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July 2019 / Responsible Investing

German Corporates & Sustainability

Corporates are acting, but more and faster action is required

Introduction

German corporates, and particularly high carbon-emitting companies, are faced with significant risks and opportunities when it comes to sustainability. The re-pricing of some German utility and car company share prices, in part due to the spread of clean technologies and regulations, are a telling sign of these risks. However, research[1] concludes that it is possible for major industrial sectors to reach net-zero emissions by 2050 with the right policy framework and investor support.

Germany also lies at the heart of some of the technologies leading the fourth industrial revolution but while Germany has long been a leader in renewable energy, more recently it has been slipping down global league tables[2]. Maintaining the country's leadership in Europe needs to be safeguarded.

German corporates are also receiving more shareholder resolutions and questions as investors add Environmental, Social and Governance (ESG) factors into their investment strategy. Companies therefore need to understand the increasing array of metrics they are being measured against, particularly as they relate to climate and the Sustainable Development Goals (SDGs).

Financial regulators and the EU's Sustainable Finance Action Plan are also moving sustainability deep into the core activities of companies and financial institutions. For example, the Action Plan will require pension funds to ask members for their ESG preferences and to incorporate ESG into their investments.

While some German corporates have strong sustainability credentials, many are not yet integrating ESG into their employee pension schemes. Doing so could have the added benefit of helping to retain and attract employees and match societal expectations.

Another important focus of the EU Action Plan centres around disclosure. This is essential as a 2018 study published by DWS and the University of Hamburg reveals ESG disclosure has the weakest correlation to financial performance[3].

With the EU Commission having updated guidance to member states on the EU Non-Financial Disclosure Directive in July 2019, we expect that the disclosure requirements on companies will continue to expand. Disclosure requirements will cover both the risks and opportunities of ESG issues and climate change on a company and also how a company has positive and negative impacts on society across a range of ESG issues particularly climate change.

Improved disclosure will be accompanied by efforts to ensure climate friendly lobbying practices and business model changes whereby executive compensation is aligned to corporate sustainability goals.

At DWS, we continue to deepen the incorporation of ESG factors into decision-making and into our investee engagement, building on our long track-record. We all have our role to play, and Germany and Europe should step up together.

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1 Energy Transitions Commission Nov 2018
2 BNEF January 2019
3 DWS-Global Research Institute Whitepaper (September 2018). Digging Deeper into the ESG-Corporate Financial Performance Relationship

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The megatrends driving sustainability

The time has come

Whatever you call it, ESG, responsible, sustainable or ethical investing has been a feature of financial markets for over a century. However, it is arguably only in the last five years that the momentum behind ESG investing has become a force to be reckoned with.

More than 2,200+ asset managers and asset owners with more than USD82 trillion in assets under management are now signatories to the Principles for Responsible Investing (PRI), a set of six voluntary principles for incorporating ESG issues into investment practice.

Financial benefits

One of the critical drivers of this trend is the growing body of research identifying the financial benefits of ESG investing. German academics and market practitioners have played an important role in this regard. Indeed at the PRI-in-Person conference in Berlin in September 2017, the Board Chair of the PRI Martin Skancke stated "*If there still should be doubts about the positive relationship between ESG and financial performance, I point investors to the academic findings of DWS and the University of Hamburg"*.

This DWS/University of Hamburg 2015 white paper[4] found that when examining more than 2,250 academic studies published on the link between ESG and corporate financial performance since the early 1970s, less than 10% of studies finding a negative relationship with the rest providing a positive or neutral view. This report was then extended in 2018 to reveal, among other things, how corporate reputation has the strongest correlation to financial performance.

Financial policies and regulations

Research has been accompanied by important public policy initiatives backed up by regulations. The EU Sustainable Finance Action Plan's ten priorities supports the EU's efforts to meet its climate and energy commitments under the Paris Agreement[5] by accelerating financial institutions integration of sustainability. As well as helping to manage risks around climate change, the plan also encourages capital flows into areas that promote the United Nations' Sustainable Development Goals (SDGs). As we discuss later, the Action Plan also moves sustainability deep into the core activities of financial institutions, such as banks, pension funds, insurers, asset managers and private banks, and most importantly into the companies in which they invest.

