ GPS data for all the mining sites of the companies that we analyze.

Using this data, we map water risk, site by site and company by company, as shown in the map.

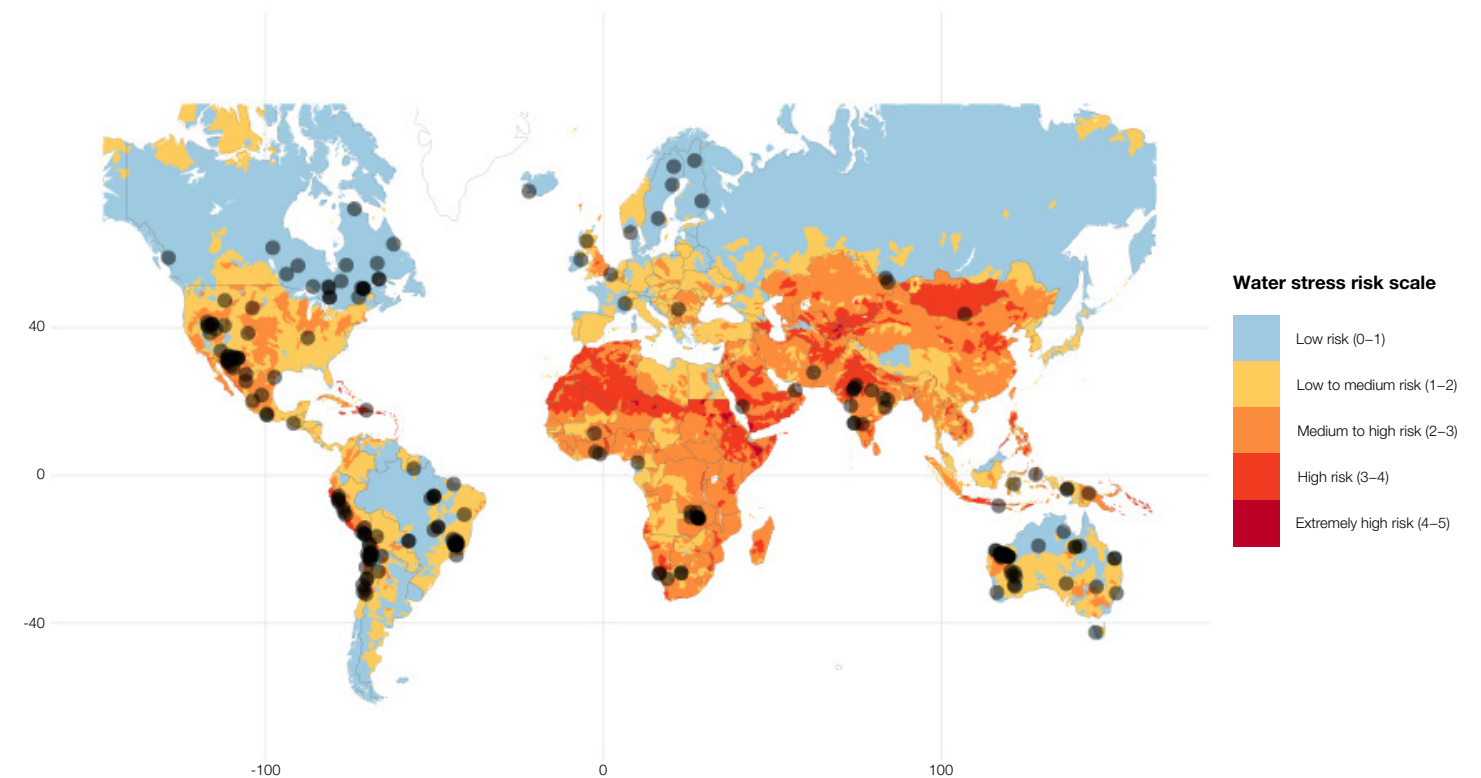


Investors are seeking greater clarity on water accounting, water risk management and performance so that water security, and its impact on business performance, can be better understood. E.ON sees the CDP Water Program as key vehicle to communicate with investors on water-related performance and developments.

E.ON



Mining sites and water stress



Source : Amundi, World Resources Institute - Aqeduct (www.wri.org), Company data.

Once the risk has been identified at site level, we analyze company policies and performance against our water criteria. We pay particular attention to raw data such as water withdrawal data, and we use CDP data to make the comparison easier. For example, to analyze performance, we compare key metrics for each company, such as water intensity of conventional water used (conventional water in megaliters/year divided by turnover), and the proportion of alternative water and recycled water used, and we analyze the trends in recycled and alternative water use. For companies identified as not taking appropriate actions to address water risks, Amundi will either enter into a phase of dialogue or downgrade the company, which can ultimately lead to divestment.

