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Balancing Environmental Transition With Social Harmony

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Navigating the balance between environmental sustainability and social fairness involves multiple stakeholders, including governments and companies. While these entities lay foundational policies and practices, investors have a unique leverage in this ecosystem given their crucial role in directing capital.

This paper examines:

- The intertwining of environmental and social considerations
- The importance of a "just transition", which ensures that environmental changes are made with social consequences in mind.
- The role of governments and companies in setting the stage for environmental transition.
- The unique positioning of investors in contributing to a just transition as well as the risks they face if social challenges lead to a disorderly climate transition.

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Executive Summary

The relationship between environmental (E) and social (S) factors in society is increasingly evident. If we don't transition to more environmentally friendly practices, society will suffer consequences such as biodiversity loss, decreased productivity, and increased forced migration. Conversely, if environmental changes don't take social factors into account, it could result in job losses and increased global inequality, leading to social unrest and opposition to climate initiatives. This emphasizes the importance of a "just transition," which ensures environmental changes are made with social consequences in mind.

A just transition requires collaboration from individuals, governments, and businesses. Among these, investors play a pivotal role, given their influence on businesses. The estimated cost of climate transition stands at US$9.2 trillion per year. While governments and businesses play their parts, investors' strategic investment decisions have the potential to incentivise companies to adopt genuine tangible "just transition" plans.

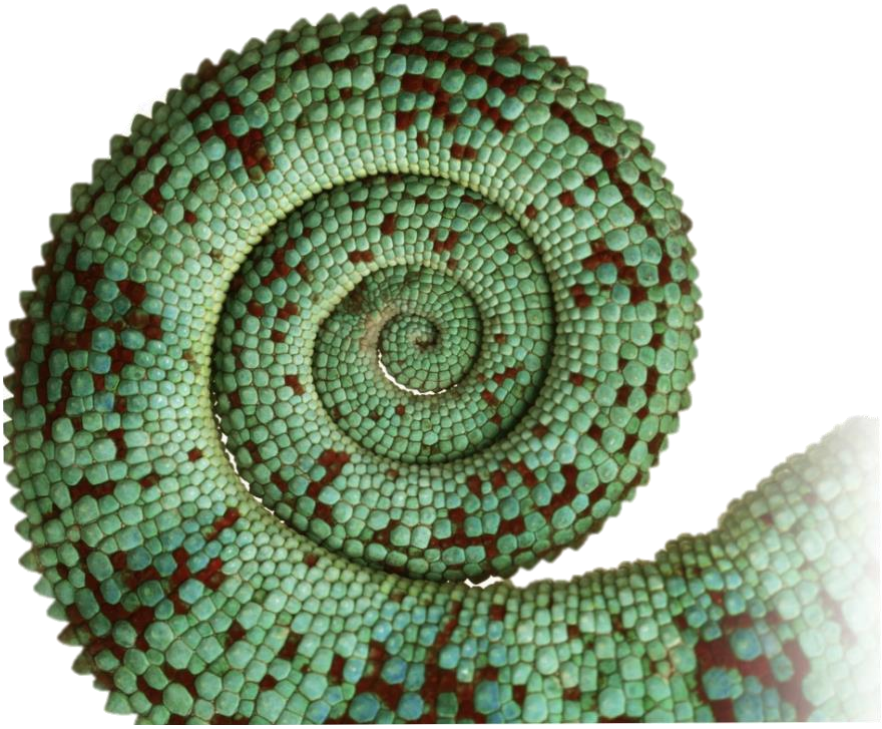
Without this balanced transition, investors will face greater risks as social challenges would force a rollback on climate commitments, weaken environmental policies, and lead to the disorderly climate transition.

Investors have three primary strategies at their disposal:

Invest – The financial market is evolving with more tools designed to back investors in environmental and social projects. Instruments like sustainable bonds, which merge ecological benefits with social goals, are becoming more popular in the green bond market.

Engage – Instead of pulling out their investments, investors should remain invested in sectors undergoing climate transition. They should actively engage with these companies to ensure that their transition plans address and reduce any negative impacts on stakeholders. This is especially vital for sectors that are in the midst of transitioning.

Collaborate – Investors can join forces with other financial entities to harness their collective interest in guiding investments and innovations in the fast-changing global environment. Through such collaborative engagement, they can pool resources, expertise, and insights to bridge the gap between environmental and social considerations.



Introduction

In the face of mounting environmental challenges, there is an increasing recognition that the fight against climate change cannot be isolated from social considerations. The interdependence between the E (environment) and S (social) factors in investment must emerge as a critical topic of discussion. Traditionally, discourse surrounding environmental concerns have primarily concentrated on the urgent need to mitigate climate change and protect biodiversity. While these objectives remain crucial, a comprehensive understanding now encompasses the recognition that environmental action is intrinsically linked to social well-being. Neglecting social dimensions within environmental transitions can have far-reaching consequences that undermine the benefits of sustainability efforts.

The responsibility for forging a just transition lies with a collective effort involving society, companies, governments, and investors. Each actor plays a role in acknowledging that the costs of inaction far outweigh the investments required for a just transition. By recognizing their own power to shape the trajectory of environmental and social progress, investors have a unique opportunity to integrate social considerations into their climate-friendly agendas in order to achieve long term risk-adjusted returns.

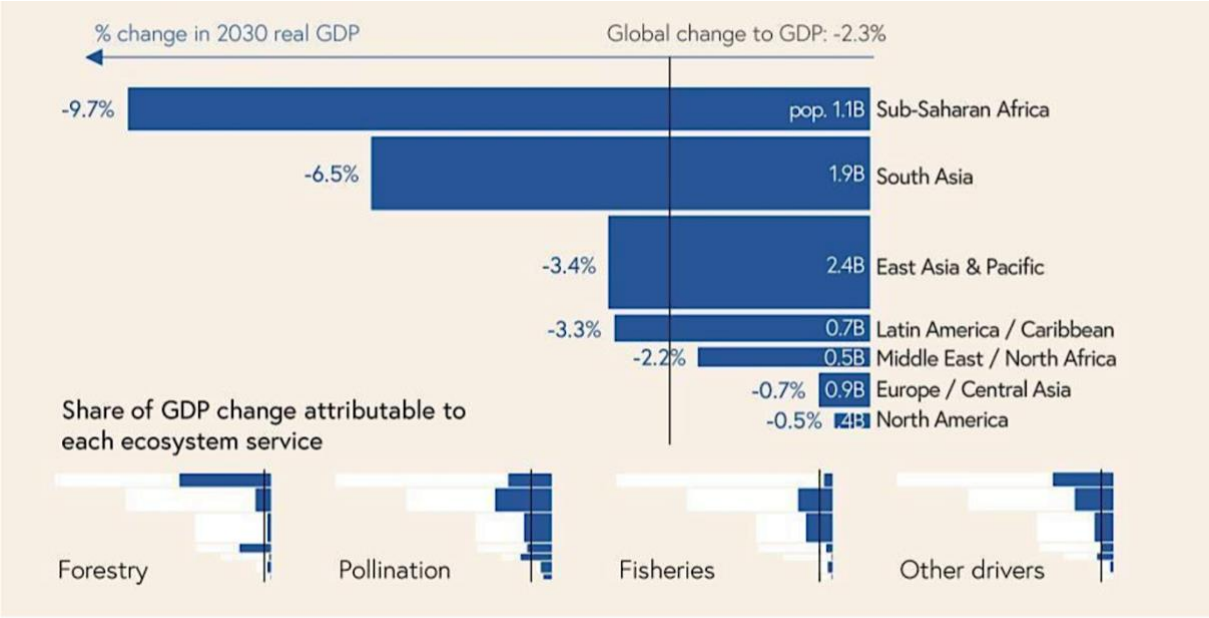
I. What happens to S if there is no E transition?

