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About AP7

The Seventh Swedish National Pension Fund (AP7) is the default alternative in the Swedish premium pension system. AP7 manages approximately 500 billion SEK for more than 4 million retirement savers.

AP7 is a universal owner managing a global portfolio comprised mainly of equities and to a smaller extent fixed income instruments. The starting point for AP7's corporate governance activities is the universally accepted norms and conventions on human rights, labour rights, environmental issues and anticorruption. With investment in nearly 3,000 companies worldwide, AP7 can act as a broad-based and long-term owner with the entire market's best interests in mind.

About CDP

CDP is an international non-profit that drives companies and governments to reduce their greenhouse gas emissions, safeguard water resources and protect forests. Voted number one climate research provider by investors and working with institutional investors with assets of US\$96 trillion, we leverage investor and buyer power to motivate companies to disclose and manage their environmental impacts. Over 7,000 companies with over 50% of global market capitalization disclosed environmental data through CDP in 2018. This is in addition to the over 750 cities, states and regions who disclosed, making CDP's platform one of the richest sources of information globally on how companies and governments are driving environmental change. CDP, formerly Carbon Disclosure Project, is a founding member of the We Mean Business Coalition. Visit https://cdp.net/en or follow us @CDP to find out more.

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Table of Contents

About Sustainarytics	∠
About AP7	3
About CDP	3
Acknowledgments	3
Foreword	5
Executive Summary	7
Introduction Three years of focused efforts on water Pushing the envelope Challenges remain A progress update Investor engagement makes a difference	8
MethodologyScope of 2019 studyEvaluating water risk management	11
2019 Results Corporate water management indicators Sectoral findings Findings by region and country	13 14
Comparative analysis Changes from 2017 to 2019 Corporate water management indicators Sectoral findings Findings by region Engagement companies	18 18 19
Analysis and discussion The tide has yet to turn Declining performance Measurable engagement impact	23 23
Conclusion A little more conversation and a lot more action, please Advantageous dialogue Key areas for improvement Unrealized investor potential	25 25
Appendices	27 29
Endnotes	37



Foreword

High time to make water risk top priority

Freshwater crisis a material risk for investors

A global freshwater crisis is one of the main threats to the world's economy. The relevance of fresh water issues to investors and the connection between local water scarcity and global financial effects is an important material risk for investors.

AP7's commitment to active ownership

AP7's main contribution to sustainable development is to be a committed and active owner. In order to achieve concrete impact and develop insights into the complex areas of active ownership and sustainability, AP7's sustainability strategy focuses on three in-depth themes at a time. Our overarching aim is to advance norms and standards for sustainable investing and corporate conduct. Seeking fruitful collaborations with other investors and stakeholders is therefore a key part of our active ownership approach.

Investor collaboration important

In 2016, AP7 launched a three-year theme aimed at exploring how we as a universal, active owner can contribute to the UN Sustainable Development Goal on freshwater, which is to ensure availability and sustainable management of clean water and sanitation for all (SDG6). One identified track for collaboration is to leverage investors' ownership activities to improve responsible water management; we lightheartedly called this "blue engagement".

Engagement pays off

This report is the third and last in an engagement project commissioned by AP7 and carried out by Sustainalytics. As we wrap up this study, one of the main conclusions is that engagement pays off. Out of the nearly 300 companies benchmarked, the ones we had engaged with improved their disclosure on freshwater risks and management more than the rest of the companies during the project. According to the saying "what gets measured gets done", we can assume that improved reporting and transparency will lead to better water risk management.

Freshwater important but still not priority

Another take-away is that although freshwater management is seen as an important issue, it is not a top priority, not even with the high-risk water-intense companies we have engaged with. Companies are under-reporting on water issues. One explanation could be that climate change is dominating other environmental goals in Agenda 2030.

Coordination a big challenge

The project also finds that coordinating water management on a river basin level is a big challenge for companies. The concept of integrated water resources management is something that companies are struggling to incorporate in their water management approaches.

High time to make water risk a top priority

Climate change will aggravate water risks. As temperatures increase, water risks will rise. In recent years we have seen increasing water withdrawals and



Investors can take action on Agenda 2030

worsening performance of water intensity globally. So it is high time that companies as well as investors and governments make water risks a top priority.

AP7's intention by commissioning this report is to add to the knowledge within the financial industry and to spur concrete action. Investors are more than financiers of water projects; they are also owners of companies with high water risks. The more experience we accumulate on active ownership the better the financial industry can contribute to the fulfillment of Agenda 2030. Not least through collaborative efforts.

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Executive Summary

More is needed to advance the water agenda

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This report provides an update on the 2017 benchmarking exercise¹ examining the state of water risk exposure and stewardship in food and beverage (F&B), garment and mining sectors. For this edition, Sustainalytics, in cooperation with AP7, repeated the analysis of the same 299 companies on the five universal and three sector-specific indicators focusing on the key aspects of corporate water management. Below, we present the 2019 status along with a comparative analysis of the developments since the initial benchmarking. Notably, on carrying out the assessment, we observed evidence of a positive engagement impact and accordingly this report also discusses the related benefits to investors and companies alike. Reflecting our belief in investors' role in encouraging companies to improve their environmental, social and governance (ESG) performance and our view that water challenges require integrated responses, AP7 and Sustainalytics encourage all stakeholders to systematically explore and utilise the synergies in active communications and collaboration.

Key takeaways

Little progress

- While water continues to be high on the agenda, not nearly enough action and impact can be seen on the ground.
- The state of corporate water disclosure remains limited and patchy.
- Overall, corporate water management does not appear to have improved: even though 30 percent of the companies in our universe received a better total score compared to 2017, 39 percent had in fact declined
- Specifically, efforts on water intensity have taken a clear turn for the worse, with either the related disclosure or performance, or both, having notably deteriorated among the companies analysed.

Glimmers of hope

- We observed most progress within the garment sector.
- Water policy remains the measure with the biggest uptake across our universe, but we also witnessed a notable increase in board-level responsibility for water management and/or sustainability.
- The poor disclosure may be masking substantial efforts underway behind the scenes.

Evident engagement impact

- Companies that investors engaged with in the two interim years improved their performance much more than the wider group.
- For investors, engagement not only helps obtain pertinent information beyond public disclosure, but also provides an opportunity to contribute to enhanced water stewardship.



Introduction

Three years of focused efforts on water

Baseline established

In autumn 2016, AP7 and Sustainalytics² embarked on a collaborative investor project on water stewardship and risk, starting with a benchmarking exercise to map out the status of 299 companies' water risk exposure and management.³ The focus was on the food and beverage (F&B), garment and mining industries, as they have large water demands, significant environmental impacts and meaningful operational footprints in water-stressed developing countries.⁴

Many risks and losers in water crisis

Recognising the crucial role of water for security, development, communities, and business continuity alike, we saw – and still see – an obvious need for decisive action from all stakeholders in society to mitigate the wide-ranging consequences of an escalating water crisis. Interlinkages and dependencies mean that while some might be able pay their way out of the immediate "losers" category, many companies could experience material negative impacts in the long run. And a small number may genuinely be able to count themselves as "water winners."

This situation could pose tremendous long-term risk for the investor community, but such risk exposure also creates both a responsibility and an incentive for investors to leverage their influence with companies.

Pushing the envelope

Investor engagement to affect change

Given that our benchmarking analysis showed companies' water policies and preparedness to be far from advanced, there was substantial opportunity for AP7 and other investors to push for the adoption of best practices, including better risk management programmes.

Accordingly, after the initial benchmarking established the existing state of affairs and identified the gaps, a group of six investors⁶, coordinated by Sustainalytics, proceeded to engage for two years with a selection of companies, mostly identified as having a low-medium standard of water risk management and medium-high exposure to water risks.

Aligning with the SDG6 and leveraging best practices

The overarching goal of this engagement was to effect change through targeted dialogue. Our objectives mirrored the targets built into Sustainable Development Goal (SDG) 6 on water and sanitation, and thus ensured that our efforts were aligned with the global agenda.

The group also engaged with five companies found in the benchmarking to command leading practices, in order to better understand practical solutions that we could discuss with less advanced companies and to encourage the leaders to continue raising standards on a sector and local level.



Little has improved since 2016

Challenges remain

Almost three years since we commenced the project, the challenges very much remain. While water continues to be high on the agenda and some action has been taken, not nearly enough impact can be seen on the ground. According to the *Sustainable Development Goals Report 2018*, the latest available figures indicate that big parts of the global population still lack access to safe drinking water and sanitation (29 percent and 61 percent respectively), while only 59 percent of all wastewater is safely treated.⁷

Business-as-usual is not an option

The Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation concludes that the world is simply not on track to achieve SDG 6 by 2030, and points out that water pollution is worsening, governance structures are weak and fragmented, and there is a serious lack of funding and capacity in connection to water.⁸

Furthermore, CDP's *Global Water Report 2018* shows that companies' water withdrawals have increased by almost 50 percent between 2015 and 2018, with some of our focus sectors – F&B and mining – among those whose performance in this regard has deteriorated most. Fully 77 percent of CDP Water respondents in high-risk sectors note an exposure to substantive water risks. All this points to a dire trajectory and clearly illustrates that business-as-usual is not only untenable but also impossible.

A progress update

Taking stock of the developments

The third and final stage of our project was to repeat the benchmarking in Q1 2019 to identify trends in the F&B, garment and mining industries, and determine how companies' water-related disclosures had developed in the interim years. We also wanted to see to what extent our engagement efforts had succeeded in improving the target companies' water management in comparison to the broader peer group that had not been subject to similar interaction with investors. This report describes the status of companies in our focus sectors in 2019 along with the key changes that our research discovered as having taken place since 2017.

