Private Equity Sector Science Based Target Setting Guidance

Draft for Public Consultation V1

Key for Consultation

Grey highlight - Open for consultation in the accompanying survey
Blue underlined - Criteria and recommendations that have been modified from the SBTi FI Guidance
Pink underlined - Hyperlink
Yellow highlight - Information to be updated

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2. Acknowledgements

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3. Executive summary - *forthcoming*

4. Glossary

The below Table 4.1 provides a list of the terms used within this *Private Equity Sector Science Based Target Setting Guidance (*this *Guidance)*. Terms that are new or differ from the terms used in the *Finance Sector Science Based Target Guidance* (*FI Guidance*) are marked in blue underlined font.

Table 4.1. Glossary.

Term	Definition	Reference
Absolute emissions	Greenhouse gas (GHG) emissions attributed to a financial institution's (FIs) lending and investing activity, expressed in metric tonnes of CO_2 equivalent (tCO_2e) (SBTi 2021).	Finance Sector Science Based Target Guidance
Assets	Something, such as land, buildings, equipment, etc., which is owned by a company and which is used to produce income for the company (Cambridge 2021). The third-party funds, individual businesses, real estate or infrastructure assets, and/or financial products, such as loans, invested in by Private Equity Funds	Cambridge Dictionary Anthesis
Asset class	A group of financial instruments that have similar financial characteristics (SBTi 2021).	Finance Sector Science Based Target Guidance
Attribution share or attribution factor	The share of total GHG emissions of the borrower or investee that are allocated to the loan or investments (PCAF 2020).	The Global GHG Accounting and Reporting Standard for the

		Financial Industry.
Avoided emissions	Emission reductions that the financed project produces versus what would have been emitted in the absence of the project (the counterfactual baseline emissions); avoided emissions are not included in SBTs (SBTi 2021).	Finance Sector Science Based Target Guidance
Biogenic CO_2e emissions	Emissions from a stationary source directly resulting from the combustion or decomposition of biologically based materials other than fossil fuels (SBTi 2021).	Finance Sector Science Based Target Guidance
Borrower	The company to whom capital is loaned from the private equity (PE) firm as part of credit or private debt loans.	Anthesis
Buyout	In a buyout investment, the investor often has complete or majority ownership and control of the company. Unlike leveraged buyouts (LBO), buyouts can also have a minority stake of the company being purchased. Buyout represents the largest strategy segment within private equity as measured by assets under management, and as such has an impact on the aggregated performance of private equity overall. (Preqin 2021).	Preqin
Capital market strategies	Capital markets describe any exchange marketplace where financial securities and assets are bought and sold. In the private equity context, this more routinely relates to trading in liquid credit assets.	Anthesis
Carbon accounting of financial portfolios	The annual accounting and disclosure of GHG emissions associated with loans and investments at a fixed point in time in line with financial accounting periods. This is also called “portfolio carbon accounting” (SBTi 2021).	Finance Sector Science Based Target Guidance
Climate impact	In the context of this framework, climate impact refers to the GHG emissions that occur as a result of financing of loans and investments (SBTi 2021).	Finance Sector Science Based Target Guidance
Climate-related risks	Financial risk associated with climate-related investments and activities, including carbon asset risk or transition risk, physical risk, and legal risk (SBTi 2021).	Finance Sector Science Based Target Guidance
CO_2-equivalent (CO_2e)	The amount of CO_2 that would cause the same integrated radiative forcing (a measure for the strength of climate change drivers) over a given time horizon as an emitted amount of another GHG or mixture of GHGs. Conversion factors vary based on the underlying assumptions and as the science advances (SBTi 2021).	Finance Sector Science Based Target Guidance

Consolidation approach	Refers to how an organization sets boundaries for corporate GHG accounting. Three consolidation approaches include equity approach, financial control and operational control as per *The Corporate Value Chain (Scope 3) Accounting and Reporting Standard* (WRI and WBCS 2011).	Finance Sector Science Based Target Guidance
Convertible preferred equity investments	These shares are corporate fixed-income securities that the investor can choose to turn into a certain number of shares of the company's common stock after a predetermined time span or on a specific date (Investopedia 2021).	Investopedia
Credit / private debt	Private credit, or private debt, is the investment of capital to acquire the debt of companies (as opposed to acquiring equity). Private debt includes sub-strategies mentioned in Table 9.2 of this *Guidance*: direct lending, distressed debt, infrastructure debt, mezzanine debt, real estate debt, special situations, venture debt. Private debt covers loan finance which is when money is lent to a company to fund ongoing operations or the improvement of infrastructure. Private debt is not traded or issued in an open market. Lending private debt can be to both listed or unlisted companies, as well to real assets such as infrastructure and real estate. Lenders for the purpose of this *Guidance* are PE firms but can be from any non-bank private FIs (Preqin 2021).	Preqin
Debt to equity ratio	The Debt-to-Equity ratio (also called the “debt-equity ratio”, “risk ratio”, or “gearing”), is a leverage ratio that calculates the weight of total debt and financial liabilities against total shareholders’ equity. Unlike the debt-assets ratio which uses total assets as a denominator, the D to equity ratio uses total equity. This ratio highlights how a company’s capital structure is tilted either toward debt or equity financing (Corporate Finance Institute 2021).	Corporate Finance Institute
Direct emissions	Emissions from sources that are owned or controlled by the reporting entity (SBTi 2021).	Finance Sector Science Based Target Guidance
Distressed debt	Differs from special situations in that it generally involves the purchase of securities in the secondary market, rather than new origination of debt or structured equity (Pitchbook 2021).	Pitchbook
Double counting	Occurs when a single GHG emission reduction or removal, achieved through a mechanism issuing units, is counted more than once toward attaining mitigation pledges or financial pledges for the purpose of mitigating climate change within one or multiple organizations (SBTi 2021).	Finance Sector Science Based Target Guidance
Emissions intensity metric	Emissions per a specific unit, for example: tCO_2e/$million invested, tCO_2e/MWh, tCO_2e/ton produced, tCO_2e/$million company revenue (SBTi 2021).	Finance Sector Science Based Target Guidance

Emission removal	The action of removing GHG emissions from the atmosphere and storing through various means, such as in soils, trees, underground reservoirs, rocks, the ocean, and even products like concrete and carbon fiber (SBTi 2021).	Finance Sector Science Based Target Guidance
Emission Scopes	The *GHG Protocol Corporate Standard* classifies an organization's GHG emissions into three scopes. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting organization, including both upstream, downstream emissions, and in the context of this *Guidance*, emissions in Category 15 associated with PE firms' investment and lending activities (SBTi 2021).	Finance Sector Science Based Target Guidance
Enterprise Value Including Cash (EVIC)	The sum of the market capitalization of ordinary shares at fiscal year end, the market capitalization of preferred shares at fiscal year-end, and the book values of total debt and minorities' interests. To avoid the possibility of negative enterprise values and considering that cash as an important financing source for many companies should carry its fair share of emissions, no deductions of cash or cash equivalents are made (SBTi 2021).	Finance Sector Science Based Target Guidance
Financed emissions	Absolute emissions that banks and investors finance through their loans and investments. Financing emissions can be calculated and disclosed at an asset class level (SBTi 2021).	Finance Sector Science Based Target Guidance
Financial institutions (FIs)	The Science Based Target Initiative (SBTi) defines FIs as companies whose business involves the dealing of financial and monetary transactions, including deposits, loans, investments, and currency exchange. If 5% or more of a company's revenue or assets comes from activities such as those described above, they are considered to be FIs. Development FIs are currently out of scope (SBTi 2021).	Finance Sector Science Based Target Guidance
Funds of Funds	A PE firm which invests in funds, rather than directly into companies. Fund of Funds managers are frequently also active participants in the secondary market (Guy, 2010).	Private Equity as an Asset Class, Second Edition by Guy Fraser-Sampson
Fully diluted shares	The total number of common shares of a company that will be outstanding and available to trade on the open market after all possible sources of conversion, such as convertible bonds and employee stock options, are exercised (Investopedia 2021).	Investopedia

General Partner (GP)	A manager of a Private Equity fund (fund manager) is known as a GP since most Private Equity funds take the form of Limited Partnerships (LPs), and these are required by law to have a GP to manage their affairs. GP can refer either to the management entity or to individual partners within such entities. GPs raise capital from third party entities, into a specific fund which will then be invested into certain types of assets according to an investment strategy. GPs thus identify the assets to be invested in, execute those investments and then manage them until eventual exit, and offer no liability protections for the partners (Guy, 2010).	Private Equity as an Asset Class, Second Edition by Guy Fraser-Sampson
Greenhouse gas (GHG) emissions	The seven gases covered by the United Nations Framework Convention on Climate Change (UNFCCC)—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (SBTi 2021).	Finance Sector Science Based Target Guidance
GHG Protocol	Comprehensive global standardized frameworks to measure and manage GHG emissions from private and public sector operations, value chains, and mitigation actions. The GHG Protocol supplies the world's most widely used GHG accounting standards. The Corporate Accounting and Reporting Standard provides the accounting platform for virtually every corporate GHG reporting program in the world (SBTi 2021).	Finance Sector Science Based Target Guidance
GHG accounting	GHG accounting techniques that include two primary approaches to tracking GHG emissions resulting from a company's operations: corporate accounting through an annual GHG inventory, which involves financed emissions as part of the accounting; and project accounting through estimating net emission reductions or increases from individual projects or activities relative to a baseline scenario (SBTi 2021).	Finance Sector Science Based Target Guidance
Growth capital	Also referred to as growth equity or expansion capital, it's a type of private equity investment (often a minority investment) in relatively mature companies that are looking for primary capital to expand and improve operations or enter new markets to accelerate the growth of the business. Growth capital is separate from venture capital (Investment Council 2021).	Investment Council
Indirect emissions	Emissions that are a consequence of the activities of the reporting entity but occur at sources owned or controlled by another entity (SBTi 2021).	Finance Sector Science Based Target Guidance
Infrastructure private equity	This term refers to investing in the equity of infrastructure assets to gain ownership and control. There are dedicated infrastructure PE firms, but plenty of pensions, large banks, sovereign wealth funds, and other entities also make "equity investments in infrastructure" (Mergers & Acquisitions 2021).	Mergers & Acquisitions

Infrastructure debt	Like private debt, infrastructure debt is not traded or issued in an open market. Lending private infrastructure debt can be to both listed or unlisted companies. Infrastructure debt funds invest in debt linked directly to projects and to corporate entities dependent on the debt strategy. Infrastructure debt funds target project finance —but there is no single definition among investors of what constitutes infrastructure. Investors have different interpretations of exactly what assets meet infrastructure criteria. As a result, sector and risk exposures of funds differ (Cambridge Associates 2018).	Cambridge Associates
Investment	To invest is to allocate money/capital with the expectation of a positive benefit/ profitable returns in the future, typically as interest, income, or appreciation in value (Wikipedia 2021).	Wikipedia
Lender	The PE firm who is lending capital to the borrower via credit or private debt loans.	Anthesis
Leveraged buyouts (LBO)	An LBO is one company's (i.e., the PE firms) acquisition of another company (i.e., the Portfolio Company (PC)) using a significant amount of borrowed money (from LPs) to meet the cost of acquisition. A LBO occurs when the buyer (PE firm) uses the loan to gain control (i.e., majority) of another company, with the assets of the firm under acquisition often acting as collateral for the loan. In an LBO there is usually a ratio of 90% debt to 10% equity. The buyer may replace all or part of the current management team or keep the existing managers and reward them for meeting new goals. Typically, the new owner is actively involved at the board level (Investopedia 2021).	Investopedia
Limited Partner (LP)	In the US, and increasingly in Europe, an investor in Private Equity funds is known as an LP, since most Private Equity funds take the form of Limited Partnerships (Guy, 2010).	Private Equity as an Asset Class, Second Edition by Guy Fraser-Sampson
Listed equity and bonds	This includes all corporate bonds without known use of proceeds and all listed equity on the balance sheet and/or actively managed by the FI (SBTi 2021).	Finance Sector Science Based Target Guidance
Mezzanine debt	Is subordinated debt that is repaid after senior debtors are repaid in full. Mezzanine debt is often used in buyout and thus mezzanine debt can include equity share (Pitchbook 2021).	Pitchbook
Multi-strategy Funds	Multi-strategy funds engage in a variety of investment strategies (Eureka Hedge 2021).	Eureka Hedge
Paris Agreement	The Paris Agreement, adopted within the United Nations Framework Convention on Climate Change (UNFCCC) in December 2015, commits all participating countries to limit global temperature rise to well-below 2°C above preindustrial	Finance Sector Science Based Target Guidance

	levels and pursue efforts to limit warming to 1.5°C, to adapt to changes already occurring, and to regularly increase efforts over time (SBTi 2021).	
Portfolio Company (PC)	A PC is a company or entity in which a PE firm invests in (Wikipedia 2021).	Wikipedia
Private equity	A set of capital assets that are not available for public exchange, and are investments that are made discreetly and directly in a private company, without being brought to public knowledge. Preferred stock equity is a type of mezzanine capital that is senior to common stock but subordinated to debt.	Anthesis
Private equity direct investment	Private equity direct investment is medium to long-term finance provided in return for an equity stake in unlisted companies. This is deployed through strategies such as buyouts. As well as investment in more mature companies, private equity direct investments can be broken down into growth capital and venture capital, for less mature and/or smaller businesses (BVCA 2021).	BVCA
Private equity (PE) firm	The GP serves as the PE firm, also referred to herein as the proxy parent.	Anthesis
Project finance	On-balance sheet loan or equity with known use of proceeds at the level of economic activity, such as, within infrastructure the construction of a gas-fired power plant, a wind or solar project, or energy efficiency projects (Finansdanmark 2021).	Finansdanmark
Proxy parent	The GP serves as the entity that consolidates the GHG inventory for its operations (i.e., scope 1 and 2) and its investment and lending activities within its managed funds (i.e., scope 3 category 15), and submits the targets. I.e., the proxy parent is not at LP level.	Anthesis
Real Estate	Property consisting of land and resources attached to it. In the context of this *Guidance*, real estate refers to service and residential buildings (Investopedia 2021).	Investopedia
Real estate debt	The most common real estate debt strategy is direct lending for real estate acquisitions. This may include the buying and selling of securitized real estate loans in the secondary market (Pitchbook 2021).	Pitchbook
Scenario analysis	A process of analyzing future events by considering alternative possible outcomes (SBTi 2021).	Finance Sector Science Based Target Guidance

Science-based reduction targets (SBTs)	Targets adopted by companies to reduce GHG emissions are considered "science-based" if they are in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement—to limit global warming to well-below 2°C above preindustrial levels and pursue efforts to limit warming to 1.5°C (SBTi 2021).	Finance Sector Science Based Target Guidance
Scope 1 emissions	Emissions from operations that are owned or controlled by the reporting company (SBTi 2021).	Finance Sector Science Based Target Guidance
Scope 2 emissions	Emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company (SBTi 2021).	Finance Sector Science Based Target Guidance
Scope 3 emissions	All indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions (SBTi 2021).	Finance Sector Science Based Target Guidance
Scope 3, category 15 (investment) emissions	This category includes scope 3 emissions associated with the reporting company's loans and investments in the reporting year, not already included in scope 1 or scope 2 (SBTi 2021). For category 15, the G*HG Protocol Corporate Standard* only requires the inclusion of corporate debt holdings with known use of proceeds. This *Guidance* goes beyond this requirement and thus expands the minimum boundary of category 15. PE firms shall follow the emissions measurement requirements in the relevant asset class methods and measure emissions of debt investments without known use of proceeds, where applicable.	Finance Sector Science Based Target Guidance
Secondary	A secondary interest is an ownership position in an existing fund which may or may not be fully invested but has not been fully exited and wound up. Such interests are usually more or less freely transferable, and a thriving secondary market has grown up to cater for such transactions, a number of specialist firms having been set up for the purpose (Guy, 2010).	Private Equity as an Asset Class, Second Edition by Guy Fraser-Sampson
Sequestered emissions	Refers to atmospheric CO_2 emissions that are captured and stored in solid or liquid form, thereby removing their harmful global warming effect (SBTi 2021).	Finance Sector Science Based Target Guidance
Sector-specific metrics	Energy or carbon intensity metrics that use a physical unit denominator and are applicable to a specific sector. Examples include $kgCO_2/MWh$ (power), MWh/m^2 (real estate), etc. (SBTi 2021).	Finance Sector Science Based Target Guidance

Small and medium-sized enterprises (SMEs)	For companies, the SBTi provides a streamlined target validation route for SMEs, where an SME is defined as a non-subsidiary, independent company with fewer than 500 employees. PE firms should thus direct investees with more than 500 employees to the regular SBTi validation route.	Finance Sector Science Based Target Guidance
Special situations	Debt or structured equity investments made with the intent of gaining control of a company; generally, one in financial distress (Pitchbook 2021).	Pitchbook
Total balance sheet value	The sum of total Equity and Liabilities, which is equal to the company's Total Assets (Open Risk Manual 2021).	Open Risk Manual
Venture Capital	Professional equity co-invested with the entrepreneur to fund an early stage (seed and start-up). Offsetting the high risk, the investor takes is the expectation of higher-than-average return on the investment. Venture Capital is separate from growth capital (Investment Council 2021).	Investment Council
Venture debt	Debt financing extended to companies with venture capital backing. For entrepreneurs, venture debt serves to extend the runway to exit without further diluting ownership (Pitchbook 2021).	Pitchbook

5. Introduction

5.1. Introduction

As the world is struggling to recover from the Covid-19 pandemic in 2021, the extreme effects of climate change are no longer abstract or distant concepts. Recent deadly floods in China and Europe, extreme heat in Canada, Finland and Ireland, and massive wildfires in the western United States are striking warnings that the world may be accelerating towards an irreversible tipping point of the planetary system. The Intergovernmental Panel on Climate Change Assessment Report 6 (IPCC 2021) is the landmark study delivering the starkest warning to date of the risks to humanity from anthropogenic climate change with an unequivocal body of evidence.

