

# The Low Carbon Investment Playbook

A practical guide for private equity professionals who want to adapt their practices to today's environmental challenges.

carbon  
cutter



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Carbon Cutter is a consulting firm committed to making economic systems truly sustainable.

We help PE firms and their portfolio to thrive in tomorrow's economy, with pragmatism and enthusiasm.

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# A guide to help you see more clearly

Our goal is to provide you with a comprehensive and pragmatic guide to help you grow your business. It's built around six key topics:

## A focus on Private Equity

While much of the information in this guide can be applied to Venture Capital, Growth Equity or Infrastructure, it is primarily aimed at Private Equity professionals. If you work in VC / Growth, we recommend that you consult [this guide](#), instead, which we have co-written with Revaia.

## With the insights of investors

Rather than simply reading CSR reports, which – let's face it – tend to all look pretty much the same, we spoke to around 50 professional investors to gather their insights.

## Focused on decarbonizing the economy

The biodiversity crisis is definitely as important as the climate crisis. Nevertheless, we have chosen to focus this guide on decarbonization.

## We take a stand

Our aim is to help you take the best possible action to limit greenhouse gas emissions. When we recommend one practice or methodology over another, it is because we're convinced it's the most effective.

## Concise yet comprehensive content

You will come across all existing methodologies in this guide. If you would like to learn more about some of them, please use the links provided to dig deeper.

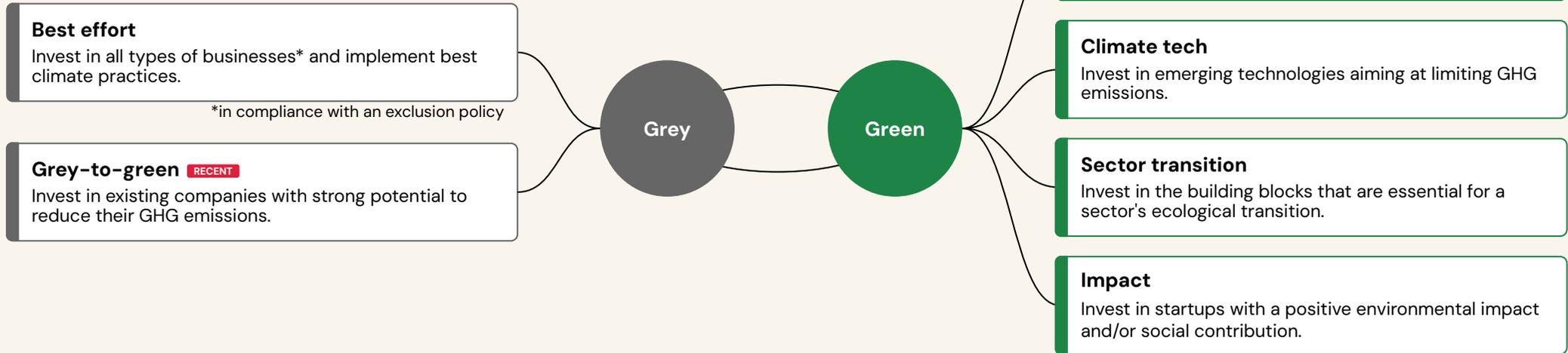
## A playbook that's not set in stone

We are exploring the themes of this guide on an ongoing basis, in order to stay up to date on new methodologies and best practices. That is why we will regularly update this playbook. If you'd like to help us on this, we'd love to hear from you.

**Disclaimer:** this guide explores the regulatory and financial landscape in France. It was originally written in French and later translated, so certain resources and regulations may not be relevant to other countries.

EXECUTIVE SUMMARY

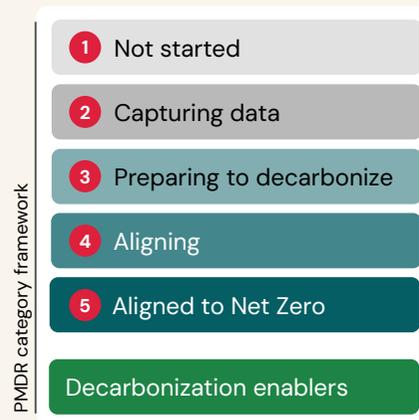
There are six investment tactics to tackle climate change



Seven out of ten PE firms do not track climate indicators. Choose yours according to your investment tactics.

- Carbon footprint e.g.: tCO<sub>2</sub>e / M€ invested
- Monetary carbon intensity of portfolio companies tCO<sub>2</sub>e / M€ sales
- Portfolio temperature ex: °C
- Company categories %
- Financed avoided emissions tCO<sub>2</sub>e / year
- Portfolio Green Taxonomy alignment ("Green Share") %

Each PE firms should adopt a category framework to accelerate the transition of its portfolio.



New tools and methods have emerged. They enable you to build your climate strategy.



# Contents

Everything you need to know  
to act at the right level

About this guide	3	
Executive summary	4	
Definitions	6	
Introduction	7	
Playbook	Be clear about the change you want to see	12
	Set the right KPIs	15
	Factor climate change into the pre-investment phase	28
	Support your portfolio companies in their transition process	32
	Set up your climate governance	36
Going further	39	
Our next steps	41	
About us	42	
Bibliography	43	

# Definitions

## Acronyms

<b>GHG</b>	Greenhouse gases
<b>GP</b>	General Partners
<b>LP</b>	Limited Partners
<b>LEC</b>	French law " <i>Energie climat</i> "
<b>PCAF</b>	Partnership for Carbon Accounting Financials
<b>PMDR</b>	Private Markets Decarbonization Roadmap
<b>SFDR</b>	Sustainable Finance Disclosure Regulation
<b>PE firms</b>	Portfolio Management Company
<b>PortCos</b>	Portfolio Companies
<b>TCFD</b>	Task Force on Climate-related Financial Disclosures

## Definitions

<b>ADEME</b>	French Environment and Energy Management Agency. It coordinates environmental protection and energy management activities under the supervision of the government.
<b>GHG emissions or Carbon footprint</b>	Measurement of a company's total greenhouse gas emissions over one year of activity.
<b>Emission factor</b>	Coefficient which allows to convert activity data into GHG emissions (e.g. 60 gCO <sub>2</sub> e / kWh of electricity consumed).
<b>Carried interest</b>	Performance fee paid by LPs to a fund's operating team to reward their performance.
<b>Management Package</b>	Capital profit-sharing tool, mainly intended for company executives and managers, which can be used to improve the ESG performance of a portfolio company.
<b>Paris Agreement</b>	Agreement reached in 2015 at COP21 and signed by 196 countries aiming for keeping global warming below 2°C and if possible below 1.5°C.

## Units

<b>CO<sub>2</sub>e</b>	CO <sub>2</sub> equivalent
<b>tCO<sub>2</sub>e</b>	Tons of CO <sub>2</sub> equivalent

# Introduction

# "We are playing Russian roulette with our planet".

- António Guterres, Secretary-General of the United Nations, June 5, 2024

The record-breaking temperature anomalies and meteorological hazards of 2023 leave no room for doubt: climate disruption is not weakening. It may in fact be accelerating.

The direct and indirect consequences of climate change will lead to major changes in the years to come.

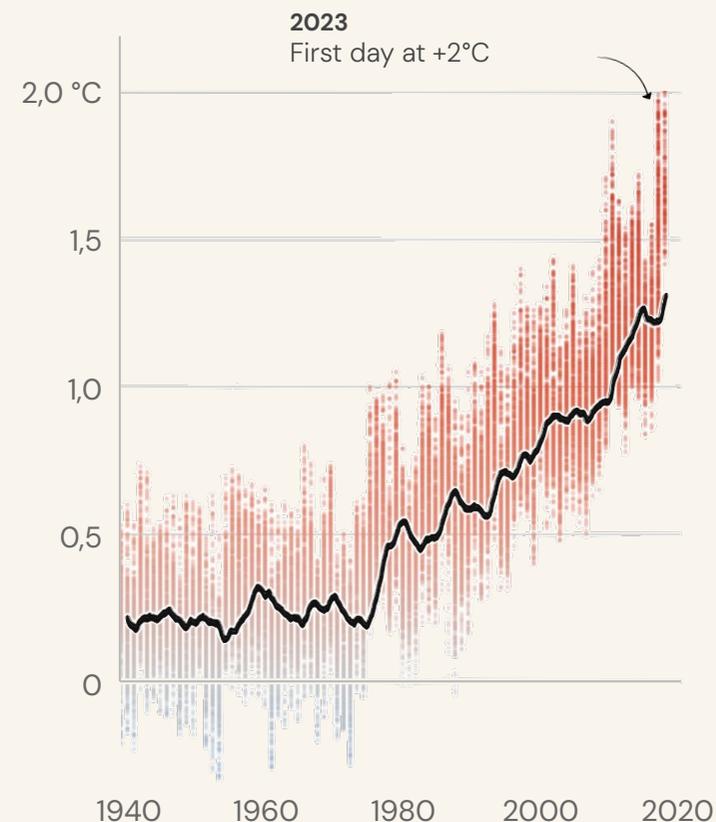
By the end of the century, climate change could cost France 10 points of GDP per year ([ADEME, 2023](#)) and 19 points of GDP per year worldwide ([Nature, 2024](#)).

## Towards a transformation of the private equity sector

The private equity sector, with its role in the development of unlisted companies and its need to project a company's value over a long time horizon, will be directly impacted.

Investment practices, organizational rules and performance indicators will need to change to adapt to the consequences of the environmental transition.

Specialized climate investment vehicles have a major role to play.



**Fig. 1: Daily temperature anomalies**

Daily global temperature anomalies relative to a pre-industrial reference

- Source : [Copernicus](#)

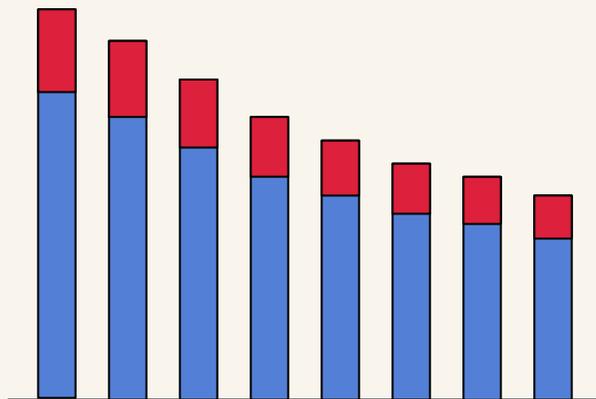
# The essential role of companies in the transition

Before looking at what you can do as an investor, you need to have a clear idea of what companies can do.

In short, a company can act in three different ways:

1. Curbing their greenhouse gas emissions
2. Developing sustainable products/services
3. Limiting vulnerability

Companies can also act indirectly. For example, companies can influence governments to set new regulations or policies to limit the environmental impact of their sector.



## Curbing their greenhouse gas emissions

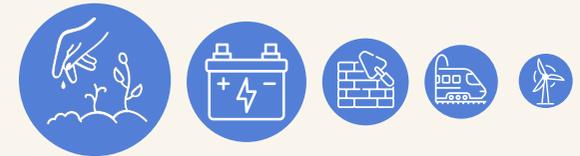
A company can change its operations (e.g., switching its vehicle fleet from ICE vehicles to electric) or its products (e.g., replacing one material with another). These changes enable the company to reduce its greenhouse gas (GHG) emissions. If a company's emission-reduction pathway is ambitious enough, it is said to be aligned with the Paris Agreement.

## Developing sustainable products/services

A company can contribute to decarbonizing the economy through its products/services. For example, a bicycle company can in some cases replace ICE vehicles. Or a steel company can produce a low-carbon alternative. To assess the sustainability of an activity, we use "taxonomies" such as the [European Taxonomy](#) or [Climate Bonds](#).

## Limiting vulnerabilities

Climate change entails both physical risks (flooding of a production site, heat waves affecting working conditions, etc.) and transition risks (carbon tax, reputation risk, supply chain disruption, etc.). Companies can limit their risk by adapting their facilities, processes or supply chain to the new context.



## Why you shouldn't treat all portfolio companies the same

A common mistake made by LPs and GPs is to rely on a one-size-fits-all approach.