Mixed results

The results were mixed: in total, 30 percent of companies appear to have improved their approach to water risks and stewardship, but 39 percent have in fact deteriorated. However, 86 percent of these received scores only slightly higher or lower than two years earlier.

The mining sector still displays the strongest performance overall, but most progress has taken place within garment industry.

Looking at different aspects of water management, a stated water policy remains the measure with the biggest uptake across our universe, but it is extremely concerning to see that efforts on water intensity have taken a clear turn for the worse, with either related disclosure or performance, or both, having notably deteriorated among the companies analysed.



Engagement produces impact and benefits

Investor engagement makes a difference

Nevertheless, we are encouraged by results indicating that investors can play a positive role leading to concrete impacts, given that the companies included in the two-year engagement stage of this project improved their performance much more than the wider group.

Active ownership therefore not only acts as a useful tool for obtaining pertinent information on companies' risk management and water stewardship, but can also contribute to enhanced preparedness in relation to water-related risks and opportunities among companies, in turn leading to improved disclosure and practices on the corporate, sector and catchment level.

Accordingly, our findings should be taken as a strong encouragement for responsible investors to utilise their leverage and an endorsement of the benefits that constructive engagement can provide for investors and companies alike.



Methodology

Scope of 2019 study

Revisiting the 2017 assessment

This report revisits the assessment of corporate water risk management conducted in Q4 2016 and Q1 2017 and considers developments in this domain for the same universe of companies.

Focus on F&B, garment and mining companies and ICs

As noted above, the three focus sectors are F&B, garment and mining, and we have also included some industrial conglomerates (ICs) which have significant operations in at least one of our focus sectors. The universe comprises 299 companies distributed as follows: F&B – 161 companies; garment – 45; mining – 74; and industrial conglomerates – 19.

The 2019 study concentrates on water risk management

We have once again evaluated the water risk management of every company using the KPI framework outlined below. For the 2017 study, we also evaluated the exposure of these companies to water-stressed countries. We have chosen not to repeat that part of the exercise for the purpose of this edition, in part because we do not expect that there will have been significant changes in this regard for most companies over the last two years. We also envisage that management of the water risks that companies face, as a result of geography or other variables such as sector or local stakeholders, is more amenable to investor influence, and therefore of greater interest to investors, than basic choice of operational location.

Evaluating water risk management

Five core KPIs

In line with the targets set out under SDG 6, we developed ahead of the 2017 benchmarking study a set of five Key Performance Indicators (KPIs) applicable to all companies in our universe.

One tailored KPI for each of the focus sectors

Given that our engagement encompasses three very distinct sectors, we also wished to incorporate into our evaluation factors that were material to each sector specifically. Accordingly, for each company we have also considered one or more sector-specific KPIs. The full list of KPIs is shown in Figure 1.

Figure 1: KPIs used in study

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Description	Scope					
Board-level responsibility for water	All companies					
Water policy	All companies					
Water use intensity	All companies					
Water use goals	All companies					
Water pollution goals	All companies					
Local community impacts	Companies in the mining sector					
Supply chain water management	Companies in the F&B sector					
Manufacturing water management	Companies in the garment sector					
	Board-level responsibility for water Water policy Water use intensity Water use goals Water pollution goals Local community impacts Supply chain water management					

Source: Sustainalytics



KPI scores ranging from 0 to 3

We assigned each company a score from 0 to 3 for each KPI, with 0 being the most favourable score and 3 the least favourable. All companies were analysed against KPIs 1 to 5 and against one or more of KPIs 6 to 8, depending on the number of relevant industries in which the company operates. When a company was analysed against more than one of the sector-specific KPIs, the score was averaged so the total score on KPIs 6 to 8 was not higher than 3.

Total score of 0 to 18 per company

Overall, a company received a subtotal score of 0 to 15 on KPIs 1 to 5 and 0 to 3 on KPIs 6 to 8, leading to a total score of 0 (most favourable) to 18 (least favourable).

Sources include public reporting, Sustainalytics research and CDP Water In conducting the 2019 assessment we have drawn on a number of sources. Naturally, information published by the companies in their annual reports and sustainability reports, as well as information on the companies' websites, has played a key role. In addition, we have consistently drawn on Sustainalytics' own research reports¹⁰ and have utilised the CDP Water survey responses of the 91 companies that have made theirs publicly available.

For more details on the process of analysing companies' management of water risk, see Appendices 1 and 2.



2019 Results

Corporate water management indicators

Water policy was core indicator with best average scores

Looking at the overall performance of our entire group of companies through the prism of the different KPIs, we can see that the universal KPI where companies scored best on average was water policy (average score of 1.8). This indicates that the majority of companies either make a high-level statement on water stewardship or disclose a water policy but at the same time show room for improvement in terms of setting clear goals or guidelines for action. Indeed, only 16 percent of companies achieved the best score on this KPI.

Under a third of companies achieved top score on any one KPI

In a similar vein, based on the scores, no more than 30 percent of companies display excellence on any of the KPIs. The KPI where the highest number of companies received the optimal score was KPI 4, on setting water use goals, where the figure was 28 percent.

75 percent received the poorest rating on water use intensity

The KPI where companies scored worst on average was water use intensity (2.5). This reflects the fact that fully 75 percent of the companies were awarded a score of 3 on water use intensity, meaning that they do not provide information on this metric or disclose consistently increasing water use intensity over the last three years.

At least 23 percent received worst score on each core KPI

The KPI displaying the next worst scores was water pollution goals (2.5), where, similarly, 70 percent of companies received a score of 3, meaning that they lack quantitative targets of qualitative goals. It is of some concern that a significant minority of companies also receive the worst score on each of the other KPIs: 45 percent on setting water use goals, 30 percent on board-level responsibility for water issues and 23 percent on disclosing a water policy.

Best scores on managing local community impacts in mining sector

The KPI displaying the best score of all was sector-specific, with mining companies achieving an average score of 1.5 on the management of local community impacts. This suggests that many companies make a high-level statement of responsibility in this area and/or disclose one or two specific measures, but still only 18 percent of mining companies achieved a score of zero on this KPI, indicating that they go as far as displaying a company-wide system for managing such impacts.

Conversely, only 3 percent of F&B companies achieved the best score on supply chain water management (indicating both a well-developed policy and one or more meaningful measures in this area).



Sectoral findings

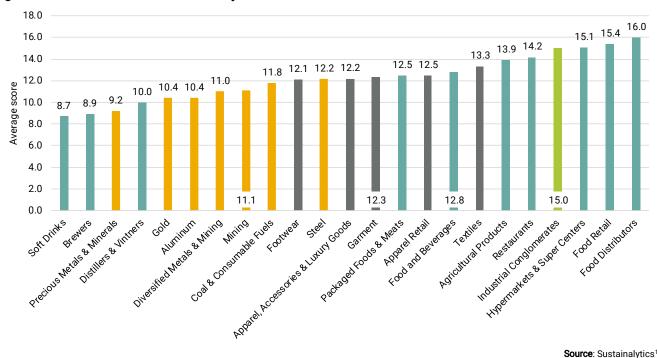
Mining displays best total scores

Our sectoral findings are summarized in Figure 2. When it comes to total scores across all KPIs, the mining sector performs best (with an average total score of 11.1), followed by the garment sector (12.3), and F&B (12.8). ICs, with an average score of 15, are some way behind.

Highly variable performance within sectors

Although F&B companies display the worst scores of all of our core focus sectors, there is a wide range of performance of different sub-sectors. Indeed, two of the top 3 performing sub-sectors - soft drinks (8.7), brewers (8.9) and precious metals and minerals (9.2) - are in the F&B sector. On the other hand, the 3 lowest-performing sub-sectors in the universe are also F&B - food distributors (16.0), food retail (15.4) and hypermarkets and super centres (15.1) - which drags down the average for the sector.

Figure 2: Total scores across all KPIs – by sector and subsector



Different sectors lead the way on different KPIs

Furthermore, within the ranking of overall sectoral performance, different sectors demonstrate the strongest performance on different KPIs. Mining companies have the best average score on board-level responsibility (1.5), water policy (1.6) and water use goals (2.2), while F&B companies have the best average score on water use goals (1.6) and garment companies have the best average score on water pollution goals (2.2).

F&B companies stand out positively on water use goals

This to some extent reflects the proportions of companies in the different sectors achieving optimal scores. Thirty-eight percent of F&B companies disclosing specific quantitative or qualitative water use goals did so in a sufficient measure to earn a top score (although 44 percent of companies in this sector disclose no goals at all). Eighteen percent of garment companies



Sector-specific KPIs mirror overall performance of focus sectors

Industrial conglomerates underperform on nearly all KPIs

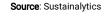
disclosing water pollution goals qualify for a top score (more than any other sector), however a striking 84 percent of garment companies also received the worst score on water use intensity, indicating that that they fail to provide information in this area or have shown consistently increasing water use intensity.

As shown in Figure 3, there is a wide range of averages on sector-specific KPIs, echoing the overall performance of the different sectors, from local community impacts (mining) (1.4) to manufacturing water management (garments) (1.6) to supply chain water management (F&B) (2.3). Indeed, only 12 percent of mining companies received the worst score on the relevant KPI, while 31 percent and 58 percent of garment and F&B companies respectively received the least favourable score, indicating that they do not disclose any information on their approach to these issues.