The environment plays a critical role in supporting human activities and overall societal welfare. It is important to recognise that Environmental and Social progress are not isolated silos but rather interconnected entities.

Investing in environmental sustainability inherently promotes positive social impact. In 2023, PwC reports that approximately 55 per cent of the world's GDP, equivalent to around US $58 trillion, is moderately or highly dependent on nature[1]. According to the World Economic Forum (WEF), this includes key sectors such as construction and agriculture, which generate US$4 trillion and US$2.5 trillion respectively of gross value added[2].

An ecosystem collapse, or failure of an ecosystem service, is a major risk to economies worldwide, especially for underdeveloped and developing countries (Figure 1). This means that a substantial portion of economic activities and sectors directly or indirectly depend on natural resources, ecosystem resilience, and environmental conditions.

Figure 1: Change in 2030 real GDP under partial ecosystem collapse scenario compared with the no-tipping-point scenario by geographic region (World Bank)[3]



In 2018, the International Labour Organisation (ILO) reported that about 1.2 billion jobs, or 40% of total world employment, depend directly on ecosystem services, which includes for example rainwater for dry-land farming and ocean biodiversity for coastal fishing [4].

Consequently, the lack of an environmental transition can have far-reaching implications for societal development, economic growth, and hinder the long-term stability and resilience of economies and societies, and not only of small and middle-income economies.

For example, according to the World Bank 60 million jobs worldwide are directly connected to fishing and fish farming. For each individual employed in this sector, an additional 2.5 jobs are generated throughout the fisheries value chain, which amounts to a total of 200 million jobs, with 60 per cent of them located in developing nations[5].

Climate change's negative influence on supply chains and global economic networks will have devastating social consequences for people working in nature-dependent sectors, impeding the achievement of SDG 8 (Decent Work and Economic Growth).

The lack of investment in an environmental transition directly affects productivity in the workplace, especially in key industries.

The IPCC Fifth Assessment report found that the global economic cost of reduced productivity could reach US$2 trillion by 2030 and output reductions could exceed 20 per cent in affected sectors during the second half of the century[6].

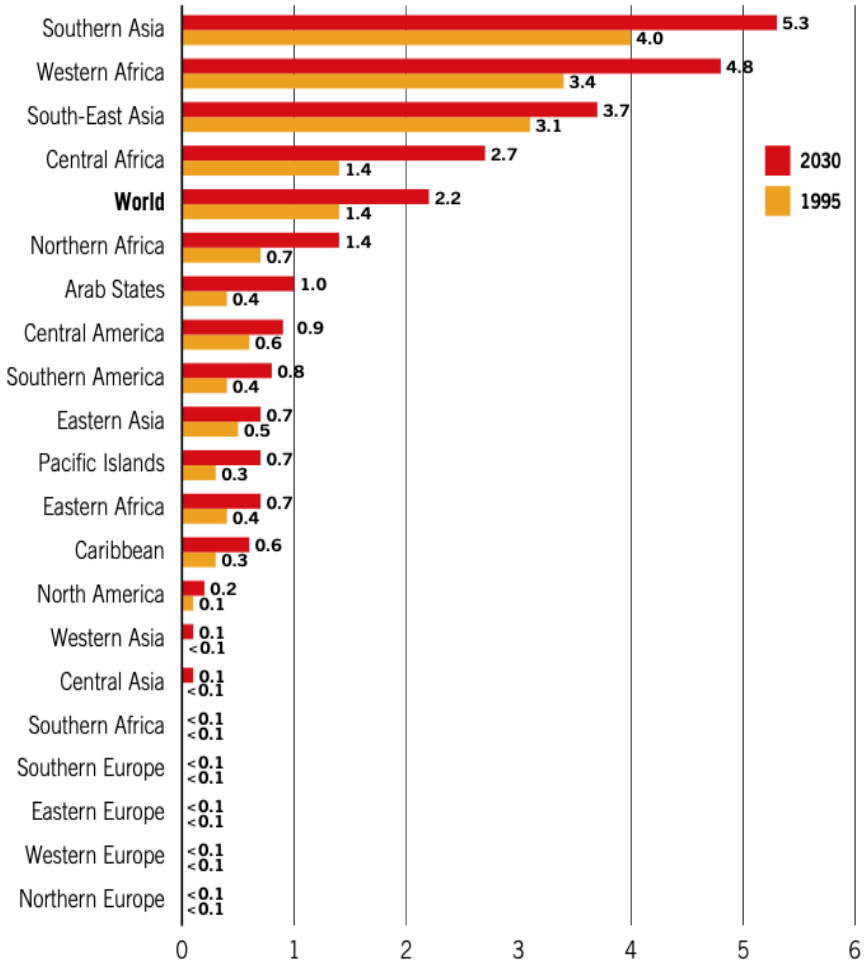
The main cause for this lost productivity is heat stress. Heat-related health issues, including heat strokes, dehydration, and exhaustion will become more prevalent, leading to increased downtime, particularly in outdoor work sectors.

The ILO reports that without a transition, 60 per cent of the jobs lost will be in the agriculture sector and 19 per cent in construction. It also predicts that 2.2 per cent of working hours will be lost by 2030 (Figure 2), the equivalent to the loss of 80 million full-time jobs or US$2,400 billion, because of heat-stress alone[7].

On a global scale, the absence of environmental transition extends beyond the workplace and affects society at large. The lack of environmental transition exacerbates the risk of poverty and inequality, negatively affecting SDGs 1 (No Poverty) and 10 (Reduced Inequalities). This is mainly through job losses in sectors heavily reliant on the environment, in addition to the vulnerable groups including pregnant or older workers who will struggle to access the workforce due to inadequate and harmful conditions.

Furthermore, the absence of environmental transition contributes to forced migration and the emergence of climate refugees, which place significant strain on societal resources, lead to social tensions, and directly impact SDG 16 (Peace, Justice, and Strong Institutions).

Figure 2: Working hours lost to heat stress by subregion, 1995 and projections for 2030 (in per centage) (ILO)[8]



Source: ILO estimates based on data from the ILOSTAT database and from the HadGEM2 and GFDL-ESM2M climate models (using as input the RCP2.6 climate change pathway, which envisages a global average temperature rise of 1.5°C by the end of the century).

The Internal Displacement Monitoring Centre (IDMC) reports that 32.6 million people were internally displaced in 2022 due to natural disasters (as opposed to 28.3 million by conflict and violence, a figure that has tripled since 2020)[9] (Figure 3).

Furthermore, environmental degradation can fuel conflicts over scarce resources, including water and arable land. The competition for these diminishing resources and the livelihoods attached to them may exacerbate existing tensions seeing as the United

Nations High Commissioner for Refugees (UNHCR) noted that 95% of all conflict displacements in 2020 occurred in countries vulnerable or highly vulnerable to climate change[10].

For example, the International Crisis Group reported that droughts in Kenya's Rift Valley have exacerbated conflict for land and water among farmers, herders, and landowners, killing at least 239 people since May 2021[11].

Figure 3: Internal displacements in 151 countries and territories (IDMC)[12]

Our heavy reliance on the environment for economic activities, coupled with decreased work productivity, increased poverty risks, forced migration, and conflict, highlights the urgent need for environmental transition.

By acknowledging these consequences, it becomes evident that addressing environmental concerns is not just a matter of preserving the planet but is essential for safeguarding social wellbeing and global economic growth.

II. What happens to S during an E transition?

As the world grapples with the pressing challenges of climate change and biodiversity degradation, the need for an environmental transition has become evident, socially, and economically. To quote Alan Jope, CEO of Unilever, “there will be no jobs or prosperity on a dead planet!”[13].

