Interdisciplinary Journal of Economics and Business Law, 2022, Vol 11, Special Issue , pp. 1-82

Special Report 2022: ESG moving forward: ESG integration in the City of London, South Africa, EU and CEE countries (The Second Report)

Ruth Taplin, *Professor and Director, Centre for Japanese and East Asian Studies, London UK; Editor, Interdisciplinary Journal of Economics and Business Law*

Neels Kilian, *Associate Professor, Law Faculty, University of the North West, South Africa*

Acknowledgements: We are most grateful to the Konrad Adenauer Stiftung NPC for their generous support of this project.

PART ONE

Overview

Following on from our first ESG report we present our second report, which assesses the progress of ESG following significant events of COP26 and 27, Covid-19 and the war in Ukraine. Adherence to ESG principles has become stricter but the debate concerning the success of asset managers who are investing according to ESG principles when allocating pensions funds to companies has widened and become more open to debates concerning the nature of ESG. Notwithstanding, regulations have become stricter and more clearly defined since 2020/2021 when all asset managers and companies appeared to be rushing to be associated with ESG initiatives. This second report has found serious scrutiny of companies claiming to be ESG compliant by both regulators and stakeholders. It is now deemed unacceptable to be compliant in one of the environmental, social and governance (ESG) aspects but not in all three, as it generally agreed they are integrally linked.

The spectrum of thought concerning the success of the integration of ESG principles has widened with extreme views but as usual the most accurate perspectives lie somewhere in the middle. As a framework for this, the second ESG Report, outlines the varying opinions and thoughts concerning ESG integration in real terms below. Additionally, we assess how ESG is moving slowly towards a global taxonomy firstly through global financial institutions with continued pressure from activists, stakeholders, asset managers and pension fund trustees.

ESG RIP?

Anne Simpson, a former proponent of ESG, who is now Global Head of Sustainability at Franklin Templeton, was quoted as declaring at a conference in New York, "I think it's time for RIP ESG". She later qualified this surprising statement, stating that the war in Ukraine, energy security and poverty reduction have become just as important as box ticking in relation to carbon emissions. She called for a re-evaluation of the definition of ESG and for a more human-centred approach which is not RIP but a call for clarifying what we mean by ESG and how to move forward in adopting and integrating ESG principles.

In the first ESG Report we argued that ESG stands for principled environmental, social and governance financial investing (especially pension funds). These aspects are inextricably linked. However, box ticking regarding various metrics was seen as an inadequate way in which to assess such social, economic, and political processes. Regulation is key to encouraging adherence to ESG principles. This has progressed and has not been diminished by the economy of scale of the company or the extent of the activism of stakeholders. A good example of this is Tesla's scoring; in 2021 it produced three-quarters of all electric cars in the US, while the minerals it uses to produce its cars derive from mines that ruin the environment and are operated under conditions that are claimed to be unfair to labour. It is also alleged that working conditions in Tesla factories are poor which its CEO Elon Musk denies. It scored so badly on the social part of ESG that the S&P 500 ratings agency removed it from its lists (Gillian Tett, *Financial Times* 2022 :6). It was the social treatment of Tesla's employees that resulted in its removal. It follows that the adequate social treatment of employees is integrally linked to good governance practices and is demanded by employees and stakeholders alike.

It appears that the next phase for ESG is a thorough investigation of companies that make exaggerated claims concerning their green, social and governance practices. This can only have positive outcomes for asset managers such as pension fund managers, assisting in understanding which companies have the best ESG performance and practice by looking at ratings and regulator lists such as the S&P mentioned above, the US SEC and the UK Financial Reporting Council (FRC). We will cover the pursuit of weeding out companies that exaggerate or greenwash their ESG principles. The £26 billion Fundsmith Equity fund, for example, had been classified as having met the European Union rules for ESG. Yet in February 2022, the Morningstar Ratings Agency withdrew Fundsmith's and another 1600 other funds, with a total value of £855 billion, status as ethical funds (David Brenchley, *The Times,* 2022). Therefore, pension fund/asset managers are also under scrutiny and will be excluded if they do not uphold ESG principles.

In the City of London, European Union (EU) and USA, government regulators are demanding that pension funds meet, for example, the environmental targets of ESG. In Britain, in 2021, Therese Coffey, the work and pensions secretary, announced plans to "name and shame" those pension funds that would not divest from polluting industries such as fossil fuels. Pension schemes would be required to report on their portfolios and how closely they align with targets to mitigate climate change in the Paris Agreement (George Grylls, *The Times,* 2021).

There is no doubt that ESG has become a part of risk management considerations, moving on in dealing with activist disapproval to fears of reputational risk and its attendant loss for investors, clients, and employees. Perhaps one of the clearest ways to ascertain the true intentions of fund/asset managers is with a genuine ESG statement that outlines the challenges for stricter adherence to ESG principles while admitting to errors rather than the production of an exaggerated public relations exercise (Sam Haddad, *The Times,* 2022).

Increase in ESG financial investing

As noted in this second ESG report, asset fund management is increasing in ESG compliant companies rather than diminishing. The emphasis now does not revolve around how loudly companies proclaim their ESG credentials but on the more subtle processes of genuine integration of ESG principles in a mature way into the overall governance practices of a company. Methods for assessing this process accurately are continuing to be explored, as are the regulatory processes, be they government, independent bodies, or internal company mechanisms.

BlackRock Asset Management, the world's largest fund manager company, overseeing over US$ trillion in funds, has not stopped its active support of ESG adherence. Larry Fink, who is the founder, chief executive, and chairman of BlackRock, has stated that all companies should become net zero by 2050 (Robert Colvile, *The Times,*2022). Others point to the problem of "greenwashing" as mentioned in the first ESG Report, which is the process of producing all the appearances of supporting green ecosystem targets while delivering very little except, for example, buying a tract of agricultural land to plant carbon eating trees which may only happen on paper, or offering vastly overrated green bonds which could lead to a dotcom bubble bursting (Philip Aldrick, *The Times,* 2021). Tariq Fancy, a former sustainability expert at BlackRock Asset Management, has claimed that ESG has stopped governments from being pressured to deal with climate change mitigation and does not channel investment into green projects as claimed.

Stuart Kirk, the former head of sustainable investments at HSBC wealth division, has proposed that the risks to investors of climate change have been exaggerated by proponents of ESG and bankers such as Mark Carney, the former head of the Bank of England. He was subsequently asked to leave HSBC after causing controversy that could have damaged HSBC's reputation (Tett 2022; Cooper 2022).

Pros and cons of ESG investment

Current attitudes towards ESG investing and how successfully it has been integrated into asset management choices for investment continues to be debated. This is heathy, as questioning such integration is necessary for the whole process to move forward and progress.

Tariq Fancy (Cooper, *The Times,* 2022), former chief investment officer for sustainable investing at Black Rock and founder of the Rumie Initiative, an open, non-profit technological educational project, has questioned whether ESG data shows increased profits and performance or whether it is largely marketing driven. In this ESG Second Report we give concrete examples of real ESG practices in companies. Fancy also points out that the ESG ratings awarded by different ratings agencies vary so widely as to make them subject to manipulation through selective quotations according to vested interests. While this does occur, it is the nascent process of building well-defined standards over time that matters rather than discrepancies and opportunistic selection while a framework for standards is being developed.

Fancy refers to the work of fellow sceptic, Asworth Damodaran, a professor at New York University's Stern School of Business, and argues that being seen as good does not add value to a company and can be detrimental. Yet, shareholders have often been driven by the positive outcomes of investing in funds that show good societal and environmental outcomes. This has been demonstrated by the move towards investing in non-fossil fuel companies by many pension funds and in this report, we point to actual examples of the positive outcomes of companies that have adopted ESG principles.

Fancy further notes that large asset managers have great incentives to claim ESG outperformance as such exaggerations may appeal to the public's growing awareness of corporate environmental and social responsibility. Yet, these same asset managers do not wish to be pressed to say anything directly on the subject. This occurs all too frequently but varies according to fund manager and industry.

Fancy agrees that taking ESG factors into account can improve returns but how this occurs and the results attained need to be communicated better with all the vagaries of such outcomes being made much clearer. This we intend to do in this report.

Fancy does acknowledge that many ESG-related tools, standards, and data are yet to emerge that can be used to expose exaggerated claims to see transparently the actual success stories resulting from good practice.

A different but representative perspective is that given by Mike Fox (Cooper 2022), who is head of UK Sustainable investments at Royal London Asset Management. He makes the insightful point that to view ESG implementation in the short term within a static environment is misplaced. Fox submits that to understand the genuine performance of ESG companies compared to non-ESG-led funds takes at least 10 years which will discount the recurrent cyclical factors such as sector-led crashes, bubbles and, in our estimation, the occasional poor governance that occurs when inept or politically motivated pension fund managers take charge who do not truly understand the nature of ESG principles or tend to engage in greenwashing practices.

Proof of this has been the results analysed by Trustnet which show that in many sustainable ESG principle-led funds with the main Investment Association insurance related sectors, such as UK All Companies and

Mixed Investment, 40 to 85% of shares posted top-quartile performance over one, three, five and 10 years to 31 December 2021.

Fox notes that the implementation of ESG principles is inextricably linked to the competence and commitment of the individual fund manager in charge, which directly affects performance.

ESG factors that can affect returns include any form of reputational damage such as workers being treated poorly, or fossil fuel assets having maintenance costs while not being used during a shift to renewable energy options, or non-legacy renewables contracts that are pushing so many into fuel poverty.

To date there is a dearth of research looking at causal links rather than simply correlations. Fox notes one study by Newcastle University and Kuwait Business School (2020) which found a significant association between a company’s willingness to make voluntary disclosures about carbon emissions and its financial performance. These disclosures are related to those highlighted in our first ESG report such as activities that reduce waste make the most of market opportunities and that this increased productivity as a natural part of sustainable growth.

ESG, like any other fund management principle, can be negatively affected by external factors such as the Covid-19 pandemic and the war in Ukraine as well as political upheaval and recessions such as that of 2008/2009. This does not, however, mean that ESG principles are flawed but that fund managers need to become more aware of how these cycles can affect their ESG investments and performance which will make the adjustment from fossil fuels to renewable energy and the effects of climate change cause to produce a realistic and robust management strategy.

Former US Vice President Al Gore, who was a pioneer of sustainable investing and decarbonisation during his term, and David Blood have written a convincing piece in the 8 November 2022 edition of the *Wall Street Journal*, reminding investors and asset fund managers that they have a fiduciary duty to follow the principles of ESG, including transparency and accountability, genuine support for sustainable environmental goals and social accountability. They argue that all investment strategies demand the most recent and accurate information for making informed decisions that highlight both the risks and opportunities. It is with disbelief that they note that some American politicians are trying to pass legislation to block investors from taking essential information into account. ESG, they argue, is essentially an analytical tool for understanding investor decisions with clarity (Al Gore and David Blood, *Wall Street Journal,* 8 November 2022). Intelligent investors, as Larry Fink, CEO of BlackRock Asset Management noted, are bound to rely on ESG data to make successful, informed decisions.

Marcie Frost, who is CEO of the huge California Public Employees' Retirement System CalPers spoke against at the recent board meeting of the dangers of politicising their $ 443,2 billion pension's plan ESG approach. The US midterms brought to the fore misleading information concerning ESG risk analysis. Frost stressed how climate change mitigation strategies can be integrated successfully into investment strategies. In a climate change report Frost shared with her investment committee she noted that carbon emissions investment in its global equity portfolio had been reduced by more than 30% and in its global fixed-income portfolio by over 50% in the past seven years. The ESG approach of Calpers has produced investment opportunities that includes $19 billion in global equity and about $1 billion of its corporate credit portfolio. Additionally, 51% of its infrastructure portfolio is invested in energy – efficient infrastructure, renewable energy, and sustainably-certified carbon neutral assets. Frost noted that the ESG approach can provide information and data to provide retirement security for 2 million of its members**.** (Arleen Jacobius, *Pensions & Investments*,16 November 2022).

In this second ESG report supported by the Konrad Adenauer Foundation, we submit that ESG provides a valuable framework for a global taxonomy that will guide sustainable investment, allowing investors, trustees, and asset fund managers such as pension fund managers to make transparent informed decisions when investing, as well as deciding which companies genuinely uphold ESG principles that are understood, integrated, and measured in terms of value globally.

ESG progress in the City of London

As outlined in the overview above, ESG has been sliding down the agenda of importance in the City of London temporarily because of inflation concerns, the cost of living, energy price rises, and instability in markets exacerbated by war and politics. These concerns could not be more pronounced with the ill-fated mini budget of the very short term of Prime Minister Truss which exhorted unsupported tax cuts; sending the

GBP into freefall. Since then, a new chancellor has made a complete U-turn in relation to tax cuts and promises of at least one year of energy support until April 2023. Truss, the underperforming prime minister who was forced to resign after 44 days in office has served to obscure the centrality of ESG principles for a positive future for financial markets and the planet. The new Prime Minister Sunak has completely reversed the negative ESG policies of his predecessor and supports COP27 which took place in Egypt between 8 and 11 November 2022. These political changes will be analysed below in this second ESG report and is re-engaging the City of London in relation to adopting ESG principles.

ESG values and socially responsible investment

With companies' profitability being undermined by the loss in value of technology linked stocks it is the socially responsible investments in ESG that are showing resilience with investors in for the long term. It is the strength of shared values that are sustaining ESG investments on the market. It is responsible investors whose convictions related to ESG principles make them less fearful of short-term volatility in the markets and willing to invest for the long term. Commitment to ESG strategies mean that investors are choosing carefully the type of ESG company that has, for example, built in defensive characteristics to mitigate volatility by adopting a more value style of management. This can be seen in the shipping companies that have adopted ESG and which are described below.

The role of financial advisors/asset managers are assisting in the current resurgence of interest in ESG. By speaking with their clients and educating them on possible strategies to further their investment goals and values advisors are driving adoption and a new awareness of ESG. (Leo Almozora, *Manulife Investment Management*,17 November 2022)

A revised definition of ESG moves forward

Stuart Kirk, formerly of HSBC, claims he is in favour of ESG adherence among asset managers and companies and has welcomed the questioning that has arisen. He states that ESG has two fundamental flaws which such questioning can serve to rectify. Kirk points to what he views as a fundamental flaw in the understanding of ESG by two different groups of supporters which regulators have failed to disentangle. One group of ESG supporters, including fund managers such as analysts, portfolio managers and data companies, takes ESG issues into account in relation to the potential risks that influence the value of the returns of an asset. Kirk notes that most portfolios continue to be measured against input indices often by the US company MSCI which analyses the financial statements of 8000 companies globally using metric scorecards. This occurs with no reference to holdings being chosen on an output basis. This means that clients choose portfolios without an understanding of ESG output funds and how the trade-off occurs between actual returns and the social or environmental good the funds are supporting. This is clearly seen in our first ESG report where pension fund managers assess the value of ESG regarding governance issues for example, and how they affect the value of returns/profits. The other group focused on in the first report, is shareholders, especially activist stakeholders, who focus on the ethics of investing their pension money in, for example, those funds that value what is important in relation to green and social issues. The value of this approach lies in, for example, investing in companies that support climate change mitigation for the good it does for the future of the planet.

Conflicting definitions and valuation

These conflicts in understanding are epitomised by Elon Musk's electric car company, Tesla, which was lauded for its green credentials in replacing polluting refined oil-run cars with clean electric ones, and was then removed from regulator/index lists for lack of ESG compliance on the grounds that its labour practices were socially unethical. Therefore, as we argued in the first ESG report, metric-based scorecards are less than accurate for understanding actual adherence to ESG principles. Additionally, as submitted in the first report, in relation to intellectual property its true worth lies in how intangible assets are valued. Kirk argues that it is unfair to claim that some ESG funds are greenwashing because of the unprecise nature of what green is. He raises the following issue: if an oil company, most likely in transition, produces 60% renewables but still has 40% fossil fuel production then are they greenwashing? Should companies in transition, say, to a 100% renewable energy goal, treating their workers well and exercising good governance practices, be viewed as green and working towards sustainability?

Further on in this Part One of the report we look at companies in the City of London, the EU, Eastern European countries (CEE) in particular, that are moving towards ESG implementation while providing good value for their clients who are seeking financially viable returns that also support good outcomes for the environment and their employees through good corporate governance practices. What constitutes 'goodness' may vary extensively and perhaps index rating agencies are not always the best professionals to judge this. Yet, if there is a standardised valuation of what constitutes good practice, for example, the level of carbon emissions allowed, which can serve to reduce carbon to a sustainable climate change mitigation level, then there will be little room for greenwashing. This is because either a company adheres to this universally agreed level of emissions or they do not. If a company misrepresents its carbon emission outputs, then that would be an example of both greenwashing and corruption, and that is when regulators should intervene and fine companies or take them off their ESG compliant lists. Regulators are essential to the process of establishing which companies are ESG compliant as they have the both the data and tools for measurement as the examples of the EU/CEE country case studies show below.

Therefore, those who argue that assessments of ESG should be more nuanced and that the simple labelling of companies as 'good' or 'bad' investors in terms of United Nations Sustainable Development Goals need to look to improving regulation and sustainable ecosystems. In an analysis of 6000 US funds, which used machine learning to identify patterns, a company called Util, a sustainable investment data specialist, suggested it is best to unbundle the constituent parts of ESG because of the different, often conflicting, nature of the concept. Util believes that there is a global trend towards personalisation such that funds which are negative in terms of social or environmental concepts should not be removed from fund portfolios. As one ETF US-listed exchange traded fund, BAD, which focuses on betting, cannabis, drugs, and alcohol, argued through its president and founder, Tommy Mancuso, he is not against ESG but does not think its investors should sacrifice their returns because of any stigma attached to what they are trading (Emma Boyde, *Financial Times*, 31 August 2022). This is a policy of ESG in isolation without reference to a wider context or framework which undermines the integration of ESG principles into practice.

Kirk makes a lucid point when he states that for ESG to succeed there needs to be transparency and honesty by asset managers such as pension fund managers about the actual trade-offs between good returns and doing good for the world. He suggests that both aspects of ESG can succeed if each makes sense on their own terms. To do this, however, valuations of good returns and doing good must be clear and transparent (Stuart Kirk, *The Times*, 3 September 2022; Ruth Taplin, 2016). It is a good start to be honest and transparent concerning ESG company goals but needs to move on from this perspective and work towards standardisation and integration.

