

Learning from the leaders

CDP Europe natural capital report 2017

Written on behalf of 803 institutional investors with US\$100 trillion in assets









CDP 2017 scoring partners

CDP works with a number of partners to deliver the scores for all our responding companies. These partners are listed below along with the geographical regions in which they provide the scoring. All scoring partners complete training to ensure the methodology and guidance are applied correctly, and the scoring results go through a comprehensive quality assurance process before being published. In some regions there is more than one

scoring partner and the responsibilities are shared between multiple partners.

In 2017, CDP worked with RepRisk, a business intelligence provider specializing in ESG risks (www.reprisk.com), who provided additional risk research and data into the proposed A List companies to assess whether there were severe reputational issues that could put their leadership status into question.





Global climate change scoring partner

Global water and forest scoring partner



Japan





France

Japan, Latin America, Turkey



Japan, Korea



Brazil



Korea



Japan



Japan



Iberia (Spain & Portugal)



Japan



Japan



Japar



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CEO foreword



The transition to a low-carbon economy will create winners and losers within and across sectors. As new businesses and technologies emerge and scale up, billions of dollars of value are waiting to be unlocked, even as many more are at risk.

A changing climate is becoming more evident. This year has brought intense Atlantic hurricanes, severe wild fires in California, an exceptional monsoon across South Asia, a stifling heatwave across Europe, and record-low wintertime sea ice in the Arctic. These changes threaten ecosystems, communities and our economic well-being, with significant assets at risk from climate change.

This evidence is not going unnoticed. Public concern is growing; and policy makers and regulators are responding. The Chinese government, for example, is set to launch a national carbon emissions trading scheme by the end of this year. Companies around the world, from all sectors, have begun transitioning their business models away from a dependence on fossil fuels and towards the low-carbon economy of the future.

In this year's CDP analysis, which is based on the climate data disclosed to us by over 1,000 of the world's largest, highest-emitting companies, we reveal that a growing number are setting longer-term emissions reduction targets, planning for low-carbon into their business models out to 2030 and beyond. The number of companies in our sample that have committed to set emissions reduction targets in line with or well below a 2 degrees Celsius pathway, via the Science Based Targets initiative, has increased from 94 to 151 in the space of a year. Continuing this momentum, an additional 317 companies plan to commit to a science-based target within two years. EDP and Unilever are two of those companies sharing their story of how and why they decided to set a science-based target in our analysis. Aligned to these targets, the significant increase in companies from our sample that are setting targets to consume renewable energy including through the RE100 initiative, or produce their own, shows how companies are embracing the cheaper, more secure supply of clean energy to meet their low-carbon goals.

Regulators have begun to respond to the risks, notably with the Task Force on Climate-related Financial Disclosures. Established by the Financial Stability Board, the Task Force has moved the climate disclosure agenda forward by emphasizing the link between climate risk and financial stability. The Task Force has recommended that both companies and investors disclose climate change information, including conducting scenario analysis in line with a 2 degrees Celsius pathway and setting out the impacts on their strategy of those scenarios. This amplifies the longstanding call from CDP's investor signatories for companies to disclose comprehensive, comparable environmental data in their mainstream reports, driving climate risk management further into the boardroom.

This year, more than 6,300 companies, accounting for around 55% of the total value of global listed equity markets, have disclosed information on

climate change, water and deforestation through our reporting platform. This request from CDP was made on behalf of more than 800 investors with assets of US\$100 trillion.

To meet the growing needs of these investors, we are evolving our disclosure platform to introduce sector-based reporting and align our information request with the recommendations of the Task Force for 2018. This will help to further illuminate to company boards and their shareholders the risks and opportunities presented by the low-carbon transition, so they can act swiftly to shift their business models accordingly.

The environmental disclosures that leading companies are making through CDP are providing data across capital markets to inform better decisions and drive action. Companies are reporting how science-based carbon emission reduction targets can drive business and sustainability improvements. They are showing how renewable energy purchases are helping companies to cut emissions and how setting an internal carbon price can drive efficiency and shift investment decisions. They are revealing how their products and services directly enable third parties to avoid greenhouse gas emissions. They are collaborating with cities, states, regions and other companies to drive positive impact in their own operations and through value chains.

This report tracks the progress of corporate action on climate change. Last year, in the wake of the Paris Agreement, we established a baseline for corporate climate action. This year, we measure progress to date. As we show, there are some encouraging trends emerging, with more companies setting further reaching carbon emissions reduction targets, and greater accountability for climate change issues within the boardroom. But, there is no doubt that more companies need to act quickly and the pace of change needs to accelerate if we are to meet the goals of the Paris Agreement and ensure long term financial and climate stability.

Disclosure of quality data is crucial to support this progress. It leads to smarter decisions and informs companies and governments of the actions they need to take. It's encouraging to see more companies setting longer-term targets; data will be key to seeing how they are performing against these over time.

Make no mistake: we are at a tipping point in the low-carbon transition. There are enormous opportunities to be had for the companies that are positioning themselves at the leading edge of this tipping point; and enormous risks for those that haven't yet taken action.

Paul Simpson CEO, CDP

Foreword CDP Europe

Reflections from the continent



With science demanding that GHG emissions peak around 2020 to avoid catastrophic disruption, the corporate world cannot tip the scales alone, and must be supported by more ambitious policy as the urgent steps towards delivering a below two-degree world are taken.

Two years ago, marking the start of a new sustainable strategy for the world, governments made a landmark agreement in Paris to keep global temperature rises below two degrees. Since then, European companies have made unprecedented commitments to accelerate environmental action, and started to build a thriving economy that works, long-term, for people and planet.

This vision - like the Paris Agreement's goals - is within reach. As we move towards a tipping point where continent-wide climate action is the norm, this first-of-its-kind report on European natural capital action shows that the low-carbon transition is happening. It is being steered by Europe's largest businesses, aware that the risks - and opportunities - are too great to ignore.

But progress is not uniform, and policymakers must play their part, strengthening their hand to align this progress continent-wide in line with science.

With more than 40% of global environmental leaders based in Europe, corporate leadership here gives reason for optimism. Responding to growing insecurity, water stewardship has risen fast up the corporate agenda, and a response to deforestation risks is now more present in boardrooms – with Europe leading the charge.

8 in 10 of Europe's highest-emitters are now planning for their low-carbon futures by setting emissions reductions targets. Armed with disclosure-driven insights, businesses are increasingly aware that targets must match climate science: more than 120 European companies have now committed to doing so through the Science Based Targets initiative. This is not just responsible business, but a signal to investors that they are well-positioned in the low-carbon transition.

Driving action is better accountability. Climate change now lies firmly in the boardroom, with responsibility at the very top in most firms. The next steps will be even greater mainstreaming of climate reporting, and more company-wide incentivization to meet climate goals.

Yet beyond these leaders, more than 50% of companies are yet to respond. A shrinking number, but a gap which must be - and can be - closed fast. Disclosure is the critical first step for action, and this group must catch the leaders making science-based target-setting as normal as disclosure.

With science demanding that GHG emissions peak around 2020 to avoid catastrophic disruption, the corporate world cannot tip the scales alone, and must be supported by more ambitious policy as the urgent steps towards delivering a below two-degree world are taken.

Critical shifts in capital across the continent are needed. This will not only be achieved by faster progress on national climate plans, with bolder targets and timelines, needed in member states like Germany who are not on track. But in bolder rules that promote - and mandate - high-quality climate disclosures that arm investors with the information they need to vote with their money.

The European Union is the factory for these policy tools. CDP welcomes the initial work of the European Commission's High-Level Expert Group on Sustainable Finance (HLEG), but as we move into 2018 and the critical implementation phase in our transition, how Europe meets our two-degree task will depend on the detail.

That begins with a bold implementation of the group's recommendations into the EU's 2018 Sustainable Finance Action Plan, which would scale up the quality of disclosure and climate risk legislation, and further mainstream CDP work of the past 17 years.

Strengthening the EU's Non-Financial Reporting Directive, a key enabler for the continent's sustainable development, must be a core priority. That means using the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to align European finance with the Paris Agreement, supporting CDP to create more meaningful transparency about European companies' alignment with climate-science - and the consequences of not doing so.

Sustainability in the financial market, crucial as a lever for the economy, has continued to develop in 2017, with initiatives like the Deutsche Börse's Accelerating Sustainable Finance and the Climetrics, the world's first climate impact rating for funds, providing missing links.

An EU-wide mechanism comparable to French Article 173-VI for investors, another recommendation from the Commission's Expert Group, would likewise go further to accelerate transparency of climate risk in the continent's investments, and show commitment from the Commission in recognizing the role of disclosure in building a sustainable financial system.

The glass on companies' TCFD disclosure is already half-full, with investors aware of the physical and regulatory climate risks and opportunities affecting more than three quarters of EU market capitalization. Filling it needs stronger mandatory reporting requirements that drive companies to use scenario analyses to test their future strategies and become resilient.

High-quality information is the heart of climate action. As European policymakers move into implementation phase, CDP will continue to play its part. Providing investors and governments with TCFD-based company disclosures from 2018, we will continue to provide the tools for the continent to set science-based targets, price carbon effectively, and track progress towards a thriving economy that works long-term for people and planet.

Steven Tebbe,

Managing Director, CDP Europe

Executive summary with global insights

CDP's first pan-European natural capital report finds the continent's major companies driving global progress and innovation towards a low-carbon, water-secure and deforestation-free world – yet a growing divide is emerging between leaders and laggards.

- 1. This year, 1,073 companies from the high impact sample responded to the request for climate disclosure from CDP, representing 12% of total global greenhouse gas emissions, and 47% of global market capitalization. In addition to this year's analysis of the High Impact sample, CDP continues to assess and score the companies that disclose through our platform. The scores show increase corporate transparency around climate, water and forests, with a third more companies reporting now than in 2013. For full information on global tracking sample, Global A lists on all programs, and to view the full 2017 analysis: "Picking up the pace: Tracking corporate action on climate change", please visit www.cdp.net
- 2. The analysis in this report covers only a subset of the data available through CDP and focuses on 540 received responses, of the 1,323 companies formally requested with primary listing in continental Europe selected by their market capitalization, and which submitted their CDP responses by 01-09-2017. In total 612 European corporations, disclosed Climate, Water or Forest information to their stakeholders through CDP in 2017. The data analyzed in this report includes data from companies incorporated in the following countries: Austria, Denmark, Finland, France, Germany, Hungary, Italy, Luxemburg, Netherlands, Norway, Poland, Portugal, Spain, Sweden and Switzerland. Companies part of the FTSE 350 index in the United Kingdom are analyzed in a report published on 24th October 2017 and can be accessed at https://www.cdp.net/en/research/global-reports/tracking-climate-progress-2017
- Out of the 573 responses, 540 companies provided unique responses and will therefore be considered as the basis for the analysis.

The Paris Agreement and the Sustainable Development Goals marked the start of a new, sustainable strategy for the world. They provide a clear signal that business as usual is over, giving impetus to those companies that had already begun addressing their environmental impacts, and leading many others to begin planning in earnest.

Our latest analysis of corporate climate data gives reasons to be cautiously optimistic, with more leading companies embedding low-carbon goals in their long-term business plans and setting targets aligned with climate science. These targets are driven from the very top of organizations, as climate change becomes a mainstream boardroom topic, while the low-carbon transition is driving innovation and encouraging companies to develop new tools to deliver change.

However, many companies are yet to publicly report financially material climate data to investors. And while the number of companies setting science-based targets is growing rapidly, the majority of responding companies have yet to commit to emissions reduction goals that match the climate threat we face.

Tracking progress on corporate action

CDP provides the essential first step for the business response to environmental challenges. It operates the leading global platform for measuring environmental disclosure, insight and action, based on corporate information requested on behalf of more than 800 institutional investors with assets of over US\$100 trillion. In total, more than 6,300 companies disclose environmental data through CDP.

Last year, CDP selected a global sample of 1,839 companies to track the corporate response to the Paris Agreement. This sample is representative of the global economy, although it is weighted towards higher emitters and bigger companies. Each year to 2020, CDP will analyze the disclosures from this high impact sample¹, to assess the progress they are making towards the low-carbon transition. The responding 1,073 companies from the high impact sample, representing 47% of the global market capitalization, are analysed in the CDP report "Picking up the pace: Tracking corporate action on climate change" published in October 2017.

This is a first-of-its-kind CDP report, shining a light on corporate action and practices in continental Europe² by mirroring the global analysis with a specific European focus. In continental Europe, 573 companies of the 1,323 largest, publicly listed companies responded to CDP, together representing 82% of this sample's total market capitalization. The analysis in this report is based on the data disclosed by these companies³. This is also the first holistic European natural capital report, assessing corporate preparedness in combatting deforestation and water insecurity in addition to climate change. Analysis in these chapters (pages 49 and 52, respectively) is based on 106 responders to CDP's water program, and 31 to CDP's forest program, as a significantly smaller pool of high-risk organizations is asked to participate in these programs.

CDP's global high impact sample, covering 45% of global market capitalization, benefits from a tilt towards large multinational corporations which have significant resources and exposure to public scrutiny. Despite the effect of this tilt, the European company sample, covering 16.5% of global market cap, falls only slightly behind the global results across our analysis of key climate management metrics.

In 2017, 49 European companies made the global CDP Climate A List, accounting for 44% of the total number. Europe likewise has a strong representation

Sustainable Development Goals - Agenda 2030

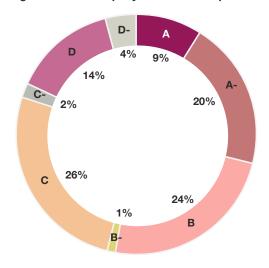
In 2015, world leaders gathered at the UN to adopt the new Sustainable Development Goals (SDGs), an ambitious global development agenda for 2030. The SDGs offer a platform for business to contribute to sustainable solutions on a global scale. Capitalizing on this distinct opportunity, however, requires companies to overcome the challenge of aligning their goals and accomplishments to the SDGs in a meaningful way.

With over 17 years of experience, CDP is at the center of the collection and analysis of corporate environmental data, operating a unique environmental disclosure platform for companies. CDP's vision is for a thriving economy that works for people and planet in the long term and we support the goals of the United Nations (UN). CDP has consultative status to the Environmental and Social Committee of the UN and is an accredited observer both to UN Environment and to the UN Framework Convention on Climate Change, as well as being a Strategic Partner of the UN Global Compact.

CDP's four 2017 environmental questionnaires (climate change, water, forests and supply chain), which have been answered by thousands of companies in more than 90 countries address six of the 17 goals in particular: climate, energy, water, forests, cities and sustainable production and consumption. Disclosing to investors or business customers through CDP provides a powerful and market-leading tool to assist companies in mapping their operations against the relevant SDGs, identifying opportunities, setting targets, tracking progress and showcasing success.

In this report, we have indicated the respective goal mapped against each CDP programs and analysed data point. Detailed mapping of the targets and indicators can be downloaded from https://www.cdp.net/sdgs

Figure 1: 2017 company scores in Europe



on the global CDP Water A List, with 24 companies representing 32% of the total. On the Forest A List, the 4 European companies included make up the majority (66%) of the list. Altogether, 54% of all assessed European companies achieved a climate score in either the leadership (A or A-) or management (B, B-) scoring bands, indicating that companies have already taken actions to address environmental issues beyond initial assessment. Major European brands, such as Carrefour and IKEA, stand out from a list of ambitious commitments made through the We Mean Business platform, with most commitments made by European companies.

However, our data suggests that a significant gap still exists between the leaders and laggards, and likewise within different European regions. France, with most companies having adopted climate change management to mainstream business practices already, stands out ahead, while the Central and Eastern European countries clearly have the most progress to come.

In addition to highlighting corporate action in the continent, collectively, this report is structured to provide an overview on the level of maturity in

We Mean Business

We Mean Business, a global non-profit coalition of organizations working with thousands of the world's most influential businesses and investors, provides a platform for businesses and investors to be recognized for their climate action. The coalition is mobilizing businesses to drive policy ambition and accelerate the transition to a low-carbon economy, as well as equipping companies to seize the opportunities of the low-carbon transition.

Hundreds of companies globally (620+), and about 220 in continental Europe have already kick-started this transition through commitments to climate action via the We Mean Business "Commit to Action" platform. Strongest growth has been in companies committing to setting science-based emissions reduction targets.

To find out more please visit www.cdp.net/commit

assessing and managing climate impacts on both a regional level (from page 54) and within sector clusters (from page 24). All sectors have a crucial role in shaping the transition towards carbon constrained world, though often from different perspectives. Information technology sector companies might as act as enablers, providing low-carbon products or services, while others can better drive change by demanding their suppliers to do so. In a few sectors, such as energy and utilities, companies are preparing to face much more disruptive changes in their business models and asset value. Unsurprisingly, companies from the utilities, materials, industrials, and energy sectors (making up 45% of all responders) are accountable for 98% of reported Scope 1 emissions.

More ambitious targets

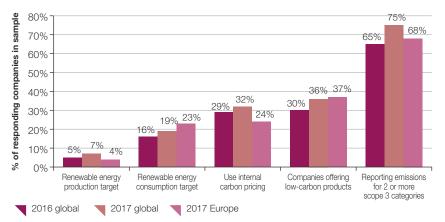
Spurred on by the Paris Agreement, more companies are setting emissions reduction targets, and these targets are increasingly long-term. Within the global high impact sample, 89% of responding companies reported emissions reduction targets in 2017, up from 85% last year. European companies are slightly behind, with 81% of companies reporting an established emissions reduction target. More than two-thirds of European companies – and their global peers – set targets extending to 2020. Only close of a quarter of reported targets (23%) by the European companies aim to medium-term emissions reductions (2021-2035), while only 8% of targets go beyond 2035.

The number of companies in the global sample that have committed to the Science Based Targets initiative (SBTi), meaning their target is, or will be, in line with the level of decarbonization required to keep global temperature increase below 2 degrees Celsius, has globally increased by 61% since 2016, from 94 to 151 companies. This makes up 14% of the overall sample, compared to 9% last year. In Europe, 25 companies have already set a sciencebased emissions reduction target that has been approved by the Science Based Targets initiative, with 62 officially committed to setting one within the next two years. Similarly, an additional 30% of the global sample – 317 companies – plan to commit to set a science-based target within two years. These targets provide frameworks within which companies can plan for the reductions needed to meet the goals of the Paris Agreement.

Adopting such a target, as Anglo-Dutch consumer goods giant Unilever Plc did in 2016, has helped provide the context within which its longer-term targets are set, stating that "having a Science Based Target gives us all a common framework to work towards emissions reductions in line with the 2-degree scenario."

To deliver against their targets, companies are increasingly turning to clean energy, cutting emissions while simultaneously increasing their energy security and reducing their exposure to fluctuating energy

Figure 2: Europe and global high impact sample comparison



prices. Over a quarter, 29% of European responders are reporting that they have renewable energy consumption and/or production targets in place.

Akzo Nobel N.V. has committed to source 100% of its energy from renewables by 2050, a pledge that not only will help the company deliver its emissions reduction targets, but also create new low-carbon business lines. "People are starting to think about new business models that are possible when we have access to large volumes of renewable energy," says André Veneman, the Dutch chemicals giant's head of sustainability.

Accelerating action on water security

Water security is high on the European agenda this year, not least due to multibillion-euro droughts in Southern Europe this summer. Further, water stress affects over 100 million people, one third of the EU territory all year around. Changing climate conditions are affecting the frequency and intensity of droughts and, according to the European Environment Agency, their environmental and economic damages appear to have increased over the past 30 years.

Water worries are not limited by the boundaries of the EU of course. European action can help ease the pressure on scarce and polluted water resources across the world.

In response and with support from the **Stavros Niarchos Foundation** and **SUEZ**, CDP launched, in 2015, the concept of water disclosure in Europe, working with shareholders to motivate 224 of Europe's largest publicly listed companies to measure and disclose water related data on an annual basis.

Now in its third year, CDP's European water program has sparked a growth in corporate water action and transparency. This year, 106 (47%) European companies provided data about their efforts to manage and govern freshwater resources, up from 86 in 2016. In addition to the growth in comparable, actionable data, there has been a significant rise in the number of European companies named on CDP's Water A List – 24 up from 6 last year. CDP acknowledges the effort and dedication of many of the world's corporations in measuring and reporting these important data, as well as the 639 institutional investors and 37 purchasing organizations using this data to drive greater insight, accountability and action.

Reference https://www.eea.europa.eu/themes/water/highlights

Climate change in the boardroom and beyond

Climate change is now an issue at the very top of corporate decision-making. 89% of European companies report that climate change is integrated into their business strategy, while 88% have either board-level, or board-appointed, responsibility for climate change. In this area Europe falls only slightly – and expectedly – behind global trends, with 97% of the global high impact companies including climate into business strategy and 98% reporting board level of responsibility.

Crucially, companies are increasingly collaborating with each other, and with various levels of government, to develop new climate-focused business models.

Three quarters in the global sample report emissions data from two or more categories of Scope 3 emissions; that is, emissions produced by suppliers or customers. Slightly fewer European companies – 68% – do the same.

For example, luxury goods holding company Kering has committed to reduce its Scope 3 emissions from purchased good and services 40% per unit of value added by 2025 from a 2015 base-year. This is part of their overall goal to reduce environmental impacts upstream, such as air emissions, water use, water pollution, land use change and waste.

However, almost half of European companies (45%) recognize there is still at least one major Scope 3 category with emissions estimated to be relevant, but not yet calculated, most often in the "purchased goods and services" category calling for better collaboration with customers and suppliers.

Embracing the tools for change

Both the global and European samples show that the transition to a low-carbon economy is driving innovation as companies develop and embrace new tools for change.

89% of European companies analysed for the report reported having established active emissions reduction activities or projects in the reporting year, again slightly lower compared to the global high impact sample (97%).

70% of European companies now report that their products and services directly enable third parties to avoid greenhouse gas (GHG) emissions, with three-quarters of companies in the global high impact sample reporting the same.

For example, Swedish construction group Skanska AB is developing and constructing buildings and infrastructure that enable their users to reduce and avoid GHG emissions, in both construction and operation. It built Solallén, Sweden's first zero-energy neighborhood, which generates more energy than it uses, saving both carbon and energy costs.

As examined in our recent "Putting a price on carbon" report, internal carbon pricing has emerged as an important mechanism to help companies manage risks and capitalize on emerging opportunities. Out of the 540 unique responses analyzed in this first European report, 128 participating companies (24%) have already established an internal price on carbon, with a further 14% companies planning to implement a price in the next two years. In comparison, the number of companies in the global sample using internal carbon pricing has also increased similarly, from 29% to 32% in the last year, with further 18% plan to implement a price of carbon in the next two years.

Dutch chemicals company Akzo Nobel has set two carbon prices; a higher price to inform its environmental profit and loss calculation, and another set at the level needed to drive the global transition to zero-net emissions. That latter €50/ton price is used to assess the company's investment decisions – and has forced its planners back to rethink proposed carbon-intensive investments.

Reasons for utilizing an internal carbon price as a tool for businesses, and insights into the development of carbon pricing in European markets are found from page 22.

The importance of corporate disclosure

Disclosure of environmental risks and impacts is a critical first step for insight and action on climate change. There has been a steady increase in the completeness of submissions from disclosing companies. Both in Europe and globally, nine out of ten (89%) of the scored submissions were in the most 'complete' quartile this year, compared with 31% in 2010, suggesting that companies are

increasingly recognizing the value of comprehensive disclosure through CDP.

A growing number of companies also recognize the importance of verifying the accuracy of their disclosures. Last year, less than half (49%) of responding companies in the global sample reported that at least 70% of their direct Scope 1 emissions data was independently verified; this figure jumped to more than two thirds of companies (68%) in 2017. Respondents reporting that at least 70% of their data relating to Scope 2 emissions (associated with electricity generated from third-parties) was independently verified also rose, from 46% to 64% among the global high-impact sample. In Europe, these the practices for reporting complete and independently verified data varies greatly between countries; from 81% of companies with 70% of their direct Scope 1 emissions data independently verified in France to 68% on average among the responding European companies.

More to be done

This progress notwithstanding, a large number of companies still ignore the request from their investors for financially material climate data. Just over 40% of companies globally and 57% of the Europe sample failed to disclose.

Similarly, while the number of companies with science-based targets is growing, the majority of responding companies have yet to commit to emissions reduction goals that match the climate threat we face. Setting long-term targets can help ensure that corporate strategy is aligned with decarbonization, and can drive the innovation needed to transform the global economy away from fossil fuels.

Disclosure to measure and manage deforestation risk

Forests are crucial to global sustainable development, affecting business, local community livelihoods, and the climate. Forests are a vital ecosystem for biodiversity; harboring over 80% of the world's terrestrial species. Ecosystem services provided from forests varies from water management to the prevention of soil erosion to flood protection. Forests are a major store of carbon and have the potential to offset a substantial proportion of global carbon emissions.

The stakes are high, and we are not yet doing enough to halt deforestation.

Deforestation continues to threaten forests worldwide at a rate of 3.3 million hectares per year. Addressing deforestation driven by soft commodities such as cattle products; palm oil; timber products; and soy is critical to achieving international climate goals, as well as to protecting biodiversity and the rights and livelihoods of local people. Corporate action has a decisive role to play in fulfilling global agreements, with deforestation and forest degradation accounting for an estimated 15% of global greenhouse gas (GHG) emissions.

There are tangible supply and financial risks that cannot be ignored by neither companies nor financial institutions if they want to be operating

in the new climate economy. Research by CDP last year found that up to US\$906 billion of turnover in publicly listed companies was dependent on commodities linked to deforestation. This continues to rise – with up to US\$941 billion being reported this year. Companies increasingly recognize that the environmental and social impacts of deforestation threaten to reduce returns and increase risks.

CDP's forests program, on behalf of 380 investors with US\$29 trillion in assets, has requested in 2017, 132 European companies to disclose their management practices related to the production or sourcing of the four commodities that drive deforestation globally. Of those, only 33⁽¹⁾ have responded to their investors' request for information. While the response rate in Europe is marginally higher (25%) than the global average (23%), more disclosure is urgently needed. We encourage all companies requested to respond to CDP's forests request next year to indicate their awareness and report the actions they are taking to address deforestation and achieve their goals. This report (page 52) presents the analysis of how companies are doing so.