Fiduciary duty

In 2005, the law firm Freshfields Bruckhaus Deringer was commissioned to examine whether fiduciary duty is a legitimate barrier to investors integrating ESG issues into their investment processes. After an international review, the law firm concluded that integrating ESG is "clearly permissible and is arguably required". Since then, responsible investing has seen significant progress, but, many investors have yet to fully integrate ESG into their investment decisions. In 2015, PRI and other financial industry associations started the 'Fiduciary Duty in the 21st Century' project to end the debate regarding whether fiduciary duty is a barrier. Fiduciary duty is not the obstacle that it is commonly assumed to be, although fiduciary duty is often presented as an excuse for not taking action.

With the support of the Generation Foundation, roadmaps were published in more than 10 countries, including Germany, on how policies regarding investor duties should be updated[6]. This effort contributed to the EU Sustainable Finance Action Plan's prioritisation of the reform of the definition of fiduciary duty.

In March 2019, the European Council and the European Parliament reached agreement on a new regulation for sustainable investment disclosure. The regulation sets out how financial market participants and financial advisors must integrate ESG risks and opportunities in their processes, as part of their duty to act in the best interest of clients. The use of the word "must" removes any ambiguity about fiduciary duty and represents a major financial regulation being linked to global sustainability objectives such as the SDGs and the Paris Agreement.

[4] DWS-Global Research Institute Whitepaper (2015). ESG and corporate financial performance: Mapping the global landscape
[5] DWS, January 2019. The EU Sustainable Finance Action Plan
[6] www.fiduciaryduty21.org

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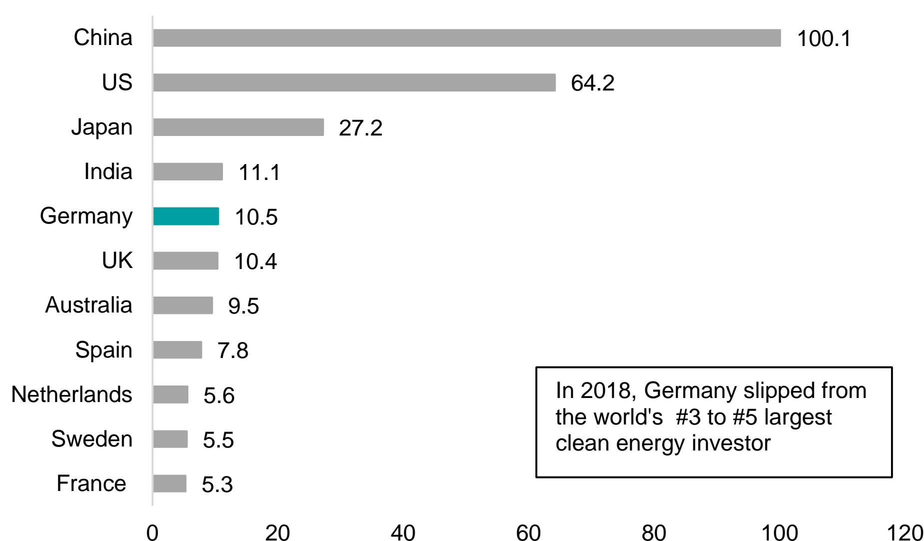
The regulation also aims to eliminate greenwashing and sets uniform rules for how financial market participants should inform end-investors and advisors about their compliance with the integration of ESG risks and opportunities and the disclosure of adverse ESG impacts. The regulation will be applied in the same manner by all European financial Supervisory Authorities and will cover investment funds, insurance based investment products, private and occupational pensions, individual portfolio management; and both insurance and investment advice[7].

Disruptive technologies

All of this is happening at a time where a new industrial revolution is taking hold. This is being fuelled by technologies encompassing digitalization, artificial intelligence, automation, biotechnology, fintech and clean technologies. Germany's Industry 4.0 leads the way in driving digitisation and the interconnection of products, value chains and business models[8]. The spread of technology also offers exciting opportunities to address both major environmental challenges, such as climate change, and social issues. Clean technologies such as wind, solar and water efficiency (blue tech) and electric vehicles are increasingly viable due to improved cost competitiveness. For example, solar photovoltaic costs have declined by over 80% since 2009[9].