To decarbonize the global economy in alignment with the goals established by the Paris Agreement, all economic actors in the real economy need to reduce their greenhouse gas (GHG) emissions at a rate sufficient to remain aligned with the emissions pathways established by climate science. Having long focused on risks climate change poses to the profitability and longevity of financial activities, it is crucial for financial institutions (FIs) to shift focus to their impact on climate through their investment and lending activities and leverage their influence in the economy to facilitate the transition to a net zero economy. Private equity (PE) firms, through their long-term investment strategies and considerable influence over their portfolio companies (PCs), are particularly well positioned to support PCs for a low-carbon transition. As an asset

class that has experienced and will continue to experience tremendous growth and influence, it is critically important that the private equity sector take immediate actions to facilitate the transition of the private markets to a net zero economy by 2050.

5.2. Purpose of this Guidance

To enable wide adoption of science-based targets (SBTs) by private equity investors, Science Based Target Initiative (SBTi) developed this *Guidance* for PE firms to set targets for their operations and investment portfolios that are aligned with the reductions needed to stay in line well-below 2°C and 1.5°C climate scenarios. The guidance is tailored to the unique business models and asset classes of private equity (PE) firms and provides practical guidance for PE firms to compile a GHG inventory and develop SBTs for their key asset classes. It identifies challenges PE firms commonly face to develop and achieve targets and makes recommendations to overcome these common barriers. SBTi intends to raise the ambition of the private equity industry by defining and promoting best practice in SBT setting and providing methods, criteria, guidance and tools to reduce the barriers to adoption and implementation.

For the development of this *Guidance*, SBTi formed an Expert Advisory Group, a group of volunteer advisors from the private equity industry, academia, consultancies, non-profit and multilateral organizations with in-depth knowledge in SBT setting for the private equity industry. The EAG serves in a technical advisory capacity for the SBTi private equity sector project and provides requested input and advice to priority topics and decisions.

5.3. Guidance audience

5.3.1. Overview of different types of PE firms

PE firms are fund management businesses who raise money from third parties to invest in private assets. The raised capital is accumulated in private equity "funds"; these funds are specific vehicles and separate corporate legal entities. These are "closed-end funds" that are not listed on public exchanges; as such, they are considered to be an alternative investment class. Whilst not legally the parent company to the fund, the fund managers, also referred to as General Partners (GPs) and are typically its founders, set its direction and manage its investment and assets. **GPs managing private equity direct investments, private debt, secondaries, and fund of funds are the principal audience for this *Guidance*.**

5.3.2. General Partners vs. Limited Partners

Private equity investors are often made up of GPs and Limited Partners (LPs). The GP primarily raises capital from third party entities including family offices and large institutional investors such as pension funds, into a specific fund vehicle (the "fund") which will then be invested into certain types of assets according to an investment strategy. The third-party investors in the fund are referred to as the LPs. There are typically multiple LP organizations invested in a particular fund, but single LP funded vehicles do exist.

A GP is considered the owner of the partnership. GPs are actively involved in management of the partnership and company decision making. GPs identify the assets to be invested in, execute those investments and then manage them until eventual exit. GPs offer no liability protections for the partners.

An LP is an investor in the fund, investing capital in exchange for a portion of the profits of the partnership. However, they are not generally involved in daily operations. LPs are often referred to as silent partners, but do wield a meaningful influence on the GPs, placing some conditions on the GP in exchange for the original investment. LPs can also include high net wealth individuals, foundations, endowment funds, labor unions, insurance companies and other institutional investors such as hedge funds, mutual funds, etc.

On occasion, the LPs will make direct "co-investments" into specific investments, and take a direct equity share in that asset (Basri 2020).

5.4. Project/Sector context

5.4.1. Economic impact of the private equity industry

In 2020, assets under management (AUM) across private markets grew to an all-time high of US$7.3 trillion. Private equity as an asset class grew to US$4.5 trillion in 2020, an annualized 16.2% since 2015, and it continues to outperform other private market asset classes, as well as public market equivalents, by nearly all measures (McKinsey & Company 2021).

Private equity stands for 61% of total private markets AUM. Within Private Equity, Buyout accounts for 50%, Venture Capital for 28%, Growth for 17% and Other accounts for 5%. North America accounts for 51% of the PE market, Europe 17%, Asia 28%, and the rest of the world for 4% (McKinsey & Company 2021).

The growth of the private equity market is expected to continue, and Deloitte forecasts a formidable growth in private equity over the next few years, with global PE AUM reaching US$5.8 trillion by 2025 in a base case scenario (Deloitte Insights 2020). Expectations of increased allocations to private markets generally and private equity specifically is a strong driver of the predicted growth. A vast majority of LPs, 79 %, are indicating plans to increase allocations in private equity in the next few years (McKinsey & Company 2021).

When considering the economic impact of private equity it is important to look beyond the cumulative AUM figures and consider the number of individual businesses invested in with the aim of achieving significant growth. This routinely drives job creation with wider socio-economic benefits. The levels of ownership in and therefore influence over those businesses also has potentially significant benefits in terms of possible GHG reductions.

5.4.2. How is the private equity sector addressing climate?

Key stakeholders, such as employees, PCs, and LPs are increasingly seeking after more sustainable corporate behaviors. According to Bain & Company (2021), a growing segment of the industry believes that investments in sustainability, social welfare and good governance require a different calculus for now. Nearly two-thirds of investors report that Environmental, Social & Governance (ESG) will be more integral to alternative assets as LPs continue to

prioritize ESG investing. In response more fund managers now hold ESG policies. Research from McKinsey & Company (2021) increasingly suggests that the individual companies that improve on ESG factors also tend to be the ones that improve most on total return to shareholders.

Within private equity, climate change has to date generally been considered as one of the most material topics within the broader ESG field. However, it is gaining in importance, is better understood, with climate risk becoming a more readily acknowledged term, and is now therefore routinely considered as a mandatory issue requiring monitoring and management across all asset types.

This has been driven by the private equity sector's increased recognition of the importance of climate change and crucially its potential impact, both positively and negatively, on the value of its investments. It is now generally accepted in the sector that climate change will have profound impact on markets in the future and thus the topic needs consideration, both in the selection of investments, and the management of assets once invested.

This has resulted in the beginnings of clear indications that private equity is being cautious of investing in assets that could be impaired by either the transition to a low carbon economy and/or the physical impacts of climate change. Inversely, there has been a meaningful redirection of capital into assets that are believed to be likely to prosper from the transition and/or are seen to have been specifically de-risked with regard to climate and wider ESG concerns.

Private capital continues to be increasingly directed into ESG-focused investments, with nearly $400 billion in private capital raised from 2015 to 2020, a quarter of that being raised in 2020 alone. These investments included funds focused on ESG themes or funds committed to ESG principles. ESG-related capital grew rapidly in private equity, increasing by over 30 % per annum from 2015 to 2020.

Both GPs and LPs are now rapidly developing new capabilities across the industry to address climate and wider ESG requirements. Pre-acquisition ESG due diligence is now being factored into many firm processes taking over from the more traditional limited approach of Environmental Health and Safety (EHS) due diligence that focused on liability issues such as contaminated land and regulatory compliance. Climate risk assessment is increasingly part of that due diligence and/or is becoming a mandatory part of the ownership period, driven by stakeholder requirements and initiatives such as the Task Force for Climate-related Financial Disclosures (TCFD), which has become a mandatory requirement of being a signatory of the UN Principles of Responsible Investment.

GPs are now increasingly asking all their PCs to prepare a full GHG emissions inventory and set formal emissions reductions targets. However, the maturity of the private markets in GHG emissions reporting remains much lower than the public markets, with reference to the Carbon Disclosure Project (CDP) as shown in Table 5.1 below. Only 0.03% of the investable private market are reporting to CDP on climate and of these just over 50% are reporting scope 1 and 2 emissions, and 37% have an active target to reduce emissions.

Table 5.1. Carbon reporting maturity of the public markets vs private markets

Parameter	Public companies reporting to CDP	Private companies reporting to CDP
CDP respondents (total 9,500+)	c.4,200	c.5,300
No. of public and private (investable) companies globally	c.41,000 (OECD 2019)	c.17,000,000 (S&P Global 2021)[1]
% CDP coverage	10.2%	0.03%
Have an active emission reduction target	79%	37%
Report scope 1 emissions	97%	58%
Report scope 2 emissions	96%	48%

Source: CDP (2021).

5.5. What are Science Based Targets?

5.5.1. What is the Science Based Target Initiative?

The SBTi mobilizes the private sector to take urgent climate action. By guiding companies in SBT setting, the SBTi enables companies to tackle climate change while seizing the benefits of, and boosting their competitiveness in the transition to a net-zero economy.

The SBTi is a collaboration between CDP, World Resources Institute (WRI), the World Wide Fund for Nature (WWF), and the United Nations Global Compact (UNGC) and is one of the We Mean Business Coalition commitments. The initiative defines and promotes best practice in SBT setting, offers resources and guidance to reduce barriers to adoption, and independently assesses and approves companies' targets.

5.5.2. SBTs for companies

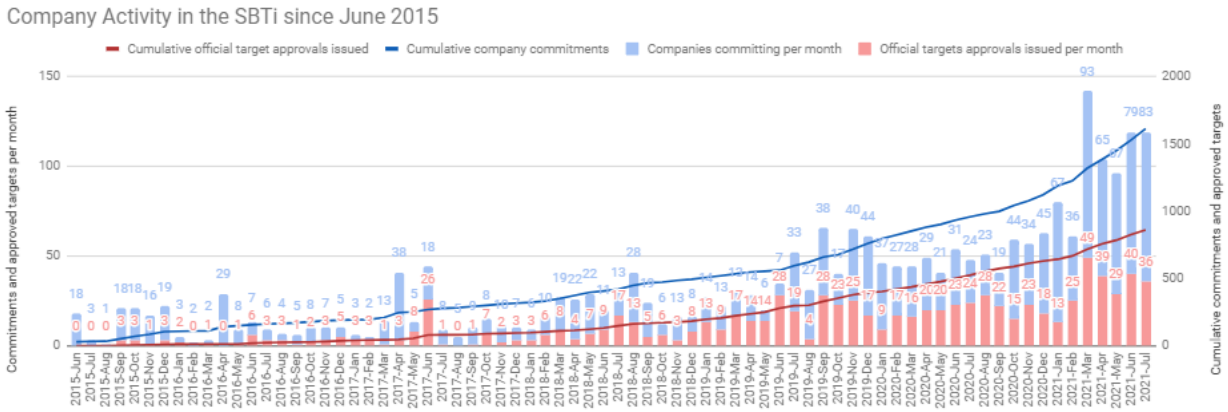
Targets adopted by companies to reduce GHG emissions are considered "science-based" if they are in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement—to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.

Since its launch in 2015, the SBTi has established itself as a leader in the corporate climate action arena. Among companies globally, there is a growing momentum for SBT setting through the SBTi. As of August 2021, 1686 companies and 89 FIs have publicly joined the SBTi, among which 841 companies have had their targets officially approved (see Figure 5.1).

For more detailed information on how a company can set SBTs through SBTi and SBTi's target validation service for companies, please refer to the *SBTi Corporate Manua*l (SBTi 2021).

Figure 5.1. Company Activity in the SBTi since June 2015 - *to be updated*

[1] Estimate of investable private universe, where S&P Global (2021) private market coverage was used as a proxy.



Source: SBTi.

5.5.3. SBTs for SMEs

In recognition of the important role small and medium-sized enterprises (SMEs) must play in global climate action as well as the limited resources available to companies of this size, the SBTi has established a separate expedited route for these companies.

SBTi defines SMEs as a non-subsidiary, independent company which employs fewer than 500 employees. SBTi's SME route may be relevant to PE firms interested in engaging PCs in Venture Capital funds to set GHG emissions reduction targets. PE firms should otherwise direct investees with more than 500 employees to the regular SBTi validation route (see section above).

For more information on how SMEs can set targets through SBTi, please refer to Section "Small and medium-sized enterprises" in the *SBTi Corporate Manual* (SBTi 2021 p8).

5.5.4. SBTs for financial institutions

FIs are a vital link in a global transition to net zero emissions. Through lending and investing, they have the power to redirect capital to the sustainable technologies and solutions of the future and to the companies doing the most to prepare for a net-zero emissions economy. The SBTi launched the world's first SBT setting framework for FIs in October 2020, allowing them to align their lending and investment portfolios with the level of ambition required by science.

Over 80 global FIs have already committed to setting SBTs and the SBT will support them in using this new framework to set their targets. The criteria and methods set out in the *Financial Sector SBT Guidance (FI Guidance)* (SBTi 2021) serve as an important foundation for this *Guidance*. Future updates to the *FI Guidance* and SBTi's target validation criteria and recommendations may trigger revisions to this *Guidance*.

6. Business case for the private equity sector to set SBTs

PE firms are uniquely positioned to influence other actors through their equity and debt portfolios. To drive Paris-aligned systemic decarbonization, it is critical to leverage shared influence and responsibility for aligning incentives as well as eliminating barriers to emissions reductions.

PE firms also have a fiduciary responsibility to return financial performance to investors, which often include institutional investors who are driven by financial performance as opposed to non-financial performance such as GHG emissions reductions. The positioning of PE firms to influence the mandates of their investors will be critical to drive systemic decarbonization. Recent work has pointed to the management of ESG issues including climate change as increasingly part of the investors' fiduciary duty, because of the risk to long term performance.

Where the PE firms typically have influence on a more granular level is presented in the Figure 6.1 below. Here we can broadly see GPs have the overarching influence of both LPs and PCs, as they typically control the fund strategies, the principles of investment, who invests and ultimately what is invested in. LPs actualize the investment cycle within the GPs governance through choosing investors and PCs to invest in. In certain instances, LPs can influence GPs to alter their principles, e.g., LPs pressure GPs to become more aligned to the ESG agenda. PCs are then ultimately the receiver of the investment and have varying levels of control based on the structure of the deal forged by the LP.

PE firms have most influence within their private equity direct investments with majority holds (>50%) over their PCs, while minority holds (<50%) have less influence over their PCs due to not having majority control over the PC. Funds of funds are typically at arm's length from PCs and have less overall influence on direct investments, while secondaries are a later stage investment in the investment cycle and thus have even less influence than funds of funds. Direct lending in credit /private debt typically has less influence than equity, as debt alone simply has no equity share in the company.

Across all these fund strategies PE firms should still try and influence GPs, LPs and PCs to adopt or align with SBTs where possible and disclose a record of engagement attempts for transparency.

