PRI Principles for Responsible Investment

UN environment programme | finance initiative

United Nations Global Compact

An investor initiative in partnership with UNEP Finance Initiative and UN Global Compact

INVESTING FOR A JUST TRANSITION:

PROPOSALS FOR A JUST TRANSITION DISCLOSURE FRAMEWORK IN CHINA

In collaboration with

商道融绿 SynTao Green Finance

THE SIX PRINCIPLES

PREAMBLE TO THE PRINCIPLES

As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social, and governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognise that applying these Principles may better align investors with broader objectives of society. Therefore, where consistent with our fiduciary responsibilities, we commit to the following:

1 We will incorporate ESG issues into investment analysis and decision-making processes.

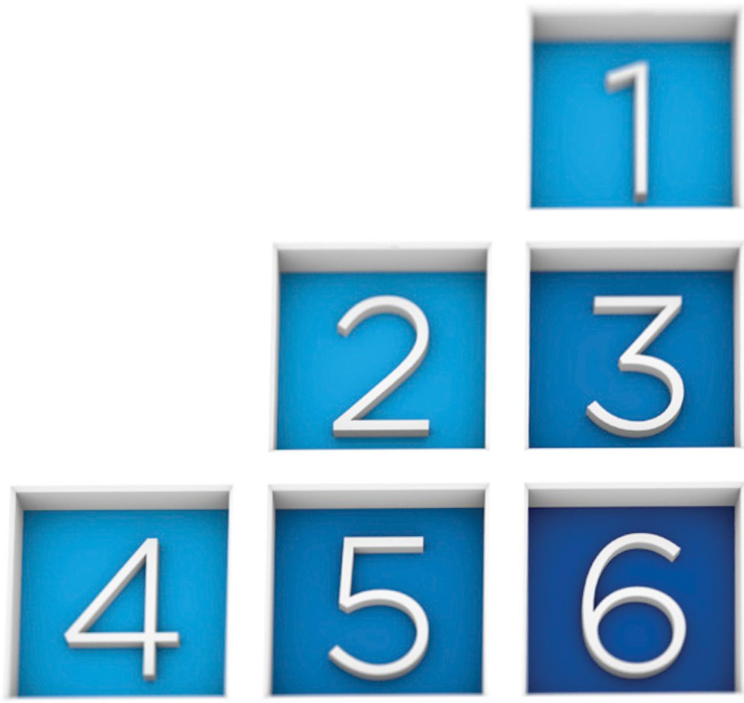
2 We will be active owners and incorporate ESG issues into our ownership policies and practices.

3 We will seek appropriate disclosure on ESG issues by the entities in which we invest.

4 We will promote acceptance and implementation of the Principles within the investment industry.

5 We will work together to enhance our effectiveness in implementing the Principles.

6 We will each report on our activities and progress towards implementing the Principles.



PRI's MISSION

We believe that an economically efficient, sustainable global financial system is a necessity for long-term value creation. Such a system will reward long-term, responsible investment and benefit the environment and society as a whole.

The PRI will work to achieve this sustainable global financial system by encouraging adoption of the Principles and collaboration on their implementation; by fostering good governance, integrity and accountability; and by addressing obstacles to a sustainable financial system that lie within market practices, structures and regulation.

CONTENTS

This report has been produced in collaboration with SynTao Green Finance.

SynTao Green Finance (STGF)

SynTao Green Finance is a Beijing-based ESG service provider that provides ESG data, sustainability bond verification, and sustainable finance advisory services. The core team was founded in 2009. STGF ESG data and research on ESG key issues are widely employed to support investment decisions, risk management, policy making, and sustainable finance product innovation. STGF STαR ESG Data Platform and STGF ESG Risk Radar System cover all A-share market and Hong Kong stocks in the stock connect schemes. STGF PANDA Climate Data Platform provides carbon emission data of Chinese entities based on GHG protocol.

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EXECUTIVE SUMMARY

As China moves towards a low-carbon society and increasingly pursues a strategy of high-quality development, issues around a just transition have become unavoidable for Chinese companies and investors. Recent policies in China, such as the 14th Five-Year Plan, the Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality and the Action Plan for Carbon Dioxide Peaking Before 2030, emphasise the importance of a steady and orderly transition towards carbon neutrality that addresses social fairness and justice issues. This provides a rich context for the concept of a just transition to be applied in China.

To achieve social justice and development goals in the low-carbon transition, joined-up efforts by governments, companies and investors will be required. On the one hand, the low-carbon transition will benefit people by creating green jobs, providing new green energy and commodities, developing new business partnerships and unlocking new development opportunities. On the other hand, unless effective measures are adopted, workers in carbon-intensive sectors, and communities and regions that rely on these sectors, face the loss of jobs, a potential lack of access to affordable green energy, hardship among small and medium-sized enterprises, fewer development opportunities and increased inequality.

Countries around the world, including China, and investors have begun taking action to tackle the social impacts of the low-carbon transition. China has been working towards a just transition by seeking to address issues of unemployment and energy security, with more effort thus far from government than among investors. A systematic approach to a just transition, bringing together government, investors and companies, is not yet in place.

A just transition matters to investors. Investors can use a just transition lens to better understand and influence systemic and systematic risks, uncover investment opportunities, identify material drivers of long-term value, fulfil their fiduciary duty and align with economic, social and ecological development goals. Investors can take action on just transition issues across five areas: investment strategy, corporate engagement, capital allocation, policy advocacy and partnerships, and learning and review.

To effectively integrate just transition issues into their decision-making, investors will need companies to provide clear, consistent and comprehensive information about the social issues they face during the low-carbon transition. However, few widely applied climate-related disclosure frameworks currently address these issues. To fill this gap, this report sets out a proposed disclosure framework for companies to disclose their recognition of and commitments to addressing a just transition, including around their strategies, actions and policy advocacy.

The just transition disclosure framework proposed in this report has been developed in alignment with other just transition and reporting frameworks/recommendations, such as those from the Organisation for Economic Co-operation and Development (OECD), the Task Force on Climate-related Financial Disclosures (TCFD), Climate Action 100+, World Benchmarking Alliance and the Just Transition Declaration. It has also been designed for incorporation into leading environmental, social and governance (ESG) disclosure frameworks in China, including the annual reporting rules for listed companies from the China Securities Regulatory Commission and the ESG disclosure rules from Hong Kong Exchanges and Clearing (HKEX).

Table 1: A proposed just transition disclosure framework

1 Acknowledgement and commitment		1.1 Responsibilities of the board of directors
		1.2 Responsibilities of senior management
		1.3 Commitment to a just transition
2 Strategy		2.1 Social impact identification and assessment
		2.2 Social impact management
3 Action	**Social dialogue and stakeholder engagement**	3.1 Social dialogue and stakeholder engagement
	Workers	3.2 Protection of workers' rights
		3.3 Skills development
		3.4 Green and decent job creation
	Clients/customers	3.5 Provision of resilient, affordable clean energy/green commodities
	Communities and regions	3.6 Support to affected communities and regions
	Supply chain	3.7 Support to supply chains
4 Policy advocacy		4.1 Just transition policy advocacy

1. INTRODUCTION

As the global economy shifts to align with the goals of the Paris Agreement, the need to ensure a just transition for workers and communities is rising up the agenda. This is acknowledged in the Paris Agreement itself, which notes that participating parties shall take into account "the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities".[1] A just transition is understood as one that protects workers and communities that stand to lose out from the shift to a low-carbon economy, and which ensures that the benefits of and opportunities from that transition are widely shared.

For China, these objectives are directly aligned with the national goals of pursuing common prosperity with high-quality development, and its stated strategies for pursuing a steady and orderly transition towards carbon neutrality.

These global and national trends present clear risks and opportunities for both companies and investors.

The achievement of net-zero greenhouse gas emissions, as envisaged by the Paris Agreement, will require companies in emissions-intensive sectors to undergo major changes. Society more broadly will also be affected in terms of changing patterns of employment and issues around energy security, supply chain integrity and local development opportunities. By addressing these issues proactively and deliberately through a just transition framework, negative impacts for society can be reduced and positive ones increased, contributing to social inclusiveness and equality, as well as supporting a strong and stable economy.

The concept of a just transition therefore aims to balance environmental protection, economic development and social welfare. As China moves towards its carbon neutrality goals and a stage of development that focuses on well-being and high-quality development, the concept of a just transition can provide a helpful framework for companies and investors.