Standardisation of ESG principles

The need for standardisation to facilitate the move towards the integration of ESG principles into companies in which pension funds invest may be seen in a new international financial reporting standard, IFRS 32, which attempts to harmonise accounting professions globally to report accurately on the operational impact on carbon emissions. Britain's Association of Chartered Certified Accountants found that many companies would not be seen to comply with IFRS 32. The policy director, Mike Suffield, noted that it may be best to give companies time to adopt the requirements voluntarily before enforcing them as a mandatory standard (Robert Lea, *The Times*,1 September 2022). This approach of initial voluntary transition to ESG adoption is working well in CEE countries.

ESG integration and accountability

In real terms, companies and larger corporations are beginning to integrate more sustainable practices into their business models. Consumer activists continue to be the reason why pension fund managers will choose green sustainable companies with good governance and social practices over those that are not. The need to become both responsible and accountable is becoming an essential aspect of consumer-facing business. Auditing bodies are being requested to partner with companies to certify sustainable practices offering an objective measure for the public to make informed decisions. If some companies do try to engage in greenwashing practices, a certifying audit body will conduct an independent investigation to see if such non-transparent and misleading practices are taking place and when it has evidence will make it public. This means that consumers will be most likely to sever relations with non-compliant companies.

The increased pressure from consumer/investors means that to adhere more deeply to the greater integration of the ESG principles requires levels of collaboration, both internally and externally, that most businesses are not used to. Even more demanding for companies are the pressures from consumer/investors to ensure that their supply chains are practising sustainable ESG. An example from shipping would be that businesses demand that their shippers use reusable, collapsible crate containers and ask clients who receive the goods to reuse the crates as well.

Companies in northern Europe, including Britain, are more likely to be given tax incentives and have cultural motivations to adopt ESG practices. Below, we will provide some case examples. Businesses in emerging markets may be less willing to adopt sustainable practices but this is changing, as argued in the second part of this report in relation to South Africa.

It is often larger corporations that can integrate more sustainable practices into their value chains. This is because large corporations have more room to manoeuvre for change unlike those that operate on very small margins or are business to business. The ability to support ESG integration through visionary leadership is also essential for good governance. The former CEO of the British consumer conglomerate Unilever, Paul Polman, was the main driving force that championed sustainable practices throughout the organisation. Yet, pressure can also come from employees, who demand, for example, that middle management implement necessary social support such as childcare for those employees working unsociable hours.

Millennials and Generation-Z are often the most proactive in demanding sustainable practices such as having vegan options in the company cafeteria or moving away from destructive linear economic practices to a circular economy that can transform waste into a new product, for example plastic or cardboard recycling. Maintaining ESG standards is today one of the top five indicators to investors and shareholders that a company will be relevant and viable in the next decade. This is essential for companies which are concerned with future expansion.

Customer and investor loyalty are essential to the success of companies. In a 2022 Deloitte survey conducted in the UK, the number one business factor that influenced consumer trust in the company was: “Having a transparent, accountable and socially and environmentally responsible supply chain.”

The next two factors were:

“A strong public perception, record and regulation around climate change and sustainability”

“A public commitment and positioning around sustainability and climate change, including net-zero commitments and greenhouse gas reductions” (Deloitte 2022) The remaining factors that encouraged trust in clients/consumers/investors were linked to some aspect of ESG principles. (Richard Pallardy, *The Times,* 7 September 2022)

The growing importance of the social aspect of ESG

While most asset managers and companies, unless they have been living in an uninhabited island near Antarctica, understand and certainly know about the environmental aspect of ESG principles and are trying to integrate these principles into their practice. This is now moving among investors, stakeholders, and consumers towards ensuring that social aspects of ESG are acknowledged with workforces being treated well. However, a good deal more work needs to be, and is being, done to address the gap between environmental and social action. The United Nations’ Sustainable Development Goals sees as a goal for 2030 the need to eradicate poverty. Despite this, 53% of UK FTSE 100 companies did not mention poverty in their annual reports for the period 2019–2020. Part of the reason for this, as was initially the case with the environmental aspect, is that the methodology for measuring poverty is still in its infancy. Before plans for action are formed poverty needs to be defined. Until now, it has been linked only to income such as is outlined by international financial bodies such as the International Monetary Fund (IMF) and the World Bank. Researchers at Oxford University have created a multidimensional poverty index (MPI) which shows that a person or family may have an income but other factors such as family size, location and other factors may keep them in poverty. The MPI has been adopted by the United Nations Development Agency and is available to businesses through a spinout called the Wise Responder. The Index considers factors such as access to education, housing, and healthcare. It should be noted that when three-quarters of the world population in 109 developing regions was measured in 2021, it showed that one in five people were living in multidimensional poverty. This meant that the World Bank estimations of 700 million people living in poverty nearly doubled to 1.3 billion people.

Jamie Coats, CEO, and co-founder of Wise Responder, was not surprised by the findings. From the data collected in Latin America he found that a third of the workforce, especially in the agricultural and beverage industries, lived in multidimensional poverty which impacted adversely their businesses. Coats noted that when companies show they care, this has a positive impact on company brand, and employee morale increases, in turn increasing their loyalty to the company.

Closer to home in the UK, figures from the CIPD 2022 show that one in eight workers live in relative poverty. Other than visiting workers' homes, an executive can assess poverty among their workforce by visiting canteens and asking whether this is the main or only meal of the day. Executives have been surprised by how many of their workers rely on canteen meals. Awareness of such poverty in their midst has encouraged company executives to become aware of multidimensional poverty indices and take social action. Jamie Coats believes that social action against poverty will catch up with green measures related to climate change mitigation and that companies will be able to reassure both investors and consumers that they have shared values based on the decent treatment of their workforce. (Sean Hargrave, *The Times,* 7 September 2022)

Greenwashing and suspect practices

Another issue that has caused temporary doubts concerning the efficacy of ESG standards integration has been greenwashing, which relates to the environmental aspect of ESG and is basically confusing reporting with genuine action. Such practices have been the concern of many doubters as expressed in the above overview. Too often misleading claims or outright untruths about the nature of companies are being promulgated. The most notorious case was that of the German car manufacturer Volkswagen in 2015, which presented its diesel cars as low in carbon emissions when compared to petrol-based cars. An investigation by the US environmental protection agency found that a 'cheat' device had been installed when the diesel cars were being tested and in fact the cars were emitting 40 times the permitted amount of nitrogen oxide. Volkswagen was heavily fined but up to 40% of websites globally continue to make misleading statements concerning their adherence to environmental ESG standards according to international consumer protection and enforcement networks. As assets shift increasingly from the post-war Baby Boomer generation to Millennials and Gen Z, as well as from men to women, these new wealth holders have become a driving force through their spending and investing for sustainable practices and adherence to ESG principles. As mentioned in our first ESG report, until the Covid-19 pandemic, ratings agencies indicated that ESG compliant companies were also showing healthy rates of return. However, when discrepancies arose between metric-based success concerning ESG practice and real action, doubts began to arise as to how ESG principles were measured. This led to many ESG rating agencies making serious attempts to make their measurements more accurate and to root out greenwashing. Meanwhile, ratings agencies are using artificial intelligence (AI) in the form of neurolinguistic programming but this too has its faults as in-house or external advisors are knowledgeable about writing such reports and may be biased. AI is most useful when its original application is being used to rapidly sort through millions of pieces of data and narrowing it down to the most repeated patterns. (Ruth Taplin, 2023)

In the UK, there is a new green technical advisory group which is overseeing the government's delivery of a new green taxonomy which involves a common framework that sets the standard for investments marked as environmentally sustainable. It is time to regulate higher standards of environmental protection which allow companies to internalise the external risks (Emma Woollacott, *The Times*, 7 September 2022).

Committed to renewables but dependent on fossil fuels

The current case of India, one of the biggest users of coal while committing itself to renewables, is a case in point of how the fossil fuel industry is making larger-than-ever profits while claiming it is investing heavily in renewables. Is this truly a transitional stage or will this trend undermine the efficacy of ESG standards?

Gautam Adani, founder and chairman of Adani Group, a multinational industrial company based in Ahmedabad, the capital of Gujarat state, is Asia's richest man. He is also the largest user and importer of coal having recently struck a deal for the Adani coal mines in Australia to open and import coal to fuel his mining, shipping, and renewable energy interests cheaply. He has the support of Prime Minister Narendra Modi who sees coal as the cheapest and most reliable foundation for building the Indian economy and lifting millions out of poverty. As discussed above, this is a laudable goal as poverty is multidimensional this strategy will bring millions of Indians who have no electricity or water in their homes or who live in tents by rivers out of deep poverty. This is in line with the social aspect of ESG, but what happens to the environmental aspect? The governance aspect of ESG is also positive as the Adani Group is a large-scale employer in the shipping, mining, and coal industries. Workers are treated relatively well and are trained in renewable skills for the future. When Adani realised that China was providing solar panels made in

China manufactured at a very inflated cost in relation to Indian prices, he opened a solar panel production factory in Mundra so that India could become reliant on domestically made equipment to expand renewable solar power. India is the fourth largest country globally for solar power generation. The Adani Group also has a large-scale thermal coal-fired power plant in Mundra which is based on thermal coal to create steam which is one of the most polluting, carbon-emitting types of coal. Solar and wind power is cheaper now than any coal-based energy so many ask the question why coal is still being used.

Therefore, the conflict lies in PM Modi pledging support for Gautam Adani because India, the world's third biggest carbon emission polluter, will by 2030 source 50% of its energy from renewables while burning heavily polluting coal in even greater quantities. Adani is the world's largest coal trader especially after he finally succeeded in buying Australia's largest coal mine in Carmichael, Queensland, after having to buy it with seven billion of his own cash.

While the Adani Group spends 80% of its capital expenditure on renewables, the remaining 20% is largely on carbon-emitting coal. Market Forces, an environmental advocacy group in Australia, questioned how the Adani Group could claim to help solve the climate crisis by being part of a transition to clean energy while still building new coal mines and coal-burning power stations. Pablo Brait, a campaigner with Market Forces, called out these claims as absolute greenwashing

(Emily Schmall and Hari Kumar, *The New York Times*, 28 October 2022).

Differing views and action

ESG is in a transitory stage and continues to have vociferous supporters as well as some very loud detractors. We will look at the current ESG debate and most importantly actions taking place in the UK, northern and Eastern Europe. There are many companies that are attracting pension investment based on ESG principles, which are also successfully integrating ESG into their company ecosystems. Europe is in the process of developing an EU taxonomy to transition to the integration of ESG standards more smoothly. There are also many industrial sectors involved.

EU taxonomy green deal

In terms of governance, corporate transparency is at the heart of the European green deal which has introduced several policy measures that intend to make Europe the first climate-neutral continent by 2050. Like the UK's Green Finance Strategy, the EU's sustainable finance initiative supports the green deal by channelling private investment towards a transitory phase in producing a carbon-neutral economy. The EU policies to implement this strategy, provide greater transparency as to what the business and economic activities are that meet EU environmental objectives. Such clarity will be widely welcomed as to date, many investors and pension fund and other asset managers have been confused as to what activities will support environmental criteria for ESG principles. Overall, the UK taxonomy for sustainable activities is designed to create a secure framework for investment and to motivate companies to carry out sustainable practices. One of the main requirements is that European companies with more than 500 employees be compelled to disclose sustainability risks and opportunities.

A related policy of the EU taxonomy is the Corporate Sustainability Reporting Directive which is the first common reporting framework that focuses on non-financial ESG data. The timeline is for 50,000 companies to submit their report on 1 January 2024 covering the 2023 financial year. The EU has six environmental objectives and companies are compelled to contribute to at least one of these without detriment to the other five objectives. The emphasis is on product design and manufacturing as more than 80% of environmental cost and impact occurs during the design phase.

The measuring of carbon emissions has been one of the most difficult activities to standardise and has been the cause of investor confusion as to the actual adherence of companies to ESG standards. Therefore, many manufacturers are adopting the Greenhouse Gas Protocol's Corporate Value Chain Standard (Scope 3) throughout the company and its attendant supply chains. Digital transformation using AI and machine learning can be used by product design and production teams to simulate alternative outcomes to meet key targets on decreasing CO_2 carbon emissions, performance, and cost (*Sustainable Business*, 7 September 2022; also see apriori.com).

Global taxonomy and sector-specific policies

There continue to be defiant anti-ESG voices especially as calls for a global ESG taxonomy increase and the UK and EU consolidate their taxonomies as described above. Shipping as a sector has lagged when it comes to adherence to ESG principles, but as the oldest industry in the world, the maritime industry is an example of a sector embracing the strengths and weaknesses of ESG. Norway, one of the world's major shipping nations, has increasingly felt under acute pressure to reform its maritime industry in keeping with the challenges presented by issues of an ESG nature. At a financial conference sponsored by investment bankers, Pareto Securities, and cited by the Norwegian business daily *Finansavisen*, shipowner Tor Olav Troim stated that he was a "hydrocarbonist" and blamed ESG policy for at least being partly responsible for the global energy crisis. His frustration appeared centred on what he believes are overtaxed and underappreciated shipowners who take risks which they are accountable for. Troim was intent on putting pressure on the very bankers whose remit is to enforce ESG policies at the behest of their investors and stakeholders. Troim's anti-decarbonisation stance was firmly rejected by Sturla Henriksen, who is a past head of the Norwegian Shipowners Association and currently a special ocean advisor at the New York-based United Nations Global Compact. Henriksen told the Norwegian newspaper *Dagens Naeringsliv* that the real source of the global crisis is Russia's invasion of Ukraine and that gas needs to be replaced by other sources. Therefore, any attempt by Troim to defend his anti-decarbonisation stance as better than greenwashing did not seem to impress many of the investment bankers or Norwegian shipowners (Bob Rust, *Trade Winds*, 23 September 2022).

Such arguments by Troim are supported by some heads of investment funds in the UK such as Iain Pyle, head of the UK and European equities division at arbdn. Pyle manages the UK Equity High Income fund and has sector responsibility for energy and banks. His view is that it is better to have active investor engagement in the management of polluting companies rather than pursue divestment policies which he thinks will damage ESG in the long-term. (Laura Miller, *Investment Week,* 18 November 2022)

Integrating ESG into company culture – a maritime example

However, the trend among many companies is to be proactive and move quickly towards ESG implementation and integration. The Maritime industry is often in the forefront of such voluntary shifts towards ESG practice.

Ocean Technologies Group chief creative officer, Raal Harris, noted that ESG is not only a sustainable approach but allows his company to retain highly skilled employees because the principles focus on company culture. According to Mr Harris, data indicates that employees are increasingly choosing companies where they can empathise with the organisation's values which leads to better decision-making and investment in people. ESG should not be seen as another regulatory headache but as a model for shipping companies to shape their organisations, so employees can thrive. Other external benefits are also available such as particular financing packages that are targeted at companies that adopt and implement ESG principles. Investors prefer to be associated with ESG compliant companies which will be the ultimate competitor differentiator (*Tanker Shipping and Trade*, August/September 2022).

ESG integration successes in the EU

The EU region, like the UK, is committed to creating ESG measures that guide action, initially voluntarily but which will soon become legally binding. One of the most important measures is the Corporate Sustainability Reporting Directive (CSRD). This is close to finalisation and will be rolled out in three stages between 2024 and 2026. Financial sustainability is a key policy, directing capital flows into a sustainable economy integrating ESG principles into risk management and fostering transparency.

Central and Eastern Europe

Previously, Central and Eastern Europe (CEE) were lagging in concepts and practices of sustainability and ESG, with Poland, for example, relying heavily on fossil fuels such as coal. The invasion of Ukraine by Russia, rather than slowing the former's progress, has inspired the CEE region to turn its attention to moving quickly towards embracing sustainability and the adoption of ESG principles. The 2021 CEE edition of the PwC Survey of CEOs shows that the percentage of executives of companies has equalled those in the global survey in terms of their commitment to decarbonisation measures at 26%. While in relation to integrating practice that will lead to net zero, 19% of CEE executives committed themselves to this compared to their global counterparts at

22%. The unreliability of Russian gas supplies has shaken CEE countries to their core, with several EU-linked initiatives coming to the fore to support the transition to renewables. In the short term, RePower EU has created an EU Energy Platform to pool the purchase of gas. The major goal of the EU Commission is to establish a fair and equitable transition to renewable energy. One of the main tools for doing this is through Just Transition, which is mobilising at least 150 billion euros for the period 2021–2027 to alleviate the socioeconomic impact of the green transition to renewables. This transition is closely aligned to ESG principles, acknowledging that good, fair governance will support climate mitigation and the social impact of the green transition, working to the benefit of all CEE countries and their populations. The rebuilding of Ukraine into a green, sustainable, and prosperous country is a priority expressed by the President of the European Commission, Ursula von de Leyen, who views this as an opportunity to support a free, democratic European country that is both sustainable and prosperous. Governments and leading finance companies such as PWC Poland and International Finance Corporation (IFC) are integrating ESG principles.

The EU Commission has been working with CEE countries such as Poland, Slovakia and Romania on Just Transition plans and practical mechanisms. The IFC, in supporting ESG adoption among its clients, provides tools and resources to further transparent practices of disclosure. An example would be the National Bank of Georgia which, supported by the IFC, has since 2019 developed a roadmap for sustainable finance through its Sustainable Banking and Finance Network. This has created new frameworks for ESG disclosure for banks which embed ESG principles into corporate governance codes for banks and green bond issuance guidance. This has all led to a new Georgian Sustainable Finance Taxonomy which was published in 2022. (Gajewska 2022);(Edleson Hanway *Emerging Europe* 2022).

Stock exchange ESG integration

As a trading organiser and a public company meeting reporting requirements, the Warsaw Stock Exchange (GPW) is taking the integration of ESG standards very seriously. It is preparing the issuers of securities for the new ESG requirements so investors in the domestic market are not damaged in any way. The GPW has produced comprehensive guidelines through its *ESG Reporting Guidelines Guide for GPW Listed Companies* and the new GPW code which incorporates such ESG principles as climate in *Best Practice for GPW Listed*

Companies 2021. In addition to this training and integration, the GPW works with the UN Global Compact Poland, bringing together the banking sector and finance into the Green Finance Group which promotes the use of sustainable finance tools.