Our water analysis methodology, which we have also applied to the utility sector, palm oil production and non-conventional hydrocarbons, demonstrates our ability to develop robust and innovative analysis tools to determine companies' exposure to ESG risks. This ultimately enables us to better understand and, if necessary, challenge their practices for managing these risks efficiently. This approach, in common with all ESG analysis, is reliant on the corporate disclosure of appropriate ESG metrics – which is why we support CDP's water program and encourage all companies to report via CDP.

Antoine Sorange
Head of ESG Analysis, Amundi

The path to a sustainable European future


The EU is fully committed to be a frontrunner in implementing the 2030 Agenda and the SDGs, together with its Member States.⁷

European
Commission

What will it take for the majority of European companies to catch up with their A list peers in terms of corporate water stewardship? Progress in environmental performance is often created by vanguards, which are then followed by regulatory changes that bring along the rest of the market.

These regulatory changes are likely to enter into force soon, as the EU looks to implement the 2015 UN Sustainable Development Goals (SDGs). One of these Global Goals (Goal 6) calls for the availability and sustainable management of water and sanitation for all.

Specific targets include universal and equitable access to safe and affordable drinking water for all by 2030. Key to achieving this is improving water quality by, among other things, eliminating dumping and minimizing release of hazardous chemicals, halving the proportion of untreated wastewater, and substantially increasing recycling and safe reuse.

With its publication on the 'Next steps for a sustainable European future,' the EU has already looked at integrating the SDGs into its policy framework and current European Commission priorities.⁸ Among other things, the publication notes plans to prevent pollution caused by nitrates, industrial emissions, pesticides and persistent organic pollutants.

The private sector can act now

Business was closely involved in drafting the SDGs and will play a crucial role in their implementation. For them, the goals can provide a new focus for what it means to be a well-run, responsible company with purpose. Those who can provide solutions to advancing progress on the goals will win business, and improve their reputation with investors, customers and employees.

The reasons for corporate engagement are straightforward: understanding the SDGs will help corporations to better manage risk and seize new opportunities in a rapidly changing world. Engagement with the SDGs also offers reputational benefits, allowing companies in the vanguard to demonstrate leadership and show they are offering solutions to the world's social and environmental problems.

Some leading firms are already making considerable progress. Dutch chemicals giant **Akzo Nobel**, for example, is integrating the SDGs into its business strategy, and has mapped them to its value chain, with a view to identifying the goals to which it can most meaningful contribute.

Closing the gap

Analysis of this year's disclosures by European companies to CDP's water program shows a persistent gap between leading proponents of corporate water stewardship and the majority of reporting companies. It also shows a continuing lack of disclosure among more than half of those companies that investors consider to be water-exposed.

That gap is likely to be closed by a tightening ratchet of regulatory requirements designed to help countries meet their commitments to the SDGs. Those regulations will serve to increasingly mandate corporate water stewardship. Their introduction will, ultimately, reduce physical and reputational water risks but they will initially pose regulatory risks to, and impact on, under-prepared companies.

CDP's water program provides a methodology to help these companies address these risks, and identify related opportunities, through transparency, measurement and monitoring, risk assessment, governance, and engagement.

As we discuss above on page 13, companies wishing to embark upon the journey towards corporate water stewardship and catch up with their leading competitors need to take three key meaningful actions: respond to the CDP information request; conduct a comprehensive water risk assessment; and begin to engage with suppliers and river-basin stakeholders to take collective action on water risk.

Making a commitment to improve water security

We encourage European companies to demonstrate their commitment to being responsible water stewards by joining the **We Mean Business** Coalition's initiative to improve water security. The steps companies agree to take when they make this water commitment are those outlined by the **Business Alliance for Water and Climate** (BAFWAC), a partnership founded by the **CEO Water Mandate**, **CDP**, **SUEZ**, and **WBCSD**, supported by the **UNFCCC** and launched on Resilience Day at COP21.

About 35 companies have made commitments to water security already, including **SUEZ**, **AstraZeneca**, and **Danone**. Companies who join **BAFWAC** and make commitments through **We Mean Business** can track progress against them via CDP's annual disclosure requests. To learn more, visit www.cdp.net/commit and <https://wateractionhub.org/cop21-declaration/>

Water Reuse: Getting more from less

The UN Sustainable Development Goal on Water (SDG 6) specifically targets a substantial increase in water recycling and safe reuse globally by 2030. The EU, meanwhile, has stated it will further promote water reuse at the EU level through, for example, setting minimum requirements for water reuse in irrigation, encouraging industrial reuse, and promoting research and innovation.

Leading companies are investing in water re-use, reaping a range of benefits.

For example, French waste and water giant **SUEZ**'s West Basin County water recycling facility, in Los Angeles, produces 240,000 m³/day of recycled water, equal to the consumption of more than one million people. Representing 22% of water resources of the County by 2020, the facility helps reduce the dependency of the Los Angeles region on conventional resources as well as on imported water, in spite of growing demand. By 2020, the facility is set to be completed with a desalination plant, which will meet an additional 10% of the region's water needs.