In the G20 Sustainable Finance Working Group Input Paper, the International Labour Organization identified a range of financial ecosystem players that are key to a just transition. The list includes governments and regulators, capital providers (including private sector financial institutions), trade unions, civil society and private sector companies.[2]

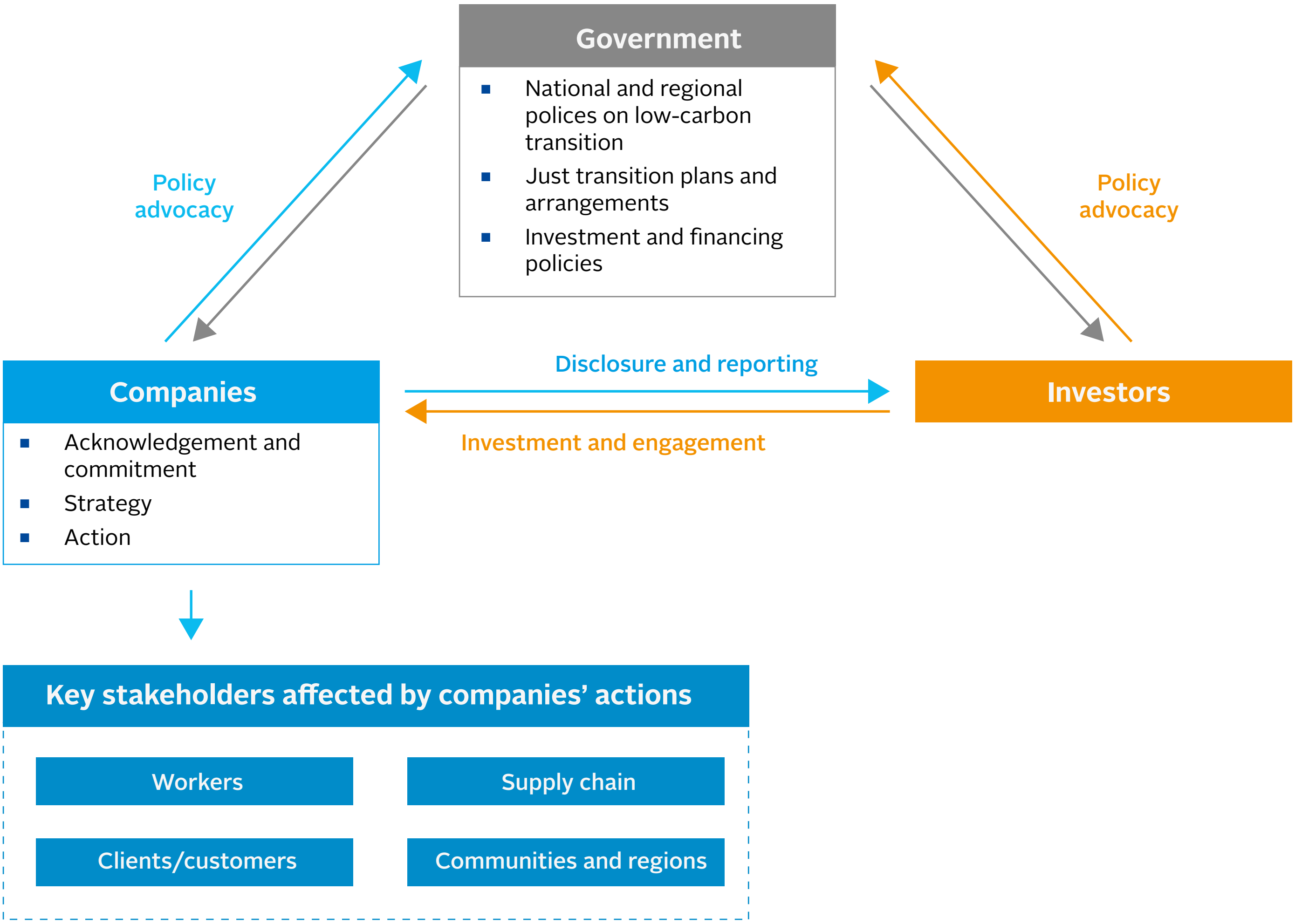
In China, for a just transition to be successful, it must be achieved through joint actions of central and local governments, investors and companies, based on social dialogue among these three key types of actors, as well as other key stakeholders such as workers. Each of the three key types of stakeholders has an important role to play. Central and local governments will need to develop policies to support companies, communities and regions through the low-carbon transition and create a supportive environment within which investors and companies can act. Companies will need to develop and implement just transition plans, creating green and decent jobs, reskilling workers, providing affordable clean energy, helping their supply chains adjust and advocating for policy support. Investors will have an important role to play in stewarding companies in which they invest through these changes and allocating capital accordingly.

To help investors understand these emerging dynamics in the Chinese context and respond to the risk and opportunities they present, clear information from investee companies will be essential. Currently, however, the disclosure frameworks that are commonly used by Chinese companies to address voluntary and mandatory reporting expectations do not tend to recognise the linkages between social and climate issues and the measurement of social justice impacts.

1 United Nations (2015), Paris Agreement

2 International Labour Organization (2022), G20 Sustainable Finance Working Group Input Paper: Finance for a Just Transition and the Role of Transition Finance

Figure 1: Roles of governments, investors and companies in addressing just transition issues



As a first step in helping investors integrate just transition issues and analysis in their investment and stewardship decision-making, this report therefore proposes key components of a potential disclosure framework for companies that is specifically tailored to the Chinese market and which companies can use to provide relevant information to investors. Better-quality disclosures about companies' commitments, strategies, actions and policy advocacy regarding a just transition will help close the current information gap, as well as enable investors to better manage risks and opportunities and fulfil their own role in supporting a strong and sustainable Chinese economy.

The second chapter of this report provides background on the just transition concept and potential alignment with the current policy landscape in China. Chapter 3 summarises the possible social and economic costs of transition for different actors. Chapter 4 identifies actions being taken globally and in China to support a just transition. Chapter 5 sets out why considerations about a just transition are seen to be increasingly important to investors, and Chapter 6 discusses why an effective disclosure framework is important to them. Finally, Chapter 7 offers specific recommendations for a just transition disclosure framework for China.

2. A JUST TRANSITION AND THE POLICY CONTEXT IN CHINA

The concept of a “just transition” in the Paris Agreement focuses on issues around employment. However, since the agreement was struck in 2015 – and signed by China in 2016 – it has been recognised by many researchers and international institutions that a just transition also concerns broader issues, including access to affordable energy, the resilience of business partnerships and the economic development opportunities of communities and regions that rely on carbon-intensive industries.[3,4,5,6]

This broader notion of a just transition aligns closely with China’s high-level goal of pursuing common prosperity with high-quality development,[7] which envisions the attainment of “ecological civilisation” as one of its guiding principles.[8] In the outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and Vision 2035 of the People’s Republic of China,[9] the government emphasises that China has moved to a stage of development with a focus on quality rather than quantity. The idea of high-quality development requires economic growth to be balanced, green and inclusive, promoting social fairness and justice as well as environmental protection.[10] At the same time, China’s policy makers acknowledge that there are still disparities in development between urban and rural areas and between regions, and that there is a long way to go to protect the environment and strengthen social governance.

Similarly, China’s plan of “orderly transition” towards carbon neutrality is also aligned with just transition objectives. Since China announced its goal to reach carbon neutrality before 2060, some officials and experts have raised concerns about pursuing carbon reductions in a disorderly manner,[11] risking the security of energy supply and economic stability.

In key policy documents,[12,13] the State Council highlights its plan to work “in a steady and orderly manner to safely reduce carbon emissions”, responding appropriately to any economic, financial and social risks that may arise during the green and low-carbon transition. It states that the transition to carbon neutrality shall “keep national energy security and economic development as the bottom line” and actions shall be taken alongside the transition to safeguard “China’s energy security, food security and the security of industrial and supply chains, and to keep ordinary citizens living and working as normal”.[14,15] These statements show that issues associated with a just transition are a high priority for Chinese policy makers.

The just transition concept is also closely linked to the UN Sustainable Development Goals (SDGs). A just transition would require meeting SDG 8 (decent work and economic growth) and SDG 13 (climate action). It is also closely linked with SDG 1 (no poverty), SDG 7 (affordable and clean energy), SDG 9 (industry, innovation and infrastructure) and SDG 10 (reduced inequalities). Figure 2 illustrates the relationships between SDGs and a just transition.

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3 International Labour Organization (2015), Guidelines for a just transition towards environmentally sustainable economies and societies for all

4 London School of Economics, Grantham Research Institute, University of Leeds, PRI and Trades Union Congress (2019), Financing inclusive climate action in the UK: An investor roadmap for the just transition

5 Scottish Government (2021), Just Transition Commission: A National Mission for a fairer, greener Scotland

6 PRI (2021), Consultation response – People-centred just transition: discussion paper by Natural Resources Canada

7 China Daily (October 2021), Xi Focus: Leading China on its new journey

8 Ministry of Foreign Affairs (October 2021), Xi Jinping Attends and Delivers a Keynote Speech at the Leaders’ Summit of the 15th Meeting of the Conference of the Parties to the Convention on Biological Diversity