Figure 6.1. Ecosystem of Influence - *forthcoming*
Source: Authors.

PE firms that set SBTs commit to align their funds with the level of ambition required to achieve the goals of the Paris Agreement. This commitment, along with the strategy and actions that will be taken to achieve the targets not only contribute to the transition to a net-zero economy but also bring substantial benefits to the PE firm.

Fundamentally, the business case for private equity to set SBTs is that it will protect asset value. Businesses that fail to decarbonize will become increasingly exposed as society seeks to transition to a net-zero future, whether to rising costs in terms of energy and carbon taxation

and/or their products or services becoming stranded. Private equity understands that in order for the value of its existing assets to continue to grow, they must be shown to be de-risked in this regard and in order to be able to raise additional capital, GPs must be able to show its investors that it understands the issues and will make future investment that have been vetted in this regard. Key additional benefits include the following:

Build business resilience and increase competitiveness: Performing scenario analysis and applying methods to set SBTs enable PE firms to align their PCs with the zero-carbon economy, to identify and capitalize on a range of opportunities, and to mitigate climate risks and increase competitiveness by gaining insights into the transformations faced by the economic sectors they lend to and invest in.

Identify and capitalize on a range of opportunities: Growing investor demand for the incorporation of ESG factors in investment processes to enable better investment decisions, improve performance and reduce risk, and growing investment opportunities given the substantial investment needed for the low-carbon transition, as highlighted by McKinsey (2015) as needing US$6 trillion per year to 2030.

Drive innovation: As SBTs include a long-term vision, PE firms can provide investments that prioritize and accelerate the low-carbon transition. Engaging with their investors, GPs and LPs can develop innovative financial products and services that enable PCs to reduce emissions in the real economy.

Build credibility and reputation: As compared to targets initiated solely by PE firms, SBTs have higher credibility with stakeholders since they are based on the latest available science and validated against a set of robust criteria developed through a multi-stakeholder consultative process. PE firms with SBTs can serve as lower-risk options for long term investors that are seeking to hedge climate-related risks. In addition, PE firms with SBTs demonstrate leadership in sustainability, which improves a PE firm's reputation with all stakeholders.

Influence and prepare for shifts in public policy: SBTs help PE firms adapt to changing policies and send a stronger signal to policymakers, allowing the industry to better influence policy decisions. PE firms with SBTs are much better positioned to respond to future regulatory adjustments as governments ramp up their climate action.

Demonstrate leadership: While metrics and methods to set SBTs targets for PE firms are new and best practice is still evolving, this is no reason to delay action. PE firms that undertake the target setting process lead the way and push the market toward the most credible and practical solutions.

7. SBTi target validation criteria and recommendations for PE firms

This chapter presents the SBTi target validation criteria and recommendations for PE firms. The *FI Guidance* sets out a list of target validation criteria and recommendations that are broadly

relevant to FIs' GHG emissions inventory and target boundaries, and introduces the concepts of organizational and operational boundaries from the *GHG Protocol Corporate Standard*. Criteria are labeled with "C" and recommendations are labeled with "R" below. Based on the context of the private equity industry, this *Guidance* updated a number of criteria set out in the *FI Guidance* with new text marked in blue underlined font within this chapter. Criteria marked with an asterisk '*' are expanded on in further chapters throughout this document, which include additional information on successfully fulfilling these requirements. The SBTi strongly recommends that PE firms thoroughly review the guidance before target development.

Sections 1 to 4 and 7 of the criteria focus on GHG inventory, scope 1 and 2 targets, and target validity and recalculations. Version 4.2 of the *SBTi Criteria and Recommendations* (SBTi 2021) for companies serves as the basis for these sections, with slight deviations for PE firms. Where relevant, these criteria are subject to the SBTi's annual update of corporate criteria[2].

All the criteria presented here must be met for PE firms' targets to be recognized by the SBTi. In addition, PE firms shall follow the *GHG Protocol Corporate Standard* (2015), *Scope 2 Guidance* (2015), and *Corporate Value Chain (Scope 3) Accounting and Reporting Standard* (2020) for their emissions accounting and reporting, wherever relevant. In the context of the criteria and this *Guidance*, the term "shall" is used to describe requirements related to relevant criteria and accounting guidance, whereas the term "should" is used to describe recommendations. The SBTi recommendations are important for transparency and best practices, but are not required. Unless otherwise noted (including specific sections), all criteria apply to scopes 1, 2, and 3.

7.1.1. Section 1 - GHG Emissions Inventory and Target Boundary

Criteria

***PE-C1 – Scopes:** The GP shall serve as the proxy parent, the entity that consolidates the GHG inventory for its operations (i.e., scope 1 and 2) and its investment and lending activities within its managed funds (i.e., scope 3 category 15)[3]. Targets shall be submitted on the GP level. GPs must set targets on all relevant and required asset classes, as set out in Table 9.1, in their target submission, in accordance with boundary criteria.

PE-C2 Significance Thresholds: PE firms may exclude up to 5% of their own scope 1 and scope 2 emissions combined in the boundary of the inventory and target[4].

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[2] In July 2021, in response to increasing urgency for climate action and the success of SBTs targets to date, the SBTi announced that in next version of the criteria (V5) to be released by end of 2021, the minimum ambition of scope 1 and 2 target will be lowered from 'well below 2°C' to '1.5°C' above pre-industrial levels. The timeframe for targets will be shortened from a maximum of 15 to 10 years. Version 5 of the SBTi criteria will become effective from 15 July 2022 and these changes will apply to PE firms as well. **Please be mindful that the criteria presented in this *Guidance* do not reflect this change.**

[3] There are two primary reasons that SBTi recommends that PE firms account for PCs' emissions in scope 3 category 15, even if they have operational or financial control over their PCs. First, if a PE firm accounts for the scope 1 and 2 emissions of its PCs in its own scope 1 and 2, it will have to set targets using methods specific to scope 1 and 2 emissions, and not methods designed for FIs' portfolios such as the SBT portfolio coverage method or temperature rating. Second, PE firms will experience large fluctuations in their scope 1 and 2 emissions as their portfolio turnover every couple of years, which makes target tracking challenging.

[4] Where PE firms' scope 1 or 2 emissions are deemed immaterial (i.e., under 5% of total combined scope 1 and 2 emissions), PE firms may set their SBT solely on the scope (either scope 1 or scope 2) that

PE-C3 – Greenhouse Gases: Scope 1 and 2 targets must cover all relevant GHGs as required per the *GHG Protocol Corporate Standard*. If optional targets on scope 3, categories 1–14 are set, they shall also cover all relevant GHGs. For PE firms' scope 3 portfolio targets, coverage of all relevant GHGs is recommended, where possible. If PE firms are unable to cover all GHGs for scope 3 portfolio targets, they shall cover CO_2 emissions at a minimum.

PE-C4 – Bioenergy Accounting: Direct emissions from the combustion of biomass and biofuels for PE firm-wide operational use, as well as GHG removals associated with bioenergy feedstock[5] must be included alongside the PE firm's inventory and must be included in the target boundary when setting a SBT and when reporting progress against that target. If biogenic emissions from biomass and biofuels are considered climate neutral, the PE firm must provide justification of the underlying assumptions. PE firms must report emissions from N_2O and CH_4 from bioenergy use under scope 1, 2, or 3, as required by the GHG Protocol, and must apply the same requirements on inventory inclusion and target boundary as for biogenic carbon.

PE-C5 – Subsidiaries: It is recommended that PE firms submit targets at the group or parent company level for all of its subsidiaries/funds, as the proxy parent of their PCs (equity) and borrowers (credit). LPs are not subsidiaries of GPs or considered to be the primary proxy parent for PCs and borrower companies. The PE firms' target must include all emissions as the proxy parent in line with the emissions boundaries as set out in Chapter 9.

Recommendations and additional guidance

PE-R1 – Direct Land Use Change Emissions: When relevant, PE firms are encouraged to account for direct land use change emissions and include them in their target boundary. PE firms seeking to implement mitigation actions aimed at reducing land use change as part of their SBTs (e.g., through preventing deforestation from their supply chains) should include land use change emissions in their base year inventory. Since methods to calculate land use change can differ widely, and there is currently no standardized method recognized under the GHG Protocol, companies should disclose the method used to calculate these impacts in their GHG inventory[6]. PE firms with indirect land use emissions can report these separately alongside the inventory and similarly disclose the method used to calculate these impacts.

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covers more than 95 % of the total scope 1 and 2 emissions. PE firm's must continue to report on both scopes and adjust their targets as needed, in accordance with the GHG Protocol's principle of completeness and as per PE-C21 - Mandatory target recalculation.

[5] Non-bioenergy–related biogenic emissions must be reported alongside the inventory and included in the target boundary. GHG removals that are not associated with bioenergy feedstock are currently not accepted to count as progress toward SBTs or toward net emissions in the inventory.

[6] At the moment, the GHG protocol provides only limited guidance on agriculture, forestry, and other land-use (AFOLU) emissions accounting, and there are no sector-specific SBT-setting methodologies available for companies in land-intensive sectors that include AFOLU emissions. The SBTs initiative is undertaking a sector development project, the SBTi Forest, Land and Agriculture project ("SBTi FLAG"), led by WWF, to address this methodology gap. The effort will focus on the development of methods and guidance to enable the food, agriculture, and forest sectors to set SBTs that include deforestation, and possibly other land-related impacts. In parallel to this effort, WRI and World Business Council for Sustainable Development (WBCSD) are leading the development of three new GHG Protocol Standards on how companies should account for GHG emissions and removals in their annual inventories. The three standards will cover: Carbon Removals and Sequestration; Land Sector Emissions and Removals;

PE-R2 – Bioenergy Accounting: Assumptions of neutrality for bioenergy tend to overlook that there is a significant time lag between the bio-based resource removal (wood/crop) and later regeneration. They also overlook possible differences in productivity among forest/crop systems used as bioenergy feedstock and the effects of long-term carbon storage in bio-based products and/or disposal. For these reasons, until a standardized method for bioenergy GHG accounting is developed under the GHG Protocol, the SBTi strongly recommends PE firm take into account the time of emissions (i.e., wood/crop removal) and sequestration (i.e., forest/crop regrowth) in their accounting methodologies.

7.1.2. Section 2 - Scope 1 and 2 Target Time Frame

Criteria

PE-C6 – Base and Target Years: Targets must cover a minimum of five years and a maximum of 15 years from the date the target is submitted to the SBTi for an official validation[7].

PE-C7 – Progress to Date: Targets that have already been achieved by the date they are submitted to the SBTi are not acceptable. The SBTi uses the year the target is submitted to the initiative (or the most recent completed GHG inventory) to assess forward-looking ambition. The most recent completed GHG inventory must not be earlier than two years prior to the year of submission.

Recommendations and additional guidance

PE-R3 – Base Year: The SBTi recommends choosing the most recent year for which data are available as the target base year.

PE-R4 – Target Year: Targets that cover more than 15 years from the date of submission are considered long-term targets. PE firms are encouraged to develop such long-term targets up to 2050 in addition to midterm targets required by PE-C6. At a minimum, long-term targets must be consistent with the level of decarbonization required to keep global temperature increase to well-below 2°C compared to preindustrial temperatures to be validated and recognized by the SBTi.

PE-R5 – Consistency: It is recommended that PE firms use the same base and target years for all targets within the midterm time frame and all targets within the long-term time frame.

7.1.3. Section 3 - Scope 1 and 2 Target Ambition

Criteria

PE-C8 – Level of Ambition: At a minimum, scope 1 and scope 2 targets will be consistent with the level of decarbonization required to keep global temperature increase to well-below 2°C

and Bioenergy. For more information on this work and how to participate, see here. The FLAG project and the new GHG Protocol Standards are complementary workstreams that will provide the infrastructure needed for corporate target setting, accounting, and reporting of AFOLU-related emissions.

[7] For targets submitted for an official validation in the first half of 2022, the valid target years are 2026 and 2036 inclusive. For targets submitted in the second half of 2022, the valid target years are between 2027 and 2032 inclusive, as the maximum target years reduce from 15 years to 10 years for targets validated post 15 July 2022 in line with SBTi minimum increase in ambition.

compared to preindustrial temperatures, though PE firms are encouraged to pursue greater efforts toward a 1.5°C trajectory. Both the target time frame ambition (base year to target year) and the forward-looking ambition (most recent year to target year) must meet this ambition criteria[8].

PE-C9 – Absolute vs. Intensity: Intensity targets for scope 1 and scope 2 emissions are only eligible when they lead to absolute emissions reduction targets in line with climate scenarios for keeping global warming to well-below 2°C or when they are modeled using an approved sector pathway. Absolute reductions must be at least as ambitious as the minimum of the range of emissions scenarios consistent with the well-below 2°C goal or aligned with the relevant sector reduction pathway within the Sectoral Decarbonization Approach (SDA).

PE-C10 – Method Validity: Targets must be modeled using the latest version of methods and tools approved by the initiative. Targets modeled using previous versions of the tools or methods can only be submitted to the SBTi for an official validation within six months of the publication of the revised method or the publication of relevant sector-specific tools.

PE-C11 – Offsets: The use of offsets is not counted as emissions reduction toward the progress of PE firms' SBTs. The SBTi requires that PE firms set targets based on emission reductions through direct action within their own operations or their investment and lending portfolios. Offsets are only considered to be an option for PE firms seeking to support additional emission reductions beyond their SBTs.

PE-C12 – Avoided Emissions: Avoided emissions fall under a separate accounting system from corporate and PE firm's inventories and do not count toward SBTs.
PE-R6 – Choosing an approach: The SBTi recommends using the most ambitious decarbonization scenarios that lead to the earliest reductions and the least cumulative emissions.

Recommendations and additional guidance

PE-R6 – Choosing an Approach: The SBTi recommends using the most ambitious decarbonization scenarios that lead to the earliest reductions and the least cumulative emissions.

7.1.4. Section 4 - Scope 2

Criteria

PE-C13 – Approaches: PE firms shall disclose whether they are using a location - or market-based approach per the *GHG Protocol Scope 2 Guidance* (WRI 2015) to calculate base year emissions and to track performance against a SBT. PE firms shall use a single, specified scope 2 accounting approach ("location-based" or "market-based") for setting and tracking progress toward their SBTs.

[8] For targets submitted for an official validation in 2022, the most recent inventory data submitted must be for 2020 at the earliest.

PE-C14 – Renewable Electricity Procurement: Targets to actively source renewable electricity at a rate that is consistent with well-below 2°C scenarios are an acceptable alternative to scope 2 emissions reduction targets. The SBTi has identified 80% renewable electricity procurement by 2025 and 100% by 2030 as thresholds (portion of renewable energy over total energy use) for this approach in line with the recommendations of RE100. PE firms that already source electricity at or above these thresholds shall maintain or increase their use share of renewable electricity to qualify.

Recommendations and additional guidance

PE-R7 – Purchased Heat and Steam: For SBT modeling purposes using the SDA it is recommended that PE firms model purchased heat and steam–related emissions as if they were part of their direct (i.e., scope 1) emissions.

PE-R8 – Efficiency Considerations for Target Modeling: If PE firms are using a method that does not already embed efficiency gains for the specific sector, market, and the decarbonization projected for the power sector based on well-below 2°C scenario, it is recommended that these factors be taken into account when modeling electricity-related scope 2 targets.

7.1.5. Section 5 - Scope 3 – Portfolio Target Setting Requirements

Criteria

PE-C15 – Requirement to Set Target(s) on Investment and Lending Activities: All PE firms shall set targets on their investment and lending activities as required by PE-C16, irrespective of the share of quantified scope 3 portfolio emissions as compared to the total scope 1 + 2 + 3 emissions of the PE firm. Recommended methods for different asset classes are defined in Required Activities and Methods Table 9.1.

PE-C16 – Portfolio Target Boundary: PE firms shall set targets on all relevant "Required Activities" in the Required Activities and Methods Table 9.1 following the minimum boundary coverage requirement.