For example, start-ups developing sustainable activities are sometimes asked to set an emission-reduction pathway in line with the Paris Agreement. It makes no sense. First, because their past emissions are low and therefore hard to reduce. Second, any activity that has a positive impact on the environment should be encouraged, and this will automatically lead to higher emissions.

Luckily, there are new approaches to managing these specificities - as you will discover in the following pages.

# The (just as) essential role of investors in the transition

As an investor, you can accelerate companies' climate action.

You can do so in three different ways :

1. Directing your investments
2. Engaging your portfolio companies
3. Excluding and divesting

You also have indirect levers, such as the signals you send to companies and your peers.

## Directing your investments

You can give more or less importance to the environment within your funds' investment thesis, your exclusion policy or your investment decisions.

## Engaging your portfolio companies

You can encourage and help the companies in your portfolio to take action. You can draw inspiration from the best practices presented in this guide.

## Excluding and divesting

You can set exit conditions based on climate factors. For example, you can set up a divestment clause in the event of failure to meet environmental targets.



"In 2020, when we talked about environmental issues with companies, we weren't necessarily welcomed with open arms. We had to go one step at a time. Today, it's the other way around : managers are asking for that. We're even winning some deals because of our climate commitments."

– **Nina Hervé**, Senior Associate & ESG Director at Yotta Capital Partners

*"Best Effort" category*

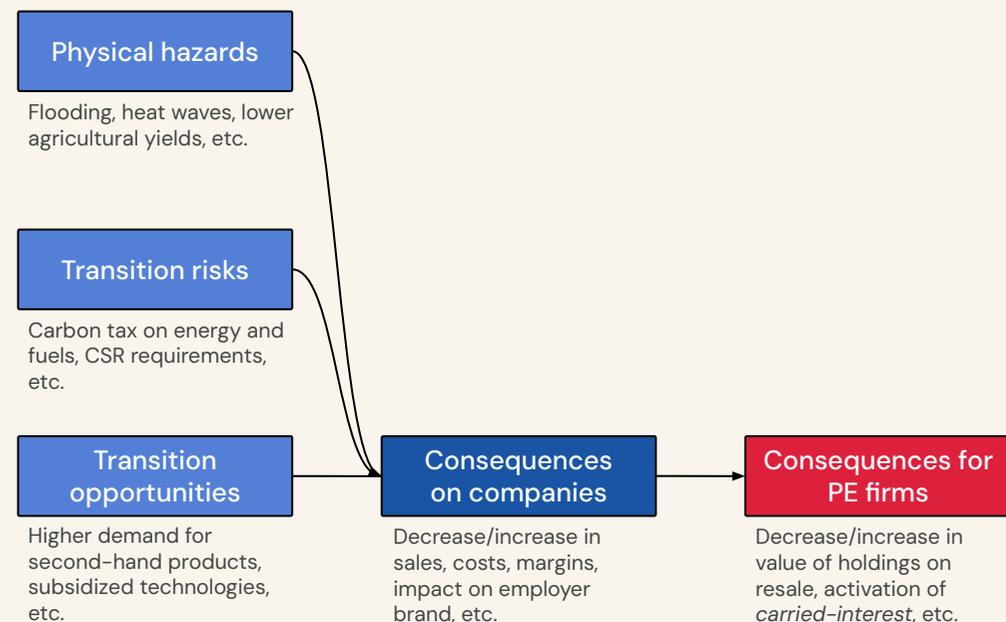


Fig. 2: Risk and opportunity transmission chain to portfolio management companies

# Factor climate change into your investment strategy

If you meet someone who wants to invest in your fund and is very interested in environmental issues, they are likely to ask you about:

- What's your climate governance like?
- How do you factor climate change into your investment strategy?
- What indicators do you track and which targets have you set?
- How do you manage climate-related risks?

You can find these 4 questions in the [TCFD](#) reference framework and you need to report about these to comply with the regulations of [article 29 of the Energy-Climate Law](#) (France).

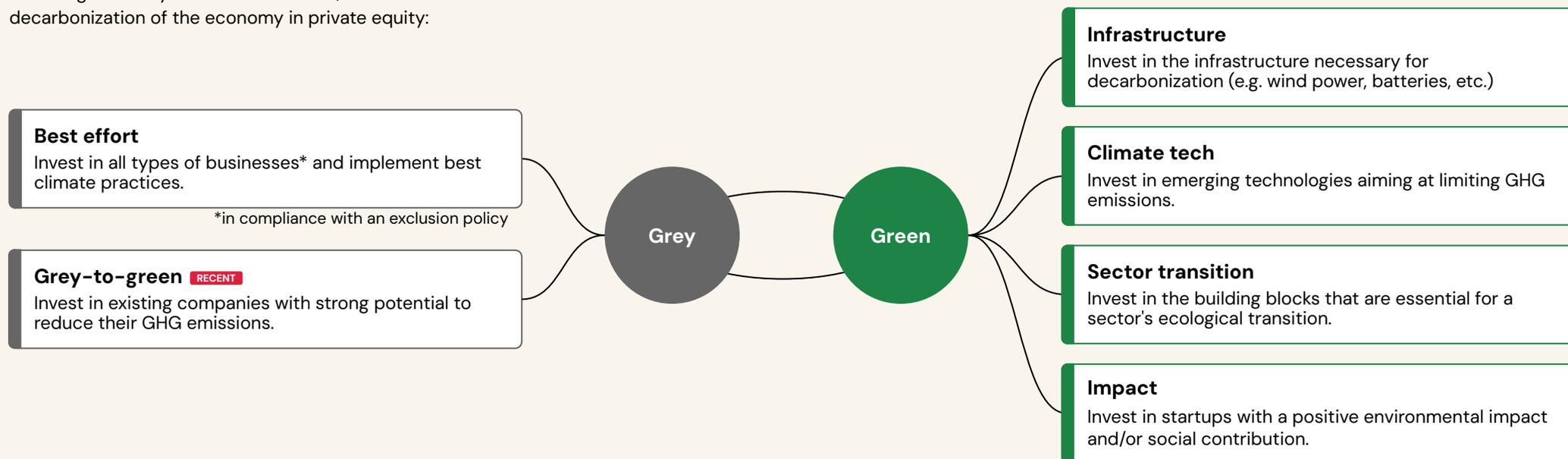
To answer these questions, we suggest a five-step process:

1. Be clear about the change you want to see
2. Set the right KPIs
3. Factor climate change into the pre-investment phase
4. Support your portfolio companies in their transition process
5. Set up your climate governance

# Be clear about the change you want to see

## Six investment tactics to tackle climate change

Following our analyses and discussions, we have listed six tactics that contribute to the decarbonization of the economy in private equity:



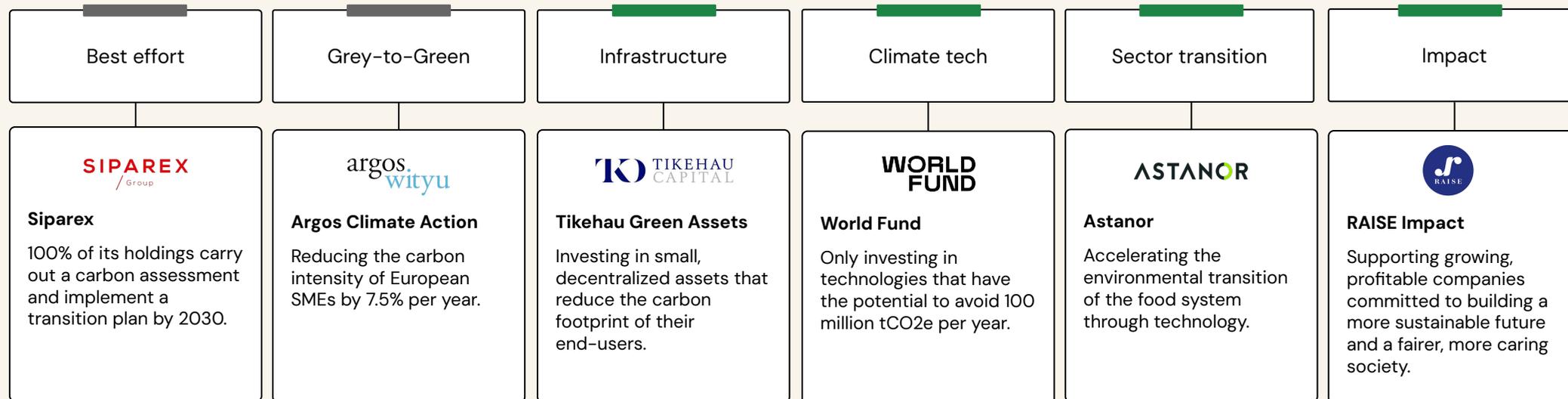
These tactics differ from one another in terms of investment scope:

- **Grey** - for existing companies, representative of today's economy. The goal is to reduce the greenhouse gas emissions of these companies.
- **Green** - for companies developing sustainable activities and representing the economy of tomorrow. In this case, the challenge is to help them flourish so that they can replace other, more emitting alternatives.

**A distinction is made between generalist funds**, which follow best practice in taking into account the climate (Best effort), **and specialist funds** (grey-to-green, sustainable infrastructure and industry, climate tech, sector transition, impact).

**Some of the specialist funds are focused on decarbonization** (grey-to-green, climate tech), while others pursue different goals (e.g. a fund specializing in regenerative agriculture will be just as interested in biodiversity) and social objectives (e.g. an impact fund).

# Get inspired by pioneer funds



"Among the players who are taking the subject seriously, we can observe a polarization between the most demanding 100% carbon strategies (Climate tech, grey-to-Green) and the more systemic vertical strategies that integrate environmental dimensions other than carbon."

- **Marine Le Lan**, Analyst at Bpifrance Funds of Funds

Investment in the low-carbon transition has long been focused only on energy-related issues (renewable energies, energy efficiency, etc.).

In recent years, new types of investment vehicles have emerged: "climate tech" funds, sector transition funds - especially in the food sector - and, more recently, "grey-to-green" funds.

This is a turning point in the world of investment: climate action is no longer limited to investment in technology, but aims to decarbonize the existing economy as well.

Finally, here are two important things to know about these tactics:

1. **These tactics have their own specificities.** For example, grey-to-green and climate tech tactics do not pursue the same goals, and therefore do not have to rely on the same KPIs and methodologies.
2. **These tactics complement each other and deserve greater cooperation.** For example, decarbonizing an industrial company in a grey-to-green portfolio may require new low-carbon materials and components developed by startups in a climate tech portfolio.

# 50 shades of grey-to-green

The emergence of funds claiming the "grey-to-green" label is a recent phenomenon. As there is no official definition, we propose the following:

Funds that invest exclusively in companies with very high GHG emissions, with the aim of achieving a decarbonization pathway in line with the Paris Agreement over the holding period.

Using this definition, only [Argos Wityu's Argos Climate Action](#) and Abenex's Industries 9.0<sup>1</sup> are "grey-to-green" funds. [Trocadero Capital Partners' Trocadero Environnement & Performance](#) and Initiative & Finance's [Tomorrow](#) funds follow this approach, but not exclusively, as they also invest in decarbonizing companies ("green" perimeter).