In the clean energy investment stakes, while China reigns supreme as the world's largest investor, Germany is top dog when it comes to clean energy investment in Europe. For the past decade, Germany has consistently been the leading European investor in clean energy technologies with on- and offshore wind dominating investment in the country since the solar boom faded from 2012 onwards[10]. However, policy changes in Germany have contributed to a 32% year on year reduction in clean energy investments in 2018, compared to total EU investment rising 27% over the same period. While this investment delivered a higher level of renewable energy capacity, it also assisted in moving Japan and India ahead of Germany in the clean energy investment country league table, **Figure 1**. Moreover, and despite being one of the strongest international advocates for climate action, Germany will not reach its 2020 emission reduction targets.

FIGURE 1. CLEAN ENERGY INVESTMENT BY COUNTRY IN 2018



Source: Bloomberg New Energy Finance (January 2019). Clean Energy Investment Exceeded $300 billion once again in 2018

[7] European Commission, 7 March 2019. Capital Markets Union: Commission welcomes agreement on sustainable investment disclosure rules
[8] GTAI 2019
[9] Irena, January 2018. Renewable Power Generation Costs in 2017
[10] BNEF January 2018

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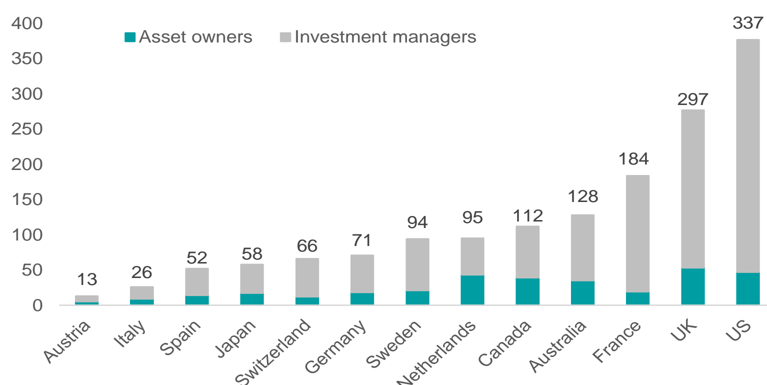
The European ESG Landscape

From an investor standpoint, Germany is eclipsed by her neighbours

The number of asset owner and investment manager signatories to the Principles for Responsible Investment now exceeds 2,200+, encompassing in excess of USD82 trillion of assets under management. Of the signatory base, roughly two-thirds are represented by just seven countries, the US, the UK, France, Australia, Canada, the Netherlands and Sweden as shown in **Figure 2**. Germany ranks seventh, with just 78 signatories, and consequently as Europe's largest economy, Germany pushes significantly below its weight.

In addition, outside of DWS, Allianz Global Investors, Wermuth Asset Management and MPC Renewable Energies, there are currently no other German investors who are members of the European Institutional Investors Group on Climate Change. IIGCC has 170 members with over EUR32 trillion in assets and the group is an influential voice to European and global policy makers, to companies and as an investor network for sharing best practices.

FIGURE 2. PRI SIGNATORIES BY COUNTRY AND TYPE



Source: PRI signatory database (February 2019)

From an asset under management perspective, the picture is even more sobering. Even though Germany sits in the middle of one of the most active regions when it comes to ESG managed assets, the country is a significant laggard when it comes to ESG investing. According to the latest data from local trade associations, Europe, Australia and New Zealand have over 50% of assets under management managed according to ESG principles. Data published at the end of last year for Canada reveal it too has hit this important psychological threshold.

In its latest study published in November 2018, Eurosif data reveal total ESG assets under management across Europe totalled EUR22.6 trillion at the end of 2017. Of this, Germany accounted for little more than 7%. This may reflect the tendency of German savings to be concentrated in fixed income products, rather than listed equity where ESG investment styles typically predominate. Eurosif data identifies that aside from ESG exclusions screens, which in Germany are skewed towards weapons and breaches in labour and human rights, there are very small sums that deploy other ESG investment styles in Germany today, **Figure 3**.

However, one needs to be cautious to claim that Germany is nowhere when it comes to the range of its ESG investment styles. If one considers the classification and measurement techniques of the local industry association covering Germany, Switzerland and Austria we find a slightly less depressing assessment, at least for those not troubled by inconsistent datasets between Eurosif and the Forum Nachhaltige Geldanlagen (FNG). Here we find exclusions still dominant, but, are accompanied by allocations to ESG integration and then smaller allocations to engagement, proxy voting and norms-based screens such as the UN Global Compact. However, even on FNG's dataset, the share of Germany ESG AuM relative to the rest of Europe is still close to 7%.