Environmental transitions such as the shift to renewable sources and the practice of regenerative agriculture, hold great promise in mitigating these global concerns. However, while Environmental and Social progress are interconnected, it is crucial to understand the potential societal consequences that come with environmental transitions. Investing in an environmental transition and disregarding the social aspects will have costly consequences and infringe on the transition itself.

Environmental transitions inevitably result in the elimination, substitution, and transformation of certain jobs, particularly emissions-intensive jobs, and climate-dependent jobs.

According to a 2022 Deloitte report, the most vulnerable industries to climate risks will be agriculture, construction, conventional energy, transport, and heavy industry and manufacturing[14].

It is important to understand the difference between physical risk and transition risk.

Physical climate risks refer to the direct impacts of climate change, such as extreme weather events and shifting climate patterns, which can harm infrastructure and business operations.

Transition climate risks arise from the societal transition to a low-carbon economy, influenced by factors such as regulatory changes, technology evolution or changing consumer behaviour, potentially impacting business, and economies.

Sectors will be affected differently because of their different exposure to climate risks. Some of them will be affected by climate physical risk, as for agriculture and construction. Others will be affected by transition risks as for conventional energy and transport.

Box 2.1. Case studies: Physical risk vs. transition risk

Physical risk: Coffee in Latin America

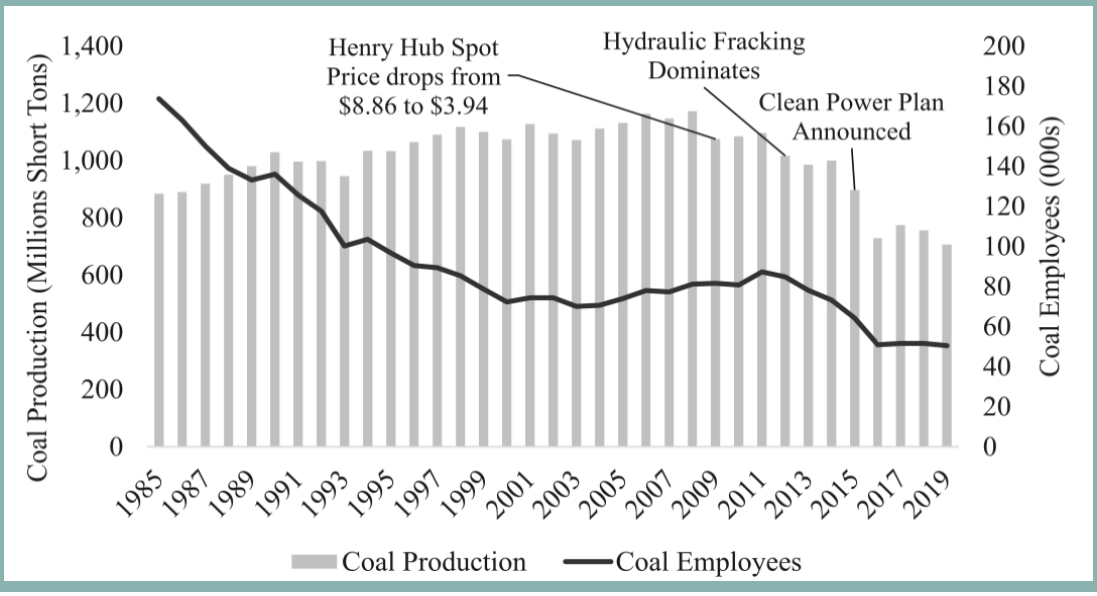
The coffee industry, which retails $83 billion yearly, is set to be heavily impacted by climate change as 60% of coffee varieties globally are in danger of extinction due to climate change and its outcomes. According to the Inter-American Development Bank (IDB), the coffee industry employs over 14 million people across Latin America as the region is home to five of the top ten coffee producers in the world. IDB estimates that rising temperatures will reduce the amount of land suitable for growing coffee by up to 50 per cent by 2050 as coffee requires specific temperature, light, and humidity levels to grow properly.

For example, 95 per cent of coffee plantations in Colombia are five hectares or less, and the industry represents 22 per cent of the country's agricultural GDP. The increased temperatures, changes in rainfall patters, and subsequent increase in pests and diseases threaten the livelihoods and welfare of millions of producers, especially small ones.

Transition risk: Transition of the U.S. coal industry

More than 42,000 work in coal mining in the United States, and support activities, transportation, and other indirect employment, contribute to an additional 306,000 jobs. Therefore, the closure of a coal-fired powerplant or a coal mine can have lasting effects on certain communities and workers. Coal-related jobs reportedly pay relatively well for low-skilled work, with some reports stating that they pay better and are more unionised than jobs in wind or solar industries. In 1990, coal-fired power plants accounted for 52% of total electricity generation compared to 18% by the end of 2021. Consequently, the number of employees in the industry declined by 75 % between 1985 and 2020 (Figure 4).

Figure 4: Coal Production and Employment in the US, 1985-2020 (Michieka et al. 2022)



Sources: Coffee - *IDB*[15,16] and *PwC*[17]; Coal - *EIA*[18], *CSIS*[19], *NMA*[20], *Witynski (2021)*[21], and *Michieka et al. (2022)*[22]

The ILO estimates that a transition to energy sustainability by 2030 will destroy nearly 7 million jobs, and in a global circular economy scenario, this number rises to 78 million jobs eliminated[23]. However, the scale and nature of job losses will vary greatly depending on the region and industry[24]. Additionally, occupations like oil rig workers, coal miners, and farmers are likely to face considerable challenges in a shifting environmental landscape. The ripple effect will impact related industries, such as transportation and manufacturing, leading to additional job losses and negatively affecting SDG 8 (Decent Work and Economic Growth).

Environmental transitions thus have the potential to exacerbate existing inequalities within communities, interfering with SDGs 1 (No Poverty) and 10 (Reduced Inequalities).

Due to job losses and economic uncertainty, low-income and unskilled workers and communities can face financial barriers that hinder their own ability to adopt sustainable practices or access green technologies. For example, farmers may be unable to invest in more sustainable irrigation infrastructure and will continue creating negative environmental externalities. Consequently, this perpetuates a divide between those who can afford to embrace environmental changes and those who cannot.

Furthermore, transitions can also result in the marginalization of entire communities that are reliant on environmentally harmful industries. When decision-making processes do not incorporate the perspectives and needs of affected communities, such as farmers or coal miners, it can lead to the disempowerment and exclusion of already vulnerable groups.

Lastly, environmental transitions can adversely affect SDG 16 (Peace, Justice, and Strong Institutions) by giving rise to social unrest, manifested in public opposition and resistance to sustainability initiatives. When the costs of these transitions are disproportionately borne by certain segments of society, it can lead to grievances and protests.

The fear of job loss, lack of social protection, and economic uncertainty can further challenge the progress of environmental transitions and create tensions that spark social movements, resulting in increased risk of violence and clashes with authorities.

Box 2.2. Case study: Dutch farmers protests

In 2019, a decision by the Netherland's supreme court ruled that no more permits to emit nitrogen could be issued as the country had breached EU nature protection laws. As Dutch farms contribute about 41 per cent of the country's nitrogen emissions, they are evidently affected. For agriculture in general, the government has advised a 41 per cent cut. Thus, in 2022, the Netherlands imposed an initial 33 per cent cut in the national animal herd and some farmers were told to cut emission by 70 to 95 per cent.
Following some of these announcements, notably in the summer of 2022, farmers have blockaded roads, airports and train stations with their tractors, picketed supermarket distribution centres, and demonstrated in front of public official's residences, despite the government's offer to buy them out. The anger gave rise to the success of the Farmer-Citizen Movement (BBB), created to oppose the planned curbs on nitrogen emissions. Whereas farmers only represent 1 per cent of the population, BBB became the largest party in every provincial legislature in the 2023 provincial elections.