## How does it differ from a Best Effort fund?

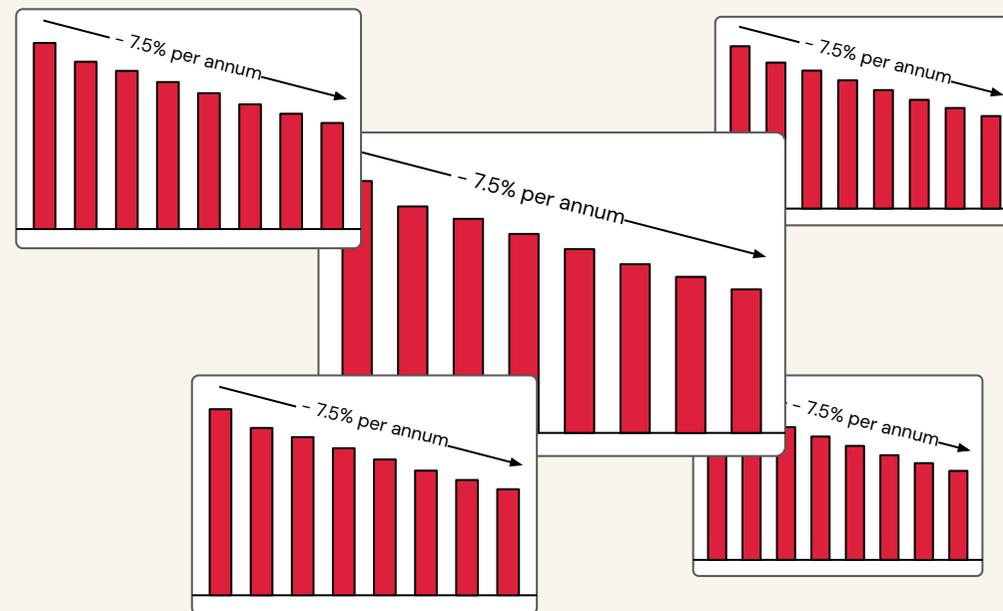
Some Best Effort funds, such as Capza's [Flex Equity Mid-Market II](#) or the Andera Partners funds<sup>2</sup>, also aim to ensure that their portfolio companies follow a pathway in line with the Paris Agreement. However, there are two differences from the grey-to-green philosophy:

1. In grey-to-green, the objective is to observe - and be able to justify to subscribers - **an actual reduction in the GHG emissions** of the portfolio companies over the holding period, which is a more restrictive commitment.
2. In grey-to-green, the investment perimeter is restricted to sectors and business models **with high GHG emissions**.

So, above all, it's a question of **reinforced intention**, embodied in more advanced practices and tools. Indeed, the emergence of grey-to-green has the potential to help the whole private market sector to progress on climate issues.

<sup>1</sup> Abenex's Industries 9.0 is featured as a grey-to-green fund in [the February 2024 issue](#) of Private Equity Magazine.

<sup>2</sup> According to its [Sustainability 2023 report](#), Andera Partners has a target of "100% of eligible companies with a validated SBTi trajectory by 2033."



**Table 1: tools and practices specific to the Argos Climate Action grey-to-green fund**

Step	Tools and practices
Pre Due Diligence	Identification of decarbonization potential and key levers using a tool developed by the fund.
Due Diligence	Assessment of the impact of decarbonization levers to achieve the 7.5% annual emission reduction target.
Detention	Integration of SBTi targets with a detailed reduction plan, annual emissions measurement and independent third-party review.
Exit	Comparing the climate performance of portfolio companies with their closest sectors.

Source: Argos Wityu, [Climate Policy](#)

# Set the right KPIs

There are many indicators for monitoring the decarbonization of an investment fund.

Knowing how to pick your indicators will enable you to tick the box, be it regulatory (article 29 LEC, CSRD) or expected for your LPs reporting, as well as to monitor the progress of your portfolio companies, and even to raise funds.

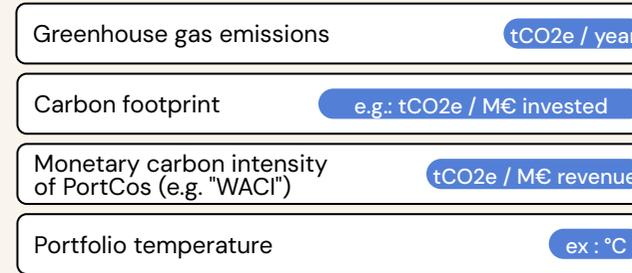
To help you achieve this, you will find in this chapter :

1. A description and critical review of the main indicators
2. A presentation of what the regulations require
3. Our recommendations for setting the right KPIs for your fund

As the choice of indicators is closely linked to the investment tactics you are pursuing, we will present you with indicator recommendations based on each tactic.

## At fund level

### Standard indicators



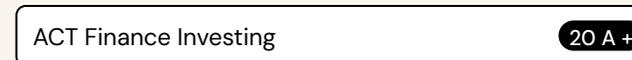
### Indicators specific to sustainable activities



### Means indicators

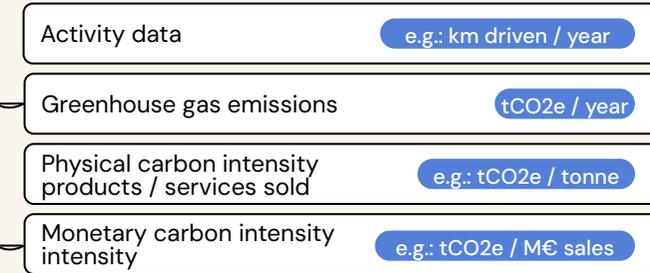


### Third party rating systems

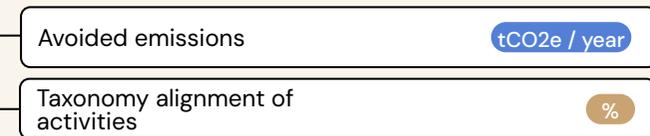


## At company level

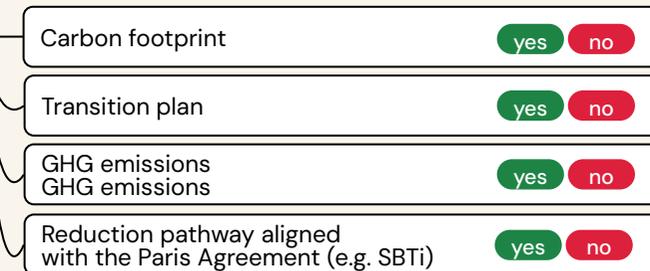
### Standard indicators



### Indicators specific to sustainable activities



### Means indicators



### Third party rating systems

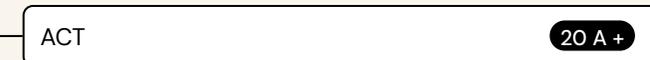


Fig. 2: Climate management indicators

# Overview of key indicators

## Greenhouse gas emissions (GHG)

We multiply the GHG emissions of each PortCo by an allocation key (e.g. the holding rate), then sum it all up.

Calculation method	Carbon footprint	Ownership rate	Financed emissions
Participation A	1,500 tCO <sub>2</sub> e	1,5 %	22.5 tCO <sub>2</sub> e
Participation B	30,000 tCO <sub>2</sub> e	0,2 %	60 tCO <sub>2</sub> e
Participation C	1,200 tCO <sub>2</sub> e	2 %	60 tCO <sub>2</sub> e
		<b>Total</b>	<b>142.5 tCO<sub>2</sub>e</b>

If we divide the fund's GHG emissions by the investment amount, we obtain the fund's carbon footprint (tCO<sub>2</sub>e / M€ of investment).

Scope: **applicable everywhere**

Temporality: **backward-looking**<sup>1</sup> ⏪

**Simplicity** ☆☆☆

Requires only carbon data from holdings, which, if not available, can also be easily modeled.

**Interpretability** ☆☆☆

Does not provide useful information, as it has the same weaknesses as corporate carbon footprints (e.g.: a company with a high footprint is not necessarily "bad" in climate terms, and vice-versa).

**Credibility** ☆☆☆

Required by SFDR. Recommended by PCAF<sup>2</sup> and TCFD.<sup>3</sup>

**Our opinion:** **too limited**

GHG emissions / carbon footprint are the best-known indicators. They are easy to obtain, which is why they are so frequently used. However, when used on their own, they cannot be used to guide action or track progress.

## Carbon intensity of holdings

We calculate the average of the monetary carbon intensities (tCO<sub>2</sub>e / M€ of sales) of the holdings. The average can be weighted by the value of each holding in relation to the value of the portfolio. In this case, we use the "WACI" Weighted Average Carbon Intensity indicator.)

Scope: **applicable everywhere**

Temporality: **backward-looking**<sup>1</sup> ⏪

**Simplicity** ☆☆☆

Similar to portfolio carbon footprint.

**Interpretability** ☆☆☆

Same weaknesses as portfolio GHG emissions, plus disturbances due to non-climatic factors (e.g. inflation). Nonetheless, (1) makes it possible to compare companies with very similar activities, and (2) to compare them with carbon intensity benchmarks for business categories (e.g.: 360 kgCO<sub>2</sub>e / M€ sales for a construction business).<sup>4</sup>

**Credibility** ☆☆☆

Recommended by PCAF<sup>1</sup> and TCFD.<sup>2</sup>

**Our verdict:** **a must-have despite the above-mentioned limitations**

The indicator is also not great, but it's slightly more useful than the portfolio footprint. Therefore, it's a must-have (since there's no better alternative).

Be careful not to fall into certain traps, such as the "Ferrari - Renault" paradox (since Ferrari sells its cars at a higher price than Renault, its carbon intensity in 2022 is estimated at 65 tCO<sub>2</sub>e/M€ sales, whereas Renault's is at 1,230 tCO<sub>2</sub>e/M€ sales - it is not correct to consider that Ferrari has a relative environmental footprint 20 times better than Renault's).

<sup>1</sup> backward-looking = provides information on past performance only

<sup>2</sup> Partnership for Carbon Accounting Financials

<sup>3</sup> Task Force on Climate Related Financial Disclosures

<sup>4</sup> Source: Base Empreinte, ADEME

# The level of uncertainty when calculating investment emissions is essential to consider, yet often overlooked

## Calculating the carbon footprint of portfolio companies

To calculate a company's greenhouse gas emissions, follow the steps below:

1. List out all the activities induced by the company that will be included in the calculation (e.g. business travel, material purchases, energy consumption, etc.).
2. For each activity, collect activity data (km traveled, tons of materials, kWh, etc.) and multiply it by a "converter" (e.g. gCO<sub>2</sub>e / km traveled) to get the related GHG emissions.
3. Add up the GHG emissions of all activities to get the company's total GHG emissions.

There's one fundamental element that is often forgotten: **calculating a carbon footprint always carries a level of uncertainty.**

When a portfolio company hasn't calculated its carbon footprint yet, you need to model it. The various modeling techniques are detailed in [this article](#). Obviously, if you rely on modeling, the associated uncertainty is particularly high.

Finally, when you have this carbon data – calculated or modeled – you can calculate your fund's GHG emissions, by multiplying the values by your holding rates, as illustrated on the previous page.

## Tracking the uncertainty levels is essential

Most investment funds' KPIs use these values as input data, and therefore inherit the uncertainty levels. This parameter is therefore the basis of the indicators used to manage the fund, and should also be included in reporting exercises, which is rarely the case.

To track the uncertainty associated with your financed emissions, we recommend using the [PCAF data quality score](#), which is a rating from 1 to 5.