*) Analysis only includes the 31 companies that submitted by the 2nd of August.

Reimagining disclosure

Tony Rooke, Director of Technical Reporting



Our 2017-2020 Tipping Point strategy¹ is to build on the momentum of the Paris Agreement and fulfil our mission to mainstream environmental stewardship and action into the economic system. We have been the catalyst for global disclosure over the past 15 years. We want to continue to drive the future of meaningful disclosure to help companies and investors better understand environmental risk and opportunities. This will accelerate the transition to a more sustainable economy and future.

We set up our Reimagining Disclosure initiative to work in consultation with you and our other key stakeholders to evolve our corporate questionnaires. Our goals of this initiative are to:

- Provide investors and stakeholders with increased relevant information now and into the future; and
- Optimise the reporting burden for companies.

To deliver this, we have focussed development of our questionnaires on the high impact areas through the following three pillars.

 Introduction of sector-specific questionnaires. We have listened to the feedback from both companies and investors that we need to focus on sector-specific disclosures.

- 2. Integration of the recommendations of the Task-Force on Climate-Related Financial Disclosures (TCFD). These recommendations align closely with existing CDP disclosures and will be incorporated principally into our climate change questionnaire, with water- and forest-specific TCFD recommendations also included in these respective questionnaires.
- 3. Continued evolution into more forward-looking metrics and reporting harmonisation. We are building upon forward-looking metrics in carbon pricing and science based targets to include reporting on scenario analyses, carbon price corridors, and transition pathway planning as key indicators of where companies are and the progress they are making.

What's new for 2018?

We are launching 18 new sector-specific questionnaires across our three themes in 2018, with all other sectors answering the "general" questionnaire for the relevant theme(s):

Cluster	Climate change	Forests	Water
General	All other companies without sector specific questionnaires	All other companies without sector specific questionnaires	All other companies without sector specific questionnaires
Energy	Oil & gas Coal Electric utilities		Oil & gas Electric utilities
Transport	Vehicle manufacturers Service providers		
Materials	Cement Steel Metals & mining Chemicals		Metals & mining Chemicals
Agriculture	Food, beverage & tobacco Agricultural commodities Paper & forestry	Paper & forestry	Food, beverage & tobacco

https://b8f65cb373b1b7b15febc70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.ra ckcdn.com/cms/reports/documents/000/002/292 /original/CDP-Strategic-Plan.pdf?1501603727

How it all fits together:



For climate change, in addition to the inclusion of sector-specific metrics, the majority of changes introduced align both structure and flow with the recommendations of the TCFD. This means an increased focus on financial impacts, and the inclusion of scenario analysis and transition planning. This is designed to help companies in preparing to include TCFD recommended disclosures in their mainstream reporting and accounts, and to provide a place for companies to reference from their reports in providing more detail.

For water, the structure and flow has been retained to maintain alignment with the CEO water mandate.

Some questions have had wording and options changed following consultation (e.g. move from supply chain to value chain), and to align with TCFD recommendations.

For forests, the main changes have been to include disclosures from our 2016-17 supply chain pilot, consolidation of questions, and better alignment with climate change and water questionnaires. We have also introduced differentiation between sustainable forestry management for paper & forestry companies, land use change, and differentiation between afforestation, reforestation and restoration projects.

Outreach this year

We have reached over 2000 companies and other stakeholders on our reimagining plans this year through webinars, conferences, meetings, industry groups, and two consultations this year:

- 1. Over 170 organisations responded to our first consultation on sector-specific disclosures and evolution;
- 2. We published 6 months earlier than usual our draft sector-specific questionnaires for feedback from organisations in our second consultation.

The feedback was processed to look for common responses, agreement/disagreement between stakeholders, and then assessed to see if the feedback would help add to achieving our goals for reimagining disclosure. The final questionnaires will be published in December as a result of this feedback and our own development work.

The consultation is now closed but the results, supporting documents and draft sector-specific questionnaires can still be viewed at https://www.cdp.net/en/companies/consultation

Policy Perspective



The European
Commission is a
staunch supporter of
natural capital
accounting, in the EU
and beyond. And we're
now seeing results,
with more consistent
reporting. But to build
a truly sustainable
society, we must move
beyond accounts. We
should move to a more
circular economy,
minimising waste, and
using resources as
efficiently as possible.

Society needs companies that put sustainability at the forefront of their vision. The European Union is always happy to work with companies that share our sustainability agenda. We are paving the way for low-carbon technologies with international agreements and legislation like the "Clean Energy for All" package.

Corporate leadership is essential for safeguarding our planet. Our economy, and our citizens, needs companies that promote low-carbon technologies, and practise what they preach. But the private sector needs to go beyond these mandatory requirements. Science-based targets for emission reductions, and internal carbon pricing can make a big difference.

But as the CDP European Natural Capital report 2017 finds, energy isn't everything. Sustainability is also about fresh water, and we can no longer take it for granted. Climate change, excessive abstraction, and inefficient use are threatening supplies. Management tools like natural capital accounts can mitigate these problems. Voluntary water targets for companies and regions can also bring major changes, for quality and quantity.

For long-term sustainability, biodiversity protection is another vital element. Assessing and managing the impact on nature isn't just good for the environment. It's also good business sense. Nature is an attractive target for private investment.

The EU guidelines for financial reporting already require disclosure on environmental and biodiversity issues. It helps investors understand how businesses rely on natural capital, and how this translates into financial risk.

The European Commission is a staunch supporter of natural capital accounting, in the EU and beyond. And we're now seeing results, with more consistent reporting. But to build a truly sustainable society, we must move beyond accounts. We should move to a more circular economy, minimising waste, and using resources as efficiently as possible.

The benefits of this transformation, for businesses and for society, are increasingly understood. Europe is laying the foundations, with mandatory measures like waste targets and eco-design regulations.

But the big changes will come from voluntary tools. Tools that can be used to manage and communicate circularity. There are many examples, from the voluntary standards on material efficiency we developed with industry at CENELEC, to the EU Ecolabel and the environmental footprint. EMAS, the EU Environmental Management and Audit Scheme, is another example. It is my hope that these tools are used as widely as possible.

The final ingredient is funding. The more we mobilise private capital for low-carbon, circular economy, water and biodiversity protection, the faster we move towards sustainability.

Change is in the air. More and more investors are looking at the environmental aspects of the companies they support. More and more start-ups are receiving private financing for eco-innovative products. But we need to go further, helping these pioneers to improve their bankability.

Environmental transparency is the basis of all decision-making – by investors, policymakers and companies themselves. I hope the Commission's High-Level Expert Group on Sustainable Finance and the EU Sustainable Finance Action Plan will take us further down that path to meaningful private sector disclosure and accountability in a European capital market and economy. The CDP platform, driving voluntary corporate transparency and mainstreaming environmental action for 15 years, provides the data and analyses policymakers need to track private sector progress and future planning to support the EU's efforts to meet the goals of the Paris Agreement and the SDGs.

Karmenu Vella

European Commissioner for the Environment

Commentary Italian Government



The Italian Ministry for the Environment is committed to promoting emissions reduction activities on a voluntary basis by the private sector as well as public institutions to foster an Italian transition towards a low-carbon economy. We believe that a low-carbon economy can be a driver to economic growth.

At the United Nations Climate Change Conference in Paris, in December 2015, the Conference of the Parties (COP) reached an ambitious agreement - a turning point in the transition to a lower emissions economy.

The Paris Agreement institutionalises a new paradigm within the climate governance regime by setting up a flexible, nationally driven, bottom-up approach. As such, its success will depend on how countries carry forward their targets relating to mitigation and adaptation. For some countries, this will mean putting significantly more climate protection measures in place, such as investing in energy efficiency and renewable energy.

Facing the consequences of climate change, ensuring the competitiveness of industry and granting secure and accessible energy to all citizens are key elements that will characterise policy in Italy and Europe in the long and very long term (until 2050), and which will require a radical transformation of the energy system and of society in general.

The Marrakech Partnership of Global Climate Action is a mutually supportive process that co-exists alongside the intergovernmental negotiations, and which contributes to sustaining political momentum and focus on international cooperation and sharing of concrete solutions by all actors. In this context, non-state actors play an increasingly important role in shaping and implementing parties' NDCs, and in building collective understanding of ways to strengthen ambition.

In September 2017, the Italian Ministry for the Environment, Land and Sea and CDP renewed their Memorandum of Understanding (MoU), aiming to drive action towards the achievement of the Paris Agreement and the Marrakech Partnership for Global Climate Action. The Italian government will support CDP's disclosure platform to promote sustainable development and protect the natural environment in both the public and private sector.

Under our MoU, the Italian government aims to increase the number of companies monitoring and actively managing their climate-related risks and impacts, by inviting Italy's largest companies and major cities to disclose to CDP. Tracking this progress, aligned towards delivering on the Paris Agreement, our National Determined Contributions (NDCs), and the Sustainable Development Goals (SDGs), the government seeks to stimulate sustainable, low-carbon economic growth.

CDP substantially supports global efforts to meet both the aims of the Paris Agreement and the SDGs. Critical to the implementation of the Agreement will be the ability to interrogate and understand what individual emitters are doing to contribute to national targets. Likewise, implementing the SDGs will require a greater understanding of how businesses are addressing deforestation and water security, which are also essential to mitigating greenhouse gas emissions.

Working together, we want to drive awareness by Italian companies, cities, states and regions of their environmental impact, and improve the quantity and quality of disclosure on climate change, water use and deforestation issues as we move towards realising the Paris Agreement's goals.

There is a specific need to drive companies' adoption of science-based emissions reduction targets, which align corporate GHG emissions reductions with global emissions budgets and the below 2-degree goal, and to generate the innovation needed to transition to a low-carbon economy.

Within the framework of the Marrakech Partnership of Global Climate Action – and beyond – we are looking to catalyse action by the Italian public and private sector to reduce GHG emissions, protect our natural resources and supply our economy with sustainable growth.

Francesco La Camera

Director General for Sustainable Development, Environmental Damage, European Union and International Affairs at the Italian Ministry for Environment, Land & Sea

KLP commentary



KLP recognizes the risks and opportunities associated with climate change as central to what it means to be a responsible investor. Our engagement related to water risk is a natural extension of this commitment.

Localized impacts on the water system often represent the «canary in the coal mine» for climate change. For this reason, the World Economic Forum in 2017 named the impact from water risk as a top global risk for the third consecutive year. KLP expects the companies in which we are invested to consider both their impact on local water systems and how water risk may affect their business model.

Companies that lack sufficient assessment procedures and management strategies to address water risk may see the impact on their direct operations and supply chains. KLP has a twofold approach to address the issue. First, KLP supports CDP as a signatory to their annual information request to companies for disclosure on water, along with disclosure requests for climate change and forest commodities. We expect portfolio companies to provide adequate disclosure on their approach to water risk. KLP partners with other investors on the CDP-led engagement project, engaging with consistent non-disclosing companies in high-impact and high-risk sectors. The objective of these initiatives is to promote transparency from companies on their water management strategy through a standardized reporting framework, and ultimately, to facilitate a more efficient and stable financial system.

In addition to disclosure, KLP also engages with companies to improve the substance of their approach to water risk. In 2017, we joined GES' collaborative water engagement initiative, which will run until 2019. The initiative focuses on engaging with 19 companies from a range of sectors and geographic areas that displayed medium to high water risk exposure, combined with low to medium preparedness to address these risks. Our ambition is to support companies in improving their risk assessment procedures and management practices. We see appropriate water risk management as a key contributor to the companies' long-term performance, as well as a means of respecting the development needs of the countries in which they operate.

Anne Kvam

Head of Responsible Investments, KLP

Engagement for disclosure

During the 2017 reporting period, CDP worked closely with some of its most active investor signatories and members to encourage complete, comparable and comprehensive environmental data reporting through CDP from number of companies not yet doing so. As part of the 2017 CDP Non-Disclosure Campaign, investors took the lead in reaching out to targeted high-impact corporations who had not provided the data previously to encourage them to submit a response, at least partial, to the CDP investor questionnaires on Climate, Water and Forest.

In order to better assess the environmental risks and opportunities of the companies in their portfolios and accelerate action, 57 investors joined this collaborative campaign either by signing engagement letters or by contacting directly the selected companies asking them to provide them information through CDP. Overall, more than 400 companies were reached out across all programs resulting to 49 new companies submitting data to CDP in 2017. The investor letters also contribute to advance the dialogue with a number of other high-impact companies on the path towards environmental disclosure and management.

About KLP

Kommunal Landspensjonskasse (KLP) is Norway's largest pension fund managing public employees' pensions as well as delivering safe and competitive financial and insurance services to the public sector. The group has total assets of NOK 597 billion invested globally in equities, bonds, infrastructure and property. KLP has been CDP's Norwegian partner since 2007

Investor perspective



As investors, the TCFD has given us a very powerful mandate, it has shifted the burden of proof to companies to explain why climate risk isn't an issue. The new norm is that companies should be considering climate risk at the board level. It's created a new concept of climate risk governance.

For an insurance giant like Aviva, failing to successfully halt climate change is unthinkable. "Our sector has an existential issue with warming above 4 degrees", says Steve Waygood, Aviva Investors' chief responsible investment officer. "It simply won't be possible to price insurance products at a premium we can sustain, and which economies can afford".

"That's a profound macroeconomic problem, given the role of insurance in pricing and redistributing risk."

On the asset side of its balance sheet, meanwhile, Aviva faces challenges relating to the climate risks to which its investments are exposed. He cites a study carried out by Aviva with the Economist¹, which found that 6 degrees of warming would wipe US\$43 trillion off the value of global capital markets. "The entire value of the MSCI World equity index is only US\$38 trillion – that's obviously a clear and present danger."

For that reason, Aviva has been a prominent voice in the climate change debate: disclosing on climate risk since 2004, incorporating climate risk into strategy and governance, engaging with investee companies, and playing an important role on the Task Force for Climate-Related Financial Disclosures (TCFD), on which Waygood sits.

"As investors, the TCFD has given us a very powerful mandate," he says. "It has shifted the burden of proof to companies to explain why climate risk isn't an issue." And, for those that recognize climate exposures, the "new norm is that companies should be considering climate risk at the board level. It's created a new concept of climate risk governance."

The TCFD recommends that companies disclose how they are likely to perform against various climate scenarios – which Waygood says will provide additional insight, but which are unlikely to tell the whole story. "A good scenario, that has been properly considered by the board, that looks at the downside risk is evidence of good quality management."

But he notes there is, as yet, no standardized way for each sector to produce scenarios, nor sector reference scenarios against which a company's scenario reporting might be compared – although he suggests there may be a role for the TFCD to produce these benchmarks.

Waygood also acknowledges that climate disclosure poses challenges for financial services groups such as his, noting that it is still not yet clear what the most appropriate metrics are for investors to disclose against. "We haven't got it cracked – I'm not happy with the state of the art," he says, noting that simply disclosing the carbon footprinting of a portfolio "doesn't cut it", as emissions can rise and fall for reasons not linked to climate risk management.

"We need a reference scenario for fund management," he suggests, that sketches out what a transition pathway to 2 degrees looks like, allowing investors to disclose how close their portfolio is to matching it.

Aviva will continue to encourage the companies in which it invests to use the TCFD guidance, but Waygood adds that more system-wide pressure needs to be brought to bear.

"It's as important that we use our influence in the political process to encourage those in Brussels, Westminster or Washington to use the TCFD in important international processes such as the International Accounting Standards Board, and the International Organization of Securities Commissions (IOSCO)," he says.

"We need to encourage the system to use this guidance and make it more than voluntary," he says, adding that he would also like to see the proxy voting firms and credit rating agencies explicitly referencing TCFD data, as well as the regulations that govern the financial sector – Basel III for banks and Solvency II for insurers – take climate risk into account.

"We have a role as investors, in terms of influencing the companies we own, as well as in terms of advocating how the financial system evolves,"he concludes.

Steve Waygood,Aviva Investors

https://www.eiuperspectives.economist.com/sites. default/files/The%20cost%20of%20inaction 0.pdf

The European corporate response to climate change







This section of the report presents analysis on corporate climate action in Europe, focusing on reported data on governance, emissions reduction initiatives, and targets.

The cross-European sample consists of 1,323 companies formally requested by CDP, on behalf of over 800 institutional investors, to disclose relevant climate change data. 573 companies (43%) responded to CDP's climate change program (illustrated in Figure 3). Although less than half of the requested companies reported data to CDP in 2017, the responding companies account for 82% of the sample's market capitalization. Out of the respondents, 540 companies provided unique responses and will therefore be considered as the basis for the analysis.

Companies from the industrials, financials and consumer discretionary sectors make up 57% of the unique responses. The remaining 43% of responses are made up of companies from seven sectors: materials, consumer staples, information technology, health care, utilities, energy, and telecommunication services. The smallest sector in terms of both requested and responding companies is the real estate sector, with four requested and no responding companies⁵.

CDP's climate change scoring methodology, explained in detail on page 20, places companies in different scoring bands: leadership (A, A-), management (B, B-), awareness (C, C-), and disclosure (D, D-). In 2017, 54% of European companies achieved a score in either the leadership (158) or management (135) bands, while 147 (27%) companies reached the awareness score and 92

(17%) companies were scored for disclosure. A total of eight companies have not been scored this year due to late submission of their data.

In 2017, 49 European companies made the global CDP Climate A List, accounting for 44% of the total number of 114 companies.⁶

Climate change governance and strategy

Out of the responding companies, 94% (508) reported that they have an individual or committee overlooking climate change issues. Most responders report that their board of directors is responsible for climate change (88%), while 6% of companies report senior management responsibility. 32 companies (6%) either do not have an individual or a committee overlooking climate change issues, or did not report any data.

Three quarters of companies (407) set incentives related to climate change adaptation and mitigation. There is a strong preference for monetary incentives, with 78% of companies reporting a monetary incentive system linked to environmental performance in place. However, non-monetary incentives such as employee recognition (18%) and other practices, such as reducing emissions related to employee commuting, (4%) are also used. In contrast to the high number of companies with board-level oversight for climate change, only a third of the reported incentives are targeted at the top management level, with 7% of incentives aimed at



- Due to the recent changes in methodology for organizing companies into sectors, significant number of Real Estate companies are included to the financial sectors analysis in this report.
- This includes two responders outside of the official investor sample reporting data to CDP voluntarily.

Figure 3: European sector participation to the climate change program 2017

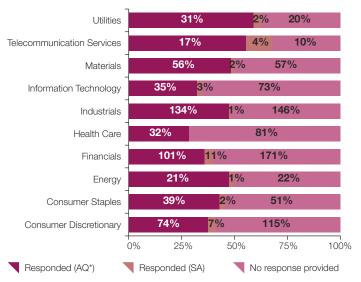
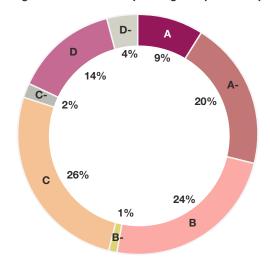


Figure 4: Scores of responding european companies



the board itself and 26% of incentives aimed at C-level executives. Moreover, only 2% of incentives are aimed at the senior management level (vice presidents, directors, head of functions).

While most companies already consider climate change a board-level issue and incentivize better climate performance, the structure of reported incentives does not fully mirror the high percentage of companies with board-level oversight. As only two percent of incentives are aimed at the senior management level, awareness of climate change issues might not be fully captured across hierarchies.

89% of responding companies (483) have indicated that climate change is integrated into their business strategy. 473 out of 540 (88%) companies have identified climate-related risks for their businesses that are either physical, regulatory, or of other significant sort, such as a reputational risk. Similarly, 474 of 540 companies (88%) have identified climate-related opportunities. 12% of companies have not identified any climate change related risks and opportunities, or did not report so.

As indicated in Figure 5, most reported risks and opportunities are related to potential changes in regulation. In the regulatory risk category, companies have identified risks in all categories, with the majority relating to fuel/energy taxes and regulations (17%), as well as cap and trade schemes (13%) and carbon taxes (11%). 9 percent of reported risks refer to uncertainties surrounding expectations for upcoming regulation changes. Identified opportunities are slightly less diverse (only 12 out of 14 opportunity types were reported), with most opportunities relating to product efficiency regulations and standards

(16%), fuel/energy taxes and regulations (13%), and international agreements (12%). Finally, 10% of reported opportunities refer to environmental regulations and planning.

The top three reported regulatory risks all refer to energy and emissions-related taxes. Many companies have also identified the same themes as opportunities. The practices for using internal carbon pricing as tool to prepare for changing business environment and translating carbon-related risks and opportunities into financial terms are further analyzed on page 22.

Encouraging steps towards decoupling emissions from growth

In 2017, a clear majority of companies were able to provide data on their direct emissions (Figure 6). 498 companies (92%) provided their Scope 1 emissions data and 454 companies (84%) disclosed their Scope 2 emissions data⁴. The overall volume of reported Scope 1 emissions equals 1,795 MtCO₂e, 90% of which are at least partially externally verified. The reported Scope 2 emissions add up to 206 MtCO₂e, 70% of which are at least partially externally verified.

Companies from the utilities, materials, industrials, and energy sectors (45% of responders) account for 98% of reported Scope 1 emissions. Moreover, companies from the materials and utilities sectors (16% of responders) also account for 54% of reported Scope 2 emissions. Companies from these sectors are often at the very beginning of global value chains, explaining why their Scope 1 and 2 emissions are high relative to companies in other sectors. Emissions produced by suppliers or

Figure 5: Identification of risks and opportunities

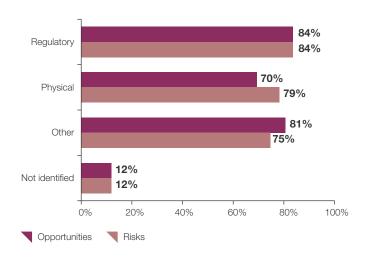
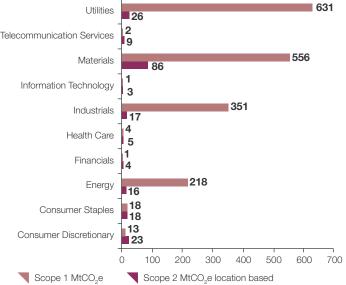


Figure 6: Scope 1 and Scope 2 emissions, MtCO_ee



Figures based on location based Scope 2 data as defined in the GHG protocol.
 www.ghgprotocol.org/scope_2_guidance

customers throughout the value chain are accounted as Scope 3 emissions. In most sectors, Scope 3 emissions are typically significantly larger than Scope 1 and 2 emissions, but the maturity to measure and reduce Scope 3 emissions across all sectors is still lower compared to the practice of reporting and initiatives aimed at reducing Scope 1 and 2 emissions⁷. In this analysis, emissions reporting from all scopes are reviewed independently, with the focus on Scope 3 emissions also in the sectoral analysis pages (pp.24 onwards)

When comparing corporate Scope 1 and 2 emissions with the previous year (Figure 7), 54% (290) of responders reported an overall decrease in emissions volume, while 34% (183) of responders reported an overall increase. The sectors in which the largest share of companies reported an overall decrease in emissions volume are the energy (75%), utilities (68%), and financials (66%) sectors, while the latter also includes companies operating in the realestate sector. For the 34% of companies reporting increased emissions, the most commonly reported reasons were due to changes in business output and structural changes, such as acquisitions.

In 2017, 426 companies (79%) provided upstream Scope 3 emissions data and 255 companies (47%) reported downstream emissions data. 81% of companies reported any kind of Scope 3 emissions (upstream or downstream), with 68% of companies reporting data for two or more named Scope 3 categories. However, only 45% of companies reported both upstream and downstream Scope 3 emissions. The overall volume of reported Scope 3 upstream emissions equals 1,626 MtCO₂e, 92% of which are being at least partially externally verified.

The reported Scope 3 downstream emissions add up to $5,678 \,\mathrm{MtCO}_2\mathrm{e}$, 98% of which are being at least partially externally verified.

For Scope 3 emissions, companies from the financial sector account for 23% of reported emissions, followed by the materials (17%), consumer discretionary (16%), and utilities sectors (16%). 35% of reported downstream Scope 3 emissions were reported by companies from the energy sector, followed by the materials (20%) and consumer discretionary sectors (15%). Considering their position in many global value chains, it is little surprise that companies from the energy and materials sectors account for high shares of reported downstream Scope 3 emissions, such as the use of sold products. While each company is different regarding its position in today's global value chains, understanding purchasing and investment decisions throughout these value chains is becoming increasingly important in the transition into a lowcarbon economy. Against this background, it is an encouraging result that 81% of companies already report some Scope 3 emissions data (upstream or downstream). However, to minimize climate-related risks stemming from supply chain disruptions, and to better understand climate change issues throughout entire value chains, companies should further increase the extent and accuracy of their Scope 3 reporting.

Collecting or estimating Scope 3 data is particularly challenging in some sectors, and in some cases available methodologies may cover only part of Scope 3 emissions. Consequently, though 68% of European companies provided CDP with data for two or more categories of Scope 3 emissions, for

 Further information on the accounting of GHG emissions based on the sources from The Greenhouse Gas Protocol

Figure 7: Emission performance in comparison

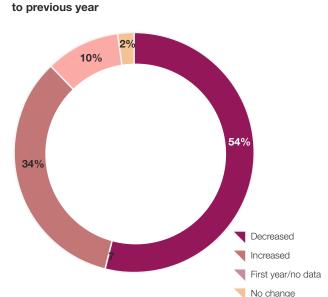


Figure 8: Scope 3 emissions upstream and downstream MtCO_ae

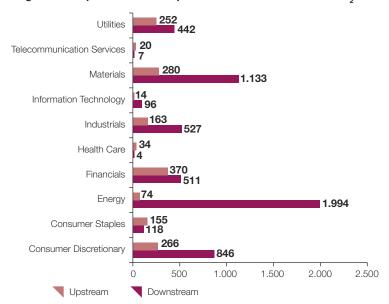


Figure 9: Percentage of responders establishing absolute, intensity and renewable energy targets

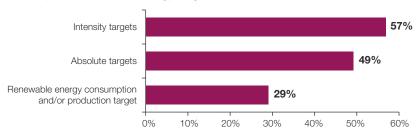
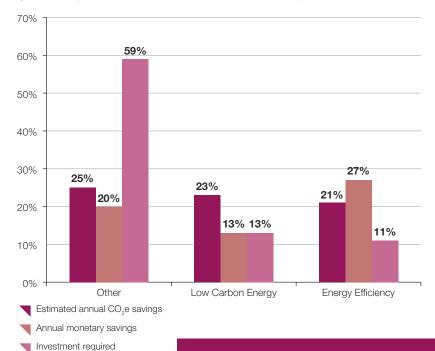


Figure 10: Top 3 emissions reduction activities in Europe



almost half of companies (45%) there is still at least one category with emissions estimated to be "relevant" but not yet calculated. For most companies this is still the "purchased goods and services" category.