Swiss pharmaceutical company **Novartis International**, meanwhile, has a water-saving program in place at its sites in Navi Mumbai, India, which involves water recycling of between 17 and 28% of its onsite treated water effluent. The sites have achieved savings of 25-30% of their annual water usage.

Not only can water initiatives reduce resource use and increase business resilience, they can lead to improved product quality. Swedish manufacturer **ASSA ABLOY** introduced a water filtration system that allowed it to move from using tap water once for rinsing fire-resistant glass, to reusing it 80 times before release. Its closed-water system uses higher-quality water, leading to greatly improved product quality.

⁷ Next steps for a sustainable European future: European action for sustainability, Communication from The European Commission, COM(2016) 739 final, Strasbourg, 22.11.2016

⁸ Ibid

Appendix I

Summary of key indicators by geography

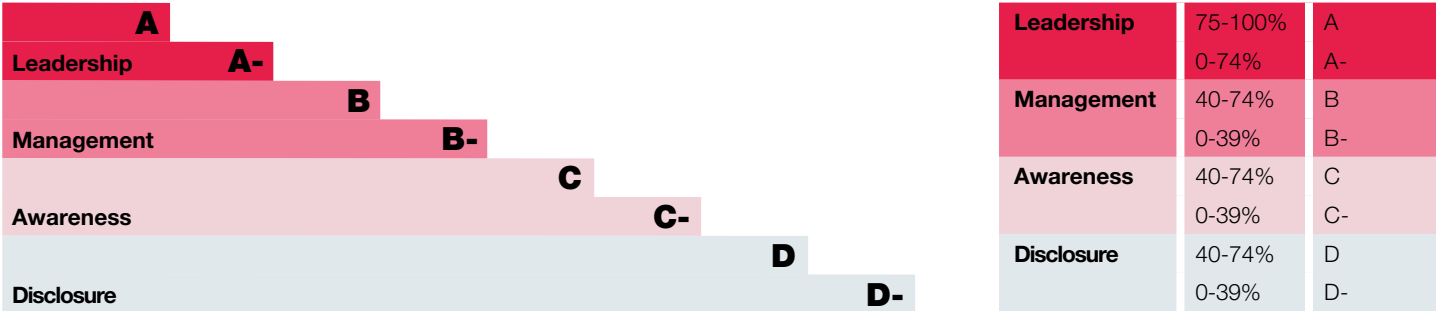
Countries	United Kingdom	Germany	Switzerland	France	Netherlands	Spain	Italy	Sweden
Number of companies responding	31	16	13	17	5	6	3	4
Number of companies requested	63	31	30	38	17	12	9	18
Response rate	49%	52%	43%	45%	29%	50%	33%	22%
Current State								
Respondents that have experienced detrimental water-related business impacts in the reporting year	39%	25%	46%	29%	20%	33%	33%	25%
Respondents that require key suppliers to report water use, risks and management	45%	63%	62%	47%	40%	33%	67%	50%
Water risk assessment								
Respondents that undertake a comprehensive company wide risk assessment that covers both direct operations and supply chain	48%	75%	38%	53%	40%	67%	67%	50%
Respondents that undertake water risk assessments at the river basin scale	45%	25%	46%	53%	0%	33%	0%	25%
Water risks & opportunities								
Respondents exposed to risks in direct operations	13%	25%	8%	18%	0%	17%	33%	25%
Respondents exposed to risks in supply chain	6%	19%	0%	6%	0%	0%	0%	0%
Respondents exposed to risks in both direct operations and supply chain	45%	19%	46%	41%	60%	33%	0%	50%
Respondents that identify opportunities	71%	69%	69%	82%	60%	83%	67%	75%
Accounting								
Respondents that report water withdrawals	94%	94%	92%	82%	60%	100%	100%	75%
Respondents that report water discharge	90%	94%	92%	71%	60%	100%	100%	75%
Respondents that verify (>50%) total volume of water withdrawal data by source for at risk facilities	35%	38%	54%	53%	60%	50%	33%	25%
Respondents that verify (>50%) water discharge quality data by desination for at risk facilities	10%	31%	38%	18%	60%	50%	33%	25%
Governance & Strategy								
Respondents with board level oversight of water policy, strategy or plan	90%	94%	85%	76%	60%	83%	0%	75%
Compliance								
Respondents subject to penalties and/or fines	32%	19%	38%	29%	20%	17%	33%	0%
Targets and initiatives								
Respondents with targets or goals in place	97%	88%	100%	94%	60%	83%	100%	100%
Linkages and trade-offs								
Respondents that have identified any linkages or trade-offs between water and other environmental impacts	84%	69%	69%	59%	60%	83%	33%	75%