Sources: The Financial Times[25,26] and *Foreign Policy*[27]

Environmental transitions are vital for combating climate change and promoting sustainable development. However, their implementation must consider the social consequences they can generate. Deloitte estimates that 80 per cent of the skills required in the Green Collar workforce are already used in today's work and the transition is set to create millions of jobs[28]. However, a report published in 2022 by the ILO, the United Nations Development Programme (UNDP), and the International Union for Conservation of Nature (IUCN) highlights that employment in Nature-based Solutions (NbS), such as employment on farms that have switched to regenerative farming, cannot guarantee decent work, nor fair compensation, security, equity, or conditions of freedom and human dignity[29]. This means that only mitigating physical climate risks will not lead to a just transition.

By ensuring a transition that addresses job losses through skill development and employment opportunities, promotes inclusivity and equality, and fosters dialogue and participation with affected communities, societies can navigate just environmental transitions in a manner that minimizes potential adverse impacts and ensures a fair and sustainable future for all.

III. What is a just transition and should pay for it?

The notion of a "just transition" has emerged as a compelling framework to reconcile the environmental transition and its social grievances and guide the transformation toward a sustainable future and net-zero economy.

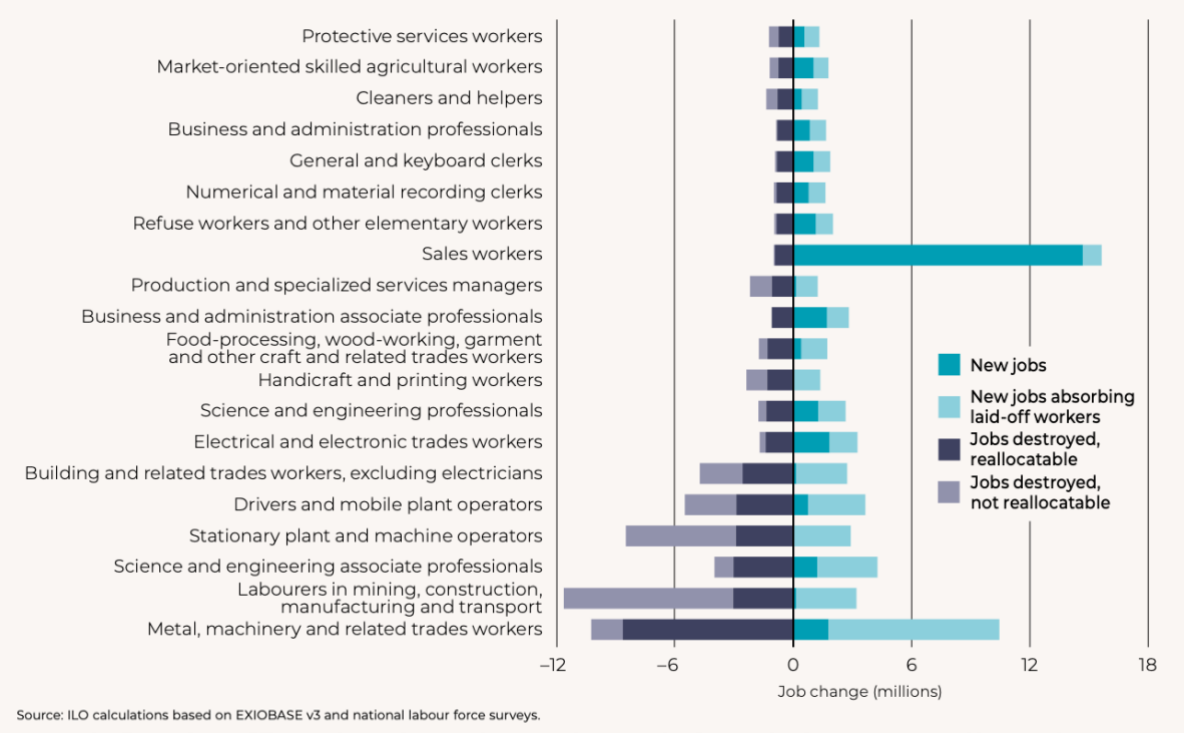
It is defined by the IPCC as, “a set of principles, processes and practices that aim to ensure that no people, workers, places, sectors, countries or regions are left behind in the transition from a high-carbon to a low-carbon economy.”[30] The concept encapsulates the essential objective of upholding fairness and inclusivity for all stakeholders involved in the transition by avoiding disproportionate burdens on vulnerable communities and exacerbating social inequalities. However, it also becomes pertinent to explore the responsibility of allocation of financial resources necessary to facilitate a just transition.

The ILO estimates that a transition by 2030 would result in almost 78 million jobs created and nearly 71 million destroyed[31]. By 2050, the McKinsey Global Institute[32] predicts that, 202 million direct and indirect jobs will be created and about 187 million lost. Additionally, different sectors and occupations will be affected to varying degrees by this transition.

Jobs heavily reliant on fossil fuels, machinery, mining, construction, and transportation are likely to experience most significant disruptions (Figure 5). These occupations are expected to face challenges in terms of job losses and restructuring, requiring investment and support to ensure a fair and inclusive transition for workers and communities affected.

However, there are other occupations such as sales that are likely to see significant growth compared to its losses and therefore present new opportunities to workers negatively affected by the transition.

Figure 5: Occupations most susceptible to job destruction and reallocation across industries in a global circular economy scenario, 2030 (ILO)



Determining the responsible entities for funding the just transition presents a complex challenge. While the burden of financing this monumental endeavour cannot be placed solely on one entity, governments, companies, and society all have roles to play.

The ILO states that 2 per cent of global jobs are at risk of disruption, however the creation of over 100 million jobs is conditional on training[33].

For example, according to EY, oil and gas companies estimate that at least 60% of workers in the sector will need to be reskilled or upskill, and the average worker could take up to 10 months[34]. Additionally, another EY report estimates that up to 17% of workers in that sector will not be able to be reskilled or upskilled[35].

Hence, someone is going to have to invest money to enable workers to acquire the new and potentially transferable skills demanded by new jobs.

Box 3.1. Case Study: SSE's road to decarbonization

SSE is a UK-based energy company operating in the UK and Ireland. Its main activities include generating, transmitting, and distributing electricity, as well as supplying energy and related services. In May 2023, it announced plans to invest £40bn in clean energy over the next 10 years.

In 2020, SSE published a Just Transition strategy outlining 20 principles for a just transition, including principles for good green jobs, consumer fairness, building and operating new assets, supporting people in high-carbon jobs, and supporting communities.

Here are some of the company's targets, demonstrating the principles in practice:

- Creation of over 1,000 new direct, contractor and supply chain jobs linked to two offshore wind farms and a subsea power cable
- Creation of at least 250 new jobs and 1,600 supply chain jobs in the SSEN Transmission's RIIO-T2 business plan
- Works closely with organisations like Skills Development Scotland to develop guidance for people looking to transition into renewable energy.
- 1/3 of SSE Renewables employees have transitioned from high-carbon
- 2/3 of operators in the Beatrice offshore wind farm control room have been attracted from oil and gas – There are directly transferable skills between the offshore oil and gas industry and the offshore renewables industry.

Sources: SSE Supporting a Just Transition[36], Just transition: From Principles to Action[37], SSE Renewables[38]

Overall, society at large, including individuals, consumers, and workers, should participate in the just transition through their purchasing choices, lifestyle changes, and collective engagement and advocacy.