9 Chinese Government (2021), 中华人民共和国国民经济和社会发展第十四个五年规划和2035年远景目标纲要

10 China Daily (October 2021), Xi Focus: Leading China on its new journey

11 Economic Daily (August 2021), 经济日报金观平：先立后破纠正运动式"减碳

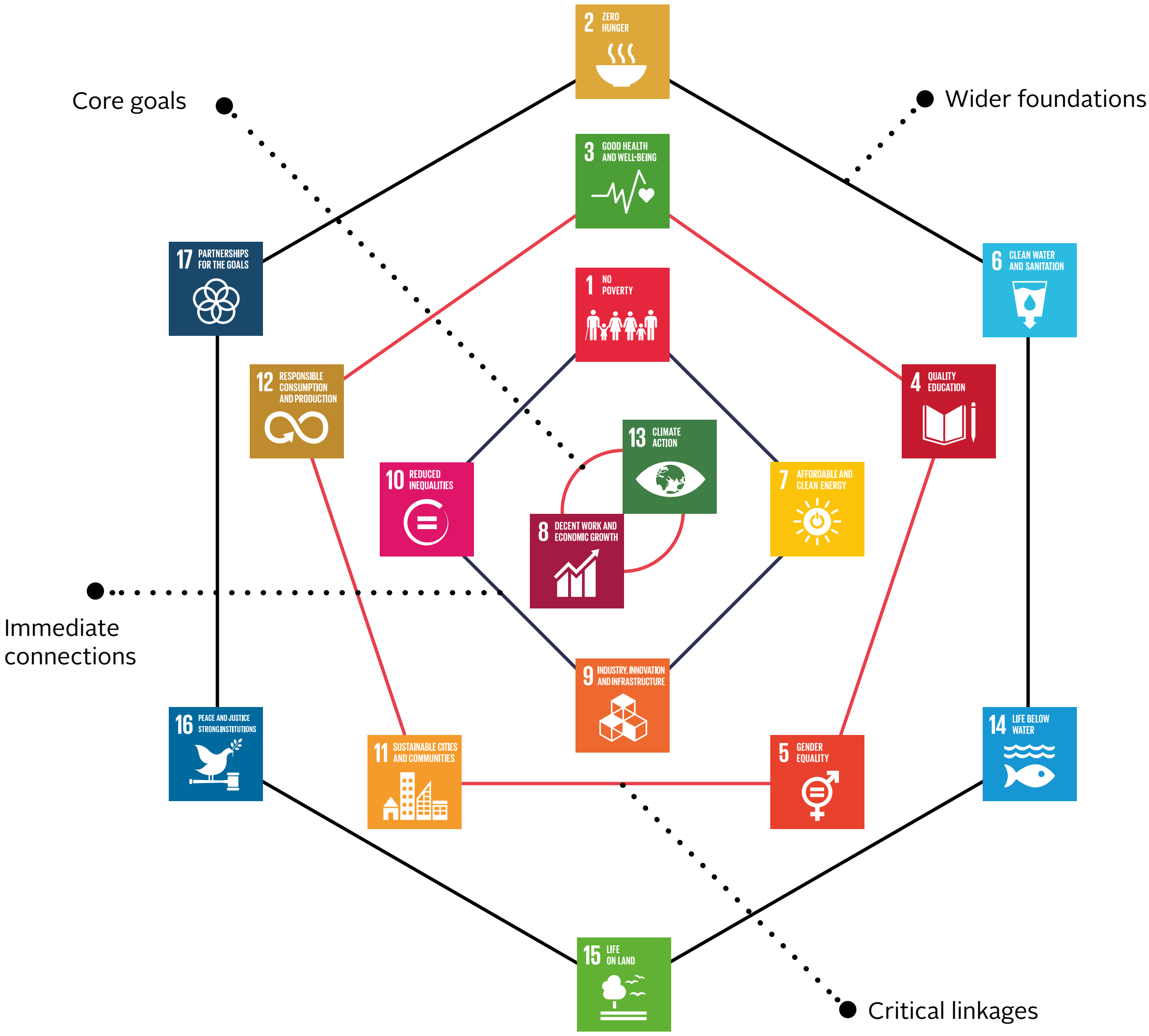
12 State Council of China (2021), 关于完整准确全面贯彻新发展理念 做好碳达峰碳中和工作的意见

13 State Council of China (2021), 2030年前碳达峰行动方案

14 State Council of China (2021), 2030年前碳达峰行动方案

15 See also National Development and Reform Commission and National Energy Administration (2022), 关于完善能源绿色低碳转型体制机制和政策措施的意见

Figure 2: A just transition and SDGs. Source: [Climate change and the just transition: A guide for investor action]()



3. POTENTIAL SOCIAL AND ECONOMIC EFFECTS OF TRANSITION

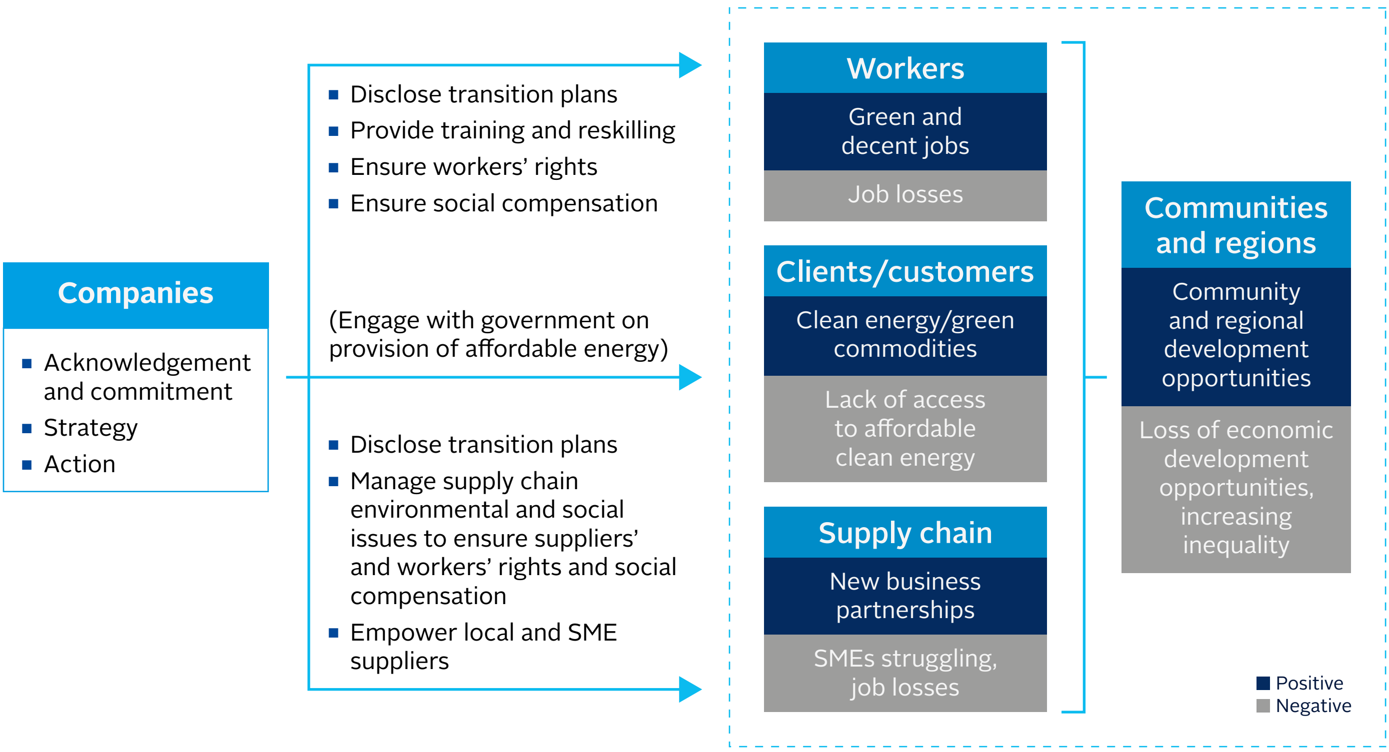
In September 2020, China committed to reaching peak carbon emissions by 2030 and carbon neutrality by 2060.[16] In its Nationally Determined Contribution, made as part of the Paris Agreement process, China has also pledged to lower carbon dioxide emissions per unit of GDP by "over 65%", increase the share of non-fossil fuels in primary energy consumption to "around 25%" and bring its total installed capacity of wind and solar power to over 1.2 billion kilowatts, all by 2030.[17] Meeting these goals will have a wide range of social and economic impacts, including for companies, their workers and customers, along supply chains and across communities and regions.

As China's national and local governments develop policy guidance for the transition towards carbon neutrality, some companies will need to change their business development paradigms, shift to new energy consumption models or restructure. Their responses will create a significant number of new green jobs – for example, in renewable energy and other low-carbon sectors. Recent research by the China Academy of Social Sciences concludes that phasing out coal could create more jobs than are lost.[18] Goldman Sachs estimates the number of jobs created in China could reach 40 million.[19]

Companies will also provide their customers with green products and services, including green electricity, green transportation and green infrastructure. The benefits of the low-carbon transition will also likely extend to companies along supply chains. All these positive impacts could contribute to the economic development of the communities and regions concerned, especially if steps are taken to ensure that green jobs are also high-quality and provide decent conditions and living standards.

At the same time, however, the transition of companies in carbon-intensive sectors will necessarily lead to some loss of employment, and some companies may have to shut down. Workers facing unemployment will need to be reskilled. Over the course of the transition, consumers in certain regions may lose access to affordable energy, unless an orderly approach is taken. Small and medium-sized enterprises (SMEs) will also be affected. In addition, inequality across different regions may worsen, as certain regions may face greater impacts due to concentrations of companies and workers in carbon-intensive sectors. These dynamics are discussed in further detail below.

