



A GUIDE ON CLIMATE CHANGE FOR PRIVATE EQUITY INVESTORS

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KPMG

KPMG is a pioneer in sustainability consulting – some KPMG member firms first offered sustainability services over 20 years ago. Today our network of member firms offer climate change, sustainability and Responsible Investment / ESG services in 60 countries, closely connected through our Global Centre of Excellence. KPMG professionals help clients to develop future-fit business strategies and supports them with building long-term value in a rapidly changing world.

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IIGCC

The Institutional Investors Group on Climate Change (IIGCC) is the investor voice on climate solutions in Europe. It is a forum for collaboration for over 120 investors representing over €13 trillion assets under management and including some of the largest pension funds and asset managers in the EU. IIGCC's mission is to provide investors with a common voice to encourage public policies, investment practices and corporate behaviour which address long-term risks and opportunities associated with climate change.

Contact: info@iigcc.org website: www.iigcc.org Twitter: [@iigccnews](https://twitter.com/iigccnews)

PRI

The PRI is the world's leading proponent of responsible investment. It works to understand the investment implications of environmental, social and governance (ESG) factors and to support its international network of investor signatories in integrating these factors into their 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 Principles for Responsible Investment have more than 1,500 signatories, managing over US\$60 trillion.

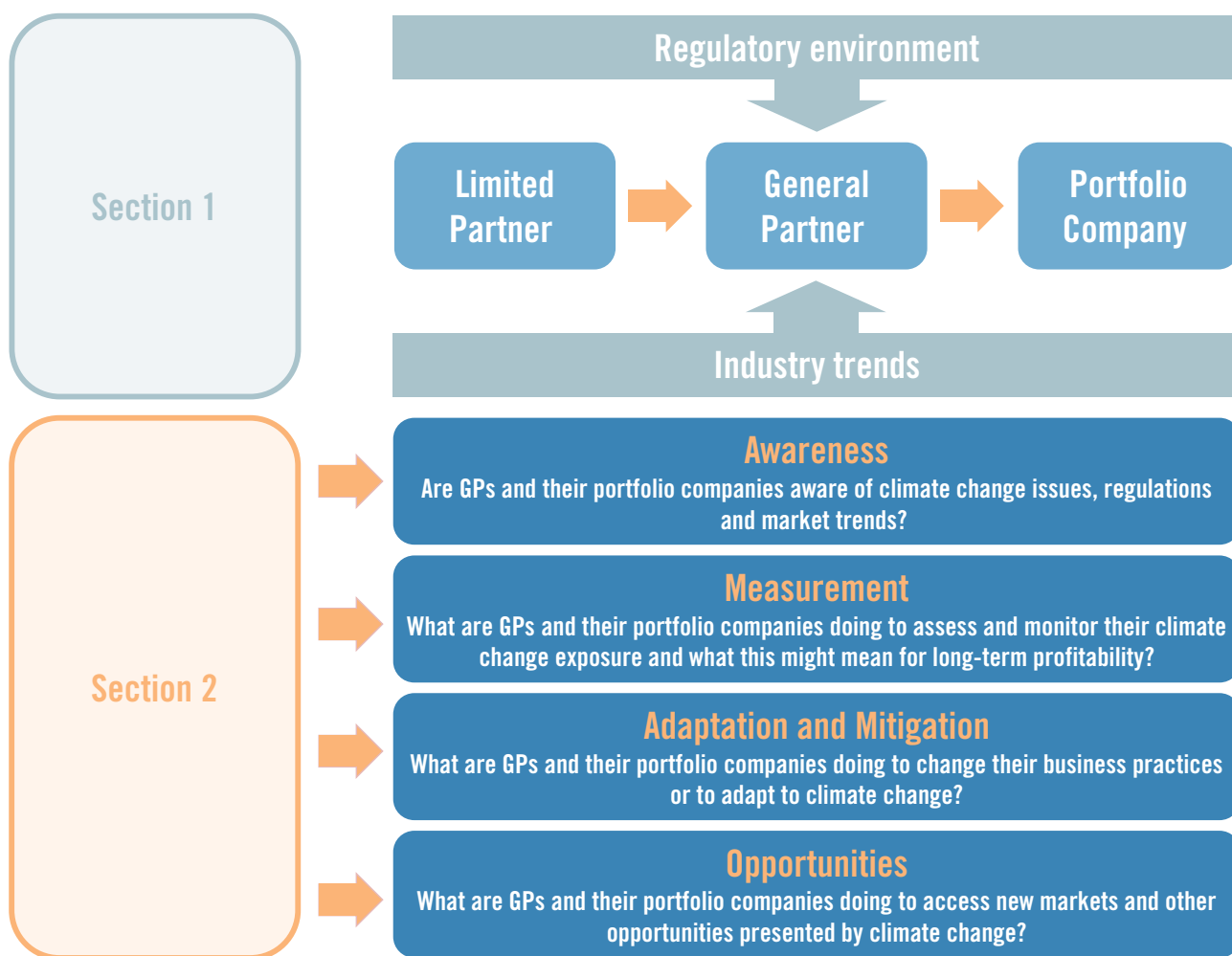
Contact: info@unpri.org website: www.unpri.org Twitter: [@pri_news](https://twitter.com/pri_news)

About the guide

This is a guide on current and emerging practice in the developing area of assessing climate change impacts on private equity investments. The guide comprises two sections:

- **Section 1** summarises the rationale for incorporating climate change concerns in private equity investments; and
- **Section 2** presents a framework that Limited Partners (LPs) and General Partners (GPs) can use in due diligence and when engaging with their fund and portfolio company investments.