GPW has created a new ESG initiative entitled the ESG Leaders Competition. This has been a successful approach to draw the attention of companies to the importance of integrating ESG principles such as transparent and reliable reporting. The GPW has made further progress in the successful integration of ESG standards into the finance sector by, in late 2021, producing the *GPW Group ESG Strategy 2025.* This means that as a public company it is willing to integrate ESG practice into its organisation by supporting the transition to a low carbon economy and being a responsible employer that supports inclusivity while educating its investors to hold the highest standards of corporate governance. The success of this integration of ESG principles has been underpinned by the fact that members of the GPW management board and its top managers were the ones who drafted and implemented the ESG strategy from the beginning of the ESG integration plans. (Olszewska, *Emerging Europe*, 2022)

Green and social bonds

As in the UK, the CEE countries are turning to green and social bonds as an alternative to green financing sources. As mentioned in our first ESG report, climate awareness green bonds were first issued by the European Investment Bank nearly 20 years ago. Since then and very recently the demand for sustainable, green, and social bonds has increased to an approximate global value of $300 trillion US dollars. In the first quarter of 2022 the European Investment Bank issued the highest number of green bonds, with China, Germany, France, the USA, and the UK being the next largest issuers.

The banks that are leading the way in showing the value of green bonds to support decarbonisation are the green initiatives led by the Hungarian Central Bank, and Polish and Czech Republic banks. CEE countries have been active in trying to rid themselves of their most polluting industries but do not wish to put in jeopardy their potential for growth. To do this successfully they have to work in tandem with the European Green Deal, as part of the circular economy, green technology, and renewable energy (Szabo, *Emerging Europe*, 2022)

ESG and changes to food production

CEE countries are following European Commission guidelines in its Food to Fork strategy to change Europeans' unsustainable diets. Both environmentally and from a health perspective the European overconsumption of meat and processed meat is being targeted by a move to plant-based diets. The production of livestock produces a potent greenhouse gas, methane, which constitute one quarter to one half of all greenhouse gases emitted into the atmosphere. More than 75% of deforested land in the Amazon has been cleared to accommodate livestock which is consumed by Europeans and Americans. With the war in Ukraine, slowing exports of plant-based grains and cereals have been increasing food prices in developed countries while restricting access to food in developing countries. This is untenable as 38.2 tonnes of grain are fed to pigs to produce unhealthy meat for Europeans while other nations are deprived of access to grain-based food for survival. Turning to eating wildlife has caused zoonotic disease which was the basis of the Covid-19 pandemic which started in Wuhan, China, as well as the Ebola virus in Africa.

Accordingly, a global green food transformation is taking place whereby even large dairy and meat producers are turning to the production of alternative plant-based food, much of it resembling real meat products or dairy. This is all in line with the ESG principle of reducing negative environmental footprints. (Homa and Tischner, *Emerging Europe,* 2022)

The mining sectors

The mining sector which underpins so much manufacturing in the UK and Europe has also been grappling with how to replace Russian minerals and to conform to ESG principles. Verisk Maplecroft is a global risk intelligence company that provides geospatial data on and analytics insight into sustainability, resilience and ESG practices.

With the war in the Ukraine continuing and the costs of recycling growing, sanctions by the EU against mined and refined materials are becoming a reality. Minerals such as refined copper and nickel, and those traditionally imported from Russia such as iron ore, manganese, aluminium, and selenium, a mineral essential to solar panel production, are all rising in demand. Alternative sources of supply are not in abundance and as companies move away from Russia and Belarus, they do not wish to turn to China which is a direct rival. Therefore, company requirements for these essential minerals, which are also needed to make the transition to renewables, are forcing companies to enter lesser known and immature markets with weak regulation that increase ESG risks and which can increase reputational risk. Regarding mining, it is not just environmental risks that can destroy corporate ESG credentials but also labour rights and human rights in general. As Verisk Maplecroft’s Dr Rory Clisby notes, when new countries are identified as mineral sources, robust ESG policies need to be instituted which will diminish greenwashing as well as other threats to high standards of ESG adherence. Investors will reject investment in companies that use forced labour in supply chains or the destruction of natural habitats. There are many new laws in the UK and the EU that legislate against such actions as well as new benchmarks such as the Taskforce on Nature-related Financial Disclosures (TNFDs). What is emerging is a conflict of demands between manufacturing industries such as electric cars and renewable equipment such as solar panels, their supply chains, and the need to be ESG compliant. An example of this is the mineral palladium, which is indispensable in many essential energy transition industries that produce electrodes, catalytic converters. and hydrogen fuel cells. Russia currently produces 40% of the world’s palladium, the majority of which is imported into the EU. South Africa is an alternative to Russia, holding roughly 90% of the world’s reserves. Dr Clisby notes that his company has commodity-specific data which shows that South Africa is a high-risk sourcing location for palladium because of the lack of water, human trafficking and occupational health and safety (OHS) indices. South Africa is subject to many environmental impacts such as habitat loss and water pollution, as are other African countries (Rory Clisby, 2022, Verisk Maplecroft). In the section below, these basic conflicts will be discussed in terms of the results of COP27 and the implications for ESG as a global taxonomy, and show what portends for the future of integrated ESG principles that will provide a framework for climate change mitigation, labour rights and governance to support the other two aspects; that is, environmental and social.

COP27 and the future of ESG

COP27 is now over but it appears as if private negotiations among countries, while not made public, perhaps show the degree of progress or lack of it in relation to climate change mitigation. It is consequently difficult to make a summary of the outcomes especially in relation to ESG.

COP27 showed how such a political gathering can be seen as highly conflictual and contradictory, with different political interest groups vying to have their agenda promoted. It is not surprising within this context that ESG as a global taxonomy framework was seemingly overlooked and not alluded to. Additionally, there were in attendance many fossil fuel companies lobbying for their fossil fuel interests to be supported.

This led to several delegates pointing to proactive fossil fuel deals being initiated in Africa. The dangers were discussed of the Canadian oil company Reconnaissance Energy Africa's (ReconAfrica) plans to drill for oil in the fragile ecosystem of a World Heritage Site in Namibia, bordering Botswana in the Okavango Delta, where fresh water supplies and wildlife are at stake in this largest inland delta in the world. How can assurances from the Canadian company and the governments of Namibia and Botswana that no environmental harm will be done be taken seriously when dealing with the historic catastrophes caused by oil and gas extraction? Is this not a backward step for a move to renewables that will make these African states energy efficient and non-polluting in the long term? The San people, who were the earliest inhabitants of this region, have been protesting vigorously against such fossil fuel extraction and argue they must be given a say in this plan which is happening on their traditional lands. With an ESG taxonomy this plan would not be invested in as it oppositional to the environmental, social and governance principles of ESG. In fact, in Africa a few governments are inviting European oil companies to drill in their countries for example in the Democratic Republic of the Congo's Virunga National Park, arguing that they need such fossil fuel exploitation to grow their economies and be energy self-sufficient. Yet, the transition, if managed properly, to renewables will do the same and in the long term will bring the most social and environmental benefits to African nations. Additionally, there is little evidence that governance systems are in place that will ensure that the revenue from these proposed fossil fuel projects will benefit the San people or even the wider nation. (Lebo Deseko, *BBC Online*, 10/11/22).

Positive initiatives in tandem with ESG

Nevertheless, there was some movement towards adopting an ESG taxonomy in relation to the acceptance of what has been called the Bridgetown Initiative. This initiative calls for major reforms to the IMF and the World Bank which no longer meet the needs of debt-laden poorer countries that are lurching from one climate change induced catastrophe to another without debt relief or access to private capital investment from rich nations. Within this context, debt-laden countries need the resources to assist them in transitioning to sustainable renewable energy. The reforms being considered would allow greater amounts of capital to reach the developing nations in need more quickly, give them debt relief after each climate event, and assist them with preparing for the next climate disaster while transitioning to renewables. This would mean, moving away from fossil fuels and other practices that have created the climate catastrophes through extensive carbon emission release from fossil fuel industries.

"The world has changed dramatically," Kristalina Georgieva, the managing director of the IMF said in an interview on the side-lines of the summit adding that she was broadly supportive of the Bridgetown Initiative. "When our institutions were set, there was no common global challenges like climate change. Now we have to mobilize to address them" (David Gelles and Max Bearak, *New York Times*, 9 November 2022).

The reorganisation of the IMF and the World Bank could unlock trillions in cash to support poorer indebted nations to transition to renewables through an ESG framework; additionally, injecting private capital for these purposes would represent a major change for the better.

There are also other programmes such as the International Renewables Agency (IRENA), which on 8 November 2022 at COP27 pledged to give $1 billion to provide renewable electric energy for health facilities and for food and medicine storage in the poorest sub-Saharan African nations. Countries such as Burkino Faso, Malawi and Mali have unreliable electricity supplies and backup generators are run on diesel, which is a fossil fuel and now too expensive for healthcare centres and hospitals. The Director General of IRENA, Francesco La Camera, said he intended to work with governments, charities, the World Bank, the private sector, and the World Health Organization (WHO), among others, to support the move towards the use of renewable energy for health facilities and to improve agricultural production to ensure health and food security (Megha Kaveri, *Health Policy Watch*, 9 November 2022).

COP27 and the future of ESG

Although we cannot find any major references to ESG at COP27, the decisions made there have huge implications for the ESG framework that needs to be developed as a global taxonomy. It is notable that when decisions are largely political rather than strictly economic and social in terms of practical action, ESG is often left out of the equation. COP27 was no exception but this can move forward with the forthcoming COP28.

The loss and damage fund that was agreed on, although no details have emerged to date, is seen as a commitment to force the largest carbon emitters from wealthy countries to pay for climate change catastrophes in smaller, vulnerable nations which are poor and that bear the brunt of the devastation. However, there was no agreement on substantially reducing fossil fuel usage and methane production in livestock production which may be viewed as a major omission to mitigate climate change.

Any fund for loss and damage will need to be linked to a transition to renewables, inclusive of the informal sector which ensures food security in poorer countries, as well as a commitment to changing governance practices that continue with unsustainable practices such as the use of fossil fuels and social issues related to food security.

Innovation and commitment to fossil fuel reduction

In our estimation, the most compelling and ESG compliant argument at COP27 came from a Nigerian solar panel entrepreneur who is helping to cut fossil fuel emissions through his business which is close to the informal sector. Michael Terungwa, who runs his solar panel business in Abuja, Nigeria, states that he will only see genuine change in fossil fuel reduction when the following occurs: First, the 10 to 20% customs and tariffs charged for cheap solar panels from China should be removed; second, when his customers' solar panel purchases from him are subsidised, replacing the current subsidies for polluting generator oil; and third, when Africa's richest man begins to invest in renewables so entrepreneurs like Terungwa can buy locally produced, better quality solar panels.

Such an investment by Aliko Dankote, Africa's richest man, would propel renewables and mitigate climate change at an accelerated rate.

Instead, Mr Dankote is building the world's largest oil refinery at a cost of $25 billion near Lagos, Nigeria. There are similarities here with the Adani Corporation mentioned above in India. It was argued at COP27 that the Gulf states and China, the latter being the world's second largest economy, should no longer be considered developing countries and pay their share to the loss and damage fund as the Gulf states are some of the most polluting while extracting great wealth from their oil and gas revenues. China is the world's biggest polluter in terms of carbon emissions but also one of the biggest producers of solar panels. China could easily afford to donate a percentage of their solar panels to poorer countries and provide training on how to manufacture and install them to local people, thus providing employment and education/training in renewable solutions to the world's poorest countries. The United States could expand its support and mitigate climate change by transferring innovative technologies that through AI and machine learning foster disease free and nourishing plant crops. (Ruth Taplin,2023)

At COP27, the new innovative e-cooking powered by solar panels was highlighted, as well as BIOLPG, a climate neutral alternative to propane. There continues to be 775 million people who have no access to electricity and cook on charcoal or biomass stoves that produce highly polluting smoke that adds to carbon emissions which are also very unhealthy for people to breathe in. Household smoke kills an estimated 32 million people annually including roughly 237,000 children. Wood gathering for charcoal also contributes to deforestation. These are ESG issues concerning the environment, social health and governance issues involving how money is allocated by energy ministers who do not see the pollution and ill health emanating from household use of fossil fuels a priority (Elaine Ruth Fletcher, *Health Policy Watch*, 18 November 2022).

How will moving forward be implemented?

Michael Terungwa noted that change does not generally come from politicians, either at the COP meetings or through African political leaders. He believes climate change mitigation policies that will support small businesses like his, which support solar energy at the local level, can only occur through popular pressure to stop regional and global financial institutions from lending money for fossil fuel projects instead of renewables, keeping countries in debt and allowing billionaire industrialists like Mr Dankote to continue investing in fossil fuels. (Elaine Ruth Fletcher and Stefan Anderson, *Health Policy Watch*, 19 November 2022).

ESG as a global taxonomy

ESG is needed as much as ever to provide a global taxonomy framework to focus activists, those who run renewables-linked businesses, informal sector participants, and all forms of investors. Investors in both global and regional institutions are the main decision makers in terms of which company, pension funds and asset managers will choose to invest. As shown in this report, more companies, both large and small, are realising that their reputations are at risk if they do not adopt genuine ESG practices. Doing good may not be the greatest motivator for adopting ESG practices but risks to the rate and value of returns and reputational risk will be the greatest harbingers of change in investment choices globally and at every level.

Recommendations

1.There needs to be more research work done in relation to turning ESG principles into a standardised global taxonomy.

2. Participants in informal sector activity which is linked to food security for billions needs to be drawn into ESG practice including training in sustainable food production that does not rely on fossil fuel products for fertilisers, makes use of AI, machine learning technologies through technology transfer from wealthy countries such as the US to produce food based on renewable energy and which is plant based.

3.Solar panel and wind turbine technology needs to be manufactured in developing countries so the benefits of employment and cheap renewables accrue directly to the inhabitants of poorer countries.

4.Pension Fund managers and other asset managers need to be trained to a high standard regarding ESG principles so they can explain how ESG practice can be implemented to their clients and gauge whether companies are involved in greenwashing practice.

5.ESG needs to become a part through integration of shared values of all stakeholders including, investor, pension/asset fund managers and company culture.

References (following order of citing in the text)

'ESG exposed as the world is forced to switch priorities' Gillian Tett*, FT Money, Financial Times*, (4 and 5 June 2022*).*

'Green bonds 'are next dotcom bubble' Philip Aldrick, *The Times*, (21 September 2021)

'Fundsmith is warned after being stripped of ethical rating', David Brenchley, *The Times*, (19 February 2022)

'Rise up, mini-capitalists!', Robert Colvile, *The Times*, (22 January 2022)

'Assessing the merits of ESG investment', Tim Cooper, *The Times, Raconteur Supplement, (*29 June 2022)

'Pensions to be used in climate fight', George Grylls, *The Times*, (21 October 2021)

'The only way is ethics: setting the ESG agenda from the top' Sam Haddad, *Times Raconteur Supplement*, (26 January 2022)

'ESG Investing is Consistent with Fiduciary Duty' Al Gore and David Blood, *Wall Street Journal*, (8 November 2022).

'Why sustainable funds near term challenges shouldn't shake ESG believers', Leo Almozora, *Manulife Investment Management,*(17 November 2022)

'CalPERS CEO pushes back against politicization of ESG investing', Arleen Jacobius*, Pensions & Investments,* (16 November 2022).

'ESG labelling lacks nuance provides only limited insights, study cautions', Emma Boyde, *Financial Times, 31 August 2022*.

'New carbon challenge due', Robert Lea, *The Times*, 1 September 2022.

Much of the above material including the Deloitte 2022 survey has been taken from, "No half measures", Richard Pallardy, *Sustainable Business, The Times (7 September 2022)*

‘Putting the ‘S’ back into ESG’ interview with Jamie Coats, CEO and co-founder of Wise Responder, Sean Hargrave, *Sustainable Business, The Times*, (7 September 2022)

See Ruth Taplin (Ed) Artificial Intelligence, Intellectual Property, Cyber Risk and Robotics, Routledge: Abingdon 2023

‘Why greenwashing is here to stay’ Emma Woollacott, *Sustainable Business*, *The Times*, (7 September 2022).

‘Coal Baron or Climate Warrior? The Dizzying Rise of Asia’s Richest Man’, Emily Schmall and Hari Kumar, *New York Times*, 28 October 2022.

‘How to achieve sustainability and profitability: Is your business ready for the new EU Taxonomy corporate mandates?’ , *Sustainable Business*, *The Times*,(7 September 2022); also see apriori.com.

‘Troim’s anti-ESG stand-up act would make Elon Musk proud’ Bob Rust, *Trade Winds,* 23 September 2022.

’ Abrdn’s Iain Pyle: I do not believe in sitting on ESG sidelines’, Laura Miller. *Investment Week*, (18 November 2022)

‘ESG: a solution for training and retaining crews’ *Tanker Shipping and Trade*, August/September 2022.

‘With every crisis comes opportunity’, Agnieszka Gajewska, Partner PwC Poland. Global Government and Public Services Leader, CEE ESG Leader in ‘Future of Emerging Europe’ in Sustainability Report 2022, Emerging Europe; ‘Sustainability: A journey, not a destination’, Cheryl Edleson Hanway, Senior Manager for Infrastructure and Natural Resources, International Finance Corporation in Sustainability Report 2022, Emerging Europe.

‘Recent Developments require a broader perspective on social and environmental responsibility’ Olszewska, (Member of the Management Board, Warsaw Stock Exchange) in Sustainability Report 2022 *Emerging Europe.*

‘Businesses must embed ESG in their core strategies’, Istvan Szabo, (CEE Head of Sustainability Services, KPMG) in Sustainability Report 2022, *Emerging Europe*.

‘Why dietary choices matter’, Patricia Homa (Director Proveg Poland) and Marcin Tischner (Corporate Engagement and Sustainability Specialist Proveg Poland) in Sustainability Report 2022, *Emerging Europe*.

see ‘Companies face ESG trade-offs in scramble to replace Russian minerals’, Dr Rory Clisby (Senior Analyst, Climate and Resilience in Environmental Risk Outlook 2022, Verisk Maplecroft

. ‘COP27: The Namibia-Botswana oil project being called a sin’, Lebo Deseko, BBC Online, 10/11/22.

‘Poor countries need climate funding. These plans could unlock trillions’, David Gelles and Max Bearak, *New York Times*, 9 November 2022.

‘COP27: World Bank, IRENA pledge over $ 1 billion to solar electrification of health facilities’, Megha Kaveri, *Health Policy Watch*, 9 November 2022.