Appendix II

Response status and sector by company

Key to response status:

AQ	Answered questionnaire
AQ (NP)	Answered questionnaire but response not made public
AQ (SA)	Company is either a subsidiary or has merged during the reporting process; see Company in parenthesis for further information
AQ (L)	Answered questionnaire after submission deadline
DP	Declined to participate
NR	No response
RV	Responded voluntarily



F: Failure to provide sufficient information to CDP to be evaluated for this purpose.⁹

Company	Response Status	Ticker	Country HQ	CDP Band and Score
Consumer Discretionary				
AccorHotels	NR	AC FP	France	Failure to disclose (F)
adidas	AQ	ADS GR	Germany	Management (B)
Autoliv	NR	ALIV SS	Sweden	Failure to disclose (F)
Barratt Developments	NR	BDEV LN	United Kingdom	Failure to disclose (F)
BMW	AQ (NP)	BMW GR	Germany	Leadership (A-)
Burberry Group	AQ	BRBY LN	United Kingdom	Leadership (A-)
Carnival Corporation	AQ	CCL US	USA	Management (B)
CCC	NR	CCC PW	Poland	Failure to disclose (F)
Christian Dior	DP	CDI FP	France	Failure to disclose (F)
Compagnie Financière Richemont	DP	CFR VX	Switzerland	Failure to disclose (F)
Compass	AQ	CPG LN	United Kingdom	Management (B)
Continental	AQ	CON GR	Germany	Disclosure (D)
Daimler	NR	DAI GR	Germany	Failure to disclose (F)
Delphi Automotive	AQ	DLPH US	United Kingdom	Management (B-)
Dixons Carphone	DP	DC/ LN	United Kingdom	Failure to disclose (F)
Dufry	NR	DUFY US	Switzerland	Failure to disclose (F)
Electrolux	DP	ELUXB SS	Sweden	Failure to disclose (F)
FF Group (Folli Follie)	NR	FFGRP GA	Greece	Failure to disclose (F)
Fiat Chrysler Automobiles	AQ	FCAU US	Italy	Leadership (A)
Garmin	NR	GRMN US	Switzerland	Failure to disclose (F)

Company	Response Status	Ticker	Country HQ	CDP Band and Score
GKN	AQ	GKN LN	United Kingdom	Awareness (C)
Groupe PSA	DP	UG FP	France	Failure to disclose (F)
H&M Hennes & Mauritz	AQ	HMB SS	Sweden	Management (B)
Hermes International	NR	RMS FP	France	Failure to disclose (F)
HUGO BOSS	DP	BOSS GR	Germany	Failure to disclose (F)
Husqvarna	NR	HUSQB SS	Sweden	Failure to disclose (F)
Inditex	AQ	ITX SM	Spain	Management (B)
Intercontinental Hotels Group	AQ	IHG LN	United Kingdom	Management (B)
Jumbo	NR	BELA GA	Greece	Failure to disclose (F)
Kering	AQ	KER FP	France	Management (B)
Kingfisher	DP	KGF LN	United Kingdom	Failure to disclose (F)
LPP	NR	LPP PW	Poland	Failure to disclose (F)
Luxottica Group	NR	LUX IM	Italy	Failure to disclose (F)
LVMH	DP	MC FP	France	Failure to disclose (F)
Marks and Spencer Group	AQ (NP)	MKS LN	United Kingdom	Not scored
MCH Group	NR	MCHN SW	Switzerland	Failure to disclose (F)
Merlin Entertainments Group	NR	MERL LN	United Kingdom	Failure to disclose (F)
Michelin	AQ (NP)	ML FP	France	Management (B)
Next	AQ (NP) (L)	NXT LN	United Kingdom	Not scored
Nokian Tyres	AQ (NP)	NRE1V FH	Finland	Awareness (C)
OPAP	NR	OPAP GA	Greece	Failure to disclose (F)
Pandora A/S	NR	PNDORA DC	Denmark	Failure to disclose (F)
Persimmon	NR	PSN LN	United Kingdom	Failure to disclose (F)
Porsche Automobil Holding	NR	PAH3 GR	Germany	Failure to disclose (F)
Renault	DP	RNO FP	France	Failure to disclose (F)
Sodexo	AQ	SW FP	France	Management (B-)
Sports Direct International	NR	SPD LN	United Kingdom	Failure to disclose (F)
Steinhoff International Holdings	NR	SHF SJ	Netherlands	Failure to disclose (F)
Swatch Group	NR	UHRN SW	Switzerland	Failure to disclose (F)
Taylor Wimpey	AQ	TW/ LN	United Kingdom	Management (B-)
TUI Group	NR	TUI LN	United Kingdom	Failure to disclose (F)
Valeo Sa	AQ (NP) (L)	FR FP	France	Not scored
Volkswagen	AQ	VOW3 GR	Germany	Leadership (A-)
Whitbread	NR	WTB LN	United Kingdom	Failure to disclose (F)
William Hill	NR	WMH LN	United Kingdom	Failure to disclose (F)