The framework presents a series of questions that LPs can ask their GPs, and that GPs can ask current or potential portfolio companies. Each question is supported by guidance explaining the rationale of the question, along with examples of emerging practices. The questions address four key aspects of climate change and private equity investment:



- **Appendix 1** provides further background on the risks and opportunities the private equity industry faces, some useful tools and methodologies to assist GPs and LPs and further examples of climate change policies and regulation.
- **Appendix 2** lists the working group and project partners that were consulted in developing this guide, and organisations that were interviewed.

The IIGCC and the PRI intend to periodically review and update this guidance as policy, regulation and business responses evolve. The IIGCC and PRI would welcome greater insight into what LPs and GPs are doing to integrate climate change into their investment processes. Contact us on info@iigcc.org and info@unpri.org to share your practices.

Foreword from IIGCC

The Paris Agreement was more than just a political signal from governments to address climate change. When 188 countries came together to present their national plans to decarbonise the global economy, they did so because the voices of investors and businesses told them the transition to a low carbon economy was important and inevitable. This market-driven momentum to address climate change can never go into reverse.

For over a decade IIGCC has called on governments to set predictable long-term policy frameworks that can incentivise a smooth transition to a low-carbon energy system. These investment-grade climate policies are beginning to materialise in Europe and other countries as the Nationally Determined Contributions (NDCs) start the process of eventually putting economies on net-zero carbon pathways.

In addition to calling for supportive policies, in the [Global Investor Statement on Climate Change](#) over 400 investors commit to taking action in their investment and stewardship practices in order to manage climate risk across their portfolios. IIGCC members actively engage with companies to ensure that they disclose the potential impact of climate change and related policy on their businesses.

In recognition of the need to integrate climate risk into all asset classes, the [Investment Solutions Guide for Asset Owners](#) created a roadmap for investors to develop a climate policy, adjust their asset allocation strategy and measure and reallocate assets to address climate change.

IIGCC's Climate Solutions programme hosts events that bring investors together to drill down into the topics that help investors develop and implement their climate strategies. In 2015, IIGCC's carbon footprinting roadshow visited 10 European cities to help investors compare options for measuring the carbon footprint arising from their equity portfolios. One of the first questions that investors asked at every roadshow event is what about other asset classes!

Much has changed since 2010 when IIGCC published its first [Guide on Climate Change for Private Equity Investors](#). There is new evidence on climate risk but also the technological solutions that will become part of a low-carbon future and will need to be financed through private equity investment have advanced significantly. This revised guide covers a range of issues facing investors in this asset class, including how to measure carbon emissions in private equity investment, and how to engage across the investment supply chain to reduce carbon asset risk and seek out low carbon investment opportunities.

Finally, we are pleased to work with PRI on this guide and to reach a broad global audience of investors committed to integrating climate change and other environmental factors across their private equity investments.



Stephanie Pfeifer

Chief Executive, Institutional Investors Group on Climate Change (IIGCC)

Foreword from PRI

Considering the ramifications of climate change is an essential part of a long-term perspective on investment, but such perspective cannot be realised and acted upon without significant industry collaboration and government support.

[The Paris Agreement](#) was a welcome development to the global climate change agenda, providing a strong foundation for governments and a policy signal for investors. By signing the [Global Investor Statement on Climate Change](#), PRI signatories have made clear their expectations for policies that support an orderly transition to a low-carbon economy.

The PRI plays an active role in supporting investor action on climate change. Our collaborative engagements support investor dialogue with listed companies on topics including emissions reduction, corporate climate lobbying and disclosure, and we collaborate with other investor initiatives through the [Investor Platform for Climate Actions](#). In 2014 we launched the [Montréal Carbon Pledge](#), a commitment investors can make to measure and publicly disclose their portfolio carbon footprint: it counts more than 120 signatures committing over US\$10 billion of assets. Our 2015 publication [Developing an asset owner climate change strategy](#) guides asset owners on key issues when addressing climate change.

Asset owners that have primarily focused on climate change strategy, measurement and disclosure through their listed investments are starting to consider how to apply these practices to their private equity holdings. They want to collaborate with their peers to understand how this can be done and how to recognise General Partners (GP) that are forward thinking on climate change, and in turn, GPs are increasingly interested in understanding how they can manage climate change risks and meet Limited Partner (LP) expectations.

In response to this demand, we have been delighted to partner with the IIGCC to revisit and update their pioneering 2010 guidance on climate change for private equity investors. A timely follow-up to COP21, the guidance provides a means to harmonise LP and GP approaches at a time of unprecedented investor momentum on climate change.



Fiona Reynolds
Managing Director, PRI

Introduction from KPMG

This guide updates IIGCC's 2010 *A Guide on Climate Change for Private Equity Investors*, addressed to institutional investors who are limited partners (LPs) in private equity funds and private equity fund managers, general partners (GPs), who are managing these funds. It aims to assist private equity LPs and GPs better understand, assess and monitor, the investment opportunities and risks presented by climate change, its mitigation and the increasing global regulation driving towards a low-carbon economy. These risks and opportunities are increasingly a core feature of sustainable and responsible investing strategies, particularly as climate change presents one of the biggest threats to modern society and long-term investment performance. Therefore, investors and portfolio companies should be thinking how to adapt their business strategy, risk management and reporting models to account for these factors and significant changes in policy and regulation to ensure sustainable returns.

As we become more aware of climate change's physical impacts and associated risks and opportunities, investors need to broaden the scope of environmental due diligence, which traditionally focused on compliance and liabilities. LPs have become more focused on climate change and carbon in recent years and GPs need to align their investment practices to take into consideration their requirements; failure to do so and effectively report progress to LPs could affect their ability to raise funds in the future.