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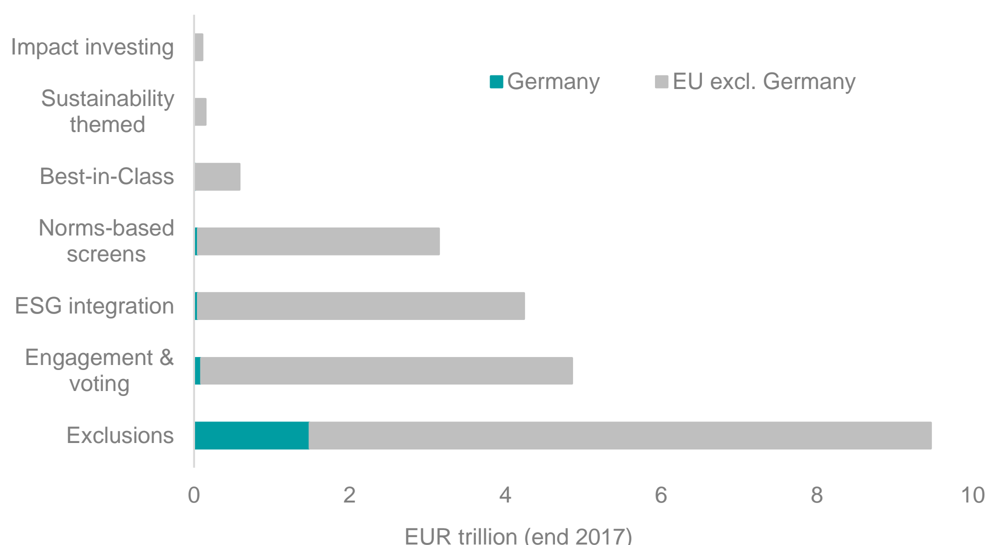
FIGURE 3. ESG INVESTMENT STYLES IN EUROPE



Source: Eurosif SRI 2018 Study (November 2018)

The focus on Engagement and voting activities is also a relatively new trend for German investors. This may be due to the tradition of German investors preferring to attend relevant meetings locally, addressing the issues in person or them preferring one-on-one engagement with German companies which is occurring alongside a low level of disclosure of this activity terms. It may also partly reflect higher fixed income allocations among German investors which has contributed to less of a tradition in terms of shareholder engagement. DWS publishes its corporate governance engagement activities annually. In 2018, this involved over 1,000 letters of engagement, voting in 45 countries in addition to 169 one to one engagements and 16 general meetings attended in person.

Active ownership is one of the main ways that investors can help create a more economically prosperous and sustainable society: using their influence to encourage companies to improve their ESG policies and practices and to shift their business models and CAPEX decisions in favour of sustainability. More institutional investors are engaging with companies and governments on a variety of ESG issues. Part of the reason for this activity is based on research which shows that it is possible to improve corporate financial performance in the medium term through investee engagement[11]. However, we believe that more 'forceful stewardship[12]' is required by more investors in order to address the critical systemic sustainability issues like climate change impacting our society.

The PRI's 2017 German roadmap for Fiduciary Duty in the 21st Century identified that BaFin's strict anti-trust/acting in concert rules mean that investors cannot co-operate when engaging companies. This is despite guidance from the European Securities and Markets Authority which allows investors to discuss matters to raise with a company's board and to make representations to companies about policies, practices or actions. This restriction actually puts German asset managers at a competitive disadvantage as many European pension funds expect to see cooperative engagement. For instance, cooperative engagement is part of the scoring of PRI's annual ESG assessment which is increasingly used by asset owners as an input to selecting asset managers. We hope that incentives and requirements for cooperative, forceful engagement will become an important aspect of the EU's and Germany's sustainable finance plan.