In contrast to this complex picture of the performance of single-sector companies, ICs display the worst or second-worst average performance on all KPIs (except garment manufacturing water management), reinforcing the view that the management of operations in multiple sectors dilutes their focus on water stewardship.

KPIs 6 - 8 (Sector-specific) KPI 5: 2.8 Water pollution goals KPI 4: 2.6 Water use 2.0 goals KPI 3: Water use intensity 22 KPI 2: Water policy KPI1: Board-level 2.1 responsibility 1.6 0.0 0.5 1.0 1.5 2.0 2.5 3.0 Average score ■ Industrial Conglomerates ■ Food and Beverages ■ Garment

Figure 3: Individual KPI scores by sector



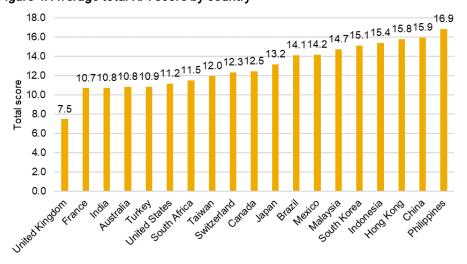


Big variation in country performance

Findings by region and country

As shown in figure 4, the leading countries (with five or more companies in the universe) are the United Kingdom, where companies average a total score of 7.5, France (10.7), India (10.8), Australia (10.8) and Turkey (10.9). Conversely, the worst-performing countries (with five or more companies in the universe) are Philippines (average total score of 16.9), China (15.9), its neighbour Hong Kong (15.8), Indonesia (15.4), South Korea (15.1) and Malaysia (14.7).

Figure 4: Average total KPI score by country

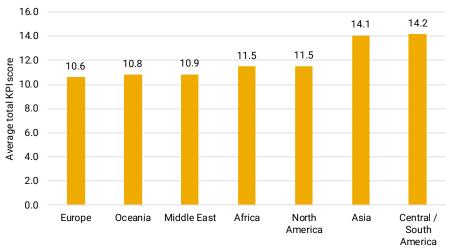


Source: Sustainalytics

Overall performance of different regions

This observation is mirrored in the overall performance of different regions (as shown in figure 5), with companies in Europe having the best overall average (10.6), followed by Oceania (10.8), Middle East (10.9), Africa (11.5) and North America (11.5). Asia and Central/South America are some distance behind (14.1 and 14.2 respectively).

Figure 5: Average total KPI score by region



Source: Sustainalytics



Different regions take the lead on different KPIs

However, if we look at the scoring in terms of specific KPIs, it is analogous to the sector-level picture outlined above, in that different regions take the lead on different KPIs. The 16 African companies are strongest on board-level responsibility and water policy (average scores of 1.1 and 1.5 respectively), as well as the mining sector's local community impacts (0.7). The seven Middle Eastern companies are strongest on water use intensity (2.1) and water use goals (1.4) – a reflection perhaps of water scarcity in a number of countries in the region - as well as in setting water pollution goals (1.6). While European companies display the best average score overall, the only individual KPIs where they outperform all other regions are supply chain water management (F&B) (1.8) and manufacturing water management (garments) (1.1).



Comparative analysis

Changes from 2017 to 2019

Overall developments

Turning to the developments since the first benchmarking, we can observe that the 299 companies split almost proportionally into 3 thirds: about 30 percent performed better, about 31 percent had the same score as in 2017, and about 39 percent scored worse. However, more than 86 percent of the companies had scores not more than 3 points higher or lower than last time. *Significant* deterioration (by four points or more) took place at 25 companies (8 percent) and significant improvement (again, by four points or more) at 15 companies (5 percent), of which 17 and 8 companies respectively represent the F&B sector.

Mostly small changes in average scores

The average total scores in mining have remained largely the same (from 11.18 in 2017 to 11.12 in 2019, where 18 is the worst score) and in F&B have deteriorated slightly (from 12.5 to 12.8). The most positive development appears to have occurred in the garment sector, where 45 percent of the companies have improved – with 9 percent improving significantly – and only 15 percent showed a decrease in performance. The average total score in this sector improved from 12.7 to 12.3.

Fewer companies with no water disclosure

The situation is also better when looking at companies with no reassuring water disclosure whatsoever: there are now only 40 companies with a score of 18 compared to 53 at our last benchmarking. Twenty of the 53 with no apparent preparedness for water risks in 2017 have now improved their performance, of which 15 are from the F&B sector. However, there are seven companies that previously had scores in the range 15-17 but now score 18, meaning that these have either removed the relevant water-related disclosure previously offered or have gone back to square one in terms of its quality.

Corporate water management indicators

Deterioration on water intensity stands out

Exploring each universal KPI in isolation (see Figure 6), we see few significant changes compared to 2017, with roughly 70-80 percent of companies having maintained the same score on the respective indicators. The notable exception is KPI 3 on water intensity, where 35 percent (105 companies) show inferior performance and only 9 percent improved their performance. The average score on this KPI has gone from 1.9 to 2.5. Conversely, the trend is most positive when it comes to board-level responsibility (KPI 1), with 22 percent of companies (65) now receiving a better score.



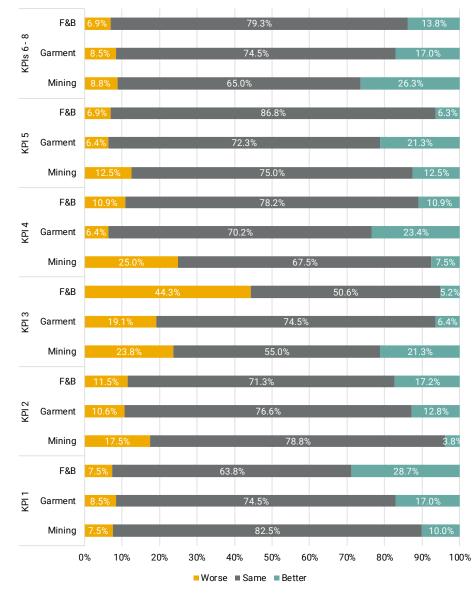


Figure 6: Company KPI scores - 2019 compared to 2017

Source: Sustainalytics

Sectoral findings

One step forward, one step back for F&B

The advance in board-level responsibility is particularly fuelled by F&B companies, of which 29 percent improved their score on KPI 1. On the other hand, this sector is also the main culprit, damaging the overall picture regarding water intensity (KPI 3), with 44 percent of F&B companies now displaying poorer performance on this aspect. On the sector-specific KPI 7, assessing supply chain water management, 14 percent of F&B companies have gone forward and 7 percent backwards in terms of their approach to related risks.



Supply chain water management still overlooked

Mining sector makes headway

Middle East leads the pack

The garment sector, in turn, has made clear headway in target-setting, with 23 and 22 percent respectively having improved their score on water use goals (KPI 4) and water pollution goals (KPI 5), and only three companies having deteriorated on each KPI. As with the F&B supply chain, no major advances have taken place with regards to water management in garment manufacturing either, as measured by KPI 8, with 17 percent of companies improving and 9 percent now performing worse than two years ago.

Conversely, mining companies have made notable progress on the sector-specific KPI 8, which assessed their approach to water-related local community impacts: 26 percent now display better preparedness in this regard. The sector also bucks the trend in relation to water-use intensity, with 21 percent of mining companies faring better on KPI 3 than in 2017. Indeed, the industry adds up to 17 of only 28 companies in our overall universe that have improved on this indicator, albeit that almost as many mining companies' related score also deteriorated. Another noteworthy KPI development from mining comes in connection to water use goals, where a quarter of the sector perform worse than in our last benchmarking.

Findings by region

As Figure 7 shows, Middle Eastern companies showed the best performance compared to their peers based in other regions with 57 percent improving their score. Another 29 percent kept their score constant and only 14 percent had a decrease in performance. However, this should be taken with a grain of salt as there were only 7 Middle Eastern companies in our study.

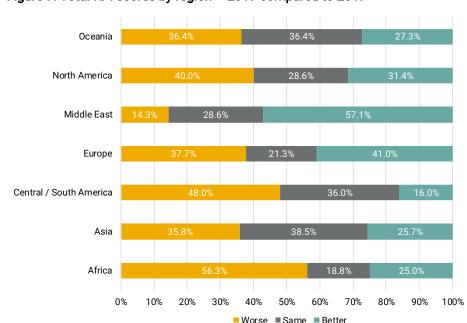


Figure 7: Total KPI scores by region - 2019 compared to 2017

Source: Sustainalytics



41 percent of European companies improve

Another region with many good developments was Europe (61 companies), where 41 percent had improved their water preparedness over the last two years, out of which 7 percentage points showed a significant improvement. In addition, about 21 percent maintained their preparedness constant, leaving 38 percent of the European companies with a decreasing performance.

Even distribution in Asia and Oceania

Perhaps not surprisingly due to their proximity, Asia and Oceania (109 and 11 companies respectively) display a similar score change distribution. In these regions, 26 percent and 27 percent of corporations respectively performed better, with half of these representing the F&B sector. Thirty-six percent of the companies in each region had a poorer score, but in Oceania none showed a significant decline and in Asia this was the case for only 6 companies, or 5.5 percent. A little more than a third of the companies in these two zones kept their score constant.

North American performance deteriorates

Most of the 70 North American companies analysed had a worse or equal performance, with 14 percent showing a significant decline and 26 percent a minor decrease in their performance. In contrast with their Asian and Oceanian peers, the F&B sector in North America dragged their region's score down: 21 of the 28 companies with a worse performance in US and Canada were from this sector. Overall, 29 percent of companies kept the same score, while 31 percent improved their performance.