***PE-C17.1 – Sectoral Decarbonization Approach Targets[9]:** PE firms' targets using the SDA are considered acceptable when the following conditions are met:

- Boundary: PE firms shall set SDA targets as specified in the Asset Class Required Activities and Methods Table 9.1.
- Ambition: Portfolio SDA targets must meet minimum ambition indicated by sector-specific methods for well-below 2°C pathways. 1.5°C targets are encouraged where sector pathways are available. [10]
- Time frame: Portfolio SDA targets must cover a minimum of five years and a maximum of 15 years from the date the PE firm's target is submitted to the SBTi for an official

[9] See Section 9.3 for further information regarding real estate asset class.
[10] At the moment, 1.5-degree pathway is only available for the power generation sector within SDA. SBTi will share more information on our plan to integrate 1.5-degree scenarios into other SDA sectors.

validation. PE firms are further encouraged to develop long-term targets up to 2050 in addition to the required midterm targets.[11]

- Scope of targets: The scope of PE firms' targets shall be consistent with the scope required by the relevant method[12].

***PE-C17.2 – Portfolio Coverage Targets[13]:** PE firms' targets to drive the adoption of science-based emissions reduction targets by PCs are considered acceptable when the following conditions are met:

- Boundary: PE firms shall set SBT Portfolio Coverage targets as specified in the Asset Class Required Activities and Methods Table 9.1. In practice, this means PE firms shall include PCs in all required categories as specified in Table 9.1. in the denominator for the calculation of percentage SBT coverage, detailed below. SBTi recommends that PE firms use scope 1, 2, and 3 emissions of PCs to define SBT coverage. If that information is not available, they may use other metrics such as invested capital in the year of acquisition.

- Target Level of Ambition: the PE firm shall commit to having its PCs set approved SBTs such that all current and future funds, starting from the base year selected by the firm, are on a linear path to 100 % SBT coverage by 2040.

  For example, a PE firm starting with 10 % SBT company coverage in 2020 would need to increase coverage by 4.5 % per year (90 / (2040 – 2020) = 4.5) and reach at least 32.5 % (10 + [5 x 4.5] = 32.5) coverage by 2025.

- Target Formulation: In the public target language, PE firms shall include the percentage of PCs that will have their SBTs approved in the target year using the selected metric.

  $$\%\ SBT\ coverage\ = (Number\ of\ PCs\ with\ approved\ SBTs \times selected\ metric)\ /\ (Number\ of\ all\ existing\ PCs \times selected\ metric)$$

- Target Time frame: The PE firm's portfolio coverage target must be fulfilled within a maximum of five years from the date the firm's targets are submitted to the SBTi for validation. Fulfillment of the portfolio coverage target means that the PCs' SBTs have been approved by SBTi. Long term targets for 2040 or 2050 are highly encouraged alongside the short-term five year target.

- Scope of PC Targets: PCs shall follow the latest SBTi criteria for companies to set scope 1 and 2 targets, as well as scope 3 targets when their scope 3 emissions are more than 40 % of total scope 1, 2, and 3 emissions.

[11] 2050 targets won't be validated until SBTi's net zero standard for financial institutions is available.
[12] A list of the sector-specific guidance and requirements is available in Section 9 of the SBTi Target Validation Protocol link.
[13] See section 9.3 for further information regarding portfolio coverage approach.

***PE-C17.3 – Portfolio Temperature Rating Targets**[14]**:** PE firms' targets to align the Temperature Rating of their credit / private debt portfolios with ambition of the Paris Agreement are considered acceptable when the following conditions are met:

- Boundary: PE firms shall set Portfolio Temperature rating targets as specified in the Asset Class Required Activities and Methods (Table "9.1).
- Target level of ambition: PE firms shall align their portfolio scope 1 + 2 temperature score with a minimum well-below 2°C scenario and in addition align their portfolio to a minimum 2°C scenario for the scope 1 + 2 + 3 portion by 2040. Alignment with more ambitious scenarios such as 1.5°C is highly encouraged. Separate targets for scope 1 + 2 and for scope 1 + 2 + 3 shall be set.
- Target time frame: Portfolio alignment targets must be fulfilled within a maximum of five years from the date the targets are submitted to the SBTi for an official validation.
- Scope of borrower company targets: PE firms' borrowers' targets shall include coverage of scope 1 and 2 emissions, as well as scope 3 emissions when their scope 3 emissions are more than 40 % of total scope 1, 2, and 3 emissions.

Recommendations and additional guidance

PE-R9 – Measuring Emissions and Setting Targets for Scope 3, Categories 1–14: It is recommended but not required for PE firms to measure and set target(s) on categories 1–14 emissions as defined by *GHG Protocol Corporate Standard*. If optional targets are set on these categories, they must meet criteria 19-C20 in the latest SBTi criteria for companies to be approved by the SBTi.

PE-R10 – Phaseout of Thermal Coal Investments: PE firms should establish a policy within six months from the time of target approval that they will phase out financial support to thermal coal across all their activities in line with a full phaseout by 2030 globally. This includes immediately ceasing all financial or other support to thermal coal companies* that are building new infrastructure or investing in new or additional thermal coal expansion, mining, production, utilization (i.e., combustion), retrofitting, or acquiring of coal assets. PE firms should implement ESG screening to ensure there are no future investments in coal companies, regardless of the fund strategy.

Coal companies[15] are defined as companies with greater than 5 % of revenues from thermal coal mining, exploration and drilling, mining services, processing, trading, transport and

[14] See section 9.5 for further information regarding temperature rating approach.

[15] This includes:
(1) Companies that have activities (i.e., identified as share of revenues) in the exploration; extraction; refining; transportation and distribution; storage; retailing; marketing; trading; or power, heat, or cooling production from oil and gas. PE firms should disclose the threshold used to delineate oil and gas companies; the SBTi recommends a 5 % threshold and for the threshold to not exceed 30 %.
(2) In line with PE-R10, companies with greater than 5 % of revenues from thermal coal mining, exploration and drilling, mining services, processing, trading, transport and logistics, equipment manufacturing, operations and maintenance (O&M) services, engineering, procurement and construction

logistics, equipment manufacturing, operations and maintenance (O&M) services, engineering, procurement and construction (EPC) services, transmission and distribution of coal-fired electricity, coal to liquids (Ctlg) and coal to gas (CtG).

PE-R11– Disclosure of Fossil Fuel Investments and Lending: PE firms with approved SBTs, should annually disclose the annual investments (private equity), direct project financing and lending to fossil fuel (oil, gas, and thermal coal) projects and companies* in U.S. dollar amount (or other currencies) (See PE-R12 for recommendations on where to disclose).

PE firms that fail to phase out coal investments or disclose fossil fuel investments and lending make themselves susceptible to risk of stranded assets and reputational damage.

7.1.6. Section 6 - Reporting

Criteria

***PE-C18 – Disclosure of Target(s) Portfolio Coverage[16]:** At the time of target announcement and along with approved targets, PE firms shall disclose the percentage of their total investment and lending activities covered by portfolio targets on the SBTi website, in a metric representative of the magnitude of PE firms' main business activities, which may involve any combination of asset classes outlined herein. Examples include total financed emissions associated with investment and lending activities (if quantified), total balance sheet, total investments, total lending book, and total assets under management.

***FI-C19 – Implementation Reporting[17]:** At the time of target submission, the PE firm shall submit a brief summary of how it intends to meet its scope 3 portfolio targets in conformity with the template provided in the target submission form. This disclosure is intended to create transparency. The content of the summary will not be used as a basis for validation of targets. At the time of target announcement, the summary of how the PE firm intends to achieve its targets shall be made public[18].

***PE-C20 – Tracking and Reporting Target Progress[19]:** After target approval, the SBTi requires annual disclosure of scope 1 and 2 GHG emissions, disclosure of progress against all approved targets in the relevant metric, and disclosure of actions/strategies taken during the year to meet scope 3 portfolio targets. If optional targets on scope 3 categories 1–14 as described in PE-R9 are submitted and approved by the SBTi, their progress shall be included in the disclosure of progress as well.

Recommendations and additional guidance

PE-R12 - Where to Disclose: There are no specific requirements regarding where the scope 1 and 2 inventory, progress against all approved targets, and actions/strategies to meet scope 3

(EPC) services, transmission and distribution of coal-fired electricity, coal to liquids (Ctlg) and coal to gas (CtG).

[16] See Chapter 10 for further information regarding reporting.

[17] See Chapter 10 for further information regarding reporting.

[18] PE firms will have opportunities to review the summary language before the SBTi publishes it on the website

[19] See Chapter 10 for further information regarding tracking and reporting target progress.

portfolio targets should be disclosed, as long as it is publicly available. Recommendations include annual reports, sustainability reports, TCFD disclosures, the PE firms' website, and/or CDP's annual questionnaire.

7.1.7. Section 7 - Recalculation and Target Validity

Criteria

PE-C21 – Mandatory Target Recalculation: To ensure consistency with most recent climate science and best practices, targets must be reviewed, and, if necessary, recalculated and revalidated, at a minimum, every five years. PE firms with an approved target that requires recalculation must follow the most recently applicable criteria at the time of resubmission. Targets should be recalculated and reset, as needed, to reflect significant changes that would compromise relevance and consistency of the existing target.

PE-C22 – Target Validity: PE firms with approved targets must announce their target publicly on the SBTi website within six months of the approval date. Targets unannounced after six months will have to go through the approval process again, unless a different publication time frame was agreed with the SBTi.

Recommendations and additional guidance

PE-R13 – Triggered Target Recalculation: Targets should be recalculated, as needed, to reflect significant changes that would compromise relevance and consistency of the existing target. The following list includes example changes that should trigger a target recalculation:

- Exclusions in the inventory or target boundary change significantly and/or exceed allowable exclusion limits;
- Significant changes in institutional structure and activities (e.g., acquisitions, divestitures, mergers, insourcing or outsourcing, shifts in product or service offerings, changes in proportion of investments by asset classes, addition of new products covered by available methods, major updates in the latest climate science) that would affect the PE firm's target boundary or ambition; for instance, they can be defined as changes in overall PE firm annual AUM of 10% of greater, proportion of investments by asset class change by 10% of greater of total AUM, or new in asset class that are not covered by existing methods, that change by 10% or greater of total AUM;
- Significant changes in data used to calculate the targets such as discovery of significant errors or several cumulative errors that are collectively significant; and
- Other significant changes to projections/assumptions used with SBT setting methods.

PE-R14 – Validity of Target Projections: Whenever relevant, the SBTi recommends that PE firms check the validity of target-related projections annually. The PE firm should notify the SBTi of any significant changes, report these major changes publicly, and consider a target recalculation, as relevant.

8. How to set SBTs for PE firms

8.1. GHG inventory

8.1.1. Selecting a GHG inventory consolidation approach

The first step to compile a GHG inventory is for the **parent company** (i.e., GP) to select an approach to define its organizational boundary and consolidate its GHG emissions. The selected consolidation approach must be applied consistently throughout its institutional structure and the boundaries of SBTs must align with the organizational boundary.

In the context of the private equity sector, while the GP itself is usually a limited liability company (PE firm) and not the parent company by legal definition, it is responsible for all management decisions and has unlimited liability for the actions of the fund (Phalippou 2017). As the entity that's arranging the strategy of the funds, **GP shall serve as the proxy parent company to consolidate the corporate level GHG inventory** (PE-C1, Chapter 7 above).

GHG Protocol Corporate Standard defines three approaches for determining the organizational boundaries of institutional GHG inventories: operational control, financial control, and equity share. For the purpose of setting SBTs, PE firms are **recommended to use the operational control or financial control approach**:

- Operational control: A firm accounts for 100% of the emissions from operations at which it has the full authority to introduce and implement operating policies as its direct (i.e., scope 1) emissions. It does not account for any of the emissions from operations in which it owns an interest but does not have operational control as direct emissions.
- Financial control: A firm accounts for 100% of the emissions from operations at which it can direct financial and operating activities with a view to gaining economic benefits from those activities as its direct emissions.

After selecting an organizational boundary, a PE firm shall establish its operational boundary to distinguish between direct emissions from sources it owns or controls (i.e., scope 1 emissions) from indirect emissions (i.e., scope 2 and scope 3 emissions). *The Corporate Value Chain (Scope 3) Accounting and Reporting Standard* categorizes scope 3 emissions into 15 categories, where category 15 (investments) covers emissions associated with equity and debt investments in the reporting year, not included in scope 1 and 2. In some cases, a PE firm may have operational or financial control over its investees, as defined above. **To simplify the target setting process and ensure consistent target tracking, PE firms should include all investment and lending activities in scope 3, category 15 for consistency of reporting**[20].

[20] There are two primary reasons that SBTi recommends that PE firms account for PCs' emissions in scope 3 category 15, even if they have operational or financial control over their PCs. First, if a PE firm accounts for the scope 1 and 2 emissions of its PCs in its own scope 1 and 2, it must also use methods specific to scope 1 and 2 emissions to set targets on its PCs, instead of methods designed for FIs' portfolios such as the SBT portfolio coverage method or temperature rating. Second, PE firms will experience large fluctuations in their scope 1 and 2 emissions as their portfolio turnover every couple of years, which makes target tracking challenging.

Similar to what's explained in Section 4.1.3 of the *FI Guidance*, for PE firms, the minimum boundary of category 15 goes beyond the original requirement outlined in the scope 3 Standard. PE firms shall follow the emissions measurement requirements in the relevant and required asset class methods and measure emissions of debt investments without known use of proceeds, where applicable. For asset classes where emissions measurement is required by the method, PE firms should cover all GHGs if possible, with measurement of CO_2 as the minimum.

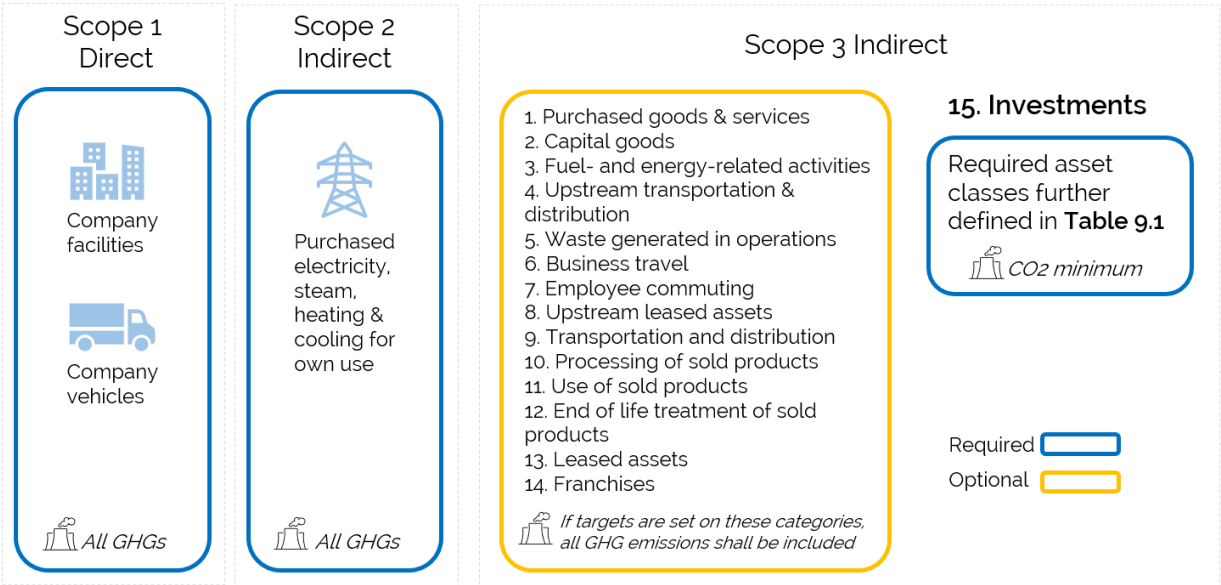
8.2. How to set an SBT for scope 1 and 2 emissions

Scope 1 and 2 emissions are the starting point for setting SBTs. While scope 3 emissions, in particular category 15 (investments) are likely the most material category for PE firms, scope 1 and 2 targets consistent with a well-below 2°C pathway at a minimum are required for all PE firms. PE firms are encouraged to align their scope 1 and 2 target ambition with a more ambitious 1.5°C scenario. Section 4.3 of the *FI Guidance* provides ample guidance on setting scope 1 and 2 targets for FIs.