Many companies are already working directly with their suppliers through the CDP supply chain program to support the implementation environmental stewardship also in their supply chains and to collect primary data for their Scope 3 inventory. Further information on the CDP supply chain program is found on page 63.

Emissions reduction targets and renewable energy targets

In 2017, 419 companies (78%) disclosed that they have emissions reduction targets in place (absolute and intensity targets), while only 154 companies (29%) reported that they have renewable energy consumption and/or production targets. 140 companies (26%) had both emissions reduction and renewable energy targets. Unfortunately, 20% (107) of responding companies did not yet set emissions reduction targets at all, or did not report so (Figure 9). Based on several years analysis of CDP data, companies that have set emissions reduction targets are much more likely to reduce their emissions.

More than two thirds (69%) of reported emissions reduction targets focus on short-term emissions reductions until 2020. Close to a quarter of targets (23%) focus on medium-term emissions reductions (2021-2035), while only 8% of targets go beyond 2036. Close to half (49%) of the reported targets covered a relevant degree of the emissions, i.e. at least 80% of total Scope 1 and Scope 2 emissions.

What is a Science Based Target?

Limiting the increase in global average temperature to well below 2°C to mitigate the dangerous effects of climate change was the central aim of the Paris Agreement on climate change signed by nearly 200 nations. Businesses, which account for a substantial portion of global GHG emissions, can align with this goal by setting corporate GHG reductions targets based on global emissions budgets generated by climate models.

Companies globally are raising their ambitions to set science-based targets and ensure their long-term sustainability and profitability. In total, over 300 companies, of which 119 in Europe, have committed to set emissions reduction targets through the initiative. By making this commitment, companies will be agreeing to set science-based emissions reduction targets in line with the Science Based Targets Initiative's Call to Action criteria within two years of signing the commitment letter. Once targets have been developed, companies will submit the targets for a quality check. A technical member of the SBTi and the Steering Committee will verify that the targets meet the criteria. As of October 2017, 76 companies have emissions reduction targets approved by the initiative, of which 33 in Europe.

The Science Based Targets initiative is a collaboration between CDP, World Resources Institute (WRI), the World Wide Fund for Nature (WWF), and the United Nations Global Compact (UNGC) and one of the We Mean Business Coalition commitments.

Please visit www.sciencebasedtargets.org for criteria, guidance, methodologies and tools for setting GHG emissions reduction targets in line with climate science. For further information, you can contact the We Mean Business – Commit to Action team at commit@cdp.net

From the reported data, more than 125 MtCO₂e annual savings are accounted for out of the implemented ERAs, yielding to €2,879 million annual monetary savings and requiring €119 billion in investments.

Out of these targets, 41% cover a yearly reduction from the base line of up to 2.1%. However, slightly more than a third (35%) cover a yearly reduction of between 2.1-4%. 24% of targets cover an annual reduction of more than 4%.

Out of the 154 companies that reported that they have renewable energy consumption and/or production targets, 33 disclosed their ambition to procure 100% renewable energy, and have underlined their intention to do so by signing the RE100 initiative commitment.

Immediate climate action is key to achieving a well-below 2°C world. However, to limit global warming to 2°C and to achieve net zero emissions by 2050, companies must set more ambitious mid-term and long-term targets.

A subset of emissions reduction targets are sciencebased targets. Such targets consider the maximum volume of GHGs that may be emitted if we are to limit global temperature rises to 2°C compared to preindustrial levels –the threshold that was agreed upon during the COP21 conference in Paris in 2015.

Out of the European companies included to this analysis, 25 already have a science-based emissions reduction target that has been approved approved by the Science Based Targets Initiative (SBTi). These companies represent a third of the companies with an approved science-based target globally. Sixty-two more European companies have signed the SBTi's commitment to develop a science-based target within the next two years.

Emissions reduction activities

For the reporting year 2017, 391 (72%) European companies reported having established various emissions reduction activities or projects.

Overall, more than 50,000 emissions reduction activities (ERAs) were reported, out of which approximately 29,500 are at the implementation stages (accounting 58% of the overall ERAs reported).

From the reported data, more than 125 MtCO₂e annual savings are accounted for out of the implemented ERAs, yielding €2,879 billion annual monetary savings and requiring €119 billion in investments. Figure 10 details the top three emissions reduction activities in Europe, alongside their monetary savings and the investment required.

In 2016, companies invested most in the "other" category. 98% of investments in this category are accountable to only one company, ENEL, which is phasing out thermal plants in Spain and in Italy in favor of renewable energy projects. Similarly, the "other" section provides the highest quantity of estimated CO₂ annual savings, albeit by a small margin compared to low carbon or energy efficiency related activities.

Going 100% renewable power

RE100 is a collaborative, global initiative uniting more than 100 influential businesses committed to 100% renewable electricity. By transitioning electricity needs to renewable sources, businesses are playing a crucial role in driving the creation of a thriving, global market for renewable generation – a game-changer in reducing emissions.

To achieve this goal, companies must match 100% of the electricity used across their global operations with electricity produced from renewable sources – biomass (including biogas), geothermal, solar, water and wind – either sourced from the market or self-produced. Companies can achieve 100% renewable electricity through:

Procurement of renewable electricity sourced from generators and suppliers in the market

Production of renewable electricity from their own on-site and off-site facilities

Company progress towards 100% renewable electricity is reported annually. Consumption and production of renewable electricity need to meet credibility and transparency requirements, and be verified by a third party.

RE100 initiative is led by The Climate Group in partnership with CDP. Both organizations are part of the We Mean Business coalition, working with leading businesses around the world.

For more information visit there100.org or contact the We Mean Business – Commit to Action team at commit@cdp.net

Climate change key takeaways

A significant number of European companies are already climate leaders. 49 feature on CDP's Climate A List, representing 44% of the global total. These leading companies are embedding low-carbon goals in their long-term business plans and setting targets aligned with climate science, but there is still some way to go before all European companies are on the below two-degree emissions trajectory with climate-resilient businesses.

Complete disclosure is the first step

- Even though the major players in Europe are already largely reporting high quality information, 57% are yet to respond to CDP's climate change questionnaire.
- A clear majority of companies provide data on their own Scope 1 (92%) and Scope 2 (84%) emissions. A growing number of companies also verify their disclosures, with 90% of companies reporting that their Scope 1 emissions are least partly externally verified and 70% for Scope 2.
- There is some distance to go before companies report fully comprehensive emissions data: just over two thirds of responding companies have independent verification covering at least 70% of their direct Scope 1 emissions, and even fewer (42%) for Scope 2 emissions.
- Value chain emissions, Scope 3 data, is still challenging for some sectors, and increased collaboration across value chains is imperative. 68% of companies already report data on two or more named Scope 3 categories, but 45% recognize at least one major category with relevant emissions not yet calculated, most often in the "purchased goods and services" category.

Long-term emissions reduction targets are needed to drive innovation

- 81% of European companies report emissions reduction targets in place for 2017, but only two-thirds set emissions reduction targets extending to 2020, and alarmingly few (21%) beyond that. While immediate climate action is key to achieving a well-below 2°C world, setting long-term targets can help ensure that corporate strategy is aligned with decarbonization, and can drive the innovation needed to transform the global economy away from fossil fuels.
- 23% of set targets focus on medium-term emissions reductions (2021-2035), while only 8% of targets go beyond 2036.
- The number of companies setting science-based targets is growing rapidly, with 25 company targets already approved by the Science Based Targets initiative, and 62 officially committed to setting one within the next two years.

- However, most responding companies have yet to commit to emissions reduction goals that align with climate science;
- Though not yet officially approved as Science Based Targets, some companies report setting ambitious annual reductions. 24% of targets aim for over 4% annual total emissions reductions.

Emissions performance

- 89% of European companies reported active emissions reduction initiatives in the reporting year.
- 54% of companies report an overall reduction in emissions volumes, while in the energy sector as many as 75% report an overall reduction.
- More than 125 MtCO₂e annual savings result from implemented emission reduction activities Europe-wide, yielding €2,879 billion annual monetary savings and requiring €119 billion in investments.

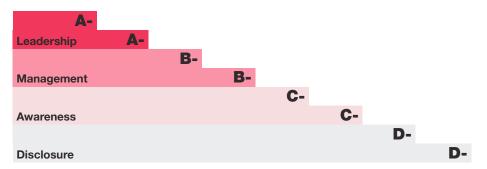
Governance and strategic steps towards low carbon economy

- Climate change is now an issue at the very top of corporate decision-making: 89% of responding companies in Europe report that climate change is integrated into their business strategy.
- 88% of companies have responsibility for climate change resting with the board, a board-level individual, or a committee appointed by the board
- ▼ 75% of companies set incentives related to climate change adaptation and mitigation
- Only 7% of incentives are aimed at the board itself, with a third of incentives targeted at the top management level and 2% to senior management level.
- 88% of European companies identified climaterelated risks for their businesses that are either physical, regulatory, or reputational, with 88% identifying opportunities. Most reported risks and opportunities relate to potential changes in regulation.

Scoring: a measure of a company's environmental performance

Scoring at CDP is mission-driven, focusing on CDP's principles and values for a sustainable economy and as such scores are a tool to communicate the progress companies have made in addressing environmental issues, and highlighting where risks may be unmanaged. CDP has developed an intuitive approach to presenting scores that highlight a company's progress towards leadership using a 4 step approach: **Disclosure** which measures the completeness of the

company's response; **Awareness** which intends to measure the extent to which the company has assessed environmental issues, risks and impacts in relation to its business; **Management** which is a measure of the extent to which the company has implemented actions, policies and strategies to address environmental issues; and **Leadership** which looks for particular steps a company has taken which represent best practice in the field of environmental management.



Leadership	80-100% 0-79%	A A-
Management	45-79% 0-44%	B B-
Awareness	45-79% 0-44%	C C-
Disclosure	45-79% 0-44%	D D-

F = Failure to provide sufficient information to CDP to be evaluated for this purpose¹

The scoring methodology clearly outlines how many points are allocated for each question and at the end of scoring, the number of points a company has been awarded per level is divided by the maximum number that could have been awarded. The fraction is then converted to a percentage by multiplying by 100. A minimum score of $80\%^2$, and/or the presence of a minimum number of indicators on one level will be required in order to be assessed on the next level. If the minimum score threshold is not achieved, the company will not be scored on the next level.

The final letter grade is awarded based on the score obtained in the highest achieved level. For example, Company XYZ achieved 88% in Disclosure level, 82% in Awareness and 65% in Management will receive a B. If a company obtains less than 44% in its highest achieved level (with the exception of Leadership), its letter score will have a minus. For example, Company 123 achieved 81% in Disclosure level and 42% in Awareness level resulting in a C-. However, a company must achieve over 80% in Leadership to be eligible for an A and thus be part of the A List. Furthermore, in order for a company to be eligible for inclusion in the A List it must not have reported any significant exclusions in emissions and have at least 70% of its scope 1 and scope 2 emissions verified by a third party verifier using one of the accepted verification standards as outlined in the scoring methodology.

Public scores are available in CDP reports, through Bloomberg terminals, Google Finance and Deutsche Boerse's website. CDP operates a strict conflict of interest policy with regards to scoring and this can be viewed at https://www.cdp.net/scoring-confict-of-interest

Future of Scoring

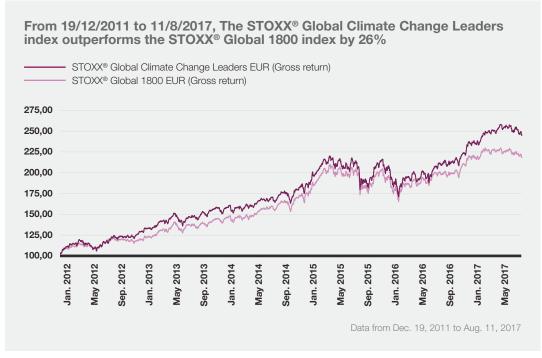
As part of its 'Reimagining Disclosure' initiative, CDP developed a series of sector-specific questionnaires integrating the recommendations by the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD) and stakeholder feedback collected via two rounds of consultations. Each sector questionnaire will have a corresponding sector-specific scoring methodology which will be released in the first quarter of 2018.

- 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.
- 2. CDP's methodology aims to incentivize continuous improvements as reflected by the state of the market and the improvement of scientific knowledge around the environmental issues it evaluates. The methodology thus evolves over time and the weight of some questions might change or some previously unscored questions might start being scored. As part of these improvements for 2017 scoring, CDP has modified the thresholds from last year.

Investing in CDP's Climate Change Leaders made easy: CDP and STOXX® continue collaboration on Low Carbon Index Family



STOXX® Low Carbon Index family now expanded based on CDP's forward-looking scoring methodology.



77

The Climate A List comprises a strong set of companies who lead on climate change mitigation today and in the future. It is exciting to see the rising investor interest in the STOXX® Global Climate Change Leaders Index.

Willem John Keogh, Senior Product Development Manager, Director, STOXX® Ltd.



Building on last year's successful collaboration with STOXX® and South Pole Group (now ISS Ethix Climate Solutions), this year CDP has again provided data and expertise for the continuation and expansion of the STOXX® Low Carbon index family.

As the first index to track CDP's Climate A List available to all market participants, the STOXX® Global Climate Change Leaders Index has made investing in CDP's Climate A List easier than never

Being based on the CDP A List, this unique index includes carbon leaders who are publicly committed to reducing their carbon footprint¹, offering investors a fully transparent and tailored solution to address long-term climate risks, while participating in the sustainable growth of a low-carbon economy.

The index has outperformed a global benchmark by 26% over 5 years.

New generation of low carbon indices based on CDP data

This year, STOXX® has expanded its Low Carbon Index family by introducing the STOXX® Climate Impact and STOXX® Climate Awareness Indices. The new indices now include the first three levels of the CDP climate change scoring methodology: Leadership, Management and Awareness.

Investors are showing great interest: STOXX® has recently licensed one of its Global Climate Impact indices to the Varma Mutual Pension Insurance Company, the largest private investor in Finland.

CDP is looking forward to contributing to innovative solutions that can add real value for investors in the future.

For more information please contact:

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^{*} Compared to the STOXX Global 1800 Index in the period from 11/12/2011 to 11/08/2017.



Putting a price on carbon

Companies have identified a variety of reasons for utilizing an internal carbon price as a tool within their business-from translating carbon-related risks and opportunities into financial terms to deliberately driving low-carbon initiatives. The three main reasons for internal carbon pricing are:

- Manage risks: Companies internalize the existing, expected or potential price of carbonfrom an ETS, carbon tax, or implicit carbon pricing policy-to assess its risk exposure to regulations that affect the cost of emitting CO₂e.
- Reveal opportunities: Companies also use an internal carbon price as a tool to reveal potential opportunities that may emerge with the transition to the low-carbon economy. As policy and legal, market, technological and reputational factors shift, they also present opportunities for companies. When used as a generic proxy in this way, an internal carbon price can help guide strategic decisions, such as low-carbon R&D to create the products and services of the future.
- Transition tool: A smaller number of organizations deliberately use an internal carbon price to drive emissions reductions and incentivize low-carbon activities - such as investments in energy efficiencies, clean energy, development of green products/services-to facilitate a company-wide low-carbon transition. This includes companies who utilize the voluntary carbon markets to offset their

emissions, although increasingly the focus has been on driving down emissions within the company.

Internal carbon pricing in Europe

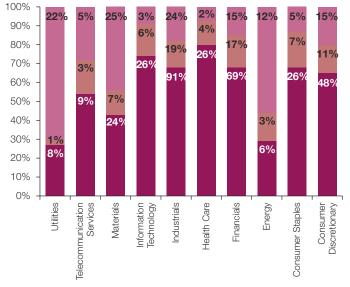
Out of the 540 unique responses included in this first European report, 128 participating companies have already established an internal price on carbon, with another 78 companies planning to implement a price on carbon in the next two years.

When looking at sector participation, the four most represented sectors using carbon pricing are materials (25) industrials (24 companies), energy (12 companies) and utilities (22 companies). This is a commendable result as these four sectors alone account for 98% of the total EU Scope 1 emission data provided to CDP in 2017.

It is logical that the leading sectors are energy intensive, as they have more exposure to material risk related to the use of fossil fuel-based energy. Furthermore, the utility and energy sectors fundamentally rely on the extraction and combustion of fossil fuels, leaving them exposed to carbon asset risks-investments and reserves that may never be economic to use or extract in the future. Therefore, these sectors have been measuring carbon risks as a part of every-day business for several years.

It is important for investors to know whether companies in their portfolio expect to be impacted by a pricing system in the future; and if so, whether

Figure 11: ICP European sector breakdown

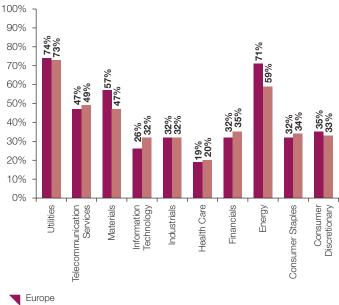


No, and we currently don't anticipate doing so in the next 2 years

No, but we anticipate doing so in the next 2 years

We currently use carbon pricing

Figure 12: Percentage of sample pricing or planning to price by 2019



Global



these companies are using internal carbon pricing to manage that risk. In 2017, nearly 65 European companies disclosed to CDP that they already participate in, or expect to participate in an Emission Trading System (ETS) within the next two years, yet they do not use an internal carbon price.

Whilst the EU-ETS the oldest regulated cap-and-trade system, it has experienced significant price volatility, with allowance prices of trading as high as almost €30 in 2008, dropping to lower than €10 a year later, back up to €15 in 2011, and finally dropping to below €10 that same year and ever since. Reform is currently underway. Between 2015 and now, the EU Commission, Parliament, and Council have been working on proposals for Phase IV of the system, which will start in 2021, and which aims to tighten the market.

While this change's potential impact on allowance price levels is not yet clear, a recent Barclays report¹ predicts that if the reforms are completed successfully, EUAs (EU Allowances) are set to rebound strongly over 2018-2020. The bank states that it expects the price to break the €10 mark in 2018, reaching €15–€20 by 2020. The electricity and aviation sectors will likely feel the pinch most over the next few years, while those sectors with a current surplus of allowances (such as steel and cement) become reluctant to sell. European utilities may not be ready for this pinch if their expectations of EUAs stay low. The improvements to CDP's carbon pricing

questions will allow investors to identify more precisely the companies potentially at risk of carbon pricing policy exposure in the future. A key aspect of a company's disclosure of its internal carbon pricing practices is the assumptions the company makes about how the prices will develop over time—i.e. is the company using an evolutionary price metric or a static one? And if a static one is used, does the company build the potential increase in these costs into its current price up front? This latter practice tends to be used more by companies adopting this metric as a transition tool, whereas the former evolutionary model tends to be used by those who are seeking to reflect explicit carbon pricing policies as part of their risk management practices.

Looking for more insights on companies using an internal price on carbon?

This is just a small subset of the data and analysis in our latest report on carbon pricing - a more detailed analysis of the tool, price levels used globally; the link between the Task Force on Climate-Related Financial Disclosure's recommendations and carbon pricing; and forward looking analyses can be found in our report "Putting a price on Carbon: Integrating climate risks into business planning"

Hannah Cushing, Project Manager, Carbon Pricing Nicolette Bartlett, Director, Carbon Pricing

Sectoral profileConsumer discretionary

The consumer discretionary sector is a highly diversified sector including businesses from the textile, automotive, apparel and accessories, and retail industries.⁸

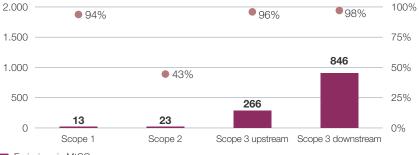
The most common scores for CDP's climate change program in the sector are B and C, with 21 companies achieving each score. This signals that a good proportion of responders understand how climate issues affect their businesses and are starting to implement measures to address them. Four companies in this sector are part of the CDP's Climate A List.

The carbon footprint of the consumer discretionary sector

The sector is mostly composed of companies where the majority of emissions is emerging in Scope 3 categories, often due to the use phase of the final products by consumers. As illustrated in Figure 13, the sector reports approximately three times more Scope 3 downstream emissions in comparison to the second highest category, Scope 3 upstream. However, all figures are still relatively partial, as 56% of the participants in the sector still have not provided any data related to their Scope 3 emissions, resulting in a substantial data gap in the responses provided. It is critical that the remaining companies in the sector begin to report their Scope 3 figures, and address the

The consumer discretionary sector in Europe is composed of 196 requested companies, of which 74 unique responses were received in 2017 and are analyzed in this section.

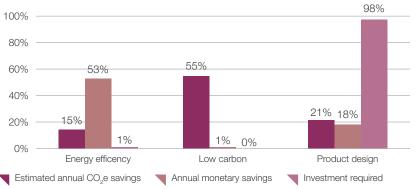
Figure 13: Consumer discretionary sector breakdown of emissions and partial verification



■ Emissions in MtCO₂e

Percentage of reported emission volume that is at least partially externally verified

Figure 14: Top 3 emissions reduction activities Consumer discretionary sector



importance of their value chains to mitigate further climate risks.

Towards the decarbonization of the consumer discretionary sector

73% of companies disclosed that they have emissions reduction targets in place, with 45% reporting absolute targets and 55% intensity targets. Furthermore, 23% of companies reported that they have renewable energy consumption and/or production targets. 26% of responding companies in the Consumer Discretionary sector did not yet set any targets, or did not report so. 77% of reported emissions reduction targets focus on short-term emissions reductions until 2020. 18% of targets focus on medium-term emissions reductions (2021-2035), while only 5% of targets go beyond 2035.

Two companies in the sector have set and approved Science Based Targets, emissions reductions aligned with the international goal of reducing carbon emissions to a level compatible with a maximum increase of global temperature of 2°. Another 10 companies in the sector are committed in establishing an SBT in the next two years. Three responding companies in the sector are part of the RE100 initiative, publicly stating their commitment in sourcing 100% renewable electricity for their operations.

Achievements in emissions reductions

Out of the companies that could compare their Scope 1 and Scope 2 emissions to the previous year, 57% reported an overall decrease in emissions volume and 43% an increase. The reported emissions reduction activities are set to generate estimated annual emissions savings of more than 3.3 $\rm MtCO_2e$, and annual monetary savings of €162 million, requiring a total of €12 billion in investments. The largest $\rm CO_2e$ savings are accounted for by low carbon initiatives, requiring in comparison only 0.1% of the total investment reported.

Profile: Daimler

For Daimler, acting in line with the principles of sustainability means striving to achieve long-term, viable business success. To make this possible, our activities must be in harmony with society and the environment. As a globally operating automobile manufacturer, we face industry-specific challenges, as road traffic contributes to the generation of CO₂ and pollutant emissions. We therefore use our power of innovation to create safe, environmentally friendly vehicles that conserve resources to the greatest extent possible. We also develop sustainable mobility solutions and promote their profitable implementation.

There is every indication that two current trends - the switch to renewable sources of energy and the growing demand for electric vehicles - will continue to intensify worldwide in the years ahead. Completely emission-free mobility may be a not-too-distant reality.

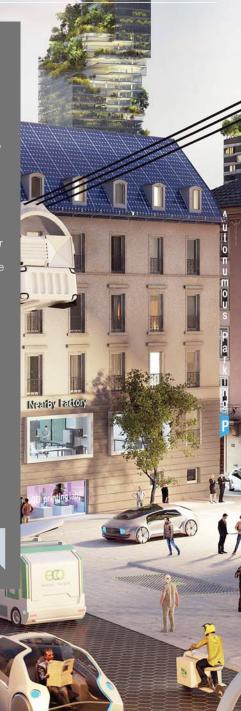
As we head toward this future, we must utilize all means available to us to reduce CO₂ emissions rapidly. The electrification of the drive system is without doubt key to achieving this goal. By 2022, we will electrify the entire passenger car portfolio of Mercedes-Benz, offering customers at least one electrified alternative in all segments and more than 50 electrified vehicle variants in total. In the years ahead, we will invest over €10 billion expanding our electric fleet.

With the market launch of electric vehicles, we introduce a new product brand for electric mobility: EQ, meaning «Electric Intelligence». The new brand encompasses all key aspects for customer-focused electric mobility and extends beyond the vehicle itself. EQ offers a comprehensive electric mobility ecosystem of products, services, technologies and innovations, ranging from

electric vehicles to wallboxes and charging services to home energy storage units. The new brand will not only enable climate-friendly driving (locally zero CO₂ emissions), but will also foster private solar electricity generation. The home energy storage units can save solar energy during sunny daytime, which can be transferred to electric vehicles through the wallboxes in the evening. Customers can create a whole renewable energy ecosystem for their home electricity demand and their electric vehicles.

As the world's leading manufacturer of commercial vehicles, Daimler naturally employs sustainable new drive systems in our trucks, buses, and vans. We put our first electric van into series production in 2011: the Vito E-CELL. 2018 will bring a new van; completely electric featuring an automated cargo area. In the same year, we also plan to launch an electric version of our Citaro short-distance bus, which, thanks to its 300 kilometer range, can easily cover most regular-service routes. Finally, our battery-electric light truck Fuso Canter E-CELL, including the third generation which launched in 2017, secures our leadership status for green trucks.

Daimler will continue to increase its share of investment in future-oriented technologies. We are investing €1 billion alone in the global expansion of our battery production for electric cars and plug-in hybrids. In this way, we are ensuring direct access to key components of electric mobility and thus safeguarding our strategy to switch to emission-free mobility.