New E-Cooking Technologies Could Reduce Climate Change and Save Lives from Air Pollution’, Elaine Ruth Fletcher, *Health Policy Watch*, 18 November 2022

‘Loss and Damage Negotiations in Overdrive’; Right to ‘Healthy Environment’ Drops Out’ Elaine Ruth Fletcher and Stefan Anderson, *Health Policy Watch*, 19 November 2022.

PART TWO

1. ESG progress in South Africa, France, and Germany

1.1 South Africa

Background to the ESG progress in South Africa

ESG or environmental, social, (corporate) governance attracted attention last year at the COP 26 Conference (31 October – 12 November 2021). The purpose of this conference – organised by the United Nations Framework Convention on Climate Change (UNFCCC) – is to obtain consensus from the individual participants on how far they have come by complying with the Paris Treaty on Climate Change. Cop 26 not only refers to 26 countries; it refers to the 26th Conference of the Parties (COP), since it is obvious that climate change is relevant and applicable to every country – each country is experiencing the effect of climate change to a greater of lesser extent. The signing of the Paris Treaty on Climate Change was negotiated by 193 parties at the 2015 United Nations Climate Change Conference in France in 2015. As from November 2021, 193 United Nations members are parties to the Paris Agreement, and the only country that refused to ratify the Paris Treaty is Iran (Information for COP 26 Participants, 2022). The main targets set by COP 26 are simply the following: to make finance available to countries to rectify their carbon emissions, to promote ESG disclosures in either the financial statements of listed companies (or the sustainability reports of listed companies) and to promote mechanisms to achieve effective reductions in carbon emissions (The Glasgow Climate Pact – Key Outcomes from COP 26, 2022).

In order to discuss progress relevant to available finance and to promote ESG disclosures and/or sustainability reports, it should be noted that the International Financial Reporting Standards (IFRS) has announced the creation of the International Sustainability Standards Board (ISSB). The ISSB will not be in one country or state only, but will have numerous offices around the world. One of the reasons why the ISSB has been created is as a result of a recent survey conducted by PWC, asking its clients and associated companies about their willingness to incorporate ESG in either their financial statements or sustainability reports. These should explain in great detail how the company is complying with ESG. The response PWC received from this survey illustrates confusion among its clients (both listed and unlisted companies) as to how to report on ESG. There are numerous ESG elements or factors relevant to a company's financial and/or sustainability reports; thus, how does one identify all social (or environmental or corporate governance) aspects relevant to a company? To eliminate this confusion, it is suggested that the ISSB should draft a single framework, highlighting the most important factors or elements of ESG and how companies or their external service providers, for example PWC and MSCI, should be disclosing ESG in future.

MSCI, an American company, has been reporting on ESG disclosures for the past 45 years, by analysing the financial statements of approximately 8000 global companies. Although MSCI is making use of metrics to rate companies in terms of ESG, the metrics remain the intellectual property of MSCI and are not available to the general public. In this regard, the ISSB is an important step in putting in place an ESG disclosure framework relevant to global companies, thus making it easy for external services providers to rate them in terms of ESG. It is the opinion of the authors that external service providers should incorporate ISSB standards into their existing metrices. This report does not analyse ISSB in great detail, but analyses current ESG rating disclosures in South Africa, France and Germany. One should keep in mind that a metrics is very limited – it is limited by the criteria agreed to by its inventor, for example, MSCI.

South Africa, the JSE stock exchange and ESG

The progress of ESG in South Africa since COP26 is remarkable. Since our first Konrad Adenauer Stiftung webinar in South Africa (November 2021) the following developments have been noted. The relationship between an employer, pension fund and fund manager (or asset manager or investment manager) is clearly more ESG transparent. By working closely with MSCI, Old Mutual fund managers have developed a unique method for disclosing the ESG sustainability of listed companies. Old Mutual fund managers, without explaining the complexities of each ESG leg – environmental, social, and corporate governance – have broken ESG down into the following rating scale: AAA very sustainable in future while CCC refers to unsustainable companies in future. This allows investors (pension funds and others) to understand whether the pension fund contributions made to listed companies on the JSE

(South Africa's stock exchange) are ESG compliant or not. The reason why investors focus on ESG is the following: a company that is sustainable in the long run will be more profitable than a company that is currently highly profitable but has no sustainability prospects in future. Most investors would choose sustainability over short-term profitability. Old Mutual fund managers rate their portfolio – Old Mutual ESG Equity Fund – with an MSCI rating of AAA (Old Mutual ESG Equity Fund Example, 2021). When considering this rating, it is immediately clear to any pension fund, or company employees who contribute a portion of their salaries to a pension fund, that they are investing in sustainable companies – Old Mutual ESG Equity Fund. To understand what types of company are rated AAA in the Old Mutual ESG Equity Fund, the fund or portfolio consists of the following companies: Clicks (pharmacy and general store), Mr Price (clothing company), Impala Platinum Mining Holdings (mining company), NASPERS (printing/publishing company), Anglo American Platinum (mining company), Standard Bank Group (banking and financial services company), MTN Group (cell phone company), First Rand (banking and financial services company) and Prosus NV (Dutch internet company with links to NASPERS). These companies' ESG is rated AAA by Old Mutual because, when compared to other companies in their respective industries, they are exceeding their peers in terms of ESG disclosures. For a layman or investor in South Africa without any understanding of ESG, the AAA rating will convince them that these companies are sustainable in the long term with respect to their social relationships (e.g., human rights) and the environment (e.g. carbon emissions) and that they comply with good corporate governance practices (e.g. the King IV Report).

It is interesting to note that Old Mutual fund managers also rate their funds that include fossil fuel companies as part of their investments. In South Africa, a well-known fossil fuel company that is listed on the JSE is Sasol. There have been no remarkable announcements by Sasol as to how its long-term sustainability will be obtained or what methods will be it will employ to make it more environmentally friendly. It is possible that Sasol may invest in green projects and try to sell those items to the public. A practical example in this regard is Tesla, which is not only producing environmentally friendly vehicles, but also solar energy panels for purchase by home owners in South Africa – Sasol could support Tesla initiatives here – as a method to support fossil fuels transitory and renewables

On the other hand, South Africa's state-owned companies, for example Eskom, are plagued by corruption, making these companies (nearly 70 in total) unsustainable as a result of poor corporate governance practices. In the case of Eskom, many small businesses and home owners in South Africa are considering Tesla technology to help them with sustainable electricity as Eskom is unable to do so. The consequence of corruption or poor corporate governance will undermine ESG progress in South Africa, unless the South African government plays a more active role to eliminate corruption at state-owned companies.

Nevertheless, the following is an example of an Old Mutual portfolio containing Sasol, rated as A by MSCI (Old Mutual Equity Fund, 2022). This fund does not contain the abbreviation ESG in the name of the fund, (probably because of the fossil fuel company). The listed companies in this portfolio are the MTN Group, First Rand, ABSA (banking and financial services), Sasol (fossil fuel company), Anglo American Platinum, Prosus NV, Standard Bank Group, British American Tobacco (tobacco company), Investec (banking and financial services) and Northam Platinum Holdings (mining company). Most of the companies mentioned here are part of AAA ESG sustainability, as previously mentioned, except for Sasol, British American Tobacco, Investec, ABSA and Northam Platinum Holdings. One may assume that the rating of A is probably due to the tobacco and fossil fuel company – how can tobacco be produced that will prolong the life expectancy of its users (users have a human right pertaining the right to life)? While tobacco or the by-products of tobacco could be cultivated using environmentally friendly methods and/or the companies involved could implement good corporate governance practices, the tobacco (as a product) nevertheless remains the main problem regarding social relations and is contrary to the interests of the public. For this reason, we may question the sustainability or future sustainability of Sasol and British American Tobacco (Saloojee and Matthee, 2021, no page numbers). There is no need to analyse the sustainability reports or financial statements for either Sasol or British American Tobacco to understand their long-term commitment to ESG – common sense dictates that these companies are unsustainable.

Another fund manager (Prescient Investment Management) is also disclosing ESG compliance to investors such as pension funds and company employees who are making use of pension funds to invest their contributions sustainably. Prescient Investment Management makes use of metrics similar to the MSCI metrics to understand the sustainability of JSE listed companies in the long run. These metrics can also be explained as a scorecard, simply because a scorecard contains questions which require simple yes or no (qualitative data) answers. A yes or no response may be assigned a specific weighted number to understand the overall ESG compliance of a fund. Prescient Investment Management assigns different weights to the different ESG legs, for example, to make the latter companies ESG compliant, the environmental leg for banks and financial institutions would be higher than for mining and fossil fuel companies. On the other hand, it is possible to assign the same weight for banks, fossil fuel and financial services companies in terms of corporate governance when rating the corporate governance leg of ESG (*Ahmed, 2021, no page numbers;* Screening for ESG risks and Opportunities using the Prescient ESG scorecard Daily Maverick, 2021). What is unique with regard to Prescient Investment Management is that it also discloses its (Prescient Investment Management) sustainability report to the public, in other words whether its business activities are sustainable in the long run (Prescient Sustainability Report, 2021). The CEO of Prescient is a woman, Cheree Dyers, which is in unique compliance with the social leg of ESG in South Africa – generally men are the CEOs of companies. The NASDAQ stock exchange makes use of a company called Equileap to analyse the composition of the boards of directors of listed companies in order to understand their compliance with the social relations leg of ESG (Equileap Gender Equality Data, 2022). The CEO of Equileap, Diana van Maasdijk, has stated that only 18 out of 4000 companies had an excellent gender balance rating on all levels of the company – from junior to senior management. This indicates that gender equality remains a problem, not only in South Africa but globally. Equileap also discloses its scorecard which contains questions relating to 17 factors, for example gender balance at director level, the gender wage gap and living wage, freedom from sexual and verbal harassment in the workplace, and safety at work among others (Gender Equality Global Report and Ranking with reference to their gender scorecard, 2022).

As part of its ESG disclosures, Prescient Investment Management has established the Prescient Foundation to help, for example, with funding for schools and Covid-19 projects in South Africa. This fund manager is committed to invest only in those JSE companies that will be sustainable in future, explaining how they use weights relevant to ESG scores and why some weights may differ from one industry to another – as explained earlier. Prescient's scorecard in brief contains 60 metric questions, for example the environmental pillar follows five themes, namely, the CO_2 emissions of listed companies, energy consumption of listed companies, water usage and consumption of listed companies, waste management, and other relevant environmental policies to understand the future environmental sustainability of a listed company. Its scorecard or metrics are flexible and may include additional factors in future to understand the long-term sustainability of listed companies (*Ahmed, 2021*). It is therefore possible that Prescient may assign an appropriate weight to fossil fuel companies, making them attractive to investment in the short term – similar to the Old Mutual fund with an A MSCI rating where the fund contains a fossil fuel company.

The above two fund managers – Old Mutual and Prescient Investment Management – follow their own unique processes to identify ESG sustainability for JSE listed companies. This could be subject to criticism since the metrics or scorecard or sustainability analysis may differ between the two fund managers – the actual ESG rating. However, the JSE has acknowledged these problems in practice and has made some recommendations, for example on what type of information listed companies should be disclosing in either their financial statements or sustainability reports in order to be rated by external service providers – MSCI (Khashanem, 2022, no page numbers). In other words, although the social leg generally prohibits any form of discrimination between employees and the company or between employees themselves, the JSE follows South African lawful discrimination legislation. In this regard, while a French company may be penalised for discriminatory actions, in South Africa a company would be penalised for not promoting discriminatory actions (Gerber, 2019, no page numbers). The social relations leg (or human rights) of ESG has a different meaning to, for example, the duty of corporate vigilance found in France. Nevertheless, social relations remain important to the JSE as it requires listed companies to report not only on the social relations leg but also the environmental and corporate governance practices according to a newly developed JSE ESG metrics (JSE Disclosure Guidance – Narrative Disclosure and Metrics, 2022). These metrics make a very important contribution to ESG disclosures, since Old Mutual and Prescient Investment Management must analyse sustainability reports to understand whether ESG compliance is present or not. In other words, what the JSE requires may not be as comprehensive as the metrics of MSCI or Prescient Investment Management; even so the JSE metrics are a very important development for South Africa. The JSE Sustainability and Climate Disclosure Guidance consultation paper requires environmental disclosure; accordingly, listed companies should define and report on their carbon emission progress in the short, medium and long term. The JSE metrics explain that carbon emissions are also relevant to the supply chains of listed companies; in other words, a listed company must ensure that all the companies in its supply chain have an efficient carbon emissions ratio. This JSE requirement is a result of the Paris Treaty on climate change to limit the global increase in temperatures. What is also interesting is that the JSE requires a ratio disclosure between the CEO's salary and employees' salaries as part of the JSE metrics (JSE Disclosure Guidance – Narrative Disclosure and Metrics, 2022). This is a very important ratio. For example, if a CEO with 80 billion rand's worth of shares (80 000 000 000) is compared to an employee who earns R4500 per month, it would take that employee nearly 18 000 years to save 1 billion rand (R1 000 000 000) (Kilian, 2019, pp. 161). In conclusion to this paragraph, the JSE Sustainability Disclosure Guidance document or metrics also contains five themes – each theme is relevant to the environmental, social and corporate governance legs – divided further into 13 to 15 factors each. These metrics have been developed by focusing on the GRI Sustainability Reporting Standards, the Taskforce on Climate-related Financial Disclosures and Recommendations, the IIRC's International Framework as well as other stock exchange practices (at least 60 stock exchanges worldwide have issued their own metrics [or documents or reports] for ESG disclosure guidance), for example NASDAQ, Frankfurt among others (Anon, 2022, no page numbers). In this regard, the JSE is on a par with other global exchanges and the companies listed on the JSE are also on a par with other global listed companies in terms of ESG disclosures and ratings. Accordingly, a clear commitment is evident from the JSE to promote ESG disclosures.

Lastly, the JSE metrics are also supported by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and International Finance Corporation (IFC) World Bank Group.

1.2 France and Germany in support of South Africa

The JSE is focusing on disclosing individual listed companies' greenhouse gas (GHG) emissions (or consumption), commonly referred to as carbon emissions (coal, oil and natural gas). The reason why this is so important is that COP26 has an ambitious commitment to halve GHG emissions globally by 2030. This ambition is in part because of the Paris treaty on climate change and to prevent severe climate change in future. In Africa, 54 countries are committed to complying with the Paris treaty, however 35 African countries are not yet committed to reducing carbon emissions by 2030 (PWC COP26: South Africa Challenge for COP26 to get all countries to sign policies to reduce carbon emissions, 2021). This is in part owing to the costs involved in reducing GHG emissions. For this reason, and during the COP 26 conference, France and Germany will contribute 131 billion rand over the next three years to South Africa to assist the Eskom business model to reduce GHG emissions – Eskom produces electricity by burning fossil fuels (coal or diesel to produce electricity for South Africans) at an alarming rate and is not sustainable in the long term. The reduction of Eskom GHG emissions by 2030 is probably unlikely, but it remains a long-term commitment from the South African government to transform the business model to one of sustainability in future. Germany and France also required the South African government to establish a renewable energy sector, for example electric vehicles and other green projects. These initiatives are very important since South Africa is probably the largest carbon emissions economy in the G20 – it seems South Africa's carbon emissions increase on average by 1.3% per annum, producing 600 tCO2/$m GDP. The world average is 286tCO2/$m GDP for economies much larger than South Africa (PWC COP26: South Africa Challenge for COP26 to get all countries to sign policies to reduce carbon emissions, 2021). The probability of transforming the private sector into a green sector is greater than doing so with Eskom and other state-owned companies where corruption is rife. On the other hand, Eskom must change to be sustainable, and France and Germany require strict investment policies to force the South African government to eradicate corruption and to prevent corruption for all state-owned companies in future. No country or state will finance a government indefinitely when corruption is rife, especially when France, Germany and South Africa have a common goal in sight to change Eskom to comply with the Paris treaty. The Wits Global Change Institute estimates a 6° C increase in temperature for South Africa at the end of the century. Considering that South Africa is a dry country and is becoming drier, the South African government must act now to avoid the future consequences of climate change. Exports of fossil fuel vehicles, fossil fuels and platinum converters for fossil fuel vehicles are major business revenue activities for the South African government and France and Germany are raising the prices of these products to discourage global demands as a method to develop the South African economy into a sustainable economy in future (PWC COP26: South Africa Challenge for COP26 to get all countries to sign policies to reduce carbon emissions, 2021). When referring to South Africa in this regard, it includes the international vehicle manufacturers operating in South Africa that are exporting these products, for example Toyota and BMW. The supply chains of these companies (mostly South African companies) will be affected in future unless they start implementing new sustainable business models that would promote sustainability – in partnership with Toyota (for example) – and prevent future job losses etcetera.

It should be noted that the United Nations has issued a document stating that South Africa could easily be powered by solar and wind energy (UN Climate Change 2022, Mitigation of Climate Change, Working Group III Contribution to the IPCC 6th Assessment Report, 2022, TS 1 and Chapter 4 pp. 42; Tait and Winkler, 2012, pp. 8-17). This document consists of more than 3000 pages, and the lead author for South Africa is Professor Harold Winkler. In this regard, South Africa proposes a net zero carbon emissions economy by 2050 (without fossil fuels and without Eskom current business model), as stated as follows (UN Climate Change 2022, Mitigation of Climate Change, Working Group III Contribution to the IPCC 6th Assessment Report, 2022, TS 1 and Chapter 4 pp. 42):

In South Africa, it is found that long-term mitigation goals could be achieved with accelerated adoption of solar PV and wind generation, if the electricity sector decarbonises by phasing out coal entirely by 2050, even if CCS is not feasible before 2025. Abundant solar PV and wind potential, coupled with land availability suggest that more than 75% of power generation could ultimately originate from solar PV and wind.

The JSE should also take note of the above possibilities and encourage listed companies to avoid Eskom electricity and to generate their own green electricity.