[11] Dimson, Karakaş and Li, Aug 2015. Found that engagement can show a positive return for companies which made changes following an investor engagement. The academics studied 613 U.S. companies engaged by a U.S. asset manager between 1999 and 2009

[12] This term was coined by Dr. Raj Thamotheram, former head of ESG at a major UK pension fund and at a major asset manager. https://preventablesurprises.com/forceful-stewardship/

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Sustainability and German Corporates

How German corporates are in the front line

German corporates are faced with significant risks and opportunities when it comes to sustainability and climate. The Paris climate agreement provides an important framework with significant implications since the German economy has a large number of high carbon industries. Indeed, many industries critical to the German economy, such as autos, chemicals, steel, and utilities will need to adjust significantly in order to be aligned to the objectives of the Paris climate agreement.

The industrial challenge and opportunity

The Energy Transitions Commission[13] assessed the possibilities of drastically reducing emissions from 'difficult to abate' sectors including trucking, shipping, aviation, steel, cement and plastics. These sectors represent 40% of carbon emissions today, but, could represent 60% by 2040 as sectors like electricity make progress in reducing emissions and as demand for mobility and materials grows. It was concluded that reaching net-zero emissions from these sectors by 2050 in developed countries and 2060 in developing countries was technically and financially possible with technologies that already exist. However, several technologies still need further investment to reach commercial readiness. It is possible to improve energy and material efficiency and recycling and by limiting demand growth for carbon intensive transport through improved logistics efficiency and shifting transportation modes. Such a transition would only have a minor impact on the cost of end consumer products.

This transformation is already underway. For example, electric vehicles pose significant disruption risk to traditional auto makers, the oil industry and both sectors' extensive supply chains. More and more countries are introducing bans on the sale of petrol and diesel cars, in some instances as soon as 2030. The re-pricing in sectors is captured by the 25 largest auto manufacturers making up just 20% of the market cap of the world's 15 largest tech companies today compared to 60% eight years ago[14]. The Volkswagen dieselgate scandal in 2015 was also a set of extraordinary steps one company took in its attempts to circumvent tightening global emission standards and preserve market share. After a very strong political, regulatory, investor and consumer backlash, it appears that Volkswagen and other companies are starting to shift their businesses towards a stronger focus on electric vehicles.

Investor scrutiny

Companies in Germany and around the world are now under increased scrutiny and pressure from the investment community. This is not just confined to more active shareholder resolutions, but, more and more asset owners and asset managers are assessing their investments through an ESG lens. This means corporates need to understand the increasing array of metrics they are being measured against. One of the most popular frameworks to have appeared in recent years comes in the form of the United Nations' Sustainable Development Goals (SDGs). Current approaches are estimating companies' revenue linked to products and services which could in some way support progress towards the SDGs. Ultimately this should shift towards an assessment of profits from different business activities and an assessment of intentionality – is the company truly supporting progress towards these Global Goals or just providing products and services linked to a 'regular' market that just happens to have some links to environmental or health issues.

From an investment standpoint, almost forensic analysis is now applied to the universe of investible securities – though improved and more harmonised disclosure is still necessary. Investors increasingly are demanding more ESG-related information. More than 300 investors with USD33 trillion in assets committed to the Climate Action 100+ initiative, including DWS, are aiming to ensure the world's largest corporate emitters of greenhouse gases take appropriate action. Investor groups supporting this initiative have also published a series of investor expectations for sectors such as steel, oil and gas, automotive, utilities, mining and well as expectations on corporate lobbying of governments on climate policies[15]. Announcements from Shell, BP, Rio Tinto and Glencore illustrate that companies are making changes in response to investor expectations[16].

[13] ETC November 2018 www.energy-transitions.org
[14] KPMG, January 2018. The changing landscape of disruptive technologies
[15] IIGCC 2015-2019 www.iigcc.org/publications/category/investor-guides
[16] Climate Action 100+ March 2019 www.climateaction100.org