Sectoral profileConsumer staples

The consumer staples sector includes companies in food and staples retailing, beverages and tobacco, and household and personal products⁹.

The most common scores for CDP's climate change program in the sector are A- and C, achieved by nine companies per scoring band. This result shows the divide in readiness in the sector in tackling climate issues, and the ability to future-proof their businesses for the years to come. Two European companies in the sector are part of the CDP Climate A List.

The carbon footprint of the consumer staples sector

As shown in Figure 15, upstream Scope 3 emissions represent a significant share of the consumer staples footprint, representing 7 times Scope 1 and Scope 2 emissions combined. Working with suppliers to encourage emission reductions throughout their complex supply chains therefore represents a vital measure for companies in this sector to align with a low-carbon economy.

Towards the decarbonization of the consumer staples sector

79% of companies disclosed that they have emissions reduction targets in place, with 36% reporting absolute targets and 67% intensity targets.

Furthermore, 31% of companies reported that they have renewable energy consumption and/or production targets. 21% of responding companies in

the consumer staples sector did not yet set any targets at all, or did not report so.

More than two thirds (67%) of reported emissions reduction targets focus on short-term emissions reductions until 2020. 27% of targets focus on medium-term emissions reductions (2021-2035), while only 7% of targets go beyond 2035.

To ensure that emissions reduction targets are ambitious enough to meet the Paris Agreement, consumer staples companies are turning to science-based targets. Three companies already received approval for their targets from the SBTi, and six other companies have publicly committed to adopt an SBT within the next two years.

The consumer staples sector is engaged in the shift towards renewable energy, with 12 companies (31%) having adopted targets on renewable energy consumption or production. Four have already committed to procure 100% of their electricity from renewable sources under the RE100 initiative.

Achievements in emissions reductions

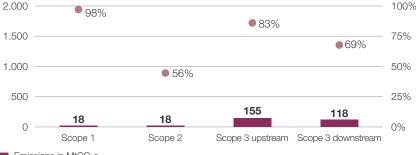
Out of the companies that could compare their Scope 1 and Scope 2 emissions to the previous year, 57% reported an overall decrease in emissions volume and 40% stated an increase. 3% reported unchanged emissions.

The reported emissions reduction activities are set to generate estimated annual emissions savings of more than 2.4 MtCO₂e, and annual monetary savings of €70 million, requiring a total of €342 million in investments. The emission reduction activities generating the most emissions and monetary savings, and with the highest investment, are depicted in Figure 16. Energy efficiency measures are most favored, representing 70% of expenditure and providing the highest portion of estimated monetary and emission savings.

Process emission reduction initiatives have provided the sector with the second most estimated $\mathrm{CO}_2\mathrm{e}$ savings (35%), requiring only 0.30% of the overall amount invested. The aim of these policies is typically to improve energy efficiency of buildings. Another interesting result is also provided by the monetary savings provided in "behavioral change" initiatives, in which 0.37% of the overall amount invested accounts for 6.5% of the annual monetary savings.

 The consumer staples sector in Europe is composed of 92 requested companies, of which 39 unique responses were received in 2017 are analyzed in this section.

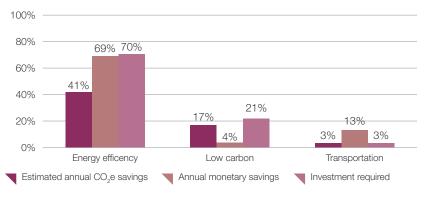
Figure 15: Consumer staples sector breakdown of emissions and partial verification



Emissions in MtCO₂e

Percentage of reported emission volume that is at least partially externally verified

Figure 16: Top 3 emissions reduction activities Consumer staples sector



Profile: Kesko Corporation



One of our main sustainability goals is our commitment to mitigate climate change and promote the shift to renewable energy. Setting science-based targets was a significant step for working toward this goal and a sustainable future.

We are proud to be the first Finnish company to set emission targets approved by the Science Based Targets initiative. The process of calculating and setting science-based targets was eye-opening and useful for examining and setting our path toward a low carbon future. We believe in leading by example and thus hope to encourage other companies to join us in setting their own ambitious climate targets as well.

Our targets include emissions reductions from our stores, logistics and the supply chain. To achieve these ambitious emission reduction targets, we will increase our use of renewable energy while also improving energy efficiency in stores and logistics. Our supply chain target is to engage our key suppliers to set their own emissions targets and thus influence the overall climate impact of the sectors in which we operate.

Our most significant achievement in increasing the consumption of renewable energy has been our decision to start purchasing 100% renewable electricity in Finland since the beginning of 2017. One of our challenges in the coming years is to increase our consumption of renewable energy in our other operating countries as well. Kesko's building and technical trade division operates in Finland, Sweden, Norway, Estonia, Latvia, Lithuania, Russia, Belarus and Poland.

In Finland, we have been investing in building solar power plants on the rooftops of our grocery stores since 2016. With a total of 16 solar power plants, we are the biggest producer and consumer of solar power in Finland. Our positive experiences with these plants have encouraged us to plan for more solar power in the future.

Keeping global warming below two degrees as set in the Paris Climate Agreement requires innovation and cooperation from all sectors and businesses. In addition to providing companies with a method for defining targets in line with climate science, science-based targets provide investors and other stakeholders with an excellent tool for comparing the emissions performance of companies.

This profile is collaborative content supported by Kesko Co

Mikko Helander President and CEO Kesko Corporation



Scope 3 emissions represent a significant share of the consumer staples footprint, representing seven times Scope 1 and Scope 2 emissions combined. Working with suppliers to encourage emissions reductions throughout their complex supply chains therefore represents a vital measure for companies in this sector to align with a low-carbon economy.



Sectoral profileEnergy

The energy sector includes companies in both traditional fossil fuel industries as well as in renewable energy production, and has a pivotal role in the transition to low carbon economy¹⁰.

The most common score for CDP's climate change program in the sector is C, achieved by 8 companies, indicating that most companies in the sector understand how environmental issues intersect with their business, but might have not yet implemented actions to address their emissions or future proof their business strategy. One European company is part of the CDP Climate A I ist.

The carbon footprint of energy companies

The energy sector is the fourth largest emitting sector in this year's analysis, constituting 12% of the total European reported European Scope 1 emissions, 8% of Scope 2, 5% of upstream Scope 3 and 35% of downstream Scope 3 emissions.

As illustrated in Figure 17, the highest portion of reported emissions come from Scope 3 downstream categories, which amounts to eight times of the total Scope 1 and 2 emissions of these companies. This is logical, given that most of these emissions result from the use of energy sold to third parties¹¹. All responding companies report having their emissions in all scopes at least partially verified, reflecting the requirements of participation in the EU ETS system.

Towards the decarbonization of the energy sector

95% of companies disclosed that they have emissions reduction targets in place, with 71% reporting absolute targets and 57% intensity targets. Furthermore, two companies reported that they have renewable energy consumption and/or production targets. All the responding companies from the energy sector reported setting emissions reduction and/or renewable energy targets.

Close to three quarters (73%) of reported emissions reduction targets focus on short-term emissions reductions until 2020. 27% of targets focus on medium-term emissions reductions (2021-2035), while no companies from the energy sector have long-term targets that go beyond 2035.

Despite the high quantity of emissions resulting from downstream Scope 3 categories, no emissions reduction targets were reported for these activities. Instead, some companies in the sector are working to reorient their business for a low-carbon energy future. Currently, some companies in the sector, namely companies from the oil and gas industries, can only commit to establishing a science-based emissions reduction target, as there currently is no sector specific methodlogy for these industries.

Nevertheless, there are already existing pathways to work with reducing emissions. The sector is increasingly interested in carbon pricing mechanisms to steer future decisions, with 57% of responding companies reporting to have already established an internal price on carbon, and a further 14% planning to do so within the next two years.

Achievements in emissions reductions

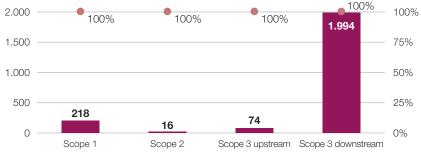
Out of the companies that could compare their Scope 1 and Scope 2 emissions to the previous year, 75% reported an overall decrease in emissions volume, while 20% stated an increase. 5% reported that their emissions did not change.

The reported emissions reduction activities are set to generate estimated annual emissions savings of more than 8.8 MtCO₂e, and annual monetary savings of €231 million, requiring a total of €551 million in investments. However, the majority (62%) of investment can be accounted to one company in the sector, Total, which has implemented substantive investments in flaring reduction projects.

It is evident that the sector faces major restructuring of operations. As reported in CDP's 2017 *The Carbon Majors Database* report, 52% of global industrial GHGs result from the combustion of fossil fuels since the dawn of the industrial revolution (1751). It is of critical importance that the sector continues to invest in alternative ways to address their emission volumes.

10. The energy sector sample in Europe is composed of 44 requested companies, of which 21 unique responses were received in 2017 are analyzed in this section.

Figure 17: Energy sector breakdown of emissions and partial verification



Emissions in MtCO₂e

Percentage of reported emission volume that is at least partially externally verified

Figure 18: Top 3 emissions reduction activities Energy sector



^{11.} As also reported in our Carbon Majors report (2017), "Scope 3 emissions account for 90% of total company emissions and result from the downstream combustion of coal, oil, and gas for energy purposes, but – many fossil fuel companies not yet reporting Scope 3 'use of sold product' emissions"



Sectoral profile Financials

The financials sector includes companies involved in different activities related to financials services, such as banks and insurance¹².

The most common score for CDP's climate change program in the sector is B, achieved by 31 companies. Ten companies in this sector are part of the Global Climate A List.

The carbon footprint of the financial sector

In this sector, Scope 3 emissions are a significant share of financial companies' carbon footprint, resulting from the assets they finance. The sector is uniquely placed to accelerate low-carbon growth by divesting from, or encouraging low carbon shifts in, unsustainable sectors and companies, while investing in and lending to low-carbon actors. The role of this sector has been brought to the forefront in the last years through voluntary initiatives like the Portfolio Decarbonization Coalition (PDC) and Montreal Carbon Pledge, new legislation such as the French article 173 requesting investors to measure and manage their carbon footprint and high-level working groups like the G20 Task Force on Climaterelated Financial Disclosures (TCFD) and the European High-Level Expert Group on Sustainable Finance. As illustrated in Figure 19, the overwhelming majority of reported emissions in the financial sector are at the Scope 3 downstream level, representing 511 MtCO₂e. The sector reports a high quantity of verified emissions, with 75% of

reported emissions in all scopes at least partially verified. Major gaps in reporting remain, particularly in reporting Scope 3 emissions.

Towards the decarbonization of the financial sector

78% of companies disclosed that they have emissions reduction targets in place, with 52% reporting absolute targets and 48% intensity targets. Furthermore, 37% of companies reported that they have renewable energy consumption and/or production targets. 21% of responding companies in the financial sector did not yet set any targets at all, or did not report so.

Three quarters of reported emissions reduction targets focus on short-term emissions reductions extending only to 2020. 17% of targets focus on medium-term emissions reductions (2021-2035), while only 8% of targets go beyond 2035.

As there is currently no sector specific methodology for the financial sector to set Science Based Targets, reduction targets in this sector are not currently assessed with respect to the international goal of reducing carbon emissions to a level compatible with a maximum increase of global temperature of 2°. However, 7 financial companies have already committed to adopt a Science Based Target when the methodology becomes available. 13 companies have committed to be powered 100% by renewable energy and joined the RE100 initiative.

As a further tool to assess low-carbon transition risks and opportunities, 15 companies in the sector (15%) use an internal price on carbon and further 17 (17%) report that they anticipate using one in the next two years.

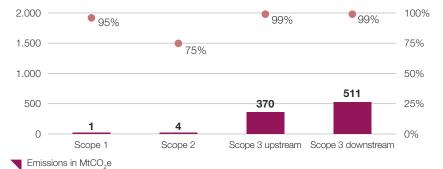
Achievements in emissions reductions

Out of the companies that could compare their Scope 1 and Scope 2 emissions to the previous year, 66% reported an overall decrease in emissions volume and 34% stated an increase.

The reported emissions reduction activities are set to generate estimated annual emissions savings of more than1.2 MtCO₂e and annual monetary savings of €112 million, requiring a total of €417 million in investments. Figure 20 shows the most common types of emissions reduction activities in the financials sector. While green project finance does not appear in the chart, accounting for only 1.5% of reported emissions reduction activities, these projects represent 10.7% of saved emissions.

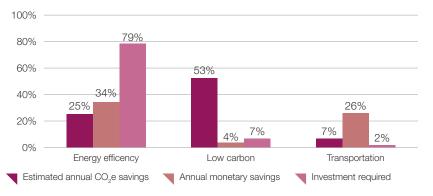
12. The financials sector in Europe is composed of 283 requested companies, of which 101 unique responses were received in 2017 are analyzed in this section. At the time of writing of this report, the sector analysis is including companies that were more recently classified under the Real Estate sector.

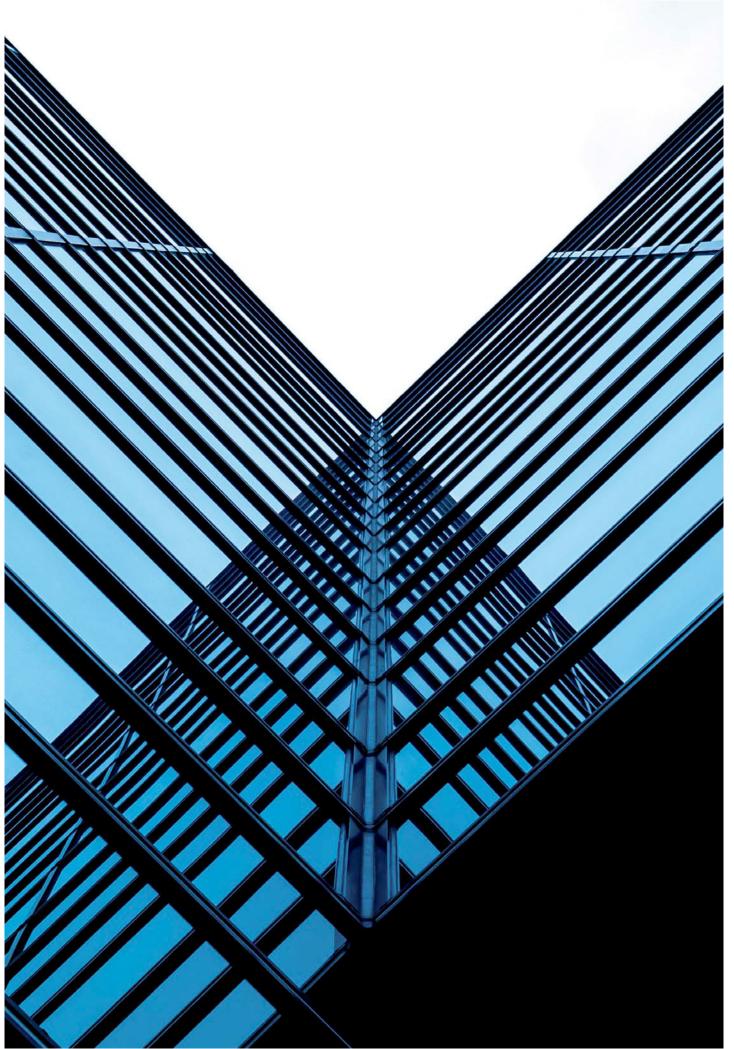
Figure 19: Financials sector breakdown of emissions and partial verification



Percentage of reported emission volume that is at least partially externally verified

Figure 20: Top 3 emissions reduction activities Financials sector





Sectoral profile

Health care

The health care sector is a diverse sector which includes pharmaceutical and biotechnology companies, as well as more traditional health care operators ¹³. The most common score for CDP's climate change program in the sector is C, achieved by 10 companies, implying that many companies in the sector are aware of climate change impacts, but might be still lagging in implementing measures that can secure a long-term future against climate-related risks. Three companies in sector are part of the CDP Climate A List.

The carbon footprint of the health care sector

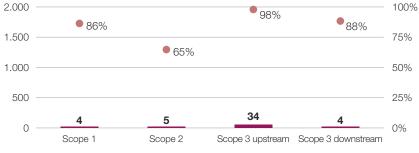
Reported Scope 3 emissions in the sector are eight times higher than Scope 1 and Scope 2 emissions combined (Figure 21). The real impact of the sector remains obscure, as 25% of companies fail to report any Scope 3 data at all, and of those that respond, only 34% reported partially verified emissions.

Towards the decarbonization of the health care sector

Only 66% of responding companies disclosed that they have emissions reduction targets in place, with 41% reporting absolute targets and 28% reporting intensity targets. Furthermore, 16% of companies reported that they have renewable energy consumption and/or production targets. 31% of responding companies in the health care sector did not yet set any targets at all, or did not report so.

 The sample is composed by 113 requested companies in Europe, out of which 32 analyzed in this section have reported their climate change information to CDP in 2017.

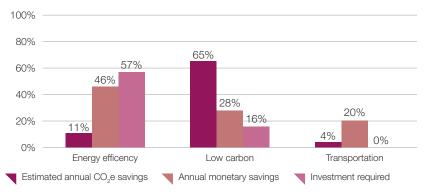
Figure 21: Health care sector breakdown of emissions and partial verification



Emissions in MtCO₂e

Percentage of reported emission volume that is at least partially externally verified

Figure 22: Top 3 emissions reduction activities Health care sector



More than two thirds (71%) of reported emissions reduction targets that focus on short-term emissions reductions until 2020. 24% of targets focus on medium-term emissions reductions (2021-2035), while only 5% of targets go beyond 2035.

Achievements in emissions reductions

From companies that could compare their Scope 1 and Scope 2 emissions to the previous year, 56% reported an overall decrease in emissions volume and 37% stated an increase. 7% reported that their emissions did not change. In line with the results of the general analysis in this report, most of the reported emissions reductions result from successfully implemented emissions reduction activities. The increased emissions were most commonly reported to be due to changes in business output.

The reported emissions reduction activities are set to generate estimated annual emissions savings of more than 0.7 MtCO₂e, and annual monetary savings of €46 million, requiring a total of €378 million in investments – indicating some long-term investments with longer pay-back expectations. While energy efficiency measures reportedly bear the highest share of annual savings, these also require the highest share of investments (57%) and have a comparably small CO₂e savings potential (11%). This ratio speaks strongly in favor of low carbon installations, which deliver almost six times higher CO₂e savings potential at less than a third of required investments when compared to energy efficiency measures.

While transportation projects bring a 4% of annual CO_2 savings, they bear large potential for the sector as they appear highly profitable – with savings 30 times higher than required investments needed. In one example of the potential of advanced Scope 3 management, by switching from air freight to sea freight, AstraZeneca generated \in 7.6 Mio annual savings and 18,000 metric tonnes CO_2 e savings at investments of only \in 85,000.



Sectoral profile Industrials

The industrials sector includes companies from commercial services, logistics and transport industries as well as some from industrial conglomerates. Due to the high carbon footprint of the sector, it has a pivotal role in the transition to a low carbon economy¹⁴.

The most common scores for CDP's climate change program in the sector is C, achieved by 42 companies. In consideration of the substantial carbon impact of the sector, it is important that the sector focuses on implementing long-term policies and measures for emissions reduction. Eight companies in sector are part of the CDP Climate A List.

The carbon footprint of the industrial sector

The industrial sector is one of the highest emitting sectors in terms of Scope 1 emission, reporting 351 MtCO_oe, and accounting for 20% of the overall Scope 1 emissions declared by all European companies. The sector is accountable for 8% of the overall amount of reported Scope 2 emissions and 10% and 9% of Scope 3 upstream and downstream emissions, respectively, across Europe. As shown in Figure 23, industrials companies report 49% of their reported emission partially verified for Scope 1, and more than 70% for all other scopes. However, the data shows a divide when assessing companies providing verified data. Just 46% of all responding companies in the sector provided verified Scope 2 data, with 51% providing verified upstream Scope 3 data and only 31% verified Scope 3 downstream data.

14. The industrials sector sample in Europe is composed of 281 requested companies, of which 134 unique responses were received in 2017 are analyzed in this section.

Figure 23: Industrials sector breakdown of emissions and partial verification

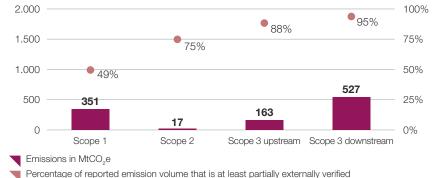
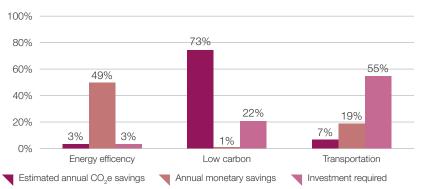


Figure 24: Top 3 emissions reduction activities Industrials sector



Towards the decarbonization of the industrial sector

78% of companies disclosed that they have emissions reduction targets in place, with 46% reporting absolute targets and 60% reporting intensity targets. Furthermore, 23% of companies reported that they have renewable energy consumption and/or production targets. 19% of responding companies in the industrials sector did not yet set any targets at all, or did not report so.

Close to three quarters (73%) of reported emissions reduction targets focus on short-term emissions reductions until 2020. A fifth of targets focus on medium-term emissions reductions (2021-2035), while only 7% of targets go beyond 2035.

The industrial sector has also displayed great interest in setting targets according to scientific methodologies. Five companies have had their targets approved by the SBTi and another 15 are committed to establishing one within the next two years.

However, as one of the four most impactful sectors in terms of emission volumes, tools such as internal carbon pricing could be highly effective in transition planning. Only 18% of responding companies have already established a price on carbon, whereas the clear majority (68%) do not show interest in implementing an internal carbon pricing mechanism within the next 2 years. Considering the sector's carbon intensity, means beyond targets and emissions reductions activities should be implemented to more effectively tackle their emission volumes.

Achievements in emissions reductions

Out of the companies that could compare their Scope 1 and 2 emissions to the previous year, 59% reported an overall decrease in emissions volume.

The reported emissions reduction activities are set to generate estimated annual emissions savings of more than 13 MtCO₂e, and annual monetary savings of €614 million,. requiring a total of €2 billion in investments. Out of the reported investments, 55% are represented by "transportation activities. This is mainly the result of major companies in the aviation industry, as well as transport intensive sectors investing to renew their fleets. A trend for process emissions reduction activities is also shown by the responses, where 3% of the total reported investments provide 49% of the declared monetary savings. 74% of estimated CO₂e savings are meanwhile reported in the product design category.



Sectoral profile Information technology

The information technology sector includes various businesses from both IT services and hardware industries, and is often considered to hold high potential as an enabler of low carbon solutions across other sectors.¹⁴

The most common score for CDP's climate change program in the sector is C, achieved by 13 companies. Two companies are part of the CDP Climate A List.

The carbon footprint of the information technology sector

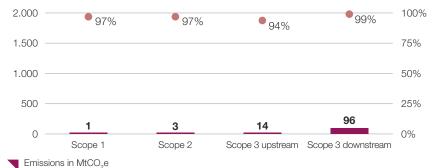
While the information technology sector ranks in the middle in terms of its quantity of disclosing companies, the quantity of emissions in the sector is substantially lower compared to that of other sectors, with the second-lowest Scope 1 emissions, the lowest Scope 2 emissions, and the third-lowest Scope 3. The sector's Scope 3 emissions, however, are over 26 times the volume of its Scope 1 and 2 combined, with Scope 3 data reported by less than half (15) of disclosing companies. The driver for this figure is subcategory 11 ("Use of sold products"), reflecting the great potential the sector has in providing low carbon products and services.

Towards the decarbonization of the IT sector

66% of companies disclosed that they have emissions reduction targets in place, while 46% report absolute targets and 49% report intensity targets. Furthermore, 29% of companies reported

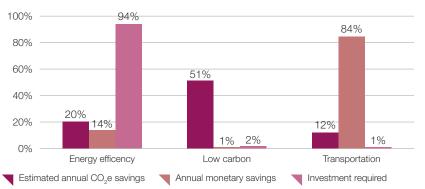
14. In Europe, 35 companies in the sector reported climate change information to CDP in 2017 out of 111 requested companies. Three further companies reported through their parent company.

Figure 25: Information technology sector breakdown of emissions and partial verification



Percentage of reported emission volume that is at least partially externally verified

Figure 26: Top 3 emissions reduction activities Information technology sector



that they have renewable energy consumption and/or production targets. 31% of responding companies in the information technology sector did not yet set any targets at all, or did not report so.

Close to two thirds (62%) of reported emissions reduction targets focus on short-term emissions reductions until 2020. 27% of targets focus on medium-term emissions reductions (2021-2035), while 11% of targets go beyond 2035.

The information technology sector has also displayed interest in setting targets according to scientific methodologies, and renewable energy, with five companies committed to establishing science-based targets within the next two years. Furthermore, two companies are members of the RE100 initiative.

Achievements in emissions reduction targets

Out of the companies that could compare their Scope 1 and 2 emissions to the previous year, 48% reported an overall decrease in emissions volume and 48% stated an increase. Four per cent reported that their emissions did not change.

The reported emissions reduction activities are set to generate estimated annual emissions savings of more than 0.6 MtCO₂e, and annual monetary savings of €74 million, requiring a total of €84 million in investments. Renewable energy can have large – and almost immediate – scale effects. One of the biggest companies in the sector, SAP SE, has publicly committed to procure 100% of its energy from renewable sources through the RE100 initiative.

Consequently, low carbon activities account for the biggest share of overall CO₂ savings out of all measures undertaken (51%), though they account only for 2% of investment, in part since they have not been identified as contributing significant cost savings (reported as 1% of all savings).

The investments in energy efficiency measures are the most invested in activity (94%), although these are not as effective in regard to $\rm CO_2e$ savings as other initiatives. Sector investments in efficiency were 50% higher than in low carbon initiatives, yet carbon savings are reported to account for below half such initiatives. Financially, transportation projects demonstrate high profitability. A good example is the sector giant Ericsson, which reduced its carbon footprint by 50,000 metric tonnes per year, by switching from air to surface transport with no reported investment.