2. What constitutes good governance progress in ESG implementation? Definitions with examples from countries in the extended report

We have seen that, in our example earlier, two South African fund managers are using two distinct methods to disclose ESG compliance. Both fund managers are making use of metrics – Old Mutual is using MSCI and MSCI metrics to rate Old Mutual investment portfolios and Prescient Investment Management is using their own developed metrics, with a specific weighting option attached to each leg of ESG – we do not know if they use AAA or numbers to rate the sustainability of funds. The problem with this is that Prescient's metrics could attach a very low weight to the main business activities of a listed company, for example a company whose main business is fossil fuel. In this regard, such a company may look sustainable owing to the lesser weight that is attached to, for example, the environmental leg of ESG. This is only speculation, however our assumption could be correct, as it was explained earlier how Prescient is attaching weights to the different legs of ESG. The very same problem has been noted by the Organisation for Economic Development Co-operation (OECD) (Boffo and Patalano, 2020). In the foreword to the OECD document (Boffo and Patalano, 2020, no page numbers) it is noted that investors, or even pension funds that are making use of fund (or asset or investment) managers, may be confused owing to the different ESG approaches applied to listed companies by various fund managers. In addition, the phrases or terminologies used in individually designed metrics are not standard phrases or terminologies. For example, in the JSE Sustainability Disclosure Guidance metrics, the corporate governance metrics include board composition and ethical behaviour. Ethical behaviour could also be part of the social relationship leg of ESG to indicate ethical and unethical appointments. In this regard, we may assume that ethical director appointments should rather be part of the governance leg of ESG. However, this depends on the discretionary power of the external service provider that developed their ESG metrics. In terms of the OECD document on ESG, ethical director appointments are part of the governance leg of ESG (Boffo and Patalano, 2020, no page numbers). South Africa is not yet an OECD member, but the concerns raised in the OECD foreword are equally relevant from a South African perspective. For example, the OECD document recognises the importance of stock exchanges in developing their own metrics or reports to be used by listed companies as a form of check list when drafting their sustainability reports. Stock exchanges should – in principle – require similar phrases or terminologies in their sustainability reports or financial statements. For this reason, external service providers that are rating listed companies should, in principle, use similar ESG metrics to analyse listed companies' sustainability reports in order to give a universal or similar ESG rating – irrespective of whether similar listed companies operate in France, Germany or South Africa; in other words, to create a form of unity in analysing different listed companies' reports. In this regard, fund managers or external service providers that rate listed companies should be limited in terms of their creativity in developing unique ratings or weighting methods in order to produce similar and uniform interpretations of ESG practices (Boffo and Patalano, 2020). In this regard, the JSE Sustainability Disclosure Guidance metrics, we assume, allocate a 33% weight to each leg, but Prescient Investment Management uses different weights depending on the business activity of the listed company. Although it is not specifically stated by the JSE that the three legs of ESG should be weighted exactly the same (33% each), the JSE ESG metrics describe each leg of ESG according to its own themes which explain a specific ESG leg in detail. However, it seems that the JSE allows listed companies and external service providers to assign their own weights to a specific leg, thus making a fossil fuel company ESG compliant (JSE Disclosure Guidance – Narrative Disclosure and Metrics, 2022).

The OECD document on ESG investing mentions the consequences of different ESG end results and "calls into question the meaning of the entire (ESG) process" as being meaningless to investors. For example, human rights as part of the social leg of ESG are vastly different to human rights from a French perspective. In France, the corporate duty of vigilance 2017 holds a French holding company liable for the actions of a subsidiary company doing business in a foreign country that violates human rights, for example by treating employees of the subsidiary company unequally. In South Africa, legislation has been created and implemented to make provision for the violation of employees' human rights in terms of section 36 of the Constitution of South Africa – making the violation lawful. In this regard, the South African government may issue legislation that is discriminatory against a specific racial group, and this discrimination is not seen as a violation of any human rights. For this reason, a French subsidiary doing business in South Africa, and its parent or holding company in France, may be held liable for human rights violations in South Africa – even if those violations are lawful from a South African perspective. In a recent PWC report, *The World in 2050*, which was issued before the Covid-19 pandemic, PWC remains of the opinion that growth in the global economy or global GDP growth will be 130% between 2016 and 2050 (PWC, The World in 2050, The Long view: how will the global economic order change by 2050, 2019). Emerging markets (E7) will grow twice as fast as advanced economies (G7). Six of the largest economies by 2050 are expected to be emerging economies. France will be out of the top 10 economies in the world by 2050 (Germany will still be within the top 10 global economies), Italy will not be part of the top 20 global economies, while Mexico, Turkey, Vietnam and South Africa are expected to grow faster than developed economies. However, PWC qualified this by stating that emerging economies can only achieve such results if a state is able to enhance its individual institutions (private and state-owned companies). In South Africa it is no secret that almost all state-owned companies are insolvent and unable to pay salaries on a monthly basis. There are approximately 70 state-owned companies, all of which have actively discriminated against specific racial groups. The government of South Africa is now focusing on the private sector to remove all directors or employees from companies and to replace them with the required designated racial groups. If one considers the fact that E7 economies will be double in size of the current G7 economies, it makes one wonder why such legislation is required in South Africa (PWC Insights, 2022). The annual growth rate estimated for South Africa is 4% per annum between 2030–2050. France's annual growth rate will be less than 2% per annum, as will Germany's (PWC Interactive tool data, 2022). In USD trillions, the German GDP will be nearly 6 trillion USD per annum, while South Africa's will be nearly 3 trillion USD per annum and France's 4.5 trillion USD per annum. One can therefore argue that here is more than enough room within the South African economy to promote entrepreneurship to access the economy for all racial groups without implementing human rights violations. For example, Patrice Motsepe did not participate in any legislation, making him an ideal candidate for directorships on existing South African bank boards. Instead, he created and developed a new bank in South Africa – Tyme digital Bank – which has more clients than most of the established banks in South Africa (Diphoko, 2021, no page numbers). Although Germany respects human rights, and has adopted the United Nations Guiding Principles on Human Rights in Business, Germany has no similar civil code to that of France (duty of corporate vigilance 2017) (Basic Law for the Federal Republic in Germany, 2022). To explain this in more detail, basic human rights in Germany cannot be violated, but Germany has no oversight of German subsidiary companies doing business in foreign countries where human rights are 'lawfully' violated. In France a holding company could be fined up to 30 million euros, but in Germany there is no similar penalty at present. In Germany, there may also be 'lawful' discrimination to bring about equality between men and women, as regulated in Article 3(2) (Basic Law for the Federal Republic in Germany, 2022). The number of men and women in Germany is nearly identical, although there are slightly more women than men (Statista Germany Gender, 2022). In South Africa, discrimination is aimed at a race group that forms less than 7% of the entire population of 60 million people – to replace the 7% (Jews, Afrikaners, English, Portuguese etc.) with other racial groups as company directors and employees is dissimilar to the German interpretation of equality between men and woman (who are nearly equal in number or percentage of the entire population). It should also be noted that this 7% currently has the slowest (negative) growth rate in terms of assets owned in South Africa (Stats SA, 2022). South Africa is also known as a country that participates in xenophobic activities –discriminating against African immigrants

(Tade, no date, no page numbers). These forms of discrimination are not ESG compliant.

In the recent flooding in KwaZulu-Natal, because of the effects of climate change, nearly 400 citizens lost their lives. In similar circumstances in 1984, the South African Air Force deployed 25 helicopters to save the life of citizens. In 2000, the South African Airforce deployed 17 helicopters to save the lives of Mozambiquans as a result of flooding. In 2022, the South African Police Force and South African Air Force combined was unable to deploy even one helicopter to KwaZulu-Natal. This is the result of the erosion of the South African Air Force and South African Police Service capabilities (Saunderson-Meyer, 2022, no page numbers). If one considers the erosion of public services over a period of 30 years, and the recent human rights violations with regard to private sector companies, one can assume it is only a matter of time before private pension fund contributors suffer financially when they retire – listed companies on the JSE would be in similar financial positions as state-owned companies (United Nations Global Compact, UN Global Compact Africa Strategy 2021-2023, Mobilizing African Business for Impact, 2021). In this report great emphasis is placed on sustainable business practices for Africa.

The Paris stock exchange (Euronext) does not allow any investment in listed companies that violates the human rights of its employees or otherwise, since it follows the UN Global Compact guideline documents – see Table 1 (United Nations Global Compact, 2022; UN Global Compact launches new Business and Human Rights Navigator with the German Helpdesk on Business and Human Rights and Verisk Maplecroft, 2022). This tool or navigator explains human rights in order to understand this concept better in practice.

Although South Africa is a member of the United Nations Human Rights Council, it does not report frequently to the UN pertaining to its human rights developments in South Africa. In fact, South Africa has only submitted a report once to the Council in 2014 (Duguard, 2020, pp. 467). In a recent study, it was found that South Africa still hinders the promotion of human rights for all citizens and the promotion of human rights for foreign citizens in South Africa (Jordaan, 2014, pp. 90-124; Lodge, 1998, pp. 157-187).

In considering the latter, ESG cannot be implemented on a uniform level owing to some state-specific legislation that differs from that of other states. However, it would appear that ESG could be implemented on a uniform level for all global exchanges. Recently, the UK finance minister (Mr Rishi Sunak) stated that it is possible to program digital currency to be used only for specific purposes. For example, a company that contributes to carbon emissions – even if directed by a state (or even the United Nations) to stop this practice by implementing fines or penalties – and continues with such business practices, it is possible to program the digital currency to prohibit creditors from making payments to that company; in other words, to prevent creditors from making actual payments to that company. This will only be possible if the entire banking system is digital (Wallace, 2021, no page numbers).

3. ESG integration

3.1 How much progress has been made post COP26 by asset and fund managers to incorporate ESG into their investment decisions?

As was discussed earlier, from a South African perspective fund managers are starting to accept the importance of ESG and ESG rating disclosures for JSE listed companies. For example, the Old Mutual fund manager is employing the services of MSCI (a well-known ESG rating external service provider in the USA) to indicate whether a specific fund or portfolio (basket of listed companies to be invested in by private individuals and pension funds) is ESG compliant or not – irrespective of whether the fund is referred to as ESG or not. The best rating is AAA and the worst rating is CCC. As discussed earlier, where a fossil fuel company is part of an investment portfolio, the rating decreases significantly – A only. Therefore, the following question is posed – how is it possible for a fund manager, for example Old Mutual, to change an A-rated ESG portfolio to an AAA-rated ESG portfolio? The answer is simple, to invest in companies that are not fossil fuel based. To solve this problem in practice is not so easy. This is because a fund manager must change the listed companies in its portfolio and try to sell all the relevant shares held in that fossil fuel company on the open market (JSE) as well as try to buy the same number of shares (as held previously in a fossil fuel company) in any other ESG compliant company. The market cap for Sasol (fossil fuel company in South Africa) is R230 billion. The number of authorised shares is 1 127 690 590 and number of issued shares is 629 201 325 (Sasol market cap, 2022). To circumvent this problem of buying and selling, the fund manager should rather disclose the rating for ESG-specific listed companies and allow the investor or pension fund a choice – to continue with a poorly rated ESG listed company or to sell those shares. The fund manager will not make this decision, it merely discloses why a fund is rated poorly and the investor or pension fund must try and establish why a poor rating is allocated to a specific portfolio. This may be problematic, since MSCI may rate a portfolio as an A where the portfolio includes a fossil fuel company – A is far better than CCC. Subsequently, the fund manager will not disclose how MSCI rated the portfolio, for example how or what weights MSCI used when rating a portfolio consisting of a fossil fuel company. On the other hand, it is suggested that any investor(s) or pension fund(s) must have a good understanding of the business activities of a listed company to understand the relevance of a rated ESG portfolio, for example a portfolio that includes a fossil fuel company should be avoided. In addition, it is also possible for a fund manager to use its own weighting scale or ratio to rate a fossil fuel company without the assistance of MSCI, for example Prescient Investment Management. In this regard, a fossil fuel company could also be ESG compliant, owing to the weight attached to the environmental leg of ESG. The JSE should therefore communicate the weighting of each leg more clearly on its metrics, in order to indicate to fund managers and/or other external service providers (e.g., MSCI) not to use their own discretionary power relevant to weights among other things (JSE Disclosure Guidance – Narrative Disclosure and Metrics, 2022). A fund manager can also create a new sustainable portfolio for the future and leave all existing portfolios as is. This is exactly what Old Mutual asset managers and Prescient Investment Management did in order to attract investors and pension funds that are ESG conscious.

Germany's state pension fund scheme, known as *Gesetzliche Rentenversicherung* (statutory pension insurance), collected 328 billion euros in 2020 and paid out 333 billion to pensioners. Canada and Norway have similar state-owned pension fund schemes – the only difference being that they are allowed to invest in capital markets, for example buying shares or bonds. In South Africa, there is also a state-owned pension fund, namely the PIC pension fund scheme. This scheme is also allowed to invest in capital markets and by making use of fund managers to invest on their behalf on capital markets. For this reason, it is proposed that a contract should exist between a state-owned pension fund (or private pension fund) and a fund manager to invest only in sustainable listed companies, where each leg of ESG carries a similar weight of 33%. Since Germany's *Rentenversicherung* does not invest in listed companies, the arguments for and against ESG are irrelevant (Kirchfeld, Henning, Jennen, 2021, no page numbers). However, in Germany there are also additional private pension funds or voluntary private pension funds, for example *Pensionkassen* and *Riester-Rente* pension funds (OECD Pensions at a Glance: Country Profiles, 2019). These pension funds are managed by banks and insurance companies – as fund or asset or investment managers. The banks (e.g. BNP Paribas) and insurance companies (Alliance insurance company) no longer accept new pension contributors. MEAG of Munich-Re fund or asset managers that are in-house fund managers for Munich-Re may also share their expertise with other investors in the Munich-Re Group and may pay, for example, a life-long annuity to contributors when they retire (Munich-Re Group, 2022). At retirement age, the contributor is entitled to a lump sum payment (in cash) of 30% of the total value of the fund (Max Planck Institute for Social Law and Social Policy, 2022). In South Africa, insurance companies have a similar annuity scheme and also pay an approximate 30% lump sum of the total fund value to the contributor at retirement age. The *Riester-Rente* pension fund is a guaranteed pension fund – the value of a contributor's capital growth is guaranteed. In South Africa, an insurance company that sells voluntary pension schemes as annuities does not guarantee the contributors' capital. The *Riester-Rente* and *Pensionkassen* capital contributions are invested in part on the capital markets – maximum of 35% (EU European Commission – Study on the drivers of investments in equity by insurers and pension funds; Germany Key Characteristics of the Pension Funds Market, 2019, pp. 2-8). Although *Riester-Rente* is relevant to private individuals, companies in Germany may also allow their employees to contribute to *Pensionskassen* or *Pensionsfonds* (Allianze, 2022 does not accept new customers for these pension schemes). In Switzerland, regarding the popular Swiss retailer Manor, the CEO of *Pensionkassen* Manor, Martin Roth, explains the importance of ESG investments, especially ESG investments with an MSCI rating attached. However, he says that "greenwashing" is currently happening at a corporate level to make companies appear to be ESG-friendly investments (Moreolo, 2021, no page numbers). To assist *Pensionkassen* Manor, Ortec Finance is acting as a consultant to give the former the best investment advice, for example to create an investment portfolio that incorporates ESG criteria objectively (Ortec Finance, 2022, no page numbers). What is interesting is that PPC Metrics, from Denmark, also assists employers and private individual pension fund contributors to select the best asset or fund managers for investing their contributions on the capital markets. They also assist with a specific investment mandate in terms of how a fund manager should be investing the capital on behalf of the pension fund, for example to invest only in ESG sustainable companies (PPC Metrics, 2022). In this regard, an asset manager could apply for PPC "membership" and after a due diligence process, PPC could recommend the asset manager to future investors. In Germany, the Frankfurt stock exchange uses a visibility hub, where individual listed companies can disclose their ESG compliance (Frankfurt Stock Exchange, 2022). For companies that are participating for the first time in ESG disclosures in their financial statements or sustainability reports, the Frankfurt stock exchange is making available an ESG KI Report. This Report will guide these companies on how to report on ESG in future. However, the Frankfurt stock exchange discloses the ESG ratings of individual listed companies. For example, Siemens Energy AG is rated BBB by MSCI and ISS ESG rates Siemens Energy as B-Prime, and Sustainalytics rates Siemens Energy at 17,4. There are thus various ESG ratings for a specific company on the Frankfurt stock exchange, and currently no fossil fuel company is part of these voluntary ESG hub disclosures (Siemens Energy AG, 2022). Another example is SAP SE which is rated by CDP as an A, by MSCI as an AAA, by Refeinitiv as 93, by S&P as 79, and by Sustainalytics as 9,7 (Frankfurt exchange sustainability, 2022). The Frankfurt exchange also discloses the sustainable reporting documents of every company that participates voluntarily in the ESG hub. However, Siemens Kapitalanlagegesellschaft MBH (fund manager) does not disclose any ESG material on its website (Siemens Kapitalanlagegesellschaft MBH (Munich) Clients, 2022. This fund manager has 20 clients and total assets under management is 8 billion USD (also see in general Siemens Produkte and Services, 2022). We suppose that individual investors would be receiving information from the fund manager to understand to what extent a listed company is ESG compliant and whether Siemens would invest in non-compliant ESG companies. For example, in its prospectus Neuberger Berman Investment Funds PLC (an Irish investment or asset/fund manager company) states clearly that it does not invest in fossil fuel companies or tobacco companies or companies that violate human rights. In its prospectus, it is clear that this fund manager will not create or develop a portfolio of which a fossil fuel company is part. It will also not invest in companies where an external rating agency, for example Moody's, has rated the portfolio lower than B (Neuberger Berman Investment Funds PLC, 2022, pp.14-17 accessed 19 April 2022). The same applies (to some extent) to MEAG Munich-Re fund managers. On its website, it is stated clearly that ESG plays an important role, and no investment is allowed in thermal coal companies or companies with coal revenue of more than 30% of the total revenue or turnover. Similar circumstances exist for oil and gas companies and listed companies that are unable to produce zero carbon emissions in future (Munich-Re Group Ambition 2025, 2022, no page numbers).