Half of Latin American companies decline

Almost half of the 25 companies in our study based in Central / South America experienced a performance decline compared to 2017. The other half achieved either the same score or a modest improvement. None of the companies in this region showed a significant improvement of 4 points or more.

Little change in Africa

When it comes to the 16 African companies analysed, they remained largely constant – with neither a significant decline nor a significant improvement. In total, 56 percent performed slightly worse than 2 years ago while the other 44 percent had either the same or a slightly better score.

Engagement companies

Significantly better results than across the overall universe

Following the 2017 benchmarking, we commenced a collaborative two-year engagement with a selection of companies that had displayed a low-medium performance and medium-high exposure to water-stressed developing countries in our assessment, with the view to bridging the identified gaps and encouraging more transparency and the adoption of best practices. Of the 17 companies included in our engagement, 11 (65 percent) improved their total score based on public disclosure 2017 vs. 2019, of which three companies did significantly better. Three companies (18 percent) performed the same and three (18 percent) demonstrated a minor decline. As this split is clearly more advantageous than the results for the overall universe, where the equivalent proportions were 30, 31, and 39 percent, we can speculate that investor engagement contributed positively to the targeted companies' enhanced disclosure.

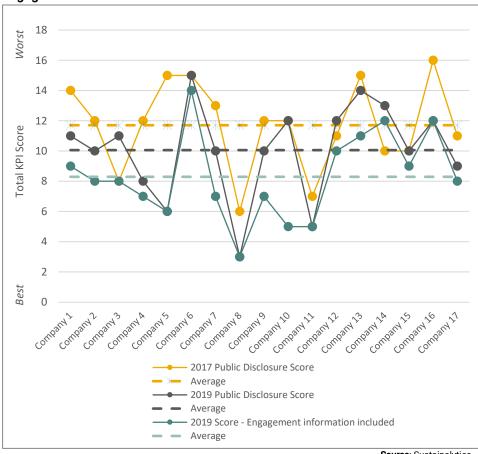


The benefits of bridging the disclosure gap

In the course of the engagement, it became obvious that companies' reporting was lagging behind actual water-related activities; in many cases we found that much more was being done than suggested by public disclosure. To explore the impact that this disclosure lag might have on public assessment of company performance, we compared engagement companies' 2019 KPI scores based on public disclosure (as above) with the scores they would get if the information they provided in the dialogue with Sustainalytics was also taken into account.

As shown in Figure 8, the results confirm that gaps in disclosure can meaningfully affect the impression given by companies to external stakeholders: of the 17 companies, 13 would in fact deserve an even higher score and four would score the same, if publicly providing a more complete picture of their existing water measures. This analysis provides an initial glimpse at the potential scoring penalties associated with disclosure lag, and underscores the benefit that can accrue to investors through engagement, particularly related to information that is not (yet) available in the public domain. The figure also illustrates how the engagement companies' water disclosure has changed since 2017 on an individual level as well as collectively.

Figure 8: Engagement company KPI scores - Public information only vs. engagement information included



Source: Sustainalytics



Analysis and discussion

The tide has yet to turn

Looking back at 2017

In 2017, we found that there was a general lack of transparency in relation to water, and policy and practices were poor across our focus sectors despite their significant exposure to water-stressed developing countries. Almost a third of the companies analysed did not have a policy on water management and over 70 percent had no targets on pollution or water quality. Mining was the sector that had on average the biggest exposure but also the best preparedness in terms of water risks, while supply chain water risks were not appropriately addressed by the vast majority of F&B and garment companies.

No news is bad news

Now in 2019, we could repeat the same summary, with the exception that some kind of water policy is now only missing from a quarter of companies. In general, the benchmarking results outlined in this report indicate that corporate water management, or at least the related disclosure, has not improved. In fact, in the case of some KPIs and many companies, it has deteriorated.

Presumed awareness is not reflected

Declining performance

on the performance

What is perhaps most worrying is the worsening performance on water intensity, which appears to correlate with the CDP Water's finding about companies' withdrawals having increased by 50 percent in recent years 12. These trends are rather surprising given all the available data demonstrating escalating water stress, the constant talk about the impacts of climate change, and the increasing scrutiny of companies' environmental management in general.

Possible reasons for non-action on water

It could be that some companies are too narrowly focused on their CO2 emissions to tackle other issues posing material operational risks, such as water scarcity, although water and climate are in fact intimately connected. Many important and financially material ESG issues tend to receive less attention than climate change in both public and institutional investors discourse, which could potentially explain companies' priority setting.

Alternatively, the lack of action on corporate water management might result from the often low (or non-existent) costs associated with water, which do not incentivize water-saving behaviours or investments in water efficiency. It is also possible that the current dip reflects the long-standing neglect of water issues in strategic planning, now being realised on the ground.

Encouraging signs regarding the tone from the top

However, one could be hopeful that this trend may change, given that our analysis uncovered a notable increase in board-level responsibility for water management and/or sustainability. In 2017, almost half of the companies analysed had no board level responsibility for sustainability, which we highlighted as one of the key concerns at the time. Sixty-five percent of the companies have since improved in this regard, even though 30 percent still report no related oversight.



A strong commitment from the top of the organisation is a crucial catalyst for companies to integrate ESG considerations in their business strategy and day-to-day operations. Holistic risk management, including water, is gradually appearing to be assigned more attention at the highest organizational levels, and can contribute to concrete improvements in operational arrangements and ultimately to positive impacts on the watershed level.

Out of sight, out of mind

While garments are the most improved sector in our analysis, for most F&B and garment companies supply chain water management remains a key shortcoming, which an enhanced strategic understanding at the company level, as outlined above, can potentially alleviate in the coming years. Indeed, we can re-confirm the finding from the initial benchmarking that the more direct water needs a company has, the more likely it is to have realised the related implications.

We note this particularly in the mining sector's superior performance in relation to others, but the flipside is also apparent: those more distanced from the point of major water withdrawals, e.g. food distribution and food retail, continue to lag behind.

Measurable engagement impact

It's official: engagement gets results

Apart from establishing the current status of F&B, garment and mining companies' preparedness to water risks and the trends in the related disclosure and processes since 2017, this benchmarking gave us the opportunity to measure engagement impact. On this point, we are very pleased to report positive outcomes. The companies engaged with by AP7 and five other investors in the past two years, coordinated by Sustainalytics, performed visibly better than the peer group, confirming the important role that investors can play in furthering water stewardship.

The fact that such obvious improvements could be achieved in only two years indicates that there is significant potential in constructive dialogues effecting change and mustering benefits to companies and investors alike.



Conclusion

A little more conversation and a lot more action, please

The gravity is not sinking in

Water stress is not new, the fact that the situation is not getting better without decisive and collaborative action is not new, companies' role in the equation is not new, and not even SDG 6 can be considered new anymore. Yet the progress in terms of meaningful improvements and impacts on the ground seems painfully slow, and our research indicates that the state of corporate water management has largely stood still over the last two years.

Is there more than meets the eye?

However, it should be noted that this analysis is based on publicly available information, whereas we have seen very clearly in the engagement stage of our project that there is much more being done than what the companies report. In light of this finding, it is possible that the picture is not as bleak as indicated by public disclosures alone, and impactful efforts may already be in motion. Nevertheless, given the poor level of corporate water disclosure and the benefits of transparency to all parties, both the companies and engaged investors should actively push for improvements in quantitative and qualitative water reporting.

Advantageous dialogue

Engagement benefits to companies...

Moreover, the possibilities for mutually advantageous dialogues should be utilised more systematically. The fact that the companies engaged by our investor group have been open to discussions and now display better water disclosure, policies and/or performance than their peers should not be underestimated: extending beyond water, this kind of approach to ESG (environmental, social and governance) issues both improves companies' position in the face of impending risks and makes them more attractive for many investors.

... and investors

For investors, apart from giving them the chance to effect positive change, engagement with companies provides plentiful opportunities for gaining pertinent information and reassurance on (potential) investees.

Key areas for improvement

Both context-based and high-level improvements needed

This report highlights the benefits of encouraging companies to improve on all aspects of water management and stewardship. It is clear that there is a need across the board to increase understanding particularly in the context of microlevel risks, impacts and collaborative opportunities (such as in connection to key sourcing locations and affected communities, as measured by our sector-specific indicators) and macro-level material implications associated with water (via enhanced board competence and oversight, as well as water policy and goals setting out the path for minimising potential disruptions to operations).



Taking a strategic approach to water

Further, companies that have carried out risk assessments, and thus obtained a snapshot of their water impacts, would benefit from developing strategic responses to manage the identified risks, build systems that collect appropriate data across their operations, and adopt a proactive approach, including stakeholder engagement and assessment of the projections of likely changes in water availability and needs.

Unrealized investor potential

Collaboration is the key

Engagement and cooperation with different stakeholders is very much in line with integrated water resource management called for by SDG 6. Collaboration is usually also the most effective and efficient way for companies to tackle shared challenges on the river basin level and for investors to leverage their influence. Accordingly, this is the approach we recommend to everyone involved.

Investors have more to offer than just money

As this report shows, investors can play a positive part regarding water, leading to concrete impacts. Importantly, their contribution should not be considered as being limited to the role of a financier, either by the investors themselves or by the other stakeholders. Indeed, given that investor engagement and active ownership can help advance corporate risk management and water stewardship, we hope to see more collaborative efforts take advantage of this so far underutilized potential.