Consumer Staples				
Anheuser Busch InBev	AQ	ABI BB	Belgium	Leadership (A-)
Aryzta	NR	ARYN VX	Switzerland	Failure to disclose (F)
Associated British Foods	AQ	ABF LN	United Kingdom	Leadership (A-)
Barry Callebaut	AQ	BARN SW	Switzerland	Management (B-)
Beiersdorf	AQ	BEI GR	Germany	Management (B)
British American Tobacco	AQ	BATS LN	United Kingdom	Management (B)
Carlsberg Breweries	NR	CARLB DC	Denmark	Failure to disclose (F)
Carrefour	AQ	CA FP	France	Management (B)

⁹ 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 to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

Company	Response Status	Ticker	Country HQ	CDP Band and Score
Casino Guichard-Perrachon	DP	CO FP	France	Failure to disclose (F)
Chocoladefabriken Lindt & Sprüngli	AQ (NP)	LISN SW	Switzerland	Disclosure (D)
Coca-Cola HBC	AQ	CCH LN	Switzerland	Leadership (A-)
Colruyt	NR	COLR BB	Belgium	Failure to disclose (F)
Danone	AQ	BN FP	France	Leadership (A-)
Delhaize Group	AQ	DELB BB	Belgium	Disclosure (D)
Dia	NR	DIA SM	Spain	Failure to disclose (F)
Diageo	AQ	DGE LN	United Kingdom	Leadership (A)
Eurocash	NR	EUR PW	Poland	Failure to disclose (F)
Heineken Holding	AQ (SA)	HEIO NA	Netherlands	Not scored
Heineken	AQ	HEIA NA	Netherlands	Leadership (A-)
Henkel AG & Co. KGaA	AQ	HEN3 GR	Germany	Management (B)
ICA Gruppen	NR	ICA SS	Sweden	Failure to disclose (F)
Imperial Brands	AQ	IMB LN	United Kingdom	Management (B)
J Sainsbury	NR	SBRY LN	United Kingdom	Failure to disclose (F)
Jerónimo Martins SGPS	NR	JMT PL	Portugal	Failure to disclose (F)
Kerry Group PLC	DP	KYG ID	Ireland	Failure to disclose (F)
L'Oréal	AQ (L)	OR FP	France	Leadership (A)
METRO	AQ	MEO GR	Germany	Awareness (C)
Morrison Supermarkets	NR	MRW LN	United Kingdom	Failure to disclose (F)
Nestlé	AQ	NESN VX	Switzerland	Leadership (A-)
Orkla ASA	AQ	ORK NO	Norway	Awareness (C)
Pernod Ricard	AQ	RI FP	France	Management (B)
Reckitt Benckiser	AQ (NP)	RB/ LN	United Kingdom	Leadership (A-)
Remy Cointreau	AQ (NP)	RCO FP	France	Awareness (C)
SABMiller	AQ	SAB LN	United Kingdom	Leadership (A-)
SCA	AQ	SCAB SS	Sweden	Leadership (A-)
Swedish Match	DP	SWMA SS	Sweden	Failure to disclose (F)
Tate & Lyle	AQ (L)	TATE LN	United Kingdom	Not scored
Tesco	NR	TSCO LN	United Kingdom	Failure to disclose (F)
Unilever Nv Cva	AQ (SA)	UNA NA	Netherlands	Not scored
Unilever	AQ	ULVR LN	United Kingdom	Leadership (A)

Energy				
Amec Foster Wheeler	NR	AMFW LN	United Kingdom	Failure to disclose (F)
BG Group	DP	BG/ LN	United Kingdom	Failure to disclose (F)
BP	DP	BP/ LN	United Kingdom	Failure to disclose (F)
Core Laboratories	AQ (NP)	CLB US	Netherlands	Awareness (C)
Eni SpA	NR	ENI IM	Italy	Failure to disclose (F)
Enesco International Incorporated	NR	ESV US	United Kingdom	Failure to disclose (F)
Galp Energia SGPS	NR	GALP PL	Portugal	Failure to disclose (F)
Grupa Lotos	NR	LTS PW	Poland	Failure to disclose (F)
Lundin Petroleum	DP	LUPE SS	Sweden	Failure to disclose (F)
MOL Nyrt.	AQ	MOL HB	Hungary	Awareness (C)
Neste Corporation	NR	NESTE FH	Finland	Failure to disclose (F)