For a services and consulting business such as Sopra Steria, business travel represents a major source of emissions. Building on its investment in video-conferencing and remote working technologies, Sopra Steria has introduced shadow **carbon pricing** for business travel in business units, as a way of engaging managers and employees in the need to reduce the footprint from their business travel

In 2017, Sopra Steria launched its "New Mobilities" project, which builds on a collaborative initiative with cities, transport authorities and large companies in France to streamline business travel and employee commuting in big cities using digital devices. With trials beginning in 2018, this project will integrate car-pooling solutions intended to reduce greenhouse gas emissions.

Sopra Steria's strategy for reducing its office and data centre greenhouse gas emissions has been to use **renewable energy**, procuring renewable electricity for offices that it controls, and generating its own in its Green Office® in France.

In India, Sopra Steria pioneered **renewable energy certificates** (PowerPlus®) and purchased I-RECs for electricity when they became available. It has also adopted green gas certification for its UK gas consumption.

The result is that now more than two-thirds of the electricity used in offices and on-

site data centres comes from renewable sources, with our remaining, unavoidable, emissions offset, meaning that Sopra Steria is carbon-neutral for office space, data centres and business travel.

With a target approved by the Science Based Targets initiative (SBTi) in June 2017, Sopra Steria is now committed to having key suppliers representing at least 70% of its supply chain emissions managing their GHG emissions and 90% of these suppliers having GHG reduction targets in place by 2025.

In engaging suppliers, Sopra Steria also incorporates sustainability in its Terms & Conditions and Supplier Code of Conduct. Each year, Sopra Steria assesses its key suppliers' sustainability using an independent CSR analysis solution and engages them with reviews of their performance.

Sopra Steria also works with policy makers and trade associations helping to shape national climate change policy, and supports NGOs on practical projects such as access to water. Sopra Steria has committed itself to the 'right to water', benefitting nearly 25,000 people around the world by supporting charities and NGOs working on projects in access to water, sanitation and pollution control, such as Green Cross, 1001 Fontaines, Les Puits du Désert and the Planet Water Foundation. Sopra Steria pioneered Water Benefit Certificates, financing the provision of 1 million litres of drinking water in India through the charity Water Health India, and has contributed to Green Cross's publications to raise awareness of issues with water.

Siva Niranjan Head of Environmental Sustainability Sopra Steria sterio

Sectoral profileMaterials

The materials sector includes companies involved in the manufacturing or processing of goods such as metals, concrete, and chemicals, as well as activities such as mining. The sector is one of the four largest carbon emitters and, as a result, has a pivotal role in the transition to a low carbon economy¹⁵.

The most common score for CDP's climate change program in the sector is B, achieved by 16 companies, indicating that most companies in the sector understand how environmental issues intersect with their business, even though a large share of the participants are lagging behind their sector peers. Six European companies are part of the CDP Climate A List.

The carbon footprint of the materials sector

The materials sector is one of the highest emitting within the group of European companies responding to CDP's climate change program, constituting 31% of reported Scope 1 Emissions, 42% of the Scope 2, 17% of the upstream Scope 3 and 20% of the downstream Scope 3 emissions in Europe. As illustrated in Figure 27, most of emissions are in Scope 3 downstream, resulting from the use of products created by the sector.

The emissions reported in the materials sector have a relatively high degree of partial external verification, as shown in Figure 27. Responding companies in the sector participate in the EU-ETS system, which requires a high degree of emissions verification. More than 70% of the Scope 2 and Scope 3 upstream emissions are reported to be at least partially verified, though only a minority of companies provided such information (48% and 41% of responders respectively). The risk of a growing divide between leaders and laggards is significant in this sector.

Towards the decarbonization of the materials sector

79% of companies disclosed that they have emissions reduction targets in place, 34% reported absolute targets and 68% reported intensity targets. Furthermore, 25% of companies reported that they have renewable energy consumption and/or production targets. 20% of responding companies in the materials sector did not yet set any targets at all, or did not report so.

Close to two thirds (60%) of reported emissions reduction targets focus on short-term emissions reductions until 2020. 31% of targets focus on medium-term emissions reductions (2021-2035), while 9% of targets go beyond 2035. Even though sector-specific science-based target methodologies for materials companies are recent, seven European companies have committed to set a Science Based Target, and a further two companies have received approval for their targets.

With a significant carbon impact, the sector is looking into tools to lower their emissions. 45% of responding companies have already established an internal price on carbon, with another 13% willing to implement one in the next 2 years.

Achievements in emissions reduction

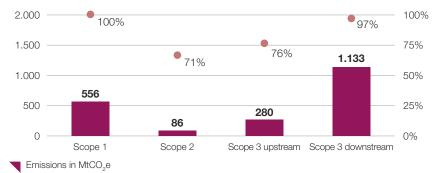
Out of the companies that could compare their Scope 1 and 2 emissions to the previous year, 56% reported an overall decrease in emissions volume while 42% reported an increase. 2% disclosed that their emissions remained stable.

The reported emissions reduction activities are set to generate estimated annual emissions savings of more than 13.3 MtCO₂e, and annual monetary savings of €348 million, requiring a total of €4 billion in investments.

The clear majority of $\rm CO_2e$ savings (70%) in the sector are connected to energy efficiency initiatives. These also provide the largest annual monetary savings (66%), by using 8% of the overall reported investments enacted by the sector. The sector has invested the most in process emissions reduction activities aimed at lowering the energy consumption in the manufacturing of products. However, 90% of the reported investments in these initiatives were made by only six companies.

15. The materials sector sample in Europe is composed of 115 requested companies, of which 56 unique responses were received in 2017 are analyzed in this section.

Figure 27: Materials sector breakdown of emissions and partial verification



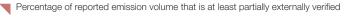
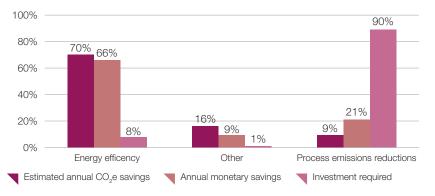
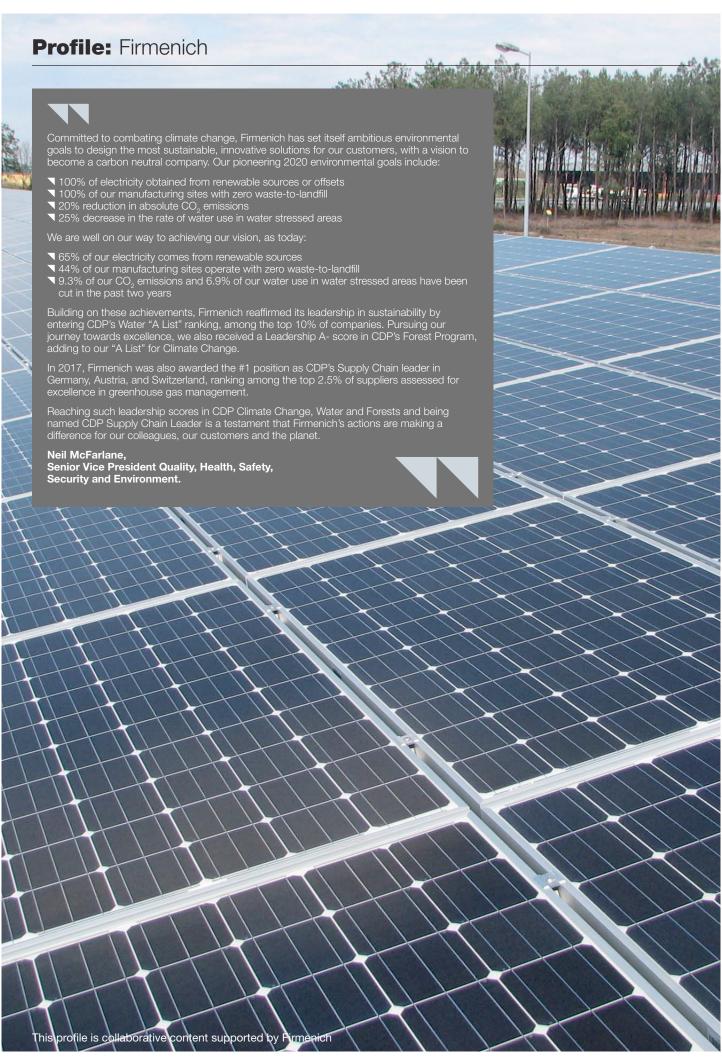


Figure 28: Top 3 emissions reduction activities Materials sector





More than 70% of the Scope 2 and Scope 3 upstream emissions are reported to be partially verified by the companies in the Materials sector, though only a minority of companies provided such information.

Profile: Metsä Board



Board's paperboard is 100% traceable fresh fiber that comes from sustainably managed Northern European forests which do not need artificial watering. Future continuity of fiber supply is guaranteed, as in Finland the wood is supplied by 104,000 private forest-owners who also own Metsä Group's parent company, Metsällitto Cooperative. In Finland annual growth of forests has for a long time been much greater than annual fellings.

Board comes from verified, certified or controlled forests, and all Metsä Board mills have both PEFC™ and FSC© chain-of-custody certifications. Metsä Board's target is to sustain the amount of certified wood at a minimum level of 80%. In 2016, 81% of the wood used by the company came from certified forests.

Resource efficiency is a key development area for Metsä Board, and fresh fiber paperboard answers the requirements of a circular economy perfectly. Investments in efficient technology and bioenergy production have reduced CO₂ emissions. In 2009 Metsä Board set a 2020 target to reduce its CO₂ emissions by 30%, and achieved a reduction of 45% already four years earlier in 2016.

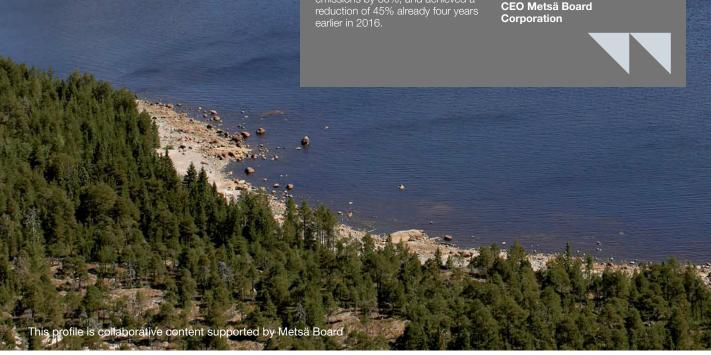
Metsä Board strives to increase the use of bioenergy in its production. In 2016, 59% of all energy used was biobased. With the recent Metsä Group based. With the recent Metsä Group investment in a new bioproduct mill in Äänekoski, Finland, the share of bioenergy will further increase. This EUR 1.2 billion bioproduct mill generates excess bioenergy and does not use any fossil fuels. The new bioproduct mill is integrated into Metsä Board's paperboard production which has positive effects on the company's has positive effects on the company's CO, emissions reductions.

Water is essential for making pulp and paperboard. Water helps to separate wood fibers for the paperboard production process, and it then corrien these fibers and different carries these fibers onto different stages of production. Water is also needed for cleaning, cooling and for steam generation production. Some of Metsä Board's paperboard mills operate next to a pulp mill, allowing even greater water efficiency. At the integrated mill sites, the wet pulp is typically fed via pipelines directly to board production without the need for drying and transportation.

Metsä Board only uses surface water and follows the water and environmental permits set by authorities. The mills seek new ways to reduce the use of water. Since 2010, Metsä Board has reduced its water use by 14%. The target is to reach a 17% reduction by 2020.

At the mills, process waters are carefully cleaned before returning into the watercourse. For example, at Metsä Board Äänekoski mill, the water is released back into the nearby lake where people swim, fish and Finnish capital area also gets its drinking water.

Mika Joukio, CEO Metsä Board



Sectoral profile

Telecommunication services

The telecommunications services sector includes companies in both traditional diversified telecommunication services as well as wireless communication ones¹⁶. The most common score for CDP's climate change program in the sector is A, achieved by 6 companies.

The carbon footprint of telecommunication services

Although the telecommunication services is sector with one of the lowest "own" Scope 1 and 2 emissions, companies must continue to progress in verifying their emissions. The highest impact of this sector is Scope 3 upstream emissions, reinforcing the importance of the sector's supply chain engagement.

Towards the decarbonization of telecommunication services

The vast majority of companies (94%) disclosed that they have emissions reduction targets in place, 76% reported absolute targets and 76% reported intensity targets. Furthermore, 47% of companies reported that they have renewable energy consumption and/or production targets. Only one company in the telecommunication services sector did not yet set any targets at all, or did not report so.

More than two thirds (68%) of reported emissions reduction targets focus on short-term emissions reductions until 2020. 19% of targets focus on medium-term emissions reductions (2021-2035), while 13% of targets go beyond 2035.

Three companies in the sector have targets approved by the Science Based Targets initiative, and a further three are committed to setting their greenhouse gas emissions reduction targets in line with climate science. Three companies are also committed to 100% renewable energy use, as members of the RE100 initiative.

Achievements in emissions reductions

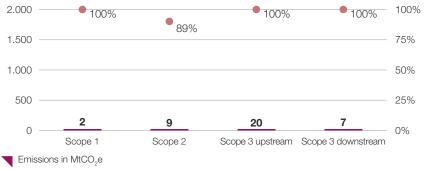
Out of the companies that could compare their Scope 1 and 2 emissions to the previous year, 50% reported an overall decrease in emissions volume and 44% stated an increase. 6% reported that their emissions remained stable.

The reported emissions reduction activities are set to generate estimated annual emissions savings of more than 2 MtCO₂e, and annual monetary savings of €65 million, requiring a total of €108 million in investments.

71% of the total CO₂e savings result from investment in low carbon initiatives, while the most profitable reductions are energy efficiency activities – though responses from sector companies show that "other" activities, in which initiatives to better manage the electricity load of the organizations' buildings can provide further monetary savings (shown in the other category in Figure 30).

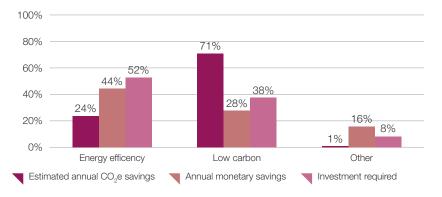
16. The telecommunication services sample in Europe is composed of 31 requested companies, of which 17 unique responses were received in 2017 are analyzed in this section.

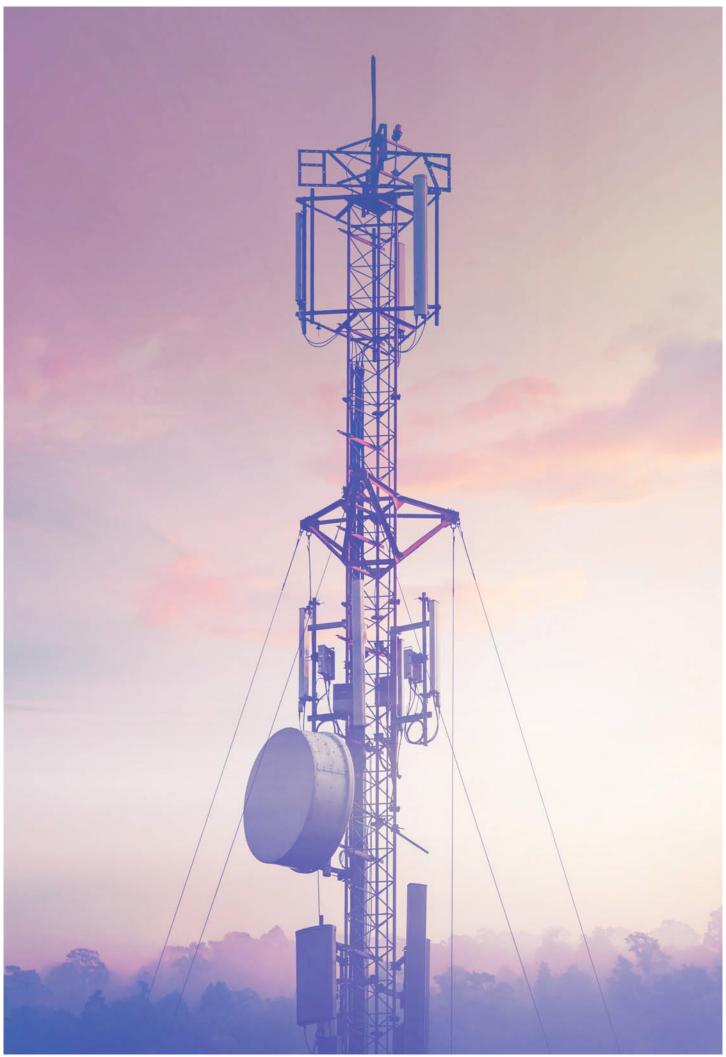
Figure 29: Telecommunication services sector breakdown of emissions and partial verification



Percentage of reported emission volume that is at least partially externally verified

Figure 30: Top 3 emissions reduction activities Telecommunication services sector





Sectoral profileUtilities

The utilities sector includes companies involved in both the production and selling of energy. The sector is central to the shift to a low carbon future, as a strong influencer of the decarbonization of other sectors and a beneficiary of the rapid development of low-carbon generation and storage technologies, as well as advanced infrastructure.¹⁷.

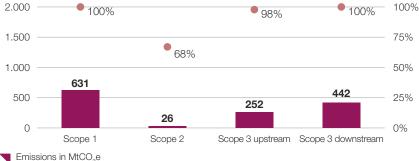
The most common score for CDP's climate change program in the sector is A-, achieved by 16 companies. Six additional companies are part of the CDP Climate A List.

The carbon footprint of the utilities sector

Generating 35% of all reported Scope 1 emissions, the utility sector is the largest contributor in terms of direct emissions in Europe. All responding utilities companies except one provide at least partially externally verified Scope 1 data. Under significant pressure from policymakers to decarbonize, and with rapid evolutions of energy systems, utilities need to evolve and innovate their business models to meet complex regulatory and market dynamics. Low-carbon scenarios for the electricity sector suggest that CO₂e emissions pathways must be 100% decarbonized, globally, by 2050 to keep the average temperature rise below 2°C¹⁸. This transformation enquires large investments and a phasing out of fossil based energy generation such as an early retirement of coal capacity.

- 17. The utilities sector sample in Europe is composed of 53 requested companies, of which 31 unique responses were received in 2017 are analyzed in this section.
- Carbon Pricing Corridors, the Market View, CDP, May 2017

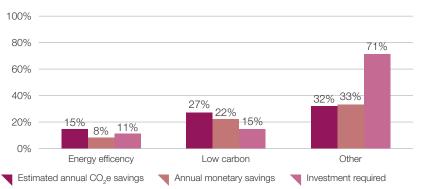
Figure 31: Utilities sector breakdown of emissions and partial verification



Emissions in MitCO₂6

Percentage of reported emission volume that is at least partially externally verified

Figure 32: Top 3 emissions reduction activities Utilities sector



Towards the decarbonization of the utilities sector

Already 94% of companies disclosed that they have emissions reduction targets in place, 81% reported absolute targets and 71% reported intensity targets. Furthermore, 55% of companies reported that they have renewable energy consumption and/or production targets. Only one company in the utilities sector did not yet set any targets at all, or did not report so.

More than half (52%) of reported emissions reduction targets focus on short-term emissions reductions until 2020. 39% of targets focus on medium-term emissions reductions (2021-2035), while 9% of targets go beyond 2035.

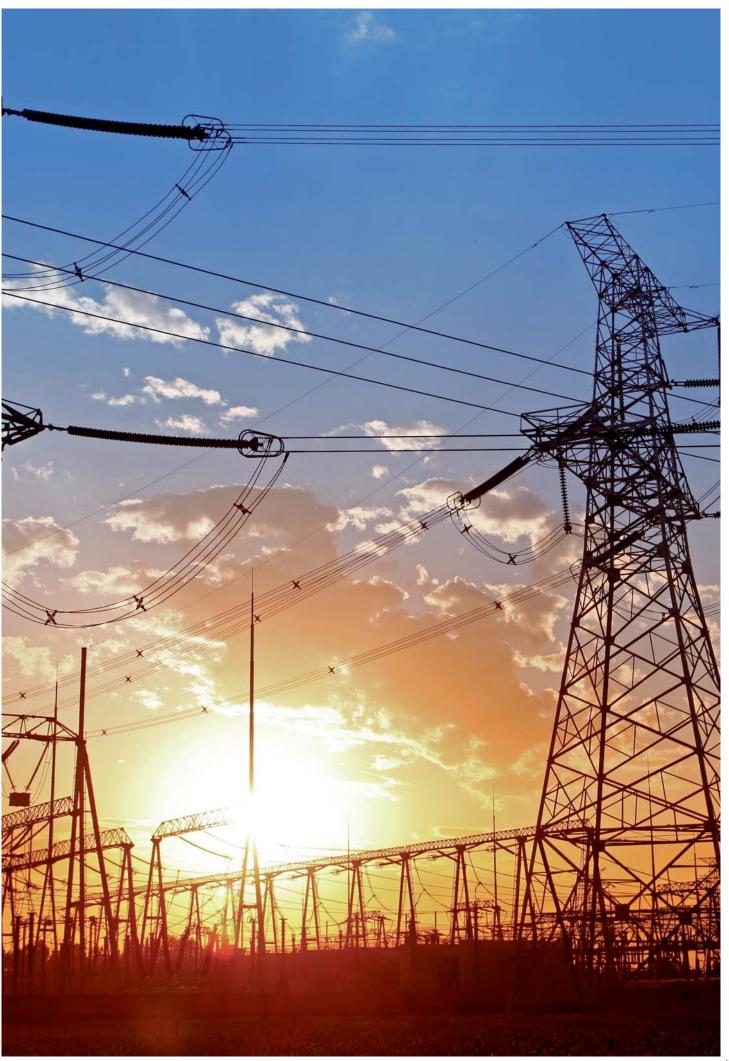
Four utilities companies to-date had their emissions reduction targets approved by the SBTi. As utilities shift towards renewable energy sources, 17 companies (55%) have reported targets related to renewable energy production and/or consumption.

Considering the substantial amount of Scope 1 emissions and the necessity to swiftly shift to a low carbon economy, internal carbon pricing is highly relevant to this sector. While European utilities are subject to a carbon price in the framework of EU ETS, 22 disclosing companies (71%) report that they are using an internal price on carbon. 8 companies (26%) declare that they are not using an internal price and do not anticipate doing so in the next two years.

Achievements in emissions reductions

Out of the companies that could compare their Scope 1 and 2 emissions to the previous year, 68% reported an overall decrease in emissions volume. In line with the results of the general analysis in this report, most of the reported emissions reductions result from successfully implemented emissions reduction activities. The increased emissions were most commonly reported to be due to changes in business output.

The reported emissions reduction activities are set to generate estimated annual emissions savings of more than 79.9 MtCO₂e, and annual monetary savings of €1 billion, requiring a total of €100 billion in investments. The top 3 emission reported activities are illustrated in Figure 32. "Other" activities are made up, to a large degree, of investments made by ENEL in the dismantling of thermal plants and investments in renewable energy plants.



SUEZ commentaryJean-Louis Chaussade



Following a period marked by the diplomatic success of COP21, the adoption of the Sustainable Development Goals as well as the endorsement of the Habitat III Urban Development Framework and the Sendai Framework for Disaster Risk Reduction, the international community has entered a new phase directed towards implementing the abovementioned sustainable development policies.

Nevertheless, the capacity of States to steer and finance the transition is today called into question by the uncertainty generated through geopolitical turmoil and the transformation of our societies caught in digitalization and post-truth trends. In this respect, the shared leadership between all categories of actors (States, regions, cities, companies, citizens) appears to be the guarantor of the due realization of on-the-ground sustainable development projects, thanks to their respective capacity to take into account the social and economic risks arising from climate change, demographic growth or urbanization.

That is why we are promoting a decentralized approach of leadership alongside with CDP, with which we created the Business Alliance for Water and Climate, a multi-stakeholder coalition in the field of water and climate change that gathers today about 65 leading organizations around commitments directed towards measuring and reducing their water footprint, covering a total cumulated annual revenues of 650 billion dollars US. As a focal point of the United Nations' Convention on Climate Change regarding the action of the private sector in this area, this coalition intends to become the vehicle for showcasing tangible solutions and for strengthening dialogue with the public administration in the design of climate policies. In order to do so, the coalition provided itself with a strategic plan consisting of 3 working priorities: resilient supply chain, circular economy of water and nature-based solutions.

The Business Alliance for Water and Climate also partnered with the Megacities Alliance and the Paris Pact on Water and Climate Change Adaptation in order to facilitate the dissemination and crossfertilization of concrete solutions at territory level. Through the joint incubation of experimental projects, the coalition is willing to optimize replicability from a region to another, and to offer an integrated approach matching the criteria of programs and funding granted by international donors.

Thereby, I invite all private sector companies which are willing to deepen their water resources preservation strategies to associate themselves to the continuous quality improvement initiative offered by CDP through its water questionnaire, and to join the Business Alliance for Water and Climate. This commitment will guide them through the identification of risks and opportunities linked to water in their value chain, the formalization of their contribution to the Sustainable Development Goals – in particular Goal 6 dedicated to water and sanitation – and the improvement of water governance at local

At SUEZ, we have taken steps to integrate our industrial customers' needs in terms of water management, which resulted this year in the acquisition of General Electric Water that specializes in industrial water treatment. This milestone confirms the Group's ambition to help its customers become pioneers in the protection of resources, and to underpin a climate-responsible economic model of growth.

Jean-Louis Chaussade

CEO SUEZ

Corporate action in pursuit of water security



Measurement, transparency and accountability are the essential tools that enable the global community to track and assess progress being made toward a water-secure world, a world in which the availability and sustainable management of water and sanitation is realized.

Companies engaging with CDP are playing a critical role in achieving a water-secure future in support of Sustainable Development Goal 6. Our water questionnaire ensures that their contributions are meaningful and long lasting.

This year, 106 of Europe's largest publicly listed companies disclosed data about their efforts to realize a water-secure world. Here we present our analysis of some of the key steps taken this year.