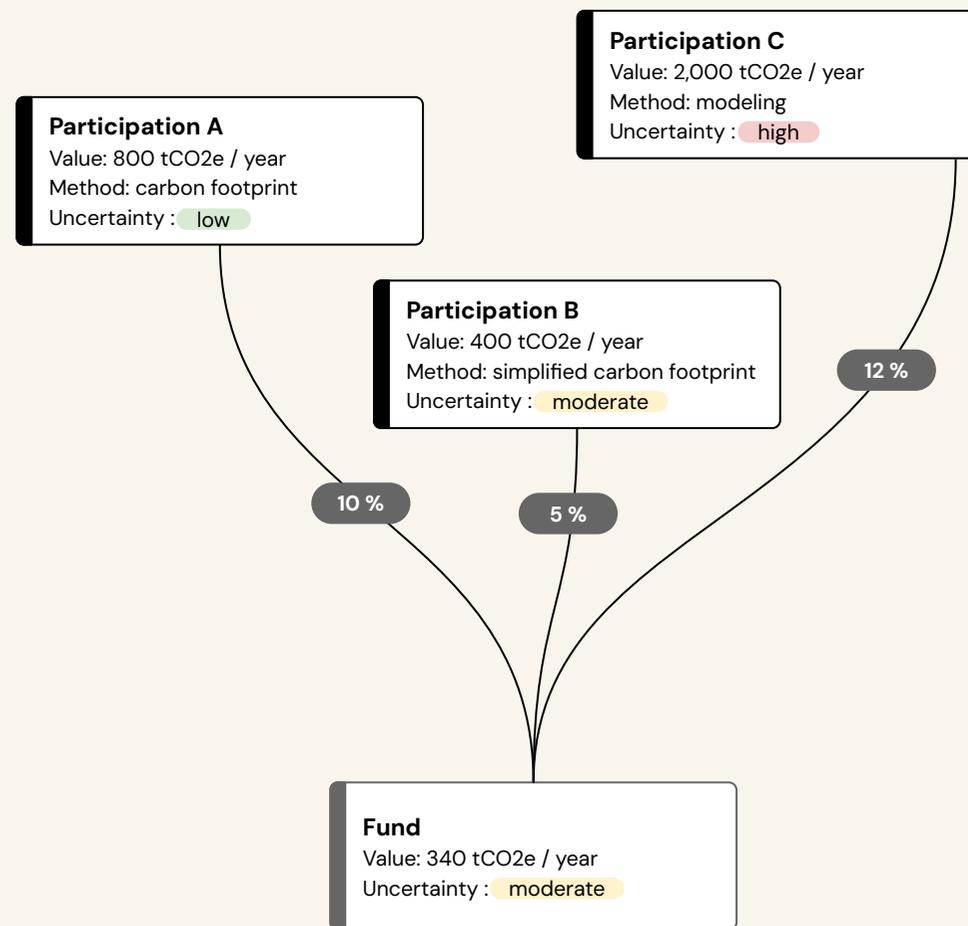


Fig. 3: Illustration of a private equity fund's financed emissions calculation

## Avoided emissions

Avoided emissions are used to measure the positive contribution of solutions for climate change (e.g. bicycles, wind turbines, etc.). They are measured by comparing the emissions of a product or service with the emissions of a theoretical reference scenario in which the product or service did not exist. We measure the avoided emissions of a portfolio by multiplying the avoided emissions of each of its PortCo with an allocation key (e.g. the holding rate).

Scope: **restricted** (the solution developed must be compatible with a low-carbon economy)

Temporality: **backward-looking or forward-looking**

**Simplicity** 🌐☆☆

Defining the reference scenario can be complex, as it is, by definition, hypothetical.

**Interpretability** 🌐🌐☆☆

This indicator makes up for the weaknesses of the carbon footprint by providing information on the usefulness of certain solutions for the climate. However, the result can vary widely depending on the assumptions used to define the reference scenario, and it does not take into account other environmental impacts (biodiversity, pollution, resource use, etc.).

**Credibility** 🌐🌐☆☆

The concept of avoided emissions is relatively recent. However, a number of reference frameworks try to standardize calculation principles, including [the Net Zero Initiative](#), [WBSCD](#) and [Climate Dividends](#).

**Our opinion:** **important to know**

It is a useful indicator to assess the positive contribution of a portfolio company. It is frequently used by PE firms investing in companies that develop low-carbon solutions.

## Taxonomy alignment

The EU Green Taxonomy is a system for classifying economic activities to identify those that are environmentally sustainable. Using the [Taxonomy Compass](#) tool, companies can calculate the percentage of their activities aligned with the taxonomy and report this to their investors, who can then calculate the alignment percentage of their portfolio.

Scope: **restricted** (only for companies developing activities considered sustainable according to the European Taxonomy)

Temporality: **backward-looking** ⏪

**Simplicity** 🌐🌐☆☆

Varies according to activity. In some cases, the taxonomy provides thresholds (example: for cement manufacturing: 498 kgCO<sub>2</sub>e/tonne), making the exercise very straightforward. In other cases, the analysis requires external expertise.

**Interpretability** 🌐🌐🌐☆☆

Very strong. The advantage of the European Taxonomy is precisely that it closes the debate: if the activity is aligned, it's moving the world in the right direction.

**Credibility** 🌐🌐🌐☆☆

Recommended by article 29, LEC law in France.

**Our opinion:** **essential**

The European Taxonomy is a great tool for guiding investment. Its scope of application is still too limited, but should gradually be extended.



Climate Dividends is a non-financial indicator designed to direct financial flows towards low-carbon activities. They show the positive climate contribution of a solution (measured with CO<sub>2</sub>e emissions avoided or sequestered) and are distributed to the shareholders of the company producing this solution, in proportion to their share of the capital. 1 tCO<sub>2</sub>e avoided/sequestered = 1 dividend.

## Portfolio temperature

This is the temperature scenario (+1.5°C, +2°C, +3°C, etc.) with which all the companies in a portfolio are aligned.

Several methods can be used to calculate a portfolio temperature, such as the [CDP/WWF](#) method, the [PACTA](#) method or the [Carbon 4 CIA](#) method.

To sum up, the calculations take into account several parameters (GHG emission trajectories, avoided emissions, etc.), which are then converted to warming temperatures thanks to some key assumptions.

To find out more, we recommend reading the [La Française guide \(2024\)](#) or the [Institut Louis Bachelier guide \(2020\)](#).

Scope: **restricted** (the indicator is mainly used on the side)

Temporality: **backward-looking** ⏪

Simplicity ⚠️☆☆

Clearly one of the most complex approaches. External help is always required.

Interpretability ⚠️⚠️☆

While the promise of interpretability is strong – since it's easier to understand °C than tCO2e – the lack of harmonized approaches calls for the utmost caution.

Credibility ⚠️⚠️☆

Initially very popular, as evidenced by its mention in article 29 of the LEC, the indicator and above all the communication associated with its use are now sometimes criticized.

➤ **Our view:** **often unsuitable for private equity**

Although this indicator is worth knowing, we do not recommend its use for *private equity* companies, due to the lack of harmonization in the underlying methodologies and the complexity of its implementation.

## Company categories

The approach consists of (1) categorizing PortCos (e.g. those that have carried out a carbon assessment, those that are developing sustainable activities, etc.) and (2) setting targets for transitioning the portfolio, i.e. moving holdings from the worst categories to the best ones.

Several methods are available and they share a relatively similar structure:

Method	Categorization proposed by the method		
<b>SBTi</b>	Committed	With approved SBT	
<b>GFANZ</b>	Aligning	Aligned	Climate Solutions Managed Phaseout
<b>Climate Bonds</b>	Transition	Aligned	
<b>PMDR</b>	Not started	Capturing data	Preparing to decarbonize
	Aligning	Aligned to Net Zero	

For example, if a management company adopts the SBTi standard (see next page), it will be able to classify its holdings in three categories: those that have committed to defining a GHG reduction trajectory ("Committed"), those that have done so ("With approved SBT") and those that haven't done anything.

Scope: **applicable everywhere**

Temporality: **forward-looking** ⏩

Simplicity ⚠️⚠️⚠️

All you need to do is find out about the actions carried out by your participants, which are normally accessible, and use the chosen standard. The standards are well documented, making them easy to use. External assistance is not required.

Interpretability ⚠️⚠️☆

Tracking by category does not in any way reflect a company's environmental performance, but it does indicate the efforts and resources the company puts in.

Credibility ⚠️⚠️⚠️

Strong, even if there are some differences between standards.

➤ **Our opinion:** **a worthwhile reference**

Every investment management company should adopt a standard set of company categories. Simple and quick to use, they provide investment managers with a clear overview of their holdings. The [PMDR](#) framework, which is particularly simple, seems well suited to *private equity* (see page 25).

METHOD ANALYSIS

# SBTi for private equity firms (1/2)



## The reference tool to claim that a GHG emission pathway is aligned with the Paris Agreement

The Science-Based Targets initiative (SBTi) encourages and helps companies set GHG emission reduction targets in line with the Paris Agreement. Put simply, SBTi indicates a % reduction in GHG emissions - or pathway - to be followed each year, depending on several parameters (sector, size, etc.).

This reduction is in absolute terms (tCO2e) for Scope 1 and 2 emissions, and in absolute or intensity terms for Scope 3 emissions. Please note: for some SMEs, a commitment regarding scope 3 emissions is optional.

Theoretically, if all companies defined their "SBTi trajectory" and followed it, this would make it possible to achieve carbon neutrality and avoid crossing the warming thresholds of the Paris Agreement (e.g. +1.5°C, +2°C).

## How does SBTi work for a PE firms?

SBTi offers sector-specific methodologies, including one specific for investment activities. The idea is for PE firms to follow a dual trajectory: one for their own GHG emissions (travel, offices, etc.), and another for their portfolio. There are three possible options here: (1) the "SDA" sectoral decarbonization approach (2) by temperature and (3) by portfolio coverage.

The principle of the sector-based approach is to track the pathway of the portfolio company on a physical basis (e.g.: tCO2e / tonne of steel produced by the portfolio company). It is ideal when applicable, which is not often the case for unlisted companies.

In practice, **private equity managers who commit to SBTi almost exclusively follow the portfolio coverage approach.** This involves setting targets for the integration of their portfolio companies into SBTi.

Portfolio company	Financed issues	% of portfolio	2025	2026	2027	2028		
Part. A	100 ktCO2e	10%	✓					
Part. B	50 ktCO2e	5%		✓				
Part. C	150 ktCO2e	15%			✓			
Part. D	30 ktCO2e	3%				✓		
Part. E	200 ktCO2e	20%				✓		
...	...	...						
Effective portfolio coverage			0%	10%	15%	30%	33%	53%
Coverage target in 2027 Adopted by PE firms in 2024							🎯 25%	

Explanation of the illustration: with each SBTi commitment, portfolio coverage increases: 0% in 2024, 30% in 2027, over 50% in 2028, etc. The objective, set by PE firms in 2024, of achieving portfolio coverage of 25% by 2027 has therefore been achieved. It will then be able to aim for a longer-term objective (e.g. 100% of the portfolio by 2035).

## The advantages and limits of SBTi

SBTi is the most widely recognized international standard. It is a commitment standard, the only one that is accepted by the majority of financial players. Clearly, for your stakeholders - especially those less familiar with the subject - **if you commit to SBTi, you are automatically best-in-class.** Talking to company executives about SBTi also helps set ambitions at the right level and make them aware of the scale of the changes to make.

The limitations of the SBTi method for PE firms are the same as those that apply to their holdings: complexity, cost, non-inclusion of avoided emissions, etc. For us, the main limitation is that **the company's initial carbon performance is not taken into account.** Let's take two companies with the same activity, except that company A does it in a very carbon-intensive way, while company B does it in a low-carbon way. SBTi will indicate the same emission reduction pathway for both companies. However, this pathway will be much harder for company B to achieve than for company A.

METHOD ANALYSIS

# SBTi for private equity firms (2/2)



## Ultimately, should you use SBTi?

The right question to ask yourself is: is the SBTi standard suitable for my portfolio companies?

- ✔ If you invest in existing companies and in priority sectors for the transition (cement, transport, etc.), the answer is yes. In most cases, you can use the sector guides provided by SBTi to set precise targets.
- ✘ If you invest in ultra-growth startups, then the answer is no. It's virtually impossible to reduce scope 1 & 2 emissions (electricity, gas, petrol, etc.) in absolute terms when the company's workforce has increased by a factor of 10.
- ⊖ Between the two, SBTi is clearly worth considering.

Bear in mind that you can "deal with SBTi". For example, if your portfolio companies meet the SME criteria, they will only be required to reduce their scopes 1 and 2 emissions, which is easier to achieve. You can also add other goals of your own, especially for scope 3.

You can also adopt an "SBTi-like" approach, i.e. follow a similar approach and pathways (e.g. - 4.2% in absolute terms on scope 1 and 2, - 7.5% in economic intensity on scope 3) but without formalizing the targets with SBTi. You'll gain in flexibility, but your approach will naturally carry less weight with your stakeholders.

## Which French private equity firms are involved in SBTi?

The list is available on the SBTi website. As of 05/31/2024, there are 5 companies based in France:



"We wanted a recognized and demanding methodological framework to embody our ambition. Despite its imperfections, SBTi sounded like the best candidate to us. To set it up, we talked to all our investment teams over a six-month period. Then, the phase of engagement with SBTi up to the validation of our pathway was quicker, taking between two and three months."