The industry has been responding, with more formal, technical focused processes at both the LP and GP level. The research underlying this guidance, which included stakeholder interviews, highlights a variety of approaches, examples of which are included. From appointment of dedicated in-house resources, to the use of carbon footprinting techniques, we hope this guide helps you to consider these issues in a more practical way in your investment decision making.



James Holley

UK Head of Responsible Investment, KPMG

Section 1 Why consider climate change in private equity investments

1.1 Investor demand

Institutional investors are increasingly demanding greater consideration of climate change opportunities and risks by their internal investment teams and external managers, in both listed and unlisted investments.

These investors, including the members of the IIGCC, PRI and other investor groups, consider it part of their fiduciary duty to integrate these issues into the investment process because it enables them to make better investment decisions, improve performance and reduce risk.¹

This is a global development; and Figure 1 lists some initiatives that enable investors to take action in their portfolios.

Climate change risk and opportunity assessment is a value-creating proposition for investors. It enables them to identify climate related risks that could affect their portfolios and opportunities associated with a transition to a low carbon economy.

Figure 1 Investor-focused climate change initiatives

Montreal Carbon Pledge commits investors to measure and publicly disclose the carbon footprint of their investment portfolio on an annual basis. Over 120 investors representing \$10 trillion have signed.

Initiative Carbone 2020 (IC20) was launched by private equity firms Apax Partners, Ardian, Eurazeo, LBO France and PAI Partners to measure, manage and reduce GHG emissions of their portfolios.

Portfolio Decarbonization Coalition (PDC) is a multi-stakeholder initiative focused on decarbonising institutional investor portfolios representing US\$600 billion of assets.

Breakthrough Energy Coalition is a growing group of countries (currently China, France, Germany, India, Japan, Nigeria, South Africa, Saudi Arabia, UK and the USA) that are increasing public research on the development of alternative power sources through the Mission Innovation initiative.

The **Green Infrastructure Investment Coalition** aims to support the financing of a rapid transition to a low-carbon and climate-resilient economy. The GIIC agenda will include examining barriers to capital flows, identifying infrastructure pipelines and facilitating greater capital market participation in green infrastructure development and financing.

¹ PRI and UNEP Finance Initiative (2015) *Fiduciary Duty in the 21st Century* <http://2xjmlj8428u1a2k5o3411m71.wpengine.netdna-cdn.com/wp-content/uploads/Fiduciary-duty-21st-century.pdf>

Risks and Returns

Investment strategies that do not adequately consider the implications of climate change may be exposed to additional risks. The Economist estimates that climate change will result in US\$4.3 trillion of losses in privately held assets due to damage caused by extreme weather including droughts, floods and storms and lower returns and slower economic growth. If global temperatures increase by 6°C from pre-industrial levels, the losses could reach US\$13.8 trillion.²

Over the last five years, US coal shares have lost over 80% of their value and over 25 coal companies have filed for bankruptcy.³ Hundreds of billions in investor capital have been lost. This decline reflects competition from other fossil fuels (notably shale gas in the US), but also a looming decrease in global demand as governments such as that of China shift away from the most polluting fossil fuels towards lower carbon sources of energy, including renewables, which themselves are falling in cost.

Opportunities

Building a low-carbon global economy to combat climate change requires substantial investment, most of which must come from the private sector.

McKinsey estimates that low-carbon infrastructure alone requires US\$6 trillion per year for each of the next 15 years – more than twice the current rate.⁴ Additional investment will be required in service and supply chain businesses to support that infrastructure growth, and will include substantial private equity opportunities.

Figure 2 Infrastructure opportunities for private equity

China aims to increase non-fossil fuel energy sources to around 20% of its generating capacity by 2030. This means installing 800GW-1,000GW of non-fossil fuel capacity – equivalent to the entire current generating capacity of the US across all sources.

Storage – The natural intermittency of renewables in energy generation creates a need for energy storage, both large-scale and distributed, presenting opportunities for investment in technology and infrastructure.

Electric cars – Global electric car sales will top 1 million in 2016. This creates opportunities in the value chain: batteries, charging stations and original equipment manufacturer (OEM) parts and services.

Japan – Actions for Cool Earth (ACE) 2.0 aims to mobilise US\$10.6bn of public and private finance by 2020 to developing countries to help them implement policies against global warming. This is combined with promoting the use of energy efficient technologies and infrastructure, such as train systems and power generation stations, in developing countries.

² The Economist (2015) *The cost of inaction* www.economistinsights.com/financial-services/analysis/cost-inaction

³ Carbon Tracker (2015) *The US Coal Crash* <http://www.carbontracker.org/wp-content/uploads/2015/03/US-coal-designed-Web.pdf>

⁴ McKinsey & Company (2016) *Financing Change: How to mobilize private-sector financing for sustainable infrastructure* http://2015.newclimateeconomy.report/wp-content/uploads/2016/01/Financing_change_How_to_mobilize_private-sector_financing_for_sustainable-infrastructure.pdf

Action

Because of the very real investment risks and opportunities, investors are increasingly seeking more information on climate risks in their portfolios, and want their investment managers to act. Investors are employing a range of approaches to make their intentions clear. This can be seen in a variety of institutional investor actions, such as measurement (see Figure 3 on carbon footprinting initiatives to understand the scope of the risk and as a basis for measuring future performance); engagement; reallocation; and reinforcement through engaging with policy makers.