Figure 3: Social and economic effects of the low-carbon transition



16 Xinhua Net (September 2020), 习近平在第七十五届联合国大会一般性辩论上的讲话
17 Climate Action Tracker (2021), Climate Action Tracker: China
18 China Academy of Social Sciences (2010), Study on Low Carbon Development and Green Employment in China
19 Goldman Sachs (2021), Carbonomics – China Net Zero: The clean tech revolution

WORKERS

As the transition progresses, workers may be laid off when companies shut down or certain jobs disappear. This will particularly be the case in sectors that produce and process fossil fuels, or which rely heavily on fossil fuels in their products and services. Such sectors may include coal mining, oil and gas, electricity production, utilities and steel; other sectors, such as agriculture and forestry, may also be affected.[20,21]

Ideally, jobs will be created to directly re-employ laid-off workers, and workers will be trained to fit new positions. For example, many coal workers in Shanxi Province have worked in the coal sector their entire lives. In 2016, Shanxi province closed the Shigajie Coal Mine, which employed more than 2,400 workers, to reduce over-capacity.[22] These workers faced unemployment. While more than 1,000 workers found jobs in other mines, the senior management of the Shigajie Coal Mine began a new agricultural business and employed the remaining workers in positions including plant cultivation, food processing and product sales. During the process, the Shigajie Coal Mine actively engaged with the local government on potential subsidies for transition. By avoiding labour displacement, the shutdown and transition of Shigajie Coal Mine was considered a success.

Alongside this example, there are many other mines and carbon-intensive companies that may face closure or major transition, resulting in job losses. Some studies have indicated that the closure of small thermal power generation units alone will leave around 600,000 people directly unemployed.[23] As positive employment effects are mainly expected through indirect job creation, governments, companies, investors and workers' organisations will all have a role to play in ensuring that workers' rights are protected, that the risks of worker and community displacement are managed, if newly created jobs are in different regions, and that reskilling and upskilling programmes are in place to support the transition to decent jobs for workers in affected sectors.

CLIENTS AND CUSTOMERS

In addition, clients and customers may lack access to affordable clean energy when local coal power plants shut down, or when they are required to switch from cheap coal-based heating and electricity to more expensive sources of energy. The "coal-to-gas switching" policy in China provides an example. Coal-to-gas switching has been promoted to improve air quality. While reliance on gas will also need to be reduced over time, it is considered an essential interim step towards carbon neutrality, as a comprehensive switch from coal to gas could help reduce CO_2 emissions from the power sector by 41%.[24] As the cost of gas-based heating is currently much higher than that of using coal, the government has so far taken a phased approach to gradually transition from coal, and provided subsidies to gas consumption.[25] The subsidy programme is aimed at significantly increasing the penetration of clean energy heating in Northern China, from 34% in 2016 to 70% in 2021.[26] Considering that the transition from coal to low-carbon and clean energy will occur more widely in many regions and sectors, and as China transitions from other carbon-intensive commodities to green ones, further action will be needed at both the public and private levels to ensure the accessibility, affordability and resilience of clean energy and other green commodities.

20 State Council of China (2021), "十四五"节能减排综合工作方案

21 National Development and Reform Commission, Ministry of Industry and Information Technology, Ministry of Ecology and Environment and National Energy Administration (2022), 高耗能行业重点领域节能降碳改造升级实施指南 (2022年版)

22 China National Radio (November 2016), 山西去产能关闭首座煤矿，全部矿工转型农民无人失业

23 China Academy of Social Sciences (2010), Study on Low Carbon Development and Green Employment in China

24 Shanghai Petroleum and Natural Gas Exchange (2021), "煤改气"是碳达峰的重要一环，需求有望超预期

25 State Council of China (2013), 大气污染防治行动计划

26 National Development and Reform Commission (2017), 关于印发北方地区冬季清洁取暖规划（2017-2021年）的通知

SUPPLY CHAINS

The low-carbon transition will significantly impact entire supply chains across the fossil fuel industry, in particular in coal-dependent sectors. A 2010 study suggested that the closure of small thermal generator units alone will lead to the loss of more than 2 million jobs among their suppliers.[27] Considering the scale of the transition needed to meet China's carbon neutrality goals, the loss of jobs across fossil fuel supply chains is likely to be significantly higher than that suggested by the 2010 study. Moreover, many companies are taking action to directly reduce supply chain emissions. SMEs in these supply chains will likely have relatively limited resources available to transition their business or retrain and support workers. Larger companies may therefore need to engage with their business partners to make sure that more green and decent jobs are created or secured and fewer workers dismissed.

COMMUNITIES AND REGIONS

The Intergovernmental Panel on Climate Change has noted that "people who are socially, economically, culturally, politically, institutionally or otherwise marginalised are especially vulnerable to climate change and also to some adaptation and mitigation responses [...] This heightened vulnerability [...] is the product of intersecting social processes that result in inequalities in socioeconomic status and income, as well as in exposure. Such social processes include, for example, discrimination on the basis of gender, class, ethnicity, age and (dis)ability."[28] For example, women and older workers in carbon-intensive sectors may be more likely to be laid off by some employers; low-income households will be more vulnerable to rising energy prices. Deliberate consideration of such issues will be needed to mitigate and avoid worsening existing social and economic inequalities.

Meanwhile, regions in which carbon-intensive industries are concentrated may not be able to rely on previous development models and may face different regional economic challenges, including to their tax base.[29] Considering that many of the regions that rely on oil or coal mining as drivers of local economic development, including Shanxi, Inner Mongolia and Heilongjiang, are already relatively poor provinces, the loss of economic development models may worsen inequality. New green and well-paying business opportunities will need to be explored from a regionally specific perspective, involving local stakeholders and with their needs considered as much as possible.

27 China Academy of Social Sciences (2010), Study on Low Carbon Development and Green Employment in China

28 International Labour Organization (2017), Gender, labour and a just transition towards environmentally sustainable economies and societies for all

29 For example, over 40% of tax revenue in Shanxi, 30% in Inner Mongolia and 20% in Shaanxi comes from the mining and power sectors. Weekly CN Stocks (March 2021), 中金彭文生：电力是未来10年最有碳减排潜力的行业，光伏、风电成本的绿色溢价已在20%以内

4. ACTIONS ARE BEING TAKEN TO ADDRESS A JUST TRANSITION

In many countries and regions, policy makers, companies and investors are taking action to address social issues linked with the low-carbon transition, seeking to ensure the transition happens in an inclusive and equitable way.

GLOBAL ACTIONS

INTERNATIONAL/NATIONAL LEVEL

At the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow, more than 30 countries, including Canada, all 27 EU member states, New Zealand, Norway, the UK and the US, signed up to the Just Transition Declaration.[30] In this declaration, the signatories made commitments to support workers, businesses and communities during the transition to greener economies. Among other things, they committed to:

- supporting workers, communities and regions that are vulnerable to the transition away from carbon-intensive economies;
- promoting social dialogue between social partners, including governments, employers' and workers' representatives and other affected groups;
- using economic strategies that support clean energy, create income and decent jobs, reduce poverty and inequality, and driving sustainable economic growth;
- creating decent jobs for workers and implementing reskilling, training and social protections to help workers secure those jobs;
- ensuring that decent jobs for all are created along supply chains.

In addition to the declaration, Canada, Germany and Scotland have established task forces specifically dedicated to developing strategic national-level policy frameworks focused on a just transition. In Canada and the US, regional and local policy processes have also been initiated in areas heavily reliant on coal production. These initiatives mainly focus on economic and skills development for coal communities, and health and retirement security for miners and their families.[31,32]

INVESTOR LEVEL

Besides actions by governments, investors are also taking action to address just transition issues. In 2020, more than 40 financial institutions in the UK, including Barclays, CDC Group and HSBC, formed the Financing a Just Transition Alliance.[33] Working with universities, civil society and trade unions, the alliance urged the UK government to develop just transition definitions and priorities to support investment in areas that would benefit workers and communities currently dependent on carbon-intensive economic activity. The alliance concentrates its work on three areas: financing a just transition by business, financing place-based needs across the UK, and national actions and policy frameworks.

In a further example, more than 160 investors representing US$10.2 trillion in assets have endorsed the PRI's Statement of Investor Commitment to Support a Just Transition on Climate Change. In doing so, they have committed to integrating workforce and social dimensions in their climate practices, laying out expectations for businesses to achieve a just transition to a net-zero and climate-resilient economy.

30 UN Climate Change Conference (2021), Supporting the conditions for a just transition internationally
31 The James Hutton Institute and SEFARI Gateway (2020), Just Transitions: a comparative perspective
32 Scottish Government, Just Transition Commission
33 London School of Economics and Grantham Research Institute on Climate Change and the Environment (2021), Financing a Just Transition

ACTIONS IN CHINA

In China, regulators, local governments, academics, non-governmental organisations (NGOs) and other stakeholders have identified a number of social issues, such as unemployment and energy security, related to the low-carbon transition and have begun developing measures to address them. The focus so far has been primarily on employment and access to energy.