8.3. How to set SBTs for scope 3 category 1 to 14

For PE firms to focus their efforts on their investment and lending activities, the SBTi only recommends but does not require that FIs measure emissions and set targets on scope 3, categories 1–14. Section 5.5 of the *FI Guidance* provides further guidance on this topic. Figure 8.1 provides an overview of SBTi's target setting and GHG emissions measurement requirements for PE firms.

Figure 8.1. Overview of target setting and GHG coverage requirements for PE firms' scope 1, 2 and 3 emissions.



Source: Adapted from *GHG Protocol Corporate Standard*.

9. How to set SBTs for Scope 3, Category 15

9.1. Overview of asset class categorization

Private equity GP firms now come in a range of sizes from small entities through to multi-national businesses with over a thousand staff members. Originally focused predominantly on direct investments (see 9.2.1 below) they have grown and diversified to consider a variety of different asset types or classes for investment. Firms will typically raise and invest multiple funds over time and whilst many may remain specialized in one asset class (albeit potentially raising funds focused on different industrial sectors or businesses in differing levels of maturity and/or financial strength), some will make investments in multiple types of asset classes (i.e., multi-strategy funds).

The most typical asset class groupings are presented in Table 9.1 below and then described in greater detail from Section 9.2. It is acknowledged that many of these groupings can then be subdivided into numerous specific asset classes, but for the purposes of this *Guidance*, they have been broken down to the level at which An SBT methodology is considered to be required.

Table 9.1. Asset Class Required Activities and Methods**.**

Target setting requirement	Legend	Description
Required		Shall be included in the target boundary if relevant
Optional		Methods are available for these asset classes, but they are optional to be included. There is no minimum coverage requirement on optional activities, and FIs may cover as much of these activities as they wish.
Out of scope	*For future use if applicable*	Cannot be covered by available methods or do not apply to the project audience.

Asset Class		Target boundary requirement	Required or Recommended Target Setting method
Private equity direct investments[1]	**Electricity Generation**	**Required:** 100 % of base year activity (kWh)	**Required:** SDA
	Real Estate	**Required:** 67 % coverage by base year activity in square meter	**Required:** SDA
	PE direct investments beyond electricity generation and real estate		
	Buyouts **≥ 30% of the fully diluted shares of the PC AND board seat(s)**	**Required:** 100% coverage of PCs by selected metric	**Required:** Portfolio coverage

	Growth capital **≥ 20% of the fully diluted shares of the PC AND board seat(s)**	**Required:** 100% coverage of PCs by selected metric	**Required:** Portfolio coverage
	Other minority shares in buyouts and growth equity investments	**Optional:** encourage minority holdings to be included in SBTsetting	**Recommended:** Portfolio coverage
	Venture Capital	**Optional:** encourage early-stage PCs to set SBTs	**Recommended:** Portfolio coverage
Secondaries		**Optional**: engage and influence GPs to set SBTs	No formal method identified for engagement
Fund of Funds		**Optional**: engage and influence GPs to set SBTs	No formal method identified for engagement
Credit / Private Debt, including infrastructure debt		**Optional:** companies receiving direct lending encouraged to set SBTs as a condition of lending	**Temperature rating**

Note:

1.SBTi recognizes that in certain "special situations", the asset classes as written in the table might not directly apply. But where there is equity stake in the first stake, the methods should be applied as per the percentage shareholdings above.

Source: *Authors.*

A PE firm shall categorize their investments by asset class to apply asset specific criteria. For example, if a PE firm in Private Equity Direct Investments has majority equity investments in several manufacturing PCs, several real estate assets and several electricity generation assets, the PE shall adopt the portfolio coverage approach to cover only the manufacturing PCs, the SDA to cover 67% of real estate assets and the SDA to cover 100% of electricity generation assets. If a PC is a conglomerate that's involved in both manufacturing and real estate activities, it may be more suitable to cover the PC within the SBT portfolio coverage target given that the method is sector agnostic.

Where a PE firm has various types of investments in an individual PC that fall under a mix of required and optional activities/categories, **the stricter treatment shall apply for all of the investments,** albeit without duplicative coverage of the same PC in multiple targets. For example, if a PE firm has 40% shares and a board seat in an LBO investment (Required) and also provides credit / private debt (Optional) to the same PC, the PE firm shall include the PC in the boundary of its SBT portfolio coverage target only.

9.2. Asset classes: real estate and electricity generation private equity investments

This section describes definitions of private equity investments in real estate and electricity generation assets, and the relevant criteria and steps to set targets on these assets using the SDA. SBTi has identified the SDA as the **required method** for these two asset classes and

devised relevant target boundary requirements specific to the method. This is to ensure that PE firms' coverage of these two high-emitting asset classes are consistent and comparable. For more information on the SDA method in general, please see Section 5.4.1 in the *FI Guidance*. Where relevant, this section references method application instructions available in the *FI Guidance*.

9.2.1. Real estate private equity definition

Private equity and private debt are two main forms of private investments in the institutional real estate market. This section discusses real estate private equity; real estate private debt is discussed in Section 9.5.

Real estate PE firms, or PE firms that invest in real estate as an asset class, deploy capital to acquire and develop (usually commercial) properties, operate and improve them, and then sell them to realize a return on their investment. As private equity real estate requires a high amount of capital, it is often only accessible to high-net-worth individuals or institutional investors, such as pension funds and asset managers. These funds are not traded publicly (Kagen, 2021).

Real estate equity is primarily majority share PE firm ownership, however there are instances where PE firms co-invest in real estate with other PE firms to reduce risk, and thus minority share in real estate is also part of the PE firm market.

Corporate loan real estate offers the closest parallel activity between this *Guidance* and the *FI Guidance*, differing in that the nature of the investment is a lending as opposed to PE where the PE firm has direct equity in the real estate. The influence as an equity holder is typically greater over the management company that make decisions over the assets decarbonization, even where there is a minority share, than the influence a lender has over the same party.

9.2.2. Electricity generation private equity definition

This asset class refers to direct private equity investments in companies and projects that are involved in the generation and sales of electricity. Given the scope of the IEA Energy Technology Perspectives (2017) scenario that underlies the SDA method, electricity transmission and distribution (T&D) companies and projects are not covered within this asset class.

Direct private equity investments in assets that generate and sell electricity are primarily majority owned investments however there are instances where the PE firm owns a minority share in such assets through co-investment often as a means of reducing risk.

9.2.3. Relevant criteria

The following criteria must be met for all SDA targets:

PE-C17.1 Science Based Target Sectoral Decarbonization Approach:

- Boundary: PE firms shall set SDA targets following the relevant target boundary requirement in Table 9.1.

- Ambition: Portfolio SDA targets must meet minimum ambition indicated by sector-specific methods for well-below 2°C pathways.
- Time frame: Portfolio SDA targets must cover a minimum of five years and a maximum of 15 years from the date the PE firm's target is submitted to the SBTi for an official validation. PE firms are further encouraged to develop long-term targets up to 2050 in addition to the required midterm targets.
- Scope of Investee Targets: The scope of PE firms' targets shall be consistent with the scope required by the relevant method.

9.2.4. SDA for real estate private equity investments

PE firms investing in the equity of real estate assets, regardless of the equity share, are required to set targets on 67% of base year activity by square meter. PE firms are required to use the SDA method, which provides sector-specific pathways for the **energy use of residential and service buildings.** The embodied emissions of the buildings' materials are currently not included due to high data uncertainty. Therefore, this method is not applicable to construction or rehabilitation of properties. Annex B in the *FI Guidance* provides details on the application of the method.

In ensuring the 67% coverage, PE firms should prioritize the inclusion of assets in regions where buildings' emissions data or buildings' energy-related data are available, or where data quality is generally higher quality. However, this should not deter PE firms from including assets in regions where only proxy or average data are available.

As a first step to apply the SDA method, the PE firm shall calculate its **financed emissions** for its real estate portfolio. The SBTi has identified the Global GHG Accounting and Reporting Standard for the Financial Industry (PCAF 2020), developed by the Partnership for Carbon Accounting Financials (PCAF), as a freely available approach to measure asset-level–financed emissions. PCAF has determined *Outstanding loan or investment amount of properties/Property values at the time of investment* as the factor to attribute emissions to a FI's portfolio (see Annex B in the *FI Guidance*). This attribution factor for the calculation of financed emissions provides flexibility for PE firms to adopt the SDA method, ensuring that the PE firm's equity share in a real estate asset is proportional to its emissions attributed to the firm.

9.2.5. SDA for electricity generation private equity investments

PE firms investing in the equity of electricity assets, regardless of the equity share[21], are required to set targets on 100% of base year activity by kilowatt hour using the SDA method. SBTi has identified 100% as the coverage requirement for electricity generation assets, as transforming the electricity sector is critical to the pathway to net zero emissions in 2050. Electricity generation accounts for 36% of total energy related-emissions today, which is the largest source of energy-related emissions (IEA 2021). In IEA's recently released Net-Zero Emissions by 2050 Scenario (NZE), global electricity demand is projected to increase by 80%

[21] Per note 1 of Table 9.1, if a PE firm has both equity and debt investments in electricity generation assets, they shall include these assets in the SDA target as described in this section, as the requirement to set targets on equity investments takes precedence.

between 2020 and 2050, where global generation from renewable sources must triple by 2030 and grow eight times by 2050 (IEA 2021).

The asset class is also closely linked with **PE-R10 – Phaseout of Thermal Coal Investments** and **PE-R11– Disclosure of Fossil Fuel Investments and Lending**, as the use of fossil fuels in facilities without carbon capture, utilization and storage (CCUS) in electricity generation must decline sharply to reach net zero emissions. For instance, according to NZE, unabated coal-fired generation must decline by 70% by 2030 and large-scale oil-fired generation must be phased out in the 2030s (IEA 2021).

The SDA method covers electricity generation from fuels such as oil, coal, natural gas, nuclear, biomass and waste, hydro, geothermal, wind, solar photovoltaics (PV) and concentrate solar power (CSP), ocean, hydrogen, and other (IEA 2017)[22]. Similar to real estate assets, PE firms shall first calculate the financed emissions of its PE investments in electricity generation. PCAF has determined *Outstanding amount versus the total balance sheet (i.e., equity + debt)* as the factor to attribute private companies' emissions to a FI's portfolio (PCAF 2020). For electricity generation projects, the attribution factor is *the ratio between the institution's outstanding amount (numerator) and the total equity and debt of the financed project (denominator).* Annex C in the *FI Guidance* provides details on the application of the method.

9.3. Asset classes: private equity direct investments including buyout, growth capital and venture capital

9.3.1. Definition

For the purposes of this *Guidance*, this category is considered to include equity investment in both business to business (B2B) and business to company (B2C) type commercial businesses and infrastructure assets which are operated by a PE firm. Investments in real estate private equity are discussed separately in Section 9.2.

Private Equity Direct Investments typically involve medium to long-term finance provided to businesses in return for an equity stake. This is more usually in unlisted companies, but situations do arise where a listed entity is acquired to become private (public to private). Each Fund will make multiple such investments with the businesses invested in being referred to as PCs.

The relative percentage of equity owned will vary. Equity stakes are generally categorized into Majority (>50% equity) or Minority (<50% equity) positions. The larger the equity stake, the greater the influence that can be exerted on the business. In certain circumstances, this influence will be exerted through the GP receiving a Board Seat. On occasion a number of GPs will partner to acquire a stake in a business, or a GP will invite an LP to make a direct investment ("co-investment").

[22] Treatment of investments leading to negative emissions from the power sector, such as bioenergy with carbon capture and storage (BECCS) and carbon capture and storage (CCS) are currently out of scope. This topic will be revisited once the GHG Protocol removal guidance is developed and as part of the SBTi's net-zero target discussion.

The equity positions are usually held for three to five years, albeit holds of up to ten years will occur. Longer terms may occur where the investment is in infrastructure assets. During that hold period the GP will work with management to help them achieve significant growth, both organically, and through the acquisition and merger of “bolt-on” businesses. At exit, the GP will sell its stake in the business or asset either through a private sale or an initial public offering (an “IPO”).

This *Guidance* section focuses on three main strategies within private equity direct investments: buyout, growth capital, and venture capital. These three strategies differ mainly in the maturity of the PCs invested in, the amount of equity and debt held by investors, and how actively investors are involved in the management and transformation of the PCs.

Buyout, as the largest strategy segment in terms of total assets under management, is an investment strategy where the investor often holds full or majority control of the company with a combination of equity and debt. The investor often replaces the PCs management team and is relatively involved in making operational decisions. Companies targeted in buyout strategies are typically mature companies (Private Equity & Venture Capital 2021).

Growth capital is a PE investment in relatively mature companies that are looking for primary capital to expand and improve operations or enter new markets to accelerate the growth of the business. The PCs invested in are usually less mature than those targeted in buyout but more mature than venture capital (discussed below). Investors in growth capital usually take minority positions in companies they believe have growth potential (“Private Equity & Venture Capital” 2021).

Venture capital is where PEs investment funds an early stage (seed and start-up) or expansion venture. Offsetting the high risk, the PE firm takes is the expectation of higher-than-average return on the investment.

9.3.2. Recommended method and relevant criteria

As shown in Table 9.1, SBTi requires that the GP, or the PE firm, use the **SBT portfolio coverage method** to set targets on its managed funds and the underlying PCs, excluding real estate and electricity generation assets for which the SDA method is required (see Section 9.2). Through their direct equity stake, GPs and the relevant LPs have significant influence over their PCs. Overall, setting an SBT through the SBT portfolio coverage method requires a GP to consider GHG emissions reduction for all future investment decisions.

SBTi has devised the following target boundary requirements for buyout, growth capital, and venture capital, considering PE firm’s influence within each strategy and the portfolio companies' maturity and ability to reduce their GHG emissions.

Buyout with ≥ 30% of the fully diluted shares of the PC AND board seat(s) A PE firm that has over, and including, 30% share of a PC and at least a board seat shall leverage its influence to engage PCs to make low-carbon transitions through setting SBTs. Minority investors in buyouts tend to be in more passive positions and have limited influence over the PCs, as they may be investing alongside another leading PE fund that’s driving the acquisition and strategy or in a syndicated stake in the PCs. This may take shape in funds that traditionally focus on mezzanine

or debt-like investments that are investing alongside a primary sponsor (i.e., the buyout fund) of a deal. Given these reasons, SBTi proposes the threshold of 30% of shares with at least one board seat for consultation.

Growth equity ≥ 20% of the fully diluted shares of the PC AND board seat(s) While growth equity funds typically invest in minority shares, these investments are often convertible preferred equity investments that grant the investors more shareholder rights to drive the strategy and outcomes despite owning minority shares. This includes ability to approve annual budgets, capital expenditure and appointing new C-suite members. For these reasons, SBTi proposes a slightly lower threshold of 20% of share with at least one board seat for consultation, given that more influence is yielded by minority shares in growth equity investments.

Venture capital is considered an optional asset class given that PCs targeted by venture capital are often early stage and are expected to grow significantly, and thus may not be able to address their climate impact at the current stage.

Portfolio coverage approach. The SBTi requires that PE firms use the SBT portfolio coverage approach for this asset class, as PE firms are well positioned to influence their PCs through their direct equity investments and potentially create greater impact through engaging PCs to go through a rigorous target validation process by the SBTi. As a minimum, a PE firm would commit to having a percentage of PCs to have approved SBTs within 5 years from the time the firm submits targets for a SBTi validation, so that it's on a linear trajectory to have 100% SBT coverage by 2040.

There are several denominator options available to define SBT coverage (see Section XX). SBTi recommends that PE firms use scope 1, 2, and 3 GHG emissions of PCs as the denominator to define SBT coverage. If that information is not known, scope 1 and 2 emissions of PCs, or financial metrics such as invested capital may also be used. Given the percentage linear increase of SBT companies required by the method, and the recommendations around grace periods and engagement credit extension set out below, reaching the minimum SBT coverage between years is achievable even if particular PCs are in an acquisition or at exit stage.

PE firms also have flexibility to strategically identify PCs that are suitable candidates for SBT adoptions.