Figure 3 Carbon footprints as a risk management tool

Carbon footprints are useful to:

- ✓ better understand the carbon-related risks in the portfolio
- ✓ respond to demand from regulators, peers and stakeholders
- ✓ evaluate financial risks linked to a price on carbon (sector and company level)
- ✓ support investors' decarbonisation targets and identify opportunities for energy savings
- ✓ enhance investment manager and company dialogue
- ✓ encourage companies to disclose more and better quality data about their emissions

A carbon footprint is *not* a metric of:

- ✗ the total climate risks and/or opportunities for a portfolio
- ✗ a portfolio's total climate impact
- ✗ how well a portfolio is positioned towards a low-carbon society

For more information on calculating carbon footprints see Appendix 1.

1.2 Climate policy and regulation

Since adopting the UN Framework Convention on Climate Change (UNFCCC) in 1992, most OECD countries and many emerging countries have been enacting policies to reduce carbon, foster renewable energy and increase disclosure on carbon usage. The Grantham Research Institute's legislation database shows that worldwide climate change policies have doubled every five years since 1997.⁵

The 2015 Paris Agreement, a global agreement to limit warming to "well below 2°C above pre-industrial levels", was an unprecedented climate policy achievement. As the agreement is implemented, new international, national and sub-national policies and regulations will come into effect; affecting most asset classes, including private equity investment. Two likely implications for private equity investors will be compliance and initial public offering (IPO) standards in preparation for exit (for instance, portfolio company climate reporting and engagement could become a prerequisite for listing).

Climate change is not an issue governments can address alone; they will require private companies and investors to play an increasingly important role. According to the International Energy Agency, investments of US\$13.5 trillion are required by 2030 just to achieve the carbon cuts that were pledged by countries in the run-up to COP21.⁶ The private equity industry is well-positioned to both support and

⁵ LSE, Grantham Research Institute (2015) Global climate legislation study at a glance www.lse.ac.uk/GranthamInstitute/legislation/2015-global-climate-legislation-study-at-a-glance/

⁶ World Energy Outlook Special Briefing for COP21 http://www.iea.org/media/news/WEO_INDC_Paper_Final_WEB.PDF

benefit from government action on implementing technical solutions, promoting responsible business behaviour and creating more responsible business models.

Policies such as carbon pricing, feed-in tariffs and subsidies are likely to create growth opportunities for companies that are positioned to operate in a low-carbon economy, such as those in the renewable energy, energy storage and low-carbon transportation sectors.

Figure 4 Climate-related policy initiatives with private equity implications

The French energy transition law, a pioneering example of mandatory regulation on climate change, requires investors to disclose how they factor ESG criteria and carbon-related aspects into their investment policies.⁷

The G20 Financial Stability Board (FSB) has established the **Task Force on Climate-Related Financial Disclosures (TCFD)** to develop clearer and consistent reporting criteria for climate-related financial risk. The TCFD has aligned with the Sustainability Accounting Standards Board (SASB) on three types of climate risk: physical, legal/compliance and transitional.

The Sustainable Stock Exchanges (SSE) initiative is examining ways to improve ESG disclosure and performance in listed companies.



⁷ For further information, see PRI (2016) French energy transition law: Global investor briefing, https://unpri.org/download_report/15214

Section 2 Framework for Limited Partners and General Partners

2.1 Questions for investors and their advisors to ask general partners



LPs are increasingly engaging with GPs on climate change and ESG issues.⁸ The typical approach is to use a questionnaire as a starting point for dialogue with the GP.

The following questions are intended to help LPs understand and assess how the GP factors climate change risks and opportunities into their investment due diligence and portfolio management processes, and the steps they are taking to develop and enhance their approach.

1 Identification of climate change risk & opportunities

How do you assess the risks and opportunities of climate change on existing and new investments? Give examples of previously identified risks and opportunities. Where do you see future risks and opportunities?

Guidance

LPs will seek assurance that the GP has a systematic approach towards climate change risk assessment and management. Climate change risks are often specific to both industries and regions, and this should be given particular consideration in due diligence. Some of the risks include:

- Stranded assets, e.g. coal and other hydrocarbon reserves;
- Inability to adequately insure operations or only at higher cost (e.g. flood insurance for facilities exposed to coastal flooding);
- Access to resources (e.g. water intensive sectors such as agriculture are vulnerable to water stress with potential impacts on yields and ultimately sales and profitability);
- Rising legal and compliance costs (e.g. China's rapidly evolving environmental regulation; future new carbon pricing schemes in Canada; proposed restrictions on electricity emissions in the US under the Clean Power Plan; and the removal of caps on environmental fines in the UK) means that the financial consequence of committing an environmental offence could be significant; and
- Risk of any of the above impacting the supply chain or any critical component in the value chain of a company.

⁸ 78% of 126 LP signatories that reported on their private equity investments to the PRI stated that they consider responsible investment factors to some extent in all three stages of private equity manager selection, appointment and monitoring in 2014/5. See [PRI Report on Progress Private Equity](https://www.unpri.org/pri-report-on-progress-private-equity) on www.unpri.org

Although there is risk, there is also opportunity and forward-thinking GPs to leverage the upsides by applying a 'climate change lens' to their investments as a means of generating revenue and cost savings. For example, through:

- The use of renewables and energy efficiency such as solar energy and low-carbon buildings; and
- The use of technology to address climate change through resilience and adaptation, such as drought resistant agricultural products.

For further examples of risks and opportunities please see Appendix 1.

2 Climate change regulatory assessment

What processes do you have in place to identify and understand climate change regulation (both current and emerging) and determine which policies and regulations are relevant to your investments? Please describe in detail including a summary of the key policies and regulations that you have deemed materially relevant, and how you ensure compliance against these.

Guidance

Climate change regulation and policy is rapidly evolving at international, national and sub-national levels, and as such it is important that GPs monitor these regulatory developments. The global agreement reached in Paris (December 2015) was a signpost for more climate regulation and disclosure to come. LPs will seek assurance that the GP is aware of these developments and their implications for the businesses in which they invest.