- **Elsa Baillet**, Sustainability Manager at Andera Partners

*"Best effort (generalist)" category*

## SBTi is evolving

In May 2024, SBTi updated its short-term criteria for financial institutions ([version 2.0](#)). In July 2024, SBTi published a preliminary definition document for a new standard, the [Financial Institutions Net-Zero \(FINZ\)](#), which is currently out for consultation.

METHOD ANALYSIS

# PMDR



## A simplified method developed for private equity

In private equity portfolios, it is common to find a majority of companies that haven't taken action at all regarding climate change, and that have only carried out a carbon assessment and defined a first roadmap. Since SBTi does not make it possible to highlight the initiatives taken, or to distinguish companies that have not made any effort from other companies, SBTi seems unsuitable for a majority of SGPs, especially those that are getting started with their climate strategy.

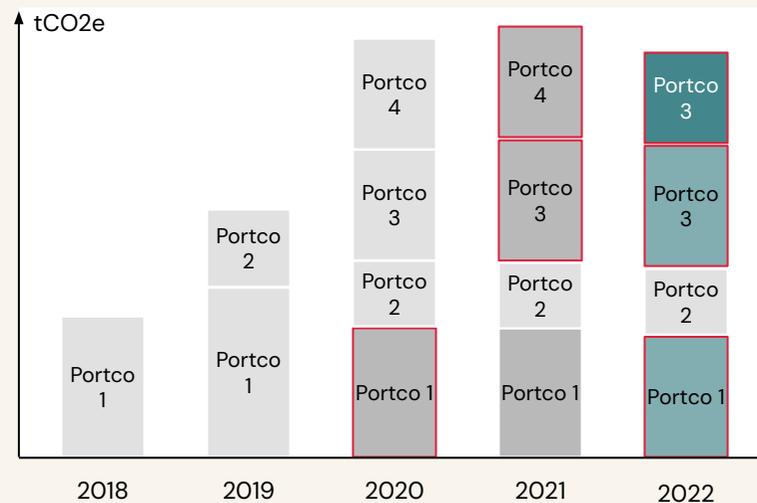
For this reason, a new methodology emerged in November 2023: [PMDR](#), for "Private Market Decarbonization Roadmap". Supported by the International Climate Initiative, the Sustainable Markets Initiative and Bain & Company, the method proposes a categorization ("Alignment Scale") that translates a company's progress into five levels.

1 Not started	2 Capturing data	3 Preparing to decarbonize	4 Aligning	5 Aligned to Net Zero
The company has not yet measured its GHG emissions or come up with an action plan.	The company has measured its Scope 1 and 2 emissions, as well as its Scope 3 significant emissions.  The company has not yet come up with a transition plan.	The company has developed a climate transition plan.  The company has not yet defined a GHG emission reduction pathway in line with the Paris Agreement (e.g. SBTi).	The company has committed to a GHG emission reduction pathway that is in line with the Paris Agreement (e.g. SBTi).	The company has shown evidence that its GHG emissions are decreasing at a rate that is compatible with the Paris Agreement.

### Easy categorization, for efficient monitoring

With this categorization, you can easily compare your portfolio companies and track their progress.

This graph shows for example that port. company 1 makes progress in 2020 (level 1 → 2) and again in 2022 (level 2 → 3), while port. company 2 never make any progress.



### Advantages and limits

Simple and adapted to private equity portfolio companies, the method also makes it possible to deal specifically with investments in decarbonizing companies ("Decarbonization Enablers").

Although it has been adopted by a few PE firms, such as Andera Partners and Serena, it is still too early to know whether PMDR will become a reference, and therefore to judge its credibility with all of the stakeholders.

METHOD ANALYSIS

# ACT Finance Investing



## The reference method for building and assessing PE firms climate strategies

[ACT](#) is an initiative launched in 2015 following the Paris Agreement by ADEME and CDP. It is now hosted by WBA in partnership with ADEME. Its goal is to facilitate the transition of organizations towards a low-carbon economy.

ACT provides sector-specific methodologies that can be used as normative frameworks for companies in every sector. In 2024, after two years of development, the [ACT Finance](#) methodology was published. ACT Finance itself includes two methodologies: one for the banking sector ([ACT Banking](#)), the other for the investment sector ([ACT Investing](#)). Like SBTi, ACT is also usable by portfolio companies, to build a robust transition plan ([ACT Step by Step](#)) or to assess the credibility of their existing transition plan ([ACT Evaluation](#)).

## How does ACT work for a PE firms?

A PE firms can use ACT (1) carry out a 360° diagnosis of its practices and (2) to improve them, via dedicated tools and the support of an ACT-trained consultant.

There are 8 categories to assess the climate strategy of a PE firms, ranging from the indicators it monitors to the level of progress of its portfolio companies, and its climate governance:

4	Portfolio climate performance	25%
7	Investees engagement	20-23%
1	Targets (GHG and non GHG)	15%
5	Management	15%
8	Policy engagement	10%
9	Business model	5%
3	Training (intangible investment)	2%
6	Investors engagement	0-3%

*Illustration of the 8 ACT Investing categories. The last column represents the weight of each category in the final rating.*

*Good to notice that some categories are given priority (e.g. portfolio performance) over others (e.g. subscriber commitment).*

ACT provides questions and rating scales for each assessment category.

One of ACT's objectives is also to enable comparisons between SGPs. Eventually, it will be possible to obtain ACT assessments of PE firms like those currently available for other sectors, which can be found on the [WBA](#) website:

*Company: Jones Lang LaSalle (JLL) - Sector: Buildings*

Module name	Score	Rank
Targets	66 / 100	#4
Material investment	8 / 100	#9
Sold products	0 / 100	#2
Management	75 / 100	#2
Supplier engagement	44 / 100	#9
Customer commitment	50 / 100	#9
Policy engagement	64 / 100	#4
Business model	50 / 100	#7

*This illustration shows Jones Lang LaSalle's ACT rating. The sector ranking ("Rank") helps to understand the company's level of progress compared to its competitors in the real estate sector.*

## Why you should care about ACT

ACT is the most robust approach for assessing and building a climate strategy. We are convinced that it will gradually gain acceptance in the finance sector. In particular, the Banque de France has chosen it as the reference framework for its [climate indicator](#).

METHOD ANALYSIS

# Summary



	SBTi Finance	PMDR	ACT Finance Investing
Creation date	2020	2023	2024
Scope of application	Funds / portfolio PE firms <i>A method for portfolio companies is also available.</i>	Funds / portfolio	Funds / portfolio PE firms <i>A method for portfolio companies is also available.</i>
Main dimensions studied	GHG emissions from portfolio companies PE firms's GHG emissions	GHG emissions from portfolio companies Actions carried out by PortCos	GHG emissions from holdings Actions carried out by participations SGP's GHG emissions Internal practices and governance Stakeholder engagement SGP's business model
Method objective	Encourage portfolio companies to commit to and follow a greenhouse gas emissions reduction pathway in line with the Paris Agreement.	Evaluate portfolio companies and track their progress	Build your SGP's climate strategy and make progress on all dimensions
Taking decarbonizing companies into account	No (in the current version)	Yes	Yes
Adoption in Private Equity	Some SGPs	Some of the first SGPs	None (new method)
Main asset	Recognition	Simplicity	Thoroughness and methodological rigor

PMDR incorporates SBTi as a method for validating GHG emission reduction pathways, while ACT uses its own principles.

## Other methods

The [GFANZ method](#) (Glasgow Financial Alliance for Net Zero), the coalition of 650 financial players initiated in 2021 following COP26, proposes an interesting approach to *managed phase-out*. The Anglo-Saxon [FRAME](#) method offers an innovative way of estimating avoided emissions potential by technology, with [an open-access platform](#).

# What do asset managers do today?

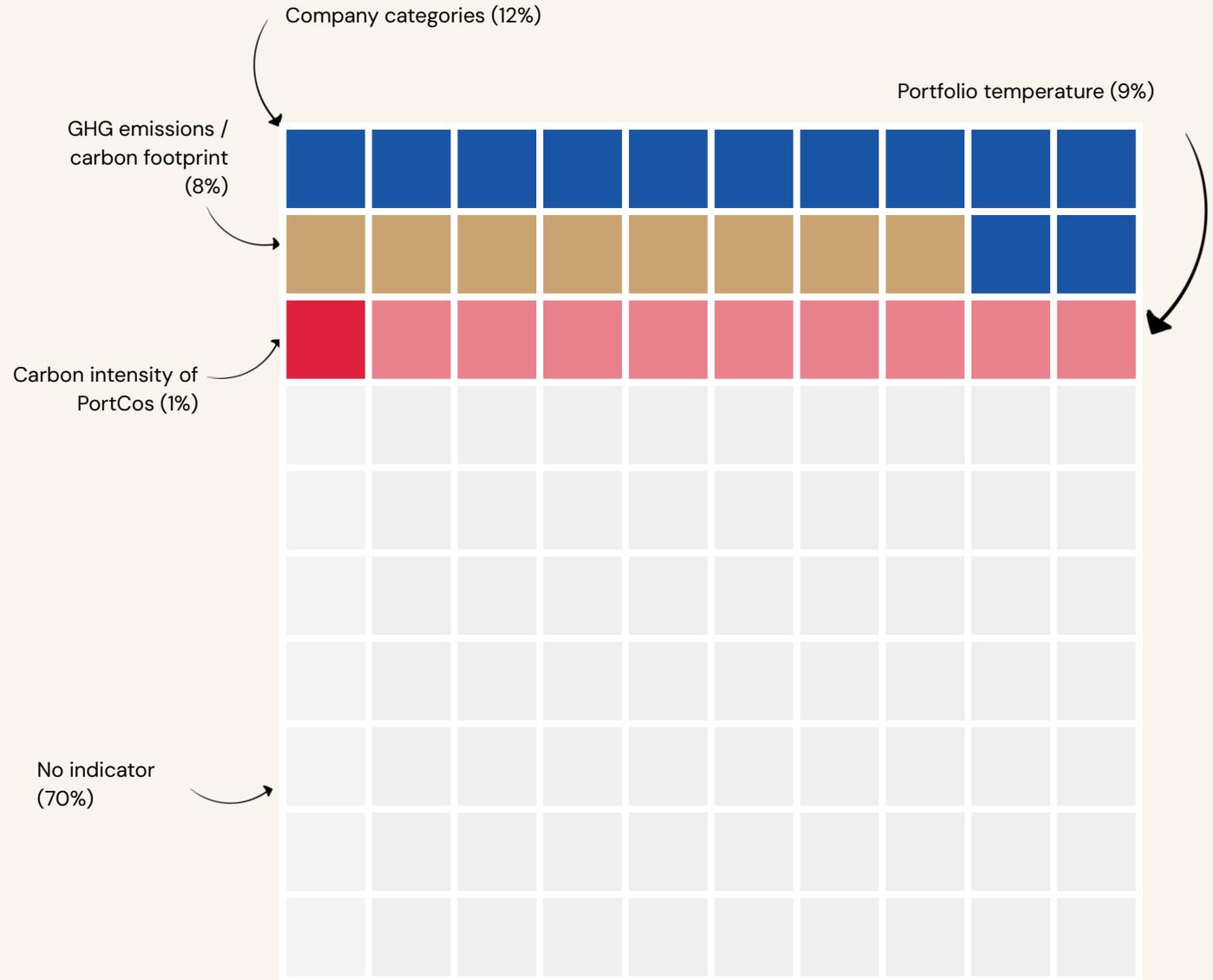
In a [report](#) published in May 2024, ADEME analyzed PE firms's "Article 29 LEC" report submissions.

Here is an overview of the indicators tracked by 64 Private Equity SGPs, after some adjustments specified [here](#).

Key takeaways:

- 7 out of 10 asset management companies say they do not track any climate indicator.
- Company categories - including SBTi - are the most used indicators, followed by portfolio temperature and GHG emissions/carbon footprint.
- Among the 64 Private Equity SGPs, only one reports tracking the carbon intensity of its portfolio companies.

[The study](#) we conducted with Revaia on European Venture Capital/Growth PE firms provides similar takeaways: only 22% of these PE firms have set climate objectives (out of a panel of 32 SGPs).