Appendices

Appendix 1: Evaluating the companies' management of water risk

SDG 6 on water and sanitation

SDG 6 sets an overarching goal of ensuring availability and sustainable management of water and sanitation for all. In order to achieve this goal, it sets a number of specific targets. These include:

- 1. improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials;
- 2. substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater;
- 3. implement integrated water resources management; and
- 4. protect and restore water-related ecosystems.

KPIs aligned with SDG 6 targets

In developing criteria for evaluating companies' water risk management, we sought to align our evaluation with these targets, and thus to factor into our assessment how far companies were contributing to promoting SDG 6 through their current approach. The eight KPIs used in our analysis are shown below.

KPI Overview

KPI	Description	Scope	Criteria
KPI 1	Board-level responsibility for water	All companies	The company discloses board-level responsibility for water
KPI 2	Water policy	All companies	The company discloses a water policy that sets out clear goals and guidelines for action
KPI3	Water use intensity	All companies	The company discloses water use intensity for at least three years and displays a consistent decrease in intensity
KPI 4	Water use goals	All companies	The company discloses companywide quantitative targets or qualitative goals related to water use or water efficiency
KPI 5	Water pollution goals	All companies	The company discloses quantitative targets or qualitative goals related to reducing or eliminating water pollution
KPI 6	Local community impacts	Companies in the mining sector	The company recognises its responsibility and takes active measures to manage water-related impacts on local communities
KPI7	Supply chain water management	Companies in the F&B sector	The company discloses a satisfactory approach to sustainable water management in its supply chain
KPI 8	Manufacturing water management	Companies in the garment sector	The company discloses a satisfactory approach to sustainable water management at manufacturing sites

Source: Sustainalytics



5 universal KPIs and 3 sector-specific KPIs

For all of the companies in our universe we applied KPIs 1-5. In addition to these "universal KPIs", and given that our engagement encompasses three very distinct sectors, we wished to incorporate into our evaluations factors that were material to each sector specifically. Accordingly, for each company we also considered one or more of sector-specific KPIs, as shown above.

Score of 0 to 3 awarded on each KPI

We incorporated these KPIs into a scoring framework which permits a score to be allocated for each KPI in a range of zero (most favourable) to three (least favourable). Thus, the scoring was consistent with our 2016/2017 assessment of geographical risk exposure, where a higher overall score equates to a higher operational footprint in water-stressed countries.

0 is most favourable, 3 is least favourable

By way of example, for KP1 1 (board-level responsibility), a score of 0 signals that the company discloses a person or committee on the board responsible for water. At the other end of the spectrum, a score of 3 means that the company discloses no person or department responsible for water or sustainability more broadly. Scores of 1 and 2 represent gradations of responsibility and transparency in between. A more detailed version of the scoring framework, including scoring guidance for each KPI, can be found in Appendix 2.

Various company sources used

During December 2016 and January 2017, and then again in Q1 2019, we evaluated all of the companies in our universe under this framework, drawing on a number of resources. On doing this, we drew directly on information published by the companies, including their annual reports, sustainability reports and websites.

For the 2019 assessment, we also drew on Sustainalytics' own research reports.

91 public CDP Water responses used in 2019

Meanwhile, CDP Water operates an annual survey of listed companies, sending them a detailed questionnaire on water risk management, to which the companies have the option to respond privately or to submit a publicly available response. In conducting our evaluation, we also used the responses to the CDP's Water questionnaire that companies had opted to make publicly available. In 2019, this provided us with an additional layer of information on 91 companies in our universe.

Total score of 0 to 18 assigned to every company

Thus, drawing on information from the companies, Sustainalytics' research and CDP Water we assigned scores to every company. This comprises (a) a score between zero and 15 related to universal KPIs (five KPIs with a maximum score of three each) and (b) a score between zero and three related to one or more sector-specific KPIs. If more than one sector-specific KPI was relevant to a company (for example in the case of industrial conglomerates with activities in more than one of our focus sectors) we calculated the average, meaning that the score on sector-specific KPIs is never higher than three. Therefore, for each company the total score for water risk management is between zero and 18.

Appendix 2: Water risk management KPIs scoring framework

KPI 1. Applicable to all sectors. Board-level responsibility.

3 The company discloses no person or department responsible for water or sustainability more broadly The company discloses a person or department responsible for water below board level, but it is not clear that they report regularly to the board OR the company discloses a person or department responsible for sustainability more broadly but is not explicit about whether water forms parts of their The company discloses a person or department responsible for water below board level and reporting regularly to the board The company discloses a person or committee on the board responsible for water

Score	KPI 2. Applicable to all sectors. Water policy. Score Description					
3	The company discloses no water policy					
2	The company states that it has a water policy but does not disclose its contents OR the company makes a high-level statement on water stewardship (which does not constitute a policy) OR the company has an overarching environmental policy that makes a limited reference to water stewardship					
1	The company discloses a water policy setting out either clear goals or guidelines for action OR discloses such a policy within an overarching environmental policy					
0	The company discloses a water policy that sets out clear goals and guidelines for action OR discloses such a policy within an overarching environmental policy					

KPI 3. Applicable to all sectors. Water use intensity.

Score	Description
3	The company provides no information on water use intensity OR discloses consistently increasing water use intensity over the last 3 years
2	The company discloses water intensity data for the last 3 years but displays a net increase in water use intensity over the period
1	The company discloses water intensity data for the last 3 years and displays a net decrease in water use intensity over the period
0	The company discloses water intensity data for the last 3 years AND displays consistently decreasing water use intensity over the period

KPI 4. Applicable to all sectors. Water use goals.				
Score	Description			
3	The company does not disclose that it has quantitative targets or qualitative goals			
2	The company states that it has quantitative targets or qualitative goals but does not disclose them			
1	The company discloses at least one quantitative target OR qualitative goal but none of them fulfill the criteria linked to a score of $\bf 0$			
0	The company discloses at least one specific, measurable and timebound quantitative target or one specific and meaningful qualitative goal			



KPI 5. Applicable to all sectors. Water pollution goals.

Score	Description
3	The company does not disclose that it has quantitative targets or qualitative goals
2	The company states that it has quantitative targets or qualitative goals but does not disclose them
1	The company discloses at least one quantitative target OR qualitative goal but none of them fulfills the criteria linked to a score of 0
0	The company discloses at least one specific, measurable and timebound quantitative target or one specific and meaningful qualitative goal

KPI 6. Applicable to the mining sector. Local community impacts.

Score	Description
3	The company does not publicly acknowledge its responsibility or disclose any relevant measures
2	The company makes a high-level statement of its responsibility OR discloses one or two localised measures
1	The company acknowledges its responsibility AND discloses at least one or two measures
0	The company acknowledges its responsibility AND discloses a companywide system for managing such impacts

KPI 7. Applicable to the food and beverage sector. Supply chain water management.

Score	Description
3	The company discloses no information on its approach
2	The company states that it has a policy and/or takes measures but discloses neither the contents of the policy nor the nature of the measures
1	The company discloses a policy setting out clear goals OR one or more meaningful water management measure
0	The company discloses both a policy setting out clear goals AND one or more meaningful water management measure

KPI 8. Applicable to the garment sector, Manufacturing water management.

it 10. Applicable to the garment sector. Manaractaring water management.				
Score	Description			
3	The company provides no information on its approach			
2	The company states that it has a policy and/or takes measures but discloses neither the content of the policy nor the nature of the measures			
1	The company discloses a policy setting out clear goals OR one or more meaningful water management measure			
0	The company discloses both a policy setting out clear goals AND one or more meaningful water management measure			