Company	Response Status	Ticker	Country HQ	CDP Band and Score
OMV	AQ	OMV AV	Austria	Leadership (A-)
Petrofac	NR	PFC LN	United Kingdom	Failure to disclose (F)
Polski Koncern Naftowy ORLEN	NR	PKN PW	Poland	Failure to disclose (F)
Polskie Górnictwo Naftowe i Gazownictwo	NR	PGN PW	Poland	Failure to disclose (F)
Repsol	NR	REP SM	Spain	Failure to disclose (F)
Royal Dutch Shell	DP	RDSA NA	Netherlands	Failure to disclose (F)
Saipem	NR	SPM IM	Italy	Failure to disclose (F)
Statoil ASA	DP	STL NO	Norway	Failure to disclose (F)
Technip Sa	NR	TEC FP	France	Failure to disclose (F)
Tenaris	NR	TEN IM	Luxembourg	Failure to disclose (F)
Total	DP	FP FP	France	Failure to disclose (F)
Transocean	NR	RIG US	Switzerland	Failure to disclose (F)
Vopak	NR	VPK NA	Netherlands	Failure to disclose (F)
Weatherford International	NR	WFT US	Switzerland	Failure to disclose (F)

Financials				
Deutsche Wohnen	NR	DWNI GR	Germany	Failure to disclose (F)
Swiss Prime Site	NR	SPSN SW	Switzerland	Failure to disclose (F)
Vonovia	NR	VNA GR	Germany	Failure to disclose (F)

Health Care				
Actelion	DP	ATLN VX	Switzerland	Failure to disclose (F)
Alkermes	NR	ALKS US	Ireland	Failure to disclose (F)
AstraZeneca	AQ	AZN LN	United Kingdom	Leadership (A)
Bayer	AQ	BAYN GR	Germany	Leadership (A)
Coloplast	NR	COLOB DC	Denmark	Failure to disclose (F)
Endo International	NR	ENDP US	Ireland	Failure to disclose (F)
Essilor International	AQ	EI FP	France	Leadership (A-)
Galenica	NR	GALN VX	Switzerland	Failure to disclose (F)
Geringe	NR	GETIB SS	Sweden	Failure to disclose (F)
GlaxoSmithKline	AQ	GSK LN	United Kingdom	Leadership (A)
GRIFOLS	NR	GRF SM	Spain	Failure to disclose (F)
Jazz Pharmaceuticals	NR	JAZZ US	Ireland	Failure to disclose (F)
Medtronic PLC	AQ	MDT US	Ireland	Management (B-)
Merck KGaA	AQ	MRK GR	Germany	Awareness (C)
Novartis	AQ	NOVN VX	Switzerland	Leadership (A-)
Novo Nordisk A/S	DP	NOVOB DC	Denmark	Failure to disclose (F)
Orion Oyj	NR	ORNBV FH	Finland	Failure to disclose (F)
Perrigo Co.	NR	PRGO US	Ireland	Failure to disclose (F)
Richter Gedeon Nyrt.	NR	RICHT HB	Hungary	Failure to disclose (F)
Roche Holding	AQ	ROG VX	Switzerland	Leadership (A-)
SANOFI	AQ	SAN FP	France	Management (B)
Shire	NR	SHP LN	Ireland	Failure to disclose (F)
Smith & Nephew	AQ (NP)	SN/ LN	United Kingdom	Awareness (C)
Sonova Holding	NR	SOON VX	Switzerland	Failure to disclose (F)