# What regulations say

In France, **article 29 of the Energy and Climate Law** – or article 29 LEC – requires all asset management companies of a certain size to publish their **"strategy for alignment with the Paris Agreement"**, i.e. to specify their KPIs and greenhouse gas emission targets related to their activities.

According to article 29 LEC, this involves defining :

- **KPIs:** carbon footprint or portfolio temperature,
- **Targets** (objective in 2030, then every 5 years), along with a level of ambition if defined (e.g. in line with the Paris Agreement).

So, according to this definition, a climate alignment strategy might look like this:



The European SFDR – Sustainable Finance Disclosure Regulation – requires reporting on nine mandatory environmental indicators. Two of them are related to GHG **emissions: the carbon footprint of portfolios and the carbon intensity of holdings.**

Please note: SFDR is currently being redesigned.

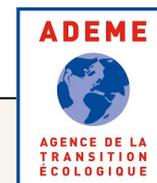
# Beyond regulations

Nevertheless, the recommendations of article 29 of the LEC have a number of limitations, such as those mentioned above concerning the "portfolio carbon footprint" and "portfolio temperature" indicators.

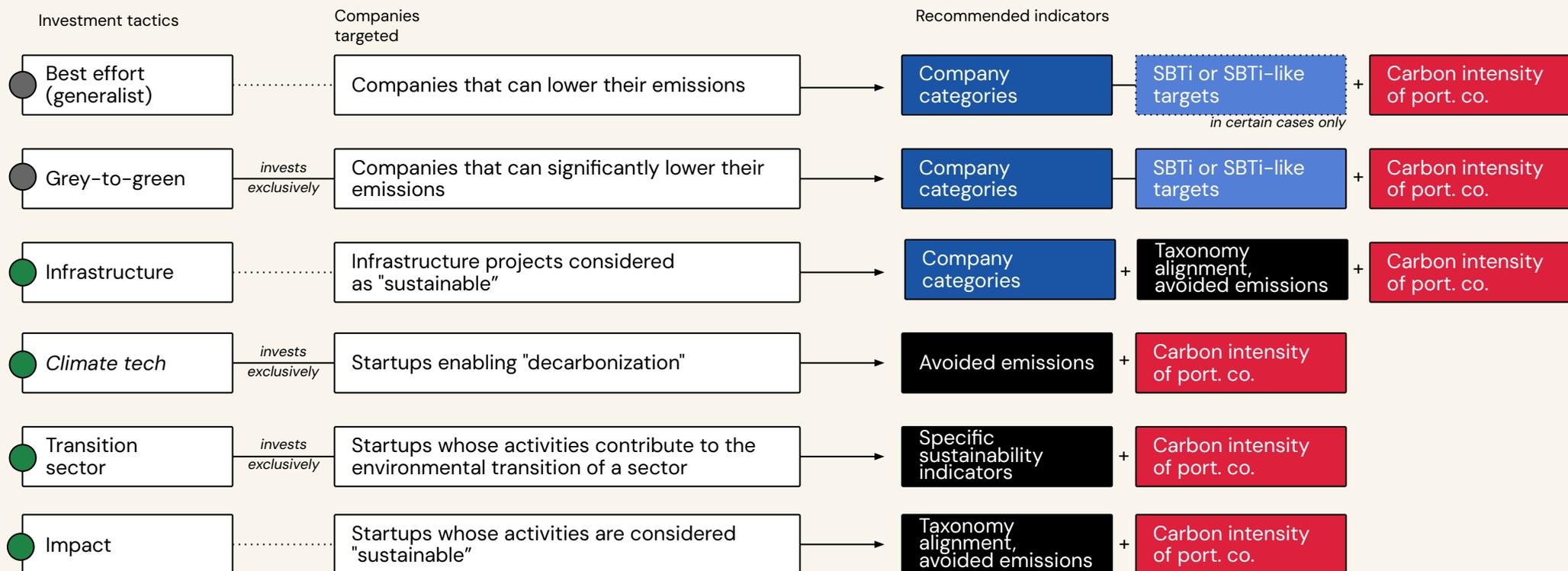
"Approaches that rely 100% on carbon indicators are not the best, as the given metrics depend on many methodological choices (scope, amortization period, etc.) and are by nature backward-looking.

ADEME encourages financial institutions to adopt a multi-criteria approach based first on the adoption of a framework to analyze the alignment of their portfolio companies, with a categorization (in transition, already low-carbon, not aligned, ...) and secondly on greenhouse gas emission metrics to track the actual emission reductions."

– **Stanislas Ray**, in charge of methodological development  
ACT Finance methodology at ADEME



# Our recommendations based on your investment tactics



## Keep in mind

1. Company categories facilitate portfolio management.
2. If a portfolio company wants to reduce its GHG emissions, it can either reduce its activity (e.g.: consume less energy) or its emission factors (e.g.: consume electricity rather than gas). So, in an ideal world, the decarbonization of a portfolio company would be driven directly by activity data and emission factors for its main sources of GHG emissions. Some funds manage to do this, but they remain an exception, as managing and sharing data requires a lot of effort. With that in mind, we recommend individualized carbon intensity management.
3. For all carbon indicators (footprint/intensity) at investment level, the perimeters, assumptions, uncertainty levels and calculation methods must be explicit. Without this, managing performances is impossible. What's more, when investment funds use financial coefficients (shareholding turnover, holding rate, etc.) to aggregate results, it makes results harder to understand, which calls for increased vigilance.
4. SBTi is a particularly interesting tool. Nevertheless, we recommend a thorough pre-analysis before committing to it.

■ Categorization   
 ■ GHG indicator   
 ■ Indicator for sustainable activities

# Factor climate change into the pre-investment phase

It is possible – and encouraged – to take climate change into account at every stage of the investment process.

In this chapter, we will zoom onto the following stages:

1. Exclusion policy
2. File analysis (screening, due diligence)
3. Investment committees
4. Letter of intent

The way to take into account climate change depends on the fund's investment policy, and sometimes on the investment tactics of the fund.

## Exclusion policy

The vast majority of Private Equity SGPs' exclusion policies are relatively standardized (e.g.: exclusion of the tobacco, arms and pornography sectors, etc.). The coal and oil sectors are generally included among the exclusions, although this is not a widespread practice worldwide. In fact, in a [report](#) published in July 2023, the NGO Reclaim Finance found that 15 private equity funds were lagging behind asset managers in implementing exclusion policies.

If the exclusion policies are not so strict regarding the most carbon-intensive activities, it would be precisely to enable investments to have the greatest "decarbonizing" power. The filter is more likely to be applied at the preliminary analysis stage, on a case-by-case basis.

## Investment case analysis

The analysis of climate issues is generally divided into several stages: pre-analysis or *screening*, then *due diligence* (internal or external). To carry out these stages, investors generally rely on the following tools:

- **A sector-specific environmental materiality matrix**, which makes it easy to pinpoint the environmental issues (climate, pollution, water, etc.) that are relevant to a company's activities. The best-known are the [Encore](#) database (free access) and the [SBTN](#) database (free access).
- **An interview guide**, to help you remember the right questions to ask.
- **A climate/ESG rating system**, to enable comparisons between portfolio companies and to make objective decisions.

Some investors also develop specific tools. This is the case for grey-to-green funds, where it is common practice to use a **tool to estimate the decarbonation potential** (tCO<sub>2</sub>e/year) of a case, based on a list of standard actions (e.g. installing an industrial heat pump).

### 5 questions to ask yourself when analyzing an investment\*.

1. What is the company's greenhouse gas emission profile?
2. What other sustainability topics are material for the company?
3. Would physical or transition risks cause the company to lose value?
4. Would the green transition create opportunities for business?
5. What can the company do? What has it done so far, and what is its plan for the future?

\* Excluding "Green" companies, which require further questions.

## Example: Chapeo company case study

Let's see how you might answer these five questions if you were to analyze Chapeo, a (fictive) SME specializing in the production, distribution and installation of fluid screed. Screed is a stability layer applied to the ground to level or raise a building surface for construction.

*Most of the tools used in this example are free and open source.*

What is the company's greenhouse gas emission profile?

If the company has not measured its carbon footprint, the [Bilan GES database](#), the [OpenClimat](#) platform or the [Climate Figures](#) tool can provide information on the carbon profile of similar companies. In terms of products, the [INIES database](#) provides environmental data on the majority of products used in construction/renovation.

→ These tools show us that most of the carbon emissions come from **the manufacturing of raw materials (cement, chemical additives) and freight.**

What other sustainability topics are material for the company?

The [ENCORE](#) database provides information on environmental topics, beyond GHG emissions, by sector of activity.

→ For the "Construction materials" sub-sector, the availability of **water resources** appears to be a major issue.



Can physical or transition risks cause the company to lose value\*?

Physical risks on sites can be analyzed with [the R4RE tool](#) (free) or the [Altitude](#) tool (license fee).

→ One of Chapeo's sites is at risk of flooding.

→ Market risk with **rising prices for road fuel and gas** used to heat sites.

→ Regulatory risk with the zero net artificial land use objective of the Climate and Resilience Act, which may slow down the newbuilding market.

Can the green transition create business opportunities\*?

A quick analysis identifies :

→ Regulatory opportunity with the RE2020 (environmental regulation in construction): the RE2020 takes into account the impact of the manufacturing of construction products and sets emission thresholds that will gradually decrease.

→ Regulations will therefore favor the **least emissive screeds**, such as anhydrite screeds and biosourced dry screeds.

What can the company do? What has it done so far, and what is its plan for the future?

→ The company has not yet carried out a carbon assessment, nor has it taken any action in favor of the environment.

→ The company is working on a project to reuse the surplus screed not used on construction sites.

\*These risks and opportunities are to be assessed over a 10-year horizon, equivalent to two holding periods.

## Climate Due Diligence

If the company goes through the screening stage, you can then carry out a more in-depth analysis. The most common practice, of course, is to carry out an ESG due diligence, which can be done in-house, with the help of external consultants or via online platforms.

An ESG Due Diligence generally lasts 2 to 3 weeks, and includes interviews with the management team and analyses. It provides :

- A materiality pre-analysis, to pinpoint the most important ESG topics for the company;
- An analysis of the company's maturity regarding these most material topics (strengths, areas for improvement);
- An analysis of contentious issues and regulatory obligations ;
- Recommendations to make progress.

This is common practice. You can go one step further regarding the climate:

- **Conduct a physical and transition risk analysis**, automated using the [Altitude](#) online platform developed by Axa Climate, for example;
- If the company has not yet carried out a carbon assessment, you can **work with them to carry out a "flash" carbon assessment**, i.e. on the most significant sources of GHG emissions, in order to come up with a first action plan. This can be part of the letter of intent;
- If the climate strategy of a company is already advanced, you can conduct a **full assessment of it** with the 9-dimension [ACT methodology](#).
- **Forecast avoided emissions**. For this, you can rely on the Life Cycle Assessment (LCA) of the company's solution - if the company has already carried one out - or use emerging methodologies, such as that of the American consortium [Project Frame](#).



"For each company, an environmental thesis has to be defined. For example, we determine whether and how the company can become a Sustainability leader in its sector. The thesis must be measurable. If we detect the possibility of building a thesis, we discuss it with the manager to see how he reacts. If the case doesn't have a compelling thesis, we don't go ahead."

- **François-Xavier Oliveau**, Partner at Initiative & Finance

*"Best effort (generalist)" category*



"We systematically initiate carbon assessments in the pre-investment phase, without waiting for the *deal* to be finalized. This helps managers better understand the exercise and have discussions at the right level. The assessments are then refined in the months following the investment."

- **Nina Hervé**, Senior Associate & ESG Director at Yotta Capital Partners

*"Sustainable infrastructure and industry" category*



"Initially, I wanted our ESG/Climate due diligence to be carried out in-house. Now, I prefer to go through an independent third party to avoid any risk of conflict of interest."

- **Lorna Lucet**, Head of ESG at Amundi Private Equity Funds - MidCap

*"Best effort (generalist)" category*



"The ACT methodology supported by ADEME should be used more extensively to track the impact of portfolio holdings to ensure a comprehensive analysis of decarbonization pathways, while building a common frame of reference for action plans for investors."