Appendix 3: List of companies

Number	Company	Country	Region	Sub-sector	Sector
1	ABC-MART	Japan	Asia	Apparel Retail	Garment
2	ABOITIZ EQUITY VENTURES	Philippines	Asia	Industrial Conglomerates	Industrial Conglomerates
3	ADARO ENERGY	Indonesia	Asia	Coal & Consumable Fuels	Mining
4	ADIDAS	Germany	Europe	Apparel, Accessories & Luxury Goods	Garment
5	AEON CO	Japan	Asia	Hypermarkets & Super Centres	Food and Beverages
6	AGNICO EAGLE MINES	Canada	North America	Gold	Mining
7	AJINOMOTO CO	Japan	Asia	Packaged Foods & Meats	Food and Beverages
8	ALCOA	United States	North America	Aluminium	Mining
9	ALFA	Mexico	Central / South America	Industrial Conglomerates	Industrial Conglomerates
10	ALIMENTATION COUCHE	Canada	North America	Food Retail	Food and Beverages
11	ALLIANCE GLOBAL GROUP	Philippines	Asia	Industrial Conglomerates	Industrial Conglomerates
12	ALROSA	Russia	Europe	Precious Metals & Minerals	Mining
13	ALUMINA	Australia	Oceania	Aluminium	Mining
14	ALUMINUM CORP OF CHINA	China	Asia	Aluminium	Mining
15	AMBEV	Brazil	Central / South America	Brewers	Food and Beverages
16	ANADOLU EFES BIRACILIK	Turkey	Middle East	Brewers	Food and Beverages
17	ANGLO AMERICAN	United Kingdom	Europe	Diversified Metals & Mining	Mining
18	ANGLO AMERICAN PLATINUM	South Africa	Africa	Precious Metals & Minerals	Mining
19	ANGLOGOLD ASHANTI	South Africa	Africa	Gold	Mining
20	ANHEUSER-BUSCH INBEV	Belgium	Europe	Brewers	Food and Beverages
21	ANTA SPORTS PRODUCTS	China	Asia	Footwear	Garment
22	ANTOFAGASTA	United Kingdom	Europe	Diversified Metals & Mining	Mining
23	ARCA CONTINENTAL	Mexico	Central / South America	Soft Drinks	Food and Beverages
24	ARCELORMITTAL	France	Europe	Steel	Mining
25	ARCHER-DANIELS-MIDLAND	United States	North America	Agricultural Products	Food and Beverages
26	ARYZTA	Switzerland	Europe	Packaged Foods & Meats	Food and Beverages
27	ASAHI GROUP HOLDINGS	Japan	Asia	Brewers	Food and Beverages
28	ASICS CORP	Japan	Asia	Footwear	Garment
29	ASSOCIATED BRITISH FOODS	United Kingdom	Europe	Packaged Foods & Meats	Food and Beverages
30	BANPU	Thailand	Asia	Coal & Consumable Fuels	Mining
31	BARRICK GOLD CORP	Canada	North America	Gold	Mining
32	BARRY CALLEBAUT	Switzerland	Europe	Packaged Foods & Meats	Food and Beverages
33	BEIJING ENTERPRISES HLDG	China	Asia	Industrial Conglomerates	Industrial Conglomerates
34	BELLE INTL HLDGS	China	Asia	Footwear	Garment
35	BGF RETAIL	South Korea	Asia	Food Retail	Food and Beverages
36	BHP BILLITON	Australia	Oceania	Diversified Metals & Mining	Mining
37	BID CORPORATION	South Africa	Africa	Food Distributors	Food and Beverages
38	BIM BIRLESIK MAGAZALAR	Turkey	Middle East	Food Retail	Food and Beverages
39	BOLIDEN	Sweden	Europe	Diversified Metals & Mining	Mining
40	BRF	Brazil	Central / South America	Packaged Foods & Meats	Food and Beverages
41	BROWN-FORMAN CORP	United States	North America	Distillers & Vintners	Food and Beverages
42	BUENAVENTURA MINAS	Peru	Central / South America	Gold	Mining
43	BUNGE	United States	North America	Agricultural Products	Food and Beverages
44	BURBERRY GROUP	United Kingdom		Apparel, Accessories & Luxury Goods	Garment
45	CALBEE	Japan	Asia	Packaged Foods & Meats	Food and Beverages
46	CAMECO CORP	Canada	North America	Coal & Consumable Fuels	Mining
47	CAMPBELL SOUP	United States	North America	Packaged Foods & Meats	Food and Beverages
48	CARLSBERG	Denmark	Europe	Brewers	Food and Beverages
49	CARREFOUR	France	Europe	Hypermarkets & Super Centres	Food and Beverages
50	CASINO	France	Europe	Food Retail	Food and Beverages
51	CCC	Poland	Europe	Footwear	Garment
52	CENCOSUD	Chile	Central / South America	Hypermarkets & Super Centres	Food and Beverages



Number	Company	Country	Region	Sub-sector	Sector
53	CERVEZAS	Chile	Central / South America	Brewers	Food and Beverages
54	CHAROEN POKPHAND FOODS	Thailand	Asia	Packaged Foods & Meats	Food and Beverages
55	CHAROEN POKPHAND INDO	Indonesia	Asia	Agricultural Products	Food and Beverages
56	CHINA COAL ENERGY	China	Asia	Coal & Consumable Fuels	Mining
57	CHINA HUISHAN DAIRY HLDG	China	Asia	Packaged Foods & Meats	Food and Beverages
58	CHINA MENGNIU DAIRY CO	China	Asia	Packaged Foods & Meats	Food and Beverages
59	CHINA RESOURCES BEER	China	Asia	Brewers	Food and Beverages
60	CHINA SHENHUA ENERGY	China	Asia	Coal & Consumable Fuels	Mining
61	CHINA STEEL CORP COMMON	Taiwan	Asia	Steel	Mining
62	CHIPOTLE MEXICAN GRILL	United States	North America	Restaurants	Food and Beverages
63	CJ CHEILJEDANG CORP	South Korea	Asia	Packaged Foods & Meats	Food and Beverages
64	CJ CORP	South Korea	Asia	Industrial Conglomerates	Industrial Conglomerates
65	CK HUTCHISON HOLDINGS	Hong Kong	Asia	Industrial Conglomerates	Industrial Conglomerates
66	COACH	United States	North America	Apparel, Accessories & Luxury Goods	Garment
67	COAL INDIA	India	Asia	Coal & Consumable Fuels	Mining
68	COCA COLA (THE)	United States	North America	Soft Drinks	Food and Beverages
69	COCA-COLA AMATIL	Australia	Oceania	Soft Drinks	Food and Beverages
70	COCA-COLA EUROPEAN PTNRS	Netherlands	Europe	Soft Drinks	Food and Beverages
71	COCA-COLA FEMSA	Mexico	Central / South America		Food and Beverages
72	COCA-COLA HBC	United Kingdom		Soft Drinks	Food and Beverages
73	COCA-COLA ICECEK	Turkey	Middle East	Soft Drinks	Food and Beverages
74	COLRUYT	Belgium	Europe	Food Retail	Food and Beverages
75	CONAGRA FOODS	United States	North America	Packaged Foods & Meats	Food and Beverages
76	CONSTELLATION BRANDS	United States	North America	Distillers & Vintners	Food and Beverages
77	COSTCO WHOLESALE CORP	United States	North America	Hypermarkets & Super Centres	Food and Beverages
78	CP ALL PCL	Thailand	Asia	Food Retail	Food and Beverages
79	CSN SIDERURGICA NATL	Brazil	Central / South America	Steel	Mining
80	DANONE	France	Europe	Packaged Foods & Meats	Food and Beverages
81	DARDEN RESTAURANTS	United States	North America	Restaurants	Food and Beverages
82	DELHAIZE GROUPE	Belgium	Europe	Food Retail	Food and Beverages
83	DIA	Spain	Europe	Hypermarkets & Super Centres	Food and Beverages
84	DIAGEO	United Kingdom	•	Distillers & Vintners	Food and Beverages
85	DIOR (CHRISTIAN)	France	Europe	Apparel, Accessories & Luxury Goods	Garment
86	DMCI HOLDINGS	Philippines	Asia	Industrial Conglomerates	Industrial Conglomerates
87	DOMINOS PIZZA	United States	North America	Restaurants	Food and Beverages
88	DOMINO'S PIZZA ENT	Australia	Oceania	Restaurants	Food and Beverages
89	DONGSUH COMPANIES	South Korea	Asia	Food Distributors	Food and Beverages
90	DR PEPPER SNAPPLE GROUP	United States	North America	Soft Drinks	Food and Beverages
91	ECLAT TEXTILE COMPANY	Taiwan	Asia	Textiles	Garment
92	ELDORADO GOLD CORP	Canada	North America	Gold	Mining
93	EMART CO	South Korea	Asia	Hypermarkets & Super Centres	Food and Beverages
94	EMBOTELLADORA	Chile	Central / South America		Food and Beverages
95	EMPIRE CO	Canada	North America	Food Retail	Food and Beverages
96	EREGLI DEMIR CELIK FABRI	Turkey	Middle East	Steel	Mining
97	EUROCASH	Poland	Europe	Food Retail	Food and Beverages
98	EXXARO RESOURCES	South Africa	Africa	Coal & Consumable Fuels	Mining
99	FAMILYMART CO	Japan	Asia	Food Retail	Food and Beverages
100	FAR EASTERN NEW CENTURY	Taiwan	Asia	Industrial Conglomerates	Industrial Conglomerates
101	FAST RETAILING CO	Japan	Asia	Apparel Retail	Garment
102	FELDA GLOBAL VENTURES	Malaysia	Asia	Agricultural Products	Food and Beverages
103	FEMSA UNIT UBD	Mexico	Central / South America		Food and Beverages
104	FENG TAY ENTERPRISE CO	Taiwan	Asia	Footwear	Garment
105	FIN RICHEMONT NAMEN	Switzerland	Europe	Apparel, Accessories & Luxury Goods	Garment
106	FIRST QUANTUM MINERALS	Canada	North America	Diversified Metals & Mining	Mining
107	FOOT LOCKER	United States	North America	Apparel Retail	Garment
108	FORMOSA TAFFETA CO	Taiwan	Asia	Textiles	Garment
109	FORTESCUE METALS GROUP	Australia	Oceania	Steel	Mining
110	FOSUN INTL	China	Asia	Industrial Conglomerates	Industrial Conglomerates
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Number	Company	Country	Region	Sub-sector	Sector
111	FRANCO-NEVADA CORP	Canada	North America	Gold	Mining
112	FREEPORT MCMORAN	United States	North America	Diversified Metals & Mining	Mining
113	FRESNILLO PLC	United Kingdom		Precious Metals & Minerals	Mining
114	GAP	United States	North America	Apparel Retail	Garment
115	GENERAL MILLS	United States	North America	Packaged Foods & Meats	Food and Beverages
116	GENTING PLANTATIONS	Malaysia	Asia	Agricultural Products	Food and Beverages
117	GERDAU	Brazil	Central / South America		Mining
118	GILDAN ACTIVEWEAR	Canada	North America	Apparel, Accessories & Luxury Goods	Garment
119	GLENCORE	United Kingdom		Diversified Metals & Mining	Mining
120	GOLD FIELDS	South Africa	Africa	Gold	Mining
121	GOLDCORP	Canada	North America	Gold	Mining
122	GOLDEN AGRI RESOURCES	Singapore	Asia	Agricultural Products	Food and Beverages
123	GRUMA	Mexico	Central / South America	3	Food and Beverages
124	GRUPO BIMBO	Mexico	Central / South America		Food and Beverages
125	GRUPO CARSO	Mexico	Central / South America	Industrial Conglomerates	Industrial Conglomerates
126	GRUPO COMERCIAL CHEDRA	Mexico	Central / South America		Food and Beverages
127	GRUPO LALA	Mexico		Packaged Foods & Meats	Food and Beverages
128	GRUPO MEXICO	Mexico		Diversified Metals & Mining	Mining
129	GS RETAIL	South Korea	Asia	Food Retail	Food and Beverages
130	HANESBRANDS	United States	North America	Apparel, Accessories & Luxury Goods	Garment
131	HAP SENG CONSOLIDATED	Malaysia	Asia	Industrial Conglomerates	Industrial Conglomerates
132	HEINEKEN NV	Netherlands	Europe	Brewers	Food and Beverages
133	HENNES & MAURITZ	Sweden	Europe	Apparel Retail	Garment
134	HERMES INTERNATIONAL	France	Europe	Apparel, Accessories & Luxury Goods	Garment
135	HERSHEY CO (THE)	United States	North America	Packaged Foods & Meats	Food and Beverages
136	HINDALCO INDUSTRIES	India	Asia	Aluminium	Mining
137	HITACHI METALS	Japan	Asia	Steel	Mining
138	HORMEL FOODS CORP	United States	North America	Packaged Foods & Meats	Food and Beverages
139	HUGO BOSS	Germany	Europe	Apparel, Accessories & Luxury Goods	Garment
140	HYUNDAI STEEL CO	South Korea	Asia	Steel	Mining
141	ICA GRUPPEN	Sweden	Europe	Food Retail	Food and Beverages
142	IMPALA PLATINUM HOLDINGS	South Africa	Africa	Precious Metals & Minerals	Mining
143	INDITEX	Spain	Europe	Apparel Retail	Garment
144	INDOFOOD CBP SUKSES	Indonesia	Asia	Packaged Foods & Meats	Food and Beverages
145	INDOFOOD SUKSES MAKMUR	Indonesia	Asia	Packaged Foods & Meats	Food and Beverages
146	INDUSTRIAS PENOLES	Mexico	Central / South America	Precious Metals & Minerals	Mining
147	INGREDION INC	United States	North America	Agricultural Products	Food and Beverages
148	IOI CORP	Malaysia	Asia	Agricultural Products	Food and Beverages
149	JARDINE MATHESON	Hong Kong	Asia	Industrial Conglomerates	Industrial Conglomerates
150	JBS	Brazil		Packaged Foods & Meats	Food and Beverages
151	JERONIMO MARTINS	Portugal	Europe	Food Retail	Food and Beverages
152	JFE HOLDINGS	Japan	Asia	Steel	Mining
153	JG SUMMIT HOLDINGS	Philippines	Asia	Industrial Conglomerates	Industrial Conglomerates
154	JIANGXI COPPER CO	China	Asia	Diversified Metals & Mining	Mining
155	JM SMUCKER CO	United States	North America	Packaged Foods & Meats	Food and Beverages
156	JOLLIBEE FOODS CORP	Philippines	Asia	Restaurants	Food and Beverages
157	JSW STEEL	India	Asia	Steel	Mining
158	KELLOGG CO	United States	North America	Packaged Foods & Meats	Food and Beverages
159	KERING	France	Europe	Apparel, Accessories & Luxury Goods	Garment
160	KERRY GROUP	Ireland	Europe	Packaged Foods & Meats	Food and Beverages
161	KGHM POLSKA MIEDZ	Poland	Europe	Diversified Metals & Mining	Mining
162	KIKKOMAN CORP	Japan	Asia	Packaged Foods & Meats	Food and Beverages
163	KINROSS GOLD CORP	Canada	North America	Gold	Mining
164	KIRIN HOLDINGS CO	Japan	Asia	Brewers	Food and Beverages
	KOBE STEEL		Asia	Steel	•
165 166		Japan	Asia Middle East	Industrial Conglomerates	Mining Industrial Conglomerates
167	KOC HOLDING KONINKLIJKE AHOLD	Turkey Netherlands		Food Retail	Food and Beverages
	KOREA ZINC	South Korea	Europe Asia	Diversified Metals & Mining	Mining Mining
168	NONEA ZINO	Journ Korea	Adia	Diversified ivictors a lymining	wiiilig