Regarding employment, in 2018 China's National Development and Reform Commission (NDRC) and 16 other ministries published Guiding Opinions on Vigorously Developing the Real Economy, and Actively Stabilising and Promoting Employment,[34] which highlighted the importance of helping workers transfer to other jobs and industries in the transition and the upgrading of traditional industries. In 2021, a senior official at the China Banking and Insurance Regulatory Commission argued for the need to create eco-friendly jobs for rural residents.[35] Similarly, the vice-governor of the People's Bank of China (PBoC) has said green finance and inclusive finance must be promoted together to help groups vulnerable to climate and environmental changes.[36] Exchanges of experience regarding a just transition in mining regions have also been organised between key stakeholders in Germany and Shanxi Province, with a focus on employment.[37] NGOs, research institutes, Shanxi Financial Investment Holdings (which is wholly owned by the provincial government) and an officer at China's Ministry of Ecology and Environment (MEE) were all involved.

As for energy security, the NDRC has been providing guidance on ensuring energy security and accessibility in its regular guiding policies on energy.[38,39,40] These policies address urgent challenges in the energy transition, highlighting the need to diversify electricity generation with renewable sources while reducing coal production.

Despite these examples, action has not yet been taken in a systematic way and the need for a just transition has not been acknowledged by all key market players. For example, since China announced its ambitious climate targets, financial institutions in the country have been increasing their support for the low-carbon transition and more financial resources are being funnelled towards green projects. The latest Green Bond Endorsed Projects Catalogue (2021 Edition)[41] also takes climate change into consideration, by excluding coal and other fossil fuels and promoting renewable energy and low-carbon industries. The recently updated Green Finance Guidelines for Banking and Insurance Sectors[42] address the need for a gradual and orderly transition to ensure energy security and supply chain security. However, within these developments, issues around a just transition have not been given widespread and comprehensive consideration by investors or companies.

34 National Development and Reform Commission (2018), 关于大力发展实体经济积极稳定和促进就业的指导意见
35 UNDP China (June 2021), United Nations in China organises a policy dialogue on Finance for Sustainable Development and Carbon Neutrality
36 China Finance (2022), 刘桂平：金融系统要坚定不移践行新发展理念
37 Climate Transparency, Greenovation: Hub and Institute of Finance and Sustainability (2021), 以公正转型迈向碳中和未来
38 National Development and Reform Commission and National Energy Administration (2020), 关于做好2020年能源安全保障工作的指导意见
39 National Development and Reform Commission (2021), 关于做好2021年能源迎峰度夏工作的通知
40 National Development and Reform Commission and National Energy Administration (2022), 关于完善能源绿色低碳转型体制机制和政策措施的意见
41 People's Bank of China, National Development and Reform Commission and China Securities Regulatory Commission (2021), Green Bond Endorsed Projects Catalogue (2021 Edition)
42 China Banking and Insurance Regulatory Commission (2022), 银行业保险业绿色金融指引

5. WHY A JUST TRANSITION MATTERS TO INVESTORS

Some actions to support a just transition have to be taken at the government level, such as providing renewable energy subsidies and stabilising energy prices. However, investors and companies can contribute as well. Doing so effectively can help investors mitigate risks and seize opportunities associated with the transition. For example, China International Capital Corporation estimates that China's power sector alone will need 6.74 billion yuan in green investment by 2060.[43] In mobilising and deploying this capital, just transition issues will become an increasingly important consideration.

Investors have a number of strategic motivations to take just transition issues into consideration in their decision-making.[44] Doing so will help them:

- **Better understand and influence systemic and systematic risks** from climate change, by factoring in issues such as social exclusion and increasing inequality. Just transition framing can help investors understand how financial risks not only come from single-factor environmental or social issues, but also come from the intersection of these issues. Social issues related to tackling climate change may pose risks to the stability and functioning of the financial system. Factoring social issues into analysis and decision-making helps investors address climate change-related risks in a more systematic way.
- **Uncover investment opportunities** that combine climate and social goals, such as inclusive growth. Increasing momentum for a just transition will provide advantages to companies that address both climate and social goals. For example, companies that provide green and decent jobs, social safety nets, affordable clean energy or economic development opportunities may obtain stronger support from governments, investors and customers. Through the lens of a just transition, investors can identify these companies and benefit from their growth.
- **Identify material drivers of long-term value**, including the implications of corporate practice in the workplace and a wider social licence to operate. Broad support for an effective just transition may increase the materiality of social issues in driving long-term value. A combined analysis of climate and social factors can help generate a more complete picture of long-term performance in relation to these key trends.
- **Reinvigorate fiduciary duty.** Fiduciary duty requires that investors look to capture the interrelated environmental and social drivers of long-term performance and, at the same time, take better account of beneficiary interests in sectors, communities and regions affected by the transition.
- **Align with economic, social and ecological development goals.** By providing financial services and products to companies and sectors that align with the just transition concept, investors can align with and better contribute to broader public policy goals, helping generate wider economic and social value.

In practice, investors endorsing the PRI's Statement of Investor Commitment to Support a Just Transition on Climate Change are mainly taking action in five areas:

- **Investment strategy:** integrating workplace and community issues into climate change policies and investment beliefs, dialogue with stakeholders and investment mandates;
- **Corporate engagement:** including workforce and community issues in climate-related engagement on corporate practices, scenarios and disclosures, expressing investor expectations, requesting disclosure, benchmarking performance and pressing for improvement;
- **Capital allocation:** designing investment mandates across asset classes that link decarbonisation, climate resilience, decent work and inclusive growth;
- **Policy advocacy and partnerships:** supporting the inclusion of a just transition in regional, national and international policies and contributing to place-based partnerships;
- **Learning and review:** developing systems to review and communicate progress on just transition activities as well as sharing best practice.

The increasing interest among the international investor community in relation to how companies are aligned with just transition issues indicates that the subject will become increasingly material to investment practices.[45]

43 China International Capital Corporation (2021), "绿色银行"路径及政策建议

44 London School of Economics, Grantham Research Institute on Climate Change and the Environment, Initiative for Responsible Investment, Harvard Kennedy School, PRI and International Trade Union Confederation (2018), Climate change and the just transition: A guide for investor action

45 Investor Group on Climate Change (2021), Empowering communities: How investors can support an equitable transition to net zero

6. THE NEED FOR A JUST TRANSITION DISCLOSURE FRAMEWORK

To assess portfolio exposure to risks and impacts associated with the social aspects of the transition to carbon neutrality, as well as to identify opportunities to connect green assets with positive social effects and make better-informed investment decisions that align with fiduciary duty and economic, social and ecological development goals, investors will need companies to provide clear, consistent and comprehensive information about these issues.

Currently, few widely applied climate-related disclosure frameworks address both the social and economic sides of the low-carbon transition. Many ignore the linkages between climate issues and social issues altogether. For example, the recommendations developed by the Task Force on Climate-related Financial Disclosures (TCFD) focus on climate issues and their financial impacts on both investors and companies, but do not take into account social issues that may result from climate change. In China, the PBoC's Guidance on Environmental Information Disclosure for Financial Institutions[46] asks financial institutions to disclose the financial impacts of environmental and climate issues on themselves as well as the impacts of their investment activities on the environment, but it does not mention the social and economic dimensions.

Broader cross-issue ESG disclosure frameworks, such as the Global Reporting Initiative (GRI) Standards[47] and the ESG Reporting Guide from Hong Kong Exchanges and Clearing (HKEX)[48] comprehensively outline what companies should disclose on sustainability performance and impacts, but generally fail to address the intersection of social and climate issues.[49] This is also the case for the environmental and social disclosure requirements of the Shanghai and Shenzhen stock exchanges.[50,51,52]

A number of international organisations have started to develop frameworks and recommendations to address just transition issues in recent years. For example, the Climate Action 100+ initiative has developed a Just Transition indicator, composed of sub-indicators, to encourage companies to disclose their acknowledgement of and commitments, engagement and actions on a just transition.[53] The indicator is currently in beta form. The World Benchmarking Alliance has also developed a set of just transition indicators to support a benchmark initiative.[54] The indicators focus on the procedures companies put in place to address social issues in transition and can potentially be used as a guide for companies to take action. In addition, the Investor Group on Climate Change has made recommendations for just transition disclosure by suggesting the inclusion of social metrics in the TCFD framework.[55]

As the importance of a just transition becomes increasingly clear and investors continue to face challenges in analysing and tracking companies' comparative performance related to a just transition, just transition disclosure frameworks should become more focused on the relevant actions companies take and the impact of those actions on other stakeholders. The examples above should provide a useful starting point for just transition disclosures. To provide a comprehensive basis for reporting on relevant risks, actions and impacts in a way that is tailored to the Chinese market, we propose below the foundations of a possible just transition disclosure framework for China.