PE firm's SBT portfolio coverage targets must meet the following criteria:

PE-C17.2 SBT Portfolio Coverage Approach:

- Boundary: PE firms shall set SBT Portfolio Coverage targets as specified in the Asset Class Required Activities and Methods Table 9.1 In practice, this means PE firms shall include PCs in all required categories as specified in Table 9.1. in the denominator for the calculation of percentage SBT coverage, detailed below. SBTi recommends that PE firms use scope 1, 2, and 3 emissions of PCs to define SBT coverage. If that information is not available, they may use other metrics such as invested capital in the year of acquisition.

- Target Level of Ambition: the PE firm shall commit to having its PCs set approved SBTs such that all current and future funds, starting from the base year selected by the firm, are on a linear path to 100 % SBT coverage by 2040.

  For example, a PE firm starting with 10 % SBT company coverage in 2020 would need to increase coverage by 4.5 % per year (90 / (2040 – 2020) = 4.5) and reach at least 32.5 % (10 + [5 x 4.5] = 32.5) coverage by 2025.

- Target Formulation: In the public target language, PE firms shall include the percentage of PCs that will have their SBTs approved in the target year using the selected metric.

  $$\%\ SBT\ coverage\ = (Number\ of\ PCs\ with\ approved\ SBTs \times selected\ metric)\ /\ (Number\ of\ all\ existing\ PCs \times selected\ metric)$$

- Target Time frame: The PE firm's portfolio coverage target must be fulfilled within a maximum of five years from the date the firm's targets are submitted to the SBTi for validation. Fulfillment of the portfolio coverage target means that the PCs' SBTs have been approved by SBTi. Long term targets for 2040 or 2050 are highly encouraged alongside the short-term five year target.

- Scope of PC Targets: PCs shall follow the latest SBTi criteria for companies to set scope 1 and 2 targets, as well as scope 3 targets when their scope 3 emissions are more than 40 % of total scope 1, 2, and 3 emissions.

Private equity in the investment cycle is largely illiquid as PE firms are somewhat bound to their investments with PCs for a hold of typically three to five years. The *FI Guidance* on the other hand more broadly applies to FIs that hold liquid investments that can be more easily traded out or in. Therefore, to ensure the portfolio coverage approach and the temperature rating approach can work in practical terms for the private equity landscape, the following **Additional Recommendations** to the portfolio coverage approach have been provided. PE firms are encouraged to shorten the grace periods and engagement credit extension periods where practicable.

9.3.2.1. Setting the target

Existing Positions. PE firms should focus on new acquisitions when devising the SBT engagement strategy. PE firms may decide that existing PCs that are about to be sold, e.g., three years from the time the PE firm submits targets to SBTi for a validation, are not the focus of the engagement.

The linear percentage increase logic of year-on-year of the portfolio coverage approach method implies that PE firms setting SBT for the first time should find it feasible to meet the target in the early years, even considering existing funds.

Grace period. Using the portfolio coverage approach method, PE firms may devise a grace period from the point of a deal being secured to encourage the practical application of the SBT. This includes the 30 business day period required for SBTi to validate the target ("FAQs" 2021).

SBTi recommends that this grace period should not exceed three years from the securing of the deal.

This helps to ensure the PE firms are still able to focus on the broad transformational change of their PCs' core governance, management structures, risk management, legal, compliance, accounting, human resources, health and safety, etc., to then set SBTs as part of developing and implementing new growth strategies.

The SBTi recommends that during this time and as part of the 100-day plan post deal, or equivalent, the PC should implement the intent to measure their GHG emissions print throughout the grace period to improve the potential ambition of SBT upon validation. This also helps recognize any GHG emissions reductions made during the transformational change from the PE firms influence.

9.3.2.2. Tracking annual SBT portfolio coverage

Acquisition of companies with approved SBTs. If PE firms acquire PCs with existing approved SBTs, these PCs should be included in the percentage SBT calculation. Such acquisitions will directly contribute toward the achievement of portfolio coverage approach. This encourages PE firms to acquire PCs with approved SBTs that will help their progress toward their portfolio coverage. With the ongoing strong momentum of companies joining SBTi and investors engaging their investees and borrowers to set SBTs, in theory, PE firms will have a larger universe of companies with approved SBTs to invest in.

Engagement Credit Extension. Using the portfolio coverage approach, PE firms are granted an extension period of up to three years for their engagement efforts from the point of exit of that PC to ensure that PE firms are not penalized for selling the PC. In practice, this means PE firms may include PCs they successfully engaged to set approved SBTs, that have been subsequently sold, in the percentage SBT calculation (i.e., both the numerator and denominator), for up to three years after exit. This extension period **does not** apply to PCs with existing SBTs at the point of acquisition.

The time horizon for PE firms to sell the PCs outside of a typical five-year term can range from a two-year early exit (approx. two-year holds) to a four-year late exit (approx. nine-year holds). This means that PE firms are constantly in an uncertain flux with both exits and acquisitions. PE firms are able to use the three-year engagement extension period to sufficiently smooth out the inherent noise within the exit/acquisition PE landscape.

9.3.3. Example: Setting a SBT portfolio coverage target considering portfolio turnover

Several key factors should be considered when applying the SBT portfolio coverage method to a PE firm. As PE firms often hold PCs for typically 5 years, it’s important to clarify the implications of increasing SBT coverage on an ever-shifting portfolio. At the time a firm sets an SBT, it likely has existing positions in PCs that it plans to sell very soon, and hence it might be difficult and inefficient to engage these PCs to set SBTs. As PE firms continue to raise capital and make new investments, their SBT coverage may fluctuate depending on the type of

companies acquired and whether they intentionally invest in companies that already have approved SBTs.

This section presents an example of applying the SBT portfolio coverage method to an illustrative PE firm, Transition Capital, that has three funds in its portfolio - Fund A, B and C in 2020:

- Fund A consists of existing positions. It has been fully invested and the firm is starting to exit from some of the PCs. The firm used “buy and build” strategies and merged existing PCs with new “bolt ons” to achieve significant growth. Some parts of the existing PCs are sold as separate entities over the years. All shares in Fund A are majority (<50%) shares.

- Fund B is raised in 2020, and the first investments are made starting from 2020. The firm envisions a similar strategy for Fund B as for Fund A. All shares in Fund B are majority shares.

- Fund C is a new venture capital fund. Their PCs’ emissions start at a very minimal level but are expected to grow as they expand their business and through the firm’s “buy and build” strategies. All shares in Fund C are minority shares of 20~30%.

It's the year 2020, and Transition Capital would like to submit its SBTs this year. Following the **Target Timeframe** criterion, the latest target year allowed for the required short-term target would be **2025**. A quick review of the three funds reveals that no existing PCs have set SBTs. Therefore, Transition Capital is starting at 0% SBT company coverage in 2020, and would have to achieve 25% SBT coverage in 2025 to be on a linear trajectory to 100% SBT coverage in 2040:

- Minimum annual linear increase of SBT coverage: (100%-0%)/ (2040-2020) = 5%

- Minimum target year SBT coverage: 5% x (2025-2020) = 25%

Transition Capital has not yet calculated all of its existing PCs’ scope 1, 2, and 3 emissions. Therefore, it decides to use invested capital at the time of acquisition as the metric to define SBT coverage. The firm selects this metric as it’s stable over time for consistent tracking. In contrast, metrics such as company value will fluctuate significantly as the firm undergoes “bolt on” acquisitions or sells off parts of existing PCs (shown in red text in Figure 9.1).

Transition Capital proceeds to devise different engagement strategies for its three funds. For Fund A, the Firm only plans to engage two companies that they plan to hold for at least four more years to set SBTs. For most PCs that are about to be sold within three years, the firm follows SBTi’s recommendation on **Existing Positions** and decides that they will not be the focus of engagement.

For Fund B and C, the Firm still has strong levers to influence the PCs to set SBTs as the investments have just been made. For new investments the Firm projects to make up to 2025, it plans to include emissions measurement and SBT setting as a requirement in these PCs’ 100-day plan.

Figure 9.1. Example portfolio coverage approach method for Transition Capital's funds.

	Year when SBTs are set
	Year holding the PC
Number	Changes in PC value
Number	Hangover of approved SBT PCs

Fund A - Fully invested exiting positions

		Base year					Target year				
PC	**Metric used for %SBT calculation**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
		Cells show value of PCs, with fluctuates over time, with carve-out sales and build and buy strategies.										
1	1000	1000	1000									
2	1500	1500	2000	2000								
3	2000	2000	2000			*50% of company sold in 2023*						
4	1000	1000	1000	1000	500	500	500					
5	800	800										
6	1000	1000	1000	1500	1500	*Build and buy*						
7	2000	2000	2000									
8	700	700	700	700		*Organic growth*						
9	1000	800	800	1000	1000	1000	800					
10	2000	2000	2000									
Weight of SBT companies		0	0	0	1800	1800	1000					
Extension of exited SBTi approved PCs		0	0	0	0	0	800					
Sum		0	0	0	1800	1800	1800					

Fund B - Raised in 2020. First investments from 2020

PC	**Metric**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
1	1000	1000	1000	1000								
2	1500		1500	1500	1500	2000	2000	*Build and buy*				
3	2000		2000	2000	*Occasional very quick buy and sell-on*							
4	1000				1000	1000	1000	1000	1000			
5	800			800	800	800	1000	1000	*Build and buy*			
6	1000					1000	1000	1000	1000			
7	2000					2000	2000	2000	1000	1000	*50% sold*	
8	700					700	700	700				
9	1000					800	800	800	1000	1000	*Build and buy*	
10	2000					2000	2000	2000				
Weight of SBT companies in the year		0	0	0	0	1500	2500	4800	4000	2000		
Extension of exited SBTi approved PCs		0	0	0	0	0	0					
Sum		0	0	0	0	1500	2500					

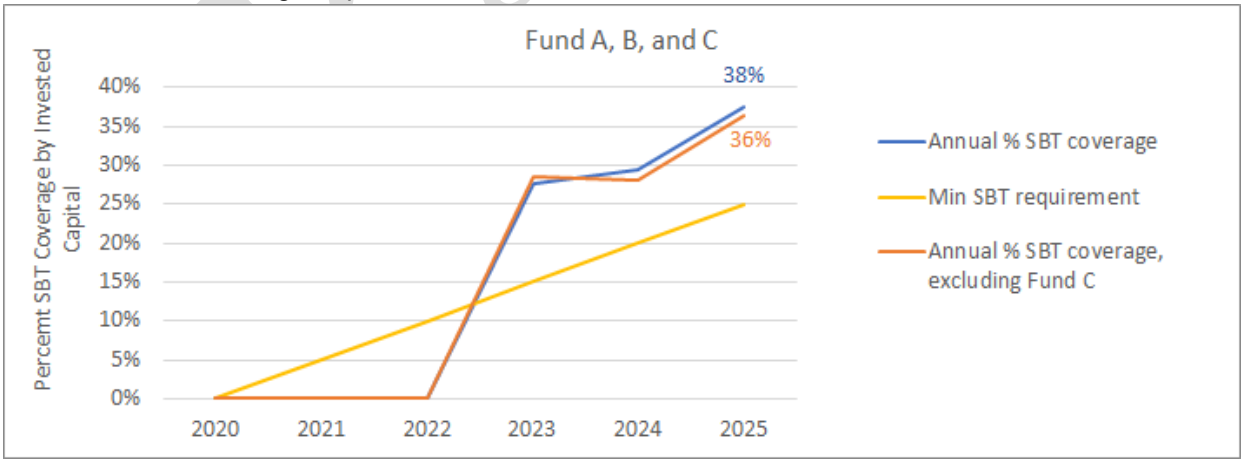
Fund C - New Venture Fund												
PC	Metric	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	50	50	50	50	*Organic growth*							
2	100	75	75	100	100	100	75					
3	100	100	100	100	100	100	100					
4	100		100	100	100	100	100					
5	75		75	75	75	75	75					
6	150			150	150	150	150					
7	75			75	75	75	75					
8	100			100	100	100						
9	100				50	50	100	100	100	*Build and buy*		
10	100				100	100	100					
Weight of SBT companies in the year		0	0	0	175	325	75					
Extension of exited SBTi approved PCs		0	0	0	0	100	350					
Sum		0	0	0	175	425	425					

Source: Authors.

Transition Capital assumes that it will take a PC on average three years to have its SBTs approved and included this assumption in the modeling of SBT coverage up to 2025 (shown in navy cells). It also follows the **Engagement Credit Extension** recommendation and continues to include PCs that it successfully engaged to set SBTs in the numerator and denominator for the SBT coverage calculation.

Given the metric selected to calculate SBT coverage, the engagement strategy, the assumption of a three-year period to attain SBT approval, and the **Engagement Credit Extension** period, Transition Capital projects that it will reach 38% SBT coverage in 2025 for all three funds, exceeding the minimum requirement of 25%. Given that Fund C consists of venture capital that are optional to be included in the target boundary, Transition Capital also calculates the SBT coverage excluding Fund C and finds that it can still reach 36% SBT coverage covering only Fund A and B.

Figure 9.2. Transition Capital's annual percentage of SBT coverage by invested capital, compared to SBTi's minimum coverage requirement.



Source: Authors.

After conducting the exercise above, Transition Capital feels comfortable to submit a target that commits itself to achieve 36% SBT coverage by invested capital by 2025, covering Fund A and

B for the moment. Building on this exercise, it also plans to further project the target up to 2030 and 2040.

9.4. Asset classes: secondaries and funds of funds

9.4.1. Definition

9.4.1.1. Secondaries

A secondary investment is the purchase of an existing LP interest in a private equity fund. It can also be the purchase of a directly held ownership interest in a private company, which is known as a direct secondary. These transactions provide some liquidity to sellers that often include FIs such as banks, pension funds, insurance companies, corporations, government bodies, and family offices.

Secondary investors are inherently at least one step removed from the underlying investee companies. Secondary investors are not the GP, so direct engagement with PCs is often restricted. Secondary investors also have limited influence over the timing of exit processes given that they have come into the fund or portfolio investments at a later date.

Secondary investors do however have an investment in the underlying assets of a manager, so there is greater influence over manager strategies, especially when they are making direct secondary investments.

9.4.1.2. Fund of funds

A fund of funds is a pooled investment fund that invests in other types of funds. A fund of funds is often created to provide investors more access to certain fund types and the support necessary to manage investments in private equity, debt, secondaries, etc.

Fund of funds investors are inherently at least one step removed from the underlying investee companies, debt etc. Direct engagement with PCs is often restricted because of this fund framework.

In the case of fund of funds investing in private equity portfolios specifically, investors do have an investment in the underlying assets of a manager, so there is greater influence over manager strategies.

9.4.2. Recommended methods for optional targets

As secondaries and fund of funds are optional asset classes, PE firms may decide what percentage of these asset classes they wish to cover, if at all. SBTi recommends adopting any of the three methods if the PE firm has the relevant data to be able to set SBTs.

9.4.2.1. Funds of funds

The temperature rating approach offers the most flexibility as the funds of funds, and more so secondaries, are at arm’s length from influencing PCs. Therefore, the temperature rating approach does not require the PC to set their own SBT but to work toward reducing their temperature score within a five year time frame.

9.4.2.2. Secondaries

Secondaries firms may also optionally set GP engagement targets internally to promote climate initiatives and SBT's in certain circumstances. SBTi recommends that secondaries firms strive to achieve a linear trajectory to 100% by 2035, when the majority of SBTi GPs have theoretically set SBTs for a 2040 timeline, in line with SBT portfolio coverage method timeline and reasoning.

At present the SBTi do not have any formal and approved method for GP engagement and thus this target cannot be validated by the SBTi and would remain an internal tracking, good will exercise from secondaries firms. SBTi appreciates the leverage and influence secondaries firms have over PCs is minimal, being often more than an arm's length from the PCs, and at a later stage in the PCs investment. However, SBTi does recognize the relationships secondaries firms have with GPs and thus it is the intention of the SBTi to bring a formal GP engagement target method into place in a future iteration of this *Guidance*. Thus, it is important for secondaries firms to adopt the principles as set out below, to ensure a non-cold start when the method is formally launched to validate the target.

<u>Principles of a GP Engagement Internal Target for Secondaries</u>

Secondaries firms are recommended to set a target percentage of GPs they engage with to pursue climate initiatives and/or set SBTs themselves. Secondaries firms are recommended to choose their own unit of measure to highlight the form engagement takes for these calculations. A number of actions can be undertaken by the secondaries firm to engage GPs with the SBTi, and in doing so the secondaries firm should clearly and transparently attribute both the success and failure of the engagement in GPs adopting a SBT.