Emerging GP practices for assessing and managing the impact of regulation and ensuring compliance include, for example:

- Broadening the focus of the in-house legal function to include climate related regulation;
 - Using third party assistance, depending on jurisdictions, and where having in-house resources is not practical;
 - Appointing a dedicated Responsible Investment / ESG professional that works closely with investment teams to ensure climate change issues are considered pre- and post-investment; and
 - Putting in place systems for monitoring updates to regulation and good practice guidance.
- Examples of recent regulatory developments impacting investors include:
- The *Clean Power Plan* in the US is expected to set emission standards for power plants and will impact the value of fossil-fuel fired power generation;
 - The EU Energy Efficiency Directive requires member states to create energy audit schemes. Transposition into EU member state law differs from country to country, and is impacting some GPs and their portfolio companies; and
 - In France, the Energy Transition Law requires French institutional investors to annually disclose how they consider ESG criteria in their investment decisions and how their policies align with the national strategy to mitigate climate change. See the PRI's global investor briefing on the French energy transition law.

For further examples of regulation, see Appendix 1.

3 Management of climate change risk & opportunities

Please provide details of how you engage and work with your portfolio companies to ensure that the identified climate change risks and opportunities are embedded into relevant business processes and overall strategy.

Guidance

While it is good practice to have policies to identify and assess climate risk, it is critical to be able to demonstrate action to implement and tackle the issues identified. LPs are increasingly looking for assurance from the GP that they can demonstrate active management of climate related issues with portfolio companies. For example, by:

- Factoring climate related risks and opportunities into business models, including the price of carbon;
- Developing compliance systems for emissions reduction requirements; and
- Implementing a strategy to make the most of the potential opportunities (e.g. low-carbon technological solutions).

It is important that the GP monitors their investments to ensure the business remains viable in a rapidly changing and warming world. Examples of good practice include:

- Assisting and supporting portfolio companies to establish a baseline for data collection relating to energy and water consumption;
- Identifying material issues such as supply chain disruptions caused by extreme weather events, and exposure to disruptive technology;
- Engaging with portfolio companies to identify and assess the potential impact of climate change on the business, and developing action plans to help mitigate the associated impacts and/or capitalise on resulting opportunities; and
- Stress testing of their business strategies, for example in relation to a 2°C temperature increase scenario.

4 Climate change monitoring & reporting

Please describe the processes you have in place to monitor the performance of your investments in terms of managing climate change risks and opportunities, and how you report on these to LPs.

Guidance

Transparent, regular monitoring will help in the assessment of portfolio-wide and systemic risks related to climate change. Reporting to LPs will allow the LP to assess the risks and opportunities in their portfolios and may assist in future asset allocation decisions. Monitoring and reporting is becoming more important as the regulatory landscape continues to evolve and investors, customers, suppliers and the public become more aware and concerned about the impacts of climate change – measurement is an important first step towards management.

Key to monitoring and reporting is materiality: assessing what factors are likely to have the most impact on investments, and how these can be measured and reported. These will of course vary across sectors, geographies and markets. For example, a real estate asset located in a coastal area in US Florida is likely to have a different set of climate change issues to consider (e.g. flooding) to a software company (e.g. energy usage of servers). The GP's determination of materiality should be based on both their own assessment of materiality and an assessment of their LPs' views. Where necessary, LPs should discuss and agree with the GP to ensure an aligned approach.

The most common example is carbon emissions; more and more investors are considering this a material factor and are seeking to establish a baseline carbon footprint across a fund or portfolio. The methods developed to report on carbon for public equity can be tailored to fit private equity portfolios. For further guidance on carbon reporting, see Appendix 1.

5 Portfolio company accountability

How is portfolio company management made both responsible and accountable for complying with climate change regulation, and/or addressing climate change risks, and or taking advantage of the opportunities?

Guidance

Responsibility for addressing climate change issues and ensuring regulatory compliance lies ultimately with portfolio company management, and should be driven by the Board. It is good practice to assign accountability to a Director to signal top-level intent. If deemed material to the business, appointing a technical specialist is recommended. Some GP practices for ensuring portfolio company accountability may include, for example:

- Encouraging the portfolio company to develop and implement climate change policies and risk assessment processes;
- Where material issues are identified, collaborating with management to develop and implement improvement or mitigation action plans;
- Supporting the portfolio company to develop a framework for monitoring and reporting, including the development of key performance indicators (KPIs);
- Appointing a C-level officer to be responsible and accountable for monitoring and delivering on the KPIs and ensuring the provision of dedicated resources;
- Requiring management to include a review of climate related performance at senior management meetings and the Board, at least annually, or more frequently where deemed material; and
- Establishing a committee or working group at the GP level to discuss and review strategic climate change issues and performance; facilitation of annual company-wide meetings to raise awareness and share good practices.

6 Positive engagement

How are you actively engaging with the private equity industry, or through other organisations, in seeking to understand and address climate change risks and opportunities?

Guidance

There are many industry organisations that are addressing climate change risks and opportunities, and seeking to raise investor awareness and understanding. By participating in these organisations, GPs may gain greater insight into risks and opportunities which could result in better investment decision making, as well as supporting a more cohesive industry approach to climate change. By publicly engaging with these organisations, GPs can help raise further awareness and demonstrate commitment to this important issue.

Examples of GP practices to encourage and support accountability include:

- Working directly with governments and collaborating with organisations such as the Institutional Investor Group on Climate Change (IIGCC), Principles for Responsible Investment (PRI), UN Global Compact, and Initiative Carbone 2020;
- Engaging directly with LPs to understand reporting and stakeholder requirements;
- Actively developing evaluation tools and methodologies for the private equity industry such as standard due diligence questionnaires;⁹ and
- Participating in research and thought leadership on the topic.