46 People's Bank of China (2021), 金融机构环境信息披露指南
47 Global Reporting Initiative (2021), GRI Standards
48 Hong Kong Exchanges and Clearing (2022), Appendix 27: Environmental, Social and Governance Reporting Guide
49 The GRI Sector Standards Project for Coal – Exposure Draft (not yet finalised) does propose several just transition-related reporting elements.
50 Shenzhen Stock Exchange (2022), 深圳证券交易所上市公司自律监管指引第1号——主板上市公司规范运作
51 Shanghai Stock Exchange (2010), 《公司履行社会责任的报告》编制指引
52 Shanghai Stock Exchange (2022), 上海证券交易所上市公司自律监管指引第1号——规范运作
53 Climate Action 100+ (October 2021), Net-Zero Company Benchmark
54 World Benchmarking Alliance (2021), Just Transition Methodology
55 Investor Group on Climate Change (2021), Empowering Communities: How investors can support an equitable transition to net zero

7. RECOMMENDATIONS FOR A JUST TRANSITION DISCLOSURE FRAMEWORK FOR CHINA

Taking into account the principles and disclosure frameworks discussed above, this section sets out a proposed just transition disclosure framework that aligns with the analytical framework in Chapter 3 and reflects the Chinese context. The proposed disclosure framework brings together relevant elements of the key principles and disclosure frameworks developed by major organisations in the field of sustainable development, including the OECD, the TCFD, Climate Action 100+ (CA 100+) and World Benchmarking Alliance. It also draws on the Just Transition Declaration agreed at COP26. The disclosure framework consists of a variety of elements, including: the extent to which there is an acknowledgement of, and commitment to address, just transition issues by firms; how they have addressed these issues in their strategy; and any actions they are taking to address these issues. It includes key qualitative and quantitative metrics and is designed to be complementary to existing climate-related or broader ESG disclosure frameworks that might be adopted in China.

SCOPE

The disclosure framework is designed to apply to all listed companies. We suggest that the general disclosure requirements are incorporated into existing disclosure frameworks in China (for details, see the section entitled "Potential incorporation into existing disclosure frameworks" lower down). In their disclosure practice, companies can refer to the specific examples listed in the "Recommended disclosures and metrics" column in Table 2 – most likely, companies in the carbon-intensive sectors identified by the State Council,[56] the NDRC and three other ministries,[57] namely: coal mining, oil and gas, utilities, materials and chemical engineering, infrastructure, transportation, steel and agriculture.

PROPOSED DISCLOSURE FRAMEWORK

Table 2: Proposed just transition disclosure framework for companies

1 Acknowledgement and commitment		
General disclosure requirements	**Recommended disclosures and metrics**	**References**
1.1 Responsibilities of the board of directors (BoD)		
1.1.1 The BoD's overall responsibility for oversight of just transition issues	1.1.1(a) The BoD's overall responsibility for just transition oversight, including in relation to social impacts, risks and opportunities and its role in developing relevant policies that respect, protect and promote workers' rights	OECD Just Transition Principles (OECD JTP) (Principle 1) TCFD recommendations (TCFD) (Governance – a)
1.2 Responsibilities of senior management		
1.2.1 Senior management's role in developing just transition strategies and plans	1.2.1(a) Senior management's role in developing just transition strategies and plans, including in relation to assessing and managing climate-related social impacts, risks and opportunities, and developing strategies, administrative procedures and accountability mechanisms for the implementation of relevant policies	OECD JTP (Principle 1) TCFD (Governance – b)

56 State Council of China (2021), "十四五"节能减排综合工作方案

57 National Development and Reform Commission, Ministry of Industry and Information Technology, Ministry of Ecology and Environment and the International Energy Agency (2022), 高耗能行业重点领域节能降碳改造升级实施指南（2022年版）

1 Acknowledgement and commitment

General disclosure requirements	Recommended disclosures and metrics	References
1.3 Commitment to a just transition		
1.3.1 The company's commitments and/or policies on decarbonisation/ the low-carbon transition and its intention to consider just transition issues	1.3.1(a) Information about just transition-related policies, including commitments to retain, retrain, redeploy and/or compensate workers affected by the low-carbon transition, with reference to the International Labour Organization's guidelines for a just transition	OECD JTP (Principle 1) CA 100+ Net-Zero Company Benchmark v1.1 (CA 100+ Benchmark) (Indicator 9 Just Transition – 9.1 Acknowledgement – a & b; Indicator 9 Just Transition – 9.2 Commitment – a & b) World Benchmarking Alliance Just Transition Indicators (WBA JTP) (JTI 3 a, JTI 4 a)

2 Strategy

General disclosure requirements	Recommended disclosures and metrics	References
2.1 Social impact identification and assessment		
2.1.1 The social impacts, risks and opportunities associated with climate change and transition over the short, medium and long term, in relation to: (1) the company's business, strategy and financial planning; (2) workers and other key stakeholders; (3) society and the economy	2.1.1(a) Explanation of any risks of unemployment associated with transition and the scale of exposure within the company and its supply chain, including the number of possible layoffs, job position transitions, new jobs created, percentage of SMEs in the supply chain affected and number of sites exposed to transition risks or facing closure or rehabilitation	OECD JTP (Principles 3 & 4) CA 100+ Benchmark (Indicator 9 Just Transition – 9.1 Acknowledgement – a) WBA JTI (JTI 3 b, JTI 5 b) TCFD (Strategy – a & b, Risk Management – a, Metrics & Targets – a)
	2.1.1(b) Explanation of any positive and negative social impacts on local communities, including the number of people expected to receive/lose energy access or be affected by any changes in energy costs	OECD JTP (Principles 3 & 4) CA 100+ Benchmark (Indicator 9 Just Transition – 9.1 Acknowledgement – a) WBA JTI (JTI 3 b, JTI 5 b) TCFD (Strategy – a & b, Risk Management – a, Metrics & Targets – a)

2 Strategy		
General disclosure requirements	**Recommended disclosures and metrics**	**References**
2.2 Social impact management		
2.2.1 Information on managing social impacts, risks and opportunities associated with climate change and transition	2.2.1(a) The processes for managing social impacts, risks and opportunities associated with climate change and transition, and how they are integrated into the company's decision-making, operations and management processes	OECD JTP (Principles 3 & 4) WBA JTI (JTI 2 b, c & d, JTI 5 c & d) TCFD (Risk Management – b & c)
	2.2.1(b) Information about any just transition plans that have been developed, including any indicators used to help assess impacts on workers, local communities (including vulnerable groups) and supply chain partners	OECD JTP (Principles 3 & 4) WBA JTI (JTI 2 b, c & d, JTI 5 c & d) TCFD (Risk Management – b, Metrics & Targets – a)
	2.2.1(c) Timeframes for the just transition plan	OECD JTP (Principles 3 & 4) WBA JTI (JTI 2 b, c & d, JTI 5 c & d) TCFD (Risk Management – b & c)
	2.2.1(d) Costs associated with any just transition plans, including measures of compensation (including compensation for unemployment, social security, re-employment and reskilling education), and affordable energy delivery plans	OECD JTP (Principles 3 & 4) WBA JTI (JTI 2 b, c & d, JTI 5 c & d) TCFD (Strategy – a & b, Risk Management – b, Metrics & Targets – a)
	2.2.1(e) Total monetary value of financial provisions made by the company for closure and rehabilitation, including post-closure and rehabilitation monitoring, and aftercare	OECD JTP (Principles 3 & 4) WBA JTI (JTI 2 b, c & d, JTI 5 c & d) TCFD (Strategy – a & b, Risk Management – b, Metrics & Targets – a)

3 Action		
General disclosure requirements	**Recommended disclosures and metrics**	**References**
3.1 Social dialogue and stakeholder engagement		
3.1.1 Information on the social dialogue and stakeholder engagement conducted on social impacts associated with climate change and transition conducted by the company	3.1.1(a) Information on engagement with workers, unions, communities and suppliers while developing and implementing any just transition plan, including the geographic scale of engagement	COP26 Just Transition Declaration (COP26 Declaration) ("2. Support and promote social dialogue and stakeholder engagement") OECD JTP (Principle 2) CA 100+ Benchmark (Indicator 9 Just Transition – 9.3 Engagement – a, 9.4 Action – b) WBA JTI (JTI 1, JTI 2 a) TCFD (Risk Management – b, Metrics & Targets – a)
	3.1.1(b) Information on any advance notice given to the potentially affected stakeholders regarding any transition plan to be implemented	COP26 Declaration ("2. Support and promote social dialogue and stakeholder engagement") OECD JTP (Principle 2) CA 100+ Benchmark (Indicator 9 Just Transition – 9.3 Engagement – a) WBA JTI (JTI 1, JTI 2 a) TCFD (Risk Management – b)
	3.1.1(c) Categories of stakeholders the company identifies and engages with on climate-related social issues	COP26 Declaration ("2. Support and promote social dialogue and stakeholder engagement") OECD JTP (Principle 2) CA 100+ Benchmark (Indicator 9 Just Transition – 9.3 Engagement – a) WBA JTI (JTI 1 b) TCFD (Risk Management – b, Metrics & Targets – a)
	3.1.1(d) Forms of communication (e.g. public hearings or seminars, separate or combined with other meetings)	COP26 Declaration ("2. Support and promote social dialogue and stakeholder engagement") OECD JTP (Principle 2) CA 100+ Benchmark (Indicator 9 Just Transition – 9.3 Engagement – a) WBA JTI (JTI 1 c) TCFD (Risk Management – b, Metrics & Targets – a)
	3.1.1(e) Frequency of communication with stakeholders	COP26 Declaration ("2. Support and promote social dialogue and stakeholder engagement") OECD JTP (Principle 2) CA 100+ Benchmark (Indicator 9 Just Transition – 9.3 Engagement – a) WBA JTI (JTI 1 c) TCFD (Risk Management – b, Metrics & Targets – a)
	3.1.1(f) Aspects of just transition discussed with stakeholders and actions taken in response to any material issues raised by stakeholders	COP26 Declaration ("2. Support and promote social dialogue and stakeholder engagement") OECD JTP (Principle 2) CA 100+ Benchmark (Indicator 9 Just Transition – 9.3 Engagement – a) WBA JTI (JTI 1 d) TCFD (Risk Management – b, Metrics & Targets – a)