The first step for the secondaries firm is to set a target percentage of GPs they engage with to pursue climate initiatives and/or set SBTs themselves.

The second step the secondaries firm should take as a prerequisite to any engagement is to ensure their own carbon screening is in order for all new investments by:

- Screening for higher carbon aware GPs in an investment opportunity
- Screening for higher carbon risk assets in a portfolio opportunity
- Screening for higher carbon opportunity (transition opportunities) at the asset level within a portfolio opportunity where granularity is possible
- Asking relevant climate related questions at due diligence (the GP and asset level)

The third step for the secondaries firm is to engage GPs with the SBTi agenda via existing ESG avenues:

- Promoting the secondaries firm own ESG Policy and approach (including on climate)
- Supporting GPs to develop their own ESG policies
- Learning about GP's existing ESG policies and approaches through research and engagement discussions
- Providing side letter during due diligence promoting or requiring SBTs
- Sharing information (in various formats) with underlying GPs on ESG and/or specific ESG factors or issues (e.g., climate change, climate risk, net zero, SBTs)
- Delivering ESG workshops for GPs
- Issuing surveys to monitor key changes to ESG practices of underlying GPs (including on climate)

- Promoting working groups such as CDP, SBTi and the UN-PRI
- Reporting on progress, asking underlying GPs about their commitments to SBT
- Commenting on existing approaches to managing ESG (including climate where material)
- Making connections within the investors own network of ESG experts (including on climate)
- Delivering climate workshops with and for underlying GPs
- Undertaking joint visits to certain “assets” and providing observations from the perspective of ESG (including on climate)
- Promoting net zero and SBTs through bespoke engagements at those GPs post deal (perhaps also involving SBTi)
- Reporting on progress (for example tracking and recording the commitments made by underlying GPs about net zero)

The fourth step is to continually record and consolidate the success of the engagement via the established engagement metrics, e.g., number of GPs who have set SBTs due to secondaries led climate workshops and track the success of the influence against the target set.

9.5. Asset class: credit / private debt

9.5.1. Definition

A debt fund comprises private equity backed capital that loans money to buyers or owners of companies or assets, as opposed to acquiring equity.

Private debt is not traded or issued in an open market. Lending private debt can be to both listed or unlisted companies, as well as to real assets such as infrastructure and real estate.

There are a multitude of private debt sub-strategies each with differing and relative risk/return characteristics as set out in *Table 9.2* below.

Table 9.2. Private debt sub-strategies[23].

Debt sub-strategy	Description
Direct lending	Typically, senior loans made to mid-market companies without an intermediary.
Distressed debt	Differs from special situations in that it generally involves the purchase of securities in the secondary market, rather than new origination of debt or structured equity.
Infrastructure debt	Debt used for infrastructure development and investment in existing assets, generally with longer terms (30+ years) because of the extended useful life of the assets.
Mezzanine debt	Subordinated debt that is repaid after senior debtors are repaid in full. Mezzanine debt is often used in LBOs.

[23] See footnote of Table 9.1. The SBTi recognizes that mezzanine and special situations often have significant equity, thus ‘required’ asset classes and methods of Table 9.1 apply in the first instance. For instance, if a PE firm’s mezzanine debt has for example 30% equity in a company, then the portfolio coverage approach would apply and the debt portion would not be required to be covered by the credit/ private debt asset class temperature rating method, to avoid duplication of target coverage of the same company.

Real estate debt	The most common real estate debt strategy is direct lending for real estate acquisitions. This may include the buying and selling of securitized real estate loans in the secondary market.
Special situations	Debt or structured equity investments made with the intent of gaining control of a company; generally, one in financial distress.
Venture debt	Debt financing extended to companies with venture capital backing. For entrepreneurs, venture debt serves to extend the runway to exit without further diluting ownership.

Source: Authors.

Across the sub-strategies of debt, PE firms provide significantly higher volume of lending deals to companies/assets, than the number of deals made in private equity PCs. PE firms therefore offer debt products that are pre-packaged to attract off the shelf interest. Of these credit products, PE firms also provide syndicated debt (from a group of lenders) and so the deployment of an SBT should consider where the PE firm has most influence over the borrower company as a starting point, e.g., sole bilateral direct lending, as opposed to syndicated debt.

9.5.2. Recommended method and relevant criteria

As shown in Table 9.1, SBTi recommends that the PE firm uses the **SBT temperature rating** method to set targets on the optional asset class of credit / private debt. Through the lending that PE firms offer, there are opportunities to influence borrowers (companies receiving loans from PE firms) in aligning with a 1.5°C world.

Since the temperature rating is optional, there is no minimum coverage, so the PE firm can decide its own coverage. The SBTi recommends that PE firms in the asset class credit / private debt cover 67% of borrower companies from the first year of adoption and adopt a principle of transparency to ensure the yearly disclosure of companies that have and have not set temperature rating targets, as well as those that have and have not met their targets to reduce their temperature scores. The SBTi recognizes that in certain years the borrower company might not meet the intended scores and in other years they might improve the scores significantly as the investment in GHG emissions reduction is not linear.

The temperature rating approach allows the PE firm to set temperature rating targets for each borrower company. The method uses an open-source framework to enable the translation of any existing GHG emissions reductions targets into temperature scores at a borrower company level. If the borrower company has an existing GHG reduction target, the method can be used to generate temperature scores to translate target ambition to a common intuitive metric, temperature. If the borrower company does not have an existing GHG reduction target, a generic temperature score of 3.2°C is applied.

The intent of the target rating approach is for PE firms to align and set the borrower companies' own scope 1 and 2 temperature score with a minimum well-below 2°C scenario, and in addition align their PCs to a minimum 2°C scenario for the PCs own scope 1 + 2 + 3 by 2040.

The temperature rating approach is likely to require more time in generating the ratings initially than that portfolio coverage approach but is overall softer in the targets. This is due to the borrower company only needing to set a temperature rating, disclosing the actions and evidence for meeting that temperature rating, rather than each borrower company setting their own SBT

as required under the portfolio coverage approach. However, in order to set a temperature rating the borrower company will require emissions data unlike the portfolio coverage approach. Where emissions data is not readily available for the borrower company, alternative robust emissions data should be obtained, such as is offered by CDP.

Direct lending. PE firms that provide direct lending are strongly recommended to leverage this position to engage the company's management to ensure the company also reduces their GHG emissions, as a condition of the lending, on a trajectory toward a 1.5°C temperature rating. Whilst it is recommended the borrower company sets a SBT, it is not a requirement of the temperature rating method.

The temperature rating method requires the borrower company to provide information around their own GHG emissions reduction target at the time of lending. If the company does not have a target, they will be given a default temperature score of 3.2°C once all data inputs are satisfied within the tool, i.e., emissions data.

The individual scores for scope 1 + 2 and scope 3 (if scope 3 emissions are greater than 40% of total scope 1, 2 and 3) are aggregated to produce an overall scope 1 + 2 + 3 score. This is completed with GHG inventory data and ultimately the output is weighted to produce scope 1 + 2 + 3 scores. The weighting also considers the coverage of emissions data, where the lower the coverage the higher the likely temperature score will be.

Once the scores are established and if the PE firm has adopted a target and set a timeframe of achieving the target, e.g., five years, it is then the PE firms' responsibility to ensure that the borrower company reports their emissions reductions and recognizes their temperature score reductions year-on-year toward their target for the period of the loan.

Other private debt sub-strategies. Whilst direct lending has the clearest opportunity for influence through engagement with the borrower company, SBTi recommends that PE firms align other sub-strategies of debt where there are opportunities to engage and set temperature rating targets. This is especially so where the PE firm is lending to firms that have strong sustainability credentials, existing GHG inventories and targets, or where the PE firm can influence the borrower company to achieve these.

PE-C17.3 – Portfolio Temperature Rating Targets

PE firms' targets to align the Temperature Rating of their credit / private debt with ambition of the Paris Agreement are considered acceptable when the following conditions are met:

- Boundary: PE firms should set temperature rating targets following the relevant target boundary requirement in Table 9.1 of this Guidance.
- Target Level of Ambition: PE firms should align their borrower companies' scope 1 + 2 temperature scores with a minimum well-below 2°C scenario and in addition align their portfolios to a minimum 2°C scenario for the scope 1 + 2 + 3 portion by 2040. Alignment with more ambitious scenarios such as 1.5°C is highly encouraged. Separate targets for scope 1 + 2 and for scope 1 + 2 + 3 should be set.

PE firms should commit to reducing their borrower companies' temperature scores such that the PE firm is on a linear path to the stated goal by 2040. For example, a PE firm starting with scope 1 + 2 portfolio temperature score of 2.9°C in 2020 would need to decrease its portfolio (borrower companies) temperature by at least 0.0575°C per year ([2.9°C – 1.75°C]/ [2040 – 2020]) = 0.0575°C and reach at least 2.61°C portfolio temperature score by 2025.

For example, a PE firm starting with scope 1 + 2 + 3 portfolio temperature score of 3.2°C in 2022 would need to decrease its portfolio temperature by at least 0.06°C per year ([3.2°C – 2°C]/ [2040 – 2020]) = 0.06°C and reach at least 3.02°C portfolio temperature score by 2025.

- Target Time frame: Portfolio alignment targets must be fulfilled within a maximum of five years from the date the targets are submitted to the SBTi for an official validation. Long term targets for 2040 or 2050 are highly encouraged alongside the short-term five year target.

- Scope of borrower company: PE firms' borrower companies' targets shall include coverage of scope 1 and 2 emissions, as well as scope 3 emissions when their scope 3 emissions are more than 40 % of total scope 1, 2, and 3 emissions.

To ensure the temperature rating approach can work in practical terms for the private debt landscape, the following **Additional Recommendations** to the temperature rating approach have been provided.

9.5.2.1. Setting the target

To ensure that the most representative temperature scores are produced at the time of setting the targets for the loans where the PE firm has the most influence to encourage a reduction of the borrowers GHG emissions, the following two recommendations are provided:

Existing Loans. PE firms should focus on existing direct lending loans where there is a strong existing engagement in place with the borrower company. Whilst all direct lending is within the recommended boundary, PE firms may decide that existing loans where there is less potential PE firm influence, are not the focus of the engagement.

9.5.2.2. Tracking target progress

Sustainability linked loans offer an opportunity in the credit space for incentivizing companies to meet their targets, to help improve the rates of the loan which in turn benefits the lender from new market growth. Appreciating that not all PE firms will be offering such products, the key to implementing and then tracking target progress will be engagement.

Engagement plan. Using the temperature rating method, PE firms are encouraged to set out engagement plans with borrower companies as a condition of all new direct lending loans, and to align with the requirements of the temperature rating method. The engagement plan should require the borrower company to measure its GHG emissions and disclose the actions being taken to reduce emissions.

New Loans. Using the temperature rating method, PE firms may devise a grace period from the point of the direct lending loan deal being secured to encourage the practical application of the SBT. This includes the time required for SBTi to validate the target. SBTi recommends that this grace period should not exceed three years from the securing of the loan deal. **Engagement credit extensions** are not applicable to the temperature rating method for credit / private debt as PE firms are not unfairly penalized for loan repayments, as the volume, cadence and consistency of loan deals is higher when comparing against PE direct investment deals.

The SBTi recommends that during this time and as part of the borrower engagement, the borrower should implement the intent to measure its GHG emissions throughout the grace period to improve the potential ambition of SBT upon validation. This also helps recognize any GHG emissions reductions made during the transformational change from the PE firm's influence.

9.5.3. Example: setting a SBT temperature rating target considering influence

Transition Capital develops a new direct lending loan. Borrower company 'Borrower A' approaches Transition Capital for the new direct lending loan which includes the requirement to align with the Transition Capital's requirement of a SBT via the temperature rating method. Transition Capital's loan also requires Borrower A to measure its annual GHG emissions at least once within two years of agreeing to the loan deal and to annually report to Transition Capital the actions being taken to reduce GHG emissions together with their annual GHG emissions.

Borrower A agrees to the deal and Transition Capital supports Borrower A in obtaining its GHG emissions inventory and GHG emissions reduction action plan (net zero strategy) in the first year prior to the loan.

Three months prior, Transition Capital adopted its own SBT for the first time, on its existing direct lending with the intention to roll the SBT out for all new future direct lending loans. Transition Capital obtained the GHG data available for borrower companies that had their own GHG emissions reductions targets, to use for the temperature rating scoring.

Using the temperature rating tool, and realizing many borrowers did not have GHG emissions reductions targets or emissions data (80%), Transition Capital reached out to CDP to obtain representative emissions data. Once the emissions data was received, Transition Capital ran the online temperature rating tool and used the weighted average temperature score method to generate a temperature score for Scope 1 + 2:

$$\frac{(90{,}000\text{tCO}_2\text{e} * 1.8°C \text{ borrowers with targets}) + (300{,}000\text{tCO}_2\text{e} * 3.2°C \text{ borrowers without targets})}{90{,}000 + 300{,}000}$$
$$= 2.88°$$

The process was repeated for Scope 1 + 2 + 3:

$$\frac{(450{,}000\text{tCO}_2\text{e} * 1.8°C \text{ borrowers with targets}) + (2{,}100{,}000\text{tCO}_2\text{e} * 3.2°C \text{ borrowers without targets})}{450{,}000 + 2{,}100{,}000}$$
$$= 2.95°$$

The target covers scope 1 + 2 portfolio temperature score of 2.88°C in 2020 and so needs to decrease its portfolio (borrower company) temperature by at least 0.069°C per year ([2.88°C – **1.5°C**]/ [2040 – 2020] = 0.069°C) and reach at least 2.54°C portfolio temperature score by 2025 for a **1.5°C** alignment.

The scope 1 + 2 + 3 portfolio temperature score of 2.95°C in 2020 needs to decrease its portfolio (borrower company) temperature by at least 0.0475°C per year ([2.95°C – **2°C**]/ [2040 – 2020] = 0.0475°C) and reach at least 2.71°C portfolio temperature score by 2025 for a **2°C** alignment.

A year later, Borrower A has obtained emissions data, a GHG emissions reduction target and GHG emissions reduction actions and shares them with Transition Capital. Annually, Transition Capital uses the temperature rating score for all new and exited loans and adopts borrower company data to lower their scores and improve overall asset class performance. Transition Capital annually discloses the actions borrower companies are taking to reduce carbon to SBTi. Moreover, Transition Capital regularly runs the online tool to track progress toward the target temperature as more borrower companies measure and set GHG emissions reductions targets throughout the year, as an early indicator of progress, or where more engagement is required where possible.

10. How to track targets and disclose progress

Once SBTs are approved, the PE firm is required to track progress toward the SBT annually (**PE-C20 – Tracking and Reporting Target Progress**) and disclose progress leveraged over its investments. The PE firm may decide where to disclose its target progress, and examples include annual reports, the firm's website, CDP, etc. (**PE-R12— Where to Disclose**).

This chapter provides recommendations on target tracking and disclosure specific to the asset classes and methods described in Chapter 9. SBTi has developed target tracking and disclosure guidance to enhance transparency around progress against approved targets, as well as actions taken on asset classes not currently covered by targets.

10.1. Target tracking and disclosure for required asset class

10.1.1. Tracking and reporting target progress for private equity investments

SBTi recommends the following information to be included in a PE firm's annual reporting for its SBT portfolio coverage target on private equity investments, as an opportunity for PE firms to report new acquisitions, exits, and provide transparency around its SBT coverage calculation approach (i.e., whether the firm used the engagement credit extension):

Annual SBT coverage. As described in PE-C17.2 Portfolio Coverage Approach.

Number of new acquisitions. New PC acquisitions and significant acquisitions within a PC such as a merger.

Percentage of new acquisitions with approved SBTs. To provide transparency around whether the firm is strategically buying companies with existing SBTs.

Disclosure of majorities. Annual reporting under the SBT commitment strongly recommends disclosure of strategic engagement for majorities, using the metric denominator to show where the engagement has been targeted and what influence the PE firm was able to have over their investments. PE firms should target the biggest emitters, that are not in the portfolio coverage for the SBT, with engagement and disclose the reasons why influence is difficult to gain traction.