7 Climate change impact at exit

Have you considered how potential investors or acquirers may view the impact of climate change on your portfolio companies?

Guidance

The impact of climate change related risks and opportunities on an investment may materialise beyond the typical holding period of private equity investors. Acquirers will have a perspective that stretches further into the future, highlighting the value of addressing even very long-term issues.

GPs can implement active processes to ensure climate change considerations are factored into exit strategy and vendor due diligence. This can help protect value, for example by preventing price chip opportunities and preventing technical issues from delaying completion deadlines, and present unlocked value creation potential to acquirers. In preparing for exit, GPs may:

- Work with management to identify potential material issues and implement corrective plans before the formal sale process – this can help save time and costs;
- Consider the potential upsides created by the climate change agenda that the company has realised, or plans to do so, which could be attractive to potential acquirers; and

⁹ The PRI and industry association partners have produced the [Limited Partners Responsible Investment Due Diligence Questionnaire](#) as the industry standard for comprehensive due diligence on a GP's policies, processes and capacities for ESG integration during the fundraising stage.

- Conduct vendor due diligence covering climate change topics (of relevance to the target's operations) with the aim of providing assurance to bidders that these issues are well run in the company.

8 For private equity advisors and funds of funds

In your GP evaluation processes, how do you consider the GP's policies and investment criteria relating to climate change, including but not limited to the matters outlined in questions 1-7 above?

Guidance

Systematic evaluation of the GP provides assurance to LPs that are concerned about how climate change risks are being managed and mitigated in their portfolio. External advisers to LPs can use their knowledge of the market and existing manager research processes to analyse how the GP is addressing climate risks and opportunities. Advisors can further undertake due diligence on the GP's climate change awareness and actions as outlined in this guidance. LPs may use this information to inform the manager selection process.



2.2 Questions for general partners to ask portfolio companies and potential new investee companies



Whilst portfolio companies are ultimately responsible for managing these issues in their business, GPs can play an important role in ensuring portfolio companies are aware of the material risks and opportunities they face from climate change and are well placed to influence action and mitigation.

The following questions are intended to help GPs consider climate change issues in their due diligence and post-investment processes.

1 Climate change impact awareness

What are the possible legal, financial and commercial impacts of climate change on your business (e.g. susceptibility to adverse weather conditions; changing supply chains and customer demands; availability of key resources such as water)?

Guidance

Climate change risk can commercially impact a business if not appropriately managed. Due to the rising costs of resources and raw materials, and costs of compliance with more stringent carbon and energy efficiency targets, a worst case scenario could have significant impact on business viability. The portfolio company Board should be aware of these issues, and factor them into key business decisions and strategy.

An example of how climate change can commercially impact a business:

Sector: Food and beverage production.

Issue: Resource / raw material intensity; extreme weather events and higher temperatures.

Impact: Scarcity of water, reduction in crop yields / raw materials which impacts the supply chain, availability and results in rising costs; societal inequality.

Climate change impacts will differ according to sector and geographical location but they have the potential to impact businesses of all sizes, locations and markets. Operational disruption caused by climate change events is rising and can result in material impacts such as stock write-off and physical damage to assets located in higher risk areas (e.g. coastal or storm affected areas). Some practical measures businesses are adopting into their risk management processes include:

- Mapping operations, supply chains and customers against areas susceptible to natural disasters, changing weather conditions, and evolving carbon and climate regulation. Outcomes of such an exercise could be diversification of energy supply, and suppliers;
- Measuring key raw material inputs (water, energy) and outputs (waste, emissions) to establish a baseline from which targets for reduction can be set;

- Including climate risk in wider business processes such as procurement and business continuity planning; and
- Using specialist consultants to advise on energy, carbon and broader climate change strategy.

2 Regulatory awareness

Which current and proposed laws and regulations relating to climate change are you aware of that might impact your business? How do you keep informed? Does, or should, the company have an officer or employee responsible for climate change or environmental measurement and reporting?

Guidance

Increasing climate change regulations and policies will continue to have a material impact on businesses and the way they operate. GPs and company directors have a responsibility to ensure they are aware of the current and emerging regulatory trends and could implement a formal process to track and review regulatory developments and compliance requirements.

In addition to the guidance in Section 2.1 Question 2 and Appendix 1, the following measures can help the portfolio company to keep on top of regulatory requirements:

- Consider integrating climate change developments into broader business processes such as corporate risk tracking, business continuity planning and integrating into wider governance functions such as the Risk Committee, Legal Counsel and Board meetings; and
- Assign responsibility for monitoring regulatory developments and reporting on this at a management level through relevant channels (as described in the point above). Participate in relevant sector engagement, lobbying activities and consultations on draft regulations, for example through trade associations and industry memberships.

3 Carbon footprint

What is your business' direct and indirect carbon footprint? What objectives and targets have you set to support the company to reduce the level of carbon emissions it emits?

Guidance

Carbon emissions are one quantifiable measure of a company's impact on the environment. By measuring emissions, a company can target emissions reduction in carbon-intensive areas and operations, reducing both its footprint and costs, for example through the implementation of energy efficiency measures.

It is important to regularly review changes in a company's emissions as the organisational footprint and operations evolve (e.g. as a result of acquisitions or the addition of process lines). Actions a company could take in relation to carbon measurement and reporting include:

- Undertaking an internal energy and carbon audit to identify opportunities for operational improvements and reduction in consumption / emissions;

- Participating in carbon reporting initiatives such as the CDP;
- Offsetting carbon emissions (although this does not tackle the issue at source); and
- Benchmarking competitors and peers in terms of carbon disclosures and strategies.