- **Alice Pégurier**, Analyst at ADEME Investment

*"Sustainable infrastructure and industry" category*

# Investment Committee

Once you're done with the ESG/Climate due diligence, you can prepare your investment case for the next investment committee. Our advice:

1. **Project the business into the future, over a time horizon equivalent to two holding periods** (e.g. 12 years). In fact, the value of the company when you leave the capital (the first holding period) will depend on the projection of the new buyer when he leaves the capital himself (the second holding period). At this point in time (e.g. 2035), the physical risks, but above all the transition risks and opportunities, will likely be much higher than they are today. In order to do this, you can use forward-looking scenarios, such as [those used by central bankers](#), or the [sector-specific publications](#) of the General Secretariat for Ecological Planning.
2. Think about what the company could look like, if its transition plan were to be successful, using **examples of inspiring companies** in the same sector. We will soon make our internal database of inspiring companies available online. [Please reach out](#) if you would like to get a preview.
3. If the company is developing or has the potential to develop sustainable activities, **use existing impact assessment databases** (e.g. [Drawdown](#), [IPCC](#)) to assess the potential climate change impact of new technologies or new behaviors.

Finally, during the committee meeting, the ESG manager should – ideally – be able to veto a case if they consider that the case is too risky ESG wise, or if it is not in line with the fund's environmental ambitions.

# Term sheet

In your letter of intent, you can specify your expectations regarding short-term (e.g. 100-day plan) and longer-term actions. For example:

- Carry out an initial carbon assessment, set an emission reduction pathway and build a transition plan;
- Carry out a life cycle assessment (LCA) and implement an eco-design approach;
- Set in stone a corporate climate strategy using the [ACT methodology](#);
- Get specific environmental labels and certifications;
- Train the finance team in carbon accounting;
- Organize a sustainability workshop for the management team.

To increase your chances of success, you can also index the financial incentives of the management team on ESG/Climate objectives. These **Management Packages** – or "manpacks" – are effective alignment mechanisms, especially in certain contexts (e.g. LBOs). For this to work, it's best if you also have a mirrored carried interest mechanism (see "Governance" chapter).



"We have given the ESG teams a veto at investment committee meetings. This practice has major advantages, not because it is frequently used, but because it encourages the investment team to ask all the right questions, right from deal origination."

– **Lorna Lucet**, Head of ESG at Amundi Private Equity Funds – MidCap

*"Best effort (generalist)" category*

# Support your portfolio companies in their transition process

There are two ways to support your portfolio companies in their transition process:

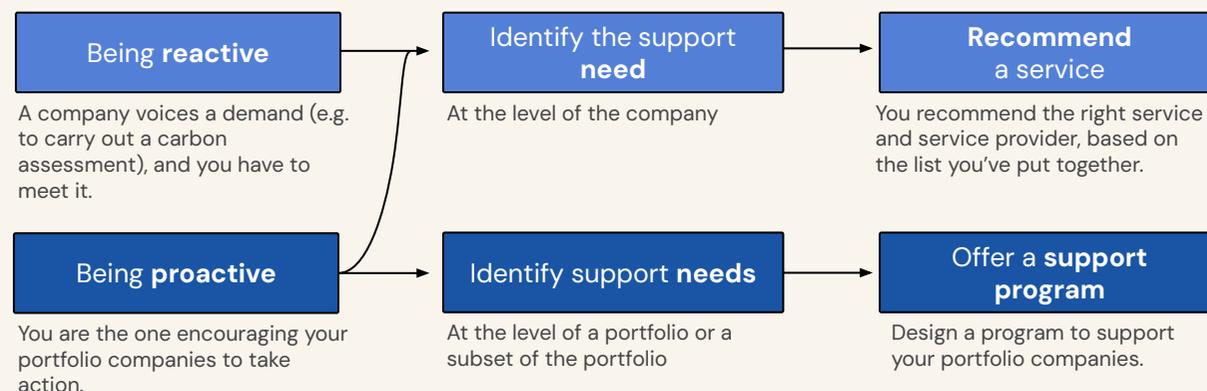
1. By being reactive, effectively meeting your portfolio companies' demands;
2. By being proactive, encouraging one or more of your portfolio companies to take specific actions

In both cases, you need to have a good understanding of the sustainability services that do exist on the market and to know when to recommend what. Being proactive is more demanding, as it often requires you to set up a transition program for a group of companies.

These programs are becoming more and more common, and can vary in formats. See below for more information.

In this chapter, we will look at the following in detail:

1. Know the sustainability services and solutions available;
2. Manage expectations;
3. Design a program to support your portfolio companies;
4. Collect useful information from portfolio companies.



# Know the sustainability services and solutions available

To understand how each one of your portfolio companies could make progress, let's use one of the category framework mentioned earlier: [PMDR](#).

1 Not started	2 Capturing data	3 Preparing to decarbonize	4 Aligning	5 Aligned to Net Zero
The company has not yet measured its GHG emissions or come up with an action plan.	The company has measured its Scope 1 and 2 emissions, as well as its Scope 3 significant emissions.  The company has not yet come up with a transition plan.	The company has developed a climate transition plan.  The company has not yet defined a GHG emission reduction pathway in line with the Paris Agreement (e.g. SBTi).	The company has committed to a GHG emission reduction pathway that is in line with the Paris Agreement (e.g. SBTi).	The company has shown evidence that its GHG emissions are decreasing at a rate that is compatible with the Paris Agreement.

There are a number of services and solutions available to help companies move forward.

Here's a summary of the main ones used by SMEs.

On top of this list, you can find other services and solutions:

- Product life cycle analyses (LCA) ;
- Biodiversity footprint ;
- Avoided emission calculation ;
- The ecodesign of products and services ;
- Technical training for employees.

Device	Progression	Cost / duration	Description
Carbon footprint software	1 → 2	 1 - €10k 1 - 3 months	Many software solutions enable companies to measure their carbon footprint and get basic recommendations.
Carbon footprint	1 → 3 2 → 3	 from €6k 2 - 6 months	A "carbon footprint" project includes a measurement phase, carried out using spreadsheets or software, as well as a workshop phase to define a transition plan (targets, actions, resources). Many service providers offer this service. In France, we recommend that you use Bpifrance's <a href="#">Diag Décarbon'Action</a> to ensure quality and because companies with fewer than 500 employees will get a 40% subsidy for it.
SBTi	2 → 4 3 → 4	 from €3k 2 - 6 months	An "SBTi" project includes defining a GHG emission pathway, and submitted your pathway to SBTi to get it approved. SBTi offers <a href="#">a speedy and simplified process for SMEs</a> , with an attractive price (€1,000 fee).
Climate strategy*	2 → 5 3 → 5 4 → 5	 €30k 12 - 18 months	Getting on an emission reduction pathway in line with the Paris Agreement is truly challenging. In order to do so, companies will need to consistently consider climate change in their day-to-day (governance, business model, etc.). This is the promise of the "climate strategy" programs based on the <a href="#">ACT</a> methodology. Several ACT-based programs offer substantial subsidies (60-80%): <a href="#">ACT Pas à Pas</a> , <a href="#">PACTE Industrie</a> .

\* the "climate strategy" system cannot guarantee that level 5 will be achieved, as this depends on the company's actual carbon performance

## Manage expectations

Now that you're familiar with the services and solutions available, you need to set your expectations, i.e. clarify the expected level of progress, and the resources you'll use to help your portfolio companies make progress.

The expected level of progress can be defined according to several parameters:

- The **level of risk** – physical and transition risks – facing the company;
- The company's **carbon intensity** (e.g. high for a construction company, low for an e-learning company);
- The company's **resources**, which depend on its workforce and stage of financing (*seed*, series A, series B, etc.);
- Your **ambition level** and your investment tactics (e.g. the expectations for a company in a *grey-to-green* fund portfolio is high);
- Your **ability to influence** (e.g. strong for LBO funds, weak if you don't have a seat on the *board*).

Based on the above parameters, you can set your expectations, and therefore the solutions and services you recommend:

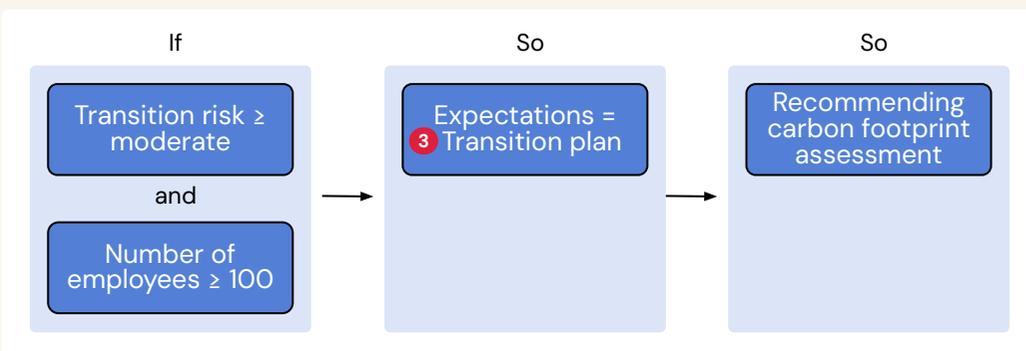


Fig. 4: Example of a formula for recommending a climate tool

The advantage of setting such formulas is not only to bring transparency to your stakeholders (shareholders, subscribers, etc.), but also to simplify the ESG process for your investment teams.

Finally, you also need to set your expectations' timeline, i.e. specify when – after the investment – you want the portfolio company to reach a given level of progress. This timeline can be determined at the level of an investment, a fund or even the management company. For example, in its [ESG 2023 report](#), Siparex states that it aims to have all its portfolio companies at least at progress level "2 – Carbon footprint" by 2030.

With regard to carbon footprint assessment, you should specify the desired update frequency (quarterly, annually, biennially, etc.). For this, we recommend *at least* an comprehensive calculation of the carbon footprint every three years, with more regular monitoring of key indicators (e.g. quarterly). Indeed, requiring an exhaustive calculation every year may be too demanding on the company's human resources, and may jeopardize the implementation of its transition plan, especially for small companies with limited resources.



"We ask for a carbon assessment in the first year following the investment. After that, instead of asking for the exercise to be repeated every year, we only recommend tracking the 10 most significant emission items."

– **Blandine Machabert**, Head of Impact Measurement and Management at RAISE Impact

"Impact" category

## Design a program to support your portfolio companies

To be consistent, you can also design a program in which all or some of your portfolio companies can (or must) participate.

Here are just a few examples:

- **Andera Climate Solutions** (see Andera Partners [Sustainability Report 2023](#)). As the PE firms is committed to SBTi, its objective is to move its portfolio towards the 4-<sup>4</sup> "4<sup>4</sup>ning" level of progress. To achieve this, Andera offers a 12 to 18-month program with 5 steps: awareness, carbon footprint, pathway, decarbonization plan, SBTi commitment. The "Carbon footprint" step is carried out via Bpifrance's [Diag Décarbon'Action](#) system.
- **Pack Eiffel** (see Eiffel Investment Group website). The PE firms offers a range of services, including "carbon footprint" solutions, which they financially subsidize. As of June 30, 2024, 44 carbon footprints had been financed thanks to this system.
- **Citizen Capital's Climate Program** (see Citizen [Capital communication](#)). Citizen gives its portfolio companies access to a coaching program to help them calculate their first carbon footprint. In addition, portfolio companies attend two collective sessions with all companies involved – one at the start of the program, the other at the end – which helps build synergies within the portfolio on these topics.
- **Bpifrance Capital Innovation's transition program** (see [case study](#)). Bpifrance offered a tool specially designed for the program, the "Flash Carbon Footprint", to enable its portfolio companies to carry out an initial carbon footprint calculation and design a first action plan quickly.
- **Fideas ACT For Climate** (see the [website](#) of the Observatoire des Sociétés à Mission). The fund has built a support program based on ACT.

Once you have designed your program, you will need to convince your portfolio companies to take part in it, unless this is part of their post-investment commitments.