Disclosure of PE direct investments not covered by targets. PE firms are recommended to annually disclose where they have encouraged SBT setting for all new PC acquisitions beyond the boundary of their targets (e.g., a minority hold in growth equity with 10% of share). Furthermore, if the PC has not adopted an SBT they should state why not and explain what else the PC are doing with GHG reduction, specifying info on the nature or their industry, their growth projections and their planned GHG mitigation measures.

10.1.2. Tracking and reporting target progress for real estate and electricity generation assets

SBTi recommends the following information to be included in a PE firm's annual reporting for its SDA targets on real estate and electricity generation private equity investments:

Progress against SDA targets. If the SDA method is used, PE firms should follow the PCAF standard and track and disclose the emissions intensity of its assets in the relevant emissions intensity metric (e.g., $kgCO_2$ per m^2, $kgCO_2$ per kWh) on an annual basis, along with the percentage of outstanding investment value for this asset class (PCAF 2020). PE firms shall determine a point in time in a given year where the emissions intensity of the asset class is measured and use that consistently throughout the target period.

Percentage of portfolio(s) covered by targets. After ensuring that relevant target coverage requirements are met at the target submission stage, PE firms should continue to report the extent to which SDA targets cover the applicable sector portfolio by the relevant activity unit (e.g., percentage of square meter or kWh covered) on an annual basis.

Inventory rebaselining. Given the three to five year period of a PE firm's investment cycle, rebaselining of asset class level financed emissions may become necessary when PCs are acquired or divested. This is especially relevant as SDA is based on reduction of emissions intensity and divesting from high-emitting assets may lead a firm to artificially lower its portfolio emissions intensity if the inventory is not properly recalculated. In line with the *GHG Protocol Scope 3 Standard* and the *PCAF Standard*, PE firms shall establish a baseline recalculation policy to define under which circumstances a recalculation of (base year) financed emissions is necessary. As part of this base year emissions recalculation policy, PE firms shall also establish and disclose the significance threshold that triggers base year emissions recalculations (WRI and WBCSD 2011). Please refer to page 36 and 37 of the *GHG Protocol Corporate Standard* for guidance around base year emissions recalculation for acquisition and divestment (WRI and WBCSD 2004).

10.2. General disclosure recommendations

More broadly, PE firms are encouraged to disclose actions taken towards engaging PCs within and beyond the scope of their SBTs. They are also encouraged to disclose their target progress on complementary reporting platforms.

Disclosure of engagement. PE firms are recommended to disclose strategic engagement with relevant actors in the applicable asset classes, such as PCs, borrowers, management of the real estate and electricity generation assets. PE firms should target the biggest emitting companies or assets, while also striving to devise decarbonization investment plans for all assets covered and not covered by an SBT. Furthermore, if the asset has not adopted GHG emissions reduction plans or a SBT, they should state why not and explain what else the asset (via the management company) is doing with GHG reduction, specifying info on the nature of their industry, their growth projections and their planned GHG mitigation measures.

Given that several asset classes are optional or have partial coverage requirements, SBTi recommends that the PE firms refer to the following metrics in *Table 10.1* in their annual reporting for any assets not covered by targets.

Table 10.1. Recommendations on metrics for annual disclosure for assets uncovered by targets.

Asset Class		**Target boundary requirement**	**Disclosure requirements**
Private equity direct invest ments	**Real Estate**	**Required partial coverage**	Explain what the real estate assets beyond the 67% threshold are doing with GHG measurement and reduction.
	Buyout and growth capital	**Required partial coverage**	Explain what PCs not covered by targets are doing with GHG measurement and reduction.
	Other minority shares in buyouts and growth equity investments	**Optional**	- % Coverage of SBTs. - Explain what PCs not covered by targets are doing with GHG measurement and reduction.
	Venture Capital	**Optional**	- % coverage of SBTs. - Explain what PCs not covered by targets are doing with GHG measurement and reduction.
Secondaries		**Optional**	% Coverage of engagement with GPs
Fund of Funds		**Optional**	% Coverage of engagement with GPs, LPs and PCs
Credit / Private Debt, including infrastructure debt		**Optional**	% Coverage of SBTs. Explain what direct lending borrowers without SBTs are doing with GHG measurement and reduction

Source: Authors.

Integrated reporting. PE firms are recommended to annually disclose in line with complimentary carbon reporting channels, including TCFD, CDP, GRI, GRESB, etc. The disclosure should scale the climate exposure for additional transparency, where a PE firm's

asset classes do not have required methods, and attempt to tackle where the PC is potentially growing absolute emissions therein.

PE firms should disclose which companies they are engaging with, what their specific demands are, and publish at least annually an assessment of the engagement result. This will increase pressure on the PE industry and drive deeper and faster changes, shining a light behind closed doors to help shift high-carbon companies business models at the pace and scale required by the Paris Agreement.

Public disclosure of climate actions should cover, depending on the PE firm, the adoption of climate-related policies for companies, the integration of the policy in mandates to investment managers and other service providers, a regular assessment of engagement impact, the filling of or support to relevant shareholder resolutions, and divestment decisions if engagement is not deemed relevant or does not deliver within set time frames.

By signaling (i.e., making public) key climate-related decisions and activities, PE firms will significantly amplify their impact. Given the climate urgency, the signaling effect is critical to raise the awareness of peer PE firms, companies, service providers, policymakers, and other stakeholders. It emphasizes the importance of the issue and helps to accelerate efforts from the abovementioned stakeholders.

11. How to communicate SBTs

Given the importance of transparency to stakeholders on the actions of PE firms in reducing GHG emissions, the SBTi provides specific requirements and guidance on how PE firms should communicate their SBTs and strategies to achieve their SBTs. PE firms should not make claims about emission reductions attributed to these strategies or related financial products without credible evidence to support these claims. The detailed target language template is provided in Table 10.1 below and additional guidance on formulating target language is included in the financial sector target submission form and shall be followed by FIs when setting targets.

At the time of target submission, PE firms shall submit a brief summary of the strategy and actions the firm will implement to reach their science-based target(s) and why they selected these actions. This summary shall be provided by the PE firms with their target submission and will be published, along with the science-based targets, on the SBTi website upon target approval.

Table 10.1. Target Language Template for PE firms.

Scope 1 and 2 targets
Absolute target: [PE firm name] commits to reduce absolute scope 1 and 2 GHG emissions [XX]% by [target year] from a [base year] base year. Intensity target: [PE firm name] commits to reduce scope 1 and 2 GHG emissions [XX]% per [unit] by [target year] from a [base year] base year.
Scope 3 Portfolio Targets – Headline Target
[PE firm name] commits to achieve SBTs in [asset classes] by [target year] * from a [base year]. [PE firm name]'s portfolio targets cover [XX]% of its total investment and lending activities by [unit].

*If there are multiple target years of the asset class–specific targets, use the target year that's farthest into the future		
Scope 3 Portfolio Targets – Asset Class Target		
Asset Class	**Method**	**Target Language Template**
Private equity direct investments	SBT Portfolio Coverage	[PE firm name] commits that XX% of its private equity investments by [unit] will have set science-based targets by [target year].
Real estate private equity investments	Sector Decarbonization Approach (SDA)	[PE firm name] commits to reduce its real estate private equity investment GHG emissions XX% per square meter by [target year] from a [base year] base year.
Private debt Fund of Funds	Temperature Rating	[PE firm name] commits to align its scope 1 + 2 portfolio temperature score within the [asset class or sector] from XX°C in [base year] to XX°C by [target year]. [PE firm name] commits to align its scope 1 + 2 + 3 portfolio temperature score within the [asset class or sector] from XX°C in [base year] to XX°C by [target year].
Secondaries	Optional: GP engagement	[PE firm name] commits that its GPs covering XX% of investees by [unit] will have set science-based targets by [target year].
Action Plan to Achieve Targets		
PE firm will implement the following strategy and actions to achieve its targets: Example: [to be provided by the PE firm]		

Source: Authors 2021.

Given that current methods do not cover all asset classes relevant to the PE sector and that the target boundary requirement remains flexible on certain asset classes, PE firms are required to disclose the coverage of their total investment and lending activities by SBTs in the target language (C18), using an economic or emissions metric that is representative of the magnitude of their main business activities. This disclosure requirement is intended to enhance the transparency and comparability of portfolio targets.

Criteria

PE-C18 – Disclosure of Target(s) Portfolio Coverage: At the time of target announcement and along with approved targets, the PE firm shall disclose the percentage of their total investment and lending activities covered by portfolio targets on the SBTi website, in a metric representative of the magnitude of the firm's main business activities, which may involve multiple strategies within the PE context. Examples include total financed emissions associated with investment and lending activities (if quantified), total balance sheet, total investments, total lending book, and total assets under management.

PE-C19 – Implementation Reporting: At the time of target submission, the PE firm shall submit a brief summary of how it intends to meet its scope 3 portfolio targets in conformity with the template provided in the target submission form. This disclosure is intended to create transparency. The content of the summary will not be used as a basis for validation of targets.

At the time of target announcement, the summary of how the PE firm intends to achieve its targets shall be made public.[24]

11.1. Example: Formulating Transition Capital's target language

Transition Capital, with its private equity direct investments and private debt, is a multi-strategy PE firm, and therefore needs to develop target language for both its SBT portfolio engagement target for private equity and temperature rating target for private debt direct lending. Following the target language template, Transition Capital comes up with the following target language for its scope 1, 2, and 3 targets:

- Transition Capital commits to reduce absolute scope 1 and 2 GHG emissions 70% by 2030 from a 2020 base year.
- Transition Capital commits to achieve SBTs in private equity and private debt asset classes by 2025 from a 2020 base year. Transition Capital's portfolio targets cover 80% of its total investment and lending activities by assets under management. Within this target:
    - Transition Capital commits that 36% of its private equity investments by invested capital will have set science-based targets by 2025.
    - Transition Capital commits to align its scope 1 + 2 portfolio temperature score within its direct lending portfolio from 2.88°C in 2020 to 2.54°C by 2025. Transition Capital also commits to align its scope 1 + 2 + 3 portfolio temperature score within its direct lending from 2.95°C in 2020 to 2.71°C by 2025.
- For its private equity direct investments, Transition Capital plans to require new portfolio companies to measure their GHG emissions and set SBTs within three years of acquisition. For its borrowers in its direct lending portfolio, Transition Capital plans to require all new borrower companies to measure their GHG emissions and report their GHG emissions reductions to Transition Capital for annual disclosure progress of temperature rating scores.

12. How to achieve targets

There are numerous actions that PE firms can use to achieve their portfolio SBTs. This section builds on the SBTi's criteria and recommendations for target setting and reporting, and further recommends steps that PE firms can take to fully integrate climate change in their organization and services and achieve their targets in a manner that leads to GHG reduction in the real economy.

[24] PE firms will have opportunities to review the summary language before the SBTi publishes it on the website.

12.1. Integration of climate change in governance

PE firms should integrate climate change across their institution. This can include the following:

- **Adoption of climate-related investment principles.** These should recognize that portfolio alignment with the Paris Agreement will contribute to investing in the best interests of PE firms' investors. Where the PE firms have institutional investors with a fiduciary duty that does not include non-financial performance such as carbon, the PE firm should highlight or seek to mandate the principles of GHG emissions reduction as a fiduciary duty.

- **Establishment of a climate governance structure.** PE firms should make portfolio alignment with the Paris Agreement a Board priority - including explicit attribution of this responsibility within the Board. They should also put governance structures in place that ensure proper support and implementation of the policy including incentive schemes, commitment of resources, capacity building, and involvement of beneficiaries or clients. This integration should be in line with the TCFD governance recommendations.

- **Integration of climate change in the investment and/or lending policy**. PE firms should adopt an investment and/or lending policy that reflects and aligns with their climate-related investment principles to all their funds. This can include depending on the PE firm's fund strategies - investment/ lending targets, strategic asset allocation, engagement objectives, selection/ screening criteria and incentives for service providers based on climate performance, and performance measurement and reporting.

- **Adjustment of strategic asset allocation to harness climate-related opportunities.** PE firms should consider climate risks and opportunities in strategic asset allocation, including increasing their exposure where feasible, over the investment cycle, to alternative asset classes that are more likely to have a direct positive climate impact on the real economy - such as PCs (renewable and energy efficiency companies), infrastructure (e.g., grids and renewable energy and real estate (highly energy-efficient and resilient buildings).

- **Adoption of additional sector-specific policies.** PE firms should extend their investment policy to sectors and technologies that pose particular climate-related risks or offer particular opportunities. These include:
    - Sectors where GHG-intensive companies have a significant potential to offer alternative solutions and thus reduce their emissions—such as power utilities, industrial sectors (steel, cement, chemicals), and automotive; and
    - Sectors that are deemed to shrink and ultimately disappear with the energy transition (e.g., coal, oil, and gas), but where some companies still have the potential to make a timely shift to other business models. The sector policies should define criteria that allow the PE firm to identify to what extent the companies in its fund are able and willing to align their business model with the Paris Agreement, set out a strategy as to how the PE firm will urge companies to adopt 1.5°C transition plans through active ownership, and identify at which point

exposure reduction/divestment is desirable in light of the inability or unwillingness of a company to transition in a timely manner.

- **Development of methods or tools that enable the measurement of the impact of climate actions.** There is currently insufficient clarity about which PE firms' actions lead to GHG emissions in the real economy. PE firms should engage with relevant service providers to develop tools that allow the PE firm to build a better understanding of the impact of their actions on GHG emissions and adjust their strategies according to the findings of these analyses.

12.2. Engagement

Generating impact in the real economy requires all relevant stakeholders to move at the same time. Hence PE firms should leverage the influence they have over companies and policymakers. This will ensure that the rules of the game in which PE firms operate are supportive of their own climate actions. PE firms should work collectively with their peer PE firms to learn, seek advice, share best practice, and, most importantly, increase the impact of engagement activities with PCs and policymakers. They should engage in PE firms coalitions and participate in and drive coalitions that promote the alignment of portfolios with the Paris Agreement, such as the initiative Climate International (iCI) Group.

12.2.1. Company engagement

PE firms should develop an engagement strategy to achieve alignment of their PCs, assets and borrowers with the Paris Agreement - through the adoption and publication of time-bound 1.5°C transition plans composed of the following elements:

- A commitment to align business models with the Paris Agreement and, more concretely, a time bound climate science–based transition target built on forward-looking climate scenario analysis, e.g., a SBT Portfolio Coverage target for applicable funds where all PCs in the boundary of these targets set approved SBTs by 2040.

- The disclosure of the targets and transition plans for alignment with TCFD recommendations. Such information should be published in mainstream financial reports (integrated reporting).

- Capital management plans to end capital expenditure for new high-carbon projects at least where the PE firm has majority control over PCs and increase capital expenditure for low-carbon projects with a clear timeline for the closure of existing high carbon assets.

- A commitment to review and ratchet up targets and transition plans in light of the evolving climate science, in particular the development of more detailed 1.5°C scenarios driven by the Paris Agreement.

- A public commitment to support policies that aim to reduce emissions in line with the Paris Agreement, be transparent about lobbying activities and related expenditures, and

exit third party organizations (e.g., business and trade associations) that promote policies that pose a risk to the achievement of the Paris Agreement.

Given the urgency to tackle climate change, PE firms should have plans in place to ensure PCs are supported in meeting their targets. For example, with credit / private debt, this means supporting borrowers to measure their GHG emissions and requiring them to disclose their actions to reduce carbon year on year, helping to lower their temperature rating score and improve the carbon performance of the PE firm.

12.2.2. Policy engagement

PE firms should engage with policymakers in favor of the proper implementation of the Paris Agreement—as the best pathway to mitigate their climate-related risks, maximize their positive contribution to climate goals, protect the long-term value of their assets, and invest in the best interest of investors.

PE firms should engage with policymakers to ask for the following items:

- Climate and energy policies and regulations that drive a timely implementation of the Paris Agreement and its embedded climate targets;
- Adequate climate and wider ESG corporate disclosure policies and regulations to ensure that relevant climate and ESG data become available to investors; and
- Financial policies and regulations that drive better understanding of climate-related risks and opportunities for PE firms, through the assessment of climate and wider ESG risks for investors and their mitigation, with the ultimate goal of portfolio alignment with the Paris Agreement.

13. Discussion and future research - *forthcoming*

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