In France, provision is made for state pension funds managed by *Caisse Nationale d'Assurance Vielilesse* (National Old Age Insurance Bank) (Retraite, 2022). The state pension may also be supported by occupational pension fund provision that has an element of investment in capital markets (Retraite, 2022). However, to make provision for any shortfall in the state pension funds, the pension reserve fund (*fonds de reserve pour les retraites*) was created in 2001. The purpose of this fund is to save contributions from state holdings for 20 years or longer, before these funds are used for any shortfall payments in future. Also, voluntary private pension funds are available to company employees (*plan d'epargne pour la retraite collectif*) and private individuals (*plan d'epargne retraite populaire*) in the form of annuities. These funds can be opened by any bank (Banque), insurance company (Assureur) or asset manager (Gestionnaire d'actifs) (Retraite Dossier, 2022). The Paris stock exchange (Paris Bourse, commonly known as Euronext) rates listed companies in terms of their ESG disclosures using an external service provider such as Moody's. In addition, the exchange has created an ESG index, in order to increase investor confidence in ESG listed companies as sustainable investments in future (Euronext Derivative Market and ESG indexes YouTube, 2022). he moment investors in general are comfortable or understand the purpose of an ESG index, Euronext will consider extending ESG disclosures (and or ratings) to all listed companies on the exchange. Currently, the exchange is also helping listed companies on how to report on ESG in their sustainability reports, although we were unable to find a suitable document on the exchange website (Euronext ESG Empowering sustainable growth, 2022). We assume it would be similar to the JSE metrics or Frankfurt KI Report. On the ESG index is the CAC 40 ESG. This index consists of the following ESG compliant companies, Airbus, Alstom, Arkema, Air Liquide, Accor and Michelin among others (Euronext CAC 40 ESG, 2022). For these 40 ESG compliant companies, the exchange provides an ESG rule book, ISR label metrics, CAC 40 ESG label metrics and a CAC 40 ESG factsheet (Euronext Index documents, 2022). The ESG rule book was introduced in December 2021 and the ISR label metrics in March 2022. The 40 listed companies in this index have been ESG rated by Moody's. The CAC 40 ESG compliance score or rating is 66. Michelin, a listed company, has for example an individual rating of 75 for environmental practices, 74 for social relationships (human rights practices) and 70 for good corporate governance practices (Euronext ESG Reporting Moody's, 2022). The CAC 40 ESG index was created in March 2021 and it is clear. that relevant documents have been issued to investors to explain the purpose, ratings and rules, among other things, of this index. In brief, to be part of the CAC 40 ESG index the following companies with business activities in any of the following categories are disqualified from participating (Euronext Rule book for CAC 40, 2022):

Table 1: Companies that breach any of the following thresholds are not eligible to be part of the CAC 40 ESG index in terms of the Rule Book for CAC 40 ESG.

Exclusion type	**Description**

UN Global Compact controversies	- Companies with active critical controversies related to UNGC are excluded.
Tobacco	- Companies with any involvement in the production of tobacco. - Companies with revenues above 10% derived from distribution of tobacco are excluded.
Coal	- Companies with any involvement in thermal Coal Mining are excluded. - Companies with revenues above 5% from Coal-fuelled power generation are excluded.
Tar sand and oil shale	- Companies with any involvement in tar sand and oil shale extraction are excluded.
Civilian firearms	- Companies with revenues above 5% derived from the production or sale of civilian firearms are excluded.

Controversial Weapons	- Companies that are involved in the following weapons considered as controversial by V.E: biological weapons, chemical weapons, blinding laser weapons, incendiary weapons, non-detectable fragments, depleted uranium, white phosphorus, with involvement type Full weapons system – munitions, are excluded. - Companies that are involved in the following weapons considered as controversial by V.E: Anti-Personnel Landmines, cluster munitions, with involvement type full weapons system – munitions or key parts – munitions, are excluded.

Accordingly, Euronext Paris has created an ESG index to be invested in either by banks, insurance companies or asset managers (Euronext Derivative Market and ESG indexes YouTube, 2022). Euronext has screened the 40 listed companies, making it very easy for asset managers, banks and insurance companies to invest in ESG compliant companies (BNP Paribas Asset Management, 2022). By adopting the ESG rule book, the investment methodology to be followed in future by BNP Paribas has also changed relevant to Table A above (UN Global Compact launches new Business and Human Rights Navigator with the German Helpdesk on Business and Human Rights and Verisk Maplecroft, 2022; a navigator is used to identify human rights violations). BNP Paribas has no discretion as to which company is really ESG compliant or not, since the

Euronext has its own rules in this regard and has screened all 40 companies according to its methods and standards.

3.2 How much progress has been made by industry sector – fossil fuel (coal, oil and gas), financial services (green bond initiatives), producers (retail and sellers), infrastructure (transportation and buildings), agribusiness and forests

In South Africa, Old Mutual asset managers rates different Old Mutual investment portfolios using MSCI, as discussed earlier. The Old Mutual equity fund, which contains listed companies in fossil fuel (Sasol) and tobacco (British American Tobacco) is rated an A by MSCI. This rating is neither approved nor rejected by the JSE, but fund/asset managers may employ their own rating method to disclose ESG compliance. For this reason, it is obvious that Euronext would not list these companies as part of their CAC 40 ESG, as indicated in Table 1 above. Nevertheless, no guidelines exist on whether JSE investors should only be investing in a minimum of A or BBB rated portfolios. Also in the same Old Mutual portfolio is a thermal coal mining company – Anglo American (Anglo-American, Anglo-American Operations: What we Mine, 2022). All of the other companies in the portfolio – MTN, Frist Rand Bank, Standard Bank Group, Investec and Northam Platinum Holdings – are, based on South African legislation, currently violating human rights by preferring a certain race above another when it comes to employment. Bearing the UN Global Compact in mind (Table 1 above), South Africa's transformation practices are rated on a B-BBEE level, for example B-BBEE 1 implies that the company has been 100% black transformed (Bowman Attorneys, 2021). The population of South Africa and France is similar – 60 million people. Seeing that South Africa's economy will be nearly as big as France's by the year 2050 according to PWC, as discussed earlier, there is no need to replace current employees with others just to match B-BBEE levels. Instead, there is more than enough room to grow the economy without focusing on the 6% of the population (Jews, English, Afrikaners, Portuguese etc.) that resides in South Africa as South Africans. If one considers the CAC 40 ESG index, none of the above JSE-listed companies would be considered ESG compliant. In other words, these companies would not be part of the ESG index of Euronext. In terms of agricultural businesses in South

Africa, an individual farmer is not allowed to export any of its produce, unless it can show a B-BBEE certificate level (Stout, Belinfanti, Gramitto, 2019. pp.1-70. In this book, co-authored by the well-known professor Stout, a form of "company" could be created as a fund to allow each citizen to participate in the fund to create wealth. Every citizen (unemployed citizen, as an example) of a state is a "shareholder" of this "company" and they could vote and receive dividends (remuneration) as a method to improve their cash flow. They or the company could participate in any economic sphere or sector of the economy and the company could be funded by large corporations to make it liquid). Since most farming businesses in South Africa are family owned, this B-BBEE criterion from the South African government has been criticized by SAAI (South African Agri Initiative) (SAAI, 2022). It is clear, that Euronext requirements as set out in Table 1 are not similar to the criteria for ESG in South Africa. On the other hand, the bonds of a state-owned company, Denel (weaponry manufacturing company), with a B-BBEE rating of level 1, have been suspended by the JSE since this company is not only insolvent but also struggles to pay the salaries of its employees (South African citizens). It also struggles to submit financial statements on time and for this reason, the JSE has suspended its bonds (Reuters, 2022). If rated according to the Euronext ESG criteria, Denel would not make the grade. In addition to Denel, almost all state-owned companies in South Africa are experiencing financial problems as a result of corruption, mismanagement and the like. In South Africa there are more than nine black ethnic groups, and we simply do not know how much each group is represented on a B-BBEE certificate. To transform a company, one would expect that all ethnic groups would be part of a B-BBEE certification process, but this is not required by relevant South African legislation. In fact, if one ethnic group were part of a company, to the exclusion of others, this would not be considered unfair by the government and the company would still be rated as a level 1 B-BBEE company. Ethnicity in South Africa is not transparent and is not meeting the requirements as indicated in Table 1 above.

The Frankfurt exchange encourages listed companies to participate and voluntarily disclose their ESG ratings in the ESG voluntary hub. There are listed companies that are compliant with one leg of ESG, for example the environment to attract investors in that area of the market and/or other companies that are compliant with all three legs. The Frankfurt exchange also makes provision for the exclusion of certain companies from ESG funds (portfolio of invested companies) owing to their business activities (but not from the exchange), for example companies that are mining coal and the like (Frankfurt exchange Sustainable ETF, 2022). An example of an ESG compliant portfolio is Xtrackers MSCI USA ESG UCITS ETF. This portfolio consists of companies with high ESG ratings as assigned by MSCI. The companies in this portfolio consist of Tesla, Microsoft, Alphabet and Nvidia among others. All these companies are leaders in low carbon emissions or zero carbon emissions according to MSCI (Xtrackers MSCI USA ESG UCITS ETF, 2022). The Euronext allows a person to search for similar ETF funds or portfolios in Europe, for example Amundi Index Equity Global Low Carbon – UCITFS ETF or Amundi MSCI World Climate Transition CTB – UCITS ETF (ISIN number LU1602144229, the ISIN number is required because the name of the portfolio could be different on other European exchanges) contains similar listed companies as the Xtrackers fund above, for example Tesla, Microsoft, Alphabet among others. The asset manager Amundi does not disclose the MSCI rating for the above funds on its website (Amundi MSCI World Climate Transition CTB -UCITS ETF, 2022). The Financial Times also does not disclose a rating for this fund). Companies with good social relationships and/or corporate governance are listed in iShares MSCI EM IMI ESG Screened UCITS ETF USD (Acc) on the Frankfurt exchange and consist of the following companies: Taiwan Semiconductor Manufacturing, Tencent Holdings, Alibaba Group Holdings and Reliance Industries of the Frankfurt exchange. The Financial Times also lists this fund on its website with an MSCI rating, for example iShares MSCI EM IMI ESG Screened UCITS ETF USD (Acc) has an MSCI rating of four stars. The Financial Times does not disclose AAA or AA (Financial Times Rating of Portfolio, 2022; this fund is for sale in Germany, Ireland, Switzerland, and UK; iShares MSCI EM IMI ESG Screened UCITS ETF USD (Acc), 2022). Reliance Industries' MSCI rating is based on the environmental leg, because Reliance sells green fuel (gas or oil) (Reliance Petroleum, 2022). In addition, the Alibaba Group ships agricultural goods, paper, vehicle parts, consumer electronics and the like to online buyers of these products (Alibaba also invests in traditional brick-and-mortar buildings). We do not know whether the suppliers in this supply chain (agricultural goods, paper etcetera) are in fact ESG compliant (Alibaba Group, 2022). In South Africa, a similar company exists, namely Takealot, but it is not listed on the JSE nor is Tesla listed on the JSE. In addition, we were unable to find MSCI ratings via Old Mutual for brick-and-mortar JSE listed companies. There are more than 500 ESG funds on the Frankfurt stock exchange as well as more than 400 green bonds (issued by banks, companies and governments). These green bonds must comply with the guidelines set for Green Bond Principles of the International Capital Market Association (Frankfurt stock exchange green bonds, 2022). The Euronext Rule Book II, issued in 2019, explains the requirements for bonds (Euronext Rule Book, Book II: Specific Rules Applicable to the French Markets, 2022). In 2022, Euronext introduced its new green bonds (Euronext Launches new Green Bonds Offering, 2022). It now has more than 44 000 bonds and is considered a world leader in sustainable finance.

4. Has assessment by institutional investors and asset managers of business models, product strategies and distribution systems changed to further integrate ESG policies and how has this progressed?

Although the JSE is disclosing suitable metrics on how JSE-listed companies should be disclosing ESG in either their sustainability reports or financial statements, it is an ongoing process. Nevertheless, it is mandatory to report on the JSE metrics since asset managers for example Prescient Investment Management, will be rating a listed company on the information provided in the sustainability report (Prescient Sustainability Report, 2021, 3 uses a holistic approach to understand ESG compliance). This asset manager allocates weights to the separate legs of ESG and it is possible to set a weight for environmental matters that is far less for fossil fuel companies in order to make them sustainable. On the other hand, Old Mutual asset managers is making use of MSCI to rate their funds/portfolios. However, we do not know whether MSCI is using the same metrics to rate all JSE-listed companies irrespective of the listed companies' jurisdiction, for example the same rating methods or metrics are used irrespective of whether the companies are South African or European. We assume that the JSE would in future follow a similar approach to that of the Frankfurt exchange by introducing a voluntary ESG hub company (JSE Disclosure Guidance – Narrative Disclosure and Metrics, 2022, no page numbers). Any investor or asset manager could then click on this voluntary hub to understand the ESG ratings available to a company. Currently, the voluntary hub of the Frankfurt exchange discloses MSCI, CDP, Refeinitiv, S&P and Sustainalytics ratings. The Euronext exchange only makes use of Moody's to disclose ESG ratings. The Frankfurt exchange also provides listed companies with a KI Report, which explains how to report or disclose ESG – very similar to the JSE initiative of JSE metrics (Frankfurt Exchange Sustainability,2022, no page numbers; Financial Times Rating of Portfolio). On the other hand, Euronext has introduced ESG and true ESG is only relevant to those companies that comply with Table 1 above; for example, no investments in oil or gas companies, tobacco companies or companies that are violating human rights. The JSE in South Africa, we assume, will follow a similar approach in future. In this regard, South African asset managers and investors will not exercise their own discretion as to which companies are ESG compliant since the exchange will automatically exclude oil or gas companies. This is a very strict interpretation of ESG and we believe this is the only approach to ensure future sustainability for listed companies. In this regard, it also excludes a weighting approach to be used by an asset manager to make, for example, an oil company attractive to investment. What we have noticed is that the Financial Times discloses funds or portfolios in a similar style and fashion to Old Mutual fund managers in South Africa. The Financial Times discloses the fund rating applicable to all companies that are part of that fund or portfolio, as discussed earlier. It may be that an asset manager, for example Amundi, also discloses the ESG ratings of a fund to investors that are not disclosed by the Financial Times – thus disclosing ESG only when investors are making investments (Amundi MSCI World Climate Transition CTB -UCITS ETF). This is merely an assumption; we were unable to find any suitable examples. Irrespective the above observations, there has been remarkable global development in ESG and its importance for listed companies following the COP 26 conference. Stock exchanges have taken note of COP26 and the exchanges discussed above are using – to a certain extent – similar approaches to disclose the importance of ESG in future.

a. How have company human resources departments contributed to the integration of ESG policies?

In South Africa, Germany and France, human resources departments are premised on the following: recruitment of company employees, pay setting or salary scale appointments and salary adjustments, performance assessment of employees which is part of the promotion processes relevant to employees, the training of employees, explaining of pension fund employee benefits and/or monitoring the working conditions of company employees to reorganise company employee structures among other things (see in general Festing, 2012, pp. 45-47; Brewster, 2004, pp. 365). Generally, these activities have been largely developed by the US and are also accepted in South Africa, Germany and France, although these could be blurred when making comparisons: Germany is less focused on employee individualism, aspects of employment are generally regulated by collective bargaining and/or state regulations (e.g., employment protection) etcetera. These activities are equally relevant to private and public sector human resources departments (OECD Human Resources Management Country Profiles, 2012). In France, human resources employees are regulated by the Civil Service Statute, in Germany by the Act of Federal Servants and in South Africa by the Public Service Act. In South Africa there is no legislation relevant to private sector human resources departments as to how they should be regulated or managed, except by general conditions of employment legislation (e.g., 45 hours per week for South African employees and in France employment protection is even further regulated by a working week that is limited to 35 hours and/or 130 hours a year – to pay overtime could be an offence) (Brewster, 2004, pp. 365). Brewster explains the differences between the US human resources model and European human resources model by making use of the "Rhineland" model. The Rhineland model explains that European economies are generally regulated market economies with social or pension security for state citizens. The state, employers' organisations and labour unions consult each other on how to achieve economic goals to bring about harmony in the economy. In the Rhineland model, individual competition and confrontation are avoided in the belief that they (e.g., individualism) undermine sustainability. In the Rhineland model, the state is the main actor in overseeing the public and private sectors of the economy (Brewster, 2004, pp. 365). To some extent, this model is also relevant to South Africa but “harmony” in the economy – in general – has very strong employee interests instead of the interests of company managers or shareholders. Therefore, in principle, company goals may not be that different in South Africa, France and Germany in regard to ESG, but the course of action in achieving ESG differs significantly (see Table 1 above as an example). This is because ESG achievements can be socially construed and shaped by any ethnic culture that exists within a state (Brewster, 2004, pp. 365). The values (e.g. what is good or bad and what is honesty), ideas (e.g. how to achieve economic sustainability) and beliefs (e.g. ESG is subject to the unique interpretation of each state) of employees and the citizens of a state are rooted in its history, tradition and perceptions which are unique to each state and are evident in the human resources practices of each state – thus an overlapping of the general premise above may occur. However, one may assume that as ESG becomes more global, human resources practices may be aligned more uniformly, for example to understand and apply UN interpretations of what are good human right practices. This is commonly referred to as the principle of “best practices”. Since France and Germany are part of the European Union, a possibility exists that state decontrol – similar to the US – to move to more similar human resources approaches as stated in the general premise above and similar ESG practices could be achieved by individual companies – see paragraph below pertaining to the relevance of digitalisation and ESG (Brewster, 2004, pp. 365; OECD Human Resources Management Country, 2012; Kuhlmann, Proeller, Schimanke, Ziekow (ed), 2021, pp. 375; OECD Human Resources Management Country Profiles, 2012; South Africa Code of Conduct for Public Servants, 2022; Festing, 2012, pp. 37). Globalisation has had an effect on private sector human resources, for example in this article Germany and other European states follow human resources practices generally associated with the US only (known as best practices). In South Africa, Germany, and France it is possible for individual companies in the private sector to draft their own rules – commonly referred to as company “policies and practices” – relevant to ESG. These policies and practices are part of the internal rules of a company which must be followed by company employees – and each company’s policies and practices may be worded and/or explained differently – but the end result should be similar for all companies. This concept largely results from the US where the following is stated (Giardini, Kabst, Müller-Camen HRM, 2005, pp. 63 my inclusion):

In this respect, Germany is a particularly interesting country. Here, managerial decisions are much more strongly framed by the institutional environment than in other countries. As it should become evident throughout this paper, this holds true especially for the management of human resource issues. However, this does not mean that Germany is not receptive to new managerial paradigms, such as the human resources management (or for example ESG) philosophy.