Number	Company	Country	Region	Sub-sector	Sector
169	KRAFT HEINZ CO	United States	North America	Packaged Foods & Meats	Food and Beverages
170	KROGER CO	United States	North America	Food Retail	Food and Beverages
171	KUALA LUMPUR KEPONG	Malaysia	Asia	Agricultural Products	Food and Beverages
172	L BRANDS	United States	North America	Apparel Retail	Garment
173	LAWSON	Japan	Asia	Food Retail	Food and Beverages
174	LINDT & SPRUENGLI	Switzerland	Europe	Packaged Foods & Meats	Food and Beverages
175	LOBLAW	Canada	North America	Food Retail	Food and Beverages
176	LOTTE CHILSUNG BEVERAGE	South Korea	Asia	Soft Drinks	Food and Beverages
177	LOTTE CONFECTIONERY CO	South Korea	Asia	Packaged Foods & Meats	Food and Beverages
178	LPP	Poland	Europe	Apparel, Accessories & Luxury Goods	Garment
179	LULULEMON ATHLETICA	United States	North America	Apparel, Accessories & Luxury Goods	Garment
180	LVMH MOET HENNESSY	France	Europe	Apparel, Accessories & Luxury Goods	Garment
181	M DIAS BRANCO	Brazil	Central / South America	Packaged Foods & Meats	Food and Beverages
182	MAGNIT	Russia	Europe	Food Retail	Food and Beverages
183	MARINE HARVEST	Norway	Europe	Packaged Foods & Meats	Food and Beverages
184	MARUICHI STEEL TUBE	Japan	Asia	Steel	Mining
185	MASSMART HOLDINGS	South Africa	Africa	Hypermarkets & Super Centres	Food and Beverages
186	MCCORMICK & CO	United States	North America	Packaged Foods & Meats	Food and Beverages
187	MCDONALD'S CORP	United States	North America	Restaurants	Food and Beverages
188	MCDONALD'S HLDGS CO JP	Japan	Asia	Restaurants	Food and Beverages
189	MEAD JOHNSON NUTRITION	United States	North America	Packaged Foods & Meats	Food and Beverages
190	MEIJI HOLDINGS CO	Japan	Asia	Packaged Foods & Meats	Food and Beverages
191	METRO	Canada	North America	Food Retail	Food and Beverages
192	METRO STAMM	Germany	Europe	Hypermarkets & Super Centres	Food and Beverages
193	MICHAEL KORS HOLDINGS	United States	North America	Apparel, Accessories & Luxury Goods	Garment
194	MITSUBISHI MATERIALS	Japan	Asia	Diversified Metals & Mining	Mining
195	MOLSON COORS BREWING	United States	North America	Brewers	Food and Beverages
196	MONDELEZ INTERNATIONAL	United States	North America	Packaged Foods & Meats	Food and Beverages
197	MONSTER BEVERAGE	United States	North America	Soft Drinks	Food and Beverages
198	MORRISON WM SUPERMARKETS	United Kingdom	Europe	Food Retail	Food and Beverages
199	NESTLE	Switzerland	Europe	Packaged Foods & Meats	Food and Beverages
200	NESTLE INDIA	India	Asia	Packaged Foods & Meats	Food and Beverages
201	NEWCREST MINING	Australia	Oceania	Gold	Mining
202	NEWMONT MINING CORP	United States	North America	Gold	Mining
203	NH FOODS	Japan	Asia	Packaged Foods & Meats	Food and Beverages
204	NIKE	United States	North America	Footwear	Garment
205	NIPPON STEEL & SUMITOMO	Japan	Asia	Steel	Mining
206	NISSHIN SEIFUN GROUP	Japan	Asia	Packaged Foods & Meats	Food and Beverages
207	NISSIN FOODS HOLDINGS CO	Japan	Asia	Packaged Foods & Meats	Food and Beverages
208	NORILSK NICKEL MMC	Russia	Europe	Diversified Metals & Mining	Mining
209	NORSK HYDRO	Norway	Europe	Aluminium	Mining
210	NUCOR CORP	United States	North America	Steel	Mining
211	NWS HOLDINGS	Hong Kong	Asia	Industrial Conglomerates	Industrial Conglomerates
212	ORION CORP	South Korea	Asia	Packaged Foods & Meats	Food and Beverages
213	ORKLA	Norway	Europe	Packaged Foods & Meats	Food and Beverages
214	OTTOGI CORPORATION	South Korea	Asia	Packaged Foods & Meats	Food and Beverages
215	PAO DE ACUCAR	Brazil	Central / South America	Hypermarkets & Super Centres	Food and Beverages
216	PEPSICO PEPSICO	United States	North America	Soft Drinks	Food and Beverages
217	PERNOD RICARD	France	Europe	Distillers & Vintners	Food and Beverages
218	PICK N PAY STORES	South Africa	Africa	Food Retail	Food and Beverages
219	PIONEER FOODS	South Africa	Africa	Packaged Foods & Meats	Food and Beverages
220	POSCO	South Korea	Asia	Steel	Mining
221	POU CHEN CORP	Taiwan	Asia	Footwear	Garment
222	PPB GROUP	Malaysia	Asia	Packaged Foods & Meats	Food and Beverages
223	PRESIDENT CHAIN STORE	Taiwan	Asia	Food Retail	Food and Beverages
224	PRICE GROUP	South Africa	Africa	Apparel Retail	Garment
225	PVH CORP	United States	North America	Apparel, Accessories & Luxury Goods	Garment
226	RALPH LAUREN CORP	United States	North America	Apparel, Accessories & Luxury Goods	Garment