3 Action		
General disclosure requirements	**Recommended disclosures and metrics**	**References**
Workers		
3.2 Protection of workers' rights		
3.2.1 Information on social protection afforded to workers, including income security, social security, health care insurance etc	3.2.1(a) Information on social protection for job losses and displacement, especially on income security and social compensation	COP26 Declaration ("4. Local, inclusive and decent work") OECD JTP (Principle 6) WBA JTI (JTI 5 a, c, d) TCFD (Risk Management – b, Metrics & Targets – a)
	3.2.1(b) Number and percentage of layoffs and projected number of layoffs under the company's just transition strategy	COP26 Declaration ("4. Local, inclusive and decent work") OECD JTP (Principle 6) WBA JTI (JTI 3 b) TCFD (Risk Management – b, Metrics & Targets – a)
3.3 Skills development		
3.3.1 Information on training programmes targeting knowledge and skills needs in a low-carbon future	3.3.1(a) Measures taken to re- and/or up-skill workers, taking gender equality and vulnerable groups into consideration	COP26 Declaration ("1. Support for workers in the transition to new jobs", "4. Local, inclusive and decent work") OECD JTP (Principles 5 & 7) WBA JTI (JTI 4 c) TCFD (Risk Management – b, Metrics & Targets – a)
	3.3.1(b) Number of workers that have received training, with breakdown by gender, and number of workers from ethnic minority groups, if relevant	COP26 Declaration ("1. Support for workers in the transition to new jobs", "4. Local, inclusive and decent work") OECD JTP (Principles 5 & 7) WBA JTI (JTI 4 d) TCFD (Risk Management – b, Metrics & Targets – a)
	3.3.1(c) Number and percentage of workers retained and/or redeployed	COP26 Declaration ("1. Support for workers in the transition to new jobs", "4. Local, inclusive and decent work") OECD JTP (Principles 5 & 7) TCFD (Risk Management – b, Metrics & Targets – a)

3 Action		
General disclosure requirements	**Recommended disclosures and metrics**	**References**
Workers		
3.4 Green and decent job creation		
3.4.1 Information on the measures taken to create and provide, or support access to, green and decent jobs	3.4.1(a) Measures taken to create and provide, or support access to, green and decent jobs within the company and its supply chain, taking gender equality and vulnerable groups into consideration	COP26 Declaration ("1. Support for workers in the transition to new jobs", "4. Local, inclusive and decent work") OECD JTP (Principle 5) WBA JTI (JTI 3 c, d) TCFD (Risk Management – b, Metrics & Targets – a)
	3.4.1(b) Number of green and decent jobs created within the company, with breakdowns by gender, and number of workers from ethnic minority groups, if relevant	COP26 Declaration ("1. Support for workers in the transition to new jobs", "4. Local, inclusive and decent work") OECD JTP (Principle 5) WBA JTI (JTI 3 c, d) TCFD (Risk Management – b, Metrics & Targets – a)
	3.4.1(c) Number of green and decent jobs created within the company's supply chain	COP26 Declaration ("1. Support for workers in the transition to new jobs", "4. Local, inclusive and decent work") OECD JTP (Principle 5) WBA JTI (JTI 3 c) TCFD (Risk Management – b, Metrics & Targets – a)
Clients/customers		
3.5 Provision of resilient, affordable clean energy/green commodities		
3.5.1 Information on the measures taken to support vulnerable clients/ customers that are adversely affected by the company's transition strategy	3.5.1(a) Measures taken to provide resilient clean energy/green commodities	OECD JTP (Principle 4) CA 100+ Benchmark (Indicator 9 Just Transition – 9.4 Action – a & c)
	3.5.1(b) Information on the clean energy/green commodities provided at an affordable price	OECD JTP (Principle 4) CA 100+ Benchmark (Indicator 9 Just Transition – 9.4 Action – a & c) TCFD (Metrics & Targets – a)
	3.5.1(c) Number of households that benefit from renewable energy/green commodities generated	OECD JTP (Principle 4) CA 100+ Benchmark (Indicator 9 Just Transition – 9.4 Action – a & c) TCFD (Metrics & Targets – a)

3 Action		
General disclosure requirements	**Recommended disclosures and metrics**	**References**
Communities and regions		
3.6 Support for affected communities and regions		
3.6.1 Information on support provided in communities/ regions affected by the low-carbon transition	3.6.1(a) Support provided in communities/regions affected by the low-carbon transition, such as technical training for local communities and vulnerable groups	COP26 Declaration ("1. Support for workers in the transition to new jobs", "4. Local, inclusive and decent work") OECD JTP (Principle 4) CA 100+ Benchmark (Indicator 9 Just Transition – 9.4 Action – a) WBA JTI (JTI 4 c) TCFD (Metrics & Targets – a)
Supply chain		
3.7 Support for supply chain		
3.7.1 Information on the measures taken to address climate-related social impacts on the company's supply chain to protect and promote worker' rights, to support companies' supply chains and to support local and small suppliers	3.7.1(a) Measures taken to address climate-related social impacts on the company's supply chain to protect and promote workers' rights	COP26 Declaration ("5. Supply chains") OECD JTP (Principle 4) WBA JTI (JTI 5 d)
	3.7.1(b) Measures taken to support the company's supply chain within the broader context of climate change and transition to carbon neutrality, including related skills development programmes	COP26 Declaration ("5. Supply chains") OECD JTP (Principle 4) WBA JTI (JTI 4 c)
	3.7.1(c) Measures taken to support SMEs that may be affected by transition	COP26 Declaration ("5. Supply chains") OECD JTP (Principle 4) TCFD (Risk Management – b, Metrics & Targets – a)
	3.7.1(d) Number and percentage of SMEs in the company's supply chain	COP26 Declaration ("5. Supply chains") OECD JTP (Principle 4) TCFD (Risk Management – b, Metrics & Targets – a)

4 Policy advocacy		
General disclosure requirements	**Recommended disclosures and metrics**	**References**
4.1 Just transition policy advocacy		
4.1.1 Information on engagement with governments to support the inclusion of just transition concerns into local policies	4.1.1 (a) Engagement with governments for just transition policies and regulations that enable the generation of green and decent jobs, the retention and reskilling of workers and provision of social protection to workers and other affected stakeholders	OECD JTP (Principle 8) WBA JTI (JTI 6 d) TCFD (Risk Management – b, Metrics & Targets – a)

POTENTIAL INCORPORATION INTO EXISTING DISCLOSURE FRAMEWORKS

The development of the just transition disclosure framework considers the possibility of disclosures being incorporated into existing broader ESG disclosure frameworks. The most widely applied climate and ESG disclosure frameworks in China include:

- The China Securities Regulatory Commission (CSRC) Standards for the Contents and Formats of Information Disclosure of Companies Publicly Issuing Securities No. 2 – Contents and Formats of Annual Reports (revised in 2021) (voluntary for all listed companies, with only certain environmental indicators mandatory for key pollutant-emitting companies);[58]
- The CSRC's Guidelines on Investor Relations Management of Listed Companies (voluntary for all listed companies);[59]
- The Shanghai,[60,61] Shenzhen[62] and Hong Kong[63] stock exchanges' guidelines on ESG disclosure (guidelines on social responsibility reporting from the Shanghai Stock Exchange are mandatory only for companies that are part of the SSE Corporate Governance index; guidelines on ESG reporting from the Shenzhen Stock Exchange are mandatory only for SZSE 100 Index component companies; as for HKEX's requirements, some of them are mandatory while others apply on a "comply or explain" basis);
- The Administrative Measures for the Disclosure of Environmental Information by Enterprises from the Ministry of Ecology and Environment (MEE) (mandatory for certain types of companies, including key pollutant-emitting entities specified in the administrative measures).[64]

The current guidelines from the Shanghai and Shenzhen stock exchanges are too general to map potential disclosures against; however, the exchanges are working on more concrete ESG disclosure frameworks.[65] The mapping against the CSRC's standards can be used as a reference to see how just transition disclosures could be incorporated into these two exchanges' guidelines.

As for the MEE's requirements, it is challenging to incorporate just transition disclosures into them as the ministry focuses on environmental disclosure by key polluters. The information to disclose only covers environmental licences, emissions of carbon and other pollutants, emergency response plans and environmental violations. Adding social indicators would go beyond the MEE's jurisdiction.

The table below shows how the proposed framework could potentially be incorporated into the CSRC's and HKEX's ESG disclosure frameworks.