Engagement on WASH

SDG 6.1 and 6.2 aim to achieve universal access to Water, Sanitation and Hygiene (WASH) by 2030. European companies are increasingly recognizing that addressing WASH issues across their value chains is not only fundamental water stewardship practice, but also an essential ingredient for long-term business success. It strengthens the corporate social license to operate and improves productivity due to increased worker well-being and reduced absenteeism.

- 76 respondents (72%) now regularly measure and monitor (>50% of facilities) employee access to WASH in the workplace, up from 65 in 2016. Food and beverage giant **Nestlé** reported to have successfully increased the percentage of employees having access to WASH from 90% in 2015 to 100% in 2016.
- This measurement and monitoring is yet to translate into action. Just 20% of respondents

have set goals to provide access to WASH in the workplace and/or local communities. In addition, only 40% of European respondents have a water policy that acknowledges the human right to water, sanitation and hygiene.

■ European companies taking action and investing in WASH are reaping multiple benefits. Swedish timber, pulp and paper manufacturer SCA aims to ensure high-quality access to WASH in the workplace as it reduces the risk of waterborne diseases, makes the workplace more attractive for employees, and is expected to improve productivity. Benefits extend beyond a company's own operations as reported by the French food company Danone, who partnered with the NGO Naandi Foundation to set up effective water treatment solutions in villages in India, successfully providing access to clean drinking water to around 630,000 people.

Wastewater management and water-use efficiency

Key measures leading companies are taking to achieve SDG 6.3 and 6.4, aimed at improving water quality and increase water-use efficiency, include: ensuring their wastewater is safely treated, reducing their water consumption as well as recycling and reusing water.

▼ 73 respondents (69%) regularly measure and monitor (>50% of facilities) the quality of their wastewater discharge, up from 60 in 2016. For the majority of its wastewater treatment plant, Swiss bottling company Coca-Cola HBC has set more stringent internal requirements on effluent parameters than those imposed by local regulations, reflecting their strong commitment to improve water quality.

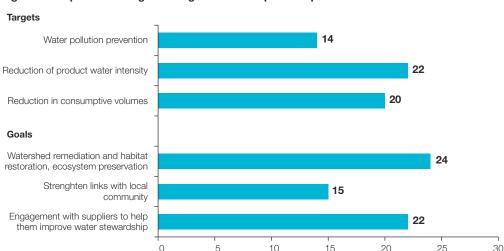


Figure 33: Top 3 water targets and goals for European respondents

- 33% and 34% of respondents reported, respectively, that their withdrawal and consumption of freshwater has reduced this year.
- New proving in water recycling and reuse, companies are reducing their demands on scarce freshwater resources, improving their water-use efficiency and reaping financial benefits. For example, oil and gas company **Galp** reported to have recycled more than 2 million m3 of water in 2016, representing around 20% of its total water consumption. The cost savings from recycling and reuse, amounted to approximately €832,000.
- 61% of European companies are setting waterrelated targets or goals, of which 20% are aimed at reducing water consumption. Leading companies are driving ambition beyond their direct operations. German apparel company Adidas reports that their strategic suppliers are on track to achieve 50% water savings by 2020.

Water governance and strategies

If European companies are to capitalize on the opportunities available in a water-secure world, water governance must be in the boardroom of every major corporation in Europe. Furthermore, water should be

factored into strategic business planning. Encouragingly, European respondents are substantially ahead of the global average with regards to water governance and strategies.

- Company boards have woken up to water security: 77% of respondents have board-level oversight of water-related issues, compared to a 70% global average. By providing board members with critical water-related information to plan for a transition to a water-secure world, water stewardship can become part of companies' modus operandi.
- The majority of European respondents (81%) factored water management into their business strategy.
- Although 49% of European respondents report engaging with their suppliers on water-security, beating the global average of 41%, still half may be overlooking water risks and opportunities in this critical part of the value chain. Through technical training projects, Spanish textile company **Inditex** engages with its suppliers to follow the 'Green to Wear' Standard in their wet processes to help them improve their water and wastewater management.

Call to Action

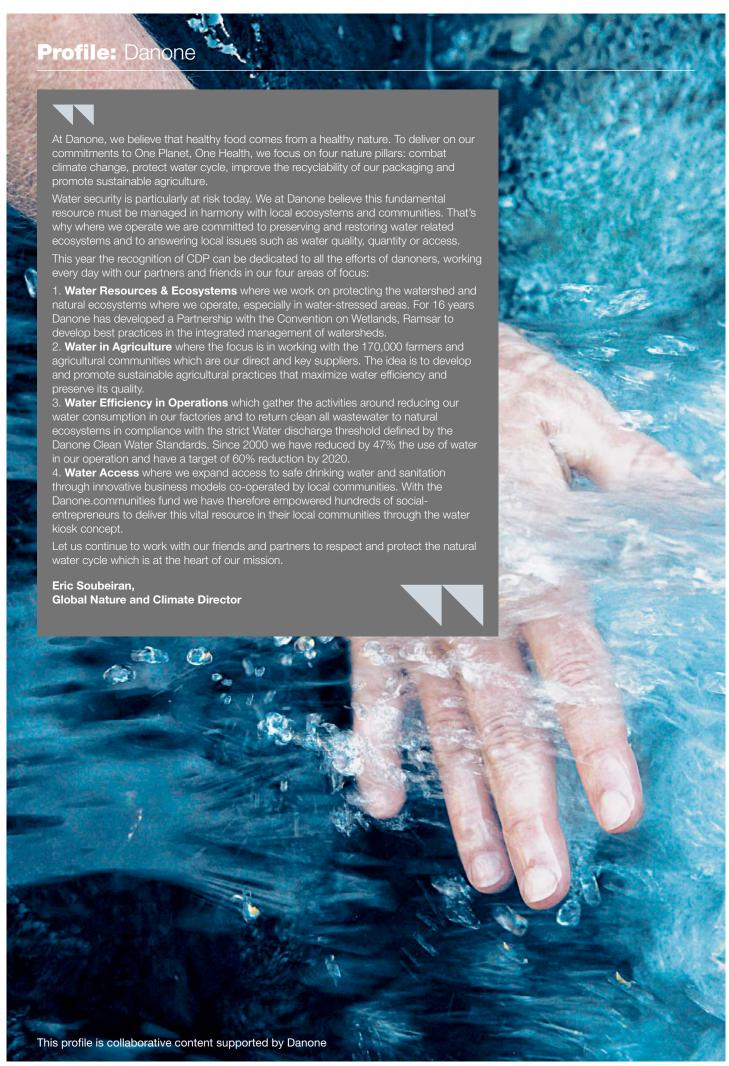
A water-secure world is possible. SDG 6 provides the map we must all now follow to achieve it. With 8 years of expertise in water disclosure and action, CDP is uniquely positioned to provide companies with a standardized way to engage and track progress against SDG 6.

European companies are increasingly aware of the importance and benefits of disclosing critical information on water via CDP, as reflected by the record high number of respondents this year. Moreover, the fourfold increase in the number of European companies achieving an 'A' score this year is a cause for celebration: 24 in 2017 compared to 6 in 2016.

But beyond these achievements, there is much to do – starting with disclosure itself. Of most concern is that the majority of European companies (53%) declined to respond to the disclosure request from their investors. Meanwhile analysis of the response data from those companies that did respond suggests that, to deliver on SDG 6, European companies must step up their efforts to integrate WASH considerations into their practices and strategies.

Our mission is to achieve a water-secure world and focus investors, companies and cities on taking urgent action to achieve this by measuring, understanding and reducing their environmental impact.

Measurement, transparency and accountability are vital tools for change. With more European companies than ever disclosing water data via CDP, we are at a tipping point that will mainstream action on water security across the world.



Deforestation risk management







Corporate action to decouple deforestation from supply chains

Action on deforestation is critical to manage and mitigate climate change. We are at a tipping point for the world's forests: 15% of greenhouse gas emissions are directly caused by deforestation. 30% of mitigation efforts depend on preserving forests. Companies disclosing through CDP's forests program can take urgent and meaningful action, while they align with the Sustainable Development Goals (SDGs).

The 17 SDGs are designed to be 'integrated and indivisible', with forests and sustainable forest management being a critical element of their success. Responsible Consumption and Production (Goal 12) and Climate Action (Goal 13) are two examples of goals with clear linkages to forest management.

Life on Land (Goal 15) clearly bridges CDP's work on forests and the SDGs. Halting deforestation by 2020 underpins this SDG, which is central to CDP's mission and is something that companies must work towards. CDP's forests questionnaire offers a clear framework for corporate action, is a tool to map progress on decoupling deforestation from supply chains against SDGs, and enables companies to report to critical stakeholders on their progress.

Iberdrola SA

"Iberdrola has incorporated the Sustainable Development Goals defined by the United Nations for the 2015-2030 horizon into the company's strategy and its sustainability policy."

Ferrovial

"Ferrovial is engaged with the scope of the Sustainable Development Goals (SDGs). Achievement of the challenges included in the new agenda for Sustainable Development will involve private sector participation, and to this end an advisory group was created comprising 13 companies selected on a global level, and these included Ferrovial".

Forest governance and strategies

To be able to take 'urgent and significant action' to halt deforestation as per Goal 15, companies must incorporate forests into their governance and strategies.

■ 90% of European respondents have made a commitment to reduce or remove deforestation and forest degradation from their direct operations and supply chains. However, European companies need to implement more ambitious high-level policies and commitments. Companies should adopt a zero-net deforestation commitment that excludes high conservation-value and high carbon-stock land from exploitation, and which requires the free, prior and informed consent of local people to any land-use activity that affects them. Only a third (32%) of reporting European companies have such commitments in place.

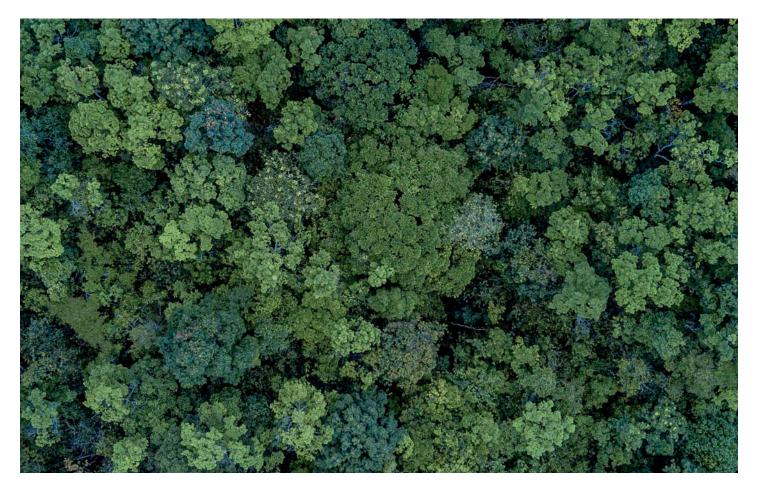
Nestlé have public commitments on all four forestrisk commodities and have committed to the New York Declaration on Forests and the Consumer Goods Forum pledge to achieve zero net deforestation by 2020. They have specifically stated that they will achieve zero deforestation and forest degradation, avoid areas of high conservation value and high carbon-stock, and achieve free, prior and informed consent of local people to any land-use activity that affects them.

- 61% of companies include legality as a criterion in their commitment to reduce deforestation. The Swedish clothing-retail company H&M Hennes & Mauritz AB have a strict sourcing policy that is aligned with the EUTR, and are committed to not sourcing wood and forest materials from:
 - Forest areas where traditional or civil rights have been violated;
 - Forests with threatened high conservation values;
 - Genetically modified (GM) trees;
 - Forest areas which have been illegally harvested; and
 - Natural forests cleared for plantation or other use.
- 81% of European companies have board-level oversight when it comes to deforestation issues, significantly higher than the global average of 64%. This is good news for European companies as CDP analysis shows that companies with board level responsibility for deforestation are able to recognize more opportunities than those that do not involve the board.

Progress to meet zero deforestation commitments

SDG 15.1 and 15.2 focus on the sustainable management of forests and other terrestrial ecosystems. This directly targets the producers, processors and traders of forest-risk commodities, but there is also an emphasis on manufactures and retailers that procure these products down the supply chain to meet their commitments. European companies are taking some action towards these SDG targets, but more is needed to realize their commitments:

 On average, 22% of European companies have achieved certification for 91-100% of some form of their commodities.



■ 3% of European manufacturers and retailers can trace their forest-risk commodities to the point of origin across commodities. While this is 6% higher than the global average, there is clearly room for improvement on traceability.

L'Oréal engages with its suppliers for timber, palm oil and soy to help realize its 2020 zero deforestation commitments. As an end-user of these raw materials they have developed the 'SPOTS initiative' with their suppliers and producers, Wilmar, Clariant, Wild Asia, and Global Amines. This initiative involves working with smallholders and promoting traceability, certification and sustainability. 100% of L'Oréal's suppliers have been empowered with the skills and feedback to increase knowledge and understanding of their own supply chain for palm derivatives.

Act on deforestation to align with the SDGs

There is an increasing emphasis on European companies removing deforestation from their supply chains, and therefore a great opportunity for companies to align with the SDGs. To do so, companies must:

 Make a public commitment to remove commodity driven deforestation from global supply chains

- Identify exposure to deforestation risk through a robust risk assessment
- 3) Effectively implement commitments through a series of specific, interim targets
- 4) Continue this implementation through certification, traceability and supply chain engagement
- Strive for leadership and unlock the multitude of opportunities that accompanies removing commodity-driven deforestation
- 6) Disclose through CDP to track progress against their own targets and the SDGs.

Supplier disclosure provides the building blocks for organizations to manage and reduce their exposure to deforestation risk at scale. Now, CDP is offering companies the opportunity to gather supply information in a standardized and comparable format on the risks of producing or sourcing timber production, palm oil, soy and cattle products. If you are interested in learning more, visit: https://www.cdp.net/en/supply-chain.

For details as to how CDP's forest questionnaire aligns with the SDGs, please review CDP's Mapping Document 2017.

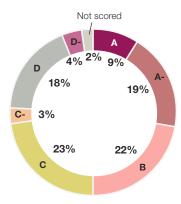
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 - /transformingourworld

Regional snapshots

Snapshot: DACH

The German, Austria and Swiss companies responding to CDP represent 84% of the total market capitalization of all companies publicly listed in these regional stock exchanges. The region hosts many ambitious companies taking steps to future-proof their businesses, but also large number of businesses only starting to act to address environmental issues.

Figure 34: DACH region score breakdown



In the DACH region, the 350 largest companies measured in market capitalization were requested to disclose climate change data in 2017. The 151 responding companies from this group represent 85% of the total market capitalization of all companies publicly listed in the regional stock exchanges. Out of these 151 companies, 83 are incorporated in Germany, 56 in Switzerland and 12 in Austria.¹⁹ With 13 companies on the global Climate A list and 9 on the Water A list (two of which are on both), the region has a high ratio of advanced companies. However, the fact that the most frequent climate score is a C (Figure 34) indicates that there is still much room for improvement with most companies' climate performance. The DACH region has the highest response rate (60%) on CDP's water program in Europe, with 39 companies responding this year. The number of forest responders is still relatively low with only 7 companies responding out of the 32 requested.

Transition planning: Risks and opportunity exposure and management

The vast majority of DACH companies are able to provide data on Scope 1 and Scope 2 emissions (91% and 85%, respectively), but many companies have yet to grasp the importance of giving reliable and complete data to decision makers. Only 54% of companies report having at least 70% of their

86% of responding companies in the DACH region are reporting board level responsibility for climate change.

9

The companies in the official DACH sample have already set ambitious emissions reduction targets approved by the Science Based Targets Initiative

Scope1 emissions data externally verified, while 49% do the same for Scope 2. Furthermore, 68% of companies have reported emissions data for at least two or more Scope 3 emission categories. Encouragingly, 56% of the responders in the region reported an overall decrease in their own (Scope 1 and 2) emissions.

In line with with their European peers, DACH companies have most notably recognized that climate change might pose regulatory changes environment with 77% identifying regulatory risks while 81% identify regulatory opportunities. The same is true of physical risks and opportunities, with 74% and 67% respectively. Both sides of a stricter regulation are however only captured on a more granular level; "Product efficiency regulations and standards", for instance, are an opportunity by 59% of companies, but as a risk by only 25%. "Uncertainty surrounding new regulation", on the other hand, is seen by 20% of companies as a risk and by none as an opportunity. On the physical climate impact side, changes in precipitation extremes and droughts are seen by 58% as risks and only by 22% as opportunities.

^{19.} Additional 15 companies outside the official sample of largest companies in the region reported climate data to CDP, one on water and three for Forest. The Forest and Water samples are not based on market capitalization but comprised of companies from the high impact sectors.

77%

of DACH companies report that they are exposed to climate change related regulatory risks

49% of responding companies reported being exposed to water risks in their direct operations and/or supply chains, whereas 62% identified water-related opportunities. All forest questionnaire responders in the region additionally identified at least one risk and one business opportunity related to risk commodities driving deforestation.

Towards environmental stewardship: embedding sustainability into strategies and operations

Climate change has increasingly become a mainstream boardroom topic in most European regions. Amongst the DACH companies, already 86% are reporting board-level responsibility for climate change. In addition, 85% of companies have board-level oversight of water-related issues, which is the highest percentage in Europe. 83% of the DACH responders have also established same level responsibility for forest related themes.

There is a growing recognition that targets should be aligned with climate science to effectively future-proof

corporate growth. Several DACH companies are already demonstrating leadership by setting ambitious emissions reduction targets aligned with the two-degree pathway, with 9 companies already having had their targets approved by the Science Based Targets Initiative, and another 19 committed to set one within two years. While not yet in line with climate science, 79% of companies however report that they have emissions reductions targets of some kind

One measure to realise emissions reduction targets is by procuring renewable energy. Some, companies demonstrate very advanced ambition in this regard, with ten companies in the region pledging to source or produce 100% of their energy from renewable sources, a group of companies that may hopefully lead the way for many more to follow.

62% of companies have set targets and goals on water and 67% of the forest program responders are committed to reduce or remove deforestation and forest degradation from their direct operations and supply chains

19

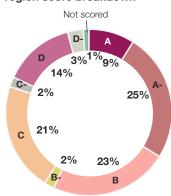
further companies in the region have officially committed to set a Science based target in the next two years

Regional snapshots

Snapshot: France & Benelux

Companies in the France and Benelux region clearly stand out in comparison to the rest of the continental Europe, with most companies adopting common best practices to advance environmental stewardship.

Figure 35: France Benelux region score breakdown



The regional analysis in this section is primarily based on responses from 146 companies from the France and Benelux region, which provided a unique climate change response to CDP in 2017 with 90 these companies publicly listed in France, 51 in the Benelux counties and 5 in both markets²⁰). In total, 395 of the largest companies by market capitalization were requested to provide data to their stakeholders through CDP this year. The responding companies represent 83% of the overall market capitalization of all publicly listed companies in the France and Benelux region stock exchanges.

The region shows a mature understanding and management of climate topics, with 13 companies achieving leadership status and inclusion to the global A list. The A- score, representing an advanced level of environmental stewardship, is also the most commonly received score (Figure 35). 32 companies in the region, representing 52% of companies requested to disclose, provided data to CDP's water program. However, only 10 companies from the requested 47 in the official forest sample provided a response to the Forest program equaling to the lowest response rate in Europe (21%). The France Benelux region also hosts 6 companies in the global Water A list and one company in the global Forest A list.

Transition planning: risks and opportunity exposure and management

Almost all companies in the region reporting to CDP in 2017, 94% and 92% respectively, provided data

of of responding companies in the France and Benelux region are reporting board level responsibility for climate change.

9

companies in the official sample in the region have already set ambitious emissions reduction targets approved by the Science Based Targets Initiative

on their Scope 1 and 2. High proportion at the European level, 86% of companies are reporting Scope 1 emissions that are at least 70% externally verified, with 84% of companies reporting equally complete data for Scope 2 emissions. A comparatively high proportion on the European scale, 71% of responding companies in the region, are also already reporting emissions data for two or more named Scope 3 categories, with 58% of companies having an data assurance process in place for at least some portion of the Scope 3 emissions.

Analysing these strategies in regard to emissions performance, 87 companies (60%) reported reductions in their emissions during the past reporting year. Signaling ambition to decouple emissions from growth, the most commonly stated reasons for emissions decreases resulting from proactive emission reduction activities in 50% of cases with divestment cited in 14% of cases and a change in output in 9%.

Companies in the region are generally aware of the potential impacts of climate change and the risks and opportunities related to changing climate, water scarcity and deforestation. Well above the European average, 90% of responding companies report that they are exposed to at least one type of risk related to climate change. As in all other regions, the most

^{20. 245} companies listed in France, 145 companies in Benelux and 5 listed in both markets. This figure exclude 5 late responders and 7 companies not included in the France Benelux sample. Overall 158 companies have submitted unique responses in France Benelux.

84%

of companies in
France and Benelux
region report that they
are exposed to
climate change
related regulatory
risks

frequently identified climate risks are risks related to changes in regulation (84%), followed by perceived risks related to changes in physical parameters (76%) and risks driven by changes in other climate-related developments (76%) such as changing consumer behavior or reputation. 59% of responding companies in the CDP's water program report exposure to water risks in their direct operations and/or supply chain, the highest rate in Europe. All companies responding to the forest program identify inherent risks related to producing, marketing or sourcing forest risk commodities.

Almost as high a percentage of companies consider perceived risks; 89% of companies stated that the low-carbon sustainability transition presents opportunities to strengthen their business, for instance through the development of new low-carbon products and services, as well as by increasing efficiency and resilience. Interestingly, the most commonly identified climate-related opportunities are also driven by regulation (85%), with opportunities linked to physical parameters (65%) far behind. In addition, 72% of companies reported water-related opportunities for their business, while 89% have identified at least one forest related opportunity.

Towards environmental stewardship: embedding sustainability into strategies and operations

In France Benelux region, 88% of companies already report that the board or a committee appointed by the board, has direct responsibility for climate change. 80% of companies, the highest proportion in Europe also provide monetary incentives related to climate change management. Furthermore, 75% of companies have board-level oversight of water-related issues, while 89% of companies have similar high-level oversight on deforestation related issues.

Companies in the region are increasingly setting ambitious targets to reduce their carbon footprint and set their business on a two-degree pathway. A noteworthy 85% of companies in France Benelux region report at least one emission reduction target (compared to only 79.5% in 2016). Of interest is the growing number of companies committing to reduce their emissions in line with a 2-degree trajectory in the framework of the Science Based Targets Initiative. While only one company had an approved Science Based Target in 2016, there are now 9 companies with their targets validated by the initiative, and additional 23 companies publicly committed to adopt a Science Based Target within the next 24 months. Further, 29% of companies in the region have set targets related to the consumption or production of renewable energy, and 11 are companies committed through the RE100 initiative to procure 100% of their electricity from renewable energy. 66% of companies of companies reporting through the water program are setting water focused targets and goals. All 9 companies reporting to CDP's forest program have committed reduce or remove deforestation and forest degradation from their direct operations and/or supply chain

23

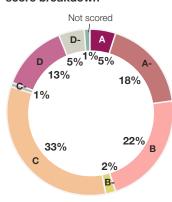
further companies in the region have officially committed to set a Science based target in the next two years

Regional snapshots

Snapshot: Nordics

Nordic companies are often perceived as thought leaders with high commitment to global sustainable development. While many companies are demonstrating ambitious action, Nordic companies collectively are lagging behind their European peers in adopting some best practices.

Figure 36: Nordics region score breakdown



The Nordic sample is composed of the 260 largest companies measured in market capitalization and with a primary listing in Sweden, Finland, Denmark or Norway²¹. In 2017, the 151 companies responding to CDP's climate change program represent 79% of the total market capitalization of all companies listed in Nordic stock exchanges.²² The analysis in this section primarily focuses on these 151 companies, with 60 unique disclosers from Sweden, 36 in Finland, 28 in Norway, 19 in Denmark and 8 headquartered outside the region but listed in one the Nordic countries.

Only 7 Nordic companies reached the global climate Climate A List in 2017. This is a significant drop from 14 companies in 2016 which is mainly due to this year's higher threshold between scores - making an A List position more competitive than ever. On the other hand, a further 27 companies reached the Leadership level with an A- score. As illustrated in Figure 36, the most common score in the region, however, is C, indicating that a large rift exists between proactive, committed companies with mature policies to address environmental issues, and the bulk of companies still working on assessing their impacts. Four Nordic companies were included to the global Water A List and further three on the Forest A List for Timber products.

Despite the region's high commitment to sustainability, only 40% of requested companies

of responding companies in the Nordic region are reporting board level responsibility for

climate change.

9

companies in the official sample in the region have already set ambitious emissions reduction targets approved by the Science Based Targets Initiative

responded to the CDP water program, the lowest rate in Europe. Interestingly, CDP's forest program saw the highest response rate in Europe in the Nordic region, with 34% of requested companies responding. This indicates that Nordic companies may be more aware of sustainable forest management issues than their European peers, while the holistic understanding of the deforestation risk commodities remains low across the continent.

Transition planning: risks and opportunity exposure and management

The vast majority of Nordic companies provide data on their own Scope 1 and Scope 2 location based emissions (93% and 85%), but many companies have yet to fully grasp the importance of reliable and complete data to decision makers. Though increasing from last year, still only 57% of companies report having at least 70% of their Scope 1 emissions data externally verified, and only 51% their Scope 2 emissions. 69% of companies have reported emissions data for at least 2 or more Scope 3 emission categories, a minor 1% increase from 2016.

Companies in the Nordic region are generally aware of the potential impacts of climate change and the

^{21.} There are 13 companies operating and publicly listed in the Nordic stock exchanges but incorporated outside the region.

Additional 22 companies in the region outside of the official sample reported environmental information through CDP in 2017.

of Nordic companies report that they are exposed to climate change related regulatory risks

risks and opportunities related to changing climate, water scarcity and deforestation. 89% of responding companies report identifying regulatory risks linked to climate change, with 83% reporting physical risks and 78% risks in the "other" risk category – linked, for instance, to reputational issues. The outlook for the opportunities is less prominent, with 87% of companies perceiving the potential for regulatory opportunities, 77% for physical opportunities, but 83% from "other" opportunities, such as reputational gains. These figures are slightly higher compared to pan-European companies' average reporting on climate risks and opportunities.