For further external guidance on carbon footprinting please see Appendix 1.

4 Market awareness

Are you aware of any action that your competitors are taking to mitigate or assess climate change impact? If so, how do your actions compare with the actions of your peers?

Guidance

Companies that act early to mitigate climate change risks and access opportunities may secure competitive advantages over those that do not. A more sustainable business model may be more likely to attract higher multiples on exit. Further, dealing with these issues proactively ahead of an exit could protect value and in some cases attract higher valuations.

Assessing and evaluating the climate / energy / carbon strategies of peers could be beneficial, for example through:

- A general awareness of new market and technology developments; and
- Benchmarking the company's emissions, risk mitigation strategies and value creation strategies (including branding and marketing opportunities) against competitor positions.

5 Cost/profitability forecasting

Have you evaluated the impact of rising climate change related costs on the business? Could increases in costs materially affect the profitability of the business? If so, what mitigation efforts have been considered?

Guidance

The 2015 Paris Climate Agreement is an important milestone for climate change action. Governments are likely to pursue multiple approaches to reach their carbon reduction goals including carbon taxes, emissions trading schemes, and regulation. For example, China's rapidly evolving environmental regulation framework to support its climate action plan is resulting in rising legal and compliance costs for businesses, while the implementation of the US Clean Power Plan could lead to significant implications for consistency in climate regulation and energy supply in different US states, and the requirement for businesses to engage with NGOs on their energy usage.

Company actions could include:

- Through the risk assessment process, forecast the potential OPEX and CAPEX requirements needed to comply with regulations e.g. purchase of carbon allowances to comply with relevant emission trading schemes, investment in energy efficiency improvements, or rising prices of raw materials and resources;

- Through energy and carbon audits, determine quick-win and medium to long-term cost-saving opportunities. For example, LED lighting installation, or energy efficiency of operating processes; and
- Review energy procurement and develop a strategy that optimises competitive energy rates, considers relevant subsidies and tax reliefs, and identifies embedded generation opportunities that could result in new revenues (e.g. selling excess energy generated on-site).

6 Management of climate change related risks and opportunities

Having identified any climate change related risks, what steps are you taking to manage these? Have you established a climate risk mitigation policy and strategy? Do you consider opportunities created by and/or related to climate change? Which functions within your business are responsible for climate change or environmental measurement, management and reporting?

Guidance

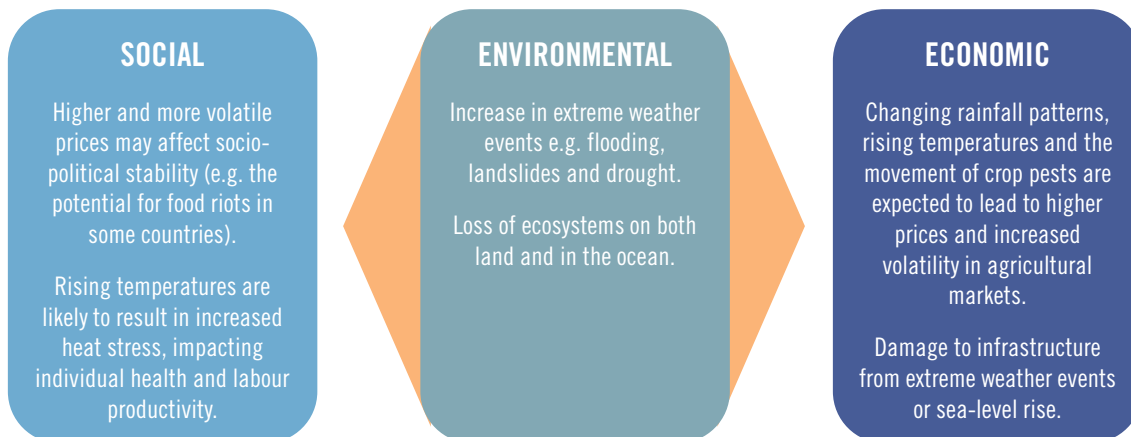
A starting point for GPs has been to focus on risk mitigation; however GPs are looking at opportunities arising from climate change through either the transition to a low carbon economy or emerging regulations. Opportunities could include the development of new sustainable products and services that address emerging environmental and social needs; there are numerous examples of climate change related opportunities across virtually all sectors. One example is clean technology (“clean tech”, such as renewables, energy, efficiency, water and waste-related technologies), which is seeing significant business growth.

Companies are increasingly developing policies and procedures to tackle these issues and capture these opportunities, such as environmental and energy strategies that align with the wider business.