58 China Securities Regulatory Commission (2021), 公开发行证券的公司信息披露内容与格式准则第2号 – 年度报告的内容与格式（2021年修订）
59 China Securities Regulatory Commission (2022), 上市公司投资者关系管理工作指引
60 Shanghai Stock Exchange (2010), 《公司履行社会责任的报告》编制指引
61 Shanghai Stock Exchange (2022), 上海证券交易所上市公司自律监管指引第1号——规范运作
62 Shenzhen Stock Exchange (2022), 深圳证券交易所上市公司自律监管指引第1号——主板上市公司规范运作
63 Hong Kong Exchanges and Clearing (2022), Appendix 27: Environmental, Social and Governance Reporting Guide
64 Ministry of Ecology and Environment (2021), 企业环境信息依法披露管理办法
65 Yicai (September 2021), 相关人士：沪深交易所正在制定ESG指引，ESG信披力度将加强

Table 3: Potential incorporation into existing disclosure frameworks

<table>
<tr><th>Indicator in the proposed framework</th><th>CSRC annual reporting rules for listed companies</th><th>HKEX Guide</th></tr>
<tr><td>1.1 Responsibilities of boards of directors</td><td></td><td></td></tr>
<tr><td>1.2 Responsibilities of senior management</td><td></td><td></td></tr>
<tr><td>1.3 Commitment to just transition</td><td>Mission in fulfilling social responsibility</td><td></td></tr>
<tr><td>2.1 Social impact identification and assessment</td><td rowspan="2">Environmental protection and sustainable development</td><td rowspan="2">A4 Climate change</td></tr>
<tr><td>2.2 Social impact management</td></tr>
<tr><td>3.1 Social dialogue and stakeholder engagement</td><td>Public relationships, protection of shareholders' and creditors' rights and interests</td><td></td></tr>
<tr><td>3.2 Protection of workers' rights</td><td rowspan="3">Protection of workers' rights and interests</td><td>B1 Employment</td></tr>
<tr><td>3.3 Skills development</td><td>B3 Development and training</td></tr>
<tr><td>3.4 Green and decent job creation</td><td>B1 Employment</td></tr>
<tr><td rowspan="2">3.5 Provision of resilient, affordable clean energy/green commodities</td><td rowspan="2">Protection of clients' and customers' rights and interests</td><td>B6 Product responsibility</td></tr>
<tr><td>B8 Community investment</td></tr>
<tr><td>3.6 Support to affected communities and regions</td><td>Public relationships</td><td>B8 Community investment</td></tr>
<tr><td>3.7 Support to supply chain</td><td>Supply chain</td><td>B5 Supply chain management</td></tr>
<tr><td>4.1 Just transition policy advocacy</td><td></td><td></td></tr>
</table>

Other key disclosure frameworks to consider include the recent exposure drafts of the International Financial Reporting Standards Foundation Sustainability Disclosure Standards, published by the International Sustainability Standards Board (ISSB) in March 2022. Building on existing frameworks, including those from the Climate Disclosure Standards Board, the TCFD, the Sustainability Accounting Standards Board, as well as the Value Reporting Foundation's Integrated Reporting Framework, the two exposure drafts contain a set of general requirements for sustainability-related financial information and a set of climate-related information disclosure requirements. The ISSB's proposed standards and the ISSB overall aim to create a global baseline for sustainability reporting. In this regard, the ISSB is engaging with various jurisdictions to ensure compatibility between a global baseline and jurisdictional initiatives. China's Ministry of Finance and the CSRC are also undertaking research on the potential implementation of the ISSB standards in China.

LIMITATIONS AND NEXT STEPS

The proposed framework is based on the potential actions that could be taken by companies to address just transition impacts with reference to existing relevant disclosure frameworks. However, there is currently a lack of support from regulators and a lack of clear demand from investors for such disclosures.

There is currently no policy in place in China that directly responds to the need for a just transition or which holistically addresses the social implications of transition. No concrete policy goals or definitions regarding a just transition have been determined to serve as the basis of disclosure. Without policy support, companies are not likely to be motivated to disclose on just transition indicators, or even to recognise the negative social and economic effects the low-carbon transition may have.

In addition to the lack of policy support, another driving force – expectations of investors on just transition information disclosure – is not clear. The needs of international investors and the awareness and attitude of domestic investors on this topic remain unassessed.

In addition, the current proposed framework fails to address social and regional biases. Green and decent jobs may emerge in different sectors and/or regions from those most affected, making it challenging to address unemployment among those directly impacted.

The limitations of the proposed framework point towards work that needs to be done. There is a need to engage with policy makers and industrial associations to seek support and reach agreement on definitions and priorities regarding a just transition in China. An investor survey could clarify investors' needs regarding just transition data and collect feedback on the effectiveness of the indicators proposed. Also, engagement with and consultation among target companies and their key stakeholders should be undertaken. A pilot disclosure programme with large listed companies in the most affected sectors might be considered.

In terms of the scope of the disclosure framework, the current proposal targets only companies. As a next step in the near future, a framework for investors' own disclosure could be developed to help drive wider behaviour change.

APPENDIX: DISCLOSURE ON RELEVANT SOCIAL INDICATORS BY CSI 300 COMPANIES

According to SynTao Green Finance's ESG Database, the disclosure rates of indicators related to a just transition by companies in the CSI 300 index are generally low but are rising. Among the 12 social indicators selected, only three were disclosed by 50% or more companies in 2021, although the disclosure rates for 11 indicators saw an increase from 2019 to 2021.

Companies actively disclosed their practices in employee training, anti-discrimination, and the number of female employees, which are associated with indicators 3.3 (Skills development) and 3.4 (Green and decent job creation) in the proposed just transition disclosure framework.

Table 4: Disclosure rates of social indicators by CSI 300 companies

Indicator in proposed just transition disclosure framework	Social indicator	Disclosure rate 2019[66]	Disclosure rate 2021
3.1 Social dialogue and stakeholder engagement **3.2 Protection of workers' rights**	Freedom of association	3.90%	7.67%
	Collective bargaining	25.20%	46.33%
3.2 Protection of workers' rights	Employee turnover rate	13.20%	21.33%
	Proportion of informal workers	14.50%	10.00%
3.2 Protection of workers' rights **3.5 Provision of resilient, affordable clean energy/green commodities** **3.6 Support to affected communities and regions** **3.7 Support to supply chain**	Human rights	12.30%	17.33%
3.3 Skills development	Number of employees receiving training annually, and duration of training	66.10%	70.67%
3.2 Protection of workers' rights **3.3 Skills development** **3.4 Green and decent job creation**	Equal pay	24.50%	28.00%
	Anti-discrimination	42.30%	62.00%
	Enhancing diversity	17.40%	47.33%
	Number of female employees	35.50%	51.00%
3.7 Support to supply chain	Responsible supply chain management	13.20%	38.00%
	Supply chain supervision system	25.20%	37.33%

Source: SynTao Green Finance

66 The disclosure rate for 2019 is based on companies' disclosures relating to calendar year 2018. Likewise, the 2021 disclosure rate reflects the disclosure of practices in the 2020 calendar year.

CREDITS

AUTHORS:

- Peiyuan Guo, SynTao Green Finance
- Yujun Liu, SynTao Green Finance
- Xinyi Ye, SynTao Green Finance
- Daniel Wiseman, PRI
- Di Tang, PRI

CONTRIBUTORS:

- Susanne Draeger, PRI
- Remi Fernandez, PRI
- Adams Koshy, PRI
- Bettina Reinboth, PRI
- Jasna Selih, PRI
- René Van Merrienboer, PRI

EDITOR:

- Mark Nicholls

DESIGN:

- Alessandro Boaretto, PRI
- Alejandro De la Peza, PRI

The Principles for Responsible Investment (PRI)

The PRI works with its international network of signatories to put the six Principles for Responsible Investment into practice. Its goals are to understand the investment implications of environmental, social and governance (ESG) issues and to support signatories in integrating these issues into investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole.

The six Principles for Responsible Investment are a voluntary and aspirational set of investment principles that offer a menu of possible actions for incorporating ESG issues into investment practice. The Principles were developed by investors, for investors. In implementing them, signatories contribute to developing a more sustainable global financial system.

More information: www.unpri.org

PRI Principles for Responsible Investment

The PRI is an investor initiative in partnership with UNEP Finance Initiative and the UN Global Compact.

United Nations Environment Programme Finance Initiative (UNEP FI)

UNEP FI is a unique partnership between the United Nations Environment Programme (UNEP) and the global financial sector. UNEP FI works closely with over 200 financial institutions that are signatories to the UNEP FI Statement on Sustainable Development, and a range of partner organisations, to develop and promote linkages between sustainability and financial performance. Through peer-to-peer networks, research and training, UNEP FI carries out its mission to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations.

More information: www.unepfi.org

UN environment programme | finance initiative

United Nations Global Compact

The United Nations Global Compact is a call to companies everywhere to align their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption, and to take action in support of UN goals and issues embodied in the Sustainable Development Goals. The UN Global Compact is a leadership platform for the development, implementation and disclosure of responsible corporate practices. Launched in 2000, it is the largest corporate sustainability initiative in the world, with more than 8,800 companies and 4,000 non-business signatories based in over 160 countries, and more than 80 Local Networks.

More information: www.unglobalcompact.org

United Nations Global Compact