It cannot be said that all human resources departments in either South Africa, Germany or France will adopt policies and practices relevant to ESG, since human resources are merely concerned with the general premise stated earlier (Sparrow, Hiltrop, 1997, pp. 201; Giardini, Kabst, Müller-Camen, 2005, pp. 63). ESG relates to the performance assessment of the company; for example, how the company's business activities protect the environment. Human resources (in France, Germany and South Africa) could use the software program from Wolters Kluwer (Wolters Kluwer Sustainability and ESG Reporting Software, 2022). Or human resources departments could draft policy and procedure frameworks that state that the companies should be using Wolters Kluwer software and that the technical calculations relevant to carbon emissions should be completed by a company that is expert in this field. It is possible to draft policies and procedures in such a way as to understand which part of the software should be completed by which department, for example the legal department relevant to corporate governance practices and the human resources department relevant to social relationships. This software program could be used by both unlisted and listed companies as a guideline to understand how ESG data may be captured by a company on a daily basis. Wolters Kluwer does state that the software program may not comply with specific ESG stock exchange disclosures (e.g. the JSE approach to ESG or Frankfurt approach to ESG) (Wolters Kluwer A Quick Guide to ESG Compliance with CCH TAGETIK ESG and Sustainability Performance Management, 2022). Although Wolters Kluwer has an annual turnover of 4.8 billion euros and more than 20 000 employees worldwide, it is unclear how many companies (listed and unlisted) globally are making use of this software program to help them to comply with ESG ore whether only the human resources departments of companies globally are using it. This software program is extremely user friendly with relevant dashboards to help the human resources and other departments of both listed and unlisted companies to complete the necessary ESG data and to keep track of their disclosures/developments etcetera (Wolters Kluwer, 2022). It could also be an internal management decision (both listed and unlisted companies) to create a dedicated ESG department – consisting of human resources experts, legal experts, accountancy experts and finance experts among others to complete the ESG software on a daily basis (Baraibar-Diez, Odriozola, 2019, pp.1; Nekhili, Boukadhaba, Nagati, Chtioui, 2019t, pp. 3061). Generally, auditors such as PWC, when drafting the financial statements for a listed company, can also make use of the software data obtained by the ESG committee to draft sustainability reports for the company. The technology to assist the human resources departments is available but we were unable to find how many companies in Germany, France or South Africa are making use of this software.

b. Has digitalisation played a part in furthering ESG goals?

Wolters Kluwer has three pillars for its 2022–2024 sustainability strategy. In brief, it seeks to promote or accelerate ESG expert solutions for their customers (listed or unlisted companies). In other words, , to accelerate the availability of the ESG software program discussed in the paragraph above in listed and unlisted companies globally. It wants to make it very easy for listed companies (and unlisted companies that want to report on ESG) to use this software program as an expert solution to categorise and report on different aspects (or categories, e.g. a category on carbon emissions) of the company and be able to analyse each aspect with reference to ESG –user-friendly dashboards explaining the ESG progress being made by the company and the like. The second pillar is to acknowledge that every listed and unlisted company has unique business aspects and Wolters Kluwer acknowledges this to develop, improve ESG software programs to enhance ESG data reporting even further in future. The last pillar is for Wolters Kluwer to employ people with knowledge of ESG and to innovate and drive innovation even further through the ESG software program (Wolters Kluwer Strategic Pillars, 2022).

5. Strengths and weaknesses

In South Africa, a radical change has occurred in the way listed companies and the JSE is making use of ESG (Compare Euronext Rule book for CAC 40 ESG to JSE Disclosure Guidance – Narrative Disclosure and Metrics). In the event of non-compliance, the voluntary principle of comply or explain seems to be irrelevant, owing to the importance of the JSE metrics that must be followed by each and every listed company as a guideline on what sustainable reports should contain or disclose (JSE Disclosure Guidance – Narrative Disclosure and Metrics; Financial Times Rating of Portfolio). In addition, asset/fund managers are also analysing listed companies' ESG disclosures, rating listed companies individually. For example, Old Mutual asset managers uses MSCI to rate its portfolios of listed companies. We have seen this on the Frankfurt exchange, it is currently possible for a listed company to approach MSCI for an individual rating, by disclosing on its voluntary ESG hub. As was discussed earlier, a portfolio in South Africa could contain fossil fuel, coal mining or tobacco companies and could nevertheless obtain a very good MSCI rating. We do not know whether the JSE will randomly analyse companies' sustainability reports or those of all listed companies in order to understand a company's commitment to implementing ESG. We also do not know whether the JSE metrics will be changed to exclude fossil fuel, coal mining and/or tobacco companies in future from an ESG rating – similar to Euronext Paris in Table 1 above. We assume that ESG compliance will be implemented immediately by the JSE – although the JSE leaves scope for both asset managers and asset managers making use of external service providers to rate ESG. Owing to the reporting requirements in sustainability reports and the additional "red tape" resulting from the JSE metrics, one listed company has left the JSE (Anon, 2022, no page numbers).

The Frankfurt exchange is committed to ESG compliance and disclosure by individual listed companies. This exchange has issued a KI Report to assist listed companies to understand the purpose of ESG and how to disclose ESG in relevant reports. The reports of these companies are analysed by various external service providers, for example MSCI, Sustainalytics and ISS ESG. Currently, there is a voluntary ESG hub on the website of the exchange where ESG compliant companies can disclose their individual ratings obtained from MSCI, Sustainalytics and the like. The problem is that a layman would not understand the meaning of an MSCI rating of BBB, an ISS ESG rating of B or a Sustainalytics rating of 17,4, tot example. Contrary to Old Mutual asset managers, Siemens Kapitalanlagegesellschaft MBH does not disclose any portfolio rating. In contrast, the Financial Times discloses listed companies that are part of an ESG portfolio and also discloses an MSCI rating, for example iShares MSCI EM IMI ESG Screened UCITS ETF USD (Acc) is rated with four stars – we do not know who disclosed the MSCI rating of four stars to the Financial Times. In addition, we do not know whether the four stars equal A or AA for example. On the other hand, Euronext has presented webinars relevant to ESG, which are available on its website, to explain the purpose of ESG sustainability in future to investors and asset managers. It has also created a specific ESG index, the CAC 40 ESG rated by Moody's. To be part of this index, Euronext has disclosed ESG-specific requirements. In this regard, listed companies that contravene the UN Global Compact controversies such as tobacco, coal, oil, gas etcetera cannot be part of the CAC 40 ESG index. Obviously, asset managers would not be able to "create" their own ESG portfolio that is contrary to the ESG requirements for CAC 40 companies, as in the case with Old Mutual which has rated a fossil fuel company using MSCI. Accordingly, to make it easier for external service providers to obtain ESG data from individual companies, we suggest that the Wolters Kluwer software program be used by companies' ESG committees – which consists of various experts as discussed earlier – to obtain relevant ESG data on a daily basis. This would allow an auditor, for example PWC, to draft the sustainability reports, which in turn will be used by external service providers for ESG rating purposes. This software, we suggest, should be merely a platform for capturing data and not used to assign a rating to the data, since an exchange in a specific jurisdiction is bound by different interpretations of terms or phrases, for example what amounts to human rights violations and the like. What should be required from the software program is to highlight the importance of UN instruments relevant to ESG data in order to make companies aware of international law or perspectives relevant to ESG. It should be a global aim to create a platform where all global companies can be rated similarly, in order to achieve a valid and objective ESG rating for all global companies (see Table 1 above as an example).

a. Do barriers to ESG investment continue to exist? What are they?

Euronext is currently experimenting with ESG index shares, probably to make investors aware of the sustainability advantages of these index companies. In this regard, Moody's has already rated certain companies ESG compliant. Although the JSE has developed a metrics, we do not know whether it will be making use of an external service provider such as Moody's to rate individual JSE companies, which would limit the freedom of companies to approach an external service provider for an ESG rating (European Securities and Market Authority (ESMA) Call for Evidence, On Market Characteristics for ESG Rating Providers in the EU, 2022, pp. 6). We suggest that the JSE should follow a similar approach to Euronext by creating a uniform rating for all JSE-listed companies, as using different external service providers to rate companies may cause confusion. (See in general iShares MSCI EM IMI ESG Screened UCITS ETF USD (Acc); Financial Times Rating of Portfolio). Euronext allows an investor to search for a fund's ISIN number to understand whether similar funds or companies are listed on other exchanges in Europe. In line with this, the JSE should disclose ISIN numbers more freely (Naspers Ltd and Prosus NV: Transactions in Own Shares, 2022). As discussed earlier, Prosus NV is listed on the JSE and Euronext Amsterdam – in the case of international fund investments it should be possible to understand whether a fund is part of an index regulated by Euronext or whether it is a fund comprising internationally listed companies randomly chosen by a South African asset manager). Using an ISIN number should also make it possible to understand the ESG rating of that particular company where it has a dual listing – Amsterdam and JSE, for example. In addition, exchanges should decide how ratings should be shared or disclosed between them in the event of dual listings.

b. What is the post COP26 facilitators or drivers of ESG investment?

The European Commission has drafted a paper for public comment – Targeted Consultation on the Functioning of the ESG Ratings

Market in the European Union and of the Consideration of ESG factors in Credit Ratings (European Commission, 2022). The public has been invited to submit any comments in this regard on or before 6 June 2022. The purpose of this paper is simply to understand the objectivity of ESG when rating listed or unlisted companies (smaller market players). In order to promote an objective approach, the paper highlights that a few external service providers have failed to be transparent in how they rate listed companies, for example the weights allocated to the business activities of the company. In addition, no clear understanding of their rating methodology is disclosed or the methods used to obtain data from companies, among other things (European Commission Consultation Document, Targeted Consultation on the Functioning of the ESG Ratings Market in the European Union and on the Consideration of ESG Factors in Credit Ratings, 2022, pp. 4).

The biggest problem highlighted by this European Commission paper is the paid report obtained by a company from an external service provider, which amounts to a conflict of interest. For example, a company pays for a report, assesses that report and then may demand changes to be made before effecting payment. The paper also suggests that the rating comparability and reliability of external service providers, for example MSCI and Moody’s, should be improved to enhance the usefulness of ESG ratings for investors. The paper also suggests that external service providers should be subjected to supervision in order to produce a regulated ESG rating market that promotes the overall efficiency of ESG ratings in Europe (European Securities and Market Authority Call for Evidence on Market Characteristics for ESG Rating Providers in the EU, 2022). Financial market participants that make use of ESG ratings in the European Union include the following parties: insurance companies (relevant to pension funds), asset managers, reinsurance, large companies that have their own asset managers for capital market investment purposes, financial advisers for investors or companies and, lastly, laymen. This paper also provides a definition for ESG ratings, since ratings should cover more than just the environment, social relationships and corporate governance relevant to a company. The definition also includes the products of a company and even the shares of a company. However, ESG could be misused by analysing the ESG disclosures of a stock exchange, For example, because the company shares are listed on that exchange, those shares obtain a similar ESG rating, thus ignoring the business activities of the company which should actually be investigated for ESG compliance. This definition is complex, as it illustrates that it is possible to rate company shares in terms of ESG, irrespective of the business activities of the company. This simple example of ESG compliant shares or products tries to show how it is possible to “rate” an ESG compliant company irrespective of the main business activities of that company. The definition in the European Commission paper thus serves as convincing evidence as to why external services providers should be regulated – to ensure the quality and reliability of ESG ratings. The European Securities and Market Authority accepts that a comprehensive understanding of ESG ratings is “yet to be established” within the European Union (European Securities and Market Authority (ESMA) Call for Evidence, On Market Characteristics for ESG Rating Providers in the EU, 2022, pp. 6). Therefore, the sustainability documents/financial statements of listed companies that disclose ESG, and the external service providers that use metrics to evaluate relevant disclosures, should consult the ESMA to understand the process relevant to ESG ratings. In addition, the ESMA will confirm the relevance of contractual relations between companies and external service providers to establish whether there is possible conflict of interest and why it should be avoided in future (European Securities and Market Authority, ESMA Launches Call for Evidence on ESG Ratings, 2022, pp. 6). The European Commission and ESMA acknowledge the growth in ESG investments (Europe leads global ESG investing; in 2018 nearly 12 trillion euros were invested in Europe, representing 46% of global sustainable investments). This growth has resulted from asset/investment/fund managers, insurance companies and the like promoting sustainable investments to their clients (European Wolturs Kluwer Wolturs Kluwer).

6. Recommendations for the future integration of ESG policies

1. The JSE Limited does not require an ESG rating at present. The JSE Limited should rate listed companies in the future. At present, Old Mutual is rating its investment portfolios by making use of MSCI. Also, asset or fund managers could rate their own portfolios,

for example, Prescient Investment Management. In the future, the JSE Limited should be the only institution to rate ESG compliance.

2. The JSE limited metrics for ESG compliance is a significant step in the right direction. However, listed companies expect to disclose environmental, social relations, and corporate governance practices according to this metrics in their financial statements. It is not expected that listed companies should disclose information on all aspects of the metrics. It is suggested that listed companies comply with all aspects of the metrics in the future.

3. The JSE limited should acknowledge the principles of international law, for example, the UN Global Compact instruments, an example is the UN Guiding Principles on business and human rights. If not, the French civil law – duty of corporate vigilance – could prevent French companies from operating in South Africa. In the future, we foresee that more states or countries will implement similar civil laws than France.

4. The JSE Limited should consider the critical role Wolters Kluwer could play in terms of their software for ESG compliance. It is possible to incorporate the JSE Limited metrics in the Wolters Kluwer software programme.

5. To prevent ESG compliance when a listed company is not ESG compliant, for example, a listed fossil fuel company, the asset manager or MSCI who rates a portfolio of companies or individual companies should be transparent in their ratings of a fossil fuel company.

6. When rating a portfolio of companies, the rating company (for example, MSCI) must indicate its rating methods and how a combined rating for all the companies in a portfolio was achieved – how an AAA was achieved.

7. The JSE Limited could establish an index similar to the cac 40 ESG index for companies that complies with ESG rules similar to the Paris Stock Exchange. This would prevent greenwashing.

8. The JSE Limited should at least disclose listed companies who comply with integrated reporting of the JSE metrics – in the newspaper on the same page where the prices for listed shares are disclosed.

References

Alibaba Group. https://www.alibaba.com/?src=sem_ggl&from=sem_ggl&cmpgn=9922923274&adgrp=97780323582&fditm=&tgt=kwd-901651004762&locintrst=&locphyscl=1028682&mtchtyp=e&ntwrk=g&device=c&dvcmdl=&creative=432240797169&plcmnt=&plcmntcat=&p1=&p2=&aceid=&position=&localKeyword=alibaba%20group%20holdings&gclid=Cj0KCQjw3v6SBhCsARIsACyrRAn9iFn_C2x_5ZipPxUZ6qMkqA0bv-nd6tFRzOCycw-0TSHmJyx42UsaAqOgEALw_wcB accessed 20 April 2022.

Allianz. https://www.allianz.de/vorsorge/pensionskasse/ accessed 14 April 2022.

Amundi MSCI World Climate Transition CTB -UCITS ETF. https://www.amundietf.fr/professional/product/view/LU1602144229 accessed 22 April 2022.

Anglo-American, Anglo-American Operations: What we Mine. https://southafrica.angloamerican.com/our-stories/anglo-american-operations-what-we-mine accessed 20 April 2022.

Anon. (2020). JSE Sustainability and Climate Change Disclosure Guidance. https://www.jse.co.za/our-business/sustainability/jses-sustainability-and-climate-change-disclosure-guidance accessed 5 April 2022.

Anon.(2022). End of an Era as PSG set to Delist from JSE. *Business Tech*.https://businesstech.co.za/news/business/563610/end-of-an-era-as-psg-set-to-delist-from-jse/ accessed 24 August 2022.

Ahmed, S. (2021). Screening for ESG Risks and Opportunities using the Prescient ESG Scorecard. *Daily Maverick*. 15 November 2021. https://www.dailymaverick.co.za/article/2021-11-15-screening-for-esg-risks-and-opportunities-using-the-prescient-esg-scorecard/ accessed 4 April 2022.

Baraibar-Diez, E. and Odriozola,M. (2019). CSR Committee and their Effect on ESG Performance in UK, France, Germany and Spain. *Sustainability* 1.

Basic Law for the Federal Republic in Germany. https://www.gesetze-im-internet.de/englisch_gg/englisch_gg.html accessed 11 April 2022.

BNP Paribas Asset Management. https://mediaroom-en.bnpparibas-am.com/news/bnp-paribas-asset-management-adopts-euronext-cac-40-esg-index-7900-0fb7a.html accessed 19 April 2022.

Boffo, R. and R, Patalano. (2020). ESG Investing: Practices, Progress and Challenges. https://www.oecd.org/finance/ESG-Investing-Practices-Progress-and-Challenges.pdf accessed 7 April 2022.

Bowman Attorneys, Bowmans The Value of Knowing. (2021). https://www.bowmanslaw.com/wp-content/uploads/2020/10/B-BBEE-Guide-1-21.10.2020.V2.pdf accessed 20 April 2022.

Brewster, C. (2004). European Perspectives on Human Resources Management. *Human Resource Management Review* 365.

Diphoko, W. (2021) Patrick Motsepe's Digital Tyme Bank Secures Millions in Funding from Chinas Tech Giant Tencent. *IOL.* 7 December 2021chttps://www.iol.co.za/technology/fintech/patrice-motsepes-digital-tyme-bank-secures-millions-in-funding-from-chinese-tech-giant-tencent-461f24b2-4e57-4289-b45a-c7c1217d43d9 accessed 5 February 2022.

Dugard, J. (2020). *International Law, A South African Perspective*, 6th ed. Juta.

Giardini, A., Kabst, R, and Müller-Camen,M. (2005). HRM in the German Business System: A Review. *Management Revue* 63.

Financial Times Rating of Portfolio. https://markets.ft.com/data/etfs/tearsheet/ratings?s=SEGM:LSE:GBP accessed 20 April 2022.

European Commission. https://ec.europa.eu/info/consultations/finance-2022-esg-ratings_en accessed 28 April 2022.

European Commission Consultation Document, Targeted Consultation on the Functioning of the ESG Ratings Market in the European Union and on the Consideration of ESG Factors in Credit Ratings. (2022). https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/2022-esg-ratings-consultation-document_en.pdf accessed 28 April.

EU European Commission - Study on the drivers of investments in equity by insurers and pension funds; Germany Key Characteristics of the Pension Funds Market .(2019). https://ec.europa.eu/finance/docs/policy/191216-insurers-pension-funds-investments-in-equity/pension-funds/factsheet-germany_en.pdf accessed 13 April 2022.