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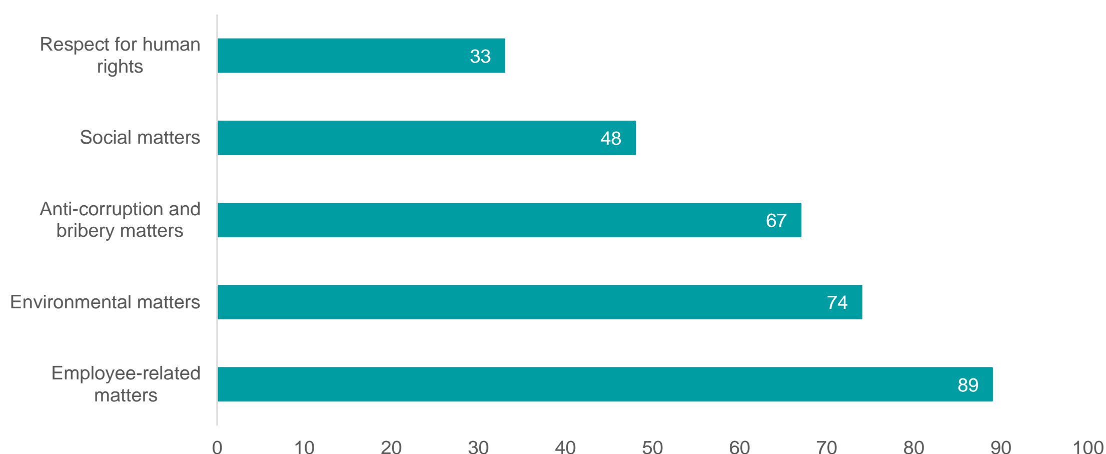
On the flip side, investors are also seeking out the investment opportunities around companies that are generating an increasing share of revenues that are aligned to the SDGs. Typically beneficiaries of these investment flows are in the areas of alternative energy, energy efficiency and healthcare. Germany can claim to be at the forefront of some of these leading technologies. At DWS, we use external data to assess the degree to which a range of benchmark equity indices and their individual underlyings make a meaningful contribution to the SDGs, defined as deriving at least some of their revenues from SDG related products. The result was that of the major benchmark equity indices, only a third of the underlying companies make a positive contribution on this metric. If German corporates want to ensure they are relevant from an ESG perspective, one of the initial steps corporates can take are in steps in to produce more robust and relevant ESG information, including disclosing revenue from products and services related to the SDGs.

Progress of the German CSR Directive Implementation Act

Germany's Corporate Social Responsibility (CSR) Directive Implementation Act came into force in April 2017 and transposed the EU Directive on the disclosure of non-financial and diversity information into German law. It covers companies, banks and insurance companies with more than 500 employees and turnover in excess of 40 million euros and consequently captures nearly 490 German companies. The widest coverage in terms of non-financial key performance indicators is in the area of employee-related matters such as occupational safety and employee satisfaction. The least reported indicators were in relation to social matters and human rights which proved particularly challenging from a disclosure perspective. **Figure 4** outlines of the 212 survey respondents, 89% of German corporates reported on employee-related matters, but, only a third on human rights.

FIGURE 4. PERCENTAGE OF GERMAN COMPANY RESPONDENTS REPORTING ON SPECIFIC ESG ISSUES



Source: Econsense, Global Compact Netzwerk Deutschland (October 2018). New momentum for reporting on sustainability?

Disclosure, financial performance and climate risk/opportunity

One of the most troubling findings of a 2018 research paper[17] published by DWS and the University of Hamburg was that ESG disclosure has the weakest correlation to financial performance. It hypothesizes how the limited standardization of ESG disclosure practices around the world simply encourages companies to provide beneficial rather than unbiased ESG information. The stringency of ESG disclosure should therefore be strengthened. Of the major regions, European corporates and specifically European large caps are the most advanced in publishing ESG related information. However, given this inconsistent information has little use from a financial performance perspective, efforts are underway to improve the quality and comparability of data. Corporates should be fully aware that more stringent and even mandatory disclosures are coming particularly on climate change.

[17] DWS-Global Research Institue Whitepaper (September 2018). Digging Deepr into the ESG-Corporate Financial Performance Relationship

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In 2015, the G20 asked the Financial Stability Board, chaired by the Bank of England Governor Mark Carney, to assess climate change. At the Paris climate summit later that year, Mr Carney announced that Michael Bloomberg would chair a Task Force for Climate-related Financial Disclosure. The TCFD taskforce included numerous major corporations and financial institutions charged with recommending how issuers and investors should disclose the business risks and opportunities from climate change. The TCFD framework focuses on Governance, Strategy, Risk Management and Metrics/Targets for opportunities and risks form climate change[18].

Numerous voluntary disclosure frameworks including CDP and the PRI as well as mandatory and regulated disclosure rules such as the EU non-financial disclosure directive have or are being amended to incorporate the TCFD's recommendations. As of June 2019, more than 800 companies are TCFD supporters, including DWS. These companies have a combined market capitalisation of over USD8 trillion and financial institutions responsible for assets of nearly USD100 trillion. While this is sizeable, it is still only a portion of all companies. In addition, companies are making variable promises to meet the TCFD's expectations.