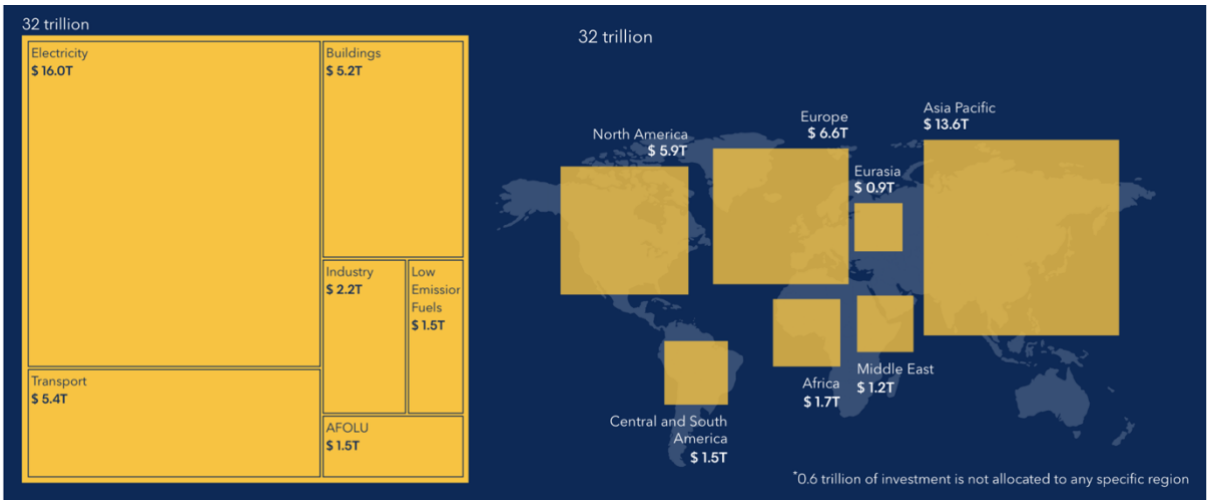
However, could workers also bear the cost of the transition by themselves? A McKinsey report from 2020 shows that in the UK, about 25 per cent of cases where reskilling is needed, employers would not profit from reskilling their workers, and external hires are paid on average 20 per cent more than reskilled workers[39].

While reskilling and upskilling workers is a critical component of the just transition, placing the financial burden solely on workers can exacerbate existing inequalities and create barriers for vulnerable individuals. To address these concerns and promote a just transition, it is crucial for governments and companies to acknowledge the financial

cost of reskilling and provide support mechanisms not only towards an environmental transition, but towards a just transition.

However, the just transition is about more than jobs. Overall, the environmental transition alone to net zero by 2050 is estimated to cost up to US$9.2 trillion annually, equivalent to 9 per cent of global GDP, according to McKinsey[40]. This is a US$3.5 trillion (or 60%) increase from today's level of investment. The United Nations Framework Convention on Climate Change (UNFCCC) Race to Zero campaign estimates that $US125 trillion of investment will be required to reach net zero by 2050. At least $US32 trillion of investment is required by 2030, across all regions and in the six sectors shown in Figure 6[41].

Figure 6: Investment required by 2030 across sectors and regions to reach net zero by 2050 (UNFCCC)



Governments play a vital role in creating favourable policy environments and providing financial incentives and support mechanisms to facilitate the transition. Additionally, they are the ones that often engage in international agreements, such as the Paris Agreement, where they set ambitious targets for emissions reductions and sustainable development.

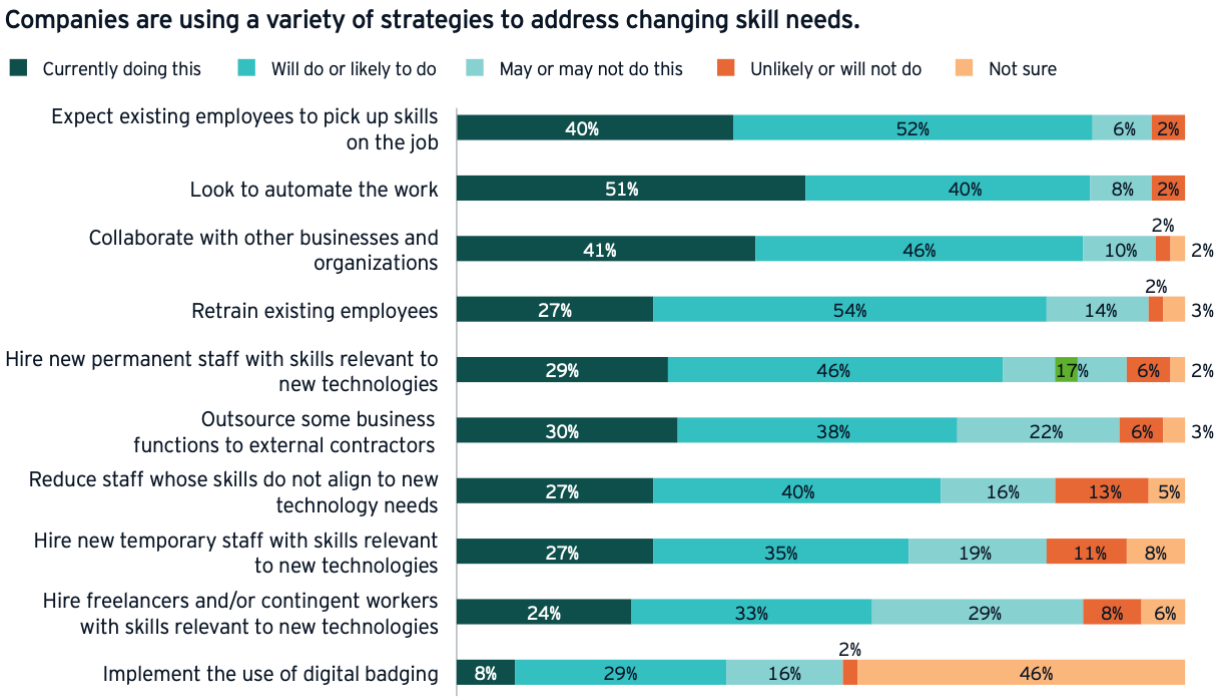
Therefore, while governments can leverage their regulatory powers to ensure compliance with targets and encourage industries to invest in sustainable practices, to what extent should they also be taking a proactive role in supporting and driving the just transition by providing the necessary financial backing required? This can come in the form of subsidies, grants, and tax incentives, which can help drive businesses to adopt sustainable practices and technologies while leaving no one behind.

For example, the European Green Deal Investment Plan (EGDIP) plans to mobilise at least €1 trillion in sustainable investments over the next decade. Included in the plan is the Just Transition Mechanism of at least €100 billion in investments over the period 2021-2027, which will target a fair and just green transition, to support workers and citizens of the regions most impacted by the transition[42].

Then, companies, as key contributors to carbon emissions and environmental degradation, bear a significant responsibility in financing the transition fairly and inclusively. It is crucial for businesses to recognize the long-term benefits of investing in sustainable practices and view it as a strategic imperative rather than a mere financial burden. By positioning themselves as leaders in sustainability, companies can enhance their long-term competitiveness and reputation in a rapidly evolving business landscape.

There are multiple approaches to integrate sustainability. It can come in the form of investments such as switching to renewable energy sources or reducing waste generation, whilst retaining their own workforce. For example, in the oil and gas sector, most companies will likely retrain their existing employees or retain them to learn on the job, whereas the least popular strategy involves reducing staff whose skills do not align to new technology needs (Figure 7).

Figure 7: Strategies used by companies in the oil and gas sector to address changing skill needs (EY) [43]



Companies can also allocate profits towards research and development of sustainable solutions and resources to support communities affected by the transition.

A notable example is Danone's efforts to develop and promote regenerative models of agriculture. By working with over 50,000 farms, agriculture represents 60% of their GHG emissions, and roughly 90% of their water footprint. As conventional farming has shown its limits, the company decided to embrace a different model, one that is focused on restoring soil to strengthen biodiversity and retain more water, supporting the next generations of farmers, and respecting animal welfare to ensure healthy ecosystems[44].