European Commission Study on Sustainability, Related Ratings, Data and Research. (2020). https://op.europa.eu/en/publication-detail/-/publication/d7d85036-509c-11eb-b59f-01aa75ed71a1/language-en/format-PDF/source-183474104 accessed 28 April 2022.

European Securities and Market Authority Call for Evidence, On Market Characteristics for ESG Rating Providers in the EU. (2022). https://www.esma.europa.eu/file/122727/download?token=Uj7nO_-K accessed 29 April 2022.

CAC 40 ESG Trading Data. https://live.euronext.com/en/product/indices/FR0014002B31-XPAR/cac-40-esg/cesgp/quotes accessed 29 April 2022.

Euronext CAC 40 ESG. https://live.euronext.com/en/product/indices/FR0014002B31-XPAR/cac-40-esg/cesgp/quotes#index-composition accessed 19 April 2022.

Euronext Derivative Market and ESG indexes YouTube. https://www.youtube.com/watch?v=d4nBbEmyvUA accessed 19 April 2022.

Euronext ESG Empowering Sustainable Growth. https://www.euronext.com/en/about/esg-empowering-sustainable-growth accessed 19 April 2022.

Euronext ESG Reporting Moody's. https://live.euronext.com/sites/default/files/documentAtion/index-factsheets/CAC_40_ESG_Index_ESG_Report_March_2022.pdf accessed 19 April 2022.

Euronext Index Documents. https://live.euronext.com/en/product/indices/FR0014002B31-XPAR/cac-40-esg/cesgp/quotes#index-composition accessed 19 April 2022.

Euronext Launches new Green Bonds Offering. https://www.euronext.com/en/about/media/euronext-press-releases/euronext-launches-new-green-bonds-offering accessed 22 April 2022.

Euronext Market Information CAC 40 ESG. https://live.euronext.com/en/product/indices/FR0014002B31-XPAR/market-information accessed 29 April 2022.

Euronext Rule book for CAC 40 ESG. https://live.euronext.com/sites/default/files/documentation/index-rules/CAC%2040%20ESG%20Index%20-

%20final%20Rulebook%20-%2020210322.pdf accessed 24 November 2022.

Euronext Rule Book, Book II: Specific Rules Applicable to the French Markets. (2022) https://www.euronext.com/sites/default/files/2020-02/Book%20II%20_2%20July%202019_UK.PDF accessed 22 April 2022.

Equileap Gender Equality Data. https://data.nasdaq.com/databases/EQL/overview accessed 5 March 2022.

Festing,M. (2012). Strategic Human Resource Management in Germany: Evidence of Convergence to the U.S. Model, the European Model, or a Distinctive National Model? *Academy Management Perspectives* 45.

Frankfurt Stock Exchange. https://www.boerse-frankfurt.de/en/corporate-sustainability-disclosures accessed 19 April 2022.

Frankfurt Stock Exchange Green Bonds. https://www.boerse-frankfurt.de/bonds/green-bonds accessed 20 April 2022.

Frankfurt Exchange Sustainable ETF. https://www.boerse-frankfurt.de/sustainabilities/etfs accessed 20 April 2022.

Frankfurt Exchange Sustainability. https://www.boerse-frankfurt.de/equity/sap-se/sustainabilities accessed 19 April 2022.

Gender Equality Global Report and Ranking with Reference to their Gender Scorecard. https://quandl-production-data-upload.s3.amazonaws.com/uploads/product_supporting_document/130/Equileap_Global_Report_2022.pdf?X-Amz-Expires=1800&X-Amz-Date=20220404T101627Z&X-Amz-Security-Token=IQoJb3JpZ2luX2VjENf//////////wEaCXVzLWVhc

3QtMSJGMEQCIF/%2BJZjJ1Ide/ob%2B8QKgwUpU%2BRhnBH153Ge7XjDx5MR3AiAA5PeRSeU4TiSb63EQA6k3uStbAWCH69RADjNPaJUPeSr6AwhwEAIaDDMwNjMyMDUwMDIwNCIMBYgwCofbHv6eYmF8KtcD4P1Wy0B9prImURWooEOBFRHyFBzKru3ksK%2BukideCuwKek%2BcjAZGOVU7W93QWvLkemywxHMsNyjlkXBpcrH3dhv/qdu2hZZS3ZurydH8Yt1CG9qI2ngsSnxIC5q3EPRi%2BCFHu0/GxoVRk8CdBhymj0ehFAtfUte4objzLuKLY1aqdH7O4f4ocP3iqG1qPikfr6KEYQqtzUaZtGiWLYkgCp64NVfxi6DFvqLz4Ogi2F1VKWxZoY2cdQhMMiP6vlFvNwB4hY9MtRX2yMILDtTg3W3oV%2B8P8nF121j6RBDZOkz%2Bdayzz5tw%2Bx%2B%2BDGJjglZpsl/uxxmlls3Z1EhGn2qkdqbon3d6FqigS8CXa9L6C4thbnUICHrsOisvcsTik84zGb3DPagb47PU0aoZC9KuRV8UDojcOTVitfACaA1NYvzYwX3%2BOP2nFLkq8yRxb40wEHa4OUOdD9uJo1LWg1vqW8m8asER%2Buos2E1g1A3Bu%2BVqQWFylb0sP9rSVjn1GQ6tfhXDNcuznk5WxSj3qLcfHTcfWi6Zb9Yp6btWH9CdawAgFpwOM%2Bi3lBb5pqhv5co3Jo7YM1WjuqJnmIzx6tCETGYRL5WIkZxGYMcmKnqvHkYYLO7B/HaSMOCsqpIGOqYBKp3/OJHCBXRNsHgZq0tcR/CY4FDGuNCC1DSO2mzE7OcfFy3RbAgYKswYXwXZF/rdlmxvSqa3vD8E0diuU/mUmSyf5LUMl9an3JSEvITVVD9cEURD6IC2aoHN%2BOCJpefLuDZvbpWQohvBquhxYD8SFIiaYM6ylC9GbGzmHtoqALBzmsnJ8evQ1KgYUBNyk4MYiiLN93%2Bj5joAPa9ykohyDPkb11Xj7w%3D%3D&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=ASIAUOUQ74XWLND35JGC/20220404/us-east-1/s3/aws4_request&X-Amz-SignedHeaders=host&X-Amz-Signature=2df1f791c91e7cb02b5f557562b2f2a34e6a9cf85d3e21c7cd9d84d58f9d6212 accessed 12 March 2022.

Gerber, G.(2019). What are the Criminal Offences and Penalties relating to BEE Fronting? *SERR Synergy* *https://serr.co.za/what-are-the-criminal-offences-and-penalties-related-to-bee-fronting-written-by-gideon-gerber* accessed 24 November 2022.

Harvard Kennedy School, O'Sullivan and Frankel: How Sanctions on Putin's Russia are Reshaping the World Economic

Order. https://www.hks.harvard.edu/faculty-research/policycast/osullivan-and-frankel-how-sanctions-war-putins-russia-could-reshape#transcript accessed 4 May 2022.

iShares MSCI EM IMI ESG Screened UCITS ETF USD (Acc). https://www.boerse-frankfurt.de/en/etf/ishares-msci-em-imi-esg-screened-ucits-etf-usd-acc accessed 20 April 2022.

Jordaan, E.(2014). South Africa and the United Nations Human Rights Council. *Human Rights Quarterly* 90. https://core.ac.uk/download/pdf/13249393.pdf accessed 10 March 2022.

JSE Disclosure Guidance – Narrative Disclosure and Metrics. https://www.jse.co.za/sites/default/files/media/documents//JSE%20Sustainability%20Recommended%20Disclosures%20and%20Metrics_FA_.pdf accessed 6 April 2022.

Khashanem JSE Launches Sustainability and Climate Change Disclosures Guidance for Listed Companies https://www.jse.co.za/news/news/jse-launches-sustainability-and-climate-change-disclosure-guidance-listed-companies accessed 6 April 2022.

Kilian, N.(2019). Good Corporate Governance Principles and the Probability of Hate Speech in Australia, Namibia and South Africa. *African journal of International and Comparative Law* 161.

Kirchfeld,A., Henning,E., and Jennen.B., Germany's $400 billion pension fund eyes Capital Markets Boost. *Bloomberg*. 3 November 2021 https://www.bloomberg.com/news/articles/2021-11-03/germany-s- 400-billion-pension-fund-eyes-capital-markets-boost accessed 13 April 2022.

Kuhlmann, S., Proeller, I., Schimanke,D., and Ziekow,J. (ed). (2021). Governance and Public Management Series, Public Administration in Germany (Palgrave MacMillan) 375.

Lodge, T. (1998). Political Corruption in South Africa. *African Affairs Journal* 157.

Max Planck Institute for Social Law and Social Policy. https://www.mpisoc.mpg.de/en/social-law/research/research-projects/pension-maps/project-website/deutschland/private-pension-scheme-riester-pension/ accessed 13 April 2022.

Moreolo, C. How We Run our Money: Pensionskassen Manor. IPE Magazine. March 2021 https://www.ipe.com/interviews/how-we-run-our-money-pensionskasse-manor/10050988.article accessed 14 April 2022.

Munich-Re Group. https://www.munichre.com/en/company/about-munich-re/organisation.html accessed 19 April 2022.

Munich-Re Group Ambition 2025. https://www.munichre.com/en/company/munich-re-group-ambition-2025.html accessed 19 April 2022.

Naspers Ltd and Prosus NV: Transactions in Own Shares. *Financial Times*. https://wwwmarkets.ft.com/data/announce/full?dockey=1323-15032232-2NS3HMD1UI;7DAFK3N7MFEOGNFQ accessed 4 May 2022.

Nekhili, M., Boukadhaba, A., Nagati, H., and Chtioui,T. (2019). ESG Performance and Market Value: The Moderating Role of Employee Board Representation. *The International Journal of Human Resource Management* 3061.

Neuberger Berman Investment Funds PLC. https://expressapi.fundassist.com/v1/api/files/73d1063b-4d23-eb11-a83a-005056a103bb pages 14-17 accessed 19 April 2022.

Information for COP 26 Participants. https://unfccc.int/cop26/participants-a-z accessed 4 April 2022.

The Glasgow Climate Pact – Key Outcomes from COP 26. https://unfccc.int/process-and-meetings/the-paris-agreement/the-glasgow-climate-pact-key-outcomes-from-cop26 accessed 4 April 2022.

Ortec Finance. https://www.ipe.com/interviews/how-we-run-our-money-pensionskasse-manor/10050988.article accessed 14 April 2022.

PPC Metrics. https://www.ppcmetrics.ch/de/kunden/pensionskassen/ accessed 14 April 2022.

PWC Insights. https://www.pwc.com/gx/en/research-insights/economy/the-world-in-2050.html accessed 12 January 2022.

PWC Interactive Tool Data. https://www.pwc.com/gx/en/research-insights/economy/the-world-in-2050.html#data accessed 5 January 2022.

PWC. (2019). The World in 2050, The Long view: How will the Global Economic Order Change by 2050? https://www.pwc.com/gx/en/research-insights/economy/the-world- in-2050.html accessed 12 December 2021.

PWC COP26: South Africa, Challenge for COP26 to Get all Countries to Sign policies to Reduce Carbon Emissions. https://www.pwc.co.za/en/press-room/cop26-south-africa-2021.html accessed 10 April 2021.

Old Mutual ESG Equity Fund Example. https://www.oldmutualinvest.com/v3/assets/bltf97ab615862b2667/blt638f1dd51915797e/622efb488149c50daac7747a/OldMutualESGEquityFund.pdf accessed 5 December 2021.

Old Mutual Equity Fund. https://www.oldmutualinvest.com/v3/assets/bltf97ab615862b2667/blt75738ad070af9289/626139ecb04465339a550be8/OldMutualEquityFund.pdf accessed 1 March 2022.

Reliance Petroluem. https://www.reliancepetroleum.com/autoLPG accessed 20 April 2022.

Retraite. https://www.retraite.com/caisse-retraite/cnav/ accessed 19 April 2022.

Retraite Dossier. https://www.retraite.com/dossier-retraite/retraite-complementaire/per-plan-epargne-retraite/ accessed 19 April 2022.

Reuters, South African Defence Firm Denel's Bonds Suspended from JSE. https://www.businesslive.co.za/bt/business-and-economy/2022-02-04-south-african-defence-firm-denels-bonds-suspended-from-jse/ accessed 20 April 2022.

SAAI. Welcomes Confirmation that PPECB will not Suspend Agricultural Exports due to BEE Certificates. https://saai.org/en/saai-welcomes-confirmation-that-ppecb-will-not-suspend-agricultural-exports-due-to-bee-certificates/ accessed 20 April 2022.

Saloojee,Y., and Matthee, A. (2021). COVID-19 and a Temporary Ban on Tobacco Sales in South Africa: Impact on Smoking Cessation. *BMJ*. https://tobaccocontrol.bmj.com/content/early/2021/07/04/tobaccocontrol-2020-056293 accessed 4 April 2022.

Saunderson-Meyer, W. (2021). KZN:What a Disaster. *The Politicsweb*. 3 March 2022. https://www.politicsweb.co.za/opinion/kzn-what-a-disaster 20 April 2022.

Sasol Market Cap. https://www.moneyweb.co.za/tools-and-data/click-a-company/SOL/ accessed 13 April 2022.

Screening for ESG Risks and Opportunities using the Prescient ESG Scorecard. *Daily Maverick*. 15 November 2021. https://www.dailymaverick.co.za/article/2021-11-15-screening-for-esg-risks-and-opportunities-using-the-prescient-esg-scorecard/ accessed 4 April 2022.

Siemens Energy AG. https://www.boerse-frankfurt.de/equity/siemens-energy-ag/sustainabilities accessed 19 April 2022.

Siemens Kapitalanlagegesellschaft MBH (Munich) Clients. https://wallmine.com/adviser/228554/siemens-kapitalanlagegesellschaft-mbh accessed 19 April 2022.

Siemens Produkte and Services. https://new.siemens.com/de/de/produkte/fuer-den-privathaushalt/investmentfonds/private-geldanlage.html accessed 4 May 2022.

South Africa Code of Conduct for Public Servants. http://www.dha.gov.za/index.php/notices/2-uncategorised/29-code-of-conduct-for-public-servants accessed 26 April 2022.

Sparrow, P., and Hiltrop, J. (1997). Redefining the Field of European Human Resources Management: A Battle between National Mindsets and Forces of Business Transition. *Human Resource Management* 201.

Statista Germany Gender. https://www.statista.com/statistics/454338/population-by-gender-germany/ accessed 10 March 2022.

Stats SA. https://www.statssa.gov.za/?p=12930 accessed 20 April 2022;

Stats SA https://www.statssa.gov.za/wp-content/uploads/2020/02/ineq2.jpg accessed 20 April. 2022

Stout, L., Belinfanti, T., and Gramitto, S. (2019). Citizen Capitalism: How a Universal Fund Can Provide Influence and Income to All. Berrett-Koehler Publishers.

Tade,O. (no date). Xenophobia in South Africa: How Family Members Influenced Nigerians to Stay or Flee. *The Conversation* no date. https://theconversation.com/xenophobia-in-south-africa-how-family-members-influenced-nigerians-to-flee-or-stay-177590 accessed 11 April 2022.

Tait, L., and Winkler, H. (2012) Estimating Greenhouse Gas Emissions Associated with Achieving 46 Universal Access to Electricity for all Households in South Africa. *Journal of Energy of South Africa* 8.

Toyota Six Challenges – Moving Toward a Future Society in Harmony with Automobiles and Nature. https://global.toyota/en/sustainability/esg/challenge2050/ accessed 29 April 2022.

OECD Human Resources Management Country Profiles. (2012) https://www.oecd.org/gov/pem/hrpractices.htm accessed 26 April 2022.

OECD Pensions at a Glance: Country Profiles (2019). https://www.oecd.org/els/public-pensions/PAG2019-country-profile-Germany.pdf accessed 13 April 2022.

Prescient Sustainability Report 2021. https://www.prescient.co.za/media/ro1jlksj/prescient-sustainability-report-2021.pdf accessed 4 April 2022.

Wolturs Kluwer. https://www.wolterskluwer.com/en accessed 26 April 2022.

Wolturs Kluwer A Quick Guide to ESG Compliance with CCH TAGETIK ESG and Sustainability Performance Management. https://assets.contenthub.wolterskluwer.com/api/public/content/esg-reporting-guide?v=0ab4be09 accessed 26 April 2022.

Wolturs Kluwer Strategic Pillars. https://www.wolterskluwer.com/en/about-us/strategy accessed 26 April 2022.

Wolters Kluwer Sustainability and ESG Reporting Software. https://www.wolterskluwer.com/en/solutions/enablon/sustainability-esg-reporting-software accessed 26 April 2022.

UN Climate Change 2022, Mitigation of Climate Change, Working Group III Contribution to the IPCC 6th Assessment Report 2022 TS 1 and Chapter 4 https://www.ipcc.ch/report/ar6/wg3/ accessed 10 April 2022.

United Nations Global Compact. https://www.unglobalcompact.org/ accessed 20 April 2022.

United Nations Global Compact, UN Global Compact Africa Strategy 2021-2023, Mobilizing African Business for Impact. (2021). https://ungc-communications-assets.s3.amazonaws.com/docs/publications/UNGC_Mobilising%20Business%20in%20Africa_2021_2023.pdf accessed 20 April 2022.

UN Global Compact Launches New Business and Human Rights Navigator with the German Helpdesk on Business and Human Rights and Verisk Maplecroft. https://www.unglobalcompact.org/news/4886-03-29-2022 accessed 20 April 2022.

Wallace. Bank of England Tells Ministers to Intervene in Digital Currency. *The Telegraph* 21 June 2021. https://www.telegraph.co.uk/business/2021/06/21/bank-england-tells-ministers-intervene-digital-currency-programming/ accessed 11 April 2022.

Xtrackers MSCI USA ESG UCITS ETF. https://markets.ft.com/data/etfs/tearsheet/summary?s=XZMU:LSE:USD accessed 20 April 2022.

Xtrackers MSCI USA ESG UCITS ETF on Frankfurt. https://www.boerse-frankfurt.de/en/etf/xtrackers-msci-usa-esg-ucits-etf accessed 29 April 2022.