Number	Company	Country	Region	Sub-sector	Sector
227	RANDGOLD RESOURCES	United Kingdom		Gold	Mining
228	REMY COINTREAU	France	Europe	Distillers & Vintners	Food and Beverages
229	RESTAURANT BRANDS	Canada	North America	Restaurants	Food and Beverages
230	RIO TINTO LTD	Australia	Oceania	Diversified Metals & Mining	Mining
231	ROSS STORES	United States	North America	Apparel Retail	Garment
232	RUENTEX INDUSTRIES	Taiwan	Asia	Textiles	Garment
233	SABMILLER	United Kingdom	Europe	Brewers	Food and Beverages
234	SAINSBURY	United Kingdom	Europe	Food Retail	Food and Beverages
235	SAMSUNG C&T CORPORATION	South Korea	Asia	Industrial Conglomerates	Industrial Conglomerates
236	SAPUTO	Canada	North America	Packaged Foods & Meats	Food and Beverages
237	SEVEN & I HOLDINGS CO	Japan	Asia	Food Retail	Food and Beverages
238	SEVERSTAL	Russia	Europe	Steel	Mining
239	SHENZHOU INTERNATIONAL	China	Asia	Apparel, Accessories & Luxury Goods	Garment
240	SHIMAMURA CO	Japan	Asia	Apparel Retail	Garment
241	SHOPRITE HOLDINGS	South Africa	Africa	Food Retail	Food and Beverages
242	SIBANYE GOLD	South Africa	Africa	Gold	Mining
243	SIME DARBY	Malaysia	Asia	Industrial Conglomerates	Industrial Conglomerates
244	SM INVESTMENTS	Philippines	Asia	Industrial Conglomerates	Industrial Conglomerates
245	SOUTH 32	Australia	Oceania	Diversified Metals & Mining	Mining
246	SOUTHERN COPPER CORP	Peru	Central / South America	Diversified Metals & Mining	Mining
247	SPAR GROUP (THE)	South Africa	Africa	Food Distributors	Food and Beverages
248	STANDARD FOODS CORP	Taiwan	Asia	Packaged Foods & Meats	Food and Beverages
249	STARBUCKS CORP	United States	North America	Restaurants	Food and Beverages
250	SUMITOMO METAL MINING CO	Japan	Asia	Diversified Metals & Mining	Mining
251	SUN ART RETAIL GROUP	China	Asia	Hypermarkets & Super Centres	Food and Beverages
252	SUNTORY BEVERAGE & FOOD	Japan	Asia	Soft Drinks	Food and Beverages
253	SWATCH GROUP	Switzerland	Europe	Apparel, Accessories & Luxury Goods	Garment
254	TATA STEEL	India	Asia	Steel	Mining
255	TATE & LYLE	United Kingdom	Europe	Packaged Foods & Meats	Food and Beverages
256	TECK RESOURCES	Canada	North America	Diversified Metals & Mining	Mining
257	TESCO	United Kingdom	Europe	Food Retail	Food and Beverages
258	THAI UNION GROUP	Thailand	Asia	Packaged Foods & Meats	Food and Beverages
259	THE FOSCHINI GROUP	South Africa	Africa	Apparel Retail	Garment
260	THYSSEN KRUPP	Germany	Europe	Steel	Mining
261	TIGER BRANDS	South Africa	Africa	Packaged Foods & Meats	Food and Beverages
262	TINGYI HLDNG CORP	China	Asia	Packaged Foods & Meats	Food and Beverages
263	TITAN COMPANY	India	Asia	Apparel, Accessories & Luxury Goods	Garment
264	TJX COMPANIES	United States	North America	Apparel Retail	Garment
265	TOYO SUISAN KAISHA	Japan	Asia	Packaged Foods & Meats	Food and Beverages
266	TREASURY WINE ESTATES	Australia	Oceania	Distillers & Vintners	Food and Beverages
267	TRUWORTHS INT	South Africa	Africa	Apparel Retail	Garment
268	TSINGTAO BREWERY	China	Asia	Brewers	Food and Beverages
269	TURKIYE SISE VE CAM FABR	Turkey	Middle East	Industrial Conglomerates	Industrial Conglomerates
270	TURQUOISE HILL RES	Canada	North America	Diversified Metals & Mining	Mining
271	TYSON FOODS	United States	North America	Packaged Foods & Meats	Food and Beverages
272	ULKER BISKUVI SANAYI	Turkey	Middle East	Packaged Foods & Meats	Food and Beverages
273	UNDER ARMOUR	United States	North America	Apparel, Accessories & Luxury Goods	Garment
274	UNI-PRESIDENT ENT.	Taiwan	Asia	Packaged Foods & Meats	Food and Beverages
275	UNITED SPIRITS	India	Asia	Distillers & Vintners	Food and Beverages
276	UNITED TRACTORS	Indonesia	Asia	Coal & Consumable Fuels	Mining
277	UNIVERSAL ROBINA CORP	Philippines	Asia	Packaged Foods & Meats	Food and Beverages
278	VALE	Brazil	Central / South America	Steel	Mining
279	VEDANTA	India	Asia	Diversified Metals & Mining	Mining
280		Herbert Ottober	North America	Apparel, Accessories & Luxury Goods	Garment
200	VF CORP	United States	North America	•	
281	VF CORP VOESTALPINE	Austria	Europe	Steel	Mining
				Steel	Mining Food and Beverages
281	VOESTALPINE	Austria	Europe	Steel	· ·



Number	Company	Country	Region	Sub-sector	Sector
285	WESFARMERS	Australia	Oceania	Hypermarkets & Super Centres	Food and Beverages
286	WESTON (GEORGE)	Canada	North America	Food Retail	Food and Beverages
287	WH GROUP	Hong Kong	Asia	Packaged Foods & Meats	Food and Beverages
288	WHITBREAD	United Kingdom	Europe	Restaurants	Food and Beverages
289	WHITEWAVE FOODS CO	United States	North America	Packaged Foods & Meats	Food and Beverages
290	WHOLE FOODS MARKET	United States	North America	Food Retail	Food and Beverages
291	WILMAR INT	Singapore	Asia	Agricultural Products	Food and Beverages
292	WOOLWORTHS LTD	Australia	Oceania	Food Retail	Food and Beverages
293	YAKULT HONSHA CO	Japan	Asia	Packaged Foods & Meats	Food and Beverages
294	YAMANA GOLD	Canada	North America	Gold	Mining
295	YAMAZAKI BAKING CO	Japan	Asia	Packaged Foods & Meats	Food and Beverages
296	YANZHOU COAL MINING	China	Asia	Coal & Consumable Fuels	Mining
297	YUE YUEN INDUSTRIAL	Hong Kong	Asia	Footwear	Garment
298	YUM BRANDS	United States	North America	Restaurants	Food and Beverages
299	ZIJIN MINING GROUP	China	Asia	Gold	Mining



Endnotes

- The initial study was carried out by GES International in cooperation with AP7 and supported by ACTIAM. GES was acquired by Sustainalytics in January 2019. The initial study can be found at: https://www.sustainalytics.com/esg-research/water-stewardship-engagement-benchmarking/
- ² Initially, the project was coordinated by GES, which was acquired by Sustainalytics in January 2019.
- The initial study can be found at: https://www.sustainalytics.com/esg-research/water-stewardship-engagement-benchmarking/
- These sectors were selected due to their direct and indirect water footprints, as well as for their presence in developing countries experiencing water stress, reflecting our view that companies must consider both internal and external variables when mitigating water risk. Furthermore, the focus was specifically on developing countries to inherently link our research and engagement to the challenges relating to the fulfilment of SDG 6 on water and sanitation.
- Walton, B. "5 things you need to know about water," World Economic Forum, last accessed (07.06.2019) at: https://www.weforum.org/agenda/2019/03/5-things-you-need-to-know-about-water/
- ACTIAM, AP7, The Church Pension Fund (Finland), KLP, OP Wealth Management and Strathclyde Pension.
- United Nations, The Sustainable Development Goals Report 2018, United Nations, last accessed (30.05.2019) at: https://unstats.un.org/sdgs/files/report/2018/TheSustainableDevelopmentGoalsReport2018-EN.pdf
- United Nations, Sustainable Development Goal 6: Synthesis report on water and sanitation, United Nations, last accessed (30.05.2019) at: http://www.unwater.org/app/uploads/2018/12/SDG6_SynthesisReport2018_WaterandSanitation_04122018.pdf
- CDP, Treading water: Corporate responses to rising water challenges, CDP, Iast accessed (30.05.2019) at: https://bit.ly/2IHM2BP
- The 2017 methodology drew in part on indicators from oekom to evaluate KPI performance. We updated the 2019 methodology with comparable Sustainalytics indicators.
- Food and Beverage subsectors shown in teal; Mining subsectors shown in gold; Garment subsectors shown in grey; Industrial Conglomerates subsectors shown in green. Overall sector averages indicated by bottom positioning of scores (e.g. 11.1 for Mining, etc.)
- 12 CDP, op. cit.