Box 3.2. Case Study: Danone and the H'lib Dzair Project

In 2014, Danone Ecosystem collaborated with Danone Djurdjura Algeria and GIZ International to establish the H'lib Dzair Project. This initiative aims to provide comprehensive support to smallholder farmers in Algeria through three key pillars: training, mentoring, and financial guidance.

As of 2023, the project has benefited approximately 1,400 Algerian dairy farmers. H'lib Dzair contributed to the development of the Algerian small dairy sector by collaborating with stakeholders throughout the Algerian farming sector and establishing 20 Milk Collection Centres to support farmers' distribution activities. Additionally, under the financial guidance pillar, the project implemented three measures: conducting trials to reduce feed costs, assisting farmers in accessing credit advances from government subsidies, and helping them explore new revenue streams.

Thus far, the project resulted in a 4% reduction in carbon footprint, improved living and working conditions for 97% of surveyed farmers, and a 14% decrease in feed production costs for participants in the "Feed the Cow" pilot program. Overall, the initiative has fostered rural development, enhanced the resilience of the Algerian dairy sector, strengthened local dairy value chains, and reduced the reliance of Danone Djurdjura Algeria on imported milk and milk powder.

Source: Danone's Regenerative Agriculture Knowledge Centre[45]

Another example is the work Nestlé has embarked on for its cacao plantation on the Ivory Coast to reduce deforestation, promote regenerative agriculture and empower financial communities.

Box 3.3. Case Study: Nestlé in the Cavally Forest

The Cavally Forest restoration project is a collaboration between the public and private sectors to protect the Cavally Forest in Côte d'Ivoire. The project was initiated in 2020 by the Ivorian government, Earthworm Foundation, and Nestlé. Over the last 60 years, Côte d'Ivoire has lost most of its forest cover, shrinking from 16 million to 2.97 million hectares between 1960 and 2021. The Cavally Forest, which is threatened by deforestation, is a key area for biodiversity, and one of the last remaining dense forests in the country. As of June 2023, there has been a significant reduction in deforestation, with 7,000 hectares of forest regeneration and 1,500 hectares being reforested since the start of the project. Additionally, over 1,400 people have gained financially from the project, thus local communities have benefited economically and socially. The new three-year phase of the project, which began on July 1, 2023, has more ambitious goals and additional stakeholders in the cacao and rubber industries.

With a total investment of CHF 4 million, the Cavally Forest restoration project is a valuable example of how companies, along with other stakeholders in public-private partnerships, can act to protect forests while empowering local communities.

Source: Nestlé [46]

Achieving a just transition requires collective responsibility, with society, companies, and governments, all playing crucial roles in recognizing that the costs of inaction far outweigh the investments required for a sustainable and socially just future. While governments can provide the policy frameworks and financial incentives and support to facilitate the transition, companies need to recognize their environmental impact and invest in sustainable practices like those Danone and Nestlé are engaging in.

However, beyond these stakeholders, another significant group that can drive change is investors. They have the important opportunity of mobilizing financial resources towards sustainable and socially responsible initiatives, which can further accelerate the progress towards a sustainable future.

IV. How can investors play their part?

Investors, with their influential role in capital allocation, are primed to lead a balanced transition that intertwines environmental and social imperatives. The environmental transition's effectiveness hinges on addressing both these dimensions.

As highlighted by the Grantham Research Institute on Climate Change and the Environment, a myopic approach may result not just in "stranded assets" but also "stranded workers" and "stranded communities'"[47].

Investors and asset managers can harmonise environmental and social goals by aligning financial objectives with broader environmental and social objectives. The evolving understanding of fiduciary duty acknowledges the need to simultaneously consider environmental and social impacts of investment decisions, linking their long-term interests to those of society.

Embracing the principles of a just transition allows investors to tap into emerging sustainable trends and unveiling new avenues of value. Yet, the stakes are high. Neglecting the just transition's tenets could lead to financial setbacks, especially in a world that values environmental and societal responsibility.

The traditional separation of performance alpha and sustainable alpha is diminishing. In a world grappling with climate change, societal risks, and an unprecedented level of transparency due to data availability, sustainable alpha is aligning more with long-term performance. This redefined fiduciary lens positions investors not just as financial guardians but as stewards of a future that harmonises the interests of investors, society, and the environment. Investors, given their crucial role in directing capital, are uniquely positioned to champion a fair transition.

This paradigm shift in fiduciary duty empowers investors to play a pivotal role in rejecting short-termism and ensuring that investment decisions contribute on the long-term to the well-being of investors, people, and the planet.

Box 4.1. Fiduciary duty and sustainability according to CFA

The CFA Institute is a leading global association of investment professionals. They provide numerous guidelines, standards, and educational materials for financial analysts around the world.

The concept of "fiduciary duty" refers to the responsibility that financial professionals, such as asset managers or trustees, owe to their clients. In essence, a fiduciary is expected to act in the best interests of their clients, putting clients' interests ahead of their own and acting with utmost care, honesty, and loyalty.

While the CFA Institute does not redefine fiduciary duty specifically in the context of ESG, they emphasize that fiduciaries have the responsibility to consider all factors that could affect the long-term performance of an investment. Given the growing evidence of the materiality of ESG risks and opportunities, this implicitly suggests that fiduciaries who ignore ESG considerations may not be fully meeting their duty to act in the best interests of their clients.

Source: CFA Institute[48]

Investors have three primary strategies at their disposal:

Invest – The financial market is evolving with more tools designed to back investors in environmental and social projects. Instruments like sustainable bonds, which merge ecological benefits with social goals, are becoming more popular in the green bond market.

Engage – Instead of pulling out their investments, investors should remain invested in sectors undergoing climate transition. They should actively engage with these companies to ensure that their transition plans address and reduce any negative impacts on stakeholders. This is especially vital for sectors that are in the midst of transitioning.

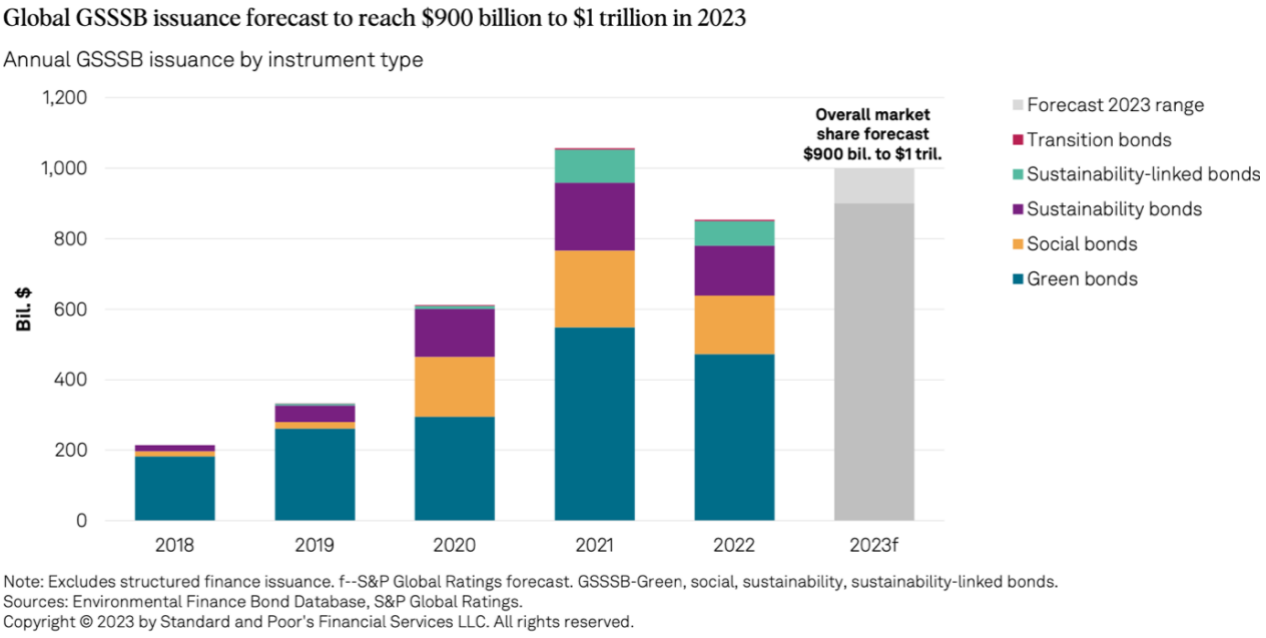
Collaborate – Investors can join forces with other financial entities to harness their collective interest in guiding investments and innovations in the fast-changing global environment. Through such collaborative engagement, they can pool resources, expertise, and insights to bridge the gap between environmental and social considerations.