In July 2019, EU Commission updtated member state guidance on implementing the EU Non-Financial Disclosure Directive, which includes an expansion of disclosure requirements on companies. Member states are encouraged to incorporate requirements for companies to disclose both the risks and opportunities of ESG issues and climate change (including a focus on physical climate impacts for the first time) on a company as well as how a company has positive and negative impacts on society across a range of ESG issues particularly climate change.

The updating to the guidance on the EU Non-Financial Directive addresses climate-related disclosure. The Directive, which is already an EU law, applies to large companies with more than 500 employees, with some countries applying the rules to companies of 250 or more employees. The nuew guidance goes further than the recommendations of the TCFD. In addition to proposing disclosures examining how the performance of a company is likely to be affected by the physical effects of climate change and the transition to a low carbon economy, it also includes how a company itself impacts climate change.

We anticipate and recommend that such disclosure requirements become increasingly mandatory over time, not only for corporations but also for the entire range of financial institutions. In certain instances this is about to begin. For example, as of next year investors who are signatories to the PRI will face mandatory reporting using aspects of the TCFD framework.

Corporates demonstrating environmental sustainability

We expect investors will also increasingly assess companies on their sustainability issues and their resilience particularly as it relates to climate change. We believe a 'Resilient Companies and supply chains' initiative would be helpful. Over the last several years, the 100 Resilience Cities initiative has been helping cities around the world create resilience strategies. At a corporate level, more and more companies are signing up to the RE100 initiative which sets a public goal for major companies to source 100% of their energy through renewable electricity.

Just as the Anglo Saxons lead on the number of PRI signatories, the RE100 initiative is also dominated by companies headquartered in the US and UK, which combined make up just over 50% of RE100 corporate members, **Figure 5**. In contrast, Germany lags but numbers have been creeping higher recently. This should be encouraged not least since research shows that RE100 companies are typically leaders in their respective sectors[19]. Indeed we need to create a badge of honour that is valued by investors, banks, rating agencies and by companies themselves. Sector based disclosure protocols would be one element of a Resilient Companies initiative, but, would also need to include how companies are helping protect their workers and local communities particularly as it relates to climate change.

[18] TCFD February 2019

[19] RE100, The Climate Group, CDP (September 2018). Making Business Sense: How RE100 companies have an edge on their peers

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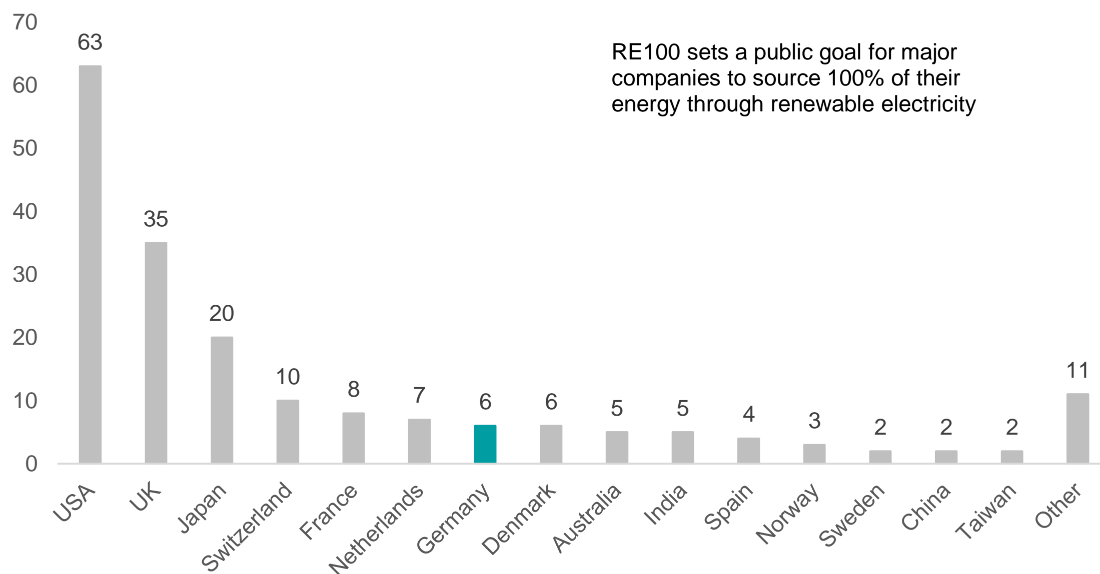
FIGURE 5. RE100 MEMERBSHIP BY REGION OF HEADQUARTERS



Source: The Climate Group (July 2019).