Of the companies reporting to CDP's water program, 56% report exposure to water-related risks in their direct operations and/or supply chain. 83% of companies in the Nordic region, the highest rate in Europe, identified water-related opportunities.,

Towards environmental stewardship: embedding sustainability into strategies and operations

In the region, 85% of responding companies state that climate change responsibility lies with the board or a subcommittee appointed by the board, which is a small decrease from 86% in 2016. Similarly, incentives for the management of climate change issues have slightly decreased, from 73% to 70% compared to 2016 data. Board oversight on other natural capital stewardship issues is also somewhat lower, with 72% of companies having board-level oversight of water-related issues and 82% on deforestation impacts.

The number of responders reporting absolute and/or intensity emissions reduction targets have decreased slightly from previous years. 72% of companies, below the European average, reported to having at least one emission reduction target. This is compared to 79.5% in 2016. Companies reporting active emissions reduction initiatives in the reporting year has remained stable at 89%. However, indicating a gap between the leading and lagging companies, there are already 22 ambitious companies in the region that have committed to adopt science-based targets via the Science Based Targets initiative. 7 of these companies, of the total 26 pan-European companies, have already had these targets approved targets by the SBTi. In addition, 8 Nordic companies from a of total 33 pan-European companies have a target to procure 100% renewable energy via the RE100 initiative.

A high 72% of responding companies have waterrelated targets and goals, while a full 91% of Nordic companies reporting through the CDP forest program have already committed to reducing or removing deforestation and forest degradation from their direct operations and/or supply chains.

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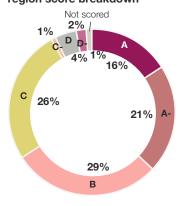
further companies in the region have officially committed to set a Science based target in the next two years

Regional snapshots

Snapshot: Southern Europe

Southern Europe has recently been exposed to extreme droughts, which are likely to become more common through changing weather patterns. Unsurprisingly, 99% of companies in the region have also identified at least one climate-related risk with the potential to affect their business. The region has also the highest number of responding companies in the CDP water program, with a clear majority reporting exposure to water risks.

Figure 37: Southern Europe region score breakdown



The Southern Europe regional sample is composed of the largest 225 companies by market capitalization incorporated in Italy (100), Spain (85) and Portugal (40). In 2017 the 99²³ responding companies represent 83% of the market capitalization of all publicly listed companies in the region. 16 companies in Southern Europe also responded to CDP's water program, representing 46% of the total requested companies in the region. Only 5 out of 19 requested companies provided data to the CDP forest program.

Companies in the region already demonstrate ambition in adopting common best practices in environmental stewardship. A very high proportion (37%) of companies in the region achieved a Leadership level for climate change, of which 16% made it to the CDP Climate A List (16 companies). five companies also achieved an A score in the water program. The most common climate score in the region is B, signaling proactive environmental management practices.

Transition planning: risks and opportunity exposure and management

A large proportion of companies in the region already report reliable and complete emissions data. With the

of responding companies in the region, highest in Europe, are reporting board level responsibility for climate change.

4

companies in the official sample in the region have already set ambitious emissions reduction targets approved by the Science Based Targets Initiative

second highest proportion in Europe (after the France & Benelux region), 86% of companies provide independently verified Scope 1 and Scope 2 data (96% and 85% reporting data overall on these scopes). Similarly, 81% of responding companies in the region, the highest proportion in Europe, report emissions data for two or more named Scope 3 categories. Encouragingly, a clear majority, 58%, also report that their overall emissions have decreased from last year due to proactive emission reduction efforts.

Companies in the Southern Europe region are generally aware of the potential risks and opportunities related to changing climate, water scarcity and deforestation. Reflecting widespread expectations for a rapidly changing business environment, 99% of companies identify at least one type of regulatory risk. The highest portion of the companies, together with Nordic businesses, 83% of companies, reported to have identified physical climate risks they might be exposed to. The outlook for climate-related opportunities is similar, with 98% of companies identifying regulatory opportunities and

 Of which 48 in Spain, 43 in Italy and 7 in Portugal. Additionally, 5 companies disclose on a voluntary basis. 99%

of companies in the South Europe sample report that they are exposed to climate change related regulatory risks

83% physical opportunities. Companies in Southern Europe appear to be increasingly aware of water-related risks, in connection to the region's widespread droughts this summer, with 56% reporting exposure to such risks. All responding companies in the forest program identified deforestation related risks. Encouragingly, 63% of companies also identified water-related opportunities, and 80% forest-related opportunities.

Towards environmental stewardship: embedding sustainability into strategies and operations

Companies in the region have already adopted many leading governance practices. With the highest proportion in Europe, 96% of responding companies reported that the board or a committee appointed by the board has direct responsibility for climate change. 84% of companies have also established financial incentives for climate-related topics. Only 69% of companies, in comparison, have board-level oversight on water-related issues, while just 60% do so for forest-related topics

Almost all responders (90%) in the region have established at least one type of emission reduction target, with 83% of the companies reporting absolute targets and 65% reporting intensity targets. 14 companies in the region have committed to adopt science-based targets via the Science Based Targets initiative within the next two years, and 4 companies have approved targets. In connection to wider emission reduction targets, 4 companies have also committed to procure 100% renewable energy. However, in contrast to the high proportion of companies (56%) reporting exposure to water risks, only 44% have water-related targets and goals, the lowest rate in Europe. All 4 companies reporting in CDP's forest program have committed to reduce or remove deforestation and forest degradation from their direct operations and/or supply chain.

14

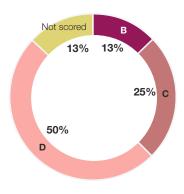
further companies in the region have officially committed to set a Science based target in the next two years

Regional snapshots

Snapshot: Central and Eastern European Region (CEE)

The response rate and scope of the reported data in the Central and Eastern European Region has remained low, with most reporting companies providing basic information for assessing the maturity of processes and actions taken. Individual companies are, however, paving the way for robust assessment and action on environmental issues.

Figure 38: Central and Eastern European region score



In the Central and Eastern European Region, the 100 largest companies listed on the stock exchanges of Warsaw, Prague and Budapest as well as the Nasdaq Baltic Market were invited to disclose their climate impacts through CDP. The response rate in this region has remained stable since 2015, with just 17 companies reporting to CDP, out of which 9 are responding via their parent companies headquartered outside the region. As the analyzed sample is limited in size, the following statistics can be only considered indicative. Responding companies represent 26% of the total market capitalization in the region, compared to 33% in 2016, and indicates that CEE companies still largely lag in transparency both in pan-European context and against global peers. With increasing investor interest, and as governments are increasingly shifting towards taking action against climate change and tightening up the regulatory framework, this may increase the environmental awareness in this region and encourage businesses to recognize the links between climate change risks and other major trends impacting the business environment.

Among the individual countries, the number of Polish companies disclosing on climate through CDP remains the highest with four Polish entities (out of 57 requested). In Hungary, only two companies out of ten requested companies responded to the questionnaire. In the Czech Republic only one company from 10 questioned submitted their answer directly. The analysis of this section is based on the data of the 8 directly responding companies and the limited sample should be noted in interpreting the key trends

On the CDP scoring scale, most of the responding companies are scored at Disclosure level (D) only (figure 38), with two reaching the Awareness level (C) and only one company (MOL Nyrt.) reaching the Management level with the B score, indicating that the company is taking concrete action in managing their climate risks and impacts beyond initial screening.

Transition planning: risks and opportunity exposure and management

88% of companies in the region report Scope 1 emissions data (of which 38% have independently verified data. All companies report some data for Scope 2, although only 25% of these emissions independently verified. 38% of responders report emissions data for two or more named Scope 3 categories

88%

of CEE companies report that they are exposed to climate change related regulatory risks

The few reporting CEE companies in the region have started to identify the potential impacts of climate change and the risks and opportunities related to changing climate, water scarcity and deforestation. 88% of responding companies identified potential exposure to regulatory risks, and 75% to physical risks. The outlook for the opportunities is significantly lower, with 63% of companies anticipating both regulatory and physical opportunities linked to climate change.

Towards environmental stewardship: embedding sustainability into strategies and operations

In CEE, 50% of companies state that climate change responsibility lies with the board or the other committee appointed by the board, which is significantly lower than other European regions. The reported incentives aimed at management and linked to climate change issues has decreased significantly from 2016, from 65% to 38%.

CEE responders reporting absolute and/or intensity emissions reduction targets have increased since last year, although only 37% of companies, significantly below the European average, reported at least one emissions reduction target There are not yet companies in this region committing to set science-based targets. There is, however, a positive increase in absolute emissions reduction targets, from 18% to 38% from 2016, and an increase in reporting of intensity emissions reduction targets from 24% to 38%. 63% of companies report active emissions reduction initiatives in the reporting year.

50%

of responding companies in the region are reporting board level responsibility for climate change.

Sustainable Supply Chain Management

In a huge and intricate web of often opaque global supply chains, an ever-increasing number of both private and public organisations are realising the necessity of understanding the multifaceted environmental risks their supply chains expose them to. Measuring and managing the effects they are having through their supply chain is the natural next step for organisations which are already leading in environmental management in their own direct operations. It also represents a significant, if complex, area for organisations to reduce their environmental impact and ultimately makes good business sense.

100 organisations this year are using the CDP Supply Chain Program to simplify this process. These major purchasers, representing USD \$3 trillion in procurement spend, requested almost 10,000 suppliers to disclose through CDP in 2017. The Program gives members insight into suppliers' environmental management relating to climate change, water and deforestation, and helps organisations to identify associated risks and opportunities.

"After trying our own questionnaire with key suppliers, Deutsche Telekom decided to join CDP supply chain to reduce the reporting burden internally and externally." – Deutsche Telekom

By requesting suppliers to disclose through an existing global standard, the reporting burden is

greatly reduced, especially for suppliers responding to multiple customers. In addition, more and more organisations are setting their own ambitious environmental targets, and require the support of their entire supplier network to realise these goals.

"How will we meet our new [science based] supply chain target? Close cooperation with our suppliers will be key. We will be working together to help them switch to renewable energy, and encouraging more of them to report to CDP. This is a critical first step towards action for suppliers, and the data they disclose will enable us to track emissions reductions and uptake of renewable energy in our supply chain." - Gabrielle Ginér, Head of Sustainable Business Policy at BT Group

Membership enables organisations to construct, measure and meet these targets, such as Scope 3 targets under the Science Based Targets initiative. For example, supplementing a Scope 3 inventory with primary data from suppliers collected through CDP is helping organisations to build more robust Scope 3 inventories. Moreover, members are better able to identify hotspots and opportunities for emissions reductions, realising their ambitious goals, safeguarding future operations and ultimately mitigating climate-related impacts.

CDP's Annual Supply Chain report, launching at the end of January 2018, will summarise key insights from the 2017 cycle.



Disclosure support and benchmarking for a Sustainable Future

The one-to-one, indepth guidance and support provided through our Reporter Services' account manager has been invaluable in improving the quality of our response to climate change for our investors.

Senior Plc

CDP's analytics tool has transformed how we use data to benchmark our risks, opportunities, and emissions reduction targets against sector peers. It provides us with detailed, valuable information through just a few clicks.

Barrick Gold Corporation

CDP's 2017-2020 Tipping Point strategy²⁴ aims to build momentum from the Paris Agreement and assist companies in planning for a sustainable future by motivating awareness of environmental impacts. To achieve this, CDP offers Reporter Services to make it as easy as possible for companies to improve the quality of their climate, water and forests disclosures, benchmark with peers, and understand best practice through a dedicated CDP expert.

Disclosure Support

With a dedicated account manager, Reporter Services members improve their understanding of the CDP process and technical requirements and have confidence that their responses accurately reflect their environmental performance. Companies looking to stay up to date will receive explanations of changes to CDPs questionnaires and technical guidance that reflect recent developments in policy and corporate best practice. Members are provided with in-depth response feedback and analysis on their prior responses, as well as a final review of their 2018 draft ahead of submission, ensuring that their responses are of the highest quality possible.

Enhanced Data Access

CDP Reporter Services facilitates an exchange of knowledge and best practice by giving its members unlimited access to CDPs complete public dataset. Members can request customized benchmarking reports that compare responses to those of their sector peers, giving members a chance to learn and improve by example. In addition, Reporter Services brings CDP's data to life by providing visual tools that explore data at the question level, saving time and improving the quality and focus of company responses. Furthermore, members can request a customized benchmarking report that compares responses to those of their sector peers, giving members a chance to communicate progress internally.

Networking and Insights

CDP strives to ensure that its Reporter Services members are up to speed on the latest developments of its questionnaire, environmental reporting and best practice. Reporter Services members have access to exclusive informational and thought leadership webinars regarding updates to the CDP questionnaires and broader topics of their choosing, such as how to best implement the TCFD recommendations. Networking events are also provided that offer members a chance to stay ahead of the curve in environmental sustainability through meeting face-to-face with other members, experts and investors.

Carla Wovdt

Associate Director Sales & Business Development

Andreas Svennefjord

Account Manager Reporter Services

Sarah Robertson

Account Manager Reporter Services

Mara Mereu

Account Manager Reporter Services

Climetrics launched: CDP's award-winning new finance tool now available to all fund investors



CDP and ISS-Ethix Climate Solutions launched the world's first climate rating for equity funds in July 2017 – top rating results available online.

Adding a new level of transparency to the fund industry, Climetrics aims to turn the equity fund market – worth more than €3 trillion in Europe – into a significant lever for mitigating climate change. Climetrics is the world's first independent and publicly available tool that rates equity funds for their climate impact.

Symbolized by green leaves issued on a scale of 1 to 5, the rating enables investors to easily assess and compare the climate impact of their fund investments, encouraging the growth in climate-responsible fund products.

More than carbon footprinting

At present, Climetrics covers approximately 2,800 equity funds and ETFs, representing about €2 trillion in fund investments and more than 55% of the total assets invested in equity funds for sale in Europe. Todate no other rating system allows investors to compare climate-related impacts of thousands of funds on a publicly available platform. Top-rated funds can be found for free on www.climetrics-rating.org

While Climetrics has a unique and exclusive focus on the climate impact of funds, the rating goes far

beyond carbon footprinting, also scoring funds on forward-looking indicators. The combination of these indicators into a robust and transparent methodology is unique in the market. The Climetrics rating is built on three quantitative layers of analysis to assess each fund's climate impact along the entire investment process. These layers are including its entire portfolio holdings, the asset manager's level of public action on climate change, and the fund's investment policy.

Climetrics uses the CDP score

In its evaluation of a fund portfolio, Climetrics measures the climate impact of each company holding in the portfolio, and the CDP score forms a central element of the score that Climetrics builds for each company. An above-average CDP score therefore makes a company share more attractive for a fund manager interested in a top Climetrics rating for their fund.

Opportunities for asset managers and banks

Climetrics offers opportunities for asset managers to market their well-rated funds, develop new products, and enhance ESG integration. Asset managers can buy the *Climetrics marketing license* for their top-

Paul Dickinson,

in fund

investments.

transition.

Climetrics is a missing

link between individual

investment choices and the

global problem of climate

change, and will move the

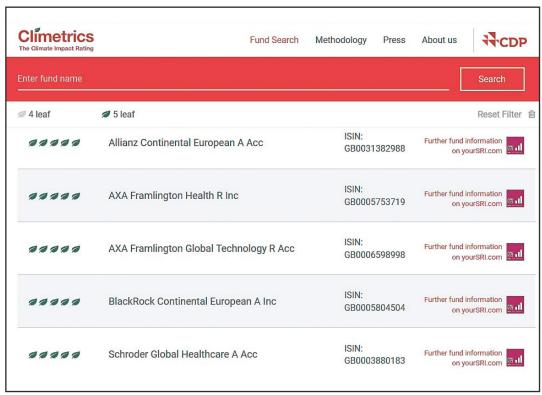
needle in incentivising both

investors and companies to

contribute to the low-carbon



More than 2,800 equity funds covered, representing about €2 trillion



8%

of the assessed funds received the highest grade of 5 green leaves. rated funds, and use the Climetrics trademark and rating results for marketing and sales purposes. The license is Europe-wide, and the rating will differentiate these funds from other funds in the market.

Climetrics company scores are an excellent basis to develop new climate-responsible products such as funds, ETFs and indices for the growing segment of climate-conscious investors. The company scores also allow fund managers to include climate impact and risk into stock analysis. This provides fund managers with a more holistic and deeper view on shares to include climate impact and risk.

Climetrics supports banks and financial advisors in addressing the growing demand of their clients to consider the wider impact of their investments. The rating offers opportunities to market climateresponsible funds and to improve the advisory service in sustainable investing.

Climetrics rating results can be sourced into the *internal information system* of banks and financial advisors, for example via an API, for a fee. This allows the advisors to access information easily during conversations with clients. Banks that run *online fund platforms* can also source Climetrics ratings for a fee to integrate climate impact data into their platform.

The funds generated by selling the Climetrics products are used by CDP to provide the overall rating results for free to the public.

Climetrics for investors

Climate indicators are becoming increasingly important for the management of investment risks and sustainable returns. Climetrics allows investors to include climate factors into their fund selection and monitoring process. Institutional investors can also use the ratings for their risk management, and to engage with asset managers on the topic of climate change. Because the rating is easy to understand, private investors may also use it to include the criteria of climate impact into their investment decisions, and to contribute to a more sustainable economy.

Award from Climate Action

Shortly after its launch, Climetrics received its first important award. Climate Action, in partnership with UN Environment, elected Climetrics as the winner of their 2017 Innovative Climate Finance Tool competition. Climetrics won against 5 other finalists in a judging panel including UBS, UNEP Finance Initiative and the International Finance Corporation. In particular, judges commended Climetrics for addressing a broad market and for its use of data from CDP as a globally-renowned disclosure platform.

For more information please contact:

climetrics@cdp.net or

Nico Fettes Project Lead Fund Ratings nico.fettes@cdp.net T +49 30 629 033 121

Climetrics rating results



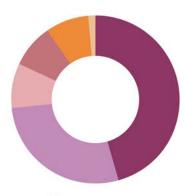
The climetrics methodology



Appendix I

Investor signatories and members

Investor signatories by location



Europe - 366 = 46%

North America - 224 = 28%

Latin America & Caribbean - 70 = 9%

▼ Asia

- 67 = 8%

Australia and NZ

Africa - 11 = 1%

CDP's investor program - backed in 2017 by 803 institutional investor signatories representing in excess of US\$100 trillion in assets - works with investors to understand their data and analysis requirements and offers tools and solutions to help them.

Our global data from companies and cities in response to climate change, water insecurity and deforestation and our award-winning investor research series is driving investor decision-making. Our analysis helps investors understand the risks they run in their portfolios. Our insights shape engagement and add value not only in financial returns but by building a more sustainable future.

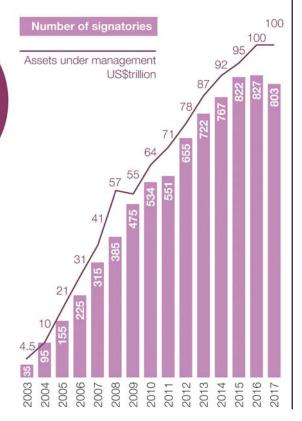
For more information about the CDP investor program, including the benefits of becoming a signatory or member please visit: http://bit.ly/2vvsrhp

To view the full list of investor signatories please visit: http://bit.ly/2uW3336

2. Investor signatories by type



3. Investor signatories over time



Investor members ACTIAM Aegon Allianz Global Investors ATP Group Aviva Investors Aviva plc AXA Group Bank of America Bendigo and Adelaide Bank BlackRock Boston Common Asset Management LLC BP Investment Management Limited British Columbia Investment Management Corporation California Public Employees' Retirement System California State Teachers' Retirement System Calvert Investment Management, Inc Capricorn Investment Group Catholic Super CCLA Investment Management Ltd ClearBridge Investments Environment Agency Pension fund Ethos Foundation Etica SGR Eurizon Capital SGR S.p.A Fundação Chesf de Assistência e Seguridade Social Fundação de Assistência e Previdência Social do BNDES FUNDAÇÃO ITAUBANCO Generation Investment Management Goldman Sachs Asset Management Henderson Global Investors Hermes Fund Managers HSBC Global Asset Management Instituto Infraero de Seguridade Social Legal and General Investment Management Legg Mason, Inc London Pensions Fund Authority Morgan Stanley National Australia Bank Neuberger Berman New York State Common Retirement Fund Nordea Investment Management Norges Bank Investment Management ÖKOWORLD LUX S.A Overlook Investments Limited PFA Pension PREVI Caixa de Previdência dos Funcionários do Banco do Brasil Rathbone Greenbank Investments RBC Global Asset Management Real Grandeza Fundação de Previdência e Assistência Social Robeco RobecoSAM AG Rockefeller Asset Management Sampension KP Livsforsikring A/S Schroders Skandinaviska Enskilda Banken AB Sompo Holdings, Inc Sustainable Insight Capital Management TIAA Terra Alpha Investments LLC The Sustainability Group The Wellcome Trust UBS

University of California

Whitley Asset Management

University of Toronto Asset Management Corporation (UTAM)

Key for Appendix II

To read the public company responses in full, access dynamic graphs on emission data and the global A list, please visit the CDP website at www.cdp.net

KEY for company responses

AQ(L): Answered questionnaire late, and therefore is not scored.

SA: See other

Bold: companies that are in the global A list

Leadership	80–100 %	Α
	0–79 %	A-
Management	45-79%	В
	0–44 %	B-
Awareness	45-79%	С
	0–44 %	C-
Disclosure	45-79%	D
	0-44%	D-

KEY for scores Range: from A to D- (A is the best score).

Leadership (A, A-): Company actions represent best practice to advance environmental stewardship; thorough understanding of risks and opportunities related to climate change; formulated and implemented strategies to mitigate or capitalize on these risks and opportunities.

Management (B, B-): Company has taken actions to address environmental issues beyond initial screenings or assessments

Awareness (C, C-): Company is able to demonstrate understanding of how environmental issues intersect with its business.

Disclosure (D, D-): Company is able to provide basic information for assessing the maturity of processes and actions taken.

The four levels represent the steps on a company's journey to being a good environmental steward. A minimum score of 80%, and/or the presence of a minimum number of indicators on one level will be required in order to be assessed on the next level. The CDP score will give a clear picture of what a company's current level is with respect to environmental stewardship and importantly, what action to focus on next.

Appendix II

Reporting companies and scores in Europe

The climate A List was established in 2011 and introduced for water and forests in 2015 and 2016 respectively. As there are proportionately more responding companies for the climate program than the newer water and forest programs, there are more companies achieving the A band for climate. We encourage companies to disclose to all relevant programs to achieve double or triple A status.