A. Invest – Considering E and S simultaneously when investing:

Investors seeking to contribute to a just transition, which focuses on ensuring a shift to a low-carbon and sustainable economy benefits all stakeholders, especially those most vulnerable, have a variety of investment instruments at their disposal.

Firstly, there are green, social, sustainable, and sustainability-linked bonds (GSSSB). As shown on Figure 8 below, it is evident that green bonds have gained popularity over the years while the number of social bonds significantly increased because of the 2020 pandemic[49]. Additionally, other types of debt such as sustainability bonds and sustainability-linked bonds have also increased in volume, except in 2022 due to the macroeconomic climate and increasing interest rates.

Figure 8: Green, social, sustainable, and sustainability-linked bonds (GSSSB) market size (S&P Global)[50]



Note: Excludes structured finance issuance. f--S&P Global Ratings forecast. GSSSB-Green, social, sustainability, sustainability-linked bonds.
Sources: Environmental Finance Bond Database, S&P Global Ratings.

However, despite their growth, green bonds and social bonds remain separate mechanisms. Besides, even if some green bonds have social principles, they are still considered green bonds, as there is no such bond that has both environmental and social objectives, just yet.

Nonetheless, the idea is already being explored. For instance, a 2022 policy proposal by the Grantham Research Institute on Climate Change and the Environment proposes a "Just Transition Bond" as part of the Northern Ireland Housing Executive's investment

programme to support green growth while enabling households to reduce their spending on energy[51].

Box 4.2. Case Study: Green Bonds for Climate-Smart Solutions in Egypt

To respond to the threats of climate change, the government of Egypt, with the support of the Macro-Economic Stabilization and Reform (MESR) project, issued a $750 million bond in 2020, the first green bond in the Middle East and North Africa. The bond was designed to finance projects that meet international ESG criteria (International Capital Market Association's Green Bond Principles) such as, renewable energy, pollution prevention and control, climate-resilient infrastructure, wastewater management, etc. Building on the success of the first green bond, Egypt's Commercial International Bank, in partnership with the International Finance Corporation, issued the first private sector green bond in June 2021. The $100 million bond aimed to help Egypt unlock finance for climate-smart projects.

However, this is not just about the environment, but about addressing Egypt's macroeconomic challenges, which are linked to the country's extreme climate vulnerability. This green bond shows that green finance mechanisms must be about more than climate change threats and carbon neutrality, but also about climate resilience and an economically sustainable future for all.

Source: DAI[52]

Another way investors can play an important role in reconciling the environmental transition and its potential social repercussions is by investing in equity of companies concerned and acting for a just transition, that have a realistic and credible transition plan that considers environmental and social factors at the same time.

The European Union has published a taxonomy classifying green economic activities however, the social taxonomy project is still in the works, and there is no such thing as a just transition taxonomy yet.

However, there are already some existing guidelines to help guide investors, for example the "Just Transition" guidelines of the ILO or the "Just Transition Criteria" by the Impact Investing Institute.

Investors can consider companies that are transitioning to more sustainable practices These companies can be active in the energy space but reallocating substantively to renewable energy while ensuring social consideration for their workforce. It is

worthwhile also looking at companies in the consumer goods or the retail sectors which consider environmental and social concerns.

Box 4.3. Case Study: Patagonia

Patagonia, an outdoor clothing and gear company, has long been a proponent of environmental conservation and social responsibility. To ensure a just transition, Patagonia integrates these principles into its business operations and supply chain. The company has taken deliberate steps to source materials sustainably, emphasizing the use of organic cotton, recycled polyester, and wool.

Beyond environmental considerations, Patagonia is dedicated to fair labour practices, ensuring that workers at all levels of its supply chain are treated ethically and paid fair wages. The company's "Footprint Chronicles" initiative provides transparency into its supply chain, allowing consumers to see the environmental and social impact of the products they purchase. Furthermore, through its 1% for the Planet program, Patagonia donates a percentage of its sales to grassroots environmental groups, fostering community resilience and supporting sustainable local initiatives

Source: Patagonia[53, 54]

Investors could look at companies that are providing solutions to the environmental transition. For example, favouring companies in the renewable energy sector, the electrification of transportation or technological companies that support environmental and social transition.

However, it is worth noting that while these companies have taken steps towards sustainability or made commitments in line with just transition principles, investor due diligence is critical. It is essential to look at the broader context of a company's activities, understand any controversies or challenges they might face, and evaluate their overall alignment with the principles of a just transition.

Some investment funds specifically focus on the just transition by integrating principles that ensure both environmental sustainability and social equity. Investing in such funds allows for diversified exposure to multiple companies promoting a just transition.

Lastly, funds can be used by investors to support a variety of environmental and social projects, such as retraining workers in carbon-intensive occupations and investing in affordable and accessible renewable energy.

Box 4.4. Case Study: Mirova's energy transition infrastructure fund

In 2002, Mirova launched their first fund of €46 million with ADEME to kick-start the wind energy sector in France. Nearly 20 years later, in September 2022, Mirova completed the raising of €1.6 billion for Mirova Energy Transition 5 (MET 5), of which €500 million came from clients who had already invested in their other ventures. MET 5 is the 5th vintage of Mirova's flagship energy transition vehicles which over the years, opened to new geographies and technologies, supporting over 300 projects in 10 countries and generating at least 5.8GW of clean energy.

In contrast to its previous funds, its new MET 5 targets up to 10 per cent of projects in low-risk OECD countries, and not just in Europe. Like its predecessors, MET 5 continues to invest in core renewables, innovative infrastructure technologies, but also includes corporate infrastructure. Additionally, the fund features an innovative opt-in impact scheme to finance non-profit projects linked increasing energy access and fighting against energy poverty.

Source: Mirova[55,56]*, Natixis*[57]*,* and *Environmental Finance*[58]

B. Engagement – The case of disinvesting vs engaging.

The "invest and engage" approach versus the "divestment" approach has been a topic of debate in the realm of responsible and sustainable investing.

There is an ongoing discussion concerning the dilemma of disinvesting (Box 4.5) or keeping rich carbon emitters to engage with them.

Both positions have their merits, but one shouldn't underestimate the power of "investing and engaging " Holding shares in a company gives investors a seat at the table, allowing them to engage directly with management, vote on shareholder resolutions, and influence company behaviour from within.

An EY preview of the 2023 proxy season notes that investors' views on strategic threats and drivers are evolving: "investors are focused on the resilience of their portfolio companies and want boards to be stewards of long-term strategy amid near-term

challenges." When asked about the biggest threats to strategic success for portfolio companies, investors included "people issues, such as shortages or a failure to upskill" and "climate risk and natural resource constraint" among the top three answers, both in 2022 and 2023. Additionally, 32% of investors believe that "workforce development and training" is among the biggest drivers of strategic success for their portfolio companies[59].