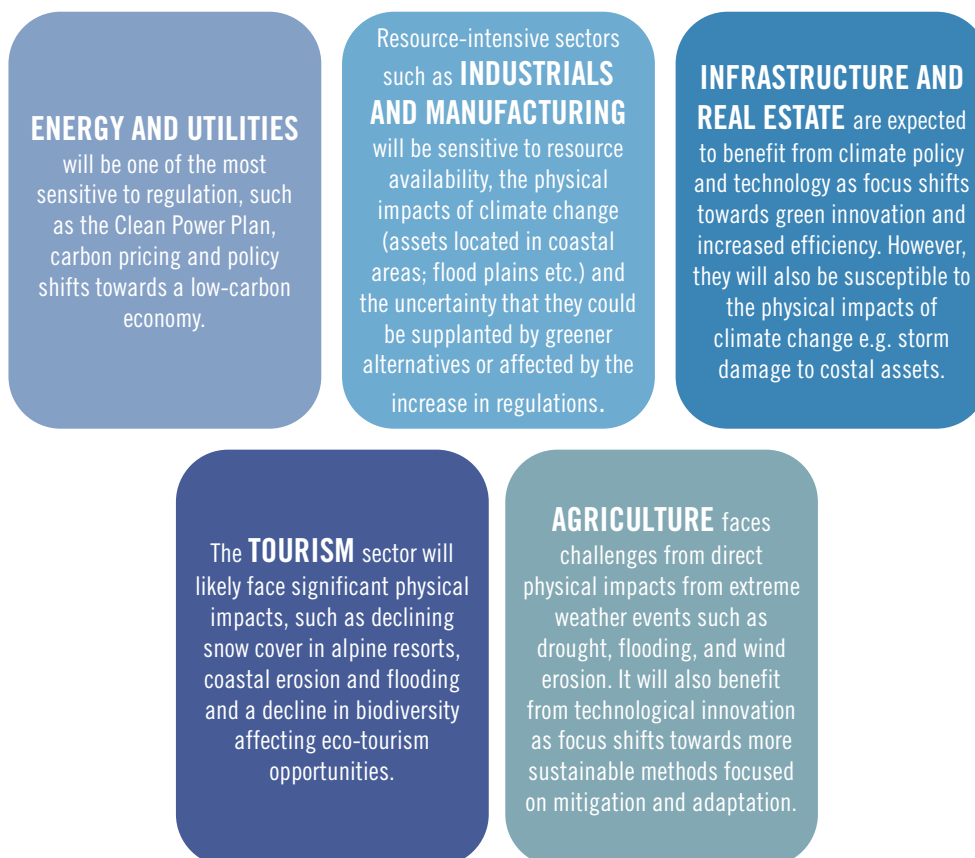
Appendix 1 – Examples and guidance

Examples of risks associated with climate change



Source: IPCC 2014 Report¹⁰

Examples of risks and opportunities on specific sectors



Source: Mercer¹¹ and UNEP 2015¹²

¹⁰ IPCC (2014) Climate Change: Implications for Investors and Financial Institutions http://www.iigcc.org/files/publication-files/IPCC_AR5_-_Implications_for_Investors.pdf

¹¹ Mercer (2015) Investing in a time of Climate Change

¹² UNEP (2015) Global Trends in Renewable Energy Investment

Calculating a carbon footprint

When calculating a carbon footprint, it is important to recognise the different scope categories for emissions, as defined by international carbon reporting standards:

- **Scope 1:** All direct greenhouse gas (GHG) emissions which are emissions from sources that are owned or controlled by the company e.g. burning diesel in on-site generators.
- **Scope 2:** Indirect GHG emissions are emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity. For example, emissions generated from the consumption of purchased electricity, heat or steam.
- **Scope 3:** Other indirect emissions, for example: generated from the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc.

For further information on carbon footprints:

- **[The GHG Protocol Corporate Standard](#)** – Provides standards and guidance for companies and other organisations preparing a GHG emissions inventory.
- **[IIGCC Carbon Compass: Investor Guide to Carbon Footprinting](#)** – Designed to help connect carbon footprint analysis with investment objectives such as minimising risk and meeting climate targets.
- **[CDP](#)** – A disclosure framework on the risks and opportunities of climate change that is applicable to private equity. CDP provides free guidance documents and support to reporting companies.

Examples of tools and methodologies to assist investors in considering climate change risks in investments:

- **[IIGCC Investor Guidelines](#)** – Guidelines to examine climate risks including carbon and energy costs, adaptation and mitigation opportunities for property & construction, mining & minerals and oil & gas.
- **[Green Investment Handbook](#)** – A manual produced by the Green Investment Bank setting out practical tools such as guidance on how to assess compliance to the Equator Principles or how to calculate the environmental benefits of an investment.
- **[Developing an asset owner climate change strategy – pilot framework](#)** – A step-by-step guide for climate change strategy, created by the PRI and eight asset owners, as overarching guidance sitting above asset class-specific guidance.
- **[Investor Platform for Climate Action](#)** – Identifies and records action on climate change undertaken by the global investor community on: measurement, engagement, reinforcement and reallocation.

For further information on climate change legislation

- [**The Grantham Research Institute of Climate Change and the Environment**](#) – A comprehensive global database focused on climate policy and regulation.
- [**OECD Compare Your Country Climate Change section**](#) – An online tool showcasing information on policies and statistics related to climate change mitigation in all 34 OECD Countries, 10 partner economies and the European Union.
- [**Climate Action Tracker**](#) – Tracks the emission commitments and actions of countries. The website provides an assessment of individual national pledges, targets and INDCs and currently implemented policy to reduce their greenhouse gas emissions.

Some specific examples of relevant climate change legislation and/or policies:

- [**EU Non-Financial Disclosure**](#) – Requires the disclosure of information related to environmental, social, employee, human rights, corruption and bribery in companies' management reports. Applicable, among others, to large private companies, and listed companies.
- [**The National Greenhouse and Energy Reporting \(NGER\) scheme**](#), established by the National Greenhouse and Energy Reporting Act 2007 (NGER Act), is a single national framework for reporting and disseminating company information about greenhouse gas emissions, energy production, energy consumption and other information specified under NGER legislation.
- [**The Alberta Government and Canadian Federal Government's Climate Leadership Plan**](#) is looking to implement an economy-wide price on carbon.

Examples of climate change legislation and policy to consider in relation to exit strategies:

- [**UK Companies Act 2006 \(Strategic and Directors' Reports\) Regulations 2013**](#) – Requires quoted companies to report their annual greenhouse gas (GHG) emissions in their directors' report.
- [**The Hong Kong's Securities and Futures Commissions \(SFC\) guidelines**](#) – SFC principles on responsible ownership.

Appendix 2 – About this project

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