There are five keys to success:

1. **Clarity of information** – Your audience may not be familiar with these topics, so you need to be very transparent and clear.
2. **Involving investment teams** – Investment teams are the program's best ambassadors. So you need to start by convincing and training them.
3. **Financing** – Subsidizing the program by taking on some of the cost is an effective lever. However, making sure that our portfolio companies also bear some of the costs is key to ensure their commitment to the program.
4. **Timing and momentum** – Avoid busy periods, especially reporting heavy and fundraising periods. Create *momentum* by setting a deadline for registrations.
5. **Cooperation** – Collective programs, i.e. with several companies, generate emulation and lead to better compliance with deadlines (as they are often collective).



"For each of our funds, we have designed a Welcome Pack, a single document in which we centralize our commitments, expectations, solutions and services available and the best practices we have identified.

We present it to the managers during our first meeting. This makes it very easy to initiate a dialogue."

– **Elsa Baillet**, Sustainability Manager at Andera Partners

*"Best effort (generalist)" category*



"For our program, we opted for an approach consisting of collective sessions, to create a group spirit, and individual time, to help each company make progress according to its specific needs. This enabled us to get the companies to share best practices and how to overcome difficulties, even though they were all from different sectors."

– **Clara Deniau**, Impact Manager at Citizen Capital

# Set up your climate governance

A fund's climate governance is a set of rules, practices and processes that enable it to achieve its decarbonization objectives.

This may include areas of responsibility, organizational structures (climate committee, ESG committee, etc.) and compensation policies. Investment practices, mentioned above, are also part of governance.

In the [CFNEWS directory of ESG practices](#), the ESG governance of all French IMCs is analyzed according to the following criteria: whether the ESG manager is part of the investment committee, whether ESG objectives are part of the criteria for the variable compensation of investment teams and portfolio managers.

The chapter on governance may be the final chapter of this playbook, yet investment funds need to tackle it as fast as possible, because the lack of clear governance is the quickest path to failure when it comes to implementing a PE firms climate strategy.

In this chapter, we will look at the following:

1. Define who will be in charge of climate-related topics in your PE firms
2. Profile of an ideal climate manager
3. Compensation rules

## Define who will be in charge of climate-related topics in your PE firms

There are three options to pick from:

- An ESG team **without a dedicated climate manager** – in this case, the ESG team can rely on external partners for help on this issue.
- An ESG team **with a dedicated climate manager** (e.g. Andera Partners, Demeter, RAISE, Serena, Siparex, Tikehau, Trocadero Capital Partners) – the climate manager is in charge of making climate change a key criteria in investment decisions and help portfolio companies make progress on that front. The climate manager therefore has lower ESG responsibilities.
- An ESG team **backed by a mission committee** made up of external experts on environmental issues (e.g. Epopee Gestion, SWEN Capital Partners) – this mission committee, which does not have an operational role, is mainly responsible for ensuring compliance with the PE firms's statutory guidelines.

The relationship between these structures and the fund's partners is fundamental. A quarterly meeting is generally held to discuss ESG/Climate issues.

[ACT Finance Investing](#)'s criteria for analyzing the climate governance of PE firms :

1. Hierarchical position of people with climate-related responsibilities in the PE firms ;
2. Technical expertise within the ESG / Climate team ;
3. Variable compensation policy linked to the achievement of decarbonization objectives ;
4. Climate risk management process.
5. Formalizing the transition plan



# Profile of an ideal climate manager

In our view, the ideal climate manager should possess the following qualities:

- **Knowledge of the challenges of the ecological transition regarding the PE firms investment sectors** – it is necessary to have a 360° view of the issues and to know how to handle prospective scenarios, particularly sectorial ones, to inform decision-making;
- **Technical expertise in environmental impact measurement** – this expertise is essential to manage impact indicators at every level, but also to challenge the data reported by portfolio companies;
- **Knowledge of the operational reality of companies and knowledge of sustainability services and solutions available** – this knowledge is essential for effective support of portfolio companies;
- **Ability to influence and bring stakeholders together** (investment team, portfolio companies, LPs, partners, etc.) – this is probably the most important skill. It is key for the success of transition plans and to make sure everyone on the PE firms team is aligned..



## Where can you find them?

Unsurprisingly, a large number of PE firms climate managers come from CSR/Climate consulting firms. Here are just a few examples:

Name	Title & SGP	Previous employer
Antoine Joint	<i>Climate Director</i> , Siparex Group	Utopies (CSR/Climate consulting)
Elsa Baillet	<i>Sustainability Manager</i> at Andera	Sirsa (CSR/Climate consulting)
Jérémy Rasori	<i>Head of Sustainability</i> at Serena	Sirsa (CSR/Climate consulting)
Justine Briand	<i>Impact Manager</i> at Trocadero CP	EcoAct (CSR / Climate consulting)

Several specialized online platforms can help you hire these profiles: [Birdeo](#), [Shift Your Job](#), [Job That Makesense](#), etc.



"Being able to advise companies ourselves is a real asset. In our team, one person is an expert in energy, another expert in industry, and I worked for several years in decarbonization consulting. This enables us to provide highly operational support to our portfolio companies."

– **Justine Briand**, Impact Manager at Trocadero Capital Partners

"Grey-to-green / best effort" category

# Compensation rules

According to a [study by Armen and HEC](#), carried interest is the most popular value-sharing tool used by management companies, as it makes it easy to align the interests of LPs and fund teams.

Initially indexed on the fund's financial performance, more and more PE firms are now including ESG / Climate criteria in their carried interest.

To define the carried interest of your fund, several parameters can vary :

- **The amount** (expressed as a percentage): the proportion of the carried amount linked to ESG criteria is often around 25%, but can vary significantly (between 10 and 50%). Swen Capital Partners' [Blue Ocean fund](#), for example, sets aside 50% of carried interest for impact objectives.
- **The number of employees concerned**: while initially reserved for fund managers and senior profiles, it is increasingly common to see carried interest benefiting a larger proportion of the fund's employees. At [NCJ](#), for example, 100% of employees have access to carried interest.
- **The scope of ESG indicators selected**: two approaches exist - the first consists in selecting indicators specific to each investment from a catalog of ESG indicators, the second consists in composing with indicators common to all investments (e.g. carbon footprint) and others specific to each one. We recommend this second approach, which allows for a partially homogeneous approach.

Finally, there are generally two approaches regarding the unallocated portion of carried interest when objectives are not met: redistribution of the unallocated portion of carried interest to LPs, or distribution to a third party contributing to the impact objectives set in the carried interest (e.g. associations, NGOs, foundations, etc.). For example, [Impact Partners](#) gives away the entire carried interest amount if, at the time of exit, the impact score is less than 60% of the score set at the time of investment.

Similarly, **management packages rely more and more on non-financial and climate criteria** to make sure that the interests of the fund and interests of the portfolio companies' management teams are aligned.

Today, according to a [PwC study](#), around **40% of asset management companies include ESG criteria in management teams' compensation**. Generally speaking, 1/4 of the management packages depends on the achievement of ESG objectives, but this figure can vary depending on the type of fund. At Siparex, for example, ESG criteria represent 10% of the ManPack for SME deals, and 25% to 50% for impact investing deals.

The challenge of management packages also lies in the definition of criteria. They must be objective criteria, to avoid potential conflicts with management teams at the time of exit. Here again, it is possible to draw on the tested methodologies and benchmarks already mentioned in this study: definition of an SBTi trajectory, percentage reduction in absolute emissions/intensity, etc.

Used together, management packages and carried interest effectively make sure that the interests of all stakeholders are aligned on objective environmental criteria.



"It is essential that the achievement or non-achievement of climate objectives has real consequences for investors and managers. At Tikehau, each investor has 20% of his or her bonus linked to the decarbonization goal."

– **Pierre Abadie**, Group Climate Director & co-Head of Private Equity Decarbonization practice at Tikehau Capital

*"Sustainable infrastructure and industry" category*

# Conclusion

# The ball is in your court

The takeaways of this playbook:

1. **It's urgent to act** for moral reasons (doing our part to limit climate change) but also for economic reasons: today, the most climate-advanced PE firms benefit from a real competitive advantage.
2. **Investment tactics will shape** your indicators and expectations for your portfolio companies.
3. **Categorizing your companies based on a benchmark will help you monitor the progress of your portfolio** more than quantitative indicators.
4. **Climate governance is essential** for your climate strategy to unfold. To help you make progress, use the framework of the new [ACT Finance Investing](#) methodology.

It's your turn to act!

## The systemic changes required to speed up decarbonization

In this guide, we've explored how asset managers can take into account climate change.

We've also highlighted other changes that are necessary to accelerate decarbonization, including the role of LPs. How can financial expectations change in a world where the rules of the game are changing?

These essential questions will be addressed in an upcoming publication.

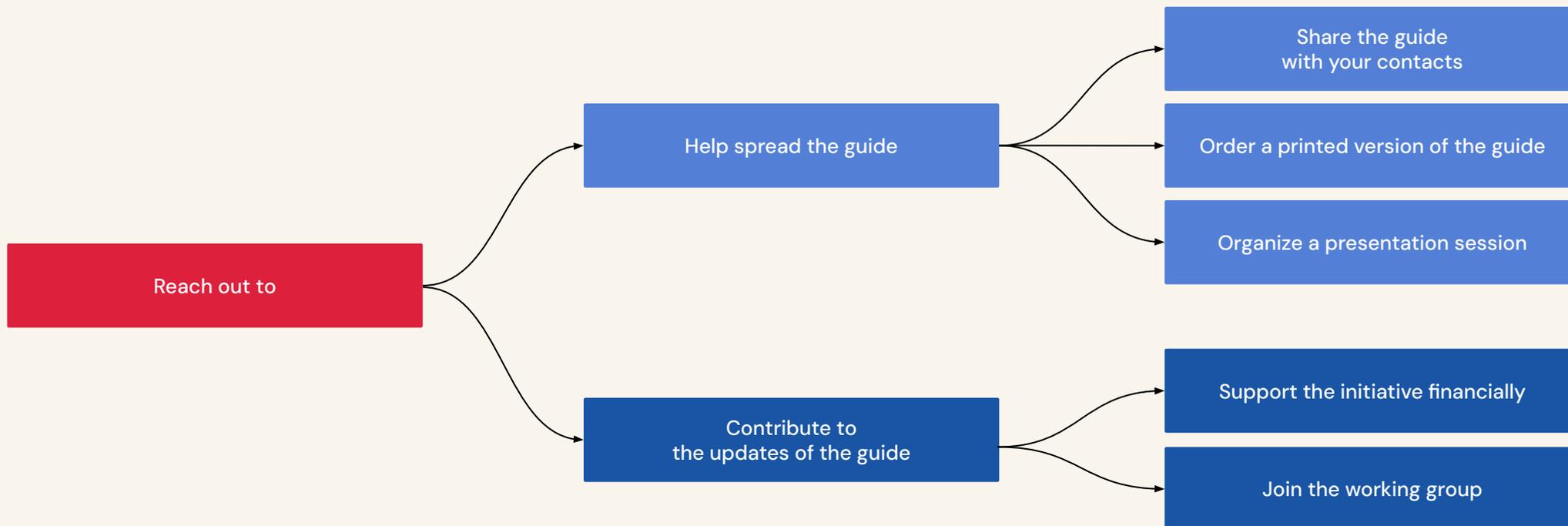
# Our next steps

This guide is open and free online, as we want to share its takeaways with as wide an audience as possible. If you would like to help us do this, please reach out to share it with your colleagues or peers. We can offer printed versions of the guide as well as presentation sessions.

And we don't intend to stop there. We intend to continue exploring several topics: the role of LPs, relationships with other financing investment vehicles (impact debt funds, European financing, etc.) and grey-to-green funds. If you'd like to help us, you can join our working group, made up of ESG managers from funds and investors only, and/or support our initiative financially.

If you have any questions or comments, please contact us at [contact@carboncutter.com](mailto:contact@carboncutter.com).

See you soon to decarbonize the economy.



# Who we are

Carbon Cutter is a consulting firm committed to making economic systems truly sustainable.

We help asset managers and their holdings to thrive in tomorrow's economy, with pragmatism and enthusiasm.

Our services for investment funds:

- Climate due diligence;
- Investment transition programs;
- Portfolio company emissions measurement and pathways;
- Fund climate strategy;
- Training of investment teams.

We have helped over 200 organizations build their climate strategy.



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