Box 4.5. Case Study: The Church of England divests from oil and gas.

The Church Commissioners for England, which manages the Church of England's £10.3bn endowment fund and its £3.2bn pension scheme, announced in June 2023 that it is selling its remaining investments in oil and gas companies, including Shell, BP, Exxon, Total, and seven others. The Church had already divested from 20 oil and gas majors in 2021 but it decided it "Will exclude all other companies primarily engaged in the exploration, production and refining of oil or gas, unless they are in genuine alignment with a 1.5°C pathway, by the end of 2023" because "some progress has been made, but not nearly enough."

Over the years, the Church has played an important role in shareholder discussions because it believed in the impact they could have by retaining shares and engaging with those companies. Its endowment fund has filed resolutions at Exxon and led discussions on behalf of Climate Action 100+ initiative shareholders, while its pension fund has also led discussions on behalf of the same alliance with Shell. Alan Smith, First Church Estates Commissioner said, "The decision to disinvest was not taken lightly," while John Ball, chief executive of the Church of England Pensions Board, noted that "Recent reversals of previous commitments, most notably by BP and Shell, have undermined confidence in the sector's ability to transition."

Sources: The Church of England Press Release[60] and *Financial Times*[61]

Through active engagement, investors can encourage companies to make incremental changes towards more sustainable practices. Over time, these small steps can accumulate into more significant shifts in a company's behaviour.
Divesting, on the other hand, may remove this influence and give it to other shareholders who might not prioritise sustainability.

In a research paper, National Bureau of Economic Research (NBER) researchers Jonathan B. Berk from the Stanford Graduate School of Business and Jules H. van

Binsbergen from the University of Pennsylvania - The Wharton School, demonstrate that "dirty stocks cannot be easily substituted for clean stocks."[62]

In their research, they are unable to identify a significant impact of ESG-related divestiture strategies on the price or cost of capital of the companies studied. Instead, they recommend that investors "invest and exercise their rights of control to change corporate policy."

In a separate article, van Binsbergen asserts: "If you sell stocks in a dirty company, somebody else will buy them" and "That person clearly doesn't care about the ESG aspect of it, making it less likely that investor pressure could force changes in the company. The question in that case is, have you done something good?" [63]

C. Collaboration between investors

Collective engagement, where multiple investors come together to engage a company on specific issues, can be very powerful. It presents a unified front of stakeholders pushing for change, potentially leading to more significant shifts than individual investors divesting.

As noted by PRI, "Collaborative investor initiatives provide the tools, frameworks and platforms to structure action on climate, and enable investors to learn from one another and develop consensus on best practice"[64].

Collaboration ensures that no investor is left behind, laying the foundation for a stronger and more resilient financial system. It is an important approach for investors seeking to converge their endeavours in driving investments and innovations in a rapidly changing global landscape.

By joining alliances, forging public-private partnerships, or collaborating with academic institutions and civil society organizations, investors can pool resources, expertise, and perspectives to tackle complex challenges posed by clashing environmental and social factors (Box 4.6).

Box 4.6. Case Study: Just Transition Finance Challenge

In 2022, the Impact Investing Institute launched the Just Transition Finance Challenge, a flagship initiative to mobilise more capital into investments that support a just transition to net zero. The challenge brought together 21 leading global financial institutions with over £4trn of assets and assets under management, including public and private asset owners, asset managers, development finance institutions, and advisors, to develop a set of criteria for a just transition.

Amongst the founding participants are Fidelity International, Schroders, Railpen, Nest, and the Environmental Agency Pension Fund. The criteria are designed to be used with existing standards and frameworks for sustainable and impact finance and can be used to create new products and adapt existing ones to be aligned with a just transition, identify, and engage with underlying investments, and utilized in formal communications and reporting.

The collaboration between the wide range of institutions and different range of actors means that the criteria were created for use by all financial actors who can take action to align products and investments with the just transition.

The Institute hopes that with this new set of criteria, at least half of the estimated £2.2trn currently invested in sustainable funds with a focus on climate, can be invested in a fair and inclusive transition to net zero. Additionally, the criteria include a proposal for a just transition label to, "recognise their leadership and good practice in adopting a just transition approach in their investments." The criteria also include a proposal for a potential just transition label that would recognise the leadership and good practice of financial actors in adopting a just transition approach in their investments.

Sources: Impact Investing Institute[65,66]*, Impact Investor*[67] and *Responsible Investor*[68]

Another example is the collaborative role played by Climate Action 100+, an investor initiative designed to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change. Historically, its key objectives have been to ensure that companies take action to curb emissions, strengthen climate-related financial disclosures, and improve governance on climate change.

According to Climate Action 100+, the first shareholder resolution seeking Just Transition planning and reporting was filed in 2022 by the International Brotherhood of Teamsters General Fund. In 2023 Climate Action 100+ focus companies, at least three just transition related resolutions were filed (Box 4.7)[69].

Box 4.7. Case Study: Marathon Petroleum Corporation ("Marathon") 2023 AGM Just Transition engagement

The International Brotherhood of Teamsters filed a resolution on just transition disclosure at Marathon's 2023 AGM. The result was 16.4% FOR, with supporters such as Mercy Investment Services from Climate Action 100+ and KBI Global Investors, Anima Sgr, and Core Commodity Management from PRI.

Following receipt of the proposal ahead of last year's shareholder meeting, Marathon published "Creating Shared Value Through a Just and Responsible Transition". However, according to the International Brotherhood of Teamster, the publication "Fails to lay out a sound 'just transition' strategy. It also sets exceedingly low bar for what this important investor disclosure should look like." The notice of exempt solicitation notes: (1) a flawed and scarcely credible reporting process on the company's engagement of workers and communities in the decarbonisation process; (2) a lack of data and meaningful metrics; and (3) an absence of tangible commitment to minimising the effects of decarbonisation.

Thus, shareholders request that the Board of Directors prepare a report disclosing how Marathon "is addressing the impact of its climate change strategy on key stakeholders, including but not limited to the communities it serves and workers, both its own and those in its supply chain, consistent with the "Just Transition" guidelines of the International Labour Organization ("ILO"). The report should be prepared at reasonable cost, omit proprietary information, and be made available to investors". Additionally, it set out the following recommendations for the report:

1. A set of measurable, time-bound indicators, such as those recommended by the World Benchmarking Alliance Just Transition methodology
2. Progress to date for achieving those goals for a Just Transition
3. Consistency of the Company's Just Transition plan with best practices
4. Disclosure of the Company's stakeholder engagement process and participants.

Sources: Ceres[70]*, PRI*[71]*,* and *notice of exempt solicitation*[72]

Conclusion

In our interconnected global landscape, the ties between environmental concerns and social factors are profoundly intertwined. We cannot simply advance environmental agendas without giving due consideration to the social ramifications. Such an oversight could lead to significant setbacks, even as we strive for progress.

Enter the concept of a just transition: a comprehensive approach that seeks to marry our environmental ambitions with the intricate nuances of societal impact. It's clear that while transitioning might come with considerable financial and structural challenges, its importance cannot be diminished.

At the helm of this movement are investors. Their decisions can make or break the momentum. By strategically investing and engaging with businesses, they have the unparalleled ability to champion genuine just transition strategies. Yet, it's also worth noting that without this just approach, investors face increased climate-related risks as societal challenges could spur resistance, weaken climate agendas, or halt critical initiatives.

Although there's no universal blueprint for achieving this balance, bypassing the imperative of a just transition could very well jeopardize the strides we've made in addressing climate challenges and fostering a more equitable world.

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