Cattle



Company Country Climate Water **Forests**

				Products	Palm Oil	Soy	Timber
Consumer Discretionary							
AccorHotels	France	A–					
adidas AG	Germany	В	A-				
Alma Media Corporation	Finland	В	A-				
Amer Sports	Finland	С					
APG SGA SA	Switzerland	С					
ATRESMEDIA CORPORACION	Spain	С					
Audi AG	Germany	SA					
Autoneum Management AG	Switzerland	C	С				
		D	C				
Axel Springer SE	Germany						
Bilia AB BMW AG	Sweden	С					
	Germany	Α	Α				
Bonava	Sweden	D					
Brembo SpA	Italy	Α	A -				
CIE Automotive	Spain	C					
Clas Ohlson AB	Sweden	В					
Compagnie Financière Richemont SA	Switzerland	С					
Continental AG	Germany	С	D				
Daimler AG	Germany	A-					
Dometic	Sweden	D					
Ekornes ASA	Norway	В					
Electrolux	Sweden	Α	A -				
ElringKlinger AG	Germany	С					
Euro Disney Sca - Regr	France	SA					
Europris	Norway	В					
Faurecia	France	В	С				
Fiat Chrysler Automobiles NV	Italy	A –	Α				
Fiskars Corporation	Finland	С					
Gestamp	Spain	С	B-				
Grandvision NV	Netherlands	C-					
Groupe Fnac	France	D					
Groupe PSA	France	A-					
Groupe SEB	France	A-					

Α-

C-

D

B-

В

В

В

Sweden

France

Germany

H&M Hennes & Mauritz AB

HORNBACH HOLDING AG & Co. KGaA

Havas

Company Country















Cattle		
roducts	Palm Oil	

				Cattle Products	Palm Oil	Soy	Timber
Consumer Discretionary							
HORNBACH-Baumarkt-AG	Germany	SA					
HUGO BOSS AG	Germany	В					
Husqvarna AB	Sweden	В					
IKEA	Sweden	A-					
Inditex	Spain	A-	В	A-			A-
Ipsos	France	В					
JCDecaux SA.	France	В					
JM AB	Sweden	В					
Kabel Deutschland Holding AG	Germany	SA					
Kaufman & Broad Sa	France	D					
Kering	France	Α	В	A –			A –
Kindred Group	Malta	С					
Kongsberg Automotive Holding ASA	Norway	D					
Lagardere S. C. A.	France	D		В			
LEONI AG	Germany	C-					
L'Occitane International S.A.	Luxembourg	D					
Maisons du Monde SA	France	В					
Mediaset Espana Comunicacion SA	Spain	В					
MEDION AG	Germany	SA					
Melia Hotels International SA	Spain	A-					
Michelin	France	A-	A-				
Modern Times Group MTG AB	Sweden	В					
NH Hotel Group	Spain	В					
Nobia	Sweden	С					D
Nokian Tyres	Finland	В	В				
Orbis S.A.	Poland	SA					
Pandox	Sweden	С					
Piaggio & C SpA	Italy	A-	В				
Pierre & Vacances	France	D					
Pirelli	Italy	A-	В				
Porsche AG	Germany	SA					
Prada	Italy	D-					D
ProSiebenSat.1 Media SE	Germany	С					
Publicis Groupe SA	France	С					
PUMA SE	Germany	С					

















				Products	Palm Oil	Soy	Timber
Consumer Staples							
Casino Guichard-Perrachon	France	В					
Cermaq Group ASA	Norway	В					
Chocoladefabriken Lindt & Sprüngli AG	Switzerland	С	С		С		
Cloetta AB	Sweden	D					
Coca-Cola HBC AG	Switzerland	Α	Α				
Corbion	Netherlands	С					
Danone	France	A-	Α		В	В	В
Delhaize Group	Belgium	SA	SA				
Deoleo SA	Spain	AQ-L					
Dia	Spain	A-					
Ebro Foods SA	Spain	D					
Emmi AG	Switzerland	В					
ForFarmers NV	Netherlands	AQ-L					
Fredman Group Oy	Finland	D					
Greenyard	Belgium	D					
Groupe Auchan	France	C-					
Heineken Holding NV	Netherlands	SA	SA				
Heineken NV	Netherlands	A-	В				
Henkel AG & Co. KGaA	Germany	В	В		A-		С
ntersnack Group GmbH & Co. KG	Germany				AQ-L		
Jerónimo Martins SGPS SA	Portugal	В		В	A-	В	A-
Kernel Holding	Poland	D					
Kesko Corporation	Finland	A-		B-	В	В	В
Lerøy Seafood Group	Norway	С					
L'Oréal	France	Α	Α		Α	Α	Α-
Marine Harvest Group	Norway	A-					
MARR SpA	Italy	D-					
METRO AG	Germany	A-	A-				
Naturex	France	C-					
Nestlé	Switzerland	Α	A –	A-	A-	A –	A –
Nordzucker	Germany		B-				
Ontex Group NV	Belgium	С					
Oriflame Cosmetics AB	Sweden	B-			В		В
Orkla ASA	Norway	A-	С		С	С	С
Pernod Ricard	France	В	A-				























				Products	Palm Oil	Soy	Timber
Energy							
Repsol	Spain	A-					
Royal Dutch Shell	Netherlands	В					
Saipem	Italy	С					
SBM Offshore	Netherlands	AQ-L					
Seadrill Management Ltd	Norway	С					
Statoil ASA	Norway	A-					
Subsea 7	Norway	С					
Technip Sa	France	A-	С				
Tecnicas Reunidas	Spain	В					
Total	France	A-	A-				
Vopak	Netherlands	С					
Weatherford International Ltd.	Switzerland	С					
Financials							
Aareal Bank AG	Germany	С					
ABN Amro Holding	Netherlands	В					
Aegon	Netherlands	С					
Aker ASA	Norway	С					
Aktia Bank	Finland	D-					
Allianz SE	Germany	В					
Alpha Bank	Greece	С					
alstria office REIT-AG	Germany	A-					
Altarea Cogedim	France	A-					
Assicurazioni Generali Spa	Italy	В					
Atenor	Belgium	D					
Atrium Ljungberg AB	Sweden	B-					
AXA Group	France	A-					
Banca Generali SpA	Italy	SA					
Banco Comercial Português SA	Portugal	A-					
Banco de credito social cooperativo	Spain	A-					
Banco Popular Espanol S.A.	Spain	В					
Banco Sabadell	Spain	D					
Banco Santander	Spain	В	В				
Bank Cler AG	Switzerland	В					
Bank Millennium S.A.	Poland	SA					















Cattle	
Products	Palm Oil

			Products	Palm Oil	Soy	Timbe
Financials						
Bank Pekao S.A.	Poland	SA				
Bank Zachodni WBK S.A.	Poland	SA				
Bankia	Spain	Α				
Bankinter	Spain	В				
Banque Cantonale Vaudoise	Switzerland	В				
Basellandschaftliche Kantonalbank	Switzerland	D				
Basler Kantonalbank	Switzerland	Α				
BBVA	Spain	С				
Befimmo SA	Belgium	В				
Beni Stabili Spa SIIQ	Italy	С				
Berner Kantonalbank AG BEKB	Switzerland	Α				
BNP Paribas	France	A-				
BNP Paribas Fortis SA	Belgium	SA				
Caixa Geral de Depósitos	Portugal	A-				
CaixaBank	Spain	Α				
Castellum	Sweden	A-				
Cegereal	France	С				
Chubb Limited	Switzerland	A-				
Citycon Oyj	Finland	В				
CNP Assurances	France	В				
Cofinimmo SA/NV	Belgium	С				
Commerzbank AG	Germany	В				
Credit Agricole	France	A-				
Credit Suisse	Switzerland	В				
Credito Valtellinese	Italy	С				
DAB bank AG	Germany	SA				
Danske Bank A/S	Denmark	В				
Delta Lloyd NV	Netherlands	D				
Deutsche Beteiligungs AG	Germany	С				
Deutsche Börse AG	Germany	A-				
Deutsche EuroShop AG	Germany	D				
Deutsche Postbank AG	Germany	С				
DNB ASA	Norway	Α				
Entra Asa	Norway	Α				
Euler Hermes	France	SA				















Cattle
Products F

Palm Oil

			Products	Palm Oil	Soy	Timbe
Financials						
Eurazeo	France	С				
Eurobank Ergasias SA	Greece	D				
Finecobank	Italy	SA				
Foncière des Régions	France	A-				
Gecina	France	A-				
Gjensidige Forsikring ASA	Norway	D				
Hannover Rück SE	Germany	В				
Helvetia Group	Switzerland	В				
Hispania Activos Inmobiliarios SAU	Spain	В				
Hoist Finance	Sweden	D-				
Hufvudstaden	Sweden	В				
ICADE	France	A-				
Immobiliare Grande Distribuzione SpA	Italy	С				
Industrivärden	Sweden	С				
ING Bank Slaski S.A.	Poland	SA				
ING Group	Netherlands	Α				
Inmobiliaria Colonial	Spain	С				
Intesa Sanpaolo S.p.A	Italy	Α				
Investment AB Latour	Sweden	C-				
Julius Bär Group LTD	Switzerland	D				
Jyske Bank A/S	Denmark	D-				
KBC Ancora	Belgium	SA				
KBC Group	Belgium	A-				
Klepierre	France	Α				
KLP	Norway	В				
Komercní banka, a.s.	Czech Republic	SA				
Leasinvest Real Estate Sca	Belgium	D-				
MAPFRE	Spain	Α				
Mercialys	France	A-				
Mobimo	Switzerland	В				
Moneta Money Bank AS	Czech Republic	D				
National Bank Of Greece	Greece	D				
Natixis SA	France	D				
Nexity	France	В				
NN Group NV	Netherlands	С				















Timber

Cattle	
Products	

Palm Oil

Soy

Financials			
Nordax Group	Sweden	D-	
Nordea Bank	Sweden	В	
Norwegian Property ASA	Norway	A-	
NSI NV	Netherlands	D-	
Nykredit	Denmark	В	
OP Financial Group	Finland	В	
Partners Group	Switzerland	D-	
Piraeus Bank	Greece	В	
PSP Swiss Property AG	Switzerland	A-	
Rabobank Group	Netherlands	A-	
Raiffeisen Bank International AG	Austria	A-	
Ratos AB	Sweden	D	
Scor SE	France	С	
Skandinaviska Enskilda Banken AB (SEB AB)	Sweden	В	
Societe Generale	France	A-	
Sponda Plc	Finland	A-	
Storebrand ASA	Norway	В	
Svenska Handelsbanken	Sweden	В	
Swedbank	Sweden	В	
Swiss Life Holding	Switzerland	С	
Swiss Re	Switzerland	В	
Technopolis	Finland	В	
TLG Immobilien AG	Germany	D	
Topdanmark	Denmark	С	
UBI Banca	Italy	С	
UBS	Switzerland	Α	
UniCredit	Italy	В	
Valiant Holding AG	Switzerland	A-	
Van Lanschot NV	Netherlands	A	
Victoria Park	Sweden	D	
Vonovia	Germany	AQ-L	
Vontobel Holding AG	Switzerland	В	
Vostok New Ventures	Bermuda	D-	
Wereldhave	Netherlands	В	
Wereldhave Belgium	Belgium	SA	
Zurich Insurance Group	Switzerland	A-	















Cattle			
Products	Palm Oil	Soy	Timber

Health Care					
Almirall Sa	Spain	С			
Astra Zeneca	United Kingdom	Α	Α		
Bayer AG	Germany	A-	Α		
bioMérieux	France	С			
Celesio AG	Germany	SA			
Coloplast A/S	Denmark	С			
Diasorin SpA	Italy	С			
Elekta	Sweden	D-			
Essilor International	France	A-	Α		
Fresenius Medical Care AG & Co. KGaA	Germany	С	AQ-L		
Fresenius SE & Co. KGaA	Germany	D-	D		
Galenica SA	Switzerland	С			
Gerresheimer AG	Germany	В			
Getinge AB	Sweden	B-			
GRIFOLS	Spain	В			
Ion Beam Applications S.A. (IBA)	Belgium	С			
lpsen	France	B-	AQ-L		
Korian-Medica	France	D			
Lonza Group AG	Switzerland	D			
Lundbeck A/S	Denmark	Α			
Merck KGaA	Germany	В	В		
Mettler-Toledo	Switzerland	D			
Mithra Pharmaceutical	Belgium	AQ-L			
North Denmark Region	Denmark	С			
Novartis	Switzerland	A –	Α		
Novo Nordisk A/S	Denmark	Α			
Oriola Oyj	Finland	D			
Össur hf.	Iceland	D			
Recipharm Ab	Sweden	С			
Roche Holding AG	Switzerland	A –	Α		
SANOFI	France	A –	Α		
Sonova Holding AG	Switzerland	В			
Straumann Holding AG	Switzerland	С			
Tecan Group Ltd	Switzerland	C-			
UCB SA	Belgium	В			
William Demant Holding A/S	Denmark	D			















Cattle Products F

Palm Oil

Soy

				Products	Palm Oil	Soy	Timber
Industrials							
A.P. Moller – Maersk	Denmark	AQ-L					
Aalberts Industries	Netherlands	AQ-L					
ABB	Switzerland	С					
Abertis Infraestructuras	Spain	В					
ACS Actividades de Construccion y Servicios	Spain	D					
Addtech AB	Sweden	D					
Adecco Group AG	Switzerland	С					
ADP (Aeroports de Paris)	France	В					
AENA SA	Spain	В					
Aeroflot	Russia	D					
ÅF AB	Sweden	С					
Agility Public Warehousing Co K.S.C.	Switzerland	AQ-L					
Air France – KLM	France	В					
Airbus Group	Netherlands	D					
Alfa Laval Corporate AB	Sweden	С					
Alstom	France	В					
Amadeus FiRe AG	Germany	D					
Ansaldo STS	Italy	С					
APPLUS Services	Spain	С					
Arcadis	Netherlands	B-					С
Assa Abloy	Sweden	С	В				
Astaldi SpA	Italy	С					
Atlantia	Italy	С					
Atlas Copco	Sweden	В	В				
Beijer Alma	Sweden	С					
Belimo Holding AG	Switzerland	C-					
Bic	France	A-					
Bilfinger SE	Germany	D					
Bouygues	France	A-					
bpost	Belgium	С					
Bravida Holding	Sweden	D					
Bucher Industries AG	Switzerland	D					
Bureau Veritas	France	С					
Cargotec Corporation	Finland	С					
Caverion	Finland	С					















Cattle Products P

Palm Oil Soy

				Products	Pailli Oil	Suy	Tilliber
Industrials							
CEWE Stiftung & Co. KGaA	Germany	A-					
CIR SpA	Italy	В					
CNH Industrial NV	United Kingdom	A –	Α				
Construcciones & Auxiliar de Ferrocarriles	Spain	D-					
Conzzeta AG–Reg	Switzerland	D-					
Correos (Grupo Sepi)	Spain	В					
Cramo Oyj	Finland	D					
CTT – Correios de Portugal SA	Portugal	Α					
Daetwyler Holding AG	Switzerland	С					
Dampskibsselskabet NORDEN A/S	Denmark	В					
Danieli & C Officine Meccaniche S.p.A.	Italy	В					
Derichebourg Multiservices	France	С					
Deutsche Bahn AG	Germany	Α					
Deutsche Lufthansa AG	Germany	A-					
Deutsche Post AG	Germany	A-	С				С
DKSH Holding AG	Switzerland	D					
dormakaba Holding AG	Switzerland	AQ-L					
DSV A/S	Denmark	D					
Dürr Aktiengesellschaft	Germany	D					
ECA	France	D					
Eiffage	France	D					
Eltek AS	Norway	С					
Europcar Groupe SA	France	С					
Feintool Group	Switzerland	D					
FERROVIAL	Spain	Α	В				A –
Fincantieri	Italy	C-					
Finnair	Finland	В					
FLSmidth & Co. A/S	Denmark	D					
Flughafen München GmbH	Germany	A-					
Fomento de Construcciones y Contratas	Spain	С					
Fraport AG	Germany	С					
Frontline Ltd	Bermuda	В					
G4S Plc	United Kingdom	С					
Gamesa Corporación Tecnológica, S.A.	Spain	С					
GEA Group AG	Germany	С					















Cattle	
roducts	Palm Oil

				Cattle Products	Palm Oil	Soy	Timber
Industrials							
Geberit AG	Switzerland	С	В				
Georg Fischer	Switzerland	В					
Groupe Eurotunnel	France	С					
Grupo Logista	Spain	Α					
Hamburger Hafen und Logistik AG	Germany	D					
Heijmans Nv-Cva	Netherlands	В					
HOCHTIEF AG	Germany	В	AQ-L				
Huber + Suhner AG	Switzerland	A-					
IMA SpA	Italy	С					
INDUS Holding AG	Germany	Α					
Infraserv GmbH & Co. Höchst KG	Germany	С					
International Consolidated Airlines Group, S.A.	Spain	Α					
Inwido Ab	Sweden	С					
ISS	Denmark	С					
Klöckner & Co SE	Germany	D-					
Kone Oyj	Finland	A-					
Konecranes	Finland	С					
Kongsberg Gruppen ASA	Norway	С					
Koninklijke Philips NV	Netherlands	Α	A -				
Krones AG	Germany	D					
KSB AG	Germany	С					
Kuehne + Nagel International AG	Switzerland	В					
KUKA AG	Germany	D					
La Poste	France	В					
Lassila & Tikanoja	Finland	A-					
LEGRAND	France	В					
Leonardo S.p.A.	Italy	A-					
Loomis AB	Sweden	D					
Maire Tecnimont SpA	Italy	С					
MAN SE	Germany	SA	SA				
Metso	Finland	A-					
MTU Aero Engines Holding AG	Germany	D					
NCC	Sweden	В					
Nexans	France	В					
NIBE Industrier	Sweden	С					















Cattle		
Products	Palm Oil	Soy

Industrials							
Nolato AB	Sweden	С					
Nordex SE	Germany	С					
Obrascon Huarte Lain (OHL)	Spain	Α	Α				В
Odfjell SE	Norway	С					
Österreichische Post AG	Austria	Α					
Palfinger AG	Austria	С					
Panalpina Welttransport Holding AG	Switzerland	В					
Peab AB	Sweden	B-					
Philips Lighting	Netherlands	Α					
Porr AG	Austria	D					
PostNL	Netherlands	В					
Prysmian SpA	Italy	В	AQ-L				
Randstad Holding nv	Netherlands	B-					
Rexel	France	В					
ROCKWOOL International A/S	Denmark	A-					
Royal BAM Group nv	Netherlands	A-					
Royal Boskalis Westminster	Netherlands	D					
SAAB	Sweden	A-					
Safran	France	С					
Saint-Gobain	France	A-	В				В
Salini Impregilo S.p.A.	Italy	В					
Sandvik AB	Sweden	С	B-				
SAS	Sweden	В		С	С	С	С
Schindler Holding AG	Switzerland	В					
Schneider Electric	France	Α					
Securitas AB	Sweden	С					
Sensata Technologies Holding NV	Netherlands	D	D				
SGS SA	Switzerland	В					
Siemens AG	Germany	A-	В				
Skanska AB	Sweden	A-	A-				A-
Solar AS	Denmark	D					
Tarkett	France	С					
Thales	France	A-					
TKH Group	Netherlands	D					
Tomra Systems ASA	Norway	С					















Cattle Products Palm Oil So

Soy

				Fiduucis	Faiiii Oii	Suy	Tillibei
Industrials							
Trafigura Beheer B.V.	Netherlands	AQ-L					_
Trelleborg AB	Sweden	С					
Uponor Corporation	Finland	В					
Vallourec	France	A-					
Valmet	Finland	A-					
Veidekke ASA	Norway	A-					
Vestas Wind Systems A/S	Denmark	С	С				
Villeroy & Boch AG	Germany	C-					
Vinci	France	В	B-				
Wacker Neuson SE	Germany	D					
Wärtsilä Corporation	Finland	В					
WashTec AG	Germany	AQ-L					
Weckerle	Germany	В					
Yit Oyj	Finland	С					
	Germany	D					
ADVA Optical Networking SE	Germany	D					
AIXTRON SE	Germany	D					
Alten							
Altran Technologies	France	В					
7 III ali Teerii lologies	France	B AQ-L					
Amadeus IT Group, S.A.	France	AQ-L					
Amadeus IT Group, S.A. ams AG	France Spain	AQ-L A-					
Amadeus IT Group, S.A. ams AG Ascom Holding AG	France Spain Austria	AQ-L A- C	C				
Amadeus IT Group, S.A. ams AG Ascom Holding AG ASM International ASML Holding	France Spain Austria Switzerland	AQ-L A- C D	C				
Amadeus IT Group, S.A. ams AG Ascom Holding AG ASM International	France Spain Austria Switzerland Netherlands	AQ-L A- C D C					
Amadeus IT Group, S.A. ams AG Ascom Holding AG ASM International ASML Holding AT&S Austria Technologie & Systemtechnik AG	France Spain Austria Switzerland Netherlands Netherlands	AQ-L A- C D C	С				
Amadeus IT Group, S.A. ams AG Ascom Holding AG ASM International ASML Holding AT&S Austria Technologie & Systemtechnik AG Atea ASA	France Spain Austria Switzerland Netherlands Netherlands Austria	AQ-L A- C D C D C	С				
Amadeus IT Group, S.A. ams AG Ascom Holding AG ASM International ASML Holding AT&S Austria Technologie & Systemtechnik AG Atea ASA Atos SE	France Spain Austria Switzerland Netherlands Netherlands Austria Norway	AQ-L A- C D C D C	С				
Amadeus IT Group, S.A. ams AG Ascom Holding AG ASM International ASML Holding AT&S Austria Technologie &	France Spain Austria Switzerland Netherlands Netherlands Austria Norway France	AQ-L A- C D C D C B A	С				
Amadeus IT Group, S.A. ams AG Ascom Holding AG ASM International ASML Holding AT&S Austria Technologie & Systemtechnik AG Atea ASA Atos SE Barco NV	France Spain Austria Switzerland Netherlands Netherlands Austria Norway France Belgium	AQ-L A- C D C D C B A C	С				
Amadeus IT Group, S.A. ams AG Ascom Holding AG ASM International ASML Holding AT&S Austria Technologie & Systemtechnik AG Atea ASA Atos SE Barco NV Basware Oyj BE Semiconductor Industries N.V	France Spain Austria Switzerland Netherlands Netherlands Austria Norway France Belgium Finland	AQ-L A- C D C D C B A C C	С				
Amadeus IT Group, S.A. ams AG Ascom Holding AG ASM International ASML Holding AT&S Austria Technologie & Systemtechnik AG Atea ASA Atos SE Barco NV Basware Oyj	France Spain Austria Switzerland Netherlands Netherlands Austria Norway France Belgium Finland Netherlands	AQ-L A- C D C D C B A C C C	С				















Cattle







Cattle			
Products	Palm Oil	Soy	Timber

				Products	Pallii Oli	Suy	HIIIDE
Materials							
ARKEMA	France	A–	В				
Arkhangelsk Pulp and Paper Mill	Russia	С					
Aurubis AG	Germany	В					
BASF SE	Germany	A -	Α				
Bekaert NV	Belgium	D					
BillerudKorsnäs	Sweden	A-	В				В
Boliden Group	Sweden	A-					
Borregaard ASA	Norway	В					
Boryszew MAFLOW	Poland	AQ-L					
Cementir Holding SpA	Italy	D					
Cementos Portland Valderrivas	Spain	SA					
Chr. Hansen Holding A/S	Denmark	С					
Clariant AG	Switzerland	В	В				
Evonik Industries AG	Germany	A-	В				
FIRMENICH SA	Germany		Α		A-		
Givaudan SA	Switzerland	А	A-				
Glencore plc	Switzerland	В	A-			В	
HeidelbergCement AG	Germany	A-	A-				
Hexpol AB	Sweden	С					
Holmen	Sweden	В					A-
Huhtamäki Oyj	Finland	С					
Imerys	France	В					
Italcementi	Italy	SA					
Kemira Corporation	Finland	A-					
Koninklijke DSM	Netherlands	Α	Α				
LafargeHolcim Ltd	Switzerland	A-					
LANXESS AG	Germany	Α					
Linde AG	Germany	A-	В				
Lundin Mining Corporation	Canada	С					
Luossavaara-Kiirunavaara AB	Sweden	AQ-L					
Mayr-Melnhof Karton Aktiengesellschaft	Austria	D					С
Metsä Board	Finland	Α	Α				A -
Miquel Y Costas	Spain	В	В				
Norsk Hydro	Norway	С	В				
Novozymes A/S	Denmark	A-	С				







Cattle







Cattle
Products Palm Oil Soy Timbe

				Products	Palm Oil	Soy	Timbe
Materials							
Nyrstar NV	Belgium	С					
Outokumpu Oyj	Finland	В					
Polymetal	Russia	D					
PSB Industries SA	France	D-					
Recylex SA	France	D					
Resilux	Belgium	D					
Saint-Gobain Oberland AG	Germany	SA					
Salzgitter AG	Germany	В					
Schmolz+Bickenbach AG	Switzerland	AQ-L					
Sika Group AG	Switzerland	С	D				
Solvay S.A.	Belgium	В	В		В		
SSAB	Sweden	С					
Stora Enso Oyj	Finland	A-					
Symrise AG	Germany	Α	Α		A-		Α-
Syngenta AG	Switzerland	В	В				
Synthos S.A.	Poland	D					
TETRA PAK	Sweden						Α
The NAVIGATOR Company	Portugal	AQ-L					
thyssenkrupp AG	Germany	Α	B-				
Umicore	Belgium	AQ-L	AQ-L				
United Co RUSAL PLC	Russia	С					
UPM-Kymmene Corporation	Finland	A-	Α				Α
Uralkali PJSC	Russia	D					
Voestalpine AG	Austria	С	В				
Wacker Chemie AG	Germany	В					
Yara International ASA	Norway	С	В				
Zignago Vetro SpA	Italy	В					













Cattle			
Products	Palm Oil	Soy	Timber

			TTOUGOLS	r aiiii Oii	Soy	Tillibei
Telecommunication Services						
AFK Sistema JFSC	Russia	D-				
Cellnex Telecom SA	Spain	В				
Deutsche Telekom AG	Germany	Α				
DNA Ltd	Finland	В				
Drillisch AG	Germany	D-				
Elisa Oyj	Finland	Α				
Euskaltel SA	Spain	С				
Hellenic Telecommunication Organisation SA	Greece	В				
Koninklijke KPN NV (Royal KPN)	Netherlands	Α				
Magyar Telekom Nyrt.	Hungary	С				
Millicom International Cellular SA	Sweden	С				
Orange	France	A-				
Orange Belgium	Belgium	SA				
Orange Polska SA	Poland	SA				
Proximus	Belgium	Α				
Rostelecom	Russia	D				
Swisscom	Switzerland	Α				
TDC A/S	Denmark	D				
Telecom Italia	Italy	В				
Telefonica	Spain	Α				
Telefonica Deutschland Holding AG	Germany	SA				
Telekom Austria AG	Austria	В				
Telenor Group	Norway	A-				
Telia Company AB	Sweden	В				
Telia Lietuva AB	Lithuania	SA				

Country Company















Cattle			
Products	Palm Oil	Soy	Timber

Utilities				
A2A	Italy	В	A-	
ACCIONA S.A.	Spain	Α	Α	
ACEA SpA	Italy	A-		
E.ON SE	Germany	A-	AQ-L	
EDF	France	A-	В	
EDP - Energias de Portugal S.A.	Portugal	A-		
EDP Renováveis SA	Spain	SA	SA	
Elia System Operator	Belgium	С		
ELTEL	Finland	D		
ENAGAS	Spain	A-	B-	
EnBW Energie Baden-Württemberg AG	Germany	A-		
Endesa	Spain	A -	Α	
Eneco Groep	Netherlands	С		
Enel Green Power SpA	Italy	SA	SA	
ENEL SpA	Italy	Α	A-	
ENERGA SA	Poland	D		
ENGIE	France	A-	A-	
ENTEGA AG	Germany	В		
ERG S.p.A	Italy	A-		
EVN AG	Austria	С		
Fortum Oyj	Finland	A-		
Gas Natural SDG SA	Spain	A-	A-	
Hera	Italy	A-		
Iberdrola SA	Spain	A-	В	В
Innogy SE	Germany	SA	SA	
INTER RAO UES OAO	Russia	D-		
Iren SpA	Italy	Α		
Italgas	Italy	A-		
Krasnoyarskaya GES OAO	Russia	C-		
Landsvirkjun	Iceland	С		
MVV Energie AG	Germany	A-		
Ørsted	Denmark	С		
Public Power Corporation SA	Greece	D-		
Red Eléctrica S.A.U	Spain	Α		
REN – Redes Energéticas Nacionais	Portugal	В		

Country Company













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Cattle			
Products	Palm Oil	Soy	Timber

					00,	
Russia	D					
Germany	В	B-				
Italy	Α	Α-				
France	Α					
Italy	С					
Sweden	A-					
France	A-	A-				
Austria	В					
Germany	AQ-L					
	Germany Italy France Italy Sweden France Austria	Germany B Italy A France A Italy C Sweden A- France A- Austria B	Germany B B- Italy A A- France A Italy C Sweden A- France A- Austria B B	Russia D Germany B B- Italy A A- France A Italy C Sweden A- France A- A- Austria B	Germany B B- Italy A A- France A Italy C Sweden A- France A- Austria B B	Russia D Germany B B- Italy A A- France A Italy C Sweden A- France A- Austria B

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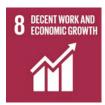
































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