Company	Response Status	Ticker	Country HQ	CDP Band and Score
UCB	NR	UCB BB	Belgium	Failure to disclose (F)
William Demant Holding	AQ	WDH DC	Denmark	Awareness (C)
Industrials				
ABB	DP	ABBN VX	Switzerland	Failure to disclose (F)
ACS Actividades de Construcción y Servicios	NR	ACS SM	Spain	Failure to disclose (F)
AerCap Holdings	NR	AER US	Netherlands	Failure to disclose (F)
Airbus Group	NR	AIR FP	Netherlands	Failure to disclose (F)
Alfa Laval Corporate	NR	ALFA SS	Sweden	Failure to disclose (F)
Alstom	DP	ALO FP	France	Failure to disclose (F)
ANDRITZ	NR	ANDR AV	Austria	Failure to disclose (F)
Ashtead Group	NR	AHT LN	United Kingdom	Failure to disclose (F)
Assa Abloy	AQ	ASSAB SS	Sweden	Management (B)
Atlas Copco	DP	ATCOA SS	Sweden	Failure to disclose (F)
BAE Systems	DP	BA/ LN	United Kingdom	Failure to disclose (F)
Bouygues	DP	EN FP	France	Failure to disclose (F)
Brenntag	NR	BNR GR	Germany	Failure to disclose (F)
Bunzl	DP	BNZL LN	United Kingdom	Failure to disclose (F)
CNH Industrial	AQ	CNHI US	United Kingdom	Leadership (A-)
Cobham	DP	COB LN	United Kingdom	Failure to disclose (F)
Deutsche Post AG	AQ (NP) RV	DPW GR	Germany	Not scored
FERROVIAL	AQ	FER SM	Spain	Leadership (A-)
GEA Group	DP	G1A GR	Germany	Failure to disclose (F)
Geberit	AQ	GEBN VX	Switzerland	Management (B)
IMI	DP	IMI LN	United Kingdom	Failure to disclose (F)
Ingersoll-Rand Co.	AQ	IR US	Ireland	Management (B)
Kone Oyj	NR	KNEBV FH	Finland	Failure to disclose (F)
LEGRAND	DP	LR FP	France	Failure to disclose (F)
Leonardo – Finmeccanica	NR	LDO IM	Italy	Failure to disclose (F)
MAN SE	AQ (SA)	MAN GR	Germany	Not scored
Meggitt	AQ	MGGT LN	United Kingdom	Awareness (C)
Melrose PLC	DP	MRO LN	United Kingdom	Failure to disclose (F)
Metso	NR	ME01V FH	Finland	Failure to disclose (F)
OCI N.V.	NR	OCI NA	Netherlands	Failure to disclose (F)
Osram Licht Ag	DP	OSR GR	Germany	Failure to disclose (F)
Pentair	NR	PNR US	United Kingdom	Failure to disclose (F)
Prysmian SpA	NR	PRY IM	Italy	Failure to disclose (F)
Rexel	NR	RXL FP	France	Failure to disclose (F)
Rolls-Royce	NR	RR/ LN	United Kingdom	Failure to disclose (F)
Royal Boskalis Westminster	DP	BOKA NA	Netherlands	Failure to disclose (F)
Royal Philips	AQ	PHIA NA	Netherlands	Management (B)
Safran	DP	SAF FP	France	Failure to disclose (F)
Saint-Gobain	AQ	SGO FP	France	Management (B)
Sandvik	AQ	SAND SS	Sweden	Management (B-)
Schindler Holding	DP	SCHP VX	Switzerland	Failure to disclose (F)

Company	Response Status	Ticker	Country HQ	CDP Band and Score
Schneider Electric	NR	SU FP	France	Failure to disclose (F)
Sensata Technologies Holding	NR	ST US	Netherlands	Failure to disclose (F)
Siemens	DP	SIE GR	Germany	Not scored
Skanska	DP	SKAB SS	Sweden	Failure to disclose (F)
SKF	DP	SKFA SS	Sweden	Failure to disclose (F)
Smiths Group	DP	SMIN LN	United Kingdom	Failure to disclose (F)
Sulzer	DP	SUN SW	Switzerland	Failure to disclose (F)
Thales	NR	HO FP	France	Failure to disclose (F)
Travis Perkins	NR	TPK LN	United Kingdom	Failure to disclose (F)
Vestas Wind Systems A/S	AQ (NP)	VWS DC	Denmark	Awareness (C)
Vinci	AQ	DG FP	France	Management (B-)
Volvo	NR	VOLVB SS	Sweden	Failure to disclose (F)
Wärtsilä Corporation	NR	WRT1V FH	Finland	Failure to disclose (F)
Weir Group	NR	WEIR LN	United Kingdom	Failure to disclose (F)
Wolseley	DP	WOS LN	United Kingdom	Failure to disclose (F)
Zardoya Otis	NR	ZOT SM	Spain	Failure to disclose (F)
Zodiac	DP	ZC FP	France	Failure to disclose (F)
Information Technology				
Alcatel - Lucent	DP	ALU FP	France	Failure to disclose (F)
ARM Holdings	AQ	ARM LN	United Kingdom	Awareness (C)
Ericsson	NR	ERICB SS	Sweden	Failure to disclose (F)
Infineon	AQ (NP)	IFX GR	Germany	Management (B)
Nokia Group	DP	NOKIA FH	Finland	Failure to disclose (F)
NXP Semiconductors	DP	NXPI US	Netherlands	Failure to disclose (F)
Seagate Technology LLC	AQ	STX US	Ireland	Management (B)
STMicroelectronics	AQ	STM IM	Switzerland	Management (B)
TE Connectivity	AQ	TEL US	Switzerland	Management (B-)
Materials				
Air Liquide	AQ (NP) (L)	AI FP	France	Not scored
AkzoNobel	AQ	AKZA NA	Netherlands	Management (B)
Anglo American	AQ	AAL LN	United Kingdom	Leadership (A-)
Antofagasta	AQ	ANTO LN	United Kingdom	Management (B)
ARKEMA	DP	AKE FP	France	Failure to disclose (F)
BASF SE	AQ	BAS GR	Germany	Leadership (A)
BHP Billiton	AQ	BHP AU	United Kingdom	Leadership (A-)
Boliden Group	NR	BOL SS	Sweden	Failure to disclose (F)
Chr. Hansen Holding	NR	CHR DC	Denmark	Failure to disclose (F)
CRH	AQ	CRH ID	Ireland	Management (B)
Croda International	AQ	CRDA LN	United Kingdom	Management (B)
Ems-Chemie Holding	NR	EMSN SW	Switzerland	Failure to disclose (F)
Evonik Industries	AQ	EVKIF US	Germany	Management (B)
Fresnillo	AQ	FRES LN	Mexico	Management (B)
Givaudan	AQ (NP)	GIVN VX	Switzerland	Management (B)