Corporate pension funds could aim to match their company's sustainability goals with ESG

Pension funds of German corporates will also find that their activities will come under the ESG microscope. Many German corporates demonstrate strong sustainability credentials in business practices, for example by reducing energy consumption and greenhouse gas emissions and using renewable energy sources where available. However, incorporating ESG/climate change as a focus for a company's own pension fund is the exception rather than the rule. For instance, of the 2,200+ PRI signatories to the Principles for Responsible Investment, less than 50 are corporate pension funds[20]. We expect the next few years will see corporations facing increasing pressure/encouragement from employees, NGOs and investors to introduce ESG practises into their employee pension schemes. An additional drive is the EU's Sustainable Finance Action Plan which will require pension funds to ask members for their ESG preferences and to incorporate ESG into their investments.

In June 2018, the World Business Council on Sustainable Development (WBCSD) representing almost 200 major corporations who are sustainability leaders established the "Aligning Retirement Assets" initiative. Combined these corporate pensions have USD1 trillion in assets and have set an aspirational goal of 1% of corporate retirement assets, or USD10 billion, to be invested in ESG-themed funds by 2020. From a geographical perspective, 47% of WBCSD members are European, including BASF, Bayer, BMW, Daimler and VW. After Europe, Asia and North America constitute 24% and 21% of WBCSD members respectively.

An ESG investment approach to a company's pension scheme is likely to give such companies an edge since it is tapping into the increasing appeal of employees who want ESG integrated into their retirement plans. Indeed ESG preferences are particularly popular among women and millennials, the latter of whom will constitute 75% of the workforce in western economies by 2025[21].

More pension funds that focus on responsible investing and active ownership will also help to speed up society's shift towards sustainability.

[20] UNGC, PRI. Jan 2017. "Aligning values: why corporate pension plans should mirror their sponsors"
[21] The Brookings Institution, May 2014

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Conclusion

German corporates are faced with significant risks and opportunities when it comes to sustainability and climate. The Paris climate agreement presents significant implications for many industries critical to the German economy, such as autos, chemicals, steel, and utilities. These sectors will need to adjust significantly in order to be aligned to the objectives of the Paris climate agreement.

At a strategic level, German corporates should watch the leadership being shown by their US counterparts signing up to the RE100 initiative. This commits members to securing 100% of their energy through renewable sources by a specified date. As of May 2019, only six of the 181 signatories to the RE100 initiative were German (Allianz, Alstria, BayWa, BMW Group, Commerzbank and SAP) compared to roughly 60 US corporate signatories. Increasing German membership in the RE100 club should be encouraged not least since research shows that RE100 companies are typically leaders in their respective sectors.

While Germans are the most concerned about climate change as well as the most pessimistic regarding their confidence in governments taking action across Europe[22], powerful regulatory action is about to take hold through the EU's Sustainable Finance Action Plan. The Action Plan will require pension funds to ask members for their ESG preferences and to incorporate ESG into their investments. While many German corporates demonstrate strong sustainability credentials achieved through ambitious commitments to reduce energy consumption and greenhouse gas emissions, few are incorporating ESG/climate risk into their own company employee pension schemes. Integrating ESG into corporate pension plans will also appeal to a growing cohort of employees who want investment decisions incorporating ESG into their retirement plans.

Another important focus of the EU Action Plan centres around disclosure. With the EU Commission having launched a consultation in February 2019 on amendments to member state guidance on the EU Non-Financial Disclosure Directive, we expect that the disclosure requirements on companies will continue to expand. Disclosure requirements will cover both the risks and opportunities of ESG issues and climate change on a company and also how a company has positive and negative impacts on society across a range of ESG issues particularly climate change. A more robust ESG disclosure environment is vital given the poor levels of ESG-related information, particularly around climate risks.

[22] NatCen, December 2017. Climate concern and pessimism: examining public attitudes across Europe

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