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Glencore	AQ (NP)	GLEN LN	Switzerland	Leadership (A-)
Grupa Azoty	NR	ATT PW	Poland	Failure to disclose (F)
HeidelbergCement	NR	HEI GR	Germany	Failure to disclose (F)
Imerys	AQ	NK FP	France	Awareness (C)
James Hardie Industries	AQ (NP)	JHX AU	Ireland	Management (B-)
Johnson Matthey	AQ	JMAT LN	United Kingdom	Management (B)
K + S	DP	SDF GR	Germany	Failure to disclose (F)
KGHM Polska Miedź	NR	KGH PW	Poland	Failure to disclose (F)
Koninklijke DSM	DP	DSM NA	Netherlands	Failure to disclose (F)
LafargeHolcim	NR	LHN VX	Switzerland	Failure to disclose (F)
LANXESS	NR	LXS GR	Germany	Failure to disclose (F)
Linde	AQ (NP)	LIN GR	Germany	Management (B-)
Mondi PLC	AQ	MNDI LN	United Kingdom	Management (B)
Norsk Hydro	AQ	NHY NO	Norway	Management (B-)
Novozymes	AQ (NP)	NZYMB DC	Denmark	Disclosure (D)
Randgold Resources	NR	RRS LN	United Kingdom	Failure to disclose (F)
Rexam	AQ	REX LN	United Kingdom	Management (B)
Rio Tinto	NR	RIO AU	United Kingdom	Failure to disclose (F)
Sika Services	AQ	SIK VX	Switzerland	Disclosure (D)
Solvay	AQ	SOLB BB	Belgium	Management (B)
Stora Enso Oyj	DP	STERV FH	Finland	Failure to disclose (F)
Symrise	AQ	SY1 GR	Germany	Leadership (A-)
Syngenta	AQ	SYNN VX	Switzerland	Management (B)
Synthos	NR	SNS PW	Poland	Failure to disclose (F)
thyssenkrupp	AQ (NP)	TKA GR	Germany	Management (B-)
Titan Cement	NR	TITK GA	Greece	Failure to disclose (F)
Umicore	DP	UMI BB	Belgium	Failure to disclose (F)
UPM-Kymmene Corporation	AQ	UPM1V FH	Finland	Leadership (A-)
Voestalpine	DP	VOE AV	Austria	Failure to disclose (F)
Yara International ASA	NR	YAR NO	Norway	Failure to disclose (F)

Utilities				
Centrica	AQ	CNA LN	United Kingdom	Leadership (A)
CEZ	NR	CEZ CP	Czech Republic	Failure to disclose (F)
E.ON	AQ	EOAN GR	Germany	Management (B)
EDF	AQ	EDF FP	France	Management (B)
EDP - Energias de Portugal	AQ	EDP PL	Portugal	Management (B)
ENAGAS	AQ	ENG SM	Spain	Management (B-)
Endesa	AQ	ELE SM	Spain	Leadership (A-)
ENEA	NR	ENA PW	Poland	Failure to disclose (F)
ENEL SpA	AQ	ENEL IM	Italy	Management (B)
ENERGA	NR	ENG PW	Poland	Failure to disclose (F)
ENGIE	AQ	ENGI FP	France	Leadership (A-)
Fortum Oyj	DP	FUM1V FH	Finland	Failure to disclose (F)
Gas Natural SDG	AQ	GAS SM	Spain	Leadership (A-)

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Iberdrola	AQ	IBE SM	Spain	Management (B)
National Grid	AQ	NG/ LN	United Kingdom	Management (B)
Polska Grupa Energetyczna (PGE)	NR	PGE PW	Poland	Failure to disclose (F)
Public Power Corporation	NR	PPC GA	Greece	Failure to disclose (F)
R.E.E.	NR	REE SM	Spain	Failure to disclose (F)
RWE	DP	RWE GR	Germany	Failure to disclose (F)
Snam S.P.A	AQ	SRG IM	Italy	Leadership (A-)
SSE	AQ	SSE LN	United Kingdom	Management (B)
TAURON Polska Energia	NR	TPE PW	Poland	Failure to disclose (F)
Terna	DP	TRN IM	Italy	Failure to disclose (F)
VEOLIA	DP	VIE FP	France	Failure to